Permanent Rulemaking Hearings

2 CCR 601-22

"Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions"



Exhibits

Rulemaking Hearings on 2 CCR 601-22 Index of Exhibits

Exhibit	Description
1	Resolution No. TC-2021-07-08 dated July 15, 2021, from the Transportation Commission
	opening the rule-making process and delegating authority to an administrative hearing officer.
2	A. SOS Notice of Rulemaking Confirmation dated August 13, 2021.
	B. Proposed rule changes filed with the SOS to open rule making.
	C. Notice of Rulemaking Hearing published in Colorado Register on August 25, 2021.
	D. Notice required to be posted at least five days prior to the hearing.
	E. Miscellaneous Rulemaking Public Notice filed on August 31, 2021.
	F. Confirmation that the Miscellaneous Rulemaking Public Notice was filed with SOS on
	August 31, 2021.
	G. Miscellaneous Rulemaking Public Notice was published in Colorado Register on
	September 10, 2021.
3	A. DORA Notice of Rulemaking Confirmation on August 13, 2021.
	B. Verification of DORA's Publication of Hearing Date.
	C. DORA Notice to Stakeholders re: Cost-Benefit Analysis.
	D. Requests Received by DORA for a Cost-Benefit Analysis.
	E. DORA Notice that a Cost-Benefit Analysis is required.
	F. DORA Notice to Stakeholder re: New Hearing and Hearing Location, Date, and Time
	Changes.
	G. Cost-Benefit Analysis
	H. DORA Confirmation that the Cost-Benefit Analysis was uploaded on September 7, 2021.
	I. DORA Notice that DORA reviewed the Cost-Benefit Analysis on September 7, 2021.
	J. Screenshot of CDOT Website that the Cost-Benefit Analysis was posted on September 7, 2021.
4	K. DORA Notice to Stakeholders with the Cost-Benefit Analysis. A. Request for Regulatory Analysis
7	B. Regulatory Analysis
	C. Screenshot of CDOT Website that the Regulatory Analysis was posted on September 9,
	2021.
5	A. Statement of Basis and Purpose.
	B. Updated Statement of Basis and Purpose on August 31, 2021, to fix a typographical error.
6	A. Screenshot of CDOT's website indicating that CDOT posted rulemaking hearing date,
	time, and location on CDOT website on August 16, 2021.
	B. Screenshot of CDOT's website indicating that CDOT posted the Miscellaneous Rulemaking
	Public Notice and Updated Statement of Basis and Purpose on September 6, 2021.
	C. Screenshot of CDOT's website indicating that CDOT posted the Cost-Benefit Analysis on
	September 7, 2021 (10 days before the first hearing).
	D. Screenshot of CDOT's website indicating that CDOT posted the Regulatory Analysis on September 9, 2021 (five days before the first hearing).
7	CDOT's Transportation Greenhouse Gas Roadmap Briefing paper that provides framework
′	and context for the proposed rule changes.
8	Exhibit 8 contains the early stakeholder engagement regarding the proposed rules.
3	A. List of Representative Group Members and meetings.
	B. Meetings with the Colorado Contractor Association.
	C. Meetings with Statewide Transportation Advisory Committee
	D. Meetings with Colorado Communities for Climate Action.
	E. Meetings with the Metropolitan Planning Organizations.
	1 - 1 meetings men the metroportion i talling organizations.

	F. Meetings with representatives from equity organizations.
	G. State Listening Sessions hosted by CDPHE and CDOT.
	H. Meetings with various environmental advocacy groups.
	I. Regional meetings around the state hosted by CDOT.
	J. Other outreach meetings.
9	Email notifications and updates to Stakeholders regarding the rulemaking.
	A. Email Notice of Proposed Rulemaking for 2 CCR 601-22 dated August 16, 2021.
	B. Email Notice regarding hearing detail changes dated September 1, 2021.
	C. Email Notice regarding Cost-Benefit Analysis dated September 7, 2021.
	D. Email Notice regarding Regulatory Analysis dated September 9, 2021.
10	Email notifications and updates to Interested Parties regarding the rulemaking.
	A. Email Notice of Proposed Rulemaking for 2 CCR 601-22 dated August 16, 2021.
	B. Email Notice regarding hearing detail changes dated September 1, 2021.
	C. Email Notice regarding Cost-Benefit Analysis dated September 7, 2021.
	D. Email Notice regarding Regulatory Analysis dated September 9, 2021.
11	Email notifications to stakeholders who registered to attend hearings virtually that were
• •	changed.
12	A. July Transportation Commission meeting minutes.
' -	B. August Transportation Commission meeting minutes.
	C. Public comments submitted to the Transportation Commission.
	D. CDOT staff presentations to the Transportation Commission.
	E. Additional comments submitted to the Transportation Commission.
42	
13	Comments received prior to the September 17, 2021, hearing regarding the proposed rules.
4.4	All comments received by noon on September 16, 2021, to dot_rules@state.co.us.
14	Memo to maintain permanent rule making record.

Resolution #TC-2021-07-08

Commence Permanent Rulemaking and Delegate Authority to an Administrative Hearing Officer to Conduct a Public Rulemaking Hearing for the Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions ("the Planning Rules"), 2 CCR 601-22.

Approved by the Transportation Commission on July 15, 2021.

WHEREAS, transportation is a complex sector involving thousands of Coloradoans individual choices about how they travel on Colorado roads; and

WHEREAS, the 10-year Plan for the Colorado Department of Transportation ("CDOT") and Metropolitan Planning Organizations ("MPOs") Regional Transportation Plans have the ability to affect the transportation decisions of the traveling public in Colorado; and

WHEREAS, Senate Bill 21-260 directs the Transportation Commission of Colorado ("the Commission") to adopt procedures and guidelines requiring CDOT and MPOs to take additional steps in the planning process for regionally significant transportation projects to account for the impacts on the amount of statewide GHG pollution and statewide vehicle miles traveled that are expected to result from those projects; and

WHEREAS, Senate Bill 21-260 also specifies implementing relevant measures pursuant to § 25-7-105, C.R.S.; reducing GHG emissions to help achieve statewide GHG pollution reduction targets established in House Bill 19-1261 (now codified in § 25-7-102(2)(g) and 105(1)(e), C.R.S.); and considering the role of land use in the transportation planning process; and

WHEREAS, § 43-1-106(8)(k), C.R.S. authorizes the Commission to make all necessary and reasonable orders, rules, and regulation to carry out its authority and duties; and

WHEREAS, pursuant to § 43-1-106(8)(b), C.R.S., one of the Commission's duties is to assure the preservation and enhancement of Colorado's environment in the planning, selection, construction, and operation of all transportation projects in Colorado; and

WHEREAS, § 43-1-1103(5), C.R.S. authorizes the Commission to promulgate rules regarding the formation of the state plan through a statewide planning process; and

WHEREAS, the Commission proposes to amend the Planning Rules to integrate the establishment of a GHG pollution-reduction standard, including compliance and enforcement requirements, in accordance with House Bill 19-1261 and Senate Bill 21-260; and

WHEREAS, the proposed amendments will consist of the following elements; including provisions outlining CDOT and MPO applicability, new definitions, emissions reduction tables, compliance, reporting and enforcement requirements; and

WHEREAS, the Commission recognizes the need for ample public comment and notes this Resolution begins the process but does not set the timeline for the formal review process; and

WHEREAS, the Commission also recognizes that the publication of the proposed amendments provide an important opportunity for the public to review and comment on the rule changes and fully participate in the rulemaking process; and

WHEREAS, the Commission has the authority to conduct a rulemaking hearing or to delegate the authority to an Administrative Hearing Officer for the purposes of conducting the rulemaking hearing, making a complete procedural record of the hearing, and submitting that record and any recommendations to the Commission for its review and action concerning amendments to the Planning Rules; and

WHEREAS, the Commission established the Ad Hoc Agency Coordination Committee ("ACC") chaired by Commissioner Hickey to act as liaison for the Commission throughout the rulemaking process, work with staff to amend the Planning Rules and ensure affected and interested parties are provided with notice and opportunity to comment under the requirements of the State Administrative Procedure Act.

NOW THEREFORE BE IT RESOLVED, the Commission authorizes staff and the ACC to take all necessary actions in accordance with the State Administrative Procedure Act to initiate rulemaking for the purpose of amending the Planning Rules, 2 CCR 601-22.

NOW THEREFORE BE IT FURTHER RESOLVED, the Commission delegates the ACC the responsibility to review and approve the draft rule prior to the Department's filing of the proposed rules with the Secretary of State.

NOW THEREFORE BE IT FURTHER RESOLVED, the Commission delegates its authority to conduct the permanent rulemaking hearing to a CDOT Administrative Hearing Officer to prepare a complete record of the hearing in collaboration with the ACC and forward said record and proposed rules to the Commission for consideration and adoption.

NOW THEREFORE BE IT FURTHER RESOLVED, the formal rulemaking filing shall include a list of public hearings that shall be held across the state.

Herman F. Stockinger AAA

Herman Stockinger, Secretary

Transportation Commission of Colorado

7-15-2021

Date





Agency Rulemaking Home

Log out Change password

Notice of Rulemaking Confirmation

Official Publication of the State Administrative Rules (24-4-103(11) C.R.S.)

Date Filed: August 13, 2021 20:03:51

Please print this page for your records

REMEMBER: You must submit your proposed rules to DORA's Office of Policy, Research and Regulatory Reform at the time of filing this notice with the Secretary of State, as required by section 24-4-103(2.5) C.R.S. Link:https://www.dora.state.co.us/pls/real/SB121.Logon

Your notice of rulemaking has been submitted to the Secretary of State. Your tracking number is 2021-00508.

> 600 - Department of Transportation Department

Type of Filing Permanent

601 - Transportation Commission and Office of Transportation Safety Agency

CCR Number 2 CCR 601-22

RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS **CCR Title**

AND TRANSPORTATION PLANNING REGIONS

Hearing Date Hearing Time 03:00 PM

CDOT Regional Office, US160 Maintenance Training Facility, 20581 Highway 160, **Hearing Location**

Durango, CO 81301

The Transportation Commission of Colorado (Commission) is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. This will be accomplished by requiring CDOT and the Metropolitan Planning Organizations (MPOs) to establish

plans that meet GHG transportation reduction targets through a mix of

transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado

General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2) (g), C.R.S., and the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S. Please see the attachment for the notice of proposed rulemaking, the proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for

Transportation Planning Proposed Standards"

The specific authority under which the Commission shall establish these proposed **Statutory Authority**

rule revisions is set forth in §§ 43-1-106(8)(k) and 43-1-1103(5), C.R.S.

ProposedRuleAttach2021-00508.pdf Proposed Rule AddInfoAttach2021-00508.pdf **Additional Information**

> The Commission plans to hold eight (8) hearings across the State as listed in the table within the attachment to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attachment or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide

instructions on how you can join the hearings of your choice virtually and provide testimony if you wish. Please submit all written comments to

dot_rules@state.co.us on or before 5:00 p.m. on October 15, 2021. Please see the attachment for the notice of proposed rulemaking, the proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for

Transportation Planning Proposed Standards".

Contacts for Public

Comments

Description

Natalie Lutz Name Rules Administrator Title 303-757-9441 Phone

Email natalie.lutz@state.co.us

Terms & conditions | Browser compatibility

DEPARTMENT OF TRANSPORTATION

Transportation Commission

RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS AND TRANSPORTATION PLANNING REGIONS

2 CCR 601-22

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

August 13, 2021, Version

Please note the following formatting key:

Font Effect	Meaning
<u>Underline</u>	New Language
Strikethrough	Deletions
[Blue Font Text]	Annotation

STATEMENT OF BASIS AND PURPOSE, AND-STATUTORY AUTHORITY AND PREAMBLE

The purpose of the Rules Governing the Statewide Transportation Planning Process and Transportation Planning Regions (Rules) is to prescribe the statewide transportation planning process through which a long-range multimodal comprehensive statewide Statewide transportation Transportation plan Plan will be developed, integrated, updated, and amended by the Colorado Department of Transportation (Department or CDOT), in cooperation with local governments, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions, Indian tribal governments, relevant state and federal agencies, the private sector, transit and freight operators, special-interest groups, and the general public. This cooperative process is designed to coordinate regional transportation planning, guided by the statewide transportation policy set by the Department and the transportation Transportation commission Commission of Colorado ("Commission"), as a basis for developing the statewide Statewide transportation planning process shall be a long-range, financially feasible, environmentally sound, multimodal Multimodal transportation system plan for Colorado that will reduce traffic and smog.

Further, the purpose of the Rules is to define the state's Transportation Planning Regions for which long-range Regional Transportation Plans are developed, prescribe the process for conducting and initiating transportation planning in the non-MPO Transportation Planning Regions and coordinating with the Metropolitan Planning OrganizationsMPOs for planning in the metropolitan areas. Memoranda of Agreement (MOA) that serve as the Metropolitan Planning Agreements (MPAs) per-pursuant to 23 C.F.R. § 450 between the Department, each MPO, and applicable transit provider(s) further prescribe the transportation planning process in the MPO transportation Transportation planning Planning regions Planning In addition, the purpose of the Rules is to describe the organization and function of the

Statewide Transportation Advisory Committee (STAC) as established by § 43-1-1104, Colorado Revised Statutes (C.R.S.).

The Rules are promulgated to meet the intent of both the U.S. Congress and the Colorado General Assembly for conducting a continuing, cooperative, and comprehensive statewide performance-based multimodal transportation planning process for producing a Statewide Transportation Plan and Regional Transportation Plans that address the transportation needs of the stateState. This planning process, through comprehensive input, results in systematic project prioritization and resource allocation.

The Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of Multimodal, cost-effective, and environmentally sound means of transportation which leads to cleaner air and reduced traffic. The Rules reflect the Commission's and the Department's focus on Multimodal transportation projects including highways, transit, rail, bicycles and pedestrians. Section 8 of these Rules establishes an ongoing administrative process for identifying, measuring, confirming, and verifying those best practices and their impacts, so that CDOT and MPOs can easily apply them to their plans in order to achieve the pollution reduction levels required by these Rules.

The Rules are promulgated by the Commission pursuant to the specific statutory authority in § 43-1-1103 (5), C.R.S., and § 43-1-106 (8)(k), C.R.S.

Preamble for 2018 Rulemaking

In 2018, rulemaking was initiated to update the rules to conform to recently passed federal legislation, update expired rules, clarify the membership and duties of the Statewide Transportation Advisory Committee STAC pursuant to HB 16-1169 and HB 16-1018, and to make other minor corrections. The Rules are intended to be consistent with and not be a replacement for the federal transportation planning requirements contained in 23 United States Code (U.S.C.) §§ 134, 135 and 150, Pub. L. No. 114-94 (Fixing America's Surface Transportation Act or the "FAST Act") signed into law on December 4, 2015, and its implementing regulations, where applicable, contained in 23 Code of Federal Regulations (C.F.R.) Part 450, including Subparts A, B and C and 25 C.F.R. § 170.421 in effect as of August 1, 2017, which are hereby incorporated into the Rules by this reference, and do not include any later amendments. All referenced laws and regulations shall be available for copying or public inspection during regular business hours from the Office of Policy and Government Relations, Colorado Department of Transportation, 2829 W. Howard Pl., Denver, Colorado 80204.

Copies of the referenced United States Code may be obtained from the following address:

Office of the Law Revision Counsel U.S. House of Representatives H2-308 Ford House Office Building Washington, DC 20515 (202) 226-2411

Copies of the referenced Code of Federal Regulations may be obtained from the following address:

U.S. Government Publishing Office 732 North Capitol Street, N.W. Washington, DC 20401 (202) 512-1800

The Statewide Planning Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of multimodal, cost effective and environmentally sound means of transportation. The Rules reflect the Department's focus on multimodal transportation projects including highways, aviation, transit, rail, bicycles and pedestrians.

The Rules are promulgated by the Commission pursuant to the specific statutory authority in § 43-1-1103 (5), C.R.S., and § 43-1-106 (8)(k), C.R.S. The Commission may, at their discretion, entertain petitions for declaratory orders pursuant to § 24-4-105(11), C.R.S.

Preamble for 2021 Rulemaking

Overview

Section 8 of these Rules establishes Greenhouse Gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of these requirements is to limit the GHG pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This is accomplished by requiring CDOT and MPOs to establish plans that meet targets through a mix of projects that limit and mitigate air pollution and improve quality of life and Multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. In the event that a plan fails to comply, CDOT and MPOs have the option to commit to implementing GHG Mitigation Measures that provide travelers with cleaner and more equitable transportation options such as safer pedestrian crossings and sidewalks, better transit and transit-access, or infrastructure that supports access to housing, jobs, and retail.

Examples of these types of mitigations, which also benefit quality of place and the economic resilience of communities, will include but not be limited to: adding bus rapid transit facilities and services, enhancing first-and-last mile connections to transit, adding bike-sharing services including electric bikes, improving pedestrian facilities like sidewalks and safe accessible crosswalks, investments that support vibrant downtown density and local zoning decisions that favor sustainable building codes and inclusive multi-use facilities downtown, and more. The process of identifying and approving mitigations will be established by a policy process that allows for ongoing innovations from local governments and other partners to be considered on an iterative basis.

If compliance still cannot be demonstrated, even after committing to GHG Mitigation Measures, the Commission shall restrict the use of certain funds, requiring that dollars be focused on projects that help reduce transportation emissions and are recognized as approved mitigations. These requirements address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Context of Section 8 of these Rules Within Statewide Objectives

The passage of House Bill (HB)19-1261 set Colorado on a course to dramatically reduce GHG emissions across all sectors of the economy. In HB 19-1261, now codified in part at §§ 25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" acknowledged that "Colorado is already experiencing harmful climate impacts[,]" and that "many of these impacts disproportionately affect" certain Disproportionately Impacted Communities. see § 25-7-102(2), C.R.S. The General Assembly also recognized that "[b]y reducing [GHG] pollution, Colorado will also reduce other harmful air pollutants, which will, in turn, improve public health, reduce health care costs, improve air quality, and help sustain the environment." see § 25-7-102(2)(d), C.R.S.

Since 2019, the State has been rigorously developing a plan to achieve the ambitious GHG pollution reduction goals in § 25-7-102(2)(g), C.R.S. In January 2021, the State published its Greenhouse Gas Pollution Reduction Roadmap (Roadmap). The Roadmap identified the transportation sector as the single largest source of statewide GHG pollution as of 2020, with passenger vehicles the largest contributor within the transportation sector. Additionally, the Roadmap determined that emissions from transportation

are a "significant contributor to local air pollution that disproportionately impacts lower-income communities and communities of color." see Roadmap, p. XII.

A key finding in the Roadmap recognized that "[m]aking changes to transportation planning and infrastructure to reduce growth in driving is an important tool" to meet the statewide GHG pollution reduction goals. see Roadmap, p. 32. Section 8 of these Rules also advances the State's goals to reduce emissions of other harmful air pollutants, including ozone.

Why the Commission is Taking This Action

Senate Bill 21-260, signed into law by the Governor on June 17, 2021, and effective upon signature, includes a new § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Section 43-1-128, C.R.S. also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and Vehicle Miles Traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.

Under Colorado law governing transportation planning, CDOT is charged with and identified as the proper body for "developing and maintaining the state transportation planning process and the state transportation plan" in cooperation with Regional Planning Commissions and local government officials. see § 43-1-1101, C.R.S.

The Commission is responsible for formulating policy with respect to transportation systems in the State and promulgating and adopting all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs. see § 43-1-106(8), C.R.S. The Commission is statutorily charged "to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado." see § 43-1-106(8)(b), C.R.S. In addition, the Commission is generally authorized "to make all necessary and reasonable orders, rules and regulations in order to carry out the provisions of this part . . ." see § 43-1-106(8)(k), C.R.S.

As such, CDOT and the Commission are primarily responsible for ensuring compliance with GHG reductions in transportation planning.

What Relevant Regulations Currently Apply to Transportation Planning

Transportation planning is subject to both state and federal requirements. Under federal law governing transportation planning and federal-aid highways, it is declared to be in the national interest to promote transportation systems that accomplish a number of mobility objectives "while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes..." see 23 U.S.C. § 134; see also 23 U.S.C. § 135(a)(1). In the metropolitan planning process, consideration must be given to projects and strategies that will "protect and enhance the environment, promote energy conservation, improve the quality of life..." see 23 U.S.C. § 134(h)(1)(E); see also 23 C.F.R. Part 450, Subpart B (federal regulations governing statewide transportation planning and programming). The same planning objective applies to statewide transportation planning. see 23 U.S.C. § 135(d)(1)(E); see also 23 C.F.R. Part 450, Subpart C (governing metropolitan transportation planning and programming). Further, the Statewide Transportation Plan shall be developed, as appropriate, in consultation with State...local agencies responsible for...environmental protection..." see 23 U.S.C. § 135(f)(2)(D)(i).

Under conforming Colorado law, the Statewide Transportation Plan is developed by integrating and consolidating Regional Transportation Plans developed by MPOs and regional transportation planning organizations into a "comprehensive statewide transportation plan" pursuant to rules and regulations promulgated by the Commission. see § 43-1-1103(5), C.R.S. The Statewide Transportation Plan must

address a number of factors including, but not limited to, "environmental stewardship" and "reduction of greenhouse gas emissions." see § 43-1-1103(5)(h) and (j), C.R.S.

Regional Transportation Plans must account for the "expected environmental, social, and economic impacts of the recommendations in the plan, including a full range of reasonable transportation alternatives...in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." see § 43-1-1103(1)(d), C.R.S. Further, in developing Regional Transportation Plans, MPOs "[s]hall assist other agencies in developing transportation control measures for utilization in accordance with state...regulations...and shall identify and evaluate measures that show promise of supporting clean air objectives." see § 43-1-1103(1)(e), C.R.S.

Putting Section 8 of these Rules into Perspective

Section 8 establishes GHG regulatory requirements that are among the first of their kind in the U.S. However, from an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a Nonattainment Area are consistent with or "conform to" a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and the Denver Regional Council of Governments' MPOs to demonstrate conformity with each plan adoption and amendment.

However, because the transportation sector encompasses the millions of individual choices people make every day that have an impact on climate, a variety of strategies are necessary to achieve the State's climate goals. Section 8 of these Rules is one of many steps needed to achieve the totality of reduction goals for the transportation sector.

Purpose of GHG Mitigation Measures

The transportation modeling conducted for this rulemaking may demonstrate that certain projects increase GHG pollution for a variety of reasons. These reasons may include factors such as induced demand as a result of additional lane mileage attracting additional vehicular traffic, or additional traffic facilitated by access to new commercial or residential development in the absence of public transit options or bicycle/pedestrian access that provides consumers with other non-driving options.

Transportation infrastructure itself can also increase or decrease GHG and other air pollutants by virtue of factors like certain construction materials, removal or addition of tree cover that captures carbon pollution, or integration with vertical construction templates of various efficiencies that result in higher or lower levels of per capita energy use. The pollution impacts of various infrastructure projects will vary significantly depending on their specifics and must be modeled in a manner that is context-sensitive to a range of issues such as location, footprint of existing infrastructure, design, and how it fits together with transportation alternatives.

Furthermore, other aspects of transportation infrastructure can facilitate reductions in emissions and thus serve as mitigations rather than contributors to pollution. For example, the addition of transit resources in a manner that can displace Vehicle Miles Traveled can reduce emissions. Moreover, improving downtown pedestrian and bike access, particularly in areas that allow individuals to shift multiple daily trips for everything from work to dining to retail, can improve both emissions and quality of life.

There is an increasing array of proven best practices for reducing pollution and smog and improving economies and neighborhoods that can help streamline decision-making for state and local agencies developing plans and programs of projects.

[Note: The Commission proposes to repeal Section 1 of these Rules in its entirety and re-enact Section 1 of these Rules below to re-format the numbering of the administrative rules into alphabetical order.]

1.00 Definitions.

- 1.01 Accessible ensure that reasonable efforts are made that all meetings are reachable by persons from households without vehicles and that the meetings will be accessible to persons with disabilities in accordance with the Americans with Disabilities Act (ADA), and also accessible to persons with limited English proficiency. Accessible opportunities to on planning related matters include those provided on the internet and through such methods as telephone town halls.
- 1.02 Attainment Area any geographic region of the United States that meets the national primary or secondary National Ambient Air Quality Standards (NAAQS) for the pollutants as defined in the Clean Air Act (CAA) (Amendments of 1990).
- 1.03 Commission the transportation commission of Colorado created by § 43-1-106, C.R.S.
- 1.04 Corridor a transportation system that includes all modes and facilities within a described geographic area.
- 1.05 Corridor Vision a comprehensive examination of a specific transportation corridor, which includes a determination of needs and an expression of desired state of the transportation system that includes transportation modes and facilities over a planning period.
- 1.06 Department the Colorado Department of Transportation created by § 43-1-103, C.R.S.
- 1.07 Division the Division of Transportation Development within the Colorado Department of Transportation.
- 1.08 Division Director the Director of the Division of Transportation Development.
- 1.09 Fiscally Constrained the financial limitation on transportation plans and programs based on the projection of revenues as developed cooperatively with the MPOs and the rural TPRs and adopted by the Commission that are reasonably expected to be available over the long-range transportation planning period and the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP) programming periods.
- 1.10 Intergovernmental Agreement an arrangement made between two or more political subdivisions that form associations for the purpose of promoting the interest and welfare of said subdivisions.
- 1.11 Intermodal Facility- A site where goods or people are conveyed from one mode of transportation to another, such as goods from rail to truck or people from passenger vehicle to bus.
- 1.12 Land Use—the type, size, arrangement, and use of parcels of land.
- 1.13 Limited English Proficiency (LEP) individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.
- 1.14 Long-range Planning a reference to a planning period with a minimum 20-year planning horizon.
- 1.15 Maintenance Area any geographic region of the United States previously designated by the U.S. Environmental Protection Agency (EPA) as a nonattainment area pursuant to the Clean Air Act (CAA) Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended in 1990.
- 1.16 Memorandum of Agreement (MOA) a written agreement between two or more parties on an intended plan of action.

- 1.17 Metropolitan Planning Agreement (MPA) a written agreement between the MPO, the State, and the providers of public transportation serving the metropolitan planning area that describes how they will work cooperatively to meet their mutual responsibilities in carrying out the metropolitan planning process.
- 1.18 Metropolitan Planning Area a geographic area determined by agreement between the Metropolitan Planning Organization for the area and the Governor, in which the metropolitan transportation planning process is carried out pursuant to 23 U.S.C. § 134.
- 1.19 Metropolitan Planning Organization (MPO) an organization designated by agreement among the units of general purpose local governments and the Governor, charged to develop the regional transportation plans and programs in a metropolitan planning area pursuant to 23 U.S.C. § 134.
- 4.20 Mobility the ability to move people, goods, services, and information among various origins and destinations.
- 1.21 Multimodal an integrated approach to transportation that takes into account all modes of travel, such as bicycles and walking, personal mobility devices, buses, transit, rail, aircraft, and motor vehicles.
- 1.22 National Ambient Air Quality Standards (NAAQS) are those established by the U.S.

 Environmental Protection Agency for air pollutants considered harmful to public health and environment. These criteria pollutants are: carbon monoxide, lead, nitrogen dioxide, ozone, small particles, and sulfur dioxide.
- 1.23 Nonattainment Area any geographic region of the United States which has been designated by the EPA under section 107 of the CAA for any pollutants for which an NAAQS exists.
- 1.24 Non-metropolitan Area a rural geographic area outside a designated metropolitan planning area.
- 1.25 Plan Integration Plan integration is a comprehensive evaluation of the statewide transportation system that includes all modes, an identification of needs and priorities, and key information from other related CDOT plans.
- 1.26 Planning Partners local and tribal governments, the rural Transportation Planning Regions and MPOs.
- 1.27 Project Priority Programming Process ("4P") the process by which CDOT adheres to 23 U.S.C. § 135 and 23 C.F.R. Part 450 when developing and amending the statewide transportation improvement program (STIP).
- 1.28 Regional Planning Commission (RPC) a planning body formed under the provisions of § 30-28-105, C.R.S., and designated under these Rules for the purpose of transportation planning within a rural Transportation Planning Region.
- 1.29 Regional Transportation Plan (RTP) a long-range plan designed to address the future transportation needs for a Transportation Planning Region including, but not limited to, anticipated funding, priorities, and implementation plans, pursuant to, but not limited to, § 43-1-1103, C.R.S. and 23 C.F.R. Part 450. All rural and urban Transportation Planning Regions in the state produce RTPs.
- 1.30 State Transportation System refers to all state-owned, operated, and maintained transportation facilities in Colorado, including, but not limited to, interstate highways, other highways, and aviation, bicycle and pedestrian, transit, and rail facilities.

- 1.31 Statewide Transportation Advisory Committee (STAC) the committee created by § 43-1-1104, C.R.S., comprising one representative from each Transportation Planning Region and one representative from each tribal government to review and comment on Regional Transportation Plans, amendments, and updates, and to advise both the Department and the Commission on the needs of the transportation system in Colorado.
- 1.32 Statewide Transportation Improvement Program (STIP) a staged, fiscally constrained, multiyear, statewide, multimodal program of transportation projects which is consistent with the statewide transportation plan and planning processes, with metropolitan planning area plans, Transportation Improvement Programs and processes, and which is developed pursuant to 23 U.S.C. § 135.
- 1.33 Statewide Transportation Plan the long-range, comprehensive, multimodal statewide transportation plan covering a period of no less than 20 years from time of adoption, developed through the statewide transportation planning process described in these Rules and 23 U.S.C. § 135, and adopted by the Commission pursuant to § 43-1-1103, C.R.S.
- 1.34 System Continuity includes, but is not limited to, appropriate intermodal connections, integration with state modal plans, and coordination with neighboring Regional Transportation Plans, and, to the extent practicable, other neighboring states' transportation plans.
- 1.35 Traditionally Underserved refers to groups such as seniors, persons with disabilities, low-income households, minorities, and student populations, which may face difficulties accessing transportation systems, employment, services, and other amenities.
- 1.36 Transit and Rail Advisory Committee (TRAC) an advisory committee created specifically to advise the Executive Director, the Commission, and the Division of Transit and Rail on transit and rail-related activities.
- 1.37 Transportation Commonality the basis on which Transportation Planning Regions are established including, but not limited to: Transportation Commission Districts, the Department's Engineering Regions, travelsheds, watersheds, geographic unity, existing intergovernmental agreements, and socioeconomic unity.
- 1.38 Transportation Improvement Program (TIP) a staged, fiscally constrained, multi-year, multimodal program of transportation projects developed and adopted by MPOs, and approved by the Governor, which is consistent with an MPO's RTP and which is developed pursuant to 23 U.S.C. § 134.
- 1.39 Transportation Mode a particular form of travel including, but not limited to, bus, motor vehicle, rail, transit, aircraft, bicycle, pedestrian travel, or personal mobility devices.
- 1.40 Transportation Planning and Programming Process all collaborative planning-related activities including the development of regional and statewide transportation plans, the Department's Project Priority Programming Process, and development of the Transportation Improvement Programs (TIPs) and Statewide Transportation Improvement Program (STIP).
- 1.41 Transportation Planning Region (TPR) a geographically designated area of the state, defined by section 2.00 of these Rules in consideration of the criteria for transportation commonality, and for which a regional transportation plan is developed pursuant to the provisions of § 43-1-1102 and 1103, C.R.S. and 23 U.S.C. § 134. The term TPR is inclusive of these types: non-MPO Transportation Planning Regions, MPO Transportation Planning Regions, and Transportation Planning Regions with both MPO and non-MPO areas.

- 1.42 Transportation Systems Planning provides the basis for identifying current and future deficiencies on the state highway system and outlines strategies to address those deficiencies and make improvements to meet Department goals.
- 1.43 Travelshed the region or area generally served by a major transportation facility, system, or corridor.
- 1.44 Tribal Transportation Improvement Program (TTIP) a multi-year fiscally constrained list of proposed transportation projects developed by a tribe from the tribal priority list or tribal long-range transportation plan, and which is developed pursuant to 25 C.F.R. Part 170. The TTIP is incorporated into the STIP without modification.
- 1.45 Urbanized Area an area with a population of 50,000 or more designated by the Bureau of the Census.
- 1.46 Watershed a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.

[Note: The Commission proposes to add nineteen (19) new definitions. New proposed defined terms include: Applicable Planning Document, Approved Air Quality Model, Baseline, Carbon Dioxide Equivalent, Congestion Mitigation and Air Quality, Disproportionately Impacted Communities, Four-Year Prioritized Plan, Greenhouse Gas, Greenhouse Mitigation Measures, Greenhouse Gas Reduction Levels, Mitigation Action Plan, MPO Model, Multimodal Transportation and Mitigation Options Fund, Regionally Significant Project, State Interagency Consultation Team, Statewide Travel Model, Surface Transportation Block Grant, Vehicle Miles Traveled, and 10-Year Plan. Only minor non-substantive changes, such as correcting grammar errors or capitalizing defined terms, were made to the existing forty-six (46) defined terms.]

1.00 Definitions.

- 1.01 Accessible ensure that reasonable efforts are made that all meetings are reachable by persons from households without vehicles and that the meetings will be accessible to persons with disabilities in accordance with the Americans with Disabilities Act (ADA), and also accessible to persons with Limited English Proficiency. Accessible opportunities to comment on planning related matters include those provided on the internet and through such methods as telephone town halls.
- Applicable Planning Document refers to MPO Fiscally Constrained RTPs,TIPs for MPOs in NAAs, CDOT's 10-Year Plan and Four-Year Prioritized Plan in non-MPO areas, and amendments to the MPO RTPs and CDOT's 10-Year Plan and Four-Year Prioritized Plan in non-MPO areas that include the addition of Regionally Significant Projects.
- 1.03 Approved Air Quality Model the most recent Environmental Protection Agency issued model that quantifies GHG emissions from transportation.
- 1.04 Attainment Area any geographic region of the United States that meets the national primary or secondary National Ambient Air Quality Standards (NAAQS) for the pollutants as defined in the Clean Air Act (CAA) (Amendments of 1990).
- 1.05 Baseline estimates of GHG emissions for each of the MPOs, and for the non-MPO areas, prepared using the MPO Models or the Statewide Travel Model. Estimates must include GHG emissions resulting from the existing transportation network and implementation of the most recently adopted RTP for all MPOs and the 10-Year Plan in non-MPO areas as of the effective date of these Rules.

- 1.06 Carbon Dioxide Equivalent (CO2e) a metric measure used to compare the emissions from various GHG based upon the 100-year global warming potential (GWP). CO2e is multiplying the mass amount of emissions (metric tons per year), for each GHG constituent by that gas's GWP, and summing the resultant values to determine CO2e (metric tons per year). This calculation allows comparison of different greenhouse gases and their relative impact on the environment over different time periods.
- 1.07 Commission the Transportation Commission of Colorado created by § 43-1-106, C.R.S.
- 1.08 Congestion Mitigation and Air Quality (CMAQ) a federally mandated program established in 23

 U.S.C § 149 to improve air quality in Nonattainment and Maintenance Areas for ozone, carbon monoxide, and particulate matter. References related to this program include any successor programs as established by the federal government.
- 1.09 Corridor a transportation system that includes all modes and facilities within a described geographic area.
- 1.10 Corridor Vision a comprehensive examination of a specific transportation Corridor, which includes a determination of needs and an expression of desired state of the transportation system that includes Transportation Modes and facilities over a planning period.
- 1.11 Department or CDOT the Colorado Department of Transportation created by § 43-1-103, C.R.S.
- 1.12 Disproportionately Impacted Communities defined in § 24-38.5-302(3), C.R.S. as a community that is in a census block group, as determined in accordance with the most recent United States Decennial Census where the proportion of households that are low income is greater than forty percent (40%), the proportion of households that identify as minority is greater than forty percent (40%), or the proportion of households that are housing cost-burdened is greater than forty percent (40%).
- 1.13 Division the Division of Transportation Development within CDOT.
- 1.14 Division Director the Director of the Division of Transportation Development.
- 1.15 Fiscally Constrained the financial limitation on transportation plans and programs based on the projection of revenues as developed cooperatively with the MPOs and the rural TPRs and adopted by the Commission that are reasonably expected to be available over the long-range transportation planning period and the TIP and STIP programming periods.
- 1.16 Four-Year Prioritized Plan a four-year subset of the 10-Year Plan consisting of projects prioritized for near-term delivery and partial or full funding.
- 1.17 Greenhouse Gas (GHG) for purposes of these Rules, GHG is defined as the primary transportation greenhouse gases: carbon dioxide, methane, and nitrous oxide.
- 1.18 Greenhouse Gas (GHG) Reduction Level the amount of the GHG expressed as CO2e reduced from the projected Baseline that CDOT and MPOs must attain through transportation planning.
- 1.19 Greenhouse Gas (GHG) Mitigation Measures non-Regionally Significant Project strategies implemented by CDOT and MPOs that reduce transportation GHG pollution and help meet the GHG Reduction Levels.
- 1.20 Intergovernmental Agreement an arrangement made between two or more political subdivisions that form associations for the purpose of promoting the interest and welfare of said subdivisions.

- 1.21 Intermodal Facility a site where goods or people are conveyed from one mode of transportation to another, such as goods from rail to truck or people from passenger vehicle to bus.
- 1.22 Land Use the type, size, arrangement, and use of parcels of land.
- 1.23 <u>Limited English Proficiency individuals who do not speak English as their primary language and</u> who have a limited ability to read, speak, write, or understand English.
- 1.24 Long-Range Planning a reference to a planning period with a minimum 20-year planning horizon.
- 1.25 Maintenance Area any geographic region of the United States previously designated by the U.S. Environmental Protection Agency (EPA) as a Nonattainment Area pursuant to the Clean Air Act (CAA) Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under § 175A of the CAA, as amended in 1990.
- 1.26 Memorandum of Agreement (MOA) a written agreement between two or more parties on an intended plan of action.
- 1.27 Metropolitan Planning Agreement (MPA) a written agreement between the MPO, the State, and the providers of public transportation serving the Metropolitan Planning Area that describes how they will work cooperatively to meet their mutual responsibilities in carrying out the metropolitan planning process.
- 1.28 Metropolitan Planning Area a geographic area determined by agreement between the MPO for the area and the Governor, in which the metropolitan transportation planning process is carried out pursuant to 23 U.S.C. § 134.
- 1.29 Metropolitan Planning Organization (MPO) an organization designated by agreement among the units of general purpose local governments and the Governor, charged to develop the RTPs and programs in a Metropolitan Planning Area pursuant to 23 U.S.C. § 134.
- 1.30 Mitigation Action Plan an element of the GHG Transportation Report that specifies which GHG Mitigation Measures shall be implemented that help achieve the GHG Reduction Levels.
- 1.31 Mobility the ability to move people, goods, services, and information among various origins and destinations.
- MPO Models one (1) or more of the computer-based models maintained and operated by the MPOs which depict the MPO areas' transportation systems (e.g., roads, transit, etc.) and development patterns (i.e., number and location of households and jobs) for a defined year (i.e., past, present, or forecast) and produce estimates of roadway VMT, delays, operating speeds, transit ridership, and other characteristics of transportation system use.
- Multimodal an integrated approach to transportation that takes into account all modes of travel, such as bicycles and walking, personal mobility devices, buses, transit, rail, aircraft, and motor vehicles.
- 1.34 Multimodal Transportation and Mitigation Options Fund (MMOF) a program created in the State
 Treasury pursuant to § 43-4-1003, C.R.S. which funds bicycle, pedestrian, transit and other
 Multimodal projects as defined in § 43-4-1002(5), C.R.S. and GHG Mitigation projects as defined in § 43-4-1002(4.5), C.R.S.
- 1.35 National Ambient Air Quality Standards (NAAQS) are those established by the U.S. Environmental Protection Agency for air pollutants considered harmful to public health and

- environment. These criteria pollutants are: carbon monoxide, lead, nitrogen dioxide, ozone, small particles, and sulfur dioxide.
- 1.36 Nonattainment Area any geographic region of the United States which has been designated by the EPA under section 107 of the CAA for any pollutants for which a NAAQS exists.
- 1.37 Non-Metropolitan Area a rural geographic area outside a designated Metropolitan Planning Area.
- 1.38 Plan Integration a comprehensive evaluation of the statewide transportation system that includes all modes, an identification of needs and priorities, and key information from other related CDOT plans.
- 1.39 Planning Partners local and tribal governments, the rural TPRs and MPOs.
- 1.40 Project Priority Programming Process the process by which CDOT adheres to 23 U.S.C. § 135 and 23 C.F.R. Part 450 when developing and amending the STIP.
- 1.41 Regional Planning Commission (RPC) a planning body formed under the provisions of § 30-28-105, C.R.S., and designated under these Rules for the purpose of transportation planning within a rural TPR.
- 1.42 Regionally Significant Project a transportation project that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network or state transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel. If the MPOs have received approval from the EPA to use a different definition of regionally significant project as defined in 40 C.F.R. § 93.101, the State Interagency Consultation Team will accept the modified definition. Necessary specificity for MPO Models or the Statewide Travel Model will be approved by the State Interagency Consultation Team.
- 1.43 Regional Transportation Plan (RTP) a long-range plan designed to address the future transportation needs for a TPR including, but not limited to, Fiscally Constrained or anticipated funding, priorities, and implementation plans, pursuant to, but not limited to, § 43-1-1103, C.R.S. and 23 C.F.R. Part 450. All rural and urban TPRs in the state produce RTPs.
- State Interagency Consultation Team consists of the Division Director or the Division Director's designee, the Colorado Department of Public Health and Environment (CDPHE) Director of Air Pollution Control Division or the Director's designee, and the Director of each MPO or their designee.
- 1.45 State Transportation System refers to all state-owned, operated, and maintained transportation facilities in Colorado, including, but not limited to, interstate highways, other highways, and aviation, bicycle and pedestrian, transit, and rail facilities.
- 1.46 Statewide Transportation Advisory Committee (STAC) the committee created by § 43-1-1104,

 C.R.S., comprising one representative from each TPR and one representative from each tribal government to review and comment on RTPs, amendments, and updates, and to advise both the Department and the Commission on the needs of the transportation system in Colorado.
- 1.47 Statewide Transportation Improvement Program (STIP) a Fiscally Constrained, multi-year, statewide, Multimodal program of transportation projects which is consistent with the Statewide

- <u>Transportation Plan and planning processes, with Metropolitan Planning Area plans,</u>
 <u>Transportation Improvement Programs and processes, and which is developed pursuant to 23 U.S.C. § 135.</u>
- 1.48 Statewide Travel Model the computer-based model maintained and operated by CDOT which depicts the state's transportation system (roads, transit, etc.) and development scale and pattern (number and location of households, number and location of firms/jobs) for a selected year (past, present, or forecast) and produces estimates of roadway VMT and speed, transit, ridership, and other characteristics of transportation system use.
- 1.49 Statewide Transportation Plan the long-range, comprehensive, Multimodal statewide transportation plan covering a period of no less than 20 years from time of adoption, developed through the statewide transportation planning process described in these Rules and 23 U.S.C. § 135, and adopted by the Commission pursuant to § 43-1-1103, C.R.S.
- Surface Transportation Block Grant (STBG) a flexible federal funding source established under 23 U.S.C. § 133 for state and local transportation needs. Funds are expended in the areas of the State based on population. References related to this program include any successor programs established by the federal government.
- 1.51 System Continuity includes, but is not limited to, appropriate intermodal connections, integration with state modal plans, and coordination with neighboring RTPs, and, to the extent practicable, other neighboring states' transportation plans.
- 1.52 Traditionally Underserved refers to groups such as seniors, persons with disabilities, low-income households, minorities, and student populations, which may face difficulties accessing transportation systems, employment, services, and other amenities.
- 1.53 Transit and Rail Advisory Committee (TRAC) an advisory committee created specifically to advise the Executive Director, the Commission, and the Division of Transit and Rail on transit and rail-related activities.
- 1.54 Transportation Commonality the basis on which TPRs are established including, but not limited to: Transportation Commission Districts, the Department's Engineering Regions, Travelsheds, Watersheds, geographic unity, existing Intergovernmental Agreements, and socioeconomic unity.
- 1.55 Transportation Improvement Program (TIP) a staged, Fiscally Constrained, multi-year,

 Multimodal program of transportation projects developed and adopted by MPOs, and approved by the Governor, which is consistent with an MPO's RTP and which is developed pursuant to 23 U.S.C. § 134.
- 1.56 Transportation Mode a particular form of travel including, but not limited to, bus, motor vehicle, rail, transit, aircraft, bicycle, pedestrian travel, or personal mobility devices.
- 1.57 Transportation Planning and Programming Process all collaborative planning-related activities including the development of regional and Statewide Transportation Plans, the Department's Project Priority Programming Process, and development of the TIPs and STIP.
- 1.58 Transportation Planning Region (TPR) a geographically designated area of the state, defined by section 2.00 of these Rules in consideration of the criteria for Transportation Commonality, and for which a regional transportation plan is developed pursuant to the provisions of § 43-1-1102 and 1103, C.R.S. and 23 U.S.C. § 134. The term TPR is inclusive of these types: non-MPO TPRs, MPO TPRs, and TPRs with both MPO and non-MPO areas.

- 1.59 Transportation Systems Planning provides the basis for identifying current and future deficiencies on the state highway system and outlines strategies to address those deficiencies and make improvements to meet Department goals.
- 1.60 Travelshed the region or area generally served by a major transportation facility, system, or Corridor.
- 1.61 Tribal Transportation Improvement Program (TTIP) a multi-year Fiscally Constrained list of proposed transportation projects developed by a tribe from the tribal priority list or tribal long-range transportation plan, and which is developed pursuant to 25 C.F.R. Part 170. The TTIP is incorporated into the STIP without modification.
- 1.62 Urbanized Area an area with a population of 50,000 or more designated by the Bureau of the Census.
- 1.63 Vehicle Miles Traveled (VMT) the traffic volume of a roadway segment or system of roadway segments multiplied by the length of the roadway segment or system.
- 1.64 Watershed a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.
- 1.65 10-Year Plan a vision for Colorado's transportation system that includes a specific list of projects categorized across priority areas as identified in the Statewide Transportation Plan.
- 2.00 Transportation Planning Regions (TPR).
- 2.01 Transportation Planning Region Boundaries. <u>Transportation Planning Region TPR</u>s are geographically designated areas of the state with similar transportation needs that are determined by considering transportation commonalities. Boundaries are hereby established as follows:
 - 2.01.1 The Pikes Peak Area Transportation Planning Region TPR comprises the Pikes Peak Area Council of Governments' metropolitan area within El Paso and Teller counties.
 - 2.01.2 The Greater Denver Transportation Planning RegionTPR, which includes the Denver Regional Council of Governments' planning area, comprises the counties of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, Jefferson, and parts of Weld.
 - 2.01.3 The North Front Range Transportation Planning RegionTPR comprises the North Front Range Transportation and Air Quality Planning Council's metropolitan area within Larimer and Weld counties.
 - 2.01.4 The Pueblo Area Transportation Planning RegionTPR comprises Pueblo County, including the Pueblo Area Council of Governments' metropolitan area.
 - 2.01.5 The Grand Valley Transportation Planning Region TPR comprises Mesa County, including the Grand Valley Metropolitan Planning Organization's metropolitan area.
 - 2.01.6 The Eastern Transportation Planning Region TPR comprises Cheyenne, Elbert, Kit Carson, Lincoln, Logan, Phillips, Sedgwick, Washington, and Yuma counties.
 - 2.01.7 The Southeast Transportation Planning Region TPR comprises Baca, Bent, Crowley, Kiowa, Otero, and Prowers counties.

- 2.01.8 The San Luis Valley Transportation Planning Region TPR comprises Alamosa, Chaffee, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties.
- 2.01.9 The Gunnison Valley <u>Transportation Planning RegionTPR</u> comprises Delta, Gunnison, Hinsdale, Montrose, Ouray, and San Miguel counties.
- 2.01.10 The Southwest Transportation Planning RegionTPR comprises Archuleta, Dolores, La Plata, Montezuma, and San Juan counties, including the Ute Mountain Ute and Southern Ute Indian Reservations.
- 2.01.11 The Intermountain Transportation Planning RegionTPR comprises Eagle, Garfield, Lake, Pitkin, and Summit counties.
- 2.01.12 The Northwest Transportation Planning Region TPR comprises Grand, Jackson, Moffat, Rio Blanco, and Routt counties.
- 2.01.13 The Upper Front Range <u>Transportation Planning Region TPR</u> comprises Morgan County, and the parts of Larimer and Weld counties, that are outside both the North Front Range and the Greater Denver (metropolitan) TPRs.
- 2.01.14 The Central Front Range Transportation Planning RegionTPR comprises Custer, El Paso, Fremont, Park, and Teller counties, excluding the Pikes Peak Area Council of Governments' metropolitan area.
- 2.01.15 The South Central Transportation Planning Region TPR comprises Huerfano, and Las Animas Counties.
- 2.02 Boundary Revision Process.
 - 2.02.1 TPR boundaries, excluding any MPO-related boundaries, will be reviewed by the Commission at the beginning of each regional and statewide transportation planning process. The Department will notify counties, municipalities, MPOs, Indian tribal governments, and RPCs for the TPRs of the boundary review revision requests. MPO boundary review shall be conducted pursuant to 23 U.S.C. § 134 and 23 C.F.R. Part 450 Subpart B and any changes shall be provided to the Department to update the Rules. All boundary revision requests shall be sent to the Division Director, and shall include:
 - 2.02.1.1 A geographical description of the proposed boundary change.
 - 2.02.1.2 A statement of justification for the change considering transportation commonalities.
 - 2.02.1.3 A copy of the resolution stating the concurrence of the affected Regional Planning CommissionRPC.
 - 2.02.1.4 The name, title, mailing address, telephone number, fax number and electronic mail address (if available) of the contact person for the requesting party or parties.
 - 2.02.2 The Department will assess and STAC shall review and comment (as set forth in these Rules) on all nonNon-metropolitan Metropolitan area Area TPR boundary revision requests based on transportation commonalities and make a recommendation to the Commission concerning such requests. The Department will notify the Commission of MPO boundary changes. The Commission may initiate a rule-making proceeding under the State-Colorado Administrative Procedure Act, § 24-4-103, C.R.S. to consider a

- boundary revision request. Requests received for a MPO or non-metropolitan TPR boundary revision outside of the regularly scheduled boundary review cycle must include the requirements identified above.
- 2.02.3 In the event that the Commission approves a change to the boundary of a TPR that has a Regional Planning CommissionRPC, the RPC in each affected TPR shall notify the Department of any changes to the intergovernmental Intergovernmental agreement Agreement governing the RPC as specified in these Rules.
- 2.03 Transportation Planning Coordination with MPOs.
 - 2.03.1 The Department and the MPOs shall coordinate activities related to the development of Regional Transportation PlanRTPs, the Statewide Transportation Plan, TIPs, and the STIP in conformance with 23 U.S.C. § 134 and 135 and § 43-1-1101 and § 43-1-1103, C.R.S. The Department shall work with the MPOs to resolve issues arising during the planning process.
- 2.04 Transportation Planning Coordination with Non-MPO RPCs.
 - 2.04.1 The Department and RPCs shall work together in developing Regional Transportation PlanRTPs and in planning future transportation activities. The Department shall consult with all RPCs on development of the Statewide Transportation Plan; incorporation of RTPs into the Statewide Transportation Plan; and the inclusion of projects into the STIP that are consistent with the RTPs. In addition, the Department shall work with the RPCs to resolve issues arising during the planning process.
- 2.05 Transportation Planning Coordination among RPCs.
 - 2.05.1 If transportation improvements cross TPR boundaries or significantly impact another TPR, the RPC shall consult with all the affected RPCs involved when developing the regional transportation planRTP. In general, RPC planning officials shall work with all planning Planning partners Partners affected by transportation activities when planning future transportation activities.
- 2.06 Transportation Planning Coordination with the Southern Ute and the Ute Mountain Ute Tribal Governments.
 - 2.06.1 Regional transportation planning within the Southwest TPR shall be coordinated with the transportation planning activities of the Southern Ute and the Ute Mountain Ute tribal governments. The long-range transportation plans for the tribal areas shall be integrated in the Statewide Transportation Plan and the Regional Transportation PlanRTP for this TPR. The TTIP is incorporated into the STIP without modification.
- 3.00 Statewide Transportation Advisory Committee (STAC).
- 3.01 Duties of the Statewide Transportation Advisory Committee (STAC). Pursuant to § 43-1-1104 C.R.S. the duties of the STAC shall be to meet as necessary and provide advice to both the Department and the Commission on the needs of the transportation system in Colorado including, but not limited to: budgets, transportation improvement programs TIPs of the metropolitan planning organizations MPOs, the Statewide Transportation Improvement Program STIP, transportation plans, and state transportation policies.

The STAC shall review and provide to both the Department and the Commission comments on:

- 3.01.1 All Regional Transportation PlanRTPs, amendments, and updates as described in these Rules.
- 3.01.2 Transportation related communication and/or conflicts which arise between RPCs or between the Department and a RPC.
- 3.01.3 The integration and consolidation of RTPs into the Statewide Transportation Plan.
- 3.01.4 Colorado's mobility Mobility requirements to move people, goods, services, and information by furnishing regional perspectives on transportation problems requiring interregional and/or statewide solutions.
- 3.01.5 Improvements to modal choice, linkages between and among modes, and transportation system balance and system System continuity Continuity.
- 3.01.6 Proposed TPR boundary revisions.
- 3.02 Notification of Membership
 - 3.02.1 Each RPC and tribal government shall select its representative to the STAC pursuant to § 43-1-1104(1), C.R.S. The Ute Mountain Ute Tribal Council and the Southern Ute Indian Tribal Council each appoint one representative to the STAC. Each TPR and tribal government is also entitled to name an alternative representative who would serve as a proxy in the event their designated representative is unable to attend a STAC meeting and would be included by the Department in distributions of all STAC correspondence and notifications. The Division Director shall be notified in writing of the name, title, mailing address, telephone number, fax number and electronic mail address (if available) of the STAC representative and alternative representative from each TPR and tribal government within thirty (30) days of selection.
- 3.03 Administration of Statewide Transportation Advisory Committee STAC
 - 3.03.1 STAC recommendations on Regional and Statewide Transportation Plans, amendments, and updates shall be documented in the STAC meeting minutes, and will be considered by the Department and Commission throughout the statewide transportation planning process.
 - 3.03.2 The STAC shall establish procedures to govern its affairs in the performance of its advisory capacity, including, but not limited to, the appointment of a chairperson and the length of the chairperson's term, meeting times, and locations.
 - 3.03.3 The Division Director will provide support to the STAC, including, but not limited to:
 - 3.03.3.1 Notification of STAC members and alternates of meeting dates.
 - 3.03.3.2 Preparation and distribution of STAC meeting agendas, supporting materials, and minutes.
 - 3.03.3.3 Allocation of Department staff support for STAC-related activities.
- 4.00 Development of Regional and Statewide Transportation Plans.
- 4.01 Regional Planning Commission RPCs, MPOs, and the Department shall comply with all applicable provisions of 23 U.S.C. § 134 and § 135, 23 C.F.R. Part 450, and § 43-1-1103, C.R.S. and all

4.02.5.1

applicable provisions of Commission policies and guidance documents in development of regional and statewide transportation plans, respectively.

4.02 Public Participation

- 4.02.1 The Department, in coordination with the RPCs of the rural TPRs, shall provide early and continuous opportunity for public participation in the transportation planning process. The process shall be proactive and provide timely information, adequate public notice, reasonable public access, and opportunities for public review and comment at key decision points in the process. The objectives of public participation in the transportation planning process include: providing a mechanism for public perspectives, needs, and ideas to be considered in the planning process; developing the public's understanding of the problems and opportunities facing the transportation system; demonstrating explicit consideration and response to public input through a variety of tools and techniques; and developing consensus on plans. The Department shall develop a documented public participation process pursuant to 23 C.F.R. Part 450.
- 4.02.2 Statewide Plans and Programs. Pursuant to 23 C.F.R. Part 450 Subpart B, the Department is responsible, in cooperation with the RPCs and MPOs, for carrying out public participation for developing, amending, and updating the statewide—Statewide transportation—Transportation planPlan, the Statewide Transportation Improvement Program (STIP), and other statewide transportation planning activities.
- 4.02.3 MPO Plans and Programs. Pursuant to 23 C.F.R. Part 450 Subpart C, the MPOs are responsible for carrying out public participation for the development of regional transportation planning activities for their respective metropolitan Metropolitan planning areas Areas. Public participation activities carried out in a metropolitan area in response to metropolitan planning requirements shall by agreement of the Department and the MPO, satisfy the requirements of this subsection.
- 4.02.4 Non-MPO TPR Plans and Programs. Regional Planning CommissionRPCs for non-MPO TPRs are responsible for public participation related to regional planning activities in that TPR, in cooperation with the Department. Specific areas of cooperation shall be determined by agreement between the Regional Planning CommissionRPC and the Department.
- 4.02.5 Public Participation Activities. Public participation activities at both the rural TPR and statewide level shall include, at a minimum:
 - Establishing and maintaining for the geographic area of responsibility a list of all known parties interested in transportation planning including, but not limited to: elected officials; municipal and county planning staffs; affected public agencies; local, state, and federal agencies eligible for federal and state transportation funds; local representatives of public transportation agency employees and users; freight shippers and providers of freight transportation services; public and private transportation providers; representatives of users of transit, bicycling and pedestrian, aviation, and train facilities; private industry; environmental and other interest groups; Indian tribal governments and the U.S. Secretary of the Interior when tribal lands are involved; and representatives of persons or groups that may be underserved by existing transportation systems, such as minority, low-income, seniors, persons with disabilities, and those with limited Limited English proficiency Proficiency; and members of the general public expressing such interest in the transportation planning process.

- 4.02.5.2 Providing reasonable notice and opportunity to comment through mailing lists and other various communication methods on upcoming transportation planning-related activities and meetings.
- 4.02.5.3 Utilizing reasonably available internet or traditional media opportunities, including minority and diverse media, to provide timely notices of planning-related activities and meetings to members of the public, including LEP-Limited English Proficiency individuals, and others who may require reasonable accommodations. Methods that will be used to the maximum extent practicable for public participation could include, but not be limited to, use of the internet; social media, news media, such as newspapers, radio, or television, mailings and notices, including electronic mail and online newsletters.
- 4.02.5.4 Seeking out those persons or groups traditionally underserved Underserved by existing transportation systems including, but not limited to, seniors, persons with disabilities, minority groups, low-income, and those with limited English proficiency Proficiency, for the purposes of exchanging information, increasing their involvement, and considering their transportation needs in the transportation planning process. Pursuant to § 43-1-601, C.R.S., the Department shall prepare a statewide survey identifying the transportation needs of seniors and of persons with disabilities.
- 4.02.5.5 Consulting, as appropriate, with Regional Planning CommissionRPCs, and federal, state, local, and tribal agencies responsible for land use management, natural resources, environmental protection, conservation and historic preservation concerning the development of long-range transportation plans.
- 4.02.5.6 Providing reasonable public access to, and appropriate opportunities for public review and comment on criteria, standards, and other planning-related information. Reasonable public access includes, but is not limited to, <u>LEP-Limited English Proficiency</u> services and access to ADA-compliant facilities, as well as to the internet.
- 4.02.5.7 Where feasible, scheduling the development of regional and statewide plans so that the release of the draft plans may be coordinated to provide for the opportunity for joint public outreach.
- 4.02.5.8 Documentation of Responses to Significant Issues. Regional Planning Commissions RPCs and the Department shall respond in writing to all significant issues raised during the review and comment period on transportation plans, and make these responses available to the public.
- 4.02.5.9 Review of the Public Involvement Process. All interested parties and the Department shall periodically review the effectiveness of the Department's public involvement process to ensure that the process provides full and open access to all members of the public. When necessary, the process will be revised and allow time for public review and comment per 23 C.F.R. Part 450.
- 4.03 Transportation Systems Planning. Regional Planning Commission RPCs, and the Department, shall use an integrated multimodal Multimodal transportation Transportation systems—Systems planning approach in developing and updating the long-range Regional Transportation PlansRTPs and the long-range Statewide Transportation Plan for a minimum 20-year forecasting

period. Regional Planning Commission RPCs shall have flexibility in the methods selected for transportation Transportation systems planning Planning based on the complexity of transportation problems and available resources within the TPR. The Department will provide guidance and assistance to the Regional Planning Commission RPCs regarding the selection of appropriate methods.

- 4.03.1 Transportation systems Systems planning by Regional Planning CommissionRPCs and the Department shall consider the results of any related studies that have been completed. Regional Planning CommissionRPCs and the Department may also identify any corridorCorridor(s) or sub-area(s) where an environmental study or assessment may need to be performed in the future.
- 4.03.2 Transportation systems Systems planning Planning by Regional Planning Commission RPCs shall consider corridor vision needs and desired state of the transportation system including existing and future land use and infrastructure, major activity centers such as industrial, commercial and recreation areas, economic development, environmental protection, and modal choices.
- 4.03.3 Transportation systems Systems planning Planning by Regional Planning CommissionRPCs shall include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility Mobility of people goods, and services.
- 4.03.4 Transportation <u>systems Systems planning Planning</u> by the Department should include capital, operations, maintenance and management strategies, investments, procedures, and other measures to ensure the preservation and most efficient and effective use of the <u>state State transportation Transportation systemSystem</u>.
- 4.03.5 Transportation systems—Systems Pplanning by the Department shall consider and integrate all modes into the Statewide Transportation Plan and include coordination with Department modal plans and modal committees, such as the Transit and Rail Advisory Committee (TRAC).
- 4.03.6 Transportation Systems Planning by the Department shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals described in 23 U.S.C. § 150 (FAST Act, P.L. 114-94). Performance targets that the Department establishes to address the performance measures described in 23 U.S.C. § 150, where applicable, are to be used to track progress towards attainment of critical outcomes for the state. The state shall consider the performance measures and targets when developing policies, programs, and investment priorities reflected in the Statewide Transportation Plan and STIP.
- 4.04 Regional Transportation Plans (RTP). Long-range regional transportation plans RTPs shall be developed, in accordance with federal (23 U.S.C. § 134 and § 135) and state (§ 43-1-1103 and § 43-1-1104, C.R.S.) law and implementing regulations. Department selection of performance targets that address the performance measures shall be coordinated with the relevant MPOs to ensure consistency, to the maximum extent practicable.
 - 4.04.1 Content of Regional Transportation PlanRTPs. Each RTP shall include, at a minimum, the following elements:
 - 4.04.1.1 Transportation system facility and service requirements within the MPO TPR over a minimum 20-year planning period necessary to meet expected demand, and the anticipated capital, maintenance and operating cost for these facilities and services.

	4.04.1.2	State and federal transportation system planning factors to be considered by Regional Planning CommissionRPCs and the Department during their respective transportation Transportation systems planning shall include, at a minimum, the factors described in § 43-1-1103 (5), C.R.S., and in 23 U.S.C. § 134 and § 135.
	4.04.1.3	Identification and discussion of potential environmental mitigation measures, corridor Studies, or corridor Studies, or corridor Studies, including a discussion of impacts to minority and low-income communities.
	4.04.1.4	A discussion of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.
	4.04.1.5	For rural RTPs, the integrated performance-based multimodal Multimodal transportation plan based on revenues reasonably expected to be available over the minimum 20-year planning period. For metropolitan RTPs, a fiscally Fiscally constrained financial plan.
	4.04.1.6	Identification of reasonably expected financial resources developed cooperatively among the Department, MPOs, and rural TPRs for long-range-Range-planning-Planning-purposes , and results expected to be achieved based on regional priorities.
	4.04.1.7	Documentation of the public notification and public participation process pursuant to these Rules.
	4.04.1.8	A resolution of adoption by the responsible Metropolitan Planning Organization MPO or the Regional Planning Commission RPC.
4.04.2	Products and re	eviews
	4.04.2.1	Draft Plan. Transportation Planning RegionTPRs shall provide a draft of the RTP to the Department through the Division-of-Transportation Development.
	4.04.2.2	Draft Plan Review. Upon receipt of the draft RTPs, the Department will initiate its review and schedule the STAC review (pursuant to these Rules). The Department will provide its comments and STAC comments to the Transportation-Planning Region_TPR within a minimum of 30 days of receiving the draft RTP. Regional transportation-plan_RTP in metropolitan areas completed pursuant to the schedule identified in 23 C.F.R. § 450.322 shall be subject to the provisions of this section prior to being submitted to the Department for consideration as an amendment to the Transportation-plan_Plan .
	4.04.2.3	Final Plan. Transportation Planning Region TPRs shall provide the final RTP to the Department through the Division of Transportation Development.
	4.04.2.4	Final Plan Review. Upon receipt of the final RTP, the Department will initiate its review and schedule the STAC review (pursuant to these

Rules) of the final RTPs to determine if the plans incorporate the elements required by the Rules. If the Department determines that a final RTP is not complete, including if the final RTP does not incorporate the elements required by these Rules, then the Department will not integrate that RTP into the statewide plan until the Transportation Planning RegionTPR has sufficiently revised that RTP, as determined by the Department with advice from the STAC. The Department will provide its comments and STAC comments to the Transportation Planning RegionTPR within a minimum of 30 days of receiving the final RTP. Transportation Planning RegionTPRs shall submit any RTP revisions based on comments from the Department and STAC review within 30 days of the Department's provision of such comments. Regional transportation plansRTPs in metropolitan areas completed pursuant to the schedule identified in 23 C.F.R. § 450.322 shall be subject to the provisions of this section prior to being submitted to the Department for consideration as an amendment to the statewide Statewide transportation-Transportation planPlan.

- 4.05 Maintenance and Nonattainment Areas. Each RTP, or RTP amendment, shall include a section that:
 - 4.05.1 Identifies any area within the TPR that is designated as a maintenance Maintenance or nonattainment Nonattainment area Area.
 - 4.05.2 Addresses, in either a qualitative or quantitative manner, whether transportation related emissions associated with the pollutant of concern in the TPR are expected to increase over the lengtong-range-Range planning-Planning period and, if so, what effect that increase might have in causing a maintenance-Area for an NAAQS pollutant to become a nonattainment-Nonattainment-Nonattainment-area-Area to exceed its emission budget in the approved State Implementation Plan.
 - 4.05.3 If transportation related emissions associated with the pollutant are expected to increase over the lengtong-range-Range-planning-Planning period, identifies which programs or measures are included in the RTP to decrease the likelihood of that area becoming a nonattainment Nonattainment area Area for the pollutant of concern.
- 4.06 Statewide Transportation Plan. The Regional Transportation PlansRTPs submitted by the Regional Planning CommissionsRPCs shall, along with direction provided through Commission policies and guidance, form the basis for developing and amending the Statewide Transportation Plan. The Statewide Transportation Plan shall cover a minimum 20-year planning period at the time of adoption and shall guide the development and implementation of a performance-based multimodal transportation system for the State.
 - 4.06.1 The Statewide Transportation Plan shall:
 - 4.06.1.1 Integrate and consolidate the RTPs and the Department's systems planning, pursuant to these Rules, into a long-range 20-year multimodal Multimodal transportation plan that presents a clear, concise path for future transportation in Colorado.
 - 4.06.1.2 Include the long-term transportation concerns of the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe in the development of the Statewide Transportation Plan.

- 4.06.1.3 Coordinate with other state and federal agencies responsible for land use management, natural resources, environmental protection. conservation, and historic preservation. 4.06.1.4 Include a discussion of potential environmental mitigation activities and potential areas to carry out these activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan developed in consultation with federal, state, and tribal wildlife, land management and regulatory agencies. 4.06.1.5 Include a comparison of transportation plans to state and tribal conservation plans or maps and to inventories of natural or historical resources. 4.06.1.6 Provide for overall multimodal Multimodal transportation system management on a statewide basis. 4.06.1.7 The Statewide Transportation Plan shall be coordinated with metropolitan transportation plans pursuant to 23 C.F.R. Part 450, § 43-1-1103 and § 43-1-1105, C.R.S. Department selection of performance targets shall be coordinated with the MPOs to ensure consistency, to the maximum extent practicable. 4.06.1.8 Include an analysis of how the Statewide Transportation Plan is aligned with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. 4.06.1.9 Includes the 10-Year Plan as an appendix.
- 4.06.2 Content of the Statewide Transportation Plan. At a minimum, the Statewide Transportation Plan shall include priorities as identified in the RTPs, as identified in these Rules and pursuant to federal planning laws and regulations. The Statewide Transportation Plan shall be submitted to the Colorado Transportation Commission for its consideration and approval.
- 4.06.3 Review and Adoption of the Statewide Transportation Plan.
 - 4.06.3.1 The Department will submit a draft Statewide Transportation Plan to the Commission, the STAC, and all interested parties for review and comment. The review and comment period will be conducted for a minimum of 30 days. The Statewide Transportation Plan and appendices The publication will be available in physical form upon requestat public facilities, such as at the Department headquarters and region offices, state depository libraries, county offices, TPR offices, Colorado Division offices of the Federal Highway Administration and Federal Transit Administration, and made available on the internet.
 - 4.06.3.2 The Department will submit the final Statewide Transportation Plan to the Colorado Transportation Commission for adoption.

5.00 Updates to Regional and Statewide Transportation Plans.

5.01 Plan Update Process. The updates of Regional Transportation Plan RTP and the Statewide Transportation Plan shall be completed on a periodic basis through the same process governing development of these plans pursuant to these Rules. The update cycle shall comply with federal

- and state law and be determined in consultation with the Transportation Commission, the Department, the STAC and the MPOs so that the respective update cycles will coincide.
- 5.02 Notice by Department of Plan Update Cycle. The Department will notify Regional Planning Commission RPC and the MPOs of the initiation of each plan update cycle, and the schedule for completion.
- 6.00 Amendments to the Regional and Statewide Transportation Plans.
- 6.01 Amendment Process
 - 6.01.1 The process to consider amendments to Regional Transportation PlanRTP s shall be carried out by rural RPCs and the MPOs. The amendment review process for Regional Transportation PlanRTP s shall include an evaluation, review, and approval by the respective RPC or MPO.
 - 6.01.2 The process to consider amendments to the Statewide Transportation Plan shall be carried out by the Department, either in considering a proposed amendment to the Statewide Transportation Plan from a requesting RPC or MPO or on its own initiative.
 - 6.01.3 The process to consider amendments to the 10-Year Plan shall be carried out by CDOT in coordination with the rural RPCs and the MPOs.
- 7.00 Transportation Improvement Programs (TIPs) and Statewide Transportation Improvement Program (STIP).
- 7.01 TIP development shall occur in accordance with 23 C.F.R. Part 450, Subpart C. The Department will develop the STIP in accordance with 23 C.F.R. Part 450, Subpart B.
- 7.02 The Department will work with its <u>planning_Planning_partners_Partners_to</u> coordinate a schedule for development and adoption of TIPs and the STIP.
- 7.03 A TIP for an MPO that is in a non-attainment or Maintenance Area must first receive a conformity determination by FHWA and FTA before inclusion in the STIP pursuant to 23 C.F.R. Part 450.
- 7.04 MPO TIPs and Colorado's STIP must be <u>fiscally_Fiscally_eonstrainedConstrained</u>. Under 23 C.F.R. Part 450, each project or project phase included in an MPO TIP shall be consistent with an approved metropolitan RTP, and each project or project phase included in the STIP shall be consistent with the long-range <u>statewide_Statewide_transportation_Transportation_plan_Plan.</u> MPO TIPs shall be included in the STIP either by reference or without change upon approval by the MPOs and the Governor.

8.00 GHG Emission Requirements

- 8.01 Establishment of Regional GHG Transportation Planning Reduction Levels
 - 8.01.1 The GHG emission reduction levels within Table 1 apply to MPOs and the Non-MPO area within the state of Colorado as of the effective date of these Rules. Baseline values are specific to each MPO and CDOT area and represent estimates of GHG emissions resulting from the existing transportation network and implementation of the most recently adopted RTP for all MPOs and the 10-Year Plan in non-MPO areas as of the effective date of these Rules. Table 2 reflects the difference in Baseline levels from year to year assuming a rapid growth in electric vehicles across the State (940,000 light duty electric vehicles in 2030, 3.38 million in 2040 and a total of 97% of all light duty vehicles in 2050).

Values in both tables include estimates of population growth as provided by the state demographer.

8.01.2 Regional GHG Transportation Planning Reduction Levels

Table 1: GHG Transportation Planning Reduction Levels in MMT of CO2e

Regional Areas	2025 Baseline Projections (MMT)	2025 Reduction Level (MMT)	2030 Baseline Projections (MMT)	2030 Reduction Level (MMT)	2040 Baseline Projections (MMT)	2040 Reduction Level (MMT)	2050 Baseline Projections (MMT)	2050 Reduction Level (MMT)
DRCOG	14.9	0.27	<u>11.8</u>	0.82	10.9	0.63	12.8	0.37
<u>NFRMPO</u>	<u>2.3</u>	0.04	<u>1.8</u>	0.12	<u>1.9</u>	0.11	2.2	0.07
PPACG	<u>2.7</u>	N/A	2.2	<u>0.15</u>	2.0	<u>0.12</u>	<u>2.3</u>	0.07
<u>GVMPO</u>	0.38	N/A	0.30	0.02	0.30	0.02	<u>0.36</u>	<u>0.01</u>
PACOG	0.50	N/A	0.40	0.03	0.30	0.02	<u>0.4</u>	0.01
CDOT/Non-MPO	<u>6.7</u>	0.12	<u>5.3</u>	0.37	<u>5.2</u>	0.30	<u>6.1</u>	<u>0.18</u>
TOTAL	<u>27.4</u>	<u>0.5</u>	<u>21.8</u>	<u>1.5</u>	<u>20.6</u>	<u>1.2</u>	<u>24.2</u>	0.7

8.01.3 Baseline Emissions Due to Projected Number of Light Duty Electric Vehicles

Table 2: Baseline Emissions Due to Projected Number of Light Duty Electric Vehicles

	2025 Projections	2030 Projections	2040 Projections	2050 Projections	
	(MMT)	(MMT)	(MMT)	(MMT)	
TOTAL	<u>27.0</u>	20.0	<u>14.0</u>	<u>8.9</u>	

8.02 Process for Determining Compliance

- 8.02.1 Analysis Requirements When Adopting or Amending an Applicable Planning Document Each MPO and CDOT shall conduct a GHG emissions analysis using MPO Models or the
 Statewide Travel Model, and the Approved Air Quality Model, to estimate total CO2e
 emissions. Such analysis shall include the existing transportation network and
 implementation of Regionally Significant Projects. The emissions analysis must estimate
 total CO2e emissions in million metric tons (MMT) for each year in Table 1 and compare
 these emissions to the Baseline specified in Table 1. This provision shall not apply to
 MPO TIP amendments.
- 8.02.2 Agreements on Modeling Assumptions and Execution of Modeling Requirements. Prior to the adoption of the next RTP for any MPO, CDOT, CDPHE, and each MPO shall enter into an Intergovernmental Agreement which outlines CDOT, CDPHE, and MPO

- responsibilities for development and execution of MPO Models or the Statewide Travel Model, and Approved Air Quality Model.
- 8.02.3 By April 1, 2022, CDOT shall establish an ongoing administrative process, through a public process, for selecting, measuring, confirming, and verifying GHG Mitigation

 Measures, so that CDOT and MPOs can incorporate one or more into each of their plans in order to reach the Regional GHG Planning Reduction Levels in Table 1. Such a process shall include, but not be limited to, determining the relative impacts of GHG Mitigation Measures, measuring and prioritizing localized impacts to communities and Disproportionately Impacted Communities in particular. The mitigation credit awarded to a specific solution shall consider both aggregate and community impact.
- 8.02.4 Timing for Determining Compliance
 - 8.02.4.1 By October 1, 2022, CDOT shall update their 10-Year Plan and DRCOG and NFRMPO shall update their RTPs pursuant to § 43-4-1103, C.R.S. and meet the reduction levels in Table 1 or the requirements pursuant to § 43-4-1103, C.R.S and restrictions on funds.
 - 8.02.4.2 After October 1, 2022
 - 8.02.4.2.1 CDOT must for each Applicable Planning Document, meet either the reduction levels within Table 1 for Non-MPO areas or the requirements as set forth in Rule 8.05.
 - 8.02.4.2.2 MPOs must meet either the corresponding reduction levels
 within Table 1 for each Applicable Planning Document, or the
 relevant MPO and CDOT each must meet the requirements as
 set forth in Rule 8.05.
- 8.02.5 Demonstrating Compliance. At least thirty (30) days prior to adoption of any Applicable
 Planning Document, CDOT for Non-MPO areas and the MPOs for their areas shall
 provide to the Commission a GHG Transportation Report containing the following
 information:
 - 8.02.5.1 GHG emissions analysis demonstrating that the Applicable Planning

 Document is in compliance with the GHG Reduction Levels in MMT of

 CO2e for each compliance year in Table 1 or that the requirements in

 Rules 8.02.5.1.1 or 8.02.5.1.2., as applicable, have been met.
 - 8.02.5.1.1 In non-MPO areas or for MPOs that are not in receipt of federal suballocations pursuant to the CMAQ and/or STBG programs, the Department utilizes 10-Year Plan funds anticipated to be expended on Regionally Significant Projects in those areas on projects that reduce GHG emissions.
 - 8.02.5.1.2 In MPO areas that are in receipt of federal suballocations
 pursuant to the CMAQ and/or STBG programs, the MPO utilizes
 those funds on projects or approved GHG Mitigation Measures
 that reduce GHG emissions, and CDOT utilizes 10-Year Plan
 funds anticipated to be expended on Regionally Significant
 Projects in that MPO area, on projects that reduce GHG
 emissions.

8.02.6.4

	8.02.5.2 8.02.5.3	Travel GHG e	cation and documentation of the MPO Model or the Statewide Model and the Approved Air Quality Model used to determine emissions in MMT of CO2e. ation Action Plan that identifies GHG Mitigation Measures needed to the reduction levels within Table 1 shall include:
		to mee	the reduction levels within rapie i shall include.
	8.02.5	.3.1	The anticipated start and completion date of each measure.
	8.02.5	.3.2	An estimate, where feasible, of the GHG emissions reductions in MMT of CO2e achieved by any GHG Mitigation Measures.
	<u>8.02.5</u>	.3.3	Quantification of specific co-benefits including reduction of co- pollutants (PM2.5, NOx, etc.) as well as travel impacts (changes to VMT, pedestrian/bike use, transit ridership numbers, etc. as applicable).
	<u>8.02.5</u>	.3.4	Description of benefits to Disproportionately Impacted Communities.
8.02.6	report to the C	ommissi	ce- Annually by April 1, CDOT and MPOs must provide a status on on an approved form with the following items for each GHG ntified in their most recent GHG Transportation Report:
	8.02.6.1	The im	plementation timeline;
	8.02.6.2	The cu	rrent status;
	8.02.6.3		easures that are in progress or completed, quantification of the or impact of such measures; and

For measures that are delayed, cancelled, or substituted, an explanation

- 8.03 GHG Mitigation Measures. When assessing compliance with the GHG Reduction Levels, CDOT and MPOs shall have the opportunity to utilize approved GHG Mitigation Measures as set forth in Rules 8.02.3 and 8.02.5.3 to offset emissions and demonstrate progress toward compliance.

 Illustrative examples of GHG Mitigation Measures include, but are not limited to:
 - 8.0.3.1 The addition of transit resources in a manner that can displace VMT.

of why that decision was made.

- 8.03.2 Improving pedestrian and bike access, particularly in areas that allow individuals to reduce multiple daily trips.
- 8.03.3 Encouraging local adoption of more effective forms of vertical development and zoning plans that integrate mixed use in a way that links and rewards transportation project investments with the city making these changes.
- <u>8.03.4 Improving first-and-final mile access to transit stops and stations that make transit resources safer and more usable by consumers.</u>
- 8.03.5 Improving the safety and efficiency of crosswalks for pedestrians, bicyclists, and other non-motorized vehicles, including to advance compliance with the ADA.

- 8.03.6 Adopting locally driven changes to parking policies and physical configuration that encourage more walking and transit trips.
- 8.03.7 Incorporating medium/heavy duty vehicle electric charging and hydrogen refueling infrastructure -- as well as upgrading commensurate grid improvements -- into the design of key freight routes to accelerate truck electrification.
- 8.03.8 Establishing policies for clean construction that result in scalable improvements as a result of factors like lower emission materials, recycling of materials, and lower truck emissions during construction.
- 8.03.9 Adoption of transportation demand management practices that reduce VMT.
- 8.04 Air Pollution Control Division (APCD) Confirmation and Verification
 - 8.04.1 At least forty-five (45) days prior to adoption of any Applicable Planning Document,

 CDOT for Non-MPO areas and the MPOs for their areas shall provide to APCD for review
 and verification of the technical data contained in the draft GHG Transportation Report
 required per Rule 8.02.5. If APCD has not provided written verification within thirty (30)
 days, the document shall be considered acceptable.
 - 8.04.2 At least thirty (30) days prior to adoption or amendment of policies per Rule 8.02.3,

 CDOT shall provide APCD the opportunity to review and comment. If APCD has not provided written comment within forty-five (45) days, the document shall be considered acceptable.
- 8.05 Enforcement. The Commission shall review all GHG Transportation Reports to determine whether the applicable reduction targets in Table 1 have been met and the sufficiency of any GHG Mitigation Measures needed for compliance.
 - 8.05.1 If the Commission determines the requirements of Rule 8.02.5 have been met, the Commission shall, by resolution, accept the GHG Transportation Report.
 - 8.05.2 If the Commission determines, by resolution, the requirements of Rule 8.02.5 have not been met, the Commission shall restrict the use of funds pursuant to Rules 8.02.5.1.1 or 8.02.5.1.2, as applicable, to projects and approved GHG Mitigation Measures that reduce GHG. Prior to the enforcement of such restriction, an MPO, CDOT or a TPR in a non-MPO area, may, within thirty (30) days of Commission action, issue one or both of the following opportunities to seek a waiver or to ask for reconsideration accompanied by an opportunity to submit additional information:

8.05.2.1			st a waiver from the Commission imposing restrictions on specific
		projects	s not expected to reduce GHG emissions. The Commission may
	,	he restrictions on specific projects on the following basis:	
8.	.05.2.1	.1	The GHG Transportation Report reflected significant
			effort and priority placed, in total, on projects and GHG
			Mitigation Measures that reduce GHG emissions; and
8.	.05.2.1	.2	In no case shall a waiver be granted if such waiver
			results in a substantial increase in GHG emissions when
			compared to the required reduction levels in this Rule.

- 8.05.2.2 Request reconsideration of a non-compliance determination by the

 Commission and provide written explanation of how the requirements of

 Rule 8.02.5 have been met.
- 8.05.2.3 The Commission shall act, by resolution, on a waiver or reconsideration request within thirty (30) days of receipt of the waiver or reconsideration request or at the next regularly scheduled Commission Meeting, whichever is later. If no action is taken within this time period, the waiver or reconsideration request shall be deemed to be denied.
- 8.05.3 Notwithstanding any other provision of this Rule, CDOT, DRCOG and NFRMPO must meet the requirements of § 43-4-1103, C.R.S.

8.06 Reporting. Beginning July 1, 2025, and every 5 years thereafter, the Executive Director on behalf of CDOT shall prepare and make public a comprehensive report on the statewide GHG reduction accomplishments.

9.00 Materials Incorporated by Reference

- 9.01 The Rules are intended to be consistent with and not be a replacement for the federal transportation planning requirements in Rule 9.01.1 and federal funding programs in Rules 9.01.2 and 9.01.3, which are incorporated into the Rules by this reference, and do not include any later amendments.
 - 9.01.1 Fixing America's Surface Transportation Act or the "FAST Act"), 23 U.S.C. §§ 134, 135 and 150, Pub. L. No. 114-94, signed into law on December 4, 2015, and its accompanying regulations, where applicable, contained in 23 C.F.R.Part 450, including Subparts A, B and C in effect as of November 29, 2017, and 25 C.F.R. § 170 in effect as of November 7, 2016.
 - 9.01.2 Congestion Mitigation and Air Quality Improvement (CMAQ) Program, 23 U.S.C. § 149, in effect as of March 23, 2018.
 - 9.01.3 Surface Transportation Block Grant (STBG) Program, 23 U.S.C. § 133, in effect as of December 4, 2015.
- 9.02 Also incorporated by reference are the following federal laws and regulations and do not include any later amendments:
 - 9.02.1 Americans with Disabilities Act (ADA), 42 U.S.C. § 12101, et. seq., in effect as of January 1, 2009.
 - 9.02.2 Clean Air Act (CCA), 42 U.S.C. §§ 7407-7410, and 7505a, in effect as of November 15, 1990.
 - 9.02.2 <u>Transportation Conformity Regulations, 40 C.F.R. § 93.101, in effect as November</u> 24,1993.
- 9.03 Also incorporated by reference are the following documents, standards, and models and do not include any later amendments:
 - 9.03.1 Greenhouse Gas Pollution Reduction Roadmap by the Colorado Energy Office and released on January 14, 2021.

- 9.03.2 MOVES3 Motor Vehicle Emissions Model for SIPs and Transportation Conformity released by the U.S. Environmental Protection Agency, in effect as of January 7, 2021.
- 9.04 All referenced laws and regulations are available for copying or public inspection during regular business hours from the Office of Policy and Government Relations, Colorado Department of Transportation, 2829 W. Howard Pl., Denver, Colorado 80204.
- 9.05 Copies of the referenced federal laws and regulations, planning documents, and models.
 - 9.05.1 Copies of the referenced United States Code (U.S.C.) may be obtained from the following address:

Office of the Law Revision Counsel
U.S. House of Representatives
H2-308 Ford House Office Building
Washington, DC 20515
(202) 226-2411
https://uscode.house.gov/browse.xhtml

9.05.2 Copies of the referenced Code of Federal Regulations (C.F.R.) may be obtained from the following address:

U.S. Government Publishing Office
732 North Capitol State, N.W.
Washington, DC 20401
(866) 512-1800
https://www.govinfo.gov/

9.0.5.3 Copies of the Greenhouse Gas Pollution Reduction Roadmap (Roadmap) may be obtained from the following address:

Colorado Energy Office 1600 Broadway, Suite 1960 Denver, CO 80202 (303) 866-2100 energyoffice.colorado.gov

9.0.5.4 To download MOVES3 released by the U.S. Environmental Protection Agency may be obtained from the following address:

U.S. Environmental Protection Agency
The Office of Transportation and Air Quality
1200 Pennsylvania Ave, N.W.
Washington, DC 20460
(734) 214–4574 or (202) 566-0495

mobile@epa.gov

https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves

10.00 Declaratory Orders

10.01 The Commission may, at their discretion, entertain petitions for declaratory orders pursuant to § 24-4-105(11), C.R.S.

Editor's Notes

History

Entire rule eff. 12/15/2012. Section SB&P eff. 05/30/2013. Entire rule eff. 09/14/2018.

Annotations

Rules 1.22, 1.25, 1.42, 2.03.1 - 2.03.1.4, 4.01, 4.02.1 - 4.02.3, 4.02.5.9, 4.04.2.2, 4.04.2.4, 4.06.1.7, 6.01.2, 7.01, 7.03 - 7.04 (adopted 10/18/2012) were not extended by Senate Bill 13-079 and therefore expired 05/15/2013.

8/25/2021 Register Details





Home

Colorado Revised Statutes

Colorado Register
Official Publication of the State Administrative Rules (24-4-103(11) C.R.S.)

August 25, 2021 - Volume 44, No. 16

Search Browse

Colorado Register

Home > Colorado Register

Back Issues Select year ➤

Authenticated PDF version

eDocket

Log in

Contact Us

Contents

Notices of proposed rulemaking

Permanent Rules Adopted
Emergency Rules Adopted

Nonrulemaking public notices and other miscellaneous rulemaking notices

Calendar of Hearings

Notices of proposed rulemaking

Department	Agency	Proposed rules	Hearing
Department of Revenue	Division of Motor Vehicles	DRIVER'S LICENSE-DRIVER CONTROL	09/15/2021 02:00 PM
Department of Transportation	Transportation Commission and Office of Transportation Safety	RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS AND TRANSPORTATION PLANNING REGIONS	09/14/2021 03:00 PM
Department of Regulatory Agencies	Division of Professions and Occupations - Board of Accountancy	ACCOUNTANCY RULES AND REGULATIONS	09/22/2021 09:00 AM
Department of Regulatory Agencies	Division of Professions and Occupations - State Electrical Board	STATE ELECTRICAL BOARD RULES AND REGULATIONS	09/29/2021 09:30 AM
Department of Regulatory Agencies	Division of Professions and Occupations - State Board of Examiners of Nursing Home Administrators	RULES AND REGULATIONS FOR NURSING HOME ADMINISTRATORS	09/15/2021 09:00 AM
Department of Regulatory Agencies	Division of Professions and Occupations - State Board of Social Work Examiners	SOCIAL WORK EXAMINERS RULES AND REGULATIONS	09/17/2021 09:30 AM
Department of Law	Peace Officer Standards and Training Board	PEACE OFFICER TRAINING PROGRAMS AND PEACE OFFICER CERTIFICATION	09/24/2021 10:00 AM
Department of Law	Attorney General-Consumer Protection Unit	Investigative Hearing Rules	09/15/2021 02:00 PM
Department of Public Health and Environment	Water And Wastewater Facility Operators Certification Board (1003 Series)	REGULATION NO. 100 - WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION REQUIREMENTS	09/28/2021 09:00 AM
Public Employees' Retirement Board	Public Employees' Retirement Association	COLORADO PERA RULES	09/17/2021 09:10 AM

Permanent Rules Adopted

Department	Agency	Rules adopted	AG opinion	Effective date
Department of Regulatory Agencies	Division of Professions and Occupations - Colorado Dental Board	3 CCR 709-1 DENTISTS & DENTAL HYGIENISTS RULES AND REGULATIONS (DOC)	08/03/2021	09/14/2021
Department of Public Health and Environment	Air Quality Control Commission	5 CCR 1001-1 PROCEDURAL RULES (DOC)	08/04/2021	09/14/2021
Environment				

<u>Top</u>

Department of Public Health and Environment	Air Quality Control Commission	5 CCR 1001-9 REGULATION NUMBER 7 CONTROL OF OZONE VIA OZONE PRECURSORS AND CONTROL OF HYDROCARBONS VIA OIL AND GAS EMISSIONS (DOC)	08/04/2021	09/14/2021
Department of Local Affairs	Division of Housing	8 CCR 1302-14 NON-RESIDENTIAL AND RESIDENTIAL FACTORY-BUILT STRUCTURES; SELLERS OF MANUFACTURED HOMES; MANUFACTURED HOME INSTALLATIONS; AND HOTELS, MOTELS, AND MULTI-FAMILY DWELLINGS IN THOSE AREAS OF THE STATE WHERE NO STANDARDS EXIST (DOC)	08/02/2021	09/14/2021

Emergency Rules Adopted

<u>Top</u>

Department	Agency	Rules adopted	Justification	AG opinion	Effective date	Expiration date
Department of Regulatory Agencies	Division of Insurance	3 CCR 702-4 Series 4-2 LIFE, ACCIDENT AND HEALTH, Series 4- 2 Accident and Health (General) (DOCX).	EmergencyJustificationPathAttach2021-00444.doc	08/09/2021	07/22/2021	11/19/2021
Department of Law	Administrator- Uniform Consumer Credit Code and Commission on Consumer Credit	4 CCR 902-3 COLORADO STUDENT LOAN EQUITY ACT RULES (DOC)	EmergencyJustificationPathAttach2021- 00469.pdf	08/05/2021	07/30/2021	11/27/2021
Department of Local Affairs	Division of Housing	8 CCR 1302-14 NON- RESIDENTIAL AND RESIDENTIAL FACTORY-BUILT STRUCTURES; SELLERS OF MANUFACTURED HOMES; MANUFACTURED HOME INSTALLATIONS; AND HOTELS, AND MULTI-FAMILY DWELLINGS IN THOSE AREAS OF THE STATE WHERE NO STANDARDS EXIST (DOC)	EmergencyJustificationPathAttach2021- 00427.rtf	08/02/2021	07/13/2021	11/10/2021
Department of Higher Education	Higher Education Commission	8 CCR 1504-9 RULES FOR THE ADMINISTRATION OF THE COLORADO OPPORTUNITY SCHOLARSHIP INITIATIVE (DOCX)	EmergencyJustificationPathAttach2021-00438.docx	08/02/2021	07/14/2021	11/11/2021

Non-Rulemaking Public Notices and Other Miscellaneous Rulemaking Notices

<u>Top</u>

Department / Agency	Filed date	Notice
Department of Health Care Policy and Financing	08/09/2021	Home and Community-Based Services (HCBS) Waiver Amendments
Department of Regulatory Agencies	08/12/2021	IN THE MATTER OF THE PROPOSED AMENDMENTS TO AGE OF MOTOR VEHICLE RULES, 4 CODE OF COLORADO REGULATIONS 723-6.
Department of Public Health and Environment	08/13/2021	2021 Integrated Water Quality Monitoring and Assessment Report Administrative Action Hearing
Department of	08/13/2021	FY2022 Intended Use Plans Administrative Action Hearing

8/25/2021 Register Details

Public Health and Environment		
Department of Public Health and Environment	08/13/2021	Annual Public Comment Informational Hearing
Department of Revenue	08/13/2021	DMV DL Virtual Workshop 1 CCR 204-30 Rule 4
Department of Revenue	08/16/2021	Date change for Gaming rulemaking hearing
Department of Regulatory Agencies	08/23/2021	<u>Colorado Real Estate Commission Meeting - Commission Approved Contract Forms</u>
Department of Health Care Policy and Financing	08/24/2021	Implementation of Colorado House Bill 21-1275

Calendar of Hearings

<u>Top</u>

Agency	Rule	Hearing
Division of Motor Vehicles	DRIVER'S LICENSE-DRIVER CONTROL	09/15/2021 02:00 PM
Transportation Commission and Office of Transportation Safety	RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS AND TRANSPORTATION PLANNING REGIONS	09/14/2021 03:00 PM
Division of Professions and Occupations - Board of Accountancy	ACCOUNTANCY RULES AND REGULATIONS	09/22/2021 09:00 AM
Division of Professions and Occupations - State Electrical Board	STATE ELECTRICAL BOARD RULES AND REGULATIONS	09/29/2021 09:30 AM
Division of Professions and Occupations - State Board of Examiners of Nursing Home Administrators	RULES AND REGULATIONS FOR NURSING HOME ADMINISTRATORS	09/15/2021 09:00 AM
Division of Professions and Occupations - State Board of Social Work Examiners	SOCIAL WORK EXAMINERS RULES AND REGULATIONS	09/17/2021 09:30 AM
Peace Officer Standards and Training Board	PEACE OFFICER TRAINING PROGRAMS AND PEACE OFFICER CERTIFICATION	09/24/2021 10:00 AM
Attorney General-Consumer Protection Unit	Investigative Hearing Rules	09/15/2021 02:00 PM
Water And Wastewater Facility Operators Certification Board (1003 Series)	REGULATION NO. 100 - WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION REQUIREMENTS	09/28/2021 09:00 AM
Public Employees' Retirement Association	COLORADO PERA RULES	09/17/2021 09:10 AM

Back

<u>Top</u>

Terms & conditions | Browser compatibility



2829 W. Howard Place Denver, CO 80204-2305

Notice of Proposed Rulemaking

Transportation Commission of Colorado
Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions
2 CCR 601-22

I. Notice

As required by the Colorado Administrative Procedure Act found at section 24-4-103, C.R.S., the Transportation Commission of Colorado (Commission) gives notice of proposed rulemaking.

II. Subject

The Commission is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms.

A detailed Statement of Basis, Purpose, and Specific Statutory Authority follows this notice and is incorporated by reference.



III. Rulemaking Hearings

The Commission plans to hold eight (8) hearings across the State as listed in the below table to hear testimony and receive comments on the proposed rule revisions. The public hearings will be conducted in a hybrid format, both in-person and virtually. All interested and affected parties may choose to attend one (1) or all eight (8) scheduled hearings either in-person or virtually.

Please note that the Commission may hold additional hearings, which will be posted on CDOT's website: https://www.codot.gov/business/rules/proposed-rules.html

Date	Location	Time	Virtual Hearing Registration Links
9/14/202	CDOT Regional Office US160 Maintenance Training Facility 20581 Highway 160 Durango, CO 81301	3-7 p.m.	<u>Virtual Registration Form</u>
9/17/2021	CDOT Regional Office Bookcliff Conference Room 2328 G Road Grand Junction CO 81505	3-7 p.m.	Virtual Registration Form
9/23/2021	Swansea Recreation Center 2650 E. 49th Ave. Denver, CO 80216	3-7 p.m.	Virtual Registration Form
9/24/2021	CDOT Regional Office 1480 Quail Lake Loop #A Colorado Springs, CO 80906	3-7 p.m.	<u>Virtual Registration Link</u>
9/27/2021	South Suburban Sports Complex 4810 E. County Line Rd. Littleton, CO 80126	3-7 p.m.	<u>Virtual Registration Link</u>
9/29/2021	CDOT Regional Office Big Sandy Conference Room 2738 Victory Highway Limon, CO 80828	3-7 p.m.	<u>Virtual Registration Form</u>
9/30/2021	Christ United Methodist Church 301 East Drake Road Fort Collins, CO 80525	3-7 p.m.	Virtual Registration Form
10/4/2021	City Hall City Council Chambers 101 West 8th Street Glenwood Springs, CO 81601	3-7 p.m.	Virtual Registration Form

How to Register to Attend Hearings Virtually

If you plan to attend any of the scheduled hearings virtually, you must click on the registration link in the above table for each hearing that you wish to attend virtually. The registration links for each hearing are also available on the CDOT's website at

https://www.codot.gov/business/rules/proposed-rules.html. When you register, you must provide your full name and email address. You may also provide your telephone number and the organization that you are representing. Lastly, please indicate whether you plan to testify during the hearing and/or submit written comments. You will receive instructions the day before the scheduled hearing on how to join, listen, and provide testimony if you wish.



IV. Statutory Authority

The specific authority under which the Commission shall establish these proposed rule revisions is set forth in §§ 43-1-106(8)(k) and 43-1-1103(5), C.R.S.

V. Copies of the Notice, Proposed Rule Revisions, and the Statement of Basis, Purpose & Authority

The notice of hearing, the proposed rule revisions, and the proposed statement of basis, purpose and authority are available for review at CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html.

If there are changes made to the proposed rule revisions before the first scheduled hearing on September 14, 2021, the updated proposed rule revisions will be available to the public and posted on CDOT's website by September 9, 2021.

Please note that the proposed rule revisions being considered are subject to further changes and modifications after the public hearings and the deadline for the submission of written comments.

VI. Opportunity to testify and submit written comments

The Commission and CDOT strive to make the rulemaking process inclusive to all. Everyone will have the opportunity to testify and provide written comments concerning the proposed rule revisions. Interested and affected parties are welcome to testify and submit written comments.

Each hearing will have an identical format. The Hearing Officer opens the hearing and provides a brief introduction of the hearing procedures. CDOT will review exhibits to establish that the CDOT on behalf of the Commission met all the procedural requirements of the Administrative Procedure Act. A summary of the proposed rule revisions will be presented by CDOT staff. Interested and affected parties will then have the opportunity to give testimony either in-person or virtually.

Testimony

The testimony phase of each hearing will proceed as follows:

- The Hearing Officer will identify the participants who indicated that they plan to testify during the hearing based on the registration records.
- When the Hearing Officer exhausts the list, they will ask whether any additional participants wish to testify.

To ensure that the hearing is prompt and efficient, oral testimony may be time-limited.

Written Comments

You may submit written comments to <u>dot rules@state.co.us</u> during the comment period between August 13, 2021, and October 15, 2021. All written comments must be received on or before Friday, October 15, 2021, at 5 pm.



Additionally, we will post all written comments to CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html. However, please note that we will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

All written comments will be added to the official rulemaking record.

VII. Recording of the Hearings

Each hearing will be recorded. After each hearing concludes, the recording will be available on CDOT's YouTube Channel at https://www.youtube.com/channel/UCOWFfi0-SE4kV07saKZdueA/videos.

VIII. Special Accommodations

If you need special accommodations, please contact CDOT's Rules Administrator at 303.757.9441 or dot rules@state.co.us at least one (1) week prior to the scheduled hearing date.

IX. Contact Information

Please contact CDOT's Rules Administrator, at 303.757.9441 or <u>dot_rules@state.co.us</u> if you have any questions.





2829 W. Howard Place Denver, CO 80204-2305

August 31, 2021

MISCELLANEOUS RULEMAKING PUBLIC NOTICE

Transportation Commission of Colorado
Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions
2 CCR 601-22

Code of Colorado Regulations eDocket Tracking Number: 2021-00508

On August 13, 2021, the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State and the Department of Regulatory Agencies.

The Commission initially planned to hold eight public hearings across the state to hear testimony and receive comments on the proposed pollution reduction planning standards for transportation. The dates, times, and locations of the eight public hearings were provided in the Notice of Proposed Rulemaking that was published in the Colorado Register on August 25, 2021.

Requests for a cost-benefit analysis have been received by the Department of Regulatory Agencies regarding the proposed pollution reduction planning standards for transportation.

Pursuant to section 24-4-103(2.5), C.R.S., this is an additional notice to postpone the first hearing originally scheduled for September 14, 2021, to comply with the requirement to complete the costbenefit analysis at least ten (10) before the public hearing. The first public hearing will now commence at 2 p.m. on Friday, September 17, 2021, at CDOT Regional Office, Bookcliff Conference Room, 2328 G Road, Grand Junction, CO 81505.

This Notice also adds a ninth public hearing in Firestone, CO, and adjusts the start and end times for certain hearings. A complete list of the dates, times, and locations of the nine public hearings can be found in the updated Notice of Proposed Rulemaking, which is attached and incorporated by reference to this Notice.

Finally, this Notice corrects a typographical error in the Proposed Statement of Basis and Purpose, Statutory Authority, and Preamble. Under the Statutory Authority section, the proposed statement incorrectly referenced 2020 as the year for Senate Bill 260 rather than 2021. The proposed statement now correctly reads Senate Bill 21-2601. The updated Proposed Statement of Basis and Purpose, Statutory Authority, and Preamble is attached and incorporated by reference to this Notice.

This Notice, the updated Notice of Proposed Rulemaking, and the updated Proposed Statement of Basis and Purpose, Statutory Authority and Preamble will be posted on CDOT's website at https://www.codot.gov/business/rules/proposed-rules.





2829 W. Howard Place Denver, CO 80204-2305

August 31, 2021

Updated Notice of Proposed Rulemaking

Transportation Commission of Colorado
Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions
2 CCR 601-22

I. Notice

As required by the Colorado Administrative Procedure Act found at section 24-4-103, C.R.S., the Transportation Commission of Colorado (Commission) gives notice of proposed rulemaking.

II. Subject

The Commission is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms.

A detailed Statement of Basis, Purpose, and Specific Statutory Authority follows this notice and is incorporated by reference.



III. Rulemaking Hearings

The Commission plans to hold nine (9) hearings across the State as listed in the below table to hear testimony and receive comments on the proposed rule revisions. The public hearings will be conducted in a hybrid format, both in-person and virtually. All interested and affected parties may choose to attend one (1) or all nine (9) scheduled hearings either in-person or virtually.

Please note that the Commission may hold additional hearings, which will be posted on CDOT's website: https://www.codot.gov/business/rules/proposed-rules.html

Date	Location	Time	Virtual Hearing Registration Links
9/17/2021	CDOT Regional Office Bookcliff Conference Room 2328 G Road Grand Junction, CO 81505	2-5 p.m.	Virtual Registration Form
9/23/2021	Swansea Recreation Center 2650 E. 49th Ave. Denver, CO 80216	3-7 p.m.	Virtual Registration Form
9/24/2021	CDOT Regional Office 1480 Quail Lake Loop #A Colorado Springs, CO 80906	3-6 p.m.	Virtual Registration Link
9/27/2021	South Suburban Sports Complex 4810 E. County Line Rd. Littleton, CO 80126	3-7 p.m.	Virtual Registration Link
9/29/2021	CDOT Regional Office Big Sandy Conference Room 2738 Victory Highway Limon, CO 80828	2-5 p.m.	Virtual Registration Form
9/30/2021	Christ United Methodist Church 301 East Drake Road Fort Collins, CO 80525	2-5 p.m.	Virtual Registration Form
10/4/2021	City Hall City Council Chambers 101 West 8th Street Glenwood Springs, CO 81601	2-5 p.m.	Virtual Registration Form
10/5/2021	Weld County Southwest Service Complex 4209 County Road 24 1/2 Firestone, CO 80504 *Note: This address may show up in some map applications as a Longmont address.	2-5 p.m.	Virtual Registration Form
10/7/2021	CDOT Regional Office US160 Maintenance Training Facility 20581 Highway 160 Durango, CO 81301	2-5 p.m.	Virtual Registration Form



How to Register to Attend Hearings Virtually

If you plan to attend any of the scheduled hearings virtually, you must click on the registration link in the above table for each hearing that you wish to attend virtually. The registration links for each hearing are also available on the CDOT's website at https://www.codot.gov/business/rules/proposed-rules.

When you register, you must provide your full name and email address. You may also provide your telephone number and the organization that you are representing. Lastly, please indicate whether you plan to testify during the hearing and/or submit written comments. You will receive instructions the day before the scheduled hearing on how to join, listen, and provide testimony if you wish.

IV. Statutory Authority

The specific authority under which the Commission shall establish these proposed rule revisions is set forth in §§ 43-1-106(8)(k) and 43-1-1103(5), C.R.S.

V. Copies of the Notice, Proposed Rule Revisions, and the Statement of Basis, Purpose & Authority

The notice of hearing, the proposed rule revisions, and the proposed statement of basis, purpose and authority are available for review at CDOT's website at https://www.codot.gov/business/rules/proposed-rules.

If there are changes made to the proposed rule revisions before the first scheduled hearing on September 17, 2021, the updated proposed rule revisions will be available to the public and posted on CDOT's website by September 10, 2021.

Please note that the proposed rule revisions being considered are subject to further changes and modifications after the public hearings and the deadline for the submission of written comments.

VI. Opportunity to testify and submit written comments

The Commission and CDOT strive to make the rulemaking process inclusive to all. Everyone will have the opportunity to testify and provide written comments concerning the proposed rule revisions. Interested and affected parties are welcome to testify and submit written comments.

Each hearing will have an identical format. The Hearing Officer opens the hearing and provides a brief introduction of the hearing procedures. CDOT will review exhibits to establish that CDOT on behalf of the Commission met all the procedural requirements of the Administrative Procedure Act. A summary of the proposed rule revisions will be presented by CDOT staff. Interested and affected parties will then have the opportunity to give testimony either in-person or virtually.

Testimony

The testimony phase of each hearing will proceed as follows:

- The Hearing Officer will identify the participants who indicated that they plan to testify during the hearing based on the registration records.
- When the Hearing Officer exhausts the list, they will ask whether any additional participants wish to testify.



To ensure that the hearing is prompt and efficient, oral testimony may be time-limited.

Written Comments

You may submit written comments to dot_rules@state.co.us during the comment period between August 13, 2021, and October 15, 2021. All written comments must be received on or before Friday, October 15, 2021, at 5 pm.

Additionally, we will post all written comments to CDOT's website at https://www.codot.gov/business/rules/proposed-rules. However, please note that we will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

All written comments will be added to the official rulemaking record.

VII. Recording of the Hearings

Each hearing will be recorded. After each hearing concludes, the recording will be available on CDOT's YouTube Channel at https://www.youtube.com/channel/UCOWFfiQ-SE4kV07saKZdueA/videos.

VIII. Special Accommodations

If you need special accommodations, please contact CDOT's Rules Administrator at 303.757.9441 or dot_rules@state.co.us at least one (1) week prior to the scheduled hearing date.

IX. Contact Information

Please contact CDOT's Rules Administrator, at 303.757.9441 or dot_rules@state.co.us if you have any questions.





2829 W. Howard Place Denver, CO 80204-2305

08/31/2021

Transportation Commission of Colorado Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions 2 CCR 601-22

Updated Proposed Statement of Basis and Purpose, Statutory Authority, and Preamble

Statement of Basis and Purpose and Preamble

Overview

The purpose of the Rules Governing the Statewide Transportation Planning Process and Transportation Planning Regions (Rules) is to prescribe the statewide transportation planning process through which a long-range multimodal, comprehensive Statewide Transportation Plan will be developed, integrated, updated, and amended by the Colorado Department of Transportation (Department or CDOT), in cooperation with local governments, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions, Indian tribal governments, relevant state and federal agencies, the private sector, transit and freight operators, and the general public. This cooperative process is designed to coordinate regional transportation planning, guided by the statewide transportation policy set by the Department and the Transportation Commission of Colorado ("Commission"), as a basis for developing the Statewide Transportation Plan. The result of the statewide transportation planning process shall be a long-range, financially feasible, environmentally sound, multimodal transportation system plan for Colorado that will reduce traffic and smog.

Further, the purpose of the Rules is to define the state's Transportation Planning Regions for which long-range Regional Transportation Plans are developed, prescribe the process for conducting and initiating transportation planning in the non-MPO Transportation Planning Regions and coordinating with the MPOs for planning in the metropolitan areas. Memoranda of Agreement (MOA) that serve as the Metropolitan Planning Agreements (MPAs) pursuant to 23 C.F.R. § 450 between the Department, each MPO, and applicable transit provider(s) further prescribe the transportation planning process in the MPO Transportation Planning Regions. In addition, the purpose of the Rules is to describe the organization and function of the Statewide Transportation Advisory Committee (STAC) as established by § 43-1-1104, Colorado Revised Statutes (C.R.S.).

The Rules are promulgated to meet the intent of both the U.S. Congress and the Colorado General Assembly for conducting a continuing, cooperative, and comprehensive statewide performance-based multimodal transportation planning process for producing a Statewide Transportation Plan and Regional Transportation Plans that address the transportation needs of the State. This planning process, through comprehensive input, results in systematic project prioritization and resource allocation.

The Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of multimodal, cost-effective, and environmentally sound means of transportation which leads to cleaner air and reduced traffic. The Rules reflect the Commission's and the Department's focus on multimodal transportation projects including highways, transit, rail, bicycles and pedestrians. Section 8 of these Rules establishes an ongoing administrative process for identifying, measuring, confirming, and verifying those



best practices and their impacts, so that CDOT and MPOs can easily apply them to their plans in order to achieve the pollution reduction levels required by these Rules.

The specific purpose of this rulemaking is to establish Greenhouse Gas (GHG) pollution reduction planning levels for transportation within Section 8 of these Rules that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of these requirements is to limit the GHG pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This is accomplished by requiring CDOT and MPOs to establish plans that meet targets through a mix of projects that limit and mitigate air pollution and improve quality of life and Multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. In the event that a plan fails to comply, CDOT and MPOs have the option to commit to implementing GHG Mitigation Measures that provide travelers with cleaner and more equitable transportation options such as safer pedestrian crossings and sidewalks, better transit and transit-access, or infrastructure that supports access to housing, jobs, and retail.

Examples of these types of mitigations, which also benefit quality of place and the economic resilience of communities, will include but not be limited to: adding bus rapid transit facilities and services, enhancing first-and-last mile connections to transit, adding bike-sharing services including electric bikes, improving pedestrian facilities like sidewalks and safe accessible crosswalks, investments that support vibrant downtown density and local zoning decisions that favor sustainable building codes and inclusive multi-use facilities downtown, and more. The process of identifying and approving mitigations will be established by a policy process that allows for ongoing innovations from local governments and other partners to be considered on an iterative basis.

If compliance still cannot be demonstrated, even after committing to GHG Mitigation Measures, the Commission shall restrict the use of certain funds, requiring that dollars be focused on projects that help reduce transportation emissions and are recognized as approved mitigations. These requirements address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms.

Context of Section 8 of these Rules Within Statewide Objectives

The passage of House Bill (HB)19-1261 set Colorado on a course to dramatically reduce GHG emissions across all sectors of the economy. In HB 19-1261, now codified in part at §§ 25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" acknowledged that "Colorado is already experiencing harmful climate impacts[,]" and that "many of these impacts disproportionately affect" certain Disproportionately Impacted Communities. see § 25-7-102(2), C.R.S. The General Assembly also



recognized that "[b]y reducing [GHG] pollution, Colorado will also reduce other harmful air pollutants, which will, in turn, improve public health, reduce health care costs, improve air quality, and help sustain the environment." see § 25-7-102(2)(d), C.R.S.

Since 2019, the State has been rigorously developing a plan to achieve the ambitious GHG pollution reduction goals in § 25-7-102(2)(g), C.R.S. In January 2021, the State published its Greenhouse Gas Pollution Reduction Roadmap (Roadmap). Available at: https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap. The Roadmap identified the transportation sector as the single largest source of statewide GHG pollution as of 2020, with passenger vehicles the largest contributor within the transportation sector. Additionally, the Roadmap determined that emissions from transportation are a "significant contributor to local air pollution that disproportionately impacts lower-income communities and communities of color." see Roadmap, p. XII.

A key finding in the Roadmap recognized that "[m]aking changes to transportation planning and infrastructure to reduce growth in driving is an important tool" to meet the statewide GHG pollution reduction goals. see Roadmap, p. 32. Section 8 of these Rules also advances the State's goals to reduce emissions of other harmful air pollutants, including ozone.

Why the Commission is Taking This Action

Senate Bill 21-260, signed into law by the Governor on June 17, 2021, and effective upon signature, includes a new § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Section 43-1-128, C.R.S. also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and Vehicle Miles Traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.

Under Colorado law governing transportation planning, CDOT is charged with and identified as the proper body for "developing and maintaining the state transportation planning process and the state transportation plan" in cooperation with Regional Planning Commissions and local government officials. see § 43-1-1101, C.R.S.

The Commission is responsible for formulating policy with respect to transportation systems in the State and promulgating and adopting all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs. see § 43-1-106(8), C.R.S. The Commission is statutorily charged "to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado." see § 43-1-106(8)(b), C.R.S. In addition, the Commission is generally authorized "to make all necessary and reasonable orders, rules and regulations in order to carry out the provisions of this part . . ." see § 43-1-106(8)(k), C.R.S.

As such, CDOT and the Commission are primarily responsible for ensuring compliance with GHG reductions in transportation planning.

What Relevant Regulations Currently Apply to Transportation Planning

Transportation planning is subject to both state and federal requirements. Under federal law governing transportation planning and federal-aid highways, it is declared to be in the national interest to promote transportation systems that accomplish a number of mobility objectives "while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes..." see 23 U.S.C. § 134; see also 23 U.S.C. § 135(a)(1). In the metropolitan planning process, consideration must be given to projects and strategies that will "protect and enhance the environment, promote energy conservation, improve the quality of life..." see 23 U.S.C. § 134(h)(1)(E); see also 23 C.F.R.



Part 450, Subpart B (federal regulations governing statewide transportation planning and programming). The same planning objective applies to statewide transportation planning. see 23 U.S.C. § 135(d)(1)(E); see also 23 C.F.R. Part 450, Subpart C (governing metropolitan transportation planning and programming). Further, the Statewide Transportation Plan shall be developed, as appropriate, in consultation with State...local agencies responsible for...environmental protection..." see 23 U.S.C. § 135(f)(2)(D)(i).

Under conforming Colorado law, the Statewide Transportation Plan is developed by integrating and consolidating Regional Transportation Plans developed by MPOs and regional transportation planning organizations into a "comprehensive statewide transportation plan" pursuant to rules and regulations promulgated by the Commission. see § 43-1-1103(5), C.R.S. The Statewide Transportation Plan must address a number of factors including, but not limited to, "environmental stewardship" and "reduction of greenhouse gas emissions." see § 43-1-1103(5)(h) and (j), C.R.S.

Regional Transportation Plans must account for the "expected environmental, social, and economic impacts of the recommendations in the plan, including a full range of reasonable transportation alternatives...in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." see § 43-1-1103(1)(d), C.R.S. Further, in developing Regional Transportation Plans, MPOs "[s]hall assist other agencies in developing transportation control measures for utilization in accordance with state...regulations...and shall identify and evaluate measures that show promise of supporting clean air objectives." see § 43-1-1103(1)(e), C.R.S.

Putting Section 8 of these Rules into Perspective

Section 8 establishes GHG regulatory requirements that are among the first of their kind in the U.S. However, from an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a Nonattainment Area are consistent with or "conform to" a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and the Denver Regional Council of Governments' MPOs to demonstrate conformity with each plan adoption and amendment.

However, because the transportation sector encompasses the millions of individual choices people make every day that have an impact on climate, a variety of strategies are necessary to achieve the State's climate goals. Section 8 of these Rules is one of many steps needed to achieve the totality of reduction goals for the transportation sector.

Purpose of GHG Mitigation Measures

The transportation modeling conducted for this rulemaking may demonstrate that certain projects increase GHG pollution for a variety of reasons. These reasons may include factors such as induced demand as a result of additional lane mileage attracting additional vehicular traffic, or additional traffic facilitated by access to new commercial or residential development in the absence of public transit options or bicycle/pedestrian access that provides consumers with other non-driving options. Transportation infrastructure itself can also increase or decrease GHG and other air pollutants by virtue of factors like certain construction materials, removal or addition of tree cover that captures carbon pollution, or integration with vertical construction templates of various efficiencies that result in higher or lower levels of per capita energy use. The pollution impacts of various infrastructure projects will vary significantly depending on their specifics and must be modeled in a manner that is context-sensitive to a range of issues such as location, footprint of existing infrastructure, design, and how it fits together with transportation alternatives.



Of note, many types of infrastructure have been demonstrated not to generate significant induced demand or increased emissions. For example, the state of California conducted a study of project types that should be considered "neutral" from the perspective of GHG pollution -- due to their use being related primarily to issues like safety and utility for emergency services. See here: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-tac-fnl-a11y.pdf

Furthermore, other aspects of transportation infrastructure can facilitate reductions in emissions and thus serve as mitigations rather than contributors to pollution. For example, the addition of transit resources in a manner that can displace Vehicle Miles Traveled can reduce emissions. Moreover, improving downtown pedestrian and bike access, particularly in areas that allow individuals to shift multiple daily trips for everything from work to dining to retail, can improve both emissions and quality of life.

There is an increasing array of proven best practices for reducing pollution and smog and improving economies and neighborhoods that can help streamline decision-making for state and local agencies developing plans and programs of projects.

Statutory Authority

The statutory authority is as follows:

- House Bill 19-1261 enacted into law on May 30, 2019.
- Senate Bill 21-260 enacted into law on June 17, 2021.
- § 25-7-102(2), C.R.S., which sets forth the legislative declaration to reduce statewide GHG pollution and establishes statewide GHG pollution targets.
- § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling, and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and vehicle miles traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.
- § 43-1-1101, C.R.S., which authorizes CDOT to develop and maintain the state transportation planning process and the State Transportation Plan in cooperation with Regional Planning Commissions and local government.
- § 43-1-1103(5), C.R.S., which authorizes the Commission to promulgate rules to establish the formation of the Statewide Transportation Plan and the statewide planning process. Also requires the consideration of environmental stewardship and reducing GHG emissions as part of transportation planning.
- § 43-1-106(8), C.R.S, which authorizes the Commission to formulate policy with respect to transportation systems in the State and promulgate and adopt all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs.
- § 43-1-106(8)(b), C.R.S., which requires the Commission to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado.
- § 43-1-106(8)(k), C.R.S., which authorizes the Commission to make all necessary and reasonable order, rules and regulations.





delete





Agency Rulemaking Home

Non-rulemaking Public Notices Official Publication of the State Administrative Rules (24-4-103(11) C.R.S.)

eDocket

Department 600 - Department of Transportation

Log out Change password

601 - Transportation Commission and Office of Transportation Safety Agency

submit new notice

Colorado Register publication date *

Title ‡

09/10/2021

<u>Transportation Commission of Colorado- Rescheduled Permanent Rulemaking Hearing (eDocket No. 2021-00508)</u>

Back

Terms & conditions | Browser compatibility

9/13/21, 7:41 PM Register Details







Home

Colorado Revised Statutes

Colorado Register
Official Publication of the State Administrative Rules (24-4-103(11) C.R.S.)

September 10, 2021 - Volume 44, No. 17

Search

Colorado Register

Home > Colorado Register

Back Issues Select year ➤

eDocket

Log in

Contact Us

Contents

Notices of proposed rulemaking Permanent Rules Adopted Emergency Rules Adopted Terminated rulemaking

Nonrulemaking public notices and other miscellaneous rulemaking notices

Calendar of Hearings

Notices of proposed rulemaking

Department	Agency	Proposed rules	Hearing
Department of Revenue	Division of Motor Vehicles	VEHICLE SERVICES SECTION	09/30/2021 02:00 PM
Department of Revenue	Division of Motor Vehicles	DRIVER'S LICENSE-DRIVER CONTROL	09/30/2021 11:00 AM
Department of Education	Colorado State Board of Education	RULES FOR THE ADMINISTRATION OF THE PUBLIC SCHOOL TRANSPORTATION FUND	10/13/2021 09:00 AM
Department of Education	Colorado State Board of Education	COLORADO RULES FOR THE OPERATION, MAINTENANCE AND INSPECTION OF SCHOOL TRANSPORTATION VEHICLES	10/13/2021 09:00 AM
Department of Education	Colorado State Board of Education	RULES FOR INDIVIDUALIZED MEDICAL SEIZURE ACTION PLANS	10/13/2021 09:00 AM
Department of Transportation	Transportation Commission and Office of Transportation Safety	RULES GOVERNING OUTDOOR ADVERTISING IN COLORADO	10/01/2021 10:00 AM
Department of Regulatory Agencies	Division of Insurance	LIFE, ACCIDENT AND HEALTH, Series 4-2 Accident and Health (General)	10/05/2021 11:00 AM
Department of Regulatory Agencies	Division of Insurance	LIFE, ACCIDENT AND HEALTH, Series 4-2 Accident and Health (General)	10/05/2021 11:00 AM
Department of Regulatory Agencies	Division of Insurance	LIFE, ACCIDENT AND HEALTH, Series 4-2 Accident and Health (General)	10/05/2021 11:00 AM
Department of Regulatory Agencies	Division of Professions and Occupations - State Board of Pharmacy	STATE BOARD OF PHARMACY RULES AND REGULATIONS	09/30/2021 08:45 AM
Department of Regulatory Agencies	Division of Professions and Occupations - Board of Psychologists Examiners	PSYCHOLOGIST EXAMINERS RULES AND REGULATIONS	10/01/2021 09:30 AM
Department of Regulatory Agencies	Public Utilities Commission	RULES REGULATING TELECOMMUNICATIONS SERVICES AND PROVIDERS OF TELECOMMUNICATIONS SERVICES	10/05/2021 09:00 AM
Department of Regulatory Agencies	Division of Real Estate	RULES REGARDING REAL ESTATE BROKERS	10/05/2021 09:00 AM
Department of Regulatory Agencies	Division of Real Estate	SUBDIVISIONS AND TIMESHARES	10/05/2021 09:00 AM
Department of Regulatory Agencies	Division of Professions and Occupations - Board of Veterinary Medicine	VETERINARY MEDICINE RULES AND REGULATIONS	10/14/2021 09:00 AM
Department of Regulatory Agencies	Division of Professions and Occupations - Colorado Office of Combative Sports	COMBATIVE SPORTS RULES AND REGULATIONS	10/12/2021 10:15 AM
Department of Regulatory Agencies	Division of Professions and Occupations - Board of Addiction Counselor Examiners	BOARD OF ADDICTION COUNSELOR EXAMINERS RULES	10/05/2021 09:30 AM

1	i	i .	
Department of Public Health and Environment	Air Quality Control Commission	REGULATION NUMBER 19 THE CONTROL OF LEAD HAZARDS	<u>11/18/2021 09:00 AM</u>
Department of Public Health and Environment	Air Quality Control Commission	REGULATION NUMBER 23 REGIONAL HAZE LIMITS	11/17/2021 04:30 PM
Department of Public Health and Environment	Health Facilities and Emergency Medical Services Division (1011, 1015 Series)	CHAPTER 2 - GENERAL LICENSURE STANDARDS	10/21/2021 12:00 PM
Department of Public Health and Environment	Prevention Services Division (1009, 1015, 1016 Series)	PREVENTION, INTERVENTION, AND TREATMENT PROGRAMS FOR CHILDREN AND YOUTH	10/21/2021 12:00 PM
Department of Local Affairs	Division of Housing	MOBILE HOME PARK ACT DISPUTE RESOLUTION & ENFORCEMENT PROGRAM	10/05/2021 01:00 PM
Department of Human Services	Income Maintenance (Volume 3)	COLORADO CHILD CARE ASSISTANCE PROGRAM	10/08/2021 08:30 AM
Department of Human Services	Child Support Services (Volume 6)	RULE MANUAL VOLUME 6, CHILD SUPPORT SERVICES RULES	10/08/2021 08:30 AM
Department of Health Care Policy and Financing	Medical Services Board (Volume 8; Medical Assistance, Children's Health Plan)	MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY	10/08/2021 09:00 AM
Department of Human Services	Food Assistance Program (Volume 4B)	RULE MANUAL VOLUME 4B, FOOD ASSISTANCE	10/08/2021 08:30 AM
Department of Human Services	Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	OVERVIEW OF CHILD WELFARE SERVICES	10/08/2021 08:30 AM
Department of Human Services	Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	REFERRAL AND ASSESSMENT	10/08/2021 08:30 AM
Department of Human Services	Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	REFERRAL AND ASSESSMENT	10/08/2021 08:30 AM
Department of Human Services	Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	PROGRAM AREAS, CASE CONTACTS, AND ONGOING CASE REQUIREMENTS	10/08/2021 08:30 AM
Department of Human Services	Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	CHILD WELFARE SERVICES	10/08/2021 08:30 AM
Department of Human Services	Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	RESOURCES, REIMBURSEMENT, REPORTING, AND PROVIDER REQUIREMENTS	10/08/2021 08:30 AM
Department of Human Services	Adult Protective Services	ADULT PROTECTIVE SERVICES	10/08/2021 08:30 AM
Department of Human Services	Adult Protective Services	ADULT PROTECTIVE SERVICES	10/08/2021 08:30 AM

Permanent Rules Adopted

<u>Top</u>

Department	Agency	Rules adopted	AG opinion	Effective date
Department of Education	Colorado State Board of Education	1 CCR 301-1 ADMINISTRATION OF STATEWIDE ACCOUNTABILITY MEASURES FOR THE COLORADO PUBLIC SCHOOL SYSTEM, CHARTER SCHOOL INSTITUTE, PUBLIC SCHOOL DISTRICTS AND PUBLIC SCHOOLS (DOC)	08/30/2021	09/30/2021
Department of Public Health and Environment	Water Quality Control Commission (1002 Series)	5 CCR 1002-31 REGULATION NO. 31 - THE BASIC STANDARDS AND METHODOLOGIES FOR SURFACE WATER (DOC)	08/27/2021	12/31/2021
Department of Public Health and Environment	Water Quality Control Commission (1002 Series)	5 CCR 1002-32 REGULATION NO. 32 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR ARKANSAS RIVER BASIN 1 (DOC) 5 CCR 1002-32 REGULATION NO. 32 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR ARKANSAS RIVER BASIN 2 (PDF)	08/27/2021	12/31/2021
Department of Public Health and Environment	Water Quality Control Commission (1002 Series)	5 CCR 1002-33 REGULATION NO. 33 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR UPPER COLORADO	08/27/2021	12/31/2021

		Negister Details		
		RIVER BASIN AND NORTH PLATTE RIVER (PLANNING REGION 12) 1 (DOC)		
		5 CCR 1002-33 REGULATION NO. 33 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR UPPER COLORADO RIVER BASIN AND NORTH PLATTE RIVER (PLANNING REGION 12) 2 (PDF)		
Department of Public Health and Environment	Water Quality Control Commission (1002 Series)	5 CCR 1002-34 REGULATION NO. 34 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR SAN JUAN AND DOLORES RIVER BASINS 1 (DOC) 5 CCR 1002-34 REGULATION NO. 34 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR SAN JUAN AND DOLORES RIVER BASINS 2 (PDF)	08/27/2021	12/31/2021
Department of Public Health and Environment	Water Quality Control Commission (1002 Series)	5 CCR 1002-35 REGULATION NO. 35 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR GUNNISON AND LOWER DOLORES RIVER BASINS 1 (DOC) 5 CCR 1002-35 REGULATION NO. 35 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR GUNNISON AND LOWER DOLORES RIVER BASINS 2 (PDF)	08/27/2021	12/31/2021
Department of Public Health and Environment	Water Quality Control Commission (1002 Series)	5 CCR 1002-36 REGULATION NO. 36 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR RIO GRANDE BASIN 1 (DOC) 5 CCR 1002-36 REGULATION NO. 36 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR RIO GRANDE BASIN 2 (PDF)	08/27/2021	12/31/2021
Department of Public Health and Environment	Water Quality Control Commission (1002 Series)	5 CCR 1002-37 REGULATION NO. 37 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR LOWER COLORADO RIVER BASIN 1 (DOC) 5 CCR 1002-37 REGULATION NO. 37 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR LOWER COLORADO RIVER BASIN 2 (PDE)	08/27/2021	12/31/2021
Department of Public Health and Environment	Water Quality Control Commission (1002 Series)	5 CCR 1002-38 REGULATION NO. 38 - CLASSIFICATIONS AND NUMERIC STANDARDS SOUTH PLATTE RIVER BASIN LARAMIE RIVER BASIN REPUBLICAN RIVER BASIN SMOKY HILL RIVER BASIN 1 (DOC) 5 CCR 1002-38 REGULATION NO. 38 - CLASSIFICATIONS AND NUMERIC STANDARDS SOUTH PLATTE RIVER BASIN LARAMIE RIVER BASIN REPUBLICAN RIVER BASIN SMOKY HILL RIVER BASIN 2 (PDF)	08/27/2021	12/31/2021
Department of Public Health and Environment	Water Quality Control Commission (1002 Series)	5 CCR 1002-64 REGULATION NO. 64 - BIOSOLIDS REGULATION (DOC)	08/27/2021	09/30/2021
Department of Human Services	Income Maintenance (Volume 3)	9 CCR 2503-9 COLORADO CHILD CARE ASSISTANCE PROGRAM (DOCX)	08/25/2021	09/30/2021
Department of Health Care Policy and Financing	Executive Director of Health Care Policy and Financing	10 CCR 2505-5 EXECUTIVE DIRECTOR OF HEALTH CARE POLICY AND FINANCING RULES (DOC)	08/25/2021	09/30/2021
Department of Human Services	Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	12 CCR 2509-8 CHILD CARE FACILITY LICENSING (DOCX)	08/25/2021	10/01/2021
Department of Human Services	Commission for the Deaf, Hard of Hearing, and DeafBlind (Volume 27)	12 CCR 2516-1 RULE MANUAL 27, COMMISSION FOR THE DEAF, HARD OF HEARING, AND DEAFBLIND (DOC)	08/25/2021	09/30/2021

Emergency Rules Adopted

<u>Top</u>

Department	Agency	Rules adopted	Justification		Effective date	Expiration date
Department of	Behavioral	2 CCR 502-1	EmergencyJustificationPathAttach2021-	08/25/2021	08/06/2021	12/04/2021

Human	Health	BEHAVIORAL HEALTH	00497.docx			Ì
Services		(DOCX)				
Department of Transportation	Transportation Commission and Office of Transportation Safety	2 CCR 601-3 RULES GOVERNING OUTDOOR ADVERTISING IN COLORADO (DOC)	EmergencyJustificationPathAttach2021- 00488.pdf	08/23/2021	08/04/2021	12/02/2021
Department of Regulatory Agencies	Public Utilities Commission	4 CCR 723-2 RULES REGULATING TELECOMMUNICATIONS SERVICES AND PROVIDERS OF TELECOMMUNICATIONS SERVICES (DOC)	EmergencyJustificationPathAttach2021- 00447.pdf	08/18/2021	07/29/2021	11/26/2021
Department of Regulatory Agencies	Public Utilities Commission	4 CCR 723-2 RULES REGULATING TELECOMMUNICATIONS SERVICES AND PROVIDERS OF TELECOMMUNICATIONS SERVICES (DOC)	EmergencyJustificationPathAttach2021- 00498.pdf	08/30/2021	08/11/2021	12/09/2021
Department of Agriculture	Plant Industry Division	8 CCR 1203-23 RULES PERTAINING TO THE ADMINISTRATION AND ENFORCEMENT OF THE INDUSTRIAL HEMP REGULATORY PROGRAM ACT (DOC)	EmergencyJustificationPathAttach2021- 00492.doc	08/30/2021	08/10/2021	12/08/2021
Department of Health Care Policy and Financing	Medical Services Board (Volume 8; Medical Assistance, Children's Health Plan)	10 CCR 2505-3 FINANCIAL MANAGEMENT OF THE CHILDREN'S BASIC HEALTH PLAN (DOC)	EmergencyJustificationPathAttach2021- 00456.pdf	08/19/2021	08/09/2021	11/27/2021
Department of Health Care Policy and Financing	Medical Services Board (Volume 8; Medical Assistance, Children's Health Plan)	10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY (DOC)	EmergencyJustificationPathAttach2021- 00455.pdf	08/19/2021	07/30/2021	11/27/2021
Department of Health Care Policy and Financing	Medical Services Board (Volume 8; Medical Assistance, Children's Health Plan)	10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 1 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 2 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 3 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 3 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 4 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 5 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 5 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 6 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 7 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 7 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 7 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 8 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 9 (DOC) 10 CCR 2505-10 MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 9 (DOC)	EmergencyJustificationPathAttach2021-00454.pdf	08/19/2021	08/09/2021	11/27/2021

STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY 10 (DOC)

Terminated rulemaking

_		
П	$\overline{}$	n

Department	Agency	CCR#	Tracking #	Termination date	Reason for termination
Department of Revenue	Taxation Division	1 CCR 201-13	<u>2021-</u> 00165	08/19/2021	After consideration of questions raised at the hearing, we determined it was necessary to make further revisions to the proposed rule and recommence the rulemaking process.

Non-Rulemaking Public Notices and Other Miscellaneous Rulemaking Notices

<u>Top</u>

Department / Agency		
Department of Transportation	08/31/2021	Transportation Commission of Colorado- Rescheduled Permanent Rulemaking Hearing (eDocket No. 2021-00508)

Calendar of Hearings

Top

Agency	Rule	Hearing
Division of Motor Vehicles	VEHICLE SERVICES SECTION	09/30/2021 02:00 PM
Division of Motor Vehicles	DRIVER'S LICENSE-DRIVER CONTROL	09/30/2021 11:00 AM
Colorado State Board of Education	RULES FOR THE ADMINISTRATION OF THE PUBLIC SCHOOL TRANSPORTATION FUND	10/13/2021 09:00 AM
Colorado State Board of Education	COLORADO RULES FOR THE OPERATION, MAINTENANCE AND INSPECTION OF SCHOOL TRANSPORTATION VEHICLES	10/13/2021 09:00 AM
Colorado State Board of Education	RULES FOR INDIVIDUALIZED MEDICAL SEIZURE ACTION PLANS	10/13/2021 09:00 AM
Transportation Commission and Office of Transportation Safety	RULES GOVERNING OUTDOOR ADVERTISING IN COLORADO	10/01/2021 10:00 AM
Division of Insurance	LIFE, ACCIDENT AND HEALTH, Series 4-2 Accident and Health (General)	10/05/2021 11:00 AM
Division of Insurance	LIFE, ACCIDENT AND HEALTH, Series 4-2 Accident and Health (General)	10/05/2021 11:00 AM
Division of Insurance	LIFE, ACCIDENT AND HEALTH, Series 4-2 Accident and Health (General)	10/05/2021 11:00 AM
Division of Professions and Occupations - State Board of Pharmacy	STATE BOARD OF PHARMACY RULES AND REGULATIONS	09/30/2021 08:45 AM
Division of Professions and Occupations - Board of Psychologists Examiners	PSYCHOLOGIST EXAMINERS RULES AND REGULATIONS	10/01/2021 09:30 AM
Public Utilities Commission	RULES REGULATING TELECOMMUNICATIONS SERVICES AND PROVIDERS OF TELECOMMUNICATIONS SERVICES	10/05/2021 09:00 AM
Division of Real Estate	RULES REGARDING REAL ESTATE BROKERS	10/05/2021 09:00 AM
Division of Real Estate	SUBDIVISIONS AND TIMESHARES	10/05/2021 09:00 AM
Division of Professions and Occupations - Board of Veterinary Medicine	VETERINARY MEDICINE RULES AND REGULATIONS	10/14/2021 09:00 AM
Division of Professions and Occupations - Colorado Office of Combative Sports	COMBATIVE SPORTS RULES AND REGULATIONS	10/12/2021 10:15 AM
Division of Professions and Occupations - Board of Addiction Counselor Examiners	BOARD OF ADDICTION COUNSELOR EXAMINERS RULES	10/05/2021 09:30 AM
Air Quality Control Commission	REGULATION NUMBER 19 THE CONTROL OF LEAD HAZARDS	11/18/2021 09:00 AM
Air Quality Control Commission	REGULATION NUMBER 23 REGIONAL HAZE LIMITS	11/17/2021 04:30 PM
Health Facilities and Emergency Medical Services Division (1011, 1015 Series)	CHAPTER 2 - GENERAL LICENSURE STANDARDS	10/21/2021 12:00 PM
Prevention Services Division (1009, 1015, 1016 Series)	PREVENTION, INTERVENTION, AND TREATMENT PROGRAMS FOR CHILDREN AND YOUTH	10/21/2021 12:00 PM
Division of Housing	MOBILE HOME PARK ACT DISPUTE RESOLUTION & ENFORCEMENT PROGRAM	10/05/2021 01:00 PM

9/13/21, 7:41 PM Register Details

Income Maintenance (Volume 3)	COLORADO CHILD CARE ASSISTANCE PROGRAM	10/08/2021 08:30 AM
Child Support Services (Volume 6)	RULE MANUAL VOLUME 6, CHILD SUPPORT SERVICES RULES	10/08/2021 08:30 AM
Medical Services Board (Volume 8; Medical Assistance, Children's Health Plan)	MEDICAL ASSISTANCE - STATEMENTS OF BASIS AND PURPOSE AND RULE HISTORY	10/08/2021 09:00 AM
Food Assistance Program (Volume 4B)	RULE MANUAL VOLUME 4B, FOOD ASSISTANCE	10/08/2021 08:30 AM
Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	OVERVIEW OF CHILD WELFARE SERVICES	10/08/2021 08:30 AM
Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	REFERRAL AND ASSESSMENT	10/08/2021 08:30 AM
Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	REFERRAL AND ASSESSMENT	10/08/2021 08:30 AM
Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	PROGRAM AREAS, CASE CONTACTS, AND ONGOING CASE REQUIREMENTS	10/08/2021 08:30 AM
Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	CHILD WELFARE SERVICES	10/08/2021 08:30 AM
Social Services Rules (Volume 7; Child Welfare, Child Care Facilities)	RESOURCES, REIMBURSEMENT, REPORTING, AND PROVIDER REQUIREMENTS	10/08/2021 08:30 AM
Adult Protective Services	ADULT PROTECTIVE SERVICES	10/08/2021 08:30 AM
Adult Protective Services	ADULT PROTECTIVE SERVICES	10/08/2021 08:30 AM



<u>Top</u>

Terms & conditions | Browser compatibility



3A

DORA Home / OPR Home / Logoff

Review of State Agency Rules -> Restricted Area

Home

My Proposed Rules

Submit New Rule

Reports

My Account

Help

Submission Accepted

Rule Submitted

Your proposed rules or amendements to rules have been successfully submitted to the Department of Regulatory Agencies.

After your submission has been checked for completeness, it will be made available to the general public on DORA's website and email notifications will be sent to interested stakeholders. You will be copied on all stakeholder requests for a cost-benefit analysis and DORA staff will contact you to discuss any public requests.

You may log back in to this system at any time to check on the current status of this rule. An email notification containing further instructions will be sent if a cost-benefit analyis is required as a result of your submission.



Colorado Department of Regulatory Agencies



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

Proposed Rule Submitted - Pollution Reduction Planning Standards. -

1 message

DORA_OPR_Website@state.co.us < DORA OPR Website@state.co.us >

Fri, Aug 13, 2021 at 8:47 PM

To: natalie.lutz@state.co.us

The following Proposed Rule has been submitted to the Colorado Office of Policy, Research and Regulatory Reform:

Department: Department of Transportation

Rulemaking Agency: Transportation Commission of Colorado

Rule ID:

Title or Subject: Rules Governing Statewide Transportation Planning Process and Transportation Planning

Regions

Submitted by: Natalie E Lutz **Date Submitted:** 08/13/2021

After your submission has been checked for completeness, it will be made available to the general public on DORA's website and email notifications will be sent to interested stakeholders.

In accordance with SB13-158, the public will have until Monday, August 30th, 2021 at midnight to request that the Department of Regulatory Agencies require your agency to prepare a cost-benefit analysis of these rules or amendments. You will be copied on all stakeholder requests for a cost-benefit analysis and DORA staff will contact you to discuss the requests. A second email notification will be sent if you are required to submit a cost-benefit analysis as a result of a public request.

Please contact us at DORA OPR Website@state.co.us if you have further questions regarding this e-mail message.









Detailed Rulemaking Information

Department/Agency

Department: Department of Transportation

Rulemaking Agency: Transportation Commission of Colorado

Proposed Rule Changes

Rule Type: New, Amended and Repealed Rules

Title or Subject: Rules Governing Statewide Transportation Planning Process and

Transportation Planning Regions

Short Description: Pollution Reduction Planning Standards.

CCR Number: 2 CCR 601-22

Statutory Authority: §§ 43-1-106(8)(k) and 43-1-1103(5), C.R.S.

Website for Current Agency Rules: https://www.codot.gov/business/rules/proposed-rules.html

Subject Matter/Purpose:

The Transportation Commission of Colorado (Commission) is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2) (g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S. Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms. Please see the attachment for the proposed rule revisions, the notice of proposed rulemaking, the

proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for Transportation Planning

Proposed Standards".

Colorado Register Publish Date: 08/25/2021

Text of Proposed Changes: Notice Statement Fact Sheet Proposed Rules.pdf (887K, Adobe

Acrobat)

Submitted for Review: 08/13/2021

Rulemaking Hearing

Hearing Date: Tuesday, September 14, 2021 03:00 pm

Hearing Covers: Multiple Rules

Hearing Location: CDOT Regional Office, US160 Maintenance Training Facility

20581 Highway 160 Durango, CO, CO 81301

Hearing Notes: The Transportation Commission of Colorado plans to hold eight (8)

hearings across the State as listed in the table within the attachment to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attachment or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish. Please submit all written comments to dot_rules@state.co.us on or before 5:00 p.m. on October 15, 2021. Please see the attachment for the notice of proposed rulemaking, the proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for Transportation

Planning Proposed Standards".

Contact Information

Public Contact Name: Natalie Lutz

Title: Rules, Policies and Procedures Administrator

Email: Natalie.Lutz@state.co.us

Phone: 303-757-9441

Subject Information

Related Subject Area(s): Environment

Government Health

пеаш

Motor Vehicles & Traffic Regulation

Transportation

Review

Deadline for Public Cost-Benefit

Analysis Request: Monday, August 30th, 2021

Click here to request a cost-benefit analysis for a new or amended rule

Back to Calendar

1560 Broadway, Suite 1550, Denver, CO 80202 Email

© 2021 State of Colorado



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

DORA Regulatory Notice: Transportation Commission of Colorado - Pollution Reduction Planning Standards. -

1 message

DORA_OPR_Website@state.co.us < DORA OPR Website@state.co.us > To: natalie.lutz@state.co.us

Mon, Aug 16, 2021 at 5:30 PM

Dear Stakeholder:

The Department of Transportation - Transportation Commission of Colorado will be holding a rulemaking hearing on Tuesday, September 14th, 2021, 3:00 pm on rules regarding Pollution Reduction Planning Standards.. The hearing will be held at: CDOT Regional Office, US160 Maintenance Training Facility, 20581 Highway 160, Durango, CO CO 81301.

The purpose of this rulemaking is:

The Transportation Commission of Colorado (Commission) is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S. Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms. Please see the attachment for the proposed rule revisions, the notice of proposed rulemaking, the proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for Transportation Planning Proposed Standards".

If you believe there will be a significant negative impact on small business, job creation or economic competitiveness, you may request that the Department of Regulatory Agencies require the rulemaking agency to prepare a cost-benefit analysis of a proposed rule or amendment. This request must be made to the Department of Regulatory Agencies by Monday, August 30th, 2021.

You may also submit comments directly to the rulemaking agency for the agency's consideration during the upcoming rulemaking hearing.

We hope this information is helpful to you. Thank you for taking the time to participate in the rulemaking process.

Brian Tobias Director Colorado Office of Policy, Research and Regulatory Reform

You have received this e-mail bulletin because you previously signed up for this service provided by the Department of Regulatory Agencies. If you do not want to receive further e-mails regarding the review of proposed rules, please visit https://www.dora.state.co.us/pls/real/SB121 Web.SignIn Form and update your personal profile.



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

Received Public CBA Request for Rule: Pollution Reduction Planning Standards. -

1 message

DORA_OPR_Website@state.co.us <DORA_OPR_Website@state.co.us>

Tue, Aug 17, 2021 at 4:13 PM

To: natalie.lutz@state.co.us

Rulemaking Agency: Department of Transportation - Transportation Commission of Colorado

Title or Subject: Rules Governing Statewide Transportation Planning Process and

Transportation Planning Regions

View Rule Details (opens a new browser window)

Received Public CBA Request for Rule: Pollution Reduction Planning Standards.

Submission Date: Tuesday, August 17, 2021 4:13 pm **Rule Number:** Pollution Reduction Planning Standards.

Negative Impact Resulting from the Proposed Rule:

significant costs will be encountered. CBA should show that they are scientifically justified by improved air quality and

health.

Additional information:

Name:
Organization:
Phone Number:
Email Address:

Submission ID: 219



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

Received Public CBA Request for Rule: Pollution Reduction Planning Standards. -

1 message

DORA_OPR_Website@state.co.us <DORA_OPR_Website@state.co.us > To: natalie_lutz@state_co.us

Wed, Aug 18, 2021 at 11:59 PM

To: natalie.lutz@state.co.us

Rulemaking Agency: Department of Transportation - Transportation Commission of Colorado

Title or Subject: Rules Governing Statewide Transportation Planning Process and

Transportation Planning Regions

View Rule Details (opens a new browser window)

Received Public CBA Request for Rule: Pollution Reduction Planning Standards.

Submission Date: Wednesday, August 18, 2021 11:59 pm

Rule Number: 2 CCR 601-22

Negative Impact Resulting from the Proposed Rule:

If implemented, the new rule could cause project delays resulting in increased costs to the total project given inherent construction costs inflation thereby reducing the amount of funds available to address transportation needs across the state.

Furthermore, the new rule could serve as a basis to prevent or dramatically hinder regionally significant roadway expansion projects that are necessary to address congestion, population growth and air quality in a region thereby impacting a region's and Colorado's economic competitiveness.

Finally, as representatives of rural regions in the state, we are concerned about negative economic impacts upon disproportionately impacted communities, in particular, increased costs of housing and transportation as a consequence of the requirements of the rule, and specifically the mitigation option to develop "more efficient vertical land use and parking".

Additional information:

CDOT Construction Cost Index: https://www.codot.gov/business/eema/constructioncostindex
FHWA Highway Construction Cost / Inflation Issues: https://www.fhwa.dot.gov/programadmin/contracts/price.cfm



Submission ID: 220



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

Received Public CBA Request for Rule: Pollution Reduction Planning Standards. -

1 message

DORA_OPR_Website@state.co.us <DORA_OPR_Website@state.co.us>

Fri, Aug 27, 2021 at 12:38 PM

To: natalie.lutz@state.co.us

Rulemaking Agency: Department of Transportation - Transportation Commission of Colorado

Title or Subject: Rules Governing Statewide Transportation Planning Process and

Transportation Planning Regions

View Rule Details (opens a new browser window)

Received Public CBA Request for Rule: Pollution Reduction Planning Standards.

Submission Date: Friday, August 27, 2021 12:38 pm

Rule Number: 2 CCR 601-22

Negative Impact Resulting from the Proposed Rule:

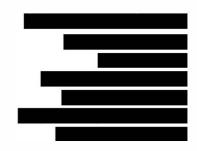
COPRRR staff entered the request into the system, and OIT attached the letter from the requestor.

Additional information:

Name:
Organization:
Phone Number:
Email Address:

Submission ID: 222





August 26, 2021

Via Electronic Mail

Colorado Department of Transportation Attn: Shoshana M. Lew, Executive Director 2829 W. Howard Pl. Denver, CO 80204 shoshana.lew@state.co.us

Department of Regulatory Agencies
Attn: Patty Salazar, Executive Director
1560 Broadway, Suite 1550
Denver, CO 80202
dora OPR Website@state.co.us

Re: Request for Cost-Benefit Analysis and Regulatory Analysis Under the Colorado Administrative Procedure Act in the Matter of Proposed Revisions to Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions, 2 CCR 601-22

Executive Director Lew and Executive Director Salazar:

The Board of County Commissioners of Weld County, Colorado ("Weld County") submits this request to the Colorado Department of Regulatory Agencies ("DORA") for a cost-benefit analysis under C.R.S. § 24-4-103(2.5) and a regulatory analysis under C.R.S. § 24-4-103(4.5) regarding the Colorado Department of Transportation's ("CDOT") proposed revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22 (the "Proposed Rule").1

¹ It is not clear whether CDOT or the Transportation Commission is the proponent of this proposed rule. See, e.g., Project Fact Sheet Regarding Greenhouse Gas Pollution Reduction for Transportation Planning Proposed Standards, Colo. Dep't of Transp. (stating "CDOT is

I. BACKGROUND

On August 13, 2021, CDOT filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the Proposed Rule. Among other things, the Proposed Rule aims to reduce greenhouse gas ("GHG") emissions from the transportation sector. If finalized, the rule would require CDOT and the state's five Metropolitan Planning Organizations ("MPOs") to determine the total GHG emissions expected from future transportation projects and take steps to ensure that emissions do not exceed set GHG reduction amounts.

The transportation sector is one of the largest contributors to GHG and ozone precursor emissions, and Weld County generally supports efforts to reduce air pollution, including GHG emissions, from this sector. The Proposed Rule will impact individuals living in Weld County, as well as transportation projects planned throughout the county. As an interested stakeholder, Weld County must be able to assess the impacts of the Proposed Rule. However, CDOT has not yet provided any documentation or analysis to explain the rule or how it calculated the baseline emissions or reduction levels. Accordingly, Weld County submits this request for a cost-benefit analysis and regulatory analysis to provide this missing information.

II. LEGAL STANDARD

Under two separate provisions of the APA, "any person" may request additional economic and regulatory impact analyses. C.R.S. §§ 24-4-103(2.5), (4.5). Given the lack of analysis or supporting documentation accompanying the Proposed Rule, Weld County requests both a cost-benefit analysis and regulatory analysis to ensure the Transportation Commission fully considers the economic and regulatory impacts of the Proposed Rule.

A. DORA-Ordered Cost-Benefit Analysis Under C.R.S. § 24-4-103(2.5)

Under C.R.S. § 24-4-103(2.5)(a) "any person may, within five days after publication of the notice of proposed rule-making in the Colorado Register, request that [DORA] require the agency submitting the proposed rule or amendment to prepare a cost-benefit analysis." Such cost-benefit analysis shall include the following:

1. The reason for the rule or amendment;

proposing a new standard to reduce greenhouse gas emissions from the transportation sector") (emphasis added); *Press Release Regarding Colorado Developing New Pollution Reduction Planning Standards to Address Climate Change and Air Quality*, Colo. Dep't of Transp. (stating the "*Colorado Transportation Commission* today proposed bold new transportation pollution reduction planning standards") (emphasis added). This request for a cost-benefit analysis and regulatory analysis is directed to CDOT. If this is incorrect, Weld County asks that this request be redirected to the Transportation Commission.

- 2. The anticipated economic benefits of the rule or amendment, which shall include economic growth, the creation of new jobs, and increased economic competitiveness;
- 3. The anticipated costs of the rule or amendment, which shall include the direct costs to the government to administer the rule or amendment and the direct and indirect costs to business and other entities required to comply with the rule or amendment;
- 4. Any adverse effects on the economy, consumers, private markets, small businesses, job creation, and economic competitiveness; and
- 5. At least two alternatives to the proposed rule or amendment that can be identified by the submitting agency or a member of the public, including the costs and benefits of pursuing each of the alternatives identified.

C.R.S. $\S 24-4-103(2.5)(a)(I) - (V)$.

CDOT has not yet provided an economic analysis of the Proposed Rule or otherwise addressed these considerations. To assess the factors set forth above, Weld County requests a complete cost-benefit analysis under C.R.S. § 24-4-103(2.5).

B. Regulatory Impact Analysis Under § 24-4-103(4.5)

Under C.R.S. § 24-4-103(4.5) "upon [the] request of any person, at least fifteen days prior to the hearing, the [Division] shall issue a regulatory analysis of a proposed rule." Such regulatory analysis must contain:

- 1. A description of the classes of persons who will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule;
- 2. To the extent practicable, a description of the probable quantitative and qualitative impact of the proposed rule, economic or otherwise, upon affected classes of persons;
- 3. The probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues;
- 4. A comparison of the probable costs and benefits of the proposed rule to the probable costs and benefits of inaction:
- 5. A determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule; and

August 26, 2021 Page 4

6. A description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule.

24-4-103(4.5)(a)(I) - (VI).

To assess the factors set forth above, Weld County requests a complete regulatory analysis under C.R.S. § 24-4-103(4.5).

III. WELD COUNTY REQUESTS BOTH A COST-BENEFIT ANALYSIS AND A REGULATORY IMPACT ANALYSIS UNDER THE STATE APA

Weld County requests that DORA require CDOT to perform both a cost-benefit analysis pursuant to C.R.S. § 24-4-103(2.5) and a regulatory impact analysis under C.R.S. § 24-4-103(4.5) with respect to the Proposed Rule.

As an initial matter, Weld County submits this request in advance of publication of the Proposed Rule in the Colorado Register and well before the first hearing scheduled on September 14, 2021. See C.R.S. §§ 24-4-103(2.5), (4.5). Moreover, the DORA website states that requests for a cost benefit analysis for the Proposed Rule are due on August 30, 2021. Rules Governing Statewide Transportation Planning Process and Transportation Planning Region, https://www.dora.state.co.us/pls/real/SB121 Public Comment GUI.submission form?p rule id =8981. Because this request is being submitted on August 26, 2021, it is timely.

Importantly, CDOT has not provided any type of analysis or the underlying documentation supporting its Proposed Rule. For instance, Table 1 and Table 2 listed on page 25 of the Proposed Rule set forth the GHG transportation planning reduction levels and baseline emissions, respectively. CDOT has not provided critical information regarding these tables, such as what methodology was used to reach these figures and what inputs and assumptions were used in the modeling. Accordingly, there is no way to evaluate the reasonableness of these figures or the efficacy of the Proposed Rule.

To allow interested stakeholders and the Transportation Commission to adequately evaluate the Proposed Rule, Weld County requests that CDOT provide supporting documentation—such as a technical support document, if available—describing the methods used to conduct the analysis for the GHG estimates in Table 1 and Table 2 of the Proposed Rule. Specifically, Weld County requests the following information be provided to all stakeholders and the Transportation Commission:

 Model inputs and outputs for all models used in the analysis, i.e., Land Use Model(s), EERPAT, MPO Models and Statewide Travel Model, and the Approved Air Quality Model, as applicable;

- Assumptions used in all models;
- Population growth data and assumptions;
- Data, assumptions, or modeling related to electric sector grid mix in future target years;
- Description of different scenarios considered in the modeling, if any, and which scenario
 was selected to determine GHG estimates shown in Table 1 and Table 2 of the Proposed
 Rule; and
- Description of any qualitative or off-model adjustments used to determine the GHG estimates in Table 1 and Table 2 of the Proposed Rule.

Weld County has separately requested from CDOT data regarding the Proposed Rule. To ensure that this information is provided to all interested stakeholders, and to enable the Transportation Commission to make an informed decision, Weld County requests that DORA require CDOT to produce this information in connection with its cost-benefit analysis and its regulatory impact analysis. This is what the Colorado APA requires. *See* C.R.S. §§ 24-4-103(2.5), (4.5).

IV. CONCLUSION

For the above-stated reasons, Weld County respectfully requests that DORA require CDOT to conduct a cost-benefit analysis under C.R.S. § 25-7-103(2.5) and a separate regulatory impact analysis under C.R.S. § 25-7-103(4.5). This information will enable the Transportation Commission to make a better-informed decision on the proposed revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.





3E Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

Rule Reviewed: Cost-Benefit Analysis Required - Pollution Reduction Planning Standards. -

1 message

DORA OPR Website@state.co.us < DORA OPR Website@state.co.us >

Tue, Aug 31, 2021 at 9:48 AM

To: natalie.lutz@state.co.us

The deadline for public cost-benefit analysis requests has passed for the following proposed rule(s):

Department: Department of Transportation

Rulemaking Agency: Transportation Commission of Colorado

Rule ID: 8981

Title or Subject: Rules Governing Statewide Transportation Planning Process and Transportation Planning

Three public requests were received by the deadline.

After consultation with the requestor(s) and staff of your agency, a cost-benefit analysis is required for the following:

Cost-benefit analysis required as requested.

This analysis must be completed and submitted to the Colorado Office of Policy, Research and Regulatory Reform by 09/04/2021 and posted on your web site.

Thank you.

Brian Tobias, Director

Colorado Office of Policy, Research and Regulatory Reform

Instructions for Completing the Cost-Benefit Analysis:

- 1. Download the blank cost-benefit analysis form from http://www.dora.state.co.us/pls/opr/blank cba.doc.
- 2. Fill out the cost-benefit analysis form and save it to a safe location on your local network.
- 3. Log into the Review of Agency Rules Online System at https://www.dora.state.co.us/pls/real/sb121.logon.
- 4. Find your proposed rule under the "Rules missing required Cost-Benefit Analysis" section and click the "Submit CBA for Rule..." link.
- 5. Click on the Submit CBA Form button.
- 6. Follow the online instructions to upload your completed cost-benefit analysis form.

Please contact us at DORA OPR Website@state.co.us if you have further questions regarding this e-mail message.



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

DORA Regulatory Notice: Transportation Commission of Colorado - NEW HEARING DATE & RULE DOCUMENT: Pollution Reduction PI -

DORA OPR Website@state.co.us < DORA OPR Website@state.co.us > To: natalie.lutz@state.co.us

Wed, Sep 1, 2021 at 2:20 PM

Dear Stakeholder:

The Department of Transportation - Transportation Commission of Colorado will be holding a rulemaking hearing on Friday, September 17th, 2021, 2:00 pm on rules regarding NEW HEARING DATE & RULE DOCUMENT: Pollution Reduction Planning Standards.. The hearing will be held at: CDOT Regional Office, Bookcliff Conference Room, 2328 G Road, Grand Junction CO 81505.

The purpose of this rulemaking is:

The Transportation Commission of Colorado (Commission) is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S. Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms. Please see the attachment for the proposed rule revisions, the notice of proposed rulemaking, the proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for Transportation Planning Proposed Standards".

If you believe there will be a significant negative impact on small business, job creation or economic competitiveness, you may request that the Department of Regulatory Agencies require the rulemaking agency to prepare a cost-benefit analysis of a proposed rule or amendment. This request must be made to the Department of Regulatory Agencies by Monday, August 30th, 2021.

You may also submit comments directly to the rulemaking agency for the agency's consideration during the upcoming rulemaking hearing.

We hope this information is helpful to you. Thank you for taking the time to participate in the rulemaking process.

Brian Tobias Director Colorado Office of Policy, Research and Regulatory Reform You have received this e-mail bulletin because you previously signed up for this service provided by the Department of Regulatory Agencies. If you do not want to receive further e-mails regarding the review of proposed rules, please visit https://www.dora.state.co.us/pls/real/SB121_Web.SignIn_Form and update your personal profile.



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

DORA Regulatory Notice: Transportation Commission of Colorado - REVISED NOTICE: Pollution Reduction Planning Standards. -

1 message

DORA_OPR_Website@state.co.us < DORA OPR Website@state.co.us > To: natalie.lutz@state.co.us

Wed, Sep 1, 2021 at 4:50 PM

Dear Stakeholder:

The Department of Transportation - Transportation Commission of Colorado will be holding a rulemaking hearing on Friday, September 17th, 2021, 2:00 pm on rules regarding REVISED NOTICE: Pollution Reduction Planning Standards... The hearing will be held at: CDOT Regional Office, Bookcliff Conference Room, 2328 G Road, Grand Junction CO 81505.

The purpose of this rulemaking is:

The Transportation Commission of Colorado (Commission) is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S. Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms. Please see the attachment for the proposed rule revisions, the notice of proposed rulemaking, the proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for Transportation Planning Proposed Standards".

If you believe there will be a significant negative impact on small business, job creation or economic competitiveness, you may request that the Department of Regulatory Agencies require the rulemaking agency to prepare a cost-benefit analysis of a proposed rule or amendment. This request must be made to the Department of Regulatory Agencies by Monday, August 30th, 2021.

You may also submit comments directly to the rulemaking agency for the agency's consideration during the upcoming rulemaking hearing.

We hope this information is helpful to you. Thank you for taking the time to participate in the rulemaking process.

Brian Tobias Director Colorado Office of Policy, Research and Regulatory Reform 9/6/2021 State.co.us Executive Branch Mail - DORA Regulatory Notice: Transportation Commission of Colorado - REVISED NOTICE: Pollution Red...

You have received this e-mail bulletin because you previously signed up for this service provided by the Department of Regulatory Agencies. If you do not want to receive further e-mails regarding the review of proposed rules, please visit https://www.dora.state.co.us/pls/real/SB121_Web.SignIn_Form and update your personal profile.







Detailed Rulemaking Information

Department/Agency

Department: Department of Transportation

Rulemaking Agency: Transportation Commission of Colorado

Proposed Rule Changes

Rule Type: New, Amended and Repealed Rules

Title or Subject: Rules Governing Statewide Transportation Planning Process and

Transportation Planning Regions

Short Description: REVISED NOTICE: Pollution Reduction Planning Standards.

CCR Number: 2 CCR 601-22

Statutory Authority: §§ 43-1-106(8)(k) and 43-1-1103(5), C.R.S.

Website for Current Agency Rules: https://www.codot.gov/business/rules/proposed-rules.html

Subject Matter/Purpose:

The Transportation Commission of Colorado (Commission) is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2) (g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S. Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it alians with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms. Please see the attachment for the proposed rule revisions, the notice of proposed rulemaking, the

proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for Transportation Planning

Proposed Standards".

Colorado Register Publish Date: 08/25/2021

Text of Proposed Changes: Revised Rule Docs.pdf (698K, Adobe Acrobat)

Submitted for Review: 08/13/2021

Rulemaking Hearing

Hearing Date: Friday, September 17, 2021 02:00 pm

Hearing Covers: Multiple Rules

Hearing Location: CDOT Regional Office, Bookcliff Conference Room

2328 G Road

Grand Junction, CO 81505

Hearing Notes: The Transportation Commission of Colorado plans to hold eight (8)

hearings across the State as listed in the table within the attachment to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attachment or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish. Please submit all written comments to dot_rules@state.co.us on or before 5:00 p.m. on October 15, 2021. Please see the attachment for the notice of proposed rulemaking, the proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for Transportation

Planning Proposed Standards".

Contact Information

Public Contact Name: Natalie Lutz

Title: Rules, Policies and Procedures Administrator

Email: <u>Natalie.Lutz@state.co.us</u>

Phone: 303-757-9441

Subject Information

Related Subject Area(s): Environment

Government Health

Motor Vehicles & Traffic Regulation

Transportation

Review

Review Date: 08/31/2021

Review Outcome: Cost-Benefit Analysis Required

Review Findings: Cost-benefit analysis required as requested.

Deadline for Public Cost-Benefit

Analysis Request: Monday, August 30th, 2021

The deadline for public cost-benefit analysis requests has passed.

Cost-Benefit Analysis

Cost-Benefit Analysis Pending



1560 Broadway, Suite 1550, Denver, CO 80202 Email

© 2021 State of Colorado



Department of Transportation

COST-BENEFIT ANALYSIS FOR RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING

In performing a cost-benefit analysis, each rulemaking entity must provide the information requested for the cost-benefit analysis to be considered a good faith effort. The cost-benefit analysis must be submitted to the Office of Policy, Research and Regulatory Reform at least ten (10) days before the administrative hearing on the proposed rule and posted on your agency's web site. For all questions, please attach all underlying data that supports the statements or figures stated in this cost-benefit analysis.

DEPARTMENT:	Colorado Department of Transportation		AGENCY:	Transportation Commission
CCR:			DATE:	August 31, 2021
	D T	C.		

RULE TITLE OR SUBJECT:

RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS AND TRANSPORTATION PLANNING REGIONS

1. The reason for the rule or amendment;

The proposed "RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS AND TRANSPORTATION PLANNING REGIONS" will set a greenhouse gas standard for state and regional transportation plans. The purpose of the Proposal is to ensure ongoing greenhouse gas emissions reductions from Colorado's transportation sector, which helps achieve the reduction goals set by HB19-1261. This rule also responds to a requirement in SB21-260, directing CDOT and the Transportation Commission to address GHGs through transportation planning.

Analysis Background

This analysis assumes that capital dollars for transportation will always be finite -- based on available federal, state, and local resources -- and that the parameters and modeling requirements established in the rule will help transportation planning agencies to prioritize those dollars in ways that better balance air pollution reduction needs with other factors such as improving safety and reducing congestion, and ideally selecting a portfolio of projects that achieve all of those ends. All of these factors, and others, tend to increase economic competitiveness, and render transportation investments of all modes good economic investments.

In terms of the overall economic and societal benefits of the rule, which are described in more detail below, it assumes that the public sector budget for transportation investment is relatively fixed and that this rule will likely result in some meaningful yet nuanced and regionally tailored shifts in the nature of which projects are prioritized.

The baseline for this analysis assumes a status quo that tallies the sum of regional transportation plans (RTPs) across all five metropolitan planning areas. These RTPs include state projects that are within the Metropolitan Planning Organization (MPO) boundaries For example: all CDOT projects within the Denver metropolitan area are also included in the RTP for the Denver Regional Council of Governments (DRCOG). These long range plans typically extend out for about 30 years, so unlike the more proximate plans established at both the state and MPO levels, many of the projects included in these plans are notional and far away from delivery. Generally speaking, these RTPs are inclusive of capital investments but do not include maintenance budgets, which are typically paid for separately by the state and local governments respectively, without engagement by the MPOs.

As these plans are not fully fiscally constrained, meaning that in actuality they contain more projects than can be paid for with resource constraints, they typically fluctuate significantly before projects are transferred to nearer term, fiscally constrained plans (e.g. the first four years of the state's "ten year plan" and the MPO transportation improvement plans or TIPs). The current sum of the long range RTPs for all five MPO areas is approximately \$28 billion of projects, many of which are not fully funded or planned. Notably, this baseline does not include the state's many planned projects in rural Colorado, outside of the boundaries of the MPO areas and represented by rural transportation planning regions (TPRs). Virtually none of these rural projects would trigger the need for GHG Mitigation Measures under this rule because, with rare exception, they do not add capacity or change land use patterns. Rather, they are generally focused on state of good repair (e.g. repaving projects), safety and resiliency improvements like adding shoulders and passing lanes, and increasingly, supporting the economic vitality of communities by investing in revitalizing main streets across the state.

Using the sum of the RTPs as the baseline for the size of the transportation capital program that could be subject to mode shift, the analysis below assumes that, over several periods of performance, it is estimated that between a quarter and a third of resources would need to be shifted towards transportation project types that have air quality mitigation benefits -- as well as many societal co-benefits -- in order to achieve the targets set in the rule (and notably, if total spending shifted either higher or lower than in the scenario described here, it is likely that the proportions would be fairly similar). As explained in the table below, which assumes that spending is roughly consistent across the periods of time identified, this number is significantly lower in the immediate years and increases in the outyears. This, in large part, is because the early year projects are assumed to add significant transit service, which carry operating costs that aggregate. However, while the modeling assumes that about 20% of transit costs are paid back by farebox revenue, it does not factor in other revenue sources that often become available as a transit system grows. For example, federal formula funds for transit are allocated partially on the basis of existing ridership, so more ridership tends to result in more federal funding.

Table 1

Net Neutral Investment Levels and Dollars Shifted to Multimodal Transportation and other Environmentally Beneficial

Transportation Investments

(net present value, millions of 2021 dollars)

Years	Total RTPs + 10-Year Plan	Total Shift to Mitigation	Percent Shift
2022-2025	\$3,842.07	\$417.90	11%
2026-2030	\$4,802.59	\$974.90	21%
2031-2040	\$9,605.17	\$2,655.80	28%

2041-2050	\$9,605.17	\$2,691.50	28%

Importantly, the scenario described above means that important capacity projects remain, but that these are balanced out with other types of projects with offsetting impacts, like adding bus infrastructure to highway projects, improving crosswalks to make them safer for pedestrians, opening up main streets for communities to utilize downtowns with less car travel, improving first-and-last-mile connections to transit facilities, and more. There is already precedent for adding these types of complementary features to highway projects. For example, construction of a managed lane on US36 included bus infrastructure for the flatiron flyer service. In a similar vein building on that model, CDOT is currently constructing a series of "mobility hubs" as part of capacity expansion along I-25 North in preparation to run bus rapid transit service in those managed lanes. In another example, design for the Floyd Hill expansion project includes plans to build out both a new microtransit service operated by CDOT, as well as park-and-ride facilities to facilitate operation of that service.

Incorporating mitigation features into high priority capacity expansion projects is expected to complement investment in project types that do not require mitigation measures -- such as repaving broken roads and fixing bridges that are in poor or fair condition before they become worse and more expensive to fix. Thus, all dollars shifted away from certain capacity projects are assumed to fund worthy transportation investments that improve competitiveness, quality of place and life, safety, economic vitality, public health, air quality, and more. A breakdown of these specific benefits is tabulated below.

An important aspect of this rule is that it does not require a specific set of measures to be implemented by the State and its MPOs to achieve the rule's targets. Those decisions are left to the implementing agencies who will also have ongoing opportunity to propose new mitigation measures for modeling to ensure that they result in emission reductions. Thus, in order to conduct this analysis, CDOT developed illustrative policy choice packages that assume implementation of three broad categories of VMT reduction measures: (1) expansion of transit service; (2) policies to encourage compact land use that reduces the need to drive by making it possible for travelers to access more of their preferred destinations easily within denser areas, in a manner that also facilitates strong and economically vibrant downtowns; and (3) various programs that expand travel choices through a variety of different approaches that could include investing in bicycle and pedestrian infrastructure and micro mobility services that assist with "first and last mile" connections to transit facilities; investments (e.g. in digital infrastructure) that help support tele-travel as an alternative to physical travel and also offer more workplace flexibility to employees in many work environments; or programs that encourage non-work travel by modes other than a single occupancy vehicle (e.g. a jurisdiction that provides transit passes to its residents).

The projected cost of these policy choice packages is assumed to be absorbed into current transportation plan budgets (a net neutral approach).

Per the provisions of 24-4-103(2.5)(a), Colorado Revised Statutes, the cost-benefit analysis must include the following:

2. The anticipated economic benefits of the rule or amendment, which shall include economic growth, the creation of new jobs, and increased economic competitiveness;

Anticipated Economic Benefits

Full implementation of this rule is expected to result in significant economic benefits in the form of cost savings to travelers and to the general public. Travelers will benefit from reductions in vehicle operating costs as a

result of expanded travel options (e.g., transit service, tele-travel, walking and bicycling), travel time savings, and the need to use personal vehicles less because of being provided with more options through state and regional transportation planning. Implementation of the rule will also reduce economic costs associated with carbon emissions, air pollution, motor vehicle crashes (road safety), and the health consequences of physical inactivity.

Businesses are also expected to receive a share of the economic benefits. Examples include congestion reduction that saves travel time for "on-the-clock" business travel, and reduced health care costs for employees as a result of reduced air pollution, motor vehicle crashes, and physical inactivity. They may also experience increased worker retention and satisfaction as a result of employees having expanded commute or work from home options.

Additionally, policies that facilitate and reward downtown density tend to have a markedly positive impact on "main street" small businesses such as restaurants and locally-owned retail. While these benefits can be somewhat difficult to quantify in the aggregate and are thus not fully accounted for in this analysis, results from the Colorado Department of Transportation's "Revitalizing Main Street" program indicate that they are significant and widespread across the state. Well over 100 grants awarded to more than 70 communities have largely supported projects including downtown street repurposing and parklets, sidewalks and crosswalks, park and street improvements, shared streets between cars and pedestrians, and wayfinding and signage improvements. Many recipients have affirmed to CDOT that these grants significantly improved business and saved jobs during the COVID-19 pandemic, and, when surveyed, 67 percent of respondents said they would not have implemented these innovations without the program. Though grants supported many projects on a pilot basis, survey results showed that 81 percent of projects are likely to be maintained or repeated on a seasonal basis given their success. This data provides qualitative indication of the economic development benefits associated with many of the project types that this policy would encourage.

Table 2 shows the projected change in social costs through 2025, 2030, 2040, and 2050 respectively, for full implementation of the proposed rule using the illustrative mix of strategies. The net benefits reflect the effects of reduced highway investment as well as increased investment in GHG-reducing projects. Negative values (shown in parentheses) represent a net cost savings. Future savings are discounted at a rate of 2.5 percent, consistent with Colorado Senate Bill (SB) 21-260 which requires use of the social cost of carbon dioxide (CO₂) and other pollutants using a discount rate of 2.5 percent or less. The most substantial benefits are from reduced crashes and reduced vehicle operating costs, resulting from reduced VMT. The net present value of total social benefits is roughly \$8 billion in the 2026-2030 timeframe and \$17 billion between 2031 and 2040.

Table 2
Economic Benefits (Cost Savings)
(Net Neutral Investment Levels after Mode Shift)
(net present value, millions of 2021 dollars)

Timeframe	Vehicle Operating Cost	Social Cost of Carbon	Air Pollution	Safety (Crashes)	Traffic Delay	Physical Inactivity	Total Social Cost Savings
2022 - 2025	\$(372)	\$(60)	\$(21)	\$(481)	\$(774)	\$(17)	\$(1,724)

2026 - 2030	\$(1,781)	\$(258)	\$(82)	\$(2,332)	\$(3,098)	\$(75)	\$(7,626)
2031 - 2040	\$(4,670)	\$(589)	\$(125)	\$(7,183)	\$(4,693)	\$(237)	\$(17,497)
2041 - 2050	\$(4,210)	\$(323)	\$(42)	\$(9,027)	\$397	\$(289)	\$(13,494)

A brief description of each of these economic benefits and how they were quantified is provided below. With the exception of physical inactivity, which is related to increased bicycling and walking, all of these economic benefits are derived from reductions in VMT and/or traffic delay. As described earlier, many of these benefits accrue to businesses as they do to individuals (e.g. a reduction in crashes leads to less lost work time). Additional detail on the assumptions underlying these estimates of economic benefits is provided in Appendix A.

- Vehicle operating cost Fuel and maintenance costs per mile driven. Costs per mile change over time consistent with projected changes in fuel prices and the mix of the vehicle fleet including conventional fuels (e.g. gasoline and diesel) versus zero emission vehicles (e.g. electric and hydrogen). Vehicle cost savings provide travelers with more out-of-pocket money that they can spend on other goods and services of higher value to them. Businesses also save money for work travel and goods movement expenses. These savings benefit the state's economy.
- Social cost of carbon Global climate change is expected to result in a variety of negative economic effects to the world and national economy, including Colorado. Examples include costs of flood prevention and mitigation, health care costs associated with excessive heat, and fire prevention, control, and damages. Carbon emissions are valued based on guidance issued by the Biden Administration¹ at a discount rate of 2.5 percent, consistent with Colorado Senate Bill (SB) 21-260. The social cost increases over time, from \$83 per metric ton of CO₂ emissions for emissions occurring in 2025 to \$116 per metric ton of CO₂ for emissions occurring in 2050.
- Air pollution Costs associated with air pollution include higher health care costs, as well as damage to structures and natural systems. Values per ton of particulate matter (PM) and oxides of nitrogen (NOx) reduced are based on modeling conducted in support of Federal rulemakings on vehicle tailpipe emission standards.
- Safety (crashes) Costs associated with crashes resulting in fatalities or injuries include higher medical
 costs, insurance costs, vehicle property damage, and lost workplace productivity. These costs impact
 Colorado's economy. Motor vehicle crash reductions are estimated based on national average fatality
 and injury crash rates per VMT, and are valued based on federal guidance on the value of a statistical
 life and average value of injury crashes.
- Traffic delay -- Traffic delay results in increased travel time for "on-the-clock" business travel and freight
 movement, as well as more time spent traveling for commuting, errands, and other personal travel.
 These time losses negatively impact Colorado's economy. To estimate delay reduction associated with

¹ "A Return to Science: Evidence-Based Estimates of the Benefits of Reducing Climate Pollution." The White House, 2021. https://www.whitehouse.gov/briefing-room/blog/2021/02/26/a-return-to-science-evidence-based-estimates-of-the-benefits-of-reducing-climate-pollution/

emissions-reducing transportation investments, hours of traffic delay reduced (per VMT reduced) are derived from Texas Transportation Institute studies of national traffic congestion and mitigation measures including transit expansion. For highway capacity expansion projects, which reduce delay, hours of delay reduced are based on modeled relationships between volume, capacity, and travel time. Capacity expansion projects consider the effects of "induced demand", or increased traffic that is observed to result over time after roads are expanded. This increased traffic may lead to net increases in greenhouse gas emissions as a result of the project, and may offset to some degree the delay reduction benefits.

• Physical inactivity -- A lack of physical activity is associated with increased mortality and other negative health outcomes, increasing health care costs. Investments in walking and bicycling infrastructure and transit services increase physical activity, reducing those associated costs. Physical inactivity in this analysis is valued based on health care cost savings per mile of walking and bicycling activity.²

Additionally, there are several categories of benefits from mitigation measures that are real, and may be quite large, but are difficult to quantify and therefore are not reflected in the chart above. These include:

- Reduced vehicle ownership costs to the extent that areas comply with the GHG requirements by making land use decisions that reduce the need to travel long distances, make areas more walkable and bikeable, and add transit service, it is likely that this will enable more households to reduce their vehicle ownership, for example going from from a 2 car to a 1 car family. This is particularly true for land use changes, where there is a strong correlation between average number of vehicles per household and land use types. While the analysis above captures reduced vehicle operating costs, it does not capture the reduced costs from lower levels of vehicle ownership, including depreciation of vehicle value due to reduced use per vehicle owned, lower cost due to owning fewer vehicles, etc.. Nationwide, researchers have found that households within 1/2 mile of transit stations own on average 0.9 cars, while households in the rest of the metropolitan regions owned, on average, 1.6 vehicles.³ According to AAA, the annual fixed cost to own a vehicle including depreciation, insurance, license and registration fees, and finance charges was on average \$6,200 in 2019, though these costs can range based on the cost and type of the vehicle, and household size.⁴
- Downtown/main street economic revitalization policies that support dense, walkable downtowns and main streets tend to spark significant economic vitality in those areas, providing customers for restaurants and small businesses. Investments in transit also spur economic benefits such as

² An alternative estimate of physical activity benefits was conducted using estimates of deaths prevented and the value of a statistical life based on U.S. Department of Transportation guidance. This method showed a much higher value of benefits -- nearly \$23 billion in the 2031-2040 timeframe in addition to benefits shown above. This alone is greater than the value of all other social benefits combined and could be considered as a consistent approach relative to other transportation modeling, since the cost benefit analysis for highway projects including capacity expansion projects typically incorporates the value of a statistical life on the benefits side when considering the safety impact of that project, for example safety improvements resulting from adding improved level of safety service at a chokepoint with an accident history. However, in the cases presented in the tables above, the value of benefits is based only on health care cost savings deriving from active transportation, and therefore represents a very conservative estimate of benefits.

³ Dorn, J. (2004). Hidden in plain sight: capturing the demand for housing near transit. Oakland, CA: Center for Transit-Oriented Development. https://ctod.org/pdfs/2004HiddenPlainSight.pdf

⁴ Average Cost of Owning and Operating an Automobile, Bureau of Transportation Statistics. https://www.bts.gov/content/average-cost-owning-and-operating-automobilea-assuming-15000-vehicle-miles-year Polzin, S. E., Chu, X., & Raman, V. S. (2008). Exploration of a shift in household transportation spending from vehicles to public transportation (No. NCTR 576-02). https://www.nctr.usf.edu/pdf/77722.pdf

increased property values and agglomeration benefits from more efficient land use. These benefits are real⁵, but difficult to quantify and are not included in this analysis.

- Increased access to jobs Because Colorado already has a very complete roadway network, households that have access to cars have the ability to access employment by driving. By contrast, for residents who do not own cars or have disabilities that preclude driving, many jobs are essentially inaccessible. A more robust transit network will increase access to jobs for these residents, and will provide a larger pool of potential employees for businesses. As an example, within the DRCOG region 6% of households do not have cars and 9% of residents have mobility disabilities⁶. While it is not quantified in this analysis, greater access to employment for these individuals could bring significant economic and equity benefits.
- 3. The anticipated costs of the rule or amendment, which shall include the direct costs to the government to administer the rule or amendment and the direct and indirect costs to business and other entities required to comply with the rule or amendment;

Direct costs to the government to administer the rule

In terms of regulatory implementation, one reason why the Transportation Commission, rather than the Air Quality Control Commission, is pursuing this rule is in order to optimize overhead and streamline implementation resources within the organizations that already house transportation planning functions and expertise.

However, there will be some administrative costs associated with implementing this policy change, especially within the initial years of implementation. Within the state, the Colorado Department of Transportation (CDOT) is largely relying on existing staff positions to support the Transportation Commission's rulemaking, however, CDOT expects to hire three new positions to focus on functions related to implementation. This likely amounts to a cost of up to \$350,000 per year including employee benefits and other costs. Over time, it is possible that the Colorado Department of Public Health and the Environment's Air Pollution Control Division could hire an additional staff modeler to support confirmation and verification of pollution reduction analytics. This cost would amount to roughly another \$125,000-\$150,000 (including benefits).

Moreover, it is expected that some metropolitan planning organizations (MPOs) may require additional staff members dedicated to emissions modeling, as well as additional modeling software. CDOT is exploring options to streamline these overhead expenses and achieve economies of scale, especially as relates to centralizing certain modeling and software capabilities for use as shared services between the state and MPOs. The recently passed state legislation, SB 260, updates the Multimodal and Mitigation Options Fund (MMOF) to allow funds directed into this program to be used for modeling support.

⁵ See for example, Liu and Shi, Understanding Economic and Business Impacts of Street Improvements for Bicycle and Pedestrian Mobility: A Multi-City, Multi-Approach Exploration, National Institute for Transportation and Communities, April, 2020, available at https://ppms.trec.pdx.edu/media/project_files/NITC-RR-1031-1161_Understanding_Economic_and_Business_Impacts_of_Street_Improvements_for_Bicycle_and_Pedestrian_Mobility.pdf, which found significant increases in retail and food service income and employment associated with bicycle and pedestrian access improvements.

⁶ Denver Regional Active Transportation Plan, DRCOG, 2019, available at https://drcog.org/sites/default/files/resources/DRCOG_ATP.pdf

Costs to business and other entities required to comply with the rule

As described in detail in the background section above, it is assumed that costs to implementing agencies are net neutral -- representing some shift in how dollars are prioritized rather than an overall change in the amount of spending on transportation. For example, some, but by no means all, dollars would shift from highway capacity expansion projects to other types of transportation investment including but not limited to bus rapid transit lanes or queue jumps as part of road projects; walking and bicycling facilities; additional transportation services, including expanded transit service and ridesharing options; and/or consumer incentives to reduce travel or encourage travel by more efficient, lower-emissions modes (such as ridesharing or telecommuting incentives). Importantly, it is anticipated that all costs shifted towards these types of investments will themselves result in mobility benefits and economic development, as well as improvements to air quality and pollution reduction.

Importantly, as described above, it is assumed that only a portion -- roughly a third -- of capital program dollars are shifted towards projects that also serve as mitigation, in addition to providing mobility benefits of their own. This means that the most critical capacity projects are assumed to advance, likely paired with mitigation and significant investment in achieving and maintaining a state of good repair for roads, bridges, tunnels, and other transportation infrastructure assets across Colorado.

It is worthy of note that additional federal investment could augment overall resources, and especially those resources geared towards transit and multimodal investments. For example, the Senate-passed Infrastructure Investment and Jobs Act would expand transit formula funds over the next five years by about \$39.5 billion, a 43% increase over the FAST Act. Under current FTA funding formulas, Colorado could receive more than \$900 million over the course of 5 years, an increase of approximately \$40 million a year. The Act also contains \$66 billion for Amtrak while Colorado continues to work towards passenger rail along the front range.

Businesses are not expected to incur significant direct costs to comply with the rule under the proposed implementation of the rule. As noted previously, there are a variety of social benefits (cost savings) that will be realized by the rule, some of which will accrue to Colorado's businesses. Importantly, this rule does <u>not</u> require that businesses implement trip reduction strategies that would have been required in a separate rulemaking recently withdrawn by the Air Quality Control Commission (AQCC). While businesses are encouraged to pursue employee trip reduction on a voluntary basis, and MPO's and CDOT through their Travel Demand Management (TDM) programs are able to help and encourage businesses in this effort, nothing in this rule requires it.

Lastly, both the benefit and cost assumptions within the rule assume that implementing agencies come into full compliance with the rule over the period of performance. However, the way that the rule is structured, the enforcement mechanism for non-compliance requires that a portion of an agency's capital funds -- which for MPOs are only those funds sub-allocated via the state as well as those specifically noted in Senate Bill 260 as being conditioned in this manner -- become restricted to projects that are demonstrated to reduce pollution and improve mobility. The recipient retains discretion over what pollution reducing investments are made, so long as those investments are approved as mitigations pursuant to the process set forth in the proposed rule. No entity would lose funds as a result of the enforcement provisions becoming effectuated by not hitting the targets in totality. The goal of this policy is to perpetuate serious conversation and planning for how the choices that planning entities make can provide consumers with the choices that are needed to reduce pollution and

improve quality of life, not to diminish the ability of any entity to invest these dollars in mobility solutions for Coloradans.

4. Any adverse effects on the economy, consumers, private markets, small businesses, job creation, and economic competitiveness; and

The proposed measures will affect Colorado industries in varying ways depending upon how spending increases or decreases for different types of vehicles, fuels, and equipment. Multipliers from the IMPLAN model were used to translate changes in spending for two industries directly affected by reductions in VMT -- gasoline and diesel sales and automotive maintenance and repairs -- into changes in direct gross state product (GSP) for those industries. IMPLAN is an economic input-output model that contains data on how spending in any one particular industry will directly and indirectly affect output, jobs, and other metrics in that industry and other industries. The IMPLAN multipliers used are \$0.18 million GSP change per \$million spending change on gasoline, and \$0.67 million GSP change per \$million spending change on automotive maintenance and repairs. The different impacts reflect the fact that more of the money spent on maintenance and repairs stays within the state of Colorado than money spent on gasoline and diesel fuel.

Table 3 shows the anticipated GSP effects for the combined VMT reduction measures for those directly affected industries, compared to baseline projected GSP levels for each industry in each year. The estimated effects are similar for both Comparison A and Comparison B since they reduce VMT to similar degrees to meet the same GHG reduction targets.

Table 3
Impacts on Directly Affected Industries
(Gross State Product, 2021 \$millions)

Spending Category	2022 - 2025	2026 - 2030	2031 - 2040	2041 - 2050
Gasoline and diesel sales	(\$54)	(\$231)	(\$479)	(\$288)
Automotive maintenance and repairs	(\$133)	(\$589)	(\$1,380)	(\$1,177)

These impacts should not be taken as a bottom line impact to Colorado's economy as a whole. The changes in costs and benefits described above will impact Colorado's economy in a variety of different ways. As shown in Table 2, Colorado's residents will save on vehicle operating costs as a result of increased travel options and the need to travel less by personal vehicle. The other social benefits resulting from the rule are also expected to result in economic impacts that may affect different sectors of the economy in a variety of ways. For example, reduced traffic crashes and air pollution will reduce spending in the health care sector, but provide consumers with correspondingly more money to spend on other goods and services that are of greater value to them. These various indirect effects are not quantified in this analysis.

Jobs Impact

Generally speaking, research shows that state and local infrastructure investment, along with other forms of government purchase of goods and services, rank⁷ amongst the highest categories of spending in terms of yielding a "fiscal multiplier" -- with that multiplier ranging between 0.4 and 2.5. The macroeconomic impact of

⁷ https://www.brookings.edu/wp-content/uploads/2019/05/AutoStabilizers_framingchapter_web_20190506.pdf

infrastructure spending, particularly when considering its impact as part of fiscal stimulus, does not tend to differentiate between the mode of transportation investment, largely because these impacts tend to be measured in terms of jobs created through fields like construction, engineering, and trucking which have more to do with the amount of work done than the substance of the end product. To that end, a rule that results in some shifting between project types should not have a significant net impact on jobs or the fiscal multiplier.

To the extent that there could be some shift in terms of how the modality of transportation spending impacts jobs, this might reflect in the breakdown between capital and operating expenses. For instance, if some portion of programmed transportation dollars shift to transit spending, that would likely entail a larger percentage of dollars spent on operating expenses relative to capital expenses -- as the analysis below shows. This might entail some shift in job type or classification, but should not result in a significant net change in jobs because, much like capital expenses, operating expenses translate directly into jobs in fields such as equipment operation (e.g. bus drivers), repair of both infrastructure and rolling stock (e.g. construction and mechanical work), technology operations (e.g. software and logistics and mapping systems, etc). Notably, there is significant overlap between the job types associated with capital versus operations. In sum, job impacts, much like the fiscal multiplier, are assumed to be strong and consistent so long as they are invested in transportation and irrespective of the specific type of transportation project that they support.

Table 4
NAICS Job Classifications for Transportation

NAICS Job Classifications ⁸	NAICS CODE
Heavy and Civil Engineering Construction	237
The Heavy and Civil Engineering Construction subsector comprises establishments whose primary activity is the construction of entire engineering projects (e.g., highways and dams), and specialty trade contractors, whose primary activity is the production of a specific component for such projects. Specialty trade contractors in Heavy and Civil Engineering Construction generally are performing activities that are specific to heavy and civil engineering construction projects and are not normally performed on buildings. The work performed may include new work, additions, alterations, or maintenance and repairs.	
Highway, Street, and Bridge Construction	2373
Other Heavy and Civil Engineering Construction	2375
Transit and Ground Passenger Transportation Industries in the Transit and Ground Passenger Transportation subsector include a variety of passenger transportation activities, such as urban transit systems; chartered bus, school bus, and interurban bus transportation; and taxis. These activities are distinguished based primarily on such production process factors as vehicle types, routes, and schedules.	485
Urban Transit Systems	4851
Other Transit and Ground Passenger Transportation	4859
Interurban and Rural Bus Transportation	4852

5. At least two alternatives to the proposed rule or amendment that can be identified by the submitting agency or a member of the public, including the costs and benefits of pursuing each of the alternatives identified.

Two alternative implementation scenarios for the rule were considered, including:

9

⁸ https://www.bls.gov/iag/tgs/iag index naics.htm

Alternative 1: A lower level of pollution savings based on modeling assumptions that only factored in savings associated with travel choices: Programs to encourage non-work travel by non-single occupancy vehicle modes; programs to support and encourage tele-travel (e.g., on-line health care, education, and shopping) as a substitute for physical travel; investment in bicycle and pedestrian infrastructure and micromobility services; and reduction of transit fares. Essentially, this regulatory alternative achieves the lowest cumulative pollution reduction targets and assumes fewer illustrative choices by agencies to meet them.

Alternative 2: A pollution reduction scenario at a level where the model assumed an illustrative set of actions including travel choices and expanded transit service. Notably, since most of the costs assumed in the rule relate to the ongoing cost of transit operations, this scenario would reflect most of the costs associated with the current proposal.

In contrast to the illustrative package of policy choices used to evaluate the proposed rule, these alternatives do not include additional land use policies to reduce vehicle travel. As a result, they are less likely to achieve the required greenhouse gas reduction targets and therefore to support overall state goals for GHG reduction and climate change.

The economic benefits (reductions in social costs) from these alternatives are presented in Table 5. The "travel choices" alternative (Alternative 1) achieves the lowest greenhouse gas emission reductions. The "travel choices + transit" alternative (Alternative 2) results in additional social cost savings and greenhouse gas reductions. The proposed alternative for this rule (which includes travel choices, transit, and land use policies) results in a further increase in greenhouse gas benefits. These considerations resulted in proposing this alternative to analyze the effects of the final rule. As with the base alternative, the net costs of implementing the rule to the public sector would assume similar levels of overhead (staffing) at implementing agencies but would otherwise assume that topline funding remains the same with some portion shifted from planned highway expansion into other, emissions-reducing modes and services.

Table 5

Net Present Value of Economic Benefits (Cost Savings) for Alternatives (\$millions)

Scenario 2022 - 2025	Alternative 1: Travel Choices \$(1,527)	Alternative 2: Travel Choices + Transit \$(1,644)
2026 - 2030	\$(6,776)	\$(7,268)
2031 - 2040	\$(14,852)	\$(16,102)
2041 - 2050	\$(10,603)	\$(11,397)

Appendix A. Detailed Analysis of Economic Benefits and Costs

This appendix provides detailed information and assumptions supporting the estimates of economic benefits and costs for the proposed Colorado transportation greenhouse gas (GHG) reduction rule. Information is presented for each of the illustrative measures that are assumed to be implemented to achieve the targets set forth in the rule. This information includes a description of the measure and how it is expected to affect economic benefits and costs; a table showing the various estimated costs and benefits of the measure; and additional details about the key assumptions and data sources.

Some effects of the measures will show up as economic benefits to one party and costs to another party. For example, reduced transit fares are an additional cost to the public sector (lost fare revenue), but a benefit to consumers.

The social benefits were estimated based on the estimated reductions in vehicle-miles traveled (VMT) and GHG emissions from each measure. VMT and GHG reductions, and the associated economic benefits, were estimated cumulatively for the entire set of measures anticipated to be implemented under the proposed rule and its two alternatives, rather than individually for each measure. VMT, GHG, and associated cost changes are discussed in a separate section following the discussion of public sector implementation costs.

Analysis Timeframe

Implementation of measures is assumed to start in 2022 or 2023 depending on the measure. The year in which measures are assumed to be fully implemented varies depending upon the measure.

The analysis considers impacts of the proposed rule in four timeframes: 2022-2025, 2026-2030, 2031-2040, and 2041-2050. Economic benefits and costs were estimated based on a time-stream of costs incurred between 2022 and 2050, expressed as net present values (NPV) for each timeframe. Costs are expressed in 2021 dollars.

Public Sector Costs

Travel Choices: Household-Based Trip Reduction

This set of measures includes programs combining information, incentives, and services to encourage non-work trip reduction and mode shifting away from SOV travel. Trips may include school trips, shopping, personal business, recreation, etc. This set of measures includes what are sometimes called "individualized marketing" programs and incentive-based rideshare or trip reduction apps.

Individualized marketing programs and similar information/incentive-based programs were piloted in a number of cities in the early 2000's and some continue to be implemented today, with some evolution of the programs (for example, to a focus on app-based incentives). One example is the Portland (OR) SmartTrips program, operated by the Portland Bureau of Transportation since 2003. In recent years this program has pivoted to focus on new households moving to the city and is now known as SmartTrips New Movers. Other agencies implementing programs have included Bellevue and King County, WA; Cambridge, MA; Chicago; Salt Lake City; San Francisco, and the Southern California Association of Governments. Washington State has proposed to create a voluntary "all trips" grant program funded at \$10 million per year that would expand on the success of the state's Commute Trip Reduction program to address non-work trips.

These types of measures entail public sector investment in the form of staff time and materials for marketing, information, and outreach. The program may also provide consumer cost savings as a result of reduced VMT and associated vehicle operating costs, although consumers may also incur some additional costs for expenditures on transit fares, bikeshare services, etc. All of these examples are illustrative of what implementing agencies might select as part of their implementation strategies. Importantly, as noted above, this rule does <u>not</u> require any employer-based trip reduction programs that would have been required by a proposed rule that was recently withdrawn by the Air Quality Control Commission (AQCC).

Table A.1 shows the estimated public sector implementation costs for this measure.

Table A.1

Costs for Household-Based Trip Reduction Programs (millions of 2021 dollars)

Description	\$ Value per Unit	2022-2025	2026-2030	2031-2040	2041-2050
Program costs	\$30 per HH per	\$2.9	\$6.2	\$13	\$13
	year				

Basis for cost estimates:

- Programs that have been in operation in the U.S. have typically reported administrative costs of around \$15 to \$30 per year per household targeted. The Portland SmartTrips New Movers program is funded at \$250,000 per year at a cost of just under \$30 per household.⁹
- The total cost is based on the assumed participation of 3.2 percent of Colorado households (77,300 households in 2030) as described in the discussion of VMT reduction estimates for this measure below.

Travel Choices: Tele-Travel

This set of measures includes programs to encourage the substitution of "virtual" travel for commute trips as well as for non-work activities such as shopping, medical appointments, and education. Examples of state and MPO policies and actions to support virtual travel may include but would not be limited to programs to encourage and support employers in developing work from home policies; revision of health care regulations, if needed, to permit or encourage remote services to the degree feasible and appropriate; and directives to publicly funded post-secondary educational institutions to support distance learning.

Tele-travel will also be supported by investments to expand broadband infrastructure to cover all households in the state. The Colorado Broadband Office is already supporting broadband expansion with the aid of Federal grant programs as well as state funds. In the long run to maximize broadband use by all residents of Colorado, support may also be needed for low-income households that cannot afford service even if it is available. For this analysis it is assumed that additional state costs beyond ongoing infrastructure investment measures are minimal and limited to program support to encourage tele-travel and broadband adoption.

Table A.2 shows the estimated public sector implementation costs for this measure.

Table A.2

Costs for Tele-Travel Programs (millions of 2021 dollars)

Description	\$ Value per	2022-2025	2026-2030	2031-2040	2041-2050				
	Unit								

⁹ Portland Bureau of Transportation, "About Smart Trips", https://www.portlandoregon.gov/transportation/

Program administration	\$131,000 /	\$0.7	\$0.8	\$0.6	\$0.5
costs	staff person				

Basis for cost estimates:

 Program administration - Two additional full-time staff people through 2030 including fringe and overhead for development and implementation of tele-travel programs, one staff person after 2030.

Travel Choices: Bicycle, Pedestrian, and Micro-Mobility Facilities, Policies, Initiatives

This set of measures includes bicycle and pedestrian infrastructure investment as well as incentives to support micro-mobility services such as shared or privately owned electric bicycles and scooters.

Public sector costs include infrastructure costs for pedestrian and bicycle facilities, and subsidies for low-income households to increase their participation in electrified micromobility options.

The costs for consumers who choose to purchase equipment like bicycles is subtracted from what those consumers might be expected to save by not operating vehicles. Importantly, though, micro-mobility options do not in any way require specific individuals to use those options; they merely expand the universe for personal choice. It is also assumed that the public sector provides an income-targeted subsidy in order to increase participation by low-income households.

Table A.3 shows the estimated public sector implementation costs for this measure.

Table A.3

Costs for Bicycle, Pedestrian, and Micro-Mobility Facilities, Policies, Initiatives (millions of 2021 dollars)

Description	\$ Value per Unit	2022-2025	2026-2030	2031-2040	2041-2050
Infrastructure costs – sidewalk	\$170,000 / mile	\$100	\$112	\$187	\$32
Infrastructure costs – bicycle	\$25,000 / mile of lane \$250,000 / mile of special facility	\$46	\$50	\$84	\$15
Maintenance	10% of capital	\$46	\$145	\$496	\$566
Electric micromobility equipment subsidy	\$250 / HH / year	\$0.4	\$1.5	\$5.9	\$8.4

Basis for cost estimates:

• Data from the Denver region was used to estimate that there are about 18,800 miles of sidewalk in this region. The DRCOG regional travel demand model includes data on sidewalk density for each traffic analysis zone (TAZ). The model includes six area types, from central business district (CBD) to rural. The number of miles of sidewalk in each area type was estimated by multiplying the sidewalk density in each TAZ by the area of the TAZ, as shown in Table A.9, totalling nearly 19,000 existing miles. For illustrative purposes, it is assumed that 1,900 new or improved miles of sidewalk are added by 2030 and 4,700 new or improved miles of sidewalk are added by 2050 in metro areas and smaller communities across the state. These values represent 10 and 25 percent of the Denver region supply, respectively. It is assumed that this work may include upgrading deficient sidewalks as well as

constructing new sidewalks where none are currently provided. It is further assumed that this work occurs over a 20-year period (2022 – 2041) at a cost of \$170,000 per mile based on Florida DOT data.¹⁰

Table A.4
Existing Sidewalk Estimates, Denver Region

Area Type	Sidewalk Miles
1 = Denver CBD	51
2 = CBD Fringe & Outlying CBD (ex. Boulder CBD)	448
3 = Urban Neighborhood	3,031
4 = Suburban Neighborhood	15,004
5 = Rural Area (Non-Mountainous)	224
6 = Rural Area (Mountainous)	37
Total	18,795

- Bicycle facilities: Construction is assumed of 2,500 linear miles of new bike lanes at \$25,000 per mile and 2,500 linear miles of new separated bike lanes and shared-use paths at an average cost of \$250,000 per mile, over a 20-year period, based on cost estimates from Cambridge Systematics (2020).¹¹ The estimate of the added length of facilities is described in the section on VMT reductions below and would occur in metro areas and smaller communities across the state.
- Sidewalk and bike facility maintenance: 10 percent annually of cumulative construction costs, based on industry estimation rules.
- Cost per e-bike: eBikesHQ.com (2019), assumed to decline from \$2,000 in 2019 declining to \$1,500 by 2025. Bicycle lifetime of 6 years from ITF (2020).¹²
- Number of new e-bikes purchased: Change in annual bike-miles traveled based on e-bike speed increase as described in the section on VMT reductions below, divided by 1,500 miles per bike per year (1 round-trip, 3 days a week, average length 5 miles, or per ITF (2020)).
- To estimate a subsidy value (public sector share of e-bike costs), it is assumed that 11 percent of households purchasing an e-bike are low-income (per statewide model) and receive a purchase voucher from the state.

Transit – Expansion of Service Coverage, Frequency, and/or Hours

This measure includes expansion of transit service, including fixed-route and demand-responsive buses as well as rail transit. It is also assumed that buses are electrified over time. However, the costs and benefits of bus electrification are not considered here, since bus electrification is not a VMT reduction measure. The costs shown in this section represent the incremental costs of adding service using existing technologies.

¹⁰ Florida DOT (n.d.). "Cost Per Mile Models for Long Range Estimating", https://www.fdot.gov/programmanagement/estimates/lre/costpermilemodels/cpmsummary.shtm.

¹¹ Cambridge Systematics, Inc. (2020) "Transportation and Climate Initiative - 2019/2020 TCI Investment Strategy Tool Documentation." Prepared for Georgetown Climate Center.

¹² International Transport Forum (ITF). (2020). "Good to Go? Assessing the Environmental Performance of New Mobility."

The public sector costs include additional operating costs for the expanded service, as well as additional capital investment for vehicles to provide the service. These added costs are partially offset by added fare revenue resulting from increased ridership (shown as a negative cost).

Travelers may incur some additional costs in the form of fares paid for new trips taken. These are subtracted from the vehicle operating cost savings for this measure.

Table A.5 shows the estimated annual public sector implementation costs for this measure.

Table A.5

Costs for Transit Service Expansion (millions of 2021 dollars)

Description	\$ Value per Unit	2022-2025	2026-2030	2031-2040	2041-2050
Vehicle costs	\$435,000 per bus	\$38	\$136	\$394	\$452
Operating costs	See below	\$200	\$718	\$2,083	\$292
New transit fare revenue	\$0.75 per trip	(\$68)	(\$243)	(\$706)	(\$809)

Basis of cost estimates:

- It is assumed that vehicle revenue-miles (VRM) are increased by 6 percent annually statewide between 2022 and 2030, with an annual increase of 2 percent between 2030 and 2050.
- Vehicle costs \$435,000 per new bus (NREL, 2017); An average of 3.11 buses are needed per 100,000 VRM of service, the average for the "motor bus" mode for all Colorado operators, from the 2019 National Transit Database (NTD).
- Operating costs Average operating costs are assumed to be \$5.96 per VRM. This is the average cost for "rapid bus" service operating in Colorado as of 2019 according to reporting for the 2019 NTD. For comparison, the cost per VRM for regular motor bus service is in the range of \$3.89 to \$6.28 for the state's smaller MPOs and is \$9.20 for the Denver region. It is assumed that funds for additional transit expansion under this rule would be directed into services such as bus rapid transit that are more cost-effective from a GHG reducing perspective.
- New transit fare revenue/expenses Public agencies recoup some of their operating costs through
 increased fare revenue. The estimate is based on an average fare per trip of \$0.75 based on 2019 NTD
 data for all Colorado operators. Transit ridership is assumed to increase in proportion to service levels,
 meaning that higher quality and frequency service results in more individuals choosing to use transit.

Transportation-Efficient Land Use

This measure includes policy changes and incentives, such as funding for planning and potential changes to transportation project selection criteria, to encourage transit-supportive land use and walkable neighborhoods that reduce vehicle-travel per household.

Land use measures are assumed to be achieved mainly through the operation of market forces responding to market demand for mixed-use neighborhoods that are supported by changes to local plans and zoning regulations. Therefore only minimal costs to the public sector are assumed for making administrative changes to plans and zoning.

Table A.6 shows the estimated annual public sector implementation costs for this measure.

Table A.6
Costs for Land Use Measures (millions of 2021 dollars)

Description	\$ Value per Unit	2022-2025	2026-2030	2031-2040	2041-2050
Administrative costs	\$50,000 per municipality	\$7	\$8	\$13	\$11

Basis for cost estimates:

 Administrative costs – 272 municipalities in Colorado at an average of \$50,000 in planning costs per municipality per five-year period for updating and revising plans and zoning.

Reduced Investment in Adding Additional Roadway Capacity

This analysis assumes a reduction, but by no means an elimination, in spending on roadway capacity expansion relative to the "baseline" scenario of what is forecasted in long range regional transportation plans (RTPs) over the next several decades. That investment is anticipated to shift to other public investment in transportation mobility, illustrating a "net revenue neutral" implementation of the rule.

Table A.7 shows the estimated annual public sector implementation costs saved as a result of implementing fewer highway capacity expansion projects. These costs saved are assumed to be re-directed to other investments that reduce GHG and help offset the inclusion of other roadway capacity expansion projects remaining in the plans.

Table A.7
Assumed Cost Reduction for Roadway Capacity Expansion (millions of 2021 dollars)

Description	\$ Value per Unit	2022-2025	2026-2030	2031-2040	2041-2050
Construction costs	\$5 million per lane mile (freeway)	\$418	\$985	\$2,656	\$2,692
	\$1.5 million per lane mile (arterial)				

Key assumptions in this analysis include:

- Freeway and arterial expansion costs average \$5.0 million and \$1.5 million per lane-mile, respectively.
- Mix of investment is 75 percent for freeway capacity and 25 percent for arterial capacity (on a dollar basis).
- There is a lag of 2 years (for freeways) and 1 year (for arterials) between "spending" the funds and realizing the benefits (i.e., roadway open to service).

Economic Benefits (Social Cost Savings)

The various social cost savings estimated in this document rely on estimated changes in vehicle-miles of travel, traffic delay, and person-miles of walking and bicycling as a result of each measure. General modeling

tools used in this analysis are first discussed, followed by a discussion of assumptions specific to each measure. The social cost savings analysis also draws on key assumptions documented above in the assessment of public sector implementation costs.

Modeling Tools

To estimate VMT reductions, the Colorado Department of Transportation statewide travel demand model and the Colorado implementation of the Energy and Emissions Reduction Policy Analysis Tool (EERPAT) were used, along with off-model spreadsheet-based analysis where needed to prepare model inputs and process model outputs.

The Colorado statewide travel demand model is a network-based model that predicts changes in traffic flows by mode and location based on future changes in demographics, job locations, costs, transportation networks, and other factors. At the time of the analysis the statewide model was set up for 2015, 2030, and 2045. Results from 2030 and 2045 runs were interpolated to obtain 2040 estimates. Results from 2045 runs were extrapolated to represent 2050.

EERPAT is a tool developed by the Federal Highway Administration and designed specifically for analysis of greenhouse gas reduction measures. EERPAT models policies at the regional level. In the Colorado application of the model, five regions are defined corresponding to the state's MPOs:

- DRCOG (Denver Regional Council of Governments) Greater Denver area.
- GVMPO (Grand Valley MPO) Grand Junction area.
- NFRMPO (North Front Range MPO) Fort Collins area.
- PACOG (Pueblo Area Council of Governments) Pueblo area.
- PPACG (Pikes Peak Area Council of Governments) Colorado Springs area.

The statewide model and EERPAT each have strengths for evaluating different measures, so the best model for each measure was selected and the results then combined. Only personal light-duty vehicle travel within Colorado is considered, along with emissions from bus service that changes as part of the scenarios. To ensure a consistent baseline of VMT, percent VMT reductions from EERPAT for measures modeled in EERPAT were applied to total VMT from the statewide model.

GHG emissions were modeled using the U.S. Environmental Protection Agency Motor Vehicle Emission Simulator (MOVES3) emission factor model, based on VMT changes from the statewide model and EERPAT. The GHG modeling was conducted by the Colorado Department of Public Health and Environment – Air Pollution Control Division. The MOVES model accounts for Colorado-specific factors such as the age of the vehicle fleet, the distribution of VMT by different vehicle types and road types, and the speeds at which vehicles travel. MOVES provides GHG emissions in carbon dioxide equivalents (CO₂e) considering tailpipe emissions of CO₂, methane, and nitrous oxide. VMT changes for each measure, estimated as described below, were summed for all measures and used to revise MOVES inputs.

Travel Choices: Tele-Travel

This strategy is evaluated using adjustments to statewide travel demand model inputs and outputs assuming that through incentives and voluntary options, more telework becomes feasible. Note that the model does not assume a policy that requires businesses to limit employee trips.

Telework is modeled by increasing the fraction of workers choosing to telework compared to the base

- vear level.
- Tele-school is modeled by adjusting the mode-specific constant for higher education trips so that home schooling meets a target percentage.
- Other tele-travel is modeled by making adjustments to model output VMT to reflect an assumed market size of households reducing their travel and percent reduction in "personal business" travel per household.

The assumed effects of tele-travel policies are as follows:

- Telework (telecommuting): The percentage of workers teleworking at least part-time is increased by a factor of 3, from 6.3 percent to 18.9 percent, compared to baseline levels, reflecting a continuation of trends observed during the COVID pandemic.¹³
- Online participation in postsecondary education: The statewide model includes school trips. It is
 assumed that higher education students "tele-commute" 40 percent of the time, or on average about 2
 days a week for a full-time course load. This is applied as a post-model adjustment to the statewide
 activity-based model (ABM) trip roster. The model would reflect similar values from an emissions
 perspective if students walked to class rather than participating virtually.
- Other substitution of travel: Other types of trips (medical, retail, etc.) are not individually modeled but are included as part of a personal business trip type. The number of households reducing their "personal business" travel is estimated using the following assumptions:
 - o Expansion of broadband infrastructure The Colorado Broadband office tracks broadband coverage and supports programs to expand coverage, including tracking Federal grant programs. An overlay of 2021 broadband coverage on household data from the 2019 American Community Survey (ACS) estimates that 1.97 million of 2.39 million households in Colorado (82.6 percent) currently are in broadband service areas. ¹⁴ It is assumed that infrastructure expansion by 2030 will reach nearly all (97 percent) of the state's households with broadband access, or an additional 344,000 households.
 - o It is also assumed that an additional 5 percent of Colorado households already served by broadband expand their use of teletravel in the future.
- Newly participating households are estimated to take 10 percent fewer "personal business" trips as a result of tele-travel options.¹⁵ This is applied as a post-model adjustment to the ABM trip roster.

Travel Choices: Bicycle, Pedestrian, and Micro-Mobility Facilities, Policies, Initiatives

This strategy is evaluated using a variety of adjustments to the statewide model, including increasing intersection density to represent expanded/more connected pedestrian networks; increasing walk and bike speeds to represent improved transit access and increased use of e-bikes and e-scooters; and adjusting various model parameters to reflect overall conditions that encourage walking and biking by all demographic

¹³ During the height of the pandemic (May 2020), work-at-home rates were as high as 35 percent. More recently (October 2020 to January 2021), the rate stabilized around 22 percent. Source: Data from Bureau of Labor Statistics, Current Population Survey Supplement, as analyzed by University of Colorado Leeds School of Business and presented to Denver Regional Transit District, April 13, 2021.

¹⁴ Per the Colorado Broadband Office, broadband is defined as a minimum of 25 megabits per second (Mbps) download and 3 Mbps upload. See https://broadband.co.gov/ for a map of broadband coverage. The overlay was done at the Census block group level, assuming that households are evenly distributed within a block group.

¹⁵ While the statistics will vary for Colorado, the 2017 National Household Travel Survey shows an average annual VMT per U.S. household of 19,642, of which 31.8 percent is for shopping or other personal business (McGuckin and Fucci 2018, Table 6a). A 10 percent reduction in personal business travel would be a 3.2 percent reduction in overall travel for these households or 642 VMT per year. The Colorado statewide model may show different results, as changes in personal business travel may affect other types of travel.

groups. The model was adjusted so that the increase in bicycling matched a target estimate of total bicycle-miles of travel based on increasing bicycle travel related to additional bicycle infrastructure (new annual bike-miles traveled per new lane/path mile) as observed in other U.S. cities.

Pedestrian and Bicycle Improvements

To model improved pedestrian conditions, intersection density was increased 10 percent in 2030 over the baseline, or 25 percent in 2050, in the "suburban" area type, representing the application of policies to increase street network connectivity. Numerically this is equivalent to an increase of 16 four-way intersections in each zone. This was applied only to area types 2 (outlying CBD & fringe), 3 (urban), and 4 (suburban). While the statewide model does not include data on sidewalk density, the relative increase in intersection density is consistent with the increase in sidewalk density assumed for cost estimation above. Intersection density was increased by 5 percent in 2030 and 15 percent in 2050 for the "urban" area type, with the smaller increase reflecting the generally more connected nature of streets in urban areas.

The total miles of bicycle facilities needed to achieve a complete network in all of the urbanized land area of Colorado (census-defined urbanized areas) was estimated by assuming a build-out of separated bike lanes or shared-use paths at one-mile intervals, along with on-street bike lanes every ½ mile in between. Previous research, considering literature and models on the effectiveness of bike investment in the U.S., has estimated the number of new bicycle-miles of travel per year per mile of new facility in urban and suburban neighborhoods of various densities (Cambridge Systematics, 2020). The values used in that analysis are shown in Table A.8. These are applied to the proportion of land in CBD or "CBD fringe", "urban", and "suburban" area types as defined in the statewide model. Values from that study are multiplied by the required length of facilities to build out a network.

Table A.8

New Bicycle Travel per New Facility-Mile

Area Type:	Core/High Urban	Medium Urban	Suburban	
Statewide Model Area Type:	CBD (1) or CBD Fringe (2)	Urban (3)	Suburban (4)	Average
New annual bike-miles per new facility mile	146,000	82,000	26,000	64,000
% of urban land area in Colorado MPO areas	14%	39%	48%	

To estimate the extent of bike network added, a build-out of bike lanes and paths is assumed at ½ mile spacing for the entire urbanized area within Colorado (1,256 square miles) over a 20-year period between 2022 and 2041. This corresponds to 5,000 new miles of facility or 250 new miles per year. This is assumed to be split equally between on-street bike lanes and specialized facilities including physically separated bike lanes, bike boulevards, and off-street paths. The resulting increase in bicycle-miles of travel (BMT) compared to baseline conditions as estimated by the statewide model for years 2030 and 2045 is shown in Table A.9.

Table A.9
Bicycle Travel Increase From Facility Investment

	Baseline BMT	New	Additional BMT	Total BMT	% Over Base
Year	(millions)	Facility-Miles	(millions)	(millions)	

2030	346	2,250	144	474	37%
2045	405	5,000	320	717	77%

Additional statewide model adjustments to estimate the effects of improved walking and bicycling conditions included:

- Gender-specific constants for walking and biking: zeroing out negative terms for females; transferring
 positive coefficient for males to the bike or walk constant.
- Zeroing out negative terms for under age 20 other tour purposes.
- Reduction of disutility (negative interaction term) equivalent to 1.5 miles for rural area type term for bike to school tours.
- Walking interaction terms related to age 35 and age 50 thresholds changed to age 75 for work walk tours, other walk tours, other bike tours, and walk trip mode.
- Vehicular speed reduction of 2 to 11 mph, typically 6 mph, for access-oriented (versus mobility-oriented) facility types. Only applied in non-rural area types; applied to facility types 3 (principal arterial), 4 (minor arterial), and 5 (collector & local); peak and off-peak input speeds also adjusted if they would exceed the new free-flow speed.
- Walking speed (through perception of walking time) on transit access links increased to 5 mph from a base of 3 mph.
- Biking speed on transit access links increased from 12 to 13 or 14 mph.

Electric Bicycles

It is assumed that with a connected network of infrastructure in place to serve walk and bike trips, electric bicycle (e-bikes) will become more widely used. To represent electrification, the average speed of bicycling in the statewide model was increased by 33 percent. The share of bikes that are e-bikes was assumed to be 25 percent in 2030 and 50 percent in 2050, so the average speed increase across all bicycle trips is modeled as 8 percent in 2030 (from 12 to 13 mph) and 16 percent in 2050 (from 12 to 14 mph).

Transit: Expansion of Service Coverage, Frequency, and/or Hours

The VMT effects of transit expansion are modeled in EERPAT using the following inputs:

• **Transit_growth.csv**: Ratio of future transit revenue miles to base year transit revenue miles, as well as proportion of transit revenue miles that are electrified rail transit.

In 2019, based on data reported by Colorado's transit operators to the National Transit Database, 81 million vehicle revenue-miles of service were provided by all modes in Colorado's five metro areas. For this measure it is assumed that transit revenue-miles will increase by 6.0 percent per year between 2022 and 2030 (69 percent total growth between 2019 and 2030), and by 2.0 percent a year between 2030 and 2050 (151 percent total growth between 2019 and 2050) compared to base year (2019) service levels. This compares with a statewide growth in transit VRM of 2.9 percent annually (76 percent) between 2000 and 2019 (3.1 percent for the Regional Transit District, 1.2 percent average for other operators in the state).

 $^{^{16}}$ On average, e-bikes require 24% less total EE (kcal/kg/min) than conventional bicycles - Langford, B. C., Cherry, C. R., Bassett, D. R., Jr., Fitzhugh, E. C., & Dhakal, N. (2017). Comparing physical activity of pedal-assist electric bikes with walking and conventional bicycles. Journal of Transport & Health, 6, 463–473. $1/(1-0.24) \sim 1.33$.

The VMT reduction percentage was carried over into the statewide model by reducing the ABM trip roster by the same percentage for trips by residents of MPO zones.

Transportation-Efficient Land Use

This strategy is modeled in EERPAT using the following input:

• metropolitan_urban_type_proportions.csv: proportions of households in urban mixed-use areas.

Urban mixed-use areas are defined for this analysis as statewide model TAZs categorized as "urban" or higher area type (*AreaType* = 1, 2, or 3) with a population density of at least 2,000 per square mile and a retail/service job density (*Entertainmentemployement* + *Retailemployement* + *Restaurantemployement*) of at least 500 per square mile. This was the density threshold used in the Carbon-Free Boston study (Cambridge Systematics, 2019) which was based on evaluation of different thresholds and qualitative comparison against community characteristics such as walkability.

The base year (2015) number and percent of households in mixed-use urban areas was estimated using statewide model estimates of households and the mixed-use variable. This calculation was repeated for 2030 and 2045 to estimate the number of households in mixed-use areas under baseline forecast growth conditions in the future. The 2015 and 2030 data were interpolated to estimate 2023 values as the start year for additional land use policy implementation.

The 2023 percent of households in mixed-use areas ranges from 11 percent in the GVMPO region to 33 percent in the Denver region. Between 2023 and 2030, the fraction of growth in mixed-use areas ranges from 10 percent in the NRFMPO region to 43 percent in the Denver region. Under the policy scenario, this is assumed to increase to 75 percent in the Denver region and to 50 percent in other MPO regions between 2023 and 2050.

It is also assumed that some areas of existing households redevelop over time into mixed-use areas, through infill commercial development in neighborhood business districts. It is assumed that 4 percent of existing households per decade are in areas that change from non-mixed use to mixed-use. The resulting values of baseline and scenario projections for the percent of households in mixed-use areas, including new households and redeveloped areas, are shown in Table A.10..

Table A.10
Households in Mixed-Use Areas

	Households in Mixed-Use Areas			Grov	23-2030 wth in se Areas	Grov	30-2045 wth in se Areas		
			2030		2045				
MPO		2030	Scenari	2045	Scenari		Scenari		Scenari
Region	2023	Base	0	Base	0	Base	0	Base	0
DRCOG	32.5%	33.5%	38.5%	33.8%	47.1%	42.9%	75.0%	35.7%	75.0%
GVMPO	11.2%	12.4%	18.7%	16.8%	29.9%	20.3%	50.0%	34.7%	50.0%
NFRMPO	18.3%	17.1%	25.5%	16.2%	36.8%	10.0%	50.0%	13.4%	50.0%
PACOG	14.5%	16.0%	20.5%	14.7%	29.6%	28.9%	50.0%	6.1%	50.0%
PPACG	21.6%	20.9%	26.4%	21.9%	34.5%	13.9%	50.0%	27.3%	50.0%

The VMT reduction percentage was carried over into the statewide model by reducing the ABM trip roster by the same percentage for trips by residents of MPO zones.

Reduced Investment in Roadway Capacity

Capacity additions can increase GHG emissions and other social costs related to vehicle-travel in the long term as a result of induced demand effects. Reducing spending on these capacity projects is likely to provide social benefits in the form of reduced GHG emissions, air pollution, vehicle operating costs, and crash costs associated with vehicle-travel. However, it is likely to increase costs related to travel time and delay. It is important to note that the alternative investments provided by funding made available for other projects will help offset the impacts of any roadway travel time increases.

Key assumptions to estimate the social costs and benefits of reduced road capacity investment include:

- Expanded roads have a base VMT of approximately 20,000 VMT per lane-mile for freeways and 10,000 VMT per lane-mile for arterials. This assumes a freeway lane capacity of 2,000 vehicles per lane per hour with 10 percent of daily traffic in the peak hour. Arterial capacities are reduced by half to account for intersection delay. Analysis of modeling conducted by Cambridge Systematics for a hypothetical freeway widening project in Virginia confirms that 20,000 VMT per lane-mile is a reasonable value.
- The long-run demand elasticity is assumed to be 0.67 for freeways and 0.5 for arterials. This elasticity represents the ratio of percent growth in VMT to percent growth in lane-miles. An elasticity of 0.5 means that a 10 percent increase in lane-miles in a given area would result in a 5 percent increase in VMT in that area. The value of 0.67 is consistent with recent modeling of corridor highway expansion projects conducted by Cambridge Systematics and is at the low end of recent values reported in a literature review, which found values ranging from 0.67 to 1.06 in the U.S.¹⁷ That report also estimated that induced demand elasticities for arterials are 75 percent those of freeways. Since some of the induced demand in corridor studies may be due to growth being shifted from other locations in the same state, it is likely that overall induced demand for a statewide program of investments (such as is being evaluated in the Colorado analysis) is lower than levels found in corridor-specific studies.
- It is assumed that it takes five years to reach full response to induced demand, with effects in years 1-4 scaled up linearly between 0 and the final value.
- Delay savings (minutes saved per base VMT) are estimated based on modeling conducted by Cambridge Systematics. The value is 0.20 minutes per VMT at a demand elasticity of 0.67, which corresponds to a 3 mph average speed increase compared with a base speed of 30 mph. The delay savings are scaled to be zero at an induced demand elasticity of 1.0, and to increase in inverse proportion to the elasticity.
- Fuel savings per hour of delay are estimated at 0.44 gal/hour (mixed traffic autos and trucks) for 2012 vehicles based on data from the 2012 Texas Transportation Institute Urban Mobility Report. These are scaled for 2022 and future vehicles based on actual and projected changes in fuel efficiency (mpg) and levels of fleet electrification. Energy use and GHG emissions from EVs are assumed not to be sensitive to the level of congestion or delay.

¹⁷ Volker, J.M.B., and S. L. Handy (2021). The Induced Travel Calculator and Its Applications. University of California Institute of Transportation Studies, UC-ITS-2021-04.

 Delay reduction from highway expansion is valued at \$16.50 per hour per the 2016 U.S. DOT benefit-cost analysis guidance and is calculated after induced demand effects.

Total VMT and Vehicle Operating Cost Savings

Table A.11 shows baseline forecast VMT emissions for light-duty vehicles and the total projected VMT reductions for the illustrative implementation of the proposed rule and the two alternatives considered.

Table A.11
VMT by Year, Light-Duty Vehicles

	Vehicle-Miles of Travel (millions)		
Scenario	2030	2040	2050
Baseline VMT Estimate	63,551	71,069	78,587
Change from Baseline			
Proposed Rule Implementation: Travel Choices + Transit + Land Use	(6,943)	(8,378)	(9,814)
Alternative 1: Travel Choices	(5,876)	(6,197)	(6,146)
Alternative 2: Travel Choices + Transit	(6,633)	(7,593)	(8,138)

Vehicle operating costs are based on gasoline and electricity consumption rates (miles per gallon equivalent) for conventional and electric vehicles from NREL (2017)¹⁸ and fuel and electricity costs from the U.S. Department of Energy Outlook Annual Energy Outlook (AEO) 2021 Reference Case. For conventional and electric vehicles, a "weighted average" fuel efficiency is estimated based on the split of light duty vehicles and light duty trucks. Vehicle maintenance costs are also sourced from NREL (2017) and weighted by the LDV/LDT split. Table A.12 displays fuel prices, energy efficiency, and fuel and maintenance cost per mile for both conventional and electric vehicles from 2020 through 2050.

Table A.12
Light-Duty Vehicle Operating and Maintenance Costs (2021 \$)

Operating Cost Inputs	2020	2025	2030	2040	2050
Gasoline Price (\$/gge)	2.22	2.37	2.58	2.91	3.06
Electricity Price (\$/gge)	3.91	3.80	3.69	3.60	3.31
Conventional Energy Efficiency (mpgge)	32.9	33.7	33.4	33.6	34.1
EV Energy Efficiency (mpgge)	104.7	109.7	111.6	116.9	125.2
Conventional Vehicle Cost – Fuel (\$/mi)	0.067	0.070	0.077	0.087	0.090
EV Cost – Fuel (\$/mi)	0.037	0.035	0.033	0.031	0.026
Conventional Vehicle Cost – Maintenance (\$/mi)	0.036	0.038	0.040	0.041	0.041
EV Cost – Maintenance (\$/mi)	0.029	0.030	0.032	0.033	0.033

To calculate total per-vehicle operation and maintenance costs, an annual VMT of 10,450 per vehicle is assumed. This is based on the number of vehicles forecast in 2030 (vehicles growing from current levels in

¹⁸ Wood, E., et al. (2017). National Plug-In Electric Vehicle Infrastructure Analysis. National Renewable Energy Laboratory.

proportion to population) multiplied by miles per vehicle to match the VMT estimates provided by the statewide model.

The total electrified light duty fleet each year is estimated based on state targets, including around 940,000 vehicles in 2030 and 100 percent EV sales by 2040. Using projections from the AEO 2021 Reference Case on vehicle stock growth through 2050, as well as a vehicle turnover model, the EV vehicle stock for 2025, 2030, 2040, and 2050 is estimated alongside vehicle sales, as shown in Table A.13.

Table A.13
Light-Duty Vehicle Electrification Projections

Vehicle Category	2020	2025	2030	2040	2050
All Light-Duty Vehicle Stock	5,090,968	5,585,48 4	6,080,00 0	6,546,667	7,590,000
EV Stock	39,908	221,357	943,318	3,739,278	6,290,115
EV Sales %	5%	17%	50%	100%	100%
EV Sales	17,818	66,858	21,800	458,267	531,300
EV% of Stock	1%	4%	16%	57%	83%

GHG Emission Reductions and Social Cost of Carbon Savings

Table A.14 shows projected total GHG emissions from on-road sources for the rule and alternatives, while Table A.15 shows the expected GHG reductions in 2025, 2030, 2040, and 2050 respectively, for the rule and alternatives. As noted above, the results assume a high level of electrification of the future vehicle fleet. As a result, the absolute GHG reductions from VMT measures are substantially lower in 2050 than in 2030, even though the cumulative effects of the measures on VMT will increase over time and be greatest in 2050.

Table A.14
GHG Emissions by Year and Alternative, All On-Road Vehicles

	GHG Emissions (million metric tons)				
Scenario	2030	2040	2050		
Proposed Rule Implementation: Travel Choices + Transit + Land Use	18.1	12.5	7.9		
Alternative 1: Travel Choices	18.4	12.8	8.1		
Alternative 2: Travel Choices + Transit	18.2	12.6	8.0		

Table A.15
GHG Emissions Change from Baseline Forecast by Year

	GHG Emissions Change in Year (million metric tons)			
Scenario	2030	2040	2050	
Proposed Rule Implementation: Travel Choices + Transit + Land Use	(1.70)	(1.20)	(0.70)	
Alternative 1: Travel Choices	(1.43)	(0.88)	(0.44)	
Alternative 2: Travel Choices + Transit	(1.62)	(1.09)	(0.59)	

To estimate the social cost of carbon savings, greenhouse gas emissions in years between 2030 and 2050 were interpolated, and annual emissions savings before 2030 were ramped up from zero in 2022 to the 2030 level. The social cost of carbon value in each year was then applied to the greenhouse gas emissions in that year. The values used for the social cost of carbon based on the Biden administration guidance are shown in Table A.16 (The White House, 2021).

Table A.16 Social Cost of CO₂, 2020-2050 (in 2020 dollars per metric ton of CO₂)

Emissions Year	2.5% Discount Rate
2020	76
2025	83
2030	89
2035	96
2040	103
2045	110
2050	116

Other Social Benefits

Other social benefits were valued based on the following data sources and key assumptions.

Air Pollution

These costs are associated with human health impacts – including mortality and morbidity – as well as crop and forest damage, ecosystem damage (e.g., from acid deposition, ozone damage, and particulate matter deposition), damage to buildings and materials, and reduced visibility. The costs of air pollution are primarily driven by human health.

Changes in emissions of particulate matter (PM) and oxides of nitrogen (NOx) were estimated based on tailpipe emission rates (grams per mile) in each future year, multiplied by changes in light-duty vehicle VMT. Emission rates for internal combustion engine vehicles were sourced from runs of the U.S. EPA MOVES2014 model conducted by Cambridge Systematics in June 2021 for years 2032 and 2040. Emission rates for years prior to 2032 were interpolated with 2017 rates from analysis for the Carbon Free Boston study (2019) conducted by Cambridge Systematics. Emission rates for 2033-2039 were interpolated between 2022 and 2040 rates, and the 2040 rate was used for years after 2040. Tailpipe emissions from electric vehicles were assumed to be zero.

Damage values (\$/kg) are based on the U.S. EPA regulatory impact analysis for light-duty vehicle fuel economy and GHG standards (U.S. EPA, 2010), as reviewed by CS in 2012 for use in the Federal Transit Administration (FTA) New Starts Environmental Benefits Template. Table A.15 shows the damage values used. The damage values are the same as used by FTA in its most current (FY 2021) version of the New Starts and Small Starts reporting templates, with the exception that 2010 dollars have been converted to 2016 dollars using a consumer price index multiplier of 1.1. The EPA values are based on nationwide modeling using county-scale data on emissions, air pollution, and population exposure. The EPA and FTA sources list different damage values for mobile vs. electricity generation sources; the mobile source values are used here. The values used are an average of those provided by FTA for years 2025 and 2035.

Table A.17
Pollutant Damage Values (\$/kg)

Pollutant	Damage Value (\$/kg)
PM _{2.5}	\$976
NO_x	\$17.69

<u>Safety</u>

Safety costs represent costs associated with crashes resulting in fatalities or injuries. To estimate safety benefits, fatality and injury motor vehicle crashes are assumed to be reduced in proportion to VMT reduced. Average rates of 0.013 fatalities and 0.195 injuries per million vehicle-miles are used, based on Fatality Analysis Reporting System (FARS) fatality data from 2000-2009 and injury rates reported by the Bureau of Transportation Statistics (BTS) in National Transportation Statistics (Table 2-17: "Motor Vehicle Safety Data"). These rates were recommended by Cambridge Systematics for the FTA in 2012 and are still being applied by FTA for use in New Starts and Small Starts project evaluation.¹⁹

Crash reduction benefits are valued at \$9.6 million per fatality based on the latest (2016) U.S. DOT guidance on value of a statistical life. Disabling injuries are valued at \$490,000 based on the value provided in FTA's latest (FY 2021) New Starts and Small Starts reporting templates. The injury value has been inflated by FTA since the original 2012 work (when it was \$323,000) and is applied to the fatality and injury rates stated in the previous paragraph.

Traffic Delay

¹⁹ See: Federal Transit Administration, New Starts Environmental Benefits Template, available at http://www.fta.dot.gov/12304.html.

Hours of traffic delay reduced per VMT reduced are derived from data in the Texas A&M Transportation Institute (TTI) 2012 Urban Mobility Report (UMR). This report estimated potential nationwide reductions in VMT due to shifting to transit, and associated savings in travel delay. These values were used to estimate an average delay savings of 0.015 hours per mile of vehicle-travel reduced, representing a weighted average across metro area sizes. Delay savings were valued at \$16.50 per hour based on U.S. DOT 2021 Benefit-Cost Analysis Guidance.

Physical Inactivity

A lack of physical activity is associated with increased mortality and other negative health outcomes. investments in walking and bicycling infrastructure and transit services increase physical activity, reducing those associated costs. Physical inactivity is valued based on health care cost savings of \$0.21 per mile of walking and bicycling activity based on Gotschi (2011). Gotschi analyzed three investment plans in Portland, Oregon. Bicycle health benefits are estimated using a per-capita health care costs of \$544 annually attributable to inactivity (i.e., less than 30 minutes of activity per day), which he derives from three literature sources, with values adjusted for inflation. New bicyclists are assumed to realize these benefits by increasing physical activity from 15 to 45 minutes daily. Gotschi also cites the World Health Organization's Health Economic Assessment Tool (HEAT) for cycling, which uses a relative risk estimate for all cause mortality of 0.72 for 3 hours of bicycling to work per week, from a large Danish cohort study. Gotschi's resulting estimates of cumulative bike miles and cumulative health care savings between 1991 and 2040 equate to about \$0.18 in benefit per additional bike mile of travel, which was inflated to \$0.21 per mile for this study.²⁰

An alternative estimate of physical activity benefits was conducted using estimates of deaths prevented and the value of a statistical life based on U.S. Department of Transportation guidance. Output from the HEAT developed for a study done by Cambridge Systematics in Massachusetts was used to estimate the benefits of increased bicycling and walking, along with additional analysis by Cambridge Systematics for use of this information in the Transportation and Climate Initiative Investment Strategy Tool.²¹ HEAT provides estimates of benefits in terms of reduced mortality based on the daily increase in walk or bicycle person-kilometers traveled or walk or bicycle person-hours traveled.²² The walk and bike PMT increases and deaths prevented were used to estimate an overall rate of 1.7 deaths prevented per million new walking PMT, and 0.5 deaths prevented per million new bicycling PMT. These factors were applied to the estimated increases in walking and bicycling due to active transportation and public transportation investments. (Due to data limitations the current analysis only includes new bicycle travel, as shown in Table A.7). Deaths prevented by physical activity were valued at the same \$9.6 million value of a statistical life used in the safety analysis.

²⁰ Gotschi, T. (2011). "Costs and Benefits of Bicycling Investments in Portland, Oregon." Journal of Physical Activity and Health, 2011, 8(Suppl 1).

²¹ Cambridge Systematics, Inc. (2020), *ibid*.

²² The HEAT tool and documentation are available at: https://www.who.int/gho/health_equity/assessment_toolkit/en/



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

Cost-Benefit Analysis Submitted - REVISED NOTICE: Pollution Reduction Planning Standards. -

1 message

DORA_OPR_Website@state.co.us < DORA OPR Website@state.co.us >

Tue, Sep 7, 2021 at 12:02 PM

To: natalie.lutz@state.co.us

The Cost-Benefit Analysis has been uploaded for the following proposed rule(s):

Department: Department of Transportation

Rulemaking Agency: Transportation Commission of Colorado

Rule ID: 8981

Title or Subject: Rules Governing Statewide Transportation Planning Process and Transportation Planning

A final e-mail notification will be sent after the Cost-Benefit Analsysis has been reviewed.

Please contact us at DORA OPR Website@state.co.us if you have further questions regarding this e-mail message.



Review of State Agency Rules -> Restricted Area

ᇘ Home

My Proposed Rules

Submit New Rule

Reports

My Account

i Help

Draft Proposed Rule

Detailed Rule Information

Department/Agency

Department: Department of Transportation

Rulemaking Agency: Transportation Commission of Colorado

Proposed Rule Changes

Rule Type: New, Amended and Repealed Rules

Title or Subject: Rules Governing Statewide Transportation Planning Process and

Transportation Planning Regions

REVISED NOTICE: Pollution Reduction Planning Standards. **Short Description:**

CCR Number: 2 CCR 601-22

Statutory Authority: §§ 43-1-106(8)(k) and 43-1-1103(5), C.R.S.

Website for Current Agency Rules: https://www.codot.gov/business/rules/proposed-rules.html The Transportation Commission of Colorado (Commission) is

Subject Matter/Purpose:

considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2) (g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S. Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms. Please see the attachment for the proposed

rule revisions, the notice of proposed rulemaking, the proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for Transportation Planning Proposed Standards". 08/25/2021

Colorado Register Publish Date:

Text of Proposed Changes: Revised Rule Docs.pdf (698K, Adobe Acrobat)

Submitted for Review: 08/13/2021

Rulemaking Hearing

Hearing Date: Friday, September 17, 2021 02:00 pm

Hearing Covers: Multiple Rules

Hearing Location: CDOT Regional Office, Bookcliff Conference Room

2328 G Road

Grand Junction, CO 81505

The Transportation Commission of Colorado plans to hold eight (8) **Hearing Notes:** hearings across the State as listed in the table within the attachment to

https://www.dora.state.co.us/pls/real/SB121 Submit Rule.Main Form Page?p session id=1792810714&p rule id=8981&p process=UPDATE

hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attachment or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish. Please submit all written comments to dot_rules@state.co.us on or before 5:00 p.m. on October 15, 2021. Please see the attachment for the notice of proposed rulemaking, the proposed statement of basis & purpose, and a fact sheet titled "Greenhouse Gas Pollution Reduction for Transportation Planning Proposed Standards".

Contact Information

Public Contact Name: Natalie Lutz

Title: Rules, Policies and Procedures Administrator

Email: Natalie.Lutz@state.co.us

Private Contact Name: 303-757-9441
Natalie E Lutz

Title: Rules, Policies, and Procedures Administrator

Email: natalie.lutz@state.co.us

Phone: 303-757-9441

Subject Information

Related Subject Area(s): Environment

Government Health

Motor Vehicles & Traffic Regulation

Transportation

Review

Review Date: 08/31/2021

Review Outcome: Cost-Benefit Analysis Required

Review Findings: Cost-benefit analysis required as requested.

Deadline for Public Cost-Benefit

Analysis Request: Monday, August 30th, 2021

The deadline for public cost-benefit analysis requests has passed.

Cost-Benefit Analysis

Submit CBA Form

Text of Cost-Benefit: CDOT Cost Benefit Analysis for GHG Rule,pdf (332K, Adobe Acrobat)

Cost-Benefit Submitted: 09/07/2021

Review of Cost-Benefit Analysis Pending

Rule Status

Current Status: Cost-Benefit Analysis Submitted

Submitted: 08/13/2021 08:47 pm by: Natalie E Lutz
DORA Regulatory Notice Sent: 09/01/2021 04:50 pm count: 1236

Public CBA Request: Closed to public requests

Public CBA Requests: 3

Reviewed: 08/31/2021 09:48 am by: Vivienne Belmont CBA Submitted: 09/07/2021 12:02 pm by: Natalie E Lutz

CBA Review: pending

Colorado Department of Regulatory Agencies

September 07, 2021 12:02 pm Calling Procedure: SB121_Submit_Rule. Main_Form_Page Version: 1.0



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

Cost-Benefit Analysis Reviewed - REVISED NOTICE: Pollution Reduction Planning Standards. -

1 message

DORA_OPR_Website@state.co.us < DORA OPR Website@state.co.us >

Tue, Sep 7, 2021 at 1:41 PM

To: natalie.lutz@state.co.us

The Cost-Benefit Analysis has been reviewed for the following proposed rule(s):

Department: Department of Transportation

Rulemaking Agency: Transportation Commission of Colorado

8981 Rule ID:

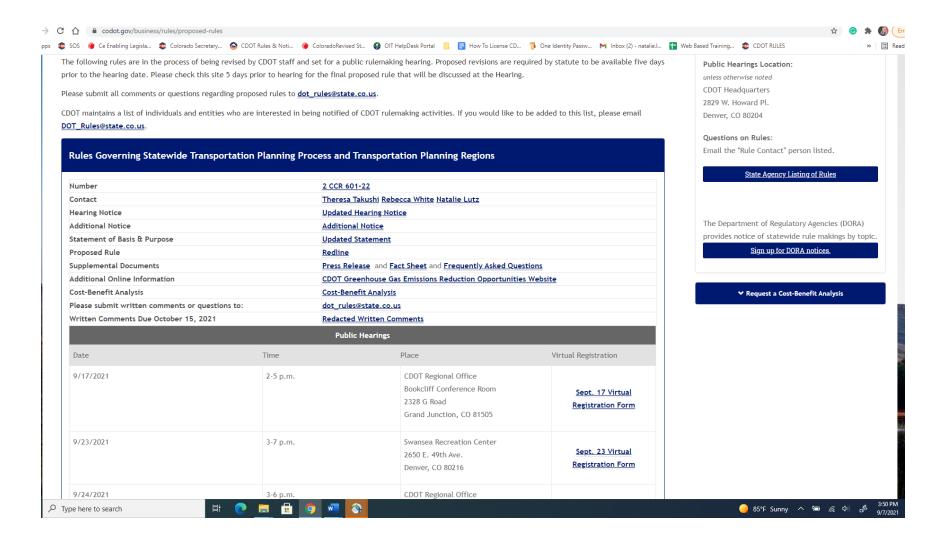
Rules Governing Statewide Transportation Planning Process and Transportation Planning Title or Subject:

The review findings for the cost-benefit analysis are as follows:

Cost-benefit analysis required as requested.

The cost-benefit analysis and specifics regarding the upcoming rulemaking hearing may be viewed at https://www.dora.state.co.us/pls/real/SB121_Web.Show_Rule?p_rule_id=8981.

Please contact us at DORA OPR Website@state.co.us if you have further questions regarding this e-mail message.





Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

Cost-Benefit Analysis of Department of Transportation - Transportation Commission of Colorado Proposed Rule -

1 message

DORA_OPR_Website@state.co.us < DORA OPR Website@state.co.us > To: natalie.lutz@state.co.us

Wed, Sep 8, 2021 at 12:00 AM

Dear Stakeholder:

The Department of Transportation - Transportation Commission of Colorado has completed a cost-benefit analysis of the REVISED NOTICE: Pollution Reduction Planning Standards. rule. The rulemaking hearing is scheduled for Friday, September 17th, 2021.

We hope this information is helpful to you. Thank you for taking the time to participate in the rulemaking process.

Brian Tobias, Director Colorado Office of Policy, Research and Regulatory Reform

You have received this e-mail bulletin because you previously signed up for this service provided by the Department of Regulatory Agencies. If you do not want to receive further e-mails regarding the review of proposed rules, please visit https://www.dora.state.co.us/pls/real/SB121 Web.SignIn Form and update your personal profile.





August 26, 2021

Via Electronic Mail

Colorado Department of Transportation Attn: Shoshana M. Lew, Executive Director 2829 W. Howard Pl. Denver, CO 80204 shoshana.lew@state.co.us

Department of Regulatory Agencies
Attn: Patty Salazar, Executive Director
1560 Broadway, Suite 1550
Denver, CO 80202
dora OPR Website@state.co.us

Re: Request for Cost-Benefit Analysis and Regulatory Analysis Under the Colorado Administrative Procedure Act in the Matter of Proposed Revisions to Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions, 2 CCR 601-22

Executive Director Lew and Executive Director Salazar:

The Board of County Commissioners of Weld County, Colorado ("Weld County") submits this request to the Colorado Department of Regulatory Agencies ("DORA") for a cost-benefit analysis under C.R.S. § 24-4-103(2.5) and a regulatory analysis under C.R.S. § 24-4-103(4.5) regarding the Colorado Department of Transportation's ("CDOT") proposed revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22 (the "Proposed Rule").1

•

¹ It is not clear whether CDOT or the Transportation Commission is the proponent of this proposed rule. See, e.g., Project Fact Sheet Regarding Greenhouse Gas Pollution Reduction for Transportation Planning Proposed Standards, Colo. Dep't of Transp. (stating "CDOT is

I. BACKGROUND

On August 13, 2021, CDOT filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the Proposed Rule. Among other things, the Proposed Rule aims to reduce greenhouse gas ("GHG") emissions from the transportation sector. If finalized, the rule would require CDOT and the state's five Metropolitan Planning Organizations ("MPOs") to determine the total GHG emissions expected from future transportation projects and take steps to ensure that emissions do not exceed set GHG reduction amounts.

The transportation sector is one of the largest contributors to GHG and ozone precursor emissions, and Weld County generally supports efforts to reduce air pollution, including GHG emissions, from this sector. The Proposed Rule will impact individuals living in Weld County, as well as transportation projects planned throughout the county. As an interested stakeholder, Weld County must be able to assess the impacts of the Proposed Rule. However, CDOT has not yet provided any documentation or analysis to explain the rule or how it calculated the baseline emissions or reduction levels. Accordingly, Weld County submits this request for a cost-benefit analysis and regulatory analysis to provide this missing information.

II. LEGAL STANDARD

Under two separate provisions of the APA, "any person" may request additional economic and regulatory impact analyses. C.R.S. §§ 24-4-103(2.5), (4.5). Given the lack of analysis or supporting documentation accompanying the Proposed Rule, Weld County requests both a cost-benefit analysis and regulatory analysis to ensure the Transportation Commission fully considers the economic and regulatory impacts of the Proposed Rule.

A. DORA-Ordered Cost-Benefit Analysis Under C.R.S. § 24-4-103(2.5)

Under C.R.S. § 24-4-103(2.5)(a) "any person may, within five days after publication of the notice of proposed rule-making in the Colorado Register, request that [DORA] require the agency submitting the proposed rule or amendment to prepare a cost-benefit analysis." Such cost-benefit analysis shall include the following:

1. The reason for the rule or amendment;

proposing a new standard to reduce greenhouse gas emissions from the transportation sector . . . ") (emphasis added); *Press Release Regarding Colorado Developing New Pollution Reduction Planning Standards to Address Climate Change and Air Quality*, Colo. Dep't of Transp. (stating the "*Colorado Transportation Commission* today proposed bold new transportation pollution reduction planning standards") (emphasis added). This request for a cost-benefit analysis and regulatory analysis is directed to CDOT. If this is incorrect, Weld County asks that this request be redirected to the Transportation Commission.

- 2. The anticipated economic benefits of the rule or amendment, which shall include economic growth, the creation of new jobs, and increased economic competitiveness;
- 3. The anticipated costs of the rule or amendment, which shall include the direct costs to the government to administer the rule or amendment and the direct and indirect costs to business and other entities required to comply with the rule or amendment;
- 4. Any adverse effects on the economy, consumers, private markets, small businesses, job creation, and economic competitiveness; and
- 5. At least two alternatives to the proposed rule or amendment that can be identified by the submitting agency or a member of the public, including the costs and benefits of pursuing each of the alternatives identified.

C.R.S. $\S 24-4-103(2.5)(a)(I) - (V)$.

CDOT has not yet provided an economic analysis of the Proposed Rule or otherwise addressed these considerations. To assess the factors set forth above, Weld County requests a complete cost-benefit analysis under C.R.S. § 24-4-103(2.5).

B. Regulatory Impact Analysis Under § 24-4-103(4.5)

Under C.R.S. § 24-4-103(4.5) "upon [the] request of any person, at least fifteen days prior to the hearing, the [Division] shall issue a regulatory analysis of a proposed rule." Such regulatory analysis must contain:

- 1. A description of the classes of persons who will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule;
- 2. To the extent practicable, a description of the probable quantitative and qualitative impact of the proposed rule, economic or otherwise, upon affected classes of persons;
- 3. The probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues;
- 4. A comparison of the probable costs and benefits of the proposed rule to the probable costs and benefits of inaction;
- 5. A determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule; and

August 26, 2021 Page 4

6. A description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule.

24-4-103(4.5)(a)(I) - (VI).

To assess the factors set forth above, Weld County requests a complete regulatory analysis under C.R.S. § 24-4-103(4.5).

III. WELD COUNTY REQUESTS BOTH A COST-BENEFIT ANALYSIS AND A REGULATORY IMPACT ANALYSIS UNDER THE STATE APA

Weld County requests that DORA require CDOT to perform both a cost-benefit analysis pursuant to C.R.S. § 24-4-103(2.5) and a regulatory impact analysis under C.R.S. § 24-4-103(4.5) with respect to the Proposed Rule.

As an initial matter, Weld County submits this request in advance of publication of the Proposed Rule in the Colorado Register and well before the first hearing scheduled on September 14, 2021. See C.R.S. §§ 24-4-103(2.5), (4.5). Moreover, the DORA website states that requests for a cost benefit analysis for the Proposed Rule are due on August 30, 2021. Rules Governing Statewide Transportation Planning Process and Transportation Planning Region, https://www.dora.state.co.us/pls/real/SB121 Public Comment GUI.submission form?p rule id =8981. Because this request is being submitted on August 26, 2021, it is timely.

Importantly, CDOT has not provided any type of analysis or the underlying documentation supporting its Proposed Rule. For instance, Table 1 and Table 2 listed on page 25 of the Proposed Rule set forth the GHG transportation planning reduction levels and baseline emissions, respectively. CDOT has not provided critical information regarding these tables, such as what methodology was used to reach these figures and what inputs and assumptions were used in the modeling. Accordingly, there is no way to evaluate the reasonableness of these figures or the efficacy of the Proposed Rule.

To allow interested stakeholders and the Transportation Commission to adequately evaluate the Proposed Rule, Weld County requests that CDOT provide supporting documentation—such as a technical support document, if available—describing the methods used to conduct the analysis for the GHG estimates in Table 1 and Table 2 of the Proposed Rule. Specifically, Weld County requests the following information be provided to all stakeholders and the Transportation Commission:

 Model inputs and outputs for all models used in the analysis, i.e., Land Use Model(s), EERPAT, MPO Models and Statewide Travel Model, and the Approved Air Quality Model, as applicable;

- Assumptions used in all models;
- Population growth data and assumptions;
- Data, assumptions, or modeling related to electric sector grid mix in future target years;
- Description of different scenarios considered in the modeling, if any, and which scenario
 was selected to determine GHG estimates shown in Table 1 and Table 2 of the Proposed
 Rule; and
- Description of any qualitative or off-model adjustments used to determine the GHG estimates in Table 1 and Table 2 of the Proposed Rule.

Weld County has separately requested from CDOT data regarding the Proposed Rule. To ensure that this information is provided to all interested stakeholders, and to enable the Transportation Commission to make an informed decision, Weld County requests that DORA require CDOT to produce this information in connection with its cost-benefit analysis and its regulatory impact analysis. This is what the Colorado APA requires. *See* C.R.S. §§ 24-4-103(2.5), (4.5).

IV. CONCLUSION

For the above-stated reasons, Weld County respectfully requests that DORA require CDOT to conduct a cost-benefit analysis under C.R.S. § 25-7-103(2.5) and a separate regulatory impact analysis under C.R.S. § 25-7-103(4.5). This information will enable the Transportation Commission to make a better-informed decision on the proposed revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.





Department of Transportation

REGULATORY ANALYSIS FOR RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING

September 9, 2021

OVERVIEW

The proposed "Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions" will set a greenhouse gas standard for state and regional transportation plans. The purpose of the Proposal is to ensure ongoing greenhouse gas emissions reductions from Colorado's transportation sector, which helps achieve the reduction goals set by HB19-1261. This rule also responds to a requirement in SB21-260, directing CDOT and the Transportation Commission to address GHGs through transportation planning.

C.R.S. 24-4-103 (4.5)(a) and (c) states that, "upon request of any person" the agency shall issue a regulatory analysis of the proposed rule, and the analysis "shall be made available to the public at least 5 days prior to the rulemaking hearing." It requires the regulatory contain the following information:

- 1. A description of the classes of persons who will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule;
- 2. To the extent practicable, a description of the probable quantitative and qualitative impact of the proposed rule, economic or otherwise, upon affected classes of persons;
- 3. The probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues;
- 4. A comparison of the probable costs and benefits of the proposed rule to the probable costs and benefits of inaction;
- 5. A determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule; and
- 6. A description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule.
- (b) Each regulatory analysis shall include quantification of the data to the extent practicable and shall take account of both short-term and long-term consequences.

Much of the information required in the Regulatory Analysis of this rule is contained in the more comprehensive Cost Benefit Analysis that CDOT has completed for this rule. The <u>"Cost-Benefit Analysis for Rules Governing Statewide Transportation Planning"</u> (CBA) may be found through the hyperlink provided.

1. A description of the classes of persons who will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule;

The proposed rule is a transportation planning rule, and the implementers of the rule include the Colorado Department of Transportation (CDOT) and the five Metropolitan Planning Organizations (MPOs) in Colorado. This rule will positively impact the way transportation projects are planned for and selected in the state.

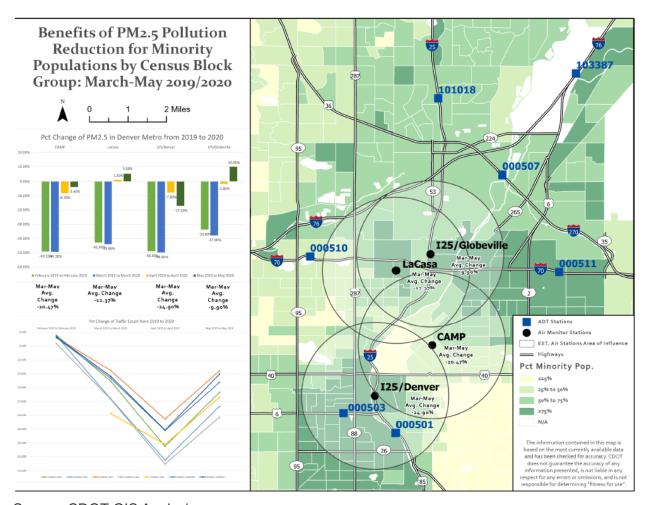
But more broadly, this is a statewide rule that will have an impact on transportation for virtually every class of individual in Colorado in some way, and the environmental benefits of the rule have a further benefit to persons living in Colorado. Because the rule is expected to shift some amount of funds to multimodal options, the rule has a particular benefit to individuals that must rely on a well constructed and maintained transit system. This includes disproportionately impacted communities.

Further, by reducing Greenhouse Gas (GHG) emissions and abating climate change, the rule will have an even greater positive impact on Disproportionately Impacted (DI) communities as those communities generally face a greater impact from climate change. This is well documented in studies and reports, including the following:

- "Populations including older adults, children, low-income communities, and some communities of color are often disproportionately affected by, and less resilient to, the health impacts of climate change." Source: <u>The Fourth National Climate Assessment</u>.
- "Minorities are most likely to currently live in areas where the analyses project the highest levels of climate change impacts with 2°C of global warming or 50 cm of global sea level rise." "Those with low income or no high school diploma are approximately 25% more likely than non-low income individuals and those with a high school diploma to currently live in areas with the highest projected losses of labor hours due to increases in high-temperature days with 2°C of global warming." Source: EPA's Climate Change and Social Vulnerability in the United States.

Work in Colorado also has demonstrated the local, disproportionate impacts on communities due to climate change. The Colorado Department of Public Health and Environment has developed a <u>climate equity data viewer</u> that uses population and environmental factors to calculate a climate equity score for every census block group in Colorado. A higher value indicates a worse score.

Another way to consider this question is to consider the co-benefits of this rule to air quality. Efforts that reduce GHGs from transportation also directly reduce other emissions, including particulate matter and ozone precursors. The map below shows the proximity of minority neighborhoods in the Denver metro area to interstate highways. This graphic also shows the reductions in fine particulate matter as measured by air quality monitors during the height of the Covid outbreak (a period of less vehicle travel) as compared to a pre-Covid time period.



Source: CDOT GIS Analysis

Additionally, this rule will provide additional benefits to multiple groups of transit-dependent individuals. According to the 2010 Census, 41.8 million Americans over age 18 were persons with disabilities, 40 million were over the age of 65, and 32 million were living below the poverty level (poverty level for people above age 18). Currently, DI communities are more likely to have limited access to high quality and efficient transportation either through transit or in a personal vehicle. Many of the individuals cited in the above census data are also totally dependent on transit due to physical abilities or age. The study "Transit Deserts: The Gap Between Supply and Demand," reflected that these populations are often marginalized and are especially vulnerable if their access to jobs, goods, and services is restricted. High quality and easily

accessible modes of transportation- frequently transit- are especially important to protect and elevate these populations.

A <u>2015 study</u> from Harvard found that Individuals who do not have reliable access to any type of transportation mode struggle to reach jobs and services and as a result their opportunity for upward economic mobility is limited. DI individuals who lack reliable transportation are more likely to be unemployed or underemployed with more chronic health issues. The Colorado Health Institute <u>examined</u> transportation disparities and its negative impact on individuals trying to access preventative as well as acute care. 5.5% of Coloradoans reported difficulty getting to doctor's appointments because they were not able to find transportation. According to the <u>American Hospital Association (AHA)</u>, transportation challenges prevent more than 3.6 million Americans from receiving medical care each year. Increasing access to more modes of travel will improve community equity and health through cleaner air, higher wages, and better access to healthcare services.

2. To the extent practicable, a description of the probable quantitative and qualitative impact of the proposed rule, economic or otherwise, upon affected classes of persons;

There are a number of expected impacts of the rule, both quantitative and qualitative. Many of these impacts are benefits that accrue to businesses and individuals alike (e.g. a reduction in crashes leads to less lost work time). Listed below, and detailed further in answer #4, is a description of some of those impacts. Additional detail on the assumptions underlying these estimates of economic impacts is provided in Appendix A of the Cost Benefit Analysis.

Table 1 shows the projected change in social costs through 2025, 2030, 2040, and 2050 respectively, for full implementation of the proposed rule using the illustrative mix of strategies. The net benefits reflect the effects of reduced highway investment as well as increased investment in GHG-reducing projects. Negative values (shown in parentheses) represent a net cost savings. Future savings are discounted at a rate of 2.5 percent, consistent with Colorado Senate Bill (SB) 21-260 which requires use of the social cost of carbon dioxide (CO₂) and other pollutants using a discount rate of 2.5 percent or less. The most substantial benefits are from reduced crashes and reduced vehicle operating costs, resulting from reduced VMT. The net present value of total social benefits is roughly \$8 billion in the 2026-2030 timeframe and \$17 billion between 2031 and 2040.

Table 1 Economic Benefits (Cost Savings) (Net Neutral Investment Levels after Mode Shift) (net present value, millions of 2021 dollars)

Timeframe	Vehicle Operating Cost	Social Cost of Carbon	Air Pollution	Safety (Crashes)	Traffic Delay	Physical Inactivity	Total Social Cost Savings
2022 - 2025	\$(372)	\$(60)	\$(21)	\$(481)	\$(774)	\$(17)	\$(1,724)
2026 - 2030	\$(1,781)	\$(258)	\$(82)	\$(2,332)	\$(3,098)	\$(75)	\$(7,626)
2031 - 2040	\$(4,670)	\$(589)	\$(125)	\$(7,183)	\$(4,693)	\$(237)	\$(17,497)
2041 - 2050	\$(4,210)	\$(323)	\$(42)	\$(9,027)	\$397	\$(289)	\$(13,494)

A brief description of each of these economic benefits and how they were quantified is provided below. With the exception of physical inactivity, which is related to increased bicycling and walking, all of these economic benefits are derived from reductions in VMT and/or traffic delay.

- Vehicle operating cost Fuel and maintenance costs per mile driven. Costs per mile change over time consistent with projected changes in fuel prices and the mix of the vehicle fleet including conventional fuels (e.g. gasoline and diesel) versus zero emission vehicles (e.g. electric and hydrogen). Vehicle cost savings provide travelers with more out-of-pocket money that they can spend on other goods and services of higher value to them. Businesses also save money for work travel and goods movement expenses. These savings benefit the state's economy.
- Social cost of carbon Global climate change is expected to result in a variety of negative economic effects to the world and national economy, including Colorado. Examples include costs of flood prevention and mitigation, health care costs associated with excessive heat, and fire prevention, control, and damages. Carbon emissions are valued based on guidance issued by the Biden Administration at a discount rate of 2.5 percent, consistent with Colorado Senate Bill (SB) 21-260. The social cost increases over time, from \$83 per metric ton of CO₂ emissions for emissions occurring in 2025 to \$116 per metric ton of CO₂ for emissions occurring in 2050.
- Air pollution Costs associated with air pollution include higher health care costs, as well as damage to structures and natural systems. Values per ton of particulate matter

- (PM) and oxides of nitrogen (NOx) reduced are based on modeling conducted in support of Federal rulemakings on vehicle tailpipe emission standards.
- Safety (crashes) Costs associated with crashes resulting in fatalities or injuries include higher medical costs, insurance costs, vehicle property damage, and lost workplace productivity. These costs impact Colorado's economy. Motor vehicle crash reductions are estimated based on national average fatality and injury crash rates per VMT, and are valued based on federal guidance on the value of a statistical life and average value of injury crashes.
- Traffic delay -- Traffic delay results in increased travel time for "on-the-clock" business travel and freight movement, as well as more time spent traveling for commuting, errands, and other personal travel. These time losses negatively impact Colorado's economy. To estimate delay reduction associated with emissions-reducing transportation investments, hours of traffic delay reduced (per VMT reduced) are derived from Texas Transportation Institute studies of national traffic congestion and mitigation measures including transit expansion. For highway capacity expansion projects, which reduce delay, hours of delay reduced are based on modeled relationships between volume, capacity, and travel time. Capacity expansion projects consider the effects of "induced demand", or increased traffic that is observed to result over time after roads are expanded. This increased traffic may lead to net increases in greenhouse gas emissions as a result of the project, and may offset to some degree the delay reduction benefits.
- Physical inactivity -- A lack of physical activity is associated with increased mortality and
 other negative health outcomes, increasing health care costs. Investments in walking
 and bicycling infrastructure and transit services increase physical activity, reducing those
 associated costs. Physical inactivity in this analysis is valued based on health care cost
 savings per mile of walking and bicycling activity.

Additionally, there are several categories of benefits from mitigation measures that are real, and may be quite large, but are difficult to quantify and therefore are not reflected in the Cost Benefit Analysis. These include:

e Reduced vehicle ownership costs - to the extent that areas comply with the GHG requirements by making land use decisions that reduce the need to travel long distances, make areas more walkable and bikeable, and add transit service, it is likely that this will enable more households to reduce their vehicle ownership, for example going from from a 2 car to a 1 car family. This is particularly true for land use changes, where there is a strong correlation between average number of vehicles per household and land use types. While the analysis above captures reduced vehicle operating costs, it does not capture the reduced costs from lower levels of vehicle ownership, including depreciation of vehicle value due to reduced use per vehicle owned, lower cost due to owning fewer vehicles, etc.. Nationwide, researchers have found that households within 1/2 mile of transit stations own on average 0.9 cars, while households in the rest of the metropolitan regions owned, on average, 1.6 vehicles. According to AAA, the annual fixed cost to own a vehicle - including depreciation, insurance, license and registration

fees, and finance charges - was on average \$6,200 in 2019, though these costs can range based on the cost and type of the vehicle, and household size.

- Downtown/main street economic revitalization policies that support dense, walkable
 downtowns and main streets tend to spark significant economic vitality in those areas,
 providing customers for restaurants and small businesses. Investments in transit also
 spur economic benefits such as increased property values and agglomeration benefits
 from more efficient land use. These benefits are real, but difficult to quantify and are not
 included in this analysis.
- Increased access to jobs Because Colorado already has a very complete roadway network, households that have access to cars have the ability to access employment by driving. By contrast, for residents who do not own cars or have disabilities that preclude driving, many jobs are essentially inaccessible. A more robust transit network will increase access to jobs for these residents, and will provide a larger pool of potential employees for businesses. As an example, within the DRCOG region 6% of households do not have cars and 9% of residents have mobility disabilities. While it is not quantified in this analysis, greater access to employment for these individuals could bring significant economic and equity benefits.

3. The probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues.

In terms of regulatory implementation, one reason why the Transportation Commission, rather than the Air Quality Control Commission, is pursuing this rule is in order to optimize overhead and streamline implementation resources within the organizations that already house transportation planning functions and expertise.

However, there will be some administrative costs associated with implementing this policy change, especially within the initial years of implementation. Within the state, the Colorado Department of Transportation (CDOT) is largely relying on existing staff positions to support the Transportation Commission's rulemaking, however, CDOT expects to hire three new positions to focus on functions related to implementation. This likely amounts to a cost of up to \$350,000 per year including employee benefits and other costs. Over time, it is possible that the Colorado Department of Public Health and the Environment's Air Pollution Control Division could hire an additional staff modeler to support confirmation and verification of pollution reduction analytics. This cost would amount to roughly another \$125,000-\$150,000 (including benefits).

Moreover, it is expected that some metropolitan planning organizations (MPOs) may require additional staff members dedicated to emissions modeling, as well as additional modeling software. CDOT is exploring options to streamline these overhead expenses and achieve economies of scale, especially as relates to centralizing certain modeling and software capabilities for use as shared services between the state and MPOs. The recently passed state legislation, SB 260, updates the Multimodal and Mitigation Options Fund (MMOF) to allow funds directed into this program to be used for modeling support.

4. A comparison of the probable costs and benefits of the proposed rule to the probable costs and benefits of inaction.

The following sections summarize a cost/benefit analysis assuming full implementation of this rule. This complete work is provided in the rule <u>docket</u>. As described in this analysis, because changes in transportation investments are assumed to be absorbed into current transportation plan budgets, the projected costs of the rule are limited to agency administrative costs (new staff) and some costs to the two industries directly affected by reductions in VMT -- gasoline and diesel sales and automotive maintenance and repairs. Logically then, these costs, if assumed to be avoided, become the "benefits" of inaction. Likewise, the costs of inaction are best represented by the benefits if the rule is not implemented. The dollar value of these benefits is summarized in Table 1 above.

Summary of the Costs and Benefits of Rule Implementation

Full implementation of this rule is expected to result in significant economic benefits in the form of cost savings to travelers and to the general public. Travelers will benefit from reductions in vehicle operating costs as a result of expanded travel options (e.g., transit service, tele-travel, walking and bicycling), travel time savings, and the need to use personal vehicles less because of being provided with more options through state and regional transportation planning. Implementation of the rule will also reduce economic costs associated with carbon emissions, air pollution, motor vehicle crashes (road safety), and the health consequences of physical inactivity.

Businesses are also expected to receive a share of the economic benefits. Examples include congestion reduction that saves travel time for "on-the-clock" business travel, and reduced health care costs for employees as a result of reduced air pollution, motor vehicle crashes, and physical inactivity. They may also experience increased worker retention and satisfaction as a result of employees having expanded commute or work from home options.

Additionally, policies that facilitate and reward downtown density tend to have a markedly positive impact on "main street" small businesses such as restaurants and locally-owned retail. While these benefits can be somewhat difficult to quantify in the aggregate and are thus not fully accounted for in this analysis, results from the Colorado Department of Transportation's "Revitalizing Main Street" program indicate that they are significant and widespread across the state. Well over 100 grants awarded to more than 70 communities have largely supported projects including downtown street repurposing and parklets, sidewalks and crosswalks, park and street improvements, shared streets between cars and pedestrians, and wayfinding and signage improvements. Many recipients have affirmed to CDOT that these grants significantly improved business and saved jobs during the COVID-19 pandemic, and, when surveyed, 67 percent of respondents said they would not have implemented these innovations without the program. Though grants supported many projects on a pilot basis, survey results showed that 81 percent of projects are likely to be maintained or repeated on a seasonal basis given their success. This data provides qualitative indication of the economic development benefits associated with many of the project types that this policy would encourage.

As indicated above, Table 1 shows the projected change in social costs through 2025, 2030, 2040, and 2050 respectively, for full implementation of the proposed rule using the illustrative mix of strategies. The net benefits reflect the effects of reduced highway investment as well as increased investment in GHG-reducing projects. Negative values (shown in parentheses) represent a net cost savings. Future savings are discounted at a rate of 2.5 percent, consistent with Colorado Senate Bill (SB) 21-260 which requires use of the social cost of carbon dioxide (CO₂) and other pollutants using a discount rate of 2.5 percent or less. The most substantial benefits are from reduced crashes and reduced vehicle operating costs, resulting from reduced VMT. The net present value of total social benefits is roughly \$8 billion in the 2026-2030 timeframe and \$17 billion between 2031 and 2040.

Anticipated Costs

The answer contained in item #3, above provides an analysis of agency implementation costs, which reflect additional FTE that will be necessary to comply with the rule. The resulting transportation planning changes are net neutral -- representing some shift in how dollars are prioritized rather than an overall change in the amount of spending on transportation. For example, some, but by no means all, dollars would shift from highway capacity expansion projects to other types of transportation investment including but not limited to bus rapid transit lanes or queue jumps as part of road projects; walking and bicycling facilities; additional transportation services, including expanded transit service and ridesharing options; and/or consumer incentives to reduce travel or encourage travel by more efficient, lower-emissions modes (such as ridesharing or telecommuting incentives). Importantly, it is anticipated that all costs shifted towards these types of investments will themselves result in mobility benefits and economic development, as well as improvements to air quality and pollution reduction.

Importantly, as detailed in Table 2, it is assumed that only a portion -- roughly a quarter to a third -- of capital program dollars are shifted towards projects that also serve as mitigation, in addition to providing mobility benefits of their own. This means that the most critical capacity projects are assumed to advance, likely paired with mitigation and significant investment in achieving and maintaining a state of good repair for roads, bridges, tunnels, and other transportation infrastructure assets across Colorado.

Table 2
Net Neutral Investment Levels and Dollars Shifted to Multimodal Transportation and other
Environmentally Beneficial Transportation Investments
(net present value, millions of 2021 dollars)

Years	Total RTPs + 10-Year Plan	Total Shift to Mitigation	Percent Shift
2022-2025	\$3,842.07	\$417.90	11%
2026-2030	\$4,802.59	\$974.90	21%
2031-2040	\$9,605.17	\$2,655.80	28%
2041-2050	\$9,605.17	\$2,691.50	28%

It is worthy of note that additional federal investment could augment overall resources, and especially those resources geared towards transit and multimodal investments. For example, the Senate-passed Infrastructure Investment and Jobs Act would expand transit formula funds over the next five years by about \$39.5 billion, a 43% increase over the FAST Act. Under current FTA funding formulas, Colorado could receive more than \$900 million over the course of 5 years, an increase of approximately \$40 million a year. The Act also contains \$66 billion for Amtrak while Colorado continues to work towards passenger rail along the front range.

Businesses are not expected to incur significant direct costs to comply with the rule under the proposed implementation of the rule. As noted previously, there are a variety of social benefits (cost savings) that will be realized by the rule, some of which will accrue to Colorado's businesses. Importantly, this rule does **not** require that businesses implement trip reduction strategies that would have been required in a separate rulemaking recently withdrawn by the Air Quality Control Commission (AQCC). While businesses are encouraged to pursue employee trip reduction on a voluntary basis, and MPO's and CDOT through their Travel Demand Management (TDM) programs are able to help and encourage businesses in this effort, nothing in this rule requires it.

Lastly, both the benefit and cost assumptions within the rule assume that implementing agencies come into full compliance with the rule over the period of performance. However, the way that the rule is structured, the enforcement mechanism for non-compliance requires that a portion of an agency's capital funds -- which for MPOs are only those funds sub-allocated via the state as well as those specifically noted in Senate Bill 260 as being conditioned in this manner -- become restricted to projects that are demonstrated to reduce pollution and improve mobility. The recipient retains discretion over what pollution reducing investments are made, so long as those investments are approved as mitigations pursuant to the process set forth in the proposed rule. No entity would lose funds as a result of the enforcement provisions becoming effectuated by not hitting the targets in totality. The goal of this policy is to perpetuate serious conversation and planning for how the choices that planning entities make can provide consumers with the choices that are needed to reduce pollution and improve quality of life, not to diminish the ability of any entity to invest these dollars in mobility solutions for Coloradans.

5. A determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule.

Earlier this year, Colorado released its <u>Greenhouse Gas Pollution Reduction Roadmap</u>, which provides multiple strategies to meet the state's climate targets in 2025, 2030 and 2050. The Roadmap, which found that transportation is now Colorado's largest source of GHG emissions, listed multiple measures within the transportation sector to reduce emissions. One of those actions is to make transportation planning, investment and land use planning changes that provide more travel choices for Coloradans. That is what this rule attempts to do. It works to accomplish a share of the overall pollution reduction target for transportation with a new planning standard that refines the roles of the state and regional governmental agencies that are already in charge of transportation planning, making the implementation of the rule

unobtrusive to everyone that does not already have a governmental role in overall transportation planning.

Further, the rule does not place requirements on individuals, the traveling public, or businesses. The rule is expected to reduce GHG by utilizing existing transportation funds programmed by government entities to expand multimodal transportation options such as transit and bicycle commuting for consumers to choose from, while still increasing road capacity for the most critical corridors where it makes the most sense.

Lastly, it is worth noting that this rule complies with a direct requirement in SB260 directing CDOT to implement GHG requirements for transportation planning.

6. A description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule.

An important aspect of this rule is that it does not require a specific set of measures to be implemented by the State and its MPOs to achieve the rule's targets. Those decisions are left to the implementing agencies who will also have ongoing opportunity to propose new mitigation measures for modeling to ensure that they result in emission reductions. Thus, in order to conduct this analysis, CDOT developed illustrative policy choice packages that assume implementation of three broad categories of VMT reduction measures: (1) expansion of transit service; (2) policies to encourage compact land use that reduces the need to drive by making it possible for travelers to access more of their preferred destinations easily within denser areas, in a manner that also facilitates strong and economically vibrant downtowns; and (3) various programs that expand travel choices through a variety of different approaches that could include investing in bicycle and pedestrian infrastructure and micro mobility services that assist with "first and last mile" connections to transit facilities; investments (e.g. in digital infrastructure) that help support tele-travel as an alternative to physical travel and also offer more workplace flexibility to employees in many work environments; or programs that encourage non-work travel by modes other than a single occupancy vehicle (e.g. a jurisdiction that provides transit passes to its residents).

Two specific alternative methods for achieving the purpose of the proposed rule were considered, including:

Alternative 1: A lower level of pollution savings based on modeling assumptions that only factored in savings associated with travel choices: Programs to encourage non-work travel by non-single occupancy vehicle modes; programs to support and encourage tele-travel (e.g., on-line health care, education, and shopping) as a substitute for physical travel; investment in bicycle and pedestrian infrastructure and micromobility services; and reduction of transit fares. Essentially, this regulatory alternative achieves the lowest cumulative pollution reduction targets and assumes fewer illustrative choices by agencies to meet them.

Alternative 2: A pollution reduction scenario at a level where the model assumed an illustrative set of actions including travel choices and expanded transit service. Notably, since most of the costs assumed in the rule relate to the ongoing cost of transit operations, this scenario would reflect most of the costs associated with the current proposal.

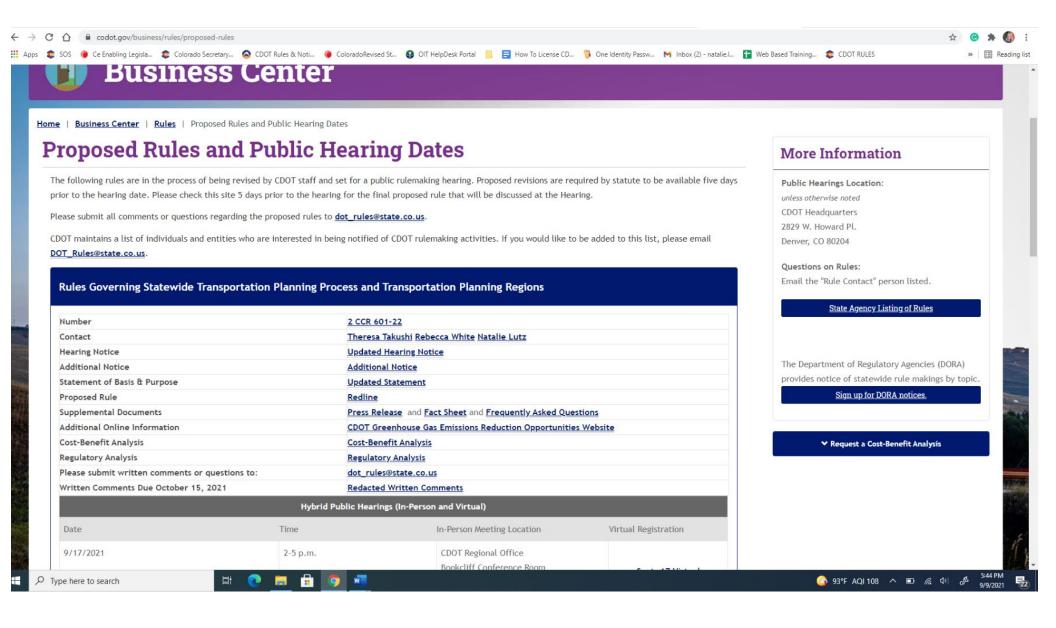
In contrast to the illustrative package of policy choices used to evaluate the proposed rule, these alternatives do not include additional land use policies to reduce vehicle travel. As a result, they are less likely to achieve the required greenhouse gas reduction targets and therefore to support overall state goals for GHG reduction and climate change. Once again, none of these scenarios prescribe specific choices for regulated entities, rather they establish stringency levels based on illustrative modeling options that contemplate various orders of magnitude.

The economic benefits (reductions in social costs) from these alternatives are presented in Table 3. The "travel choices" alternative (Alternative 1) achieves the lowest greenhouse gas emission reductions. The "travel choices + transit" alternative (Alternative 2) results in additional social cost savings and greenhouse gas reductions. The proposed alternative for this rule (which includes travel choices, transit, and land use policies) results in a further increase in greenhouse gas benefits. These considerations resulted in proposing this alternative to analyze the effects of the final rule. As with the base alternative, the net costs of implementing the rule to the public sector would assume similar levels of overhead (staffing) at implementing agencies but would otherwise assume that topline funding remains the same with some portion shifted from planned highway expansion into other, emissions-reducing modes and services.

Table 3

Net Present Value of Economic Benefits (Cost Savings) for Alternatives (\$millions)

Scenario	Alternative 1: Travel Choices	Alternative 2: Travel Choices + Transit
2022 - 2025	\$(1,527)	\$(1,644)
2026 - 2030	\$(6,776)	\$(7,268)
2031 - 2040	\$(14,852)	\$(16,102)
2041 - 2050	\$(10,603)	\$(11,397)





2829 W. Howard Place Denver, CO 80204-2305

Transportation Commission of Colorado Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions 2 CCR 601-22

Proposed Statement of Basis and Purpose, Statutory Authority, and Preamble

Statement of Basis and Purpose and Preamble

<u>Overview</u>

The purpose of the Rules Governing the Statewide Transportation Planning Process and Transportation Planning Regions (Rules) is to prescribe the statewide transportation planning process through which a long-range multimodal, comprehensive Statewide Transportation Plan will be developed, integrated, updated, and amended by the Colorado Department of Transportation (Department or CDOT), in cooperation with local governments, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions, Indian tribal governments, relevant state and federal agencies, the private sector, transit and freight operators, and the general public. This cooperative process is designed to coordinate regional transportation planning, guided by the statewide transportation policy set by the Department and the Transportation Commission of Colorado ("Commission"), as a basis for developing the Statewide Transportation Plan. The result of the statewide transportation planning process shall be a long-range, financially feasible, environmentally sound, multimodal transportation system plan for Colorado that will reduce traffic and smog.

Further, the purpose of the Rules is to define the state's Transportation Planning Regions for which long-range Regional Transportation Plans are developed, prescribe the process for conducting and initiating transportation planning in the non-MPO Transportation Planning Regions and coordinating with the MPOs for planning in the metropolitan areas. Memoranda of Agreement (MOA) that serve as the Metropolitan Planning Agreements (MPAs) pursuant to 23 C.F.R. § 450 between the Department, each MPO, and applicable transit provider(s) further prescribe the transportation planning process in the MPO Transportation Planning Regions. In addition, the purpose of the Rules is to describe the organization and function of the Statewide Transportation Advisory Committee (STAC) as established by § 43-1-1104, Colorado Revised Statutes (C.R.S.).

The Rules are promulgated to meet the intent of both the U.S. Congress and the Colorado General Assembly for conducting a continuing, cooperative, and comprehensive statewide performance-based multimodal transportation planning process for producing a Statewide Transportation Plan and Regional Transportation Plans that address the transportation needs of the State. This planning process, through comprehensive input, results in systematic project prioritization and resource allocation.

The Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of multimodal, cost-effective, and environmentally sound means of transportation which leads to cleaner air and reduced traffic. The Rules reflect the Commission's and the Department's focus on multimodal transportation projects including highways, transit, rail, bicycles and pedestrians. Section 8 of these Rules establishes an ongoing administrative process for identifying, measuring, confirming, and verifying those best practices and their impacts, so that CDOT and MPOs can easily apply them to their plans in order to achieve the pollution reduction levels required by these Rules.



The specific purpose of this rulemaking is to establish Greenhouse Gas (GHG) pollution reduction planning levels for transportation within Section 8 of these Rules that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of these requirements is to limit the GHG pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This is accomplished by requiring CDOT and MPOs to establish plans that meet targets through a mix of projects that limit and mitigate air pollution and improve quality of life and Multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. In the event that a plan fails to comply, CDOT and MPOs have the option to commit to implementing GHG Mitigation Measures that provide travelers with cleaner and more equitable transportation options such as safer pedestrian crossings and sidewalks, better transit and transit-access, or infrastructure that supports access to housing, jobs, and retail.

Examples of these types of mitigations, which also benefit quality of place and the economic resilience of communities, will include but not be limited to: adding bus rapid transit facilities and services, enhancing first-and-last mile connections to transit, adding bike-sharing services including electric bikes, improving pedestrian facilities like sidewalks and safe accessible crosswalks, investments that support vibrant downtown density and local zoning decisions that favor sustainable building codes and inclusive multi-use facilities downtown, and more. The process of identifying and approving mitigations will be established by a policy process that allows for ongoing innovations from local governments and other partners to be considered on an iterative basis.

If compliance still cannot be demonstrated, even after committing to GHG Mitigation Measures, the Commission shall restrict the use of certain funds, requiring that dollars be focused on projects that help reduce transportation emissions and are recognized as approved mitigations. These requirements address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms.

Context of Section 8 of these Rules Within Statewide Objectives

The passage of House Bill (HB)19-1261 set Colorado on a course to dramatically reduce GHG emissions across all sectors of the economy. In HB 19-1261, now codified in part at §§ 25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" acknowledged that "Colorado is already experiencing harmful climate impacts[,]" and that "many of these impacts disproportionately affect" certain Disproportionately Impacted Communities. see § 25-7-102(2), C.R.S. The General Assembly also recognized that "[b]y reducing [GHG] pollution, Colorado will also reduce other harmful air pollutants, which will, in turn, improve public health, reduce health care costs, improve air quality, and help sustain the environment." see § 25-7-102(2)(d), C.R.S.



Since 2019, the State has been rigorously developing a plan to achieve the ambitious GHG pollution reduction goals in § 25-7-102(2)(g), C.R.S. In January 2021, the State published its Greenhouse Gas Pollution Reduction Roadmap (Roadmap). Available at:

https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap. The Roadmap identified the transportation sector as the single largest source of statewide GHG pollution as of 2020, with passenger vehicles the largest contributor within the transportation sector. Additionally, the Roadmap determined that emissions from transportation are a "significant contributor to local air pollution that disproportionately impacts lower-income communities and communities of color." see Roadmap, p. XII.

A key finding in the Roadmap recognized that "[m]aking changes to transportation planning and infrastructure to reduce growth in driving is an important tool" to meet the statewide GHG pollution reduction goals. see Roadmap, p. 32. Section 8 of these Rules also advances the State's goals to reduce emissions of other harmful air pollutants, including ozone.

Why the Commission is Taking This Action

Senate Bill 21-260, signed into law by the Governor on June 17, 2021, and effective upon signature, includes a new § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Section 43-1-128, C.R.S. also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and Vehicle Miles Traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.

Under Colorado law governing transportation planning, CDOT is charged with and identified as the proper body for "developing and maintaining the state transportation planning process and the state transportation plan" in cooperation with Regional Planning Commissions and local government officials. see § 43-1-1101, C.R.S.

The Commission is responsible for formulating policy with respect to transportation systems in the State and promulgating and adopting all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs. see § 43-1-106(8), C.R.S. The Commission is statutorily charged "to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado." see § 43-1-106(8)(b), C.R.S. In addition, the Commission is generally authorized "to make all necessary and reasonable orders, rules and regulations in order to carry out the provisions of this part . . ." see § 43-1-106(8)(k), C.R.S.

As such, CDOT and the Commission are primarily responsible for ensuring compliance with GHG reductions in transportation planning.

What Relevant Regulations Currently Apply to Transportation Planning

Transportation planning is subject to both state and federal requirements. Under federal law governing transportation planning and federal-aid highways, it is declared to be in the national interest to promote transportation systems that accomplish a number of mobility objectives "while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes..." see 23 U.S.C. § 134; see also 23 U.S.C. § 135(a)(1). In the metropolitan planning process, consideration must be given to projects and strategies that will "protect and enhance the environment, promote energy conservation, improve the quality of life..." see 23 U.S.C. § 134(h)(1)(E); see also 23 C.F.R. Part 450, Subpart B (federal regulations governing statewide transportation planning and programming). The same planning objective applies to statewide transportation planning. see 23 U.S.C. § 135(d)(1)(E); see also 23 C.F.R. Part 450, Subpart C (governing metropolitan transportation planning and programming). Further, the Statewide Transportation Plan shall be developed, as appropriate, in



consultation with State...local agencies responsible for...environmental protection..." see 23 U.S.C. \$ 135(f)(2)(D)(i).

Under conforming Colorado law, the Statewide Transportation Plan is developed by integrating and consolidating Regional Transportation Plans developed by MPOs and regional transportation planning organizations into a "comprehensive statewide transportation plan" pursuant to rules and regulations promulgated by the Commission. *see* § 43-1-1103(5), C.R.S. The Statewide Transportation Plan must address a number of factors including, but not limited to, "environmental stewardship" and "reduction of greenhouse gas emissions." *see* § 43-1-1103(5)(h) and (j), C.R.S.

Regional Transportation Plans must account for the "expected environmental, social, and economic impacts of the recommendations in the plan, including a full range of reasonable transportation alternatives...in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." see § 43-1-1103(1)(d), C.R.S. Further, in developing Regional Transportation Plans, MPOs "[s]hall assist other agencies in developing transportation control measures for utilization in accordance with state...regulations...and shall identify and evaluate measures that show promise of supporting clean air objectives." see § 43-1-1103(1)(e), C.R.S.

Putting Section 8 of these Rules into Perspective

Section 8 establishes GHG regulatory requirements that are among the first of their kind in the U.S. However, from an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a Nonattainment Area are consistent with or "conform to" a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and the Denver Regional Council of Governments' MPOs to demonstrate conformity with each plan adoption and amendment.

However, because the transportation sector encompasses the millions of individual choices people make every day that have an impact on climate, a variety of strategies are necessary to achieve the State's climate goals. Section 8 of these Rules is one of many steps needed to achieve the totality of reduction goals for the transportation sector.

Purpose of GHG Mitigation Measures

The transportation modeling conducted for this rulemaking may demonstrate that certain projects increase GHG pollution for a variety of reasons. These reasons may include factors such as induced demand as a result of additional lane mileage attracting additional vehicular traffic, or additional traffic facilitated by access to new commercial or residential development in the absence of public transit options or bicycle/pedestrian access that provides consumers with other non-driving options. Transportation infrastructure itself can also increase or decrease GHG and other air pollutants by virtue of factors like certain construction materials, removal or addition of tree cover that captures carbon pollution, or integration with vertical construction templates of various efficiencies that result in higher or lower levels of per capita energy use. The pollution impacts of various infrastructure projects will vary significantly depending on their specifics and must be modeled in a manner that is context-sensitive to a range of issues such as location, footprint of existing infrastructure, design, and how it fits together with transportation alternatives.

Of note, many types of infrastructure have been demonstrated not to generate significant induced demand or increased emissions. For example, the state of California conducted a study of project types that should be considered "neutral" from the perspective of GHG pollution -- due to their use being related primarily to issues like safety and utility for emergency services. See here:



https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1 st-edition-tac-fnl-a11v.pdf

Furthermore, other aspects of transportation infrastructure can facilitate reductions in emissions and thus serve as mitigations rather than contributors to pollution. For example, the addition of transit resources in a manner that can displace Vehicle Miles Traveled can reduce emissions. Moreover, improving downtown pedestrian and bike access, particularly in areas that allow individuals to shift multiple daily trips for everything from work to dining to retail, can improve both emissions and quality of life.

There is an increasing array of proven best practices for reducing pollution and smog and improving economies and neighborhoods that can help streamline decision-making for state and local agencies developing plans and programs of projects.

Statutory Authority

The statutory authority is as follows:

- House Bill 19-1261 enacted into law on May 30, 2019.
- Senate Bill 20-260 enacted into law on June 17, 2021.
- § 25-7-102(2), C.R.S., which sets forth the legislative declaration to reduce statewide GHG pollution and establishes statewide GHG pollution targets.
- § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling, and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and vehicle miles traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.
- § 43-1-1101, C.R.S., which authorizes CDOT to develop and maintain the state transportation planning process and the State Transportation Plan in cooperation with Regional Planning Commissions and local government.
- § 43-1-1103(5), C.R.S., which authorizes the Commission to promulgate rules to establish the formation of the Statewide Transportation Plan and the statewide planning process. Also requires the consideration of environmental stewardship and reducing GHG emissions as part of transportation planning.
- § 43-1-106(8), C.R.S, which authorizes the Commission to formulate policy with respect to transportation systems in the State and promulgate and adopt all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs.
- § 43-1-106(8)(b), C.R.S., which requires the Commission to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado.
- § 43-1-106(8)(k), C.R.S., which authorizes the Commission to make all necessary and reasonable order, rules and regulations.





2829 W. Howard Place Denver, CO 80204-2305

08/31/2021

Transportation Commission of Colorado Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions 2 CCR 601-22

Updated Proposed Statement of Basis and Purpose, Statutory Authority, and Preamble

Statement of Basis and Purpose and Preamble

Overview

The purpose of the Rules Governing the Statewide Transportation Planning Process and Transportation Planning Regions (Rules) is to prescribe the statewide transportation planning process through which a long-range multimodal, comprehensive Statewide Transportation Plan will be developed, integrated, updated, and amended by the Colorado Department of Transportation (Department or CDOT), in cooperation with local governments, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions, Indian tribal governments, relevant state and federal agencies, the private sector, transit and freight operators, and the general public. This cooperative process is designed to coordinate regional transportation planning, guided by the statewide transportation policy set by the Department and the Transportation Commission of Colorado ("Commission"), as a basis for developing the Statewide Transportation Plan. The result of the statewide transportation planning process shall be a long-range, financially feasible, environmentally sound, multimodal transportation system plan for Colorado that will reduce traffic and smog.

Further, the purpose of the Rules is to define the state's Transportation Planning Regions for which long-range Regional Transportation Plans are developed, prescribe the process for conducting and initiating transportation planning in the non-MPO Transportation Planning Regions and coordinating with the MPOs for planning in the metropolitan areas. Memoranda of Agreement (MOA) that serve as the Metropolitan Planning Agreements (MPAs) pursuant to 23 C.F.R. § 450 between the Department, each MPO, and applicable transit provider(s) further prescribe the transportation planning process in the MPO Transportation Planning Regions. In addition, the purpose of the Rules is to describe the organization and function of the Statewide Transportation Advisory Committee (STAC) as established by § 43-1-1104, Colorado Revised Statutes (C.R.S.).

The Rules are promulgated to meet the intent of both the U.S. Congress and the Colorado General Assembly for conducting a continuing, cooperative, and comprehensive statewide performance-based multimodal transportation planning process for producing a Statewide Transportation Plan and Regional Transportation Plans that address the transportation needs of the State. This planning process, through comprehensive input, results in systematic project prioritization and resource allocation.

The Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of multimodal, cost-effective, and environmentally sound means of transportation which leads to cleaner air and reduced traffic. The Rules reflect the Commission's and the Department's focus on multimodal transportation projects including highways, transit, rail, bicycles and pedestrians. Section 8 of these Rules establishes an ongoing administrative process for identifying, measuring, confirming, and verifying those



best practices and their impacts, so that CDOT and MPOs can easily apply them to their plans in order to achieve the pollution reduction levels required by these Rules.

The specific purpose of this rulemaking is to establish Greenhouse Gas (GHG) pollution reduction planning levels for transportation within Section 8 of these Rules that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of these requirements is to limit the GHG pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This is accomplished by requiring CDOT and MPOs to establish plans that meet targets through a mix of projects that limit and mitigate air pollution and improve quality of life and Multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. In the event that a plan fails to comply, CDOT and MPOs have the option to commit to implementing GHG Mitigation Measures that provide travelers with cleaner and more equitable transportation options such as safer pedestrian crossings and sidewalks, better transit and transit-access, or infrastructure that supports access to housing, jobs, and retail.

Examples of these types of mitigations, which also benefit quality of place and the economic resilience of communities, will include but not be limited to: adding bus rapid transit facilities and services, enhancing first-and-last mile connections to transit, adding bike-sharing services including electric bikes, improving pedestrian facilities like sidewalks and safe accessible crosswalks, investments that support vibrant downtown density and local zoning decisions that favor sustainable building codes and inclusive multi-use facilities downtown, and more. The process of identifying and approving mitigations will be established by a policy process that allows for ongoing innovations from local governments and other partners to be considered on an iterative basis.

If compliance still cannot be demonstrated, even after committing to GHG Mitigation Measures, the Commission shall restrict the use of certain funds, requiring that dollars be focused on projects that help reduce transportation emissions and are recognized as approved mitigations. These requirements address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms.

Context of Section 8 of these Rules Within Statewide Objectives

The passage of House Bill (HB)19-1261 set Colorado on a course to dramatically reduce GHG emissions across all sectors of the economy. In HB 19-1261, now codified in part at §§ 25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" acknowledged that "Colorado is already experiencing harmful climate impacts[,]" and that "many of these impacts disproportionately affect" certain Disproportionately Impacted Communities. see § 25-7-102(2), C.R.S. The General Assembly also



recognized that "[b]y reducing [GHG] pollution, Colorado will also reduce other harmful air pollutants, which will, in turn, improve public health, reduce health care costs, improve air quality, and help sustain the environment." see § 25-7-102(2)(d), C.R.S.

Since 2019, the State has been rigorously developing a plan to achieve the ambitious GHG pollution reduction goals in § 25-7-102(2)(g), C.R.S. In January 2021, the State published its Greenhouse Gas Pollution Reduction Roadmap (Roadmap). Available at: https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap. The Roadmap identified the transportation sector as the single largest source of statewide GHG pollution as of 2020, with passenger vehicles the largest contributor within the transportation sector. Additionally, the Roadmap determined that emissions from transportation are a "significant contributor to local air pollution that disproportionately impacts lower-income communities and communities of color." see Roadmap, p. XII.

A key finding in the Roadmap recognized that "[m]aking changes to transportation planning and infrastructure to reduce growth in driving is an important tool" to meet the statewide GHG pollution reduction goals. see Roadmap, p. 32. Section 8 of these Rules also advances the State's goals to reduce emissions of other harmful air pollutants, including ozone.

Why the Commission is Taking This Action

Senate Bill 21-260, signed into law by the Governor on June 17, 2021, and effective upon signature, includes a new § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Section 43-1-128, C.R.S. also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and Vehicle Miles Traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.

Under Colorado law governing transportation planning, CDOT is charged with and identified as the proper body for "developing and maintaining the state transportation planning process and the state transportation plan" in cooperation with Regional Planning Commissions and local government officials. see § 43-1-1101, C.R.S.

The Commission is responsible for formulating policy with respect to transportation systems in the State and promulgating and adopting all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs. see § 43-1-106(8), C.R.S. The Commission is statutorily charged "to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado." see § 43-1-106(8)(b), C.R.S. In addition, the Commission is generally authorized "to make all necessary and reasonable orders, rules and regulations in order to carry out the provisions of this part . . ." see § 43-1-106(8)(k), C.R.S.

As such, CDOT and the Commission are primarily responsible for ensuring compliance with GHG reductions in transportation planning.

What Relevant Regulations Currently Apply to Transportation Planning

Transportation planning is subject to both state and federal requirements. Under federal law governing transportation planning and federal-aid highways, it is declared to be in the national interest to promote transportation systems that accomplish a number of mobility objectives "while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes..." see 23 U.S.C. § 134; see also 23 U.S.C. § 135(a)(1). In the metropolitan planning process, consideration must be given to projects and strategies that will "protect and enhance the environment, promote energy conservation, improve the quality of life..." see 23 U.S.C. § 134(h)(1)(E); see also 23 C.F.R.



Part 450, Subpart B (federal regulations governing statewide transportation planning and programming). The same planning objective applies to statewide transportation planning. see 23 U.S.C. § 135(d)(1)(E); see also 23 C.F.R. Part 450, Subpart C (governing metropolitan transportation planning and programming). Further, the Statewide Transportation Plan shall be developed, as appropriate, in consultation with State...local agencies responsible for...environmental protection..." see 23 U.S.C. § 135(f)(2)(D)(i).

Under conforming Colorado law, the Statewide Transportation Plan is developed by integrating and consolidating Regional Transportation Plans developed by MPOs and regional transportation planning organizations into a "comprehensive statewide transportation plan" pursuant to rules and regulations promulgated by the Commission. see § 43-1-1103(5), C.R.S. The Statewide Transportation Plan must address a number of factors including, but not limited to, "environmental stewardship" and "reduction of greenhouse gas emissions." see § 43-1-1103(5)(h) and (j), C.R.S.

Regional Transportation Plans must account for the "expected environmental, social, and economic impacts of the recommendations in the plan, including a full range of reasonable transportation alternatives...in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." see § 43-1-1103(1)(d), C.R.S. Further, in developing Regional Transportation Plans, MPOs "[s]hall assist other agencies in developing transportation control measures for utilization in accordance with state...regulations...and shall identify and evaluate measures that show promise of supporting clean air objectives." see § 43-1-1103(1)(e), C.R.S.

Putting Section 8 of these Rules into Perspective

Section 8 establishes GHG regulatory requirements that are among the first of their kind in the U.S. However, from an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a Nonattainment Area are consistent with or "conform to" a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and the Denver Regional Council of Governments' MPOs to demonstrate conformity with each plan adoption and amendment.

However, because the transportation sector encompasses the millions of individual choices people make every day that have an impact on climate, a variety of strategies are necessary to achieve the State's climate goals. Section 8 of these Rules is one of many steps needed to achieve the totality of reduction goals for the transportation sector.

Purpose of GHG Mitigation Measures

The transportation modeling conducted for this rulemaking may demonstrate that certain projects increase GHG pollution for a variety of reasons. These reasons may include factors such as induced demand as a result of additional lane mileage attracting additional vehicular traffic, or additional traffic facilitated by access to new commercial or residential development in the absence of public transit options or bicycle/pedestrian access that provides consumers with other non-driving options. Transportation infrastructure itself can also increase or decrease GHG and other air pollutants by virtue of factors like certain construction materials, removal or addition of tree cover that captures carbon pollution, or integration with vertical construction templates of various efficiencies that result in higher or lower levels of per capita energy use. The pollution impacts of various infrastructure projects will vary significantly depending on their specifics and must be modeled in a manner that is context-sensitive to a range of issues such as location, footprint of existing infrastructure, design, and how it fits together with transportation alternatives.



Of note, many types of infrastructure have been demonstrated not to generate significant induced demand or increased emissions. For example, the state of California conducted a study of project types that should be considered "neutral" from the perspective of GHG pollution -- due to their use being related primarily to issues like safety and utility for emergency services. See here: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-tac-fnl-a11y.pdf

Furthermore, other aspects of transportation infrastructure can facilitate reductions in emissions and thus serve as mitigations rather than contributors to pollution. For example, the addition of transit resources in a manner that can displace Vehicle Miles Traveled can reduce emissions. Moreover, improving downtown pedestrian and bike access, particularly in areas that allow individuals to shift multiple daily trips for everything from work to dining to retail, can improve both emissions and quality of life.

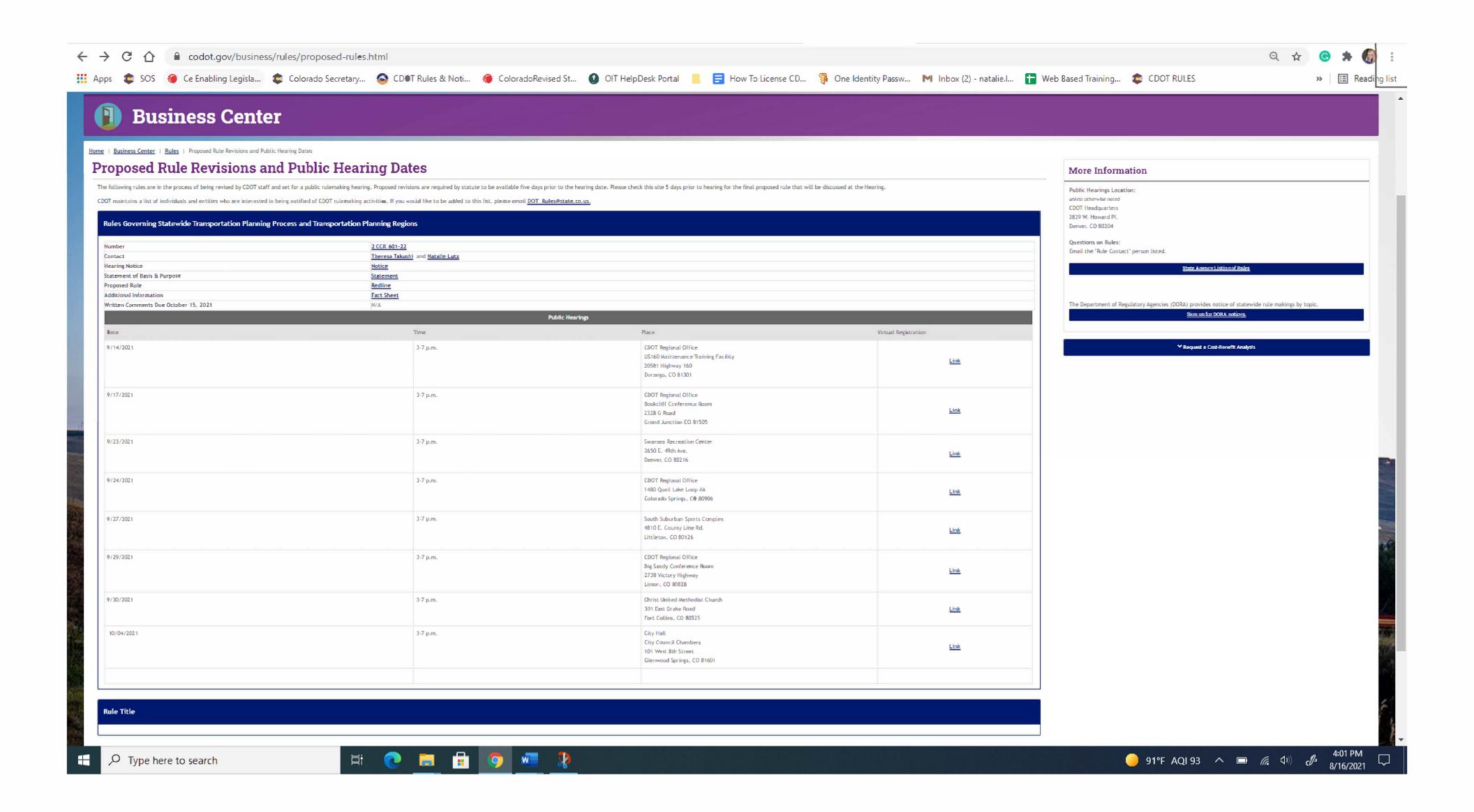
There is an increasing array of proven best practices for reducing pollution and smog and improving economies and neighborhoods that can help streamline decision-making for state and local agencies developing plans and programs of projects.

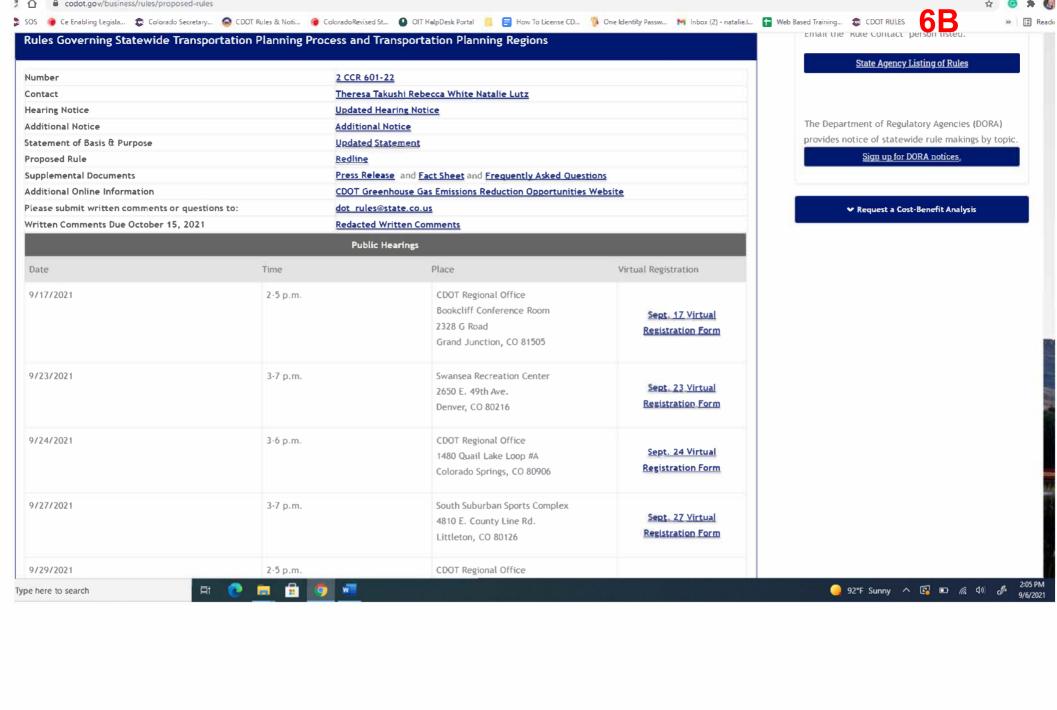
Statutory Authority

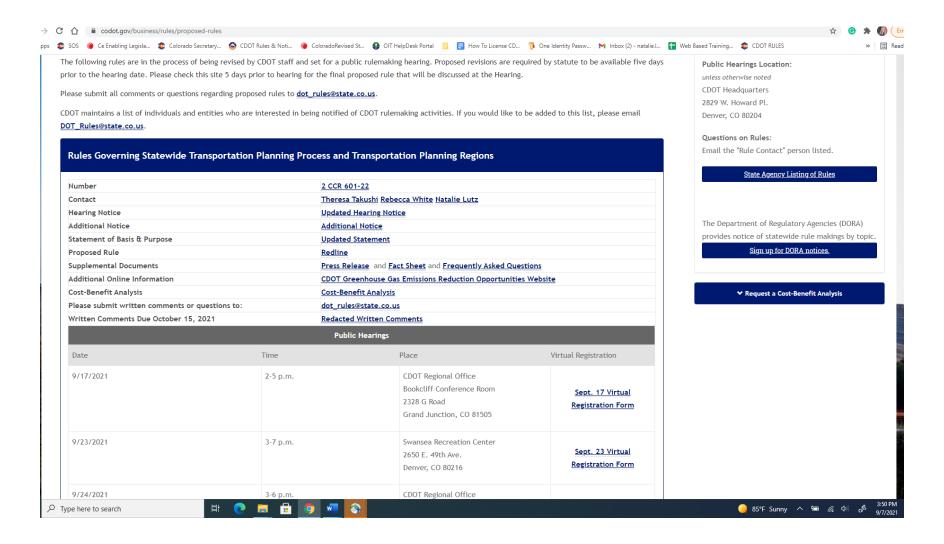
The statutory authority is as follows:

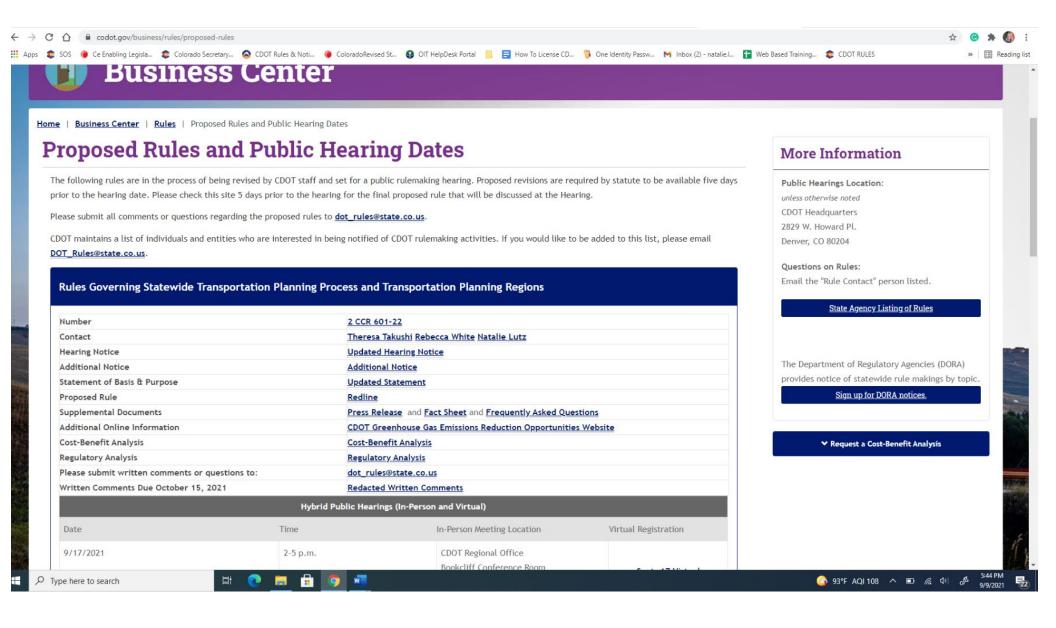
- House Bill 19-1261 enacted into law on May 30, 2019.
- Senate Bill 21-260 enacted into law on June 17, 2021.
- § 25-7-102(2), C.R.S., which sets forth the legislative declaration to reduce statewide GHG pollution and establishes statewide GHG pollution targets.
- § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling, and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and vehicle miles traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.
- § 43-1-1101, C.R.S., which authorizes CDOT to develop and maintain the state transportation planning process and the State Transportation Plan in cooperation with Regional Planning Commissions and local government.
- § 43-1-1103(5), C.R.S., which authorizes the Commission to promulgate rules to establish the formation of the Statewide Transportation Plan and the statewide planning process. Also requires the consideration of environmental stewardship and reducing GHG emissions as part of transportation planning.
- § 43-1-106(8), C.R.S, which authorizes the Commission to formulate policy with respect to transportation systems in the State and promulgate and adopt all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs.
- § 43-1-106(8)(b), C.R.S., which requires the Commission to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado.
- § 43-1-106(8)(k), C.R.S., which authorizes the Commission to make all necessary and reasonable order, rules and regulations.











COLORADO DEPARTMENT OF TRANSPORTATION

CDOT Multimodal Planning Branch Division of Transportation Development 2829 W. Howard Pl., 4th Floor Denver, CO 80204



DATE: July 13, 2021

TO: GHG Pollution Standard Stakeholders

FROM: Colorado Department of Transportation

RE: Transportation GHG Roadmap Briefing Update

Executive Summary

The passage of HB-1261 set Colorado on a course to dramatically reduce greenhouse gas emissions across all sectors of the economy. As the leading source of Greenhouse Gas (GHG) emissions in Colorado (and nationwide), transportation has a critical role to play in helping achieve these goals. The state's 2020 Greenhouse Gas Pollution Reduction Roadmap (Roadmap) identified nine different strategies for transportation. Of these, two are underway now--the Employee Trip Reduction Rule proposed in May by the Air Quality Control Commission (AQCC) and a rulemaking on pollution reduction planning for transportation discussed in this memo; one has been accomplished through SB 260 - securing new revenue to fund infrastructure and incentives for electric cars, trucks and buses; and one has begun through HB 1117 and HB 1271 - offering incentives for land use decisions by local governments that reduce vehicle miles traveled (VMT) and GHG emissions. Collectively, these strategies, as they are implemented over the next several years, combined with the effects of low and zero emission vehicle rules, are designed to achieve the 2030 target of reducing GHG pollution from transportation by 12.7 million tons per year below 2005 levels. Importantly, the pollution reduction planning rule that this memo describes, while an essential and important element of this strategy, is only one element of a comprehensive strategy and is not intended to achieve the targets in isolation.

This paper focuses on the intricacies of establishing a pollution-reduction framework that is among the first of its kind in the U.S. The thinking shared here reflects months of still-ongoing conversations with transportation planners, elected officials, industry, environmental groups, other state transportation departments and thought leaders across the country. In particular, the state's five metropolitan planning organizations (MPOs) - CDOT's partners in transportation planning - have provided countless hours of input. Our intent here is to describe the collective and draft work and thinking to date and elevate those issues that merit particular focus in the coming weeks and months as these rules and policies move forward. For that reason, the

adopted, final rule should be viewed as the official outcome of this process.

This paper also discusses the broader context for this effort. Making progress towards the transportation targets will also require actions by other agencies and across a number of areas, such as ongoing focus on the medium and heavy duty truck sector, and contributing to the development of post-2025 light duty vehicle standards. This sector encompasses the millions of individual choices people make every day that have an impact on climate, and the variety of strategies outlined below are all collectively necessary to achieve the state's ambitious and necessary climate goals. The policies contemplated by CDOT and the Transportation Commission are neither the first nor the last steps needed to achieve the totality of Roadmap goals for the transportation sector, and should be viewed as one step among many.

TABLE OF CONTENTS

I. Overview

II. Embracing the challenge of addressing greenhouse gas pollution at CDOT

II.A. Staffing and Governance

II.B. Electrification and Clean Vehicles

II.C. Expanding Transportation Choice and Multimodal Options

II.D. Improving Modeling and Planning Conventions within CDOT

II.E. Bringing more voices into the transportation conversation

III. Pollution Reduction Planning Approach

III.A. Tackling outstanding questions

IV. Conclusion

I. Overview

In response to the new legislative language in SB260¹ and months of stakeholder discussions on this concept, CDOT proposed in July of 2021 that the Transportation Commission (TC) undertake a formal rulemaking process for pollution reduction planning, which would amend the current state planning rules in order to reduce greenhouse gas pollution from transportation. This would separate targets for CDOT and MPO transportation plans. This rule will include establishment of processes to demonstrate and enforce compliance.

From a broader standpoint, this proposal helps the state make progress towards its legislatively adopted GHG reduction goals² and fulfill a key recommendation from the <u>Greenhouse Gas</u>

<u>Pollution Reduction Roadmap</u> to reduce vehicle miles traveled by "Integrat(ing) State GHG

Pollution Standards and Analysis in Regional, and Statewide Plans." Altogether, the Roadmap

¹ SB260 spells out statutory requirements for the TC to adopt procedures and guidelines requiring the Department and Metropolitan Planning Organizations (MPOs) to "[i]mplement relevant rules and regulations issued pursuant to <u>Section 25-7-105"</u> (CRS) and "[o]therwise reduce greenhouse gas emissions to "help achieve the statewide greenhouse gas pollution reduction targets established in <u>Section 25-7-102 (2)(g).</u>"

² The 2019 Climate Action Plan to Reduce Pollution (HB 19-1261) set a series of statewide greenhouse gas reduction goals (at least 26% in 2025, 50% in 2030 and 90% in 2050).

includes nine recommendations for the transportation sector, including improving the performance of light, medium, and heavy duty vehicles, transportation demand management, and incentivizing smart local land use, electrification infrastructure and fleet turnover. The sum of emissions reductions from all of these strategies, once fully developed, would be designed to add up to the 2030 transportation sector targets set in the Roadmap and to align with the 2050 goals adopted in HB 19-1261.

The 9 recommendations put forth in the Greenhouse Gas Roadmap are:

- 1. State GHG pollution standards for transportation plans.
- 2. Trip reduction/Transportation Demand Management (TDM) requirements and encouraging telecommuting for large employers.
- Clean trucking strategy with multiple components including infrastructure investments, incentives for fleet turnover, and evaluation of regulatory options.
- Secure new revenue to fund infrastructure and incentives to transition to electric cars, trucks, and buses.
- Offer incentives for land use decisions by local governments that reduce vehicles miles traveled, reduce GHG and other pollutants, and support greater access to housing near jobs.
- 6. Indirect source standards for some types of new development.
- Expand public transit, including front range rail and RTD completing the statutorily required Fastracks system that voters passed in 2004.
- 8. Develop an EV Equity study to ensure access to EV's for all Coloradans.
- Provide input into development of new clean car standards by both the federal government and for state-based standards.

The Transportation Commission rule would focus on the connection between public sector-funded transportation projects and vehicle travel; namely that what we build, combined with the emissions of vehicles themselves, influences driving patterns and commensurate GHG pollution. As this briefing paper will discuss, this connection is exceedingly complex in practice, particularly given the number of independent actors -- namely every traveler and vehicle owner-who have discretion over their personal travel choices and will not be governed by this rule and policy. Thus, the rules must isolate what role state and regional governments play in affecting travel through decisions about where and how to build infrastructure. Upon completion of this rule, Colorado will become only the second state in the nation to establish GHG-related reduction requirements on transportation planning--and the first in the Intermountain West. Colorado's policy would be unique in structure, leveraging the competencies and authorities of specific institutions that govern transportation planning within the state.

Given the intricacies involved with establishing this largely unprecedented rule and the importance of doing so in a manner that reflects the Colorado Way, there are a number of key details of particular importance in this rule: what the pollution standards should be for the state and regions; the precise mechanics of how the compliance and enforcement cycle should

operate and the underlying dynamics between the two relevant agencies (CDOT and CDPHE) and commissions (TC and AQCC); initial implementation timelines; and -- importantly -- the accounting for specific policy choices and mitigations within project plans.

This document seeks to address all of these key details and other related considerations as this process moves forward.

II. Embracing the Challenge of Addressing Greenhouse Gas Pollution at CDOT

In 2020, transportation surpassed electricity as the leading source of GHG pollution in Colorado. In recognition of the importance of this issue, the Colorado Department of Transportation (CDOT) and the Transportation Commission have embarked on a massive undertaking over the last two years to reimagine the Department's approach to clean transportation, working in tandem with the Colorado Energy Office (CEO), the Colorado Department of Public Health and the Environment (CDPHE), local partners, and stakeholders across the transportation sector. These changes are reflected in areas including **staffing and governance**, **enhanced focus on electrification and clean vehicles**, **expanding transportation choice and multimodal options**, **and undertaking significant improvements to modeling and planning conventions within the Division of Transportation Development**. Importantly, these efforts go hand in hand with an enhanced focus on improving community outreach across the state, and in disproportionately impacted communities, to ensure that Coloradans voices are represented in the choices that we make and the priorities that we establish as a Department.

II.A. Staffing and Governance:

In order for CDOT to equip itself as an organization to address today's challenges, we must prioritize them within the organization. Within the Department, the last few years have brought significant improvements towards integrating air quality and climate considerations throughout the organization—as we strive to improve the quality and efficiency of departmental output overall and across disciplines.

Two years ago, CDOT established the Office of Innovative Mobility (OIM), which integrates the Department's multimodal efforts through the Division of Transit and Rail with an emerging focus on incorporating electrification and other zero emissions vehicles into our system and equipping our infrastructure to accommodate them. This office reports directly to the executive director. OIM has recruited new leadership to elevate the role of DTR, along with expanding expertise on electrification and mobility choices.

The Division of Transportation Development (DTD), which houses CDOT's planning and modeling functions as well as its research arm, has also strengthened its institutional capacity, both overall and with particular respect to the environmental impacts within CDOT's influence. New leadership within the research division has made air quality a priority, including instituting a new air quality monitoring program to test state of the art technology for measuring pollution in communities living adjacent to the highways. Moreover, DTD has hired the Department's first ever GHG specialist, and an expert to focus on partnering with local communities to more fully

contemplate land use implications when designing infrastructure projects across the state.

Importantly, most of CDOT's work "on the ground" takes place in our five planning regions, all of which have strengthened their capacity to integrate multimodal factors into project plans -- with several regions bringing on specialists in areas like transit and multimodal planning. Indeed, improving our air is an all-of-CDOT effort that requires technical capacity and collaboration across the organization.

MPO Staffing

Just as CDOT needs to equip itself to meet the GHG challenge, the MPOs may need to make adjustments in their planning process. Each MPO is different and each has their own unique challenges based on the land area they serve, funding and staffing levels and the industries that make up their region's overall economic base. CDOT will continue to be a good partner to the MPOs and provide technical assistance, data and partnering opportunities that is appropriate in the context of that region's unique needs. Denver will have different needs then Pueblo and CDOT will continue to be nimble to provide the appropriate assistance to each region.

II.B. Electrification and clean vehicles:

Colorado has a lot to gain from electrifying the transportation sector because of the rapid gains we are making with decarbonizing our electrical generation systems, which results in vehicles that are both cleaner today and will become cleaner over time as more renewable sources are added to the grid. Electrification of vehicles can also provide reliability benefits to the grid by spreading peak loads over a longer period of the day, making use of excess renewable energy resources that are currently curtailed, and potentially - as technology develops - serving as flexible and resilient energy storage by sending electricity from vehicles back to the grid at times when it it most needed.

One key advancement in 2019 was the exploration and eventual adoption of a ZEV standard, through AQCC's Colorado Low Emission Automobile Regulation³, with Colorado becoming the first state in more than a decade and the first non-coastal state to do so and the first ever to do so with support from the auto manufacturing industry. The rule, which included incentives for early action, has helped motivate manufacturers to focus on making ZEV stock available to Colorado consumers faster. CDOT played a key role in securing the negotiated agreement of the auto industry for our ZEV rule.

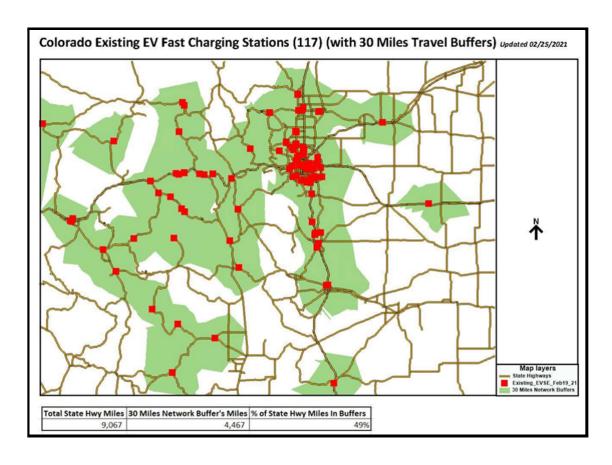
In addition to supporting greater vehicle choice for Coloradans via the ZEV standard, CDOT is also collaborating with its partners to invest in charging infrastructure that fills geographic gaps that exist in the charging network. Some areas of particular focus include the electrification of the state's 26 Scenic & Historic Byways as well as other rural and recreational destinations such

-

³ 5 C.C.R. § 1001-24, Part C.

as state parks, ski resorts, trailheads, and the like. These investments play multiple roles: providing "range confidence" for drivers to support greater EV adoption, fostering local economic development for smaller communities <u>seeking EV tourism</u> and bringing charging options to areas less likely to see private investment in the short-term. On a regional scale, CDOT also actively participates in planning coordination with our 7 neighboring states via the REV West Partnership as a means of fostering more seamless EV charging for interstate travel across the Intermountain West.

Separate from the passenger vehicle market, CDOT also works closely with transit agencies across the state to support the electrification of their fleets, from planning and education to vehicle purchases, charging equipment installation, and sharing of data and best practices. Since 2019 CDOT has awarded more than \$21 million in Volkswagen Settlement funds to 10 agencies for the purchase of 39 electric buses statewide while providing training and support to many other fleets beginning their transition process. Senate Bill 260 adds ongoing funding for this purpose through a new clean transit enterprise housed at CDOT. CDOT's goal is to deploy at least 1,000 transit ZEVs statewide by 2030.



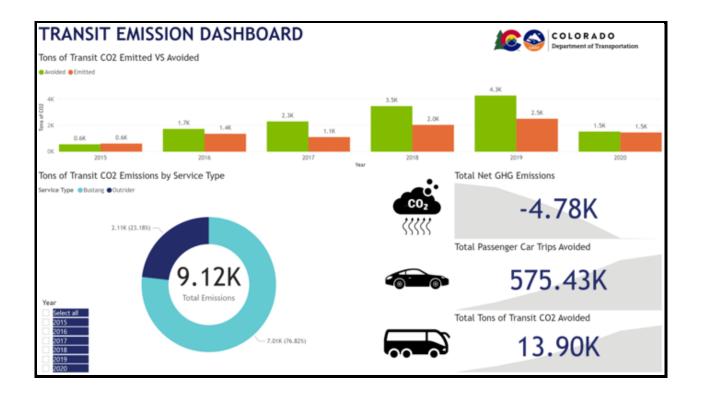
Additionally, CDOT staff is collaborating with CEO, CDPHE, the Colorado Motor Carriers Association (CMCA), and stakeholders across the state to develop a Clean Trucking Strategy that will reduce the GHG and air quality impacts of medium and heavy duty (MHD) freight and delivery vehicles while maintaining the important economic benefits that this sector provides. As part of that effort, Colorado signed an MOU with 14 other states and the District of Columbia to target a 30% MHD ZEV market share by 2030 and a full 100% MHD ZEV market share by

Finally, it is important that CDOT leads by example in the realm of transportation electrification. The percentage of new alternative fuel vehicles ordered by CDOT for our own fleet has continually increased from FY18 to today, with more than 90% of the 61 FY20 vehicles ordered being alternative fuel or electric, and many of them replacing half ton pickup trucks. With the FY21 vehicle order, 41% of the CDOT light duty fleet will be compressed natural gas (CNG), Hybrid, plug-in hybrid electric vehicles (PHEV), or EV. In terms of medium and heavy-duty vehicles, CDOT Maintenance & Operations has purchased 9 plug-in hybrid electric aerial/lift trucks that reduce idling when the vehicles are working on signs, bridges, lights and other structures. CDOT is also in the process of procuring and piloting 2 electric street sweepers partially funded through VW Settlement grants, as well as exploring opportunities for acquiring all-electric pickups as they begin to enter the market.

II.C. Expanding transportation choice and multimodal options:

As in the electrification sphere, there has been a significant transformation in how CDOT supports multimodal options throughout the state. At a leadership level, CDOT created the Office of Innovative Mobility and brought the existing transit division under senior leadership. A primary focus area has been building upon the existing success of the Bustang network, and there is a real strategy behind the development of this transit option that is only growing its appeal for possible users; it is not an accident that Bustang's farebox recovery and popularity are so strong.

CDOT is not only maintaining its existing high-quality transit service, but also going further with expanded Bustang-Outrider service to four new routes. This effort complements the buildout of new and expanded mobility hubs along I-25 that will foster multimodal connections between Bustang routes and local transit services while laying the groundwork for future Front Range Passenger Rail service. From a data and performance tracking standpoint, CDOT is also currently developing a "transit emissions dashboard" to track GHG emissions from our Bustang and Outrider commuter services and how emissions decrease with increased ridership and eventual electrification of the vehicles. CDOT expects to expand the dashboard to include non-CDOT transit services over time.



Over the last year, CDOT also launched multiple efforts supporting main streets throughout the state, through a first of its kind effort to bolster active transportation and outdoor commerce on state and local roads that anchor communities. The <u>Safer Main Street program</u>, focused on the Denver metropolitan area, awarded about \$60 million to more than 30 capital infrastructure projects focused on improving the safety of urban arterial roads. Statewide, the <u>Revitalizing Main Streets Program</u> has awarded close to \$6 million to more than 100 projects statewide that range from fixing sidewalks, to improving lighting for pedestrians, to helping cities and towns implement safety barriers for outdoor commercial space on roadways. This successful program received an initial \$30 million as part of state stimulus, and CDOT is evaluating applications for forthcoming awards. Moreover, SB260 included future funding to ensure that this important program continues.

CDOT is also one of several agencies focused on reducing emissions through Transportation Demand Management (TDM) — by providing incentives, supporting strategic planning, and leading by example. This past year, the new CanDo Telework Grant awarding \$234,000 for 41 projects to local governments and non-profit organizations to support teleworking both during the pandemic and over the longer-term.

CDOT has taken a variety of planning measures including completed Phase 1 and Phase 2 of the State TDM Plan, which assessed various strategies for their return on investment and found telework and vanpools to be the best performance. Staff have also updated the State TDM website, developed a new Healthy Communities Coordinator position to support TDM projects and programs, and implemented many of these strategies during the construction phases of the Grand Avenue Bridge replacement in Glenwood Springs and I-25 Gap project in Douglas

County, among others.

Finally, CDOT is committed to GHG emissions reductions within our own operations and to the extent possible for our contractors. The new Flexible Work Arrangement Policy Directive makes working from home for our staff 2 to 3 days a week the "norm" instead of the exception. For days when employees are working in CDOT offices, internal employee TDM-Transportation Demand Management efforts including the "Reboot Your Commute" program encourage biking, walking, carpool, vanpool, and transit for the return to work this summer.

II.D. Improving modeling and planning conventions within the department:

The Department has embarked on, and continues to advance, significant improvements in planning and modeling conventions. These continue to evolve and will be complemented by further improvements and steps to codify best practices.

Planning elements including NEPA and 1601: SB260 established new requirements for environmental studies on large projects. Many of these requirements, including additional modeling and monitoring for air quality, are already being implemented on CDOT's largest projects. CDOT is modeling additional metrics such as fine particulate matter (PM2.5) and induced demand for major projects currently underway, and such analysis will become a consistent expectation in project reviews moving forward. CDOT is also exploring advanced mitigation to proactively identify ways to offset negative impacts of projects, as well as include elements that yield positive benefits for the community during construction and beyond. In the spirit of these efforts, CDOT is also improving internal policies, such as requiring for the first time that communities follow the Department's process for approving new interchanges, which includes consideration and incorporation of transportation demand management strategies. This may be an area for future consideration given Colorado's rapid growth and the impact of new interchanges on VMT and GHG emissions.

Improving Travel Modeling: For the last several years, CDOT has worked to develop Colorado's first-ever statewide travel model, which has included building out a travel forecasting team. A key point in this process was the choice between available travel model structures and software, selecting the newer "activity-based model" (ABM) form over the older and more traditional "trip-based model" form; CDOT adapted the ABM used at DRCOG, expanding it to statewide scale. While the ABM form is becoming common in large metropolitan areas across the US, very few statewide models have yet been built using this structure, which is important for evaluating factors like induced demand and the benefits of active transportation. The advantage of the ABM form is that it includes a much more detailed depiction of both land use and person/household characteristics than does the trip-based form, permitting ABMs to be sensitive to numerous factors that are known to have significant effects on travel choice. This will become a powerful tool for CDOT's future analysis of its efforts to reduce GHG emissions. CDOT recognizes that each MPO has different modeling capabilities and we are working with MPO staff to determine how CDOT can support access to CDOT's model or upgrades to the MPO's

own tools.

CDOT's ABM provides capabilities that are crucial to the GHG analysis now on-going, including:

- Induced demand analysis: CDOT's model permits a thorough evaluation of the effects of roadway capacity expansion on the amount motorists choose to drive, and thus the subsequent impact on GHG emissions.
- Explicit inclusion of walking and biking in the set of modes available for any given trip (older trip-based models as a rule do not include these modes).
- Direct estimates of whether employees work from home or at another location.
- Depiction of household and employment locations at a high level of detail, greatly enhancing CDOT's ability to evaluate the effect on travel demand of various development patterns.
- Depiction of Colorado residents at a level of detail similar to that provided by the US
 Census, permitting sensitivity to demographic characteristics that affect people's
 travel choices (e.g., student and worker status, age, income, etc.)

II.E. Bringing more voices into the transportation conversation:

Transportation planning should be a conversation with our neighbors about the real needs that affect their daily lives. To that end, one of CDOT's first efforts during the Polis Administration was to undertake an unprecedented outreach process that took Department leadership and staff to all 64 Colorado counties, to discuss a wide range of transportation needs and priorities that should guide the Department's capital program.

Out of this process, the Department developed a ten year plan responsive to community needs -focused on key priorities like fixing roads and bridges across the state ("fix it first"), addressing
strategic choke points on the interstate system like Floyd Hill and I-270, and placing a new focus
on the safety and vitality of our main streets which carry multiple modes of transportation. The
plan also focuses on better integrating transit into critical corridors like I-70 and I-25 to
recognize that we can't build our way out of congestion and must take a multifaceted approach
to accommodate Colorado's ongoing growth. This includes increasing CDOT's Bustang transit
service and investing in new mobility hubs that increase access to transit and carpooling.

As we move to project implementation, and leveraging the relationships built out of the ten year plan process, CDOT is endeavoring to use new approaches to improve our communication with (and involvement of) communities around project planning and execution. This means coordinating early while projects are being designed, and remaining available for community input and dialogue as we manage tactical details such as construction schedules.

process. Out of the necessity created by COVID-19, CDOT adapted public meetings to a virtual format and found that pre-recorded "virtual open houses" — available in both English and Spanish — significantly expanded participation beyond traditional public meetings. By incorporating holistic virtual opportunities in our public outreach portfolio, community members who may not have the ability to join live events have an opportunity to thoroughly engage with the project team. CDOT established a standing advisory group for the I-270 project that includes key local government partners as well as neighboring jurisdictions, community leaders, business owners, environmental justice advocates, and others. The goal of this "steering committee" is to preview ongoing analysis, identify project concerns, and establish a communication network with local communities. Early mitigation implementation is running parallel to these outreach efforts — a dozen air quality monitors will be installed along the I-270 corridor before the project even begins construction.

As these types of improvements are refined, they must become part of CDOT's standard operating procedure, to ensure predictable and streamlined processes as well as consistent best practice. A key requirement in SB260 will help make this happen. The legislation requires the establishment of a new Environmental Justice and Equity Office within CDOT in order to "work directly with disproportionately impacted communities in the project planning, environmental study and project delivery phases of transportation capacity projects." CDOT is currently in the process of establishing this Office.

Working with Disproportionately Impacted Communities

Specific to the transportation planning rule, CDOT is looking at ways to involve disproportionately impacted communities, not only as part of the rulemaking process, but also through the mitigation of GHGs during project delivery, construction, and ongoing maintenance. This includes both targeted, small group discussions and open public meetings.

III. Pollution Reduction Planning Approach

The purpose of establishing greenhouse gas pollution standards for transportation plans is to determine and limit the GHG emissions which would result from the transportation system if the plan was implemented. Models (as described above) are used to assess the expected impacts that a project (or collection of projects) will have on consumer driving behavior. The goal is for planning level decisions to consider these impacts, among other considerations, and ensure that as state and MPO plans are updated and developed, projects within them fit within a fixed target when measuring cumulative emissions impacts.

From an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a nonattainment area are consistent with

("conform to") a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and DRCOG MPOs to demonstrate conformity with each plan adoption and amendment.

III.A. Major policy issues and outstanding questions:

The following section provides CDOT's thinking to date--as informed by stakeholder discussions--on the major policy issues integral to this rule. Specific elements, including definitions, compliance and enforcement will be established in the formal rulemaking. The following sections outline CDOT's current thinking based on pre-rulemaking stakeholder engagement.

How the pollution reduction planning levels will be determined: Unlike most air quality regulations, this rule cannot rely on known technological improvements (e.g. a scrubber or industrial process change) to determine reduction levels. Instead, we must estimate (i.e. model) the long-term change in travel decisions resulting from a series of potential infrastructure changes and investment decisions. A further challenge is selecting those decisions under the control of CDOT and the MPOs in order to align the reduction levels with the actions of those entities subject to the regulation and further to align the reduction levels to correspond to the upcoming planning cycles and corresponding modeling that is done as part of the plans. This timing is a key consideration that will be further discussed as part of the rulemaking.

To make this determination, CDOT modeled a series of scenarios to evaluate the impact of different measures or investments that CDOT or the MPOs could use to comply with the GHG reduction limits. These scenarios also will be used to calculate the potential costs and benefits of this rulemaking; a required component of the rule.

CDOT selected a number of scenarios to model and determine their impact on VMT and GHGs.

- Travel Choices
 - Additional sidewalk and bike lanes, increased work from home
- 2. Travel Choices + Transit
 - Increase in transit service and decrease in fares
- 3. Travel Choices + Transit + Land Use
 - Change in development patterns
- 4. Acceleration of Vehicle Electrification

As noted above, it is important to select scenarios that are under the control or influence of MPOs and CDOT. Land use is an area that merits particular consideration. MPOs and CDOT can play a role in incentivizing land use decisions that will be more efficient to accommodate

integrated transportation flows, reducing overall costs and increasing environmental and economic benefits and, perhaps more importantly, partner with local governments interested in transit-oriented development or infill. For example, as cities pursue downtown revitalization and housing, they also seek to add pedestrian features and calm traffic on state highways (which in many cases function as main streets). The traditional role of state highways are as corridors for freight and through-traffic; however more pedestrian-oriented state highways can attract infill housing development that could ultimately reduce greenfield development and the resulting congestion. For this reason, the impact of changes in land use is considered in these scenarios, and in the GHG reduction ranges in the proposed rule. However, it is important to note that land use changes occur slowly as new development or redevelopment occurs. Thus, the potential GHG reductions achieved by land use are best attributed to later target years (e.g. 2040) in the rulemaking.

Magnitude of the GHG Reductions: Based on the scenario development outlined above, CDOT envisions that this rule could reduce emissions by 0.5-1.5 million metric tons in 2030. CDOT anticipates providing a range of reductions for each compliance year in the rulemaking and soliciting input on these ranges. Ultimately, the rulemaking should ensure that the statewide and sub-regional emission reduction targets reflect a realistic upper range of feasible emissions reductions that CDOT and its partner MPOs can achieve. No one solution alone can address these issues - be it electrification or multimodal expansion - but a market basket of best practices and compliance options that can be suited to the project at hand can do so successfully. By working towards realistic but ambitious reduction totals, we can determine the realm of the possible and address the challenge before us.

Offset Measures: In order to maintain a stable and efficient transportation planning process, CDOT believes it is necessary to provide for the use of Offset Measures should a plan be unable to demonstrate compliance. Offset Measures (OMs) reduce GHG but are not "regionally significant" and are thus not included in the set of projects modeled for compliance. For example, offsets could include:

- Measures that reduce vehicle miles traveled, including new segments of sidewalk, or a connection to multi-use resources (e.g. neighborhood retail) that could decrease driving in that neighborhood.
- Operational measures that reduce emissions due to improvements to vehicles traveling through the system in the most emissions-efficient way (e.g. ramp metering).
- Features to facilitate clean vehicle turnover above and beyond what could be assumed to occur without the rule given other incentives for electrification. For example, a highway project along a key freight corridor might include targeted investments in heavy-duty charging to accelerate turnover of the rolling stock within that corridor, specifically. While it will be important to avoid "double counting" with other policies, this readiness for zero emission vehicles, especially

in the medium and heavy duty truck space, will be a critical need in future highway planning that this rule can and should accelerate.

Because these Offset Measures are expected to change over time, the draft rule will outline a process (likely a subsequent policy directive) for establishing an Offset Measure regime. This directive will include a list of approved Offset Measures, a "score" in terms of GHG reductions for different types of projects, as well as a clear evaluation process for how modeling/estimating for OMs should be conducted and approved -- including transparency measures -- to ensure a public conversation about that process as well as a resulting policy that can be nimble and iterative. This evaluation rubric could include metrics for assessing impact "hotspots" within residential neighborhoods, including potentially providing a higher level of credit to interventions based on community impact and health equity.

The Role of the Transportation Commission: As noted elsewhere in this paper, the approach contemplated in this paper responds to two recent pieces of legislation (HB19-1261 and SB21-260). Specifically, the passage of SB 260 establishes additional requirements on the TC in this space, which is reflected in the approach that is being developed.

In HB19-1261, now codified in part at §§25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" and that "many of these impacts disproportionately affect" certain disadvantaged communities." §25-7-102(2)(d), C.R.S. The Colorado General Assembly's updated GHG reduction goals are outlined in a footnote on Page 1. Section 25-7-105(1)(e), C.R.S., sets forth the framework for developing GHG abatement rules consistent with the statewide GHG pollution reduction goals in §25-7-102(2)(g), C.R.S. It is expected that the TC rule will, at the outset, set an ambitious target for the pollution reduction planning, under the assumption that this policy will account for a meaningful portion of sector-wide progress in total GHG reductions., but nonetheless be one of many policies contributing towards that goal. Colorado's transportation planning process is a cooperative process designed to coordinate regional transportation planning and is guided by statewide transportation policies set by CDOT and the TC and by the TC's Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions, 2 CCR 601-22 ("Statewide Planning Rules"). The TC's authority to promulgate and adopt the Statewide Planning Rules can be found in §43-1-1103(5), C.R.S., which requires the TC to promulgate rules and regulations governing state transportation planning. The TC also has broad rulemaking authority pursuant to §43-1-106(8)(k), which grants the TC the power to make all necessary and reasonable orders, rules and regulations in order to carry out its authority and duties.

The Role of MPOs: MPOs are necessary entities in this rulemaking given their federally-required role in transportation planning. Colorado's 5 MPOs have been close partners in developing this policy approach, providing CDOT regular and constructive feedback. CDOT will continue to work with the MPOs as the final details of the draft rulemaking are developed.

Listed below are several issues MPOs have raised to date:

- How to set statewide and regional GHG reduction levels without double-counting projects that appear in both CDOT and MPO plans.
- How to account for Colorado's rapidly growing population in setting GHG reduction levels.
- Differences in modeling capabilities across MPOs.
- Concerns about MPO ability to influence or change land use patterns.
- Importance of aligning analysis timing requirements with federal air quality staging periods (to prevent onerous, near continuous modeling burden).
- Applying enforcement provisions equally to MPOs and CDOT.

MPO Planning Factors

CDOT has a close working relationship with the State's Metropolitan Planning Organizations (MPOs). The MPOs are required to implement a performance-driven planning process that:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- (2) Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- (4) Increase accessibility and mobility of people and freight;
- (5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
- (6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- (7) Promote efficient system management and operation;
- (8) Emphasize the preservation of the existing transportation system;
- (9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- (10) Enhance travel and tourism.

Personal Choice: The Department recognizes that even the best model is imperfect, especially when modeling human behavior. Despite the efforts of CDOT, MPOs and transit agencies to build projects in ways that incorporate new technologies or offer additional travel and mode choice, individual Coloradans are ultimately in charge of how they get from point A to point B, and they may not behave precisely as the models predict. There is a rich and growing body of research on how humans interact with the transportation system including how travel decisions are made and the factors that influence the uptake of emerging and potential future mobility options. In general, people make travel choices based on travel time to their destination, cost and convenience, but different people assign different weights to these factors

and can also bring in additional preferences that reflect unique lifestyle choices, personal values and goals. Once travel preferences are established, they become ingrained habits that can be difficult to change. However, changes in life circumstances such as changing jobs, moving to a new home, having children, changes in health status or improvements to the transportation choices offered can trigger individuals to reassess travel habits. By expanding travel options, and designing projects in a way that incentivizes more efficient behavior including through a connection to sustainable land use, and by providing a wider variety of safe and convenient travel options in addition to driving an individual car, planners provide the opportunity for individuals to make different choices, but whether travelers actually shift into new modes of travel depends on which factors appeal to each unique traveler. This policy is focused on expanding options available to consumers.

Over time, as the state of the modeling practice improves in evaluating the many measures under consideration to reduce GHG emissions, CDOT's modeling tools will also improve in their ability to evaluate the effects of such measures. This is an important reason to include requirements in the rule to re-evaluate reduction levels-and adjust as necessary.

VMT as a Strategy: It is important to note that although VMT reduction is one strategy that can help to reduce GHG in the short-term, as more vehicles convert to electric technology, VMT is less of a factor in the creation of GHG emissions in the longer term. However, some stakeholders have suggested basing the emissions budget around a 10% reduction in VMT, a percentage discussed in the GHG Roadmap, or specifically making VMT the compliance mechanism of this rule. It's important to note that the metric of VMT, which was intended as a 10% reduction relative to business as usual in 2030, was included in a scenario as part of the GHG Roadmap to help achieve a future budget year emissions goals, but the percentage was never intended to be a required strategy for CDOT or the MPOs to achieve the GHG reduction levels. In fact, the proposed rule will show the combined impact of electric vehicles and reduced travel so that stakeholders can understand the varying influence these measures have over time. It's also important to note that this rule is not the only policy relevant to reducing VMT. Other measures such as the ETRP (trip reduction) rule, for example, are more relevant to the user side relative to the infrastructure itself.

Enforcement: Understanding how CDOT and MPOs comply with the pollution reduction planning standards will be complex and will require coordination over many years to come in order to ensure the modeling is reflecting the changes that are occurring in Colorado with respect to population, land use, and transportation electrification. Also, considering how CDOT and the MPOs factor in the cost of pollution reduction will be an important consideration. With significant public input, CDOT intends to recommend that the Transportation Commission (TC) develop an enforcement mechanism, likely related to the conditions and flexibility of federal funds that the TC approves for use by CDOT as well as those typically sub-allocated to MPO areas. There is significant precedent for tying the flexibility of federal aid highway funds to whether certain targets (such as road and bridge condition) are met. Many of the details around enforcement will be developed through the

rulemaking process.

IV. Conclusion and Next Steps

It is important to stress again that the Pollution Reduction Planning rule alone is not intended to achieve all of the emissions reductions identified in the Greenhouse Gas Roadmap for the transportation sector, and the Administration will concurrently advance policy dialogue in other areas, such as clean trucking, future car standards beyond 2025, additional incentives for compact land use and electric vehicle use, and major multimodal investments like Front Range rail, simultaneously with development of this policy. These efforts will require collaboration across multiple governing bodies with their respective expertise and authorities in order to achieve total Roadmap savings for the transportation sector. Each of these and additional policy tools will require rigorous review in assessing the impacts and efficacy observed over the years to come. Invariably, questions will require ongoing dialogue following this proposition and the creation of parallel CDOT policies, and the Department readily makes itself available for such conversations.

It is also important to note that this memo does not address the Air Quality Control Commission's role in measuring and confirming progress in the transportation sector, but is focused on briefing the TC ahead of their initiation of rulemaking specifically applicable to CDOT and sub recipients of transportation dollars. However, CDOT anticipates that the Air Pollution Control Division (APCD) will be responsible for verifying emission reductions and reporting along with CDOT to the AQCC on the determinations of the verification. Following the formal introduction of the TC rule, APCD staff will develop a proposed approach, in coordination with CDOT staff, for accomplishing verification. This verification process will be brought to the AQCC for consideration and will be memorialized in the form of a resolution adopted by the AQCC. The verification resolution will draw from the approach the APCD utilizes for verifying emission reductions from Clean Energy Plans overseen by the PUC.

CDOT staff will seek approval from the TC to officially commence a rulemaking to incorporate the new GHG standards into the statewide planning rules at their July meeting. If approved, the rulemaking could begin with a notice as soon as July 30, 2021. CDOT has updated its Stakeholder Engagement webpage, where stakeholders can sign up to be part of the rulemaking.



Rulemaking for 2 CCR 601-22, Statewide Transportation Planning Process and Transportation Planning Regions

Advisory Group

	Advisory Group	
ne	Organization	Email
	CDOT	
	Cenver Region Council of Governments	
	Boulder County	
	Club 20	
	Colorado Energy Office CEO	
	Colorado Department of Public Health and Environment- CDPHE	
	Vesa County	
	GVMPO-Grand Valley Metropolitan Planning Crganization	
	Alliance for Automotive Innovation	
	Climate Action, Sustainability & Resiliency, Denver	
	CDOT	
	colorado Forum	
	city of Denver	
	Colorado Motor Carriers Association	
	CDOT	
	pikes Peak Area Council of Governments, gransportation Comission	
	CDOT	
	CDOT	
	colorado Department of Public Health and Environment- CDPHE	
	rikes Peak Area Council of Governments	
	rueblo Area Council of Governments	
	emart Commute-Metro North, Transportation	
	ransportation Comission	
	CDOT	

CDOT Colorado Department of Public Health and Environment- CDPHE Summit Strategies North Front Range Metropolitan Planning Organizatio South West Energy Efficiency Project Regional Air Quality Council CDOT Colorado Contractors Association CDOT Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT CDOT CDOT CDOT CDOT CDOT	
Environment- CDPHE Summit Strategies North Front Range Metropolitan Planning Organizatio South West Energy Efficiency Project Regional Air Quality Council CDOT Colorado Contractors Association CDOT CDOT Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT CDOT CDOT CDOT CDOT CDOT	CDOT
North Front Range Metropolitan Planning Organizatio South West Energy Efficiency Project Regional Air Quality Council CDOT Colorado Contractors Association CDOT CDOT Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT CDOT CDOT CDOT CDOT CDOT	·
South West Energy Efficiency Project Regional Air Quality Council CDOT Colorado Contractors Association CDOT CDOT Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT CDOT CDOT CDOT CDOT CDOT	Summit Strategies
Regional Air Quality Council CDOT Colorado Contractors Association CDOT CDOT Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT CDOT CDOT CDOT CDOT CDOT	North Front Range Metropolitan Planning Organizatio
CDOT Colorado Contractors Association CDOT CDOT Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT CDOT CDOT CDOT CDOT CDOT	South West Energy Efficiency Project
Colorado Contractors Association CDOT CDOT Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT CDOT COOT	Regional Air Quality Council
CDOT CDOT Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT CDOT CDOT CDOT CDOT COOT	CDOT
CDOT Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT CDOT CDOT CDOT Colorado Contractors Association	Colorado Contractors Association
Denver Region Council of Governments Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT Colorado Contractors Association	CDOT
Denver Region Council of Governments CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT CDOT Colorado Contractors Association	CDOT
CDOT CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT Colorado Contractors Association	Denver Region Council of Governments
CDOT North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT Colorado Contractors Association	Denver Region Council of Governments
North Front Range Metropolitan Planning Organization Larimer County Phillips County CDOT CDOT Colorado Contractors Association	CDOT
Organization Larimer County Phillips County CDOT CDOT Colorado Contractors Association	CDOT
Phillips County CDOT CDOT Colorado Contractors Association	
CDOT CDOT Colorado Contractors Association	Larimer County
CDOT Colorado Contractors Association	Phillips County
Colorado Contractors Association	CDOT
	CDOT
Colorado Energy Office CEO	Colorado Contractors Association
	Colorado Energy Office CEO

Rulemak	ing for 2 CCR 601	-22, Statewid	le Transporta	tion Planning	Process a	and Transpo	rtation Planni	ng Regions
Advisory	Group							
	Advisory Group Meetings							
	Date	Time	Location					
	1/26/21	2:30-3:30pm	Virtual					
	2/19/21	12-1pm	Virtual					
	3/9/21	1-2pm	Virtual					
	3/23/21	11am-12pm	Virtual					
	4/6/21	1-2pm	Virtual					
	4/13/21	2:30-3:30pm	Virtual					
	4/20/21	1-2pm	Virtual					
	4/27/21	3-4pm	Virtual					
	6/21/21	1-2pm	Virtual					
	6/25/21	2-3pm	Virtual					
	7/13/21	4-4:30pm	Virtual					
	7/22/21	9:30-11am	Virtual					
	8/12/21	12:00-1:00pm	Virtual					



Shishido - CDOT, Natalie <natalie.shishido@state.co.us>

GHG Advisory Group Reconvening

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Wed, Jun 16, 2021 at 1:12 PM

Good afternoon GHG Advisory Group Members,

Thank you for your patience the past few weeks as we turned our attention to SB260. As many of you know the Bill passed, and is currently awaiting the Governor's signature. This legislation has important connections to the work this Advisory Group is undertaking, that we are looking forward to discussing more with you.

Also, in the interim the Transportation Commission (TC) has been very interested in taking an active role in this effort. CDOT is holding a workshop with the TC this afternoon to discuss the attached draft GHG Policy Paper, which staff just completed last night. We also want to discuss this paper with you all. Recognizing your busy calendars, we'd like to offer this group two meeting options to discuss the Policy Paper and next steps. (We will cover the same content at both meetings and will send an electronic calendar invite.)

The two options are the following:

Monday, June 21st 1-2pm

Friday, June 25th, 2-3pm

Thanks again for your continued involvement and patience as we chart new waters here with this policy. We look forward to speaking with you all next week. Please let us know if you have any questions.

Aloha,

Theresa

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist



P 303.757.9977 2829 W. Howard Pl., Denver, CO 80204 theresa.takushi@state.co.us | www.codot.gov Final-Transportation GHG Briefing Memo June 16 2021.pdf 275K



Shishido - CDOT, Natalie <natalie.shishido@state.co.us>

GHG Advisory Group This Afternoon - Same Information as Monday

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Fri, Jun 25, 2021 at 11:25 AM

Good morning GHG Advisory Group Members,

We just wanted to remind everyone that the meeting this afternoon at 2pm will cover the same information we discussed on Monday.

Please join us if you were not able to join the discussion on Monday.

Thank you,

Theresa

2pm This Afternoon Join Zoom Meeting

https://cdot.zoom.us/j/93105519480?pwd=dlh6aTJhbGpQQk9tZkNRWUQwMHdwdz09

Meeting ID: 931 0551 9480

Passcode: 605143 One tap mobile

+12532158782,,93105519480#,,,,*605143# US (Tacoma)

+13462487799,,93105519480#,,,,*605143# US (Houston)

Dial by your location

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 669 900 6833 US (San Jose)

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

+1 646 558 8656 US (New York)

Meeting ID: 931 0551 9480

Passcode: 605143

Find your local number: https://cdot.zoom.us/u/aczFluDXpJ

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist



P 303.757.9977

2829 W. Howard Pl., Denver, CO 80204 theresa.takushi@state.co.us | www.codot.gov





Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

GHG Advisory Group - Request for Comments on GHG Briefing Memo by Friday, July 2nd

1 message

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Mon, Jun 28, 2021 at 4:40 PM

Dear GHG Advisory Group Members,

Thank you for your continued engagement and participation, we value your thoughts and feedback.

As we mentioned at our meetings last week, we encourage your comments and clarifications to the <u>GHG Briefing Memo</u> which we discussed last week. If you can send any comments to us by this Friday, July 2nd we would really appreciate it.

On Friday a question came up regarding the rulemaking schedule that CDOT follows - we have attached a pdf to this email describing that process. We can discuss more specifics of the timeline at our next meeting - which I hope to get on your calendars for next week.

Please reach out if you have any questions.

Thank you again - we value your time in this group.

Aloha,

Theresa

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist



P 303.757.9977 2829 W. Howard Pl., Denver, CO 80204 theresa.takushi@state.co.us | www.codot.gov

perm_rulemaking_process_flowchart.pdf 103K



Shishido - CDOT, Natalie <natalie.shishido@state.co.us>

GHG Briefing Memo

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Wed, Jul 14, 2021 at 9:49 AM

Good morning,

Attached is the updated GHG Briefing Memo that will be discussed by the Transportation Commission later today.

Thank you.

Aloha,

Theresa

.....

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist



P 303.757.9977

2829 W. Howard Pl., Denver, CO 80204 theresa.takushi@state.co.us | www.codot.gov



1/1



Shishido - CDOT, Natalie <natalie.shishido@state.co.us>

GHG Advisory Group - Rulemaking Schedule

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Mon, Jul 26, 2021 at 5:55 PM

Dear GHG Advisory Group Members,

We wanted to inform you of a slight change in schedule - in order to have more time for discussion with our stakeholders on this important rule. Please note the revised date to publish the proposed GHG Rule with the Secretary of State will now be August 13th.

Thank you for your continued participation and engagement.

Aloha,

Theresa



Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist



P 303.757.9977 2829 W. Howard Pl., Denver, CO 80204 theresa.takushi@state.co.us | www.codot.gov





Transportation Greenhouse Gas Advisory Group January 26, 2021



Today's Focus

- 1. Overview of Colorado's climate legislation/policy framework
- 2. Proposed rules and policy for transportation sector
- 3. Outreach Approach
- 4. Role of Advisory Group



Colorado's Efforts To Address Climate Change

HB-1261

- In 2019, the Colorado General Assembly passed House Bill-1261, the *Climate Action Plan to Reduce Pollution*.
- HB 1261 established the following GHG reduction targets:
 - 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels

GHG Roadmap

- To ensure that Colorado continues to reduce emissions to meet greenhouse gas targets, reduce local air pollution, and realize the full economic benefits of the transition to a clean energy economy.
- Draft document released in Sept 2020; final in Jan 2021.
- https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reductionroadmap



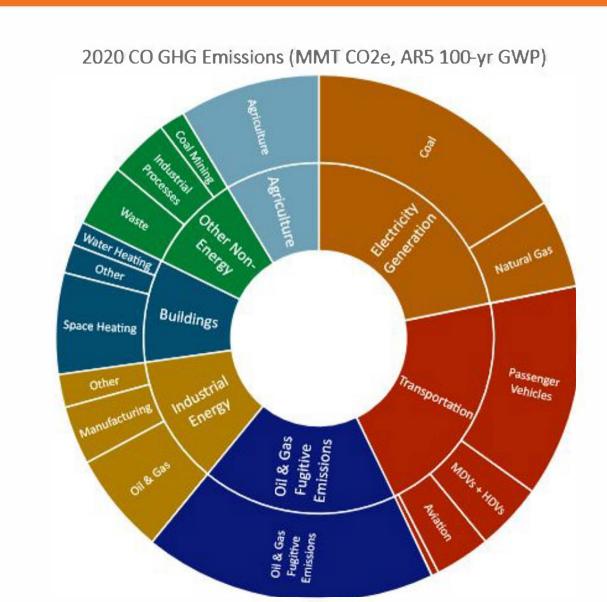
Largest GHG Emissions Sources

2005 Largest Emission Source:

- 1. Electric power
- 2. Transportation
- 3. Oil & Gas
- 4. Buildings

2020 Largest Emissions Sources

- 1. Transportation
- 2. Electric power
- 3. Oil & Gas
- 4. Buildings

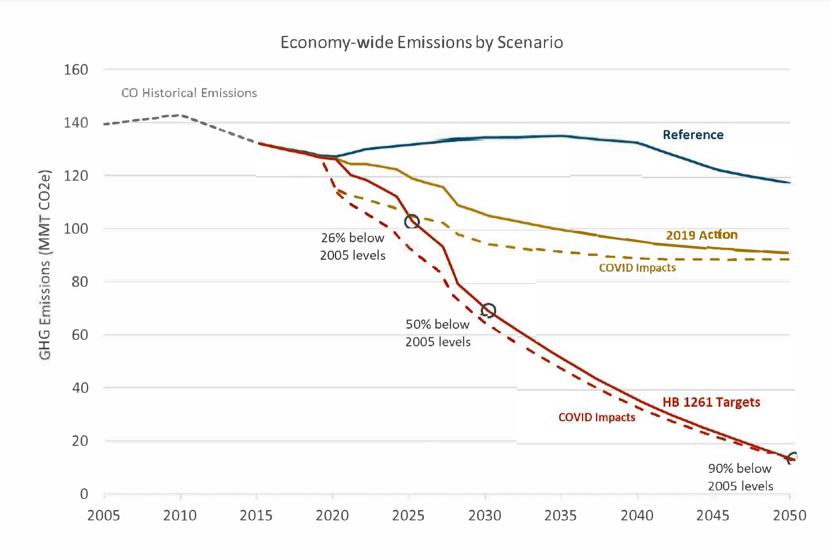




Colorado GHG Pollution Over Time

SIGNIFICANT PROGRESS UNDERWAY & MORE ACTION NECESSARY

- As a result of the state's actions to date, we are on a trajectory to achieving approximately half the level of emission reductions to meet the 2025 and 2030 goals.
- Additional strategies can advance co-benefits such as reducing local air pollution, generating economic growth, advancing environmental justice and equity.





Near-Term Transportation Actions included in the CO GHG Roadmap

Infrastructure (Planning & / Projects) GHG pollution standards for transportation plans

- Indirect source standards for some types of new development.
- Trip reduction/TDM requirements and encouraging telecommuting for large employers

Human Factors (Behavior Change)

- Expansion of public transit, including setting the stage for Front Range Rail
- Incentives for land use decisions by local governments that reduce pollution and support greater access to housing near jobs.
- Clean trucking strategy including evaluation of Advanced Clean Truck
 ZEV standards
- New revenue mechanism to fund infrastructure and incentives to transition to low and zero emissions cars, trucks and buses

Mobile Sources (Vehicles)



Proposed Transportation Rule & Policy Directive

AQCC Rulemaking

- Integrate GHG pollution standards and analysis in regional and statewide transportation plans: GHG Pollution Standard
- Reduce SOV commuter trips: <u>Large Employer Trip Reduction</u>
- Both included in single rulemaking via the CDPHE/Air Quality Control Commission process
 - May draft; August final

CDOT Policy

• In parallel, CDOT will develop implementation guidance via a policy directive specific to GHG Pollution Standard



GHG Pollution Standard (GPS) Rule Approach

Initial Thinking

- Set a GHG "budget" for transportation plans (statewide and regional).
- Phased implementation with initial focus on state and certain MPO plans.
- Exempt state of good repair/maintenance projects.
- CDOT guidance will focus on the practicalities of how the policy translates into specific project-based requirements.
- Inclusion of other measures to meet budget.



Planning: What Projects Do We Choose to Invest In?

Transportation Guidance and Regulations that Relate to Greenhouse Gas Emissions

- PD-14
- State Planning
- Federal Title 23
 Planning Regulations
- Colorado Administration
- Operations and Maintenance: How do we consider GHGS as we take care of our system?
 - Greening Government
 - Use of an electric powered fleet and maintenance

- 2 Environmental Analysis & Impact: Which solution/alternative do we pick?
 - Federal and State Environmental Regulations

- 4 Project Construction: How do we Consider GHGs During Construction?
 - Anti-idling requirements and enforcement
 - Enforcement of contract requirements relating to materials and equipment
 - Operational decisions (e.g. use of a conveyor belt to reduce dump truck trips)

- Project Design & Contracting: What restrictions and requirements do we ask our contractors to follow?
- Contract and procurement requirements.
- Choice and amount of landscaping (trees, native plants)

Federal Environmental Laws/Regs National Environmental Policy Act

- CEQ and FHWA Guidance on Implementing NEPA
- CDOT NEPA Manual
- Clean Air Act
- Transportation Conformity
- Clean Water Act
- Endangered Species Act
- Title VI
- Environmental Justice

State Environmental Laws/Regs

- HB 1261 and implementing regulations (TBD)
- CDOT Environmental Stewardship Guide
- Air Quality Project-Level Analysis Guidance (AQ-PLAG)



Stakeholder Involvement and Public Outreach

- Extensive and grassroots; modeled on CDOT's development of 10-year plan. Except...during a pandemic
 - Series of virtual, regional discussions around the state at at least two junctures (now/pre-rule and prior to draft)
 - Localized discussions to ensure they are small and familiar enough venues for candid dialogue rather than having the feel of overly formal public meetings
- Multiple-agency involvement with virtual public meetings and focused equity conversations
 - First meeting; January 28th at 6pm
 - https://zoom.us/j/96574649811?pwd=ZTN6Qzcxd2NTYnFxTnhiek9Z ODBWUT09



Role of Advisory Group

Help CDOT reach--and receive input from-- a broad range of stakeholders across the state

Advise on rule and policy directive; providing:

- Input on will might work and what won't
- Regional perspective
- Scope out "what ifs"



Two Transportation Rules Air Quality Control Commission Rulemaking in 2021

Transportation GHG Pollution Standard & Large Employer Trip Reduction

- What are your questions?
- What concerns do you have?
- What challenges do you see as important to address when developing these rules and policies?
- Who should we reach out to for regional discussions?



January 28: Public Meeting

February 1-15: Regional Meetings

Feb 15-19: Next Advisory Group Meeting



Contact Information

Theresa Takushi GHG Climate Action Specialist

theresa.takushi@state.co.us

303.757.9977



Extra Slides (if needed)



Trip reduction/TDM requirements and encouraging telecommuting for large employers

- Utilizing incentives, marketing, and other creative tools to encourage non-SOV travel, is a core strategy to reducing VMT.
- In light of COVID-19, a specialized focus on making teleworking more permanent will be essential in promoting a longer-term shift towards alternatives to driving.
- One recommended strategy is a trip reduction requirement for large employers, which would require employers over a size threshold to develop TDM programs for their employees













CDOT's Tools to Achieve GHG Goals

Mobile sources (vehicles)









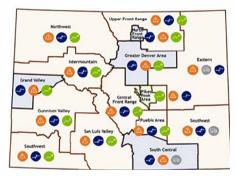




Potential action steps include:

- New regulatory actions
- Charging infrastructure
- Consumer education
- Fleet replacements

Infrastructure (planning and projects)



Potential action steps include:

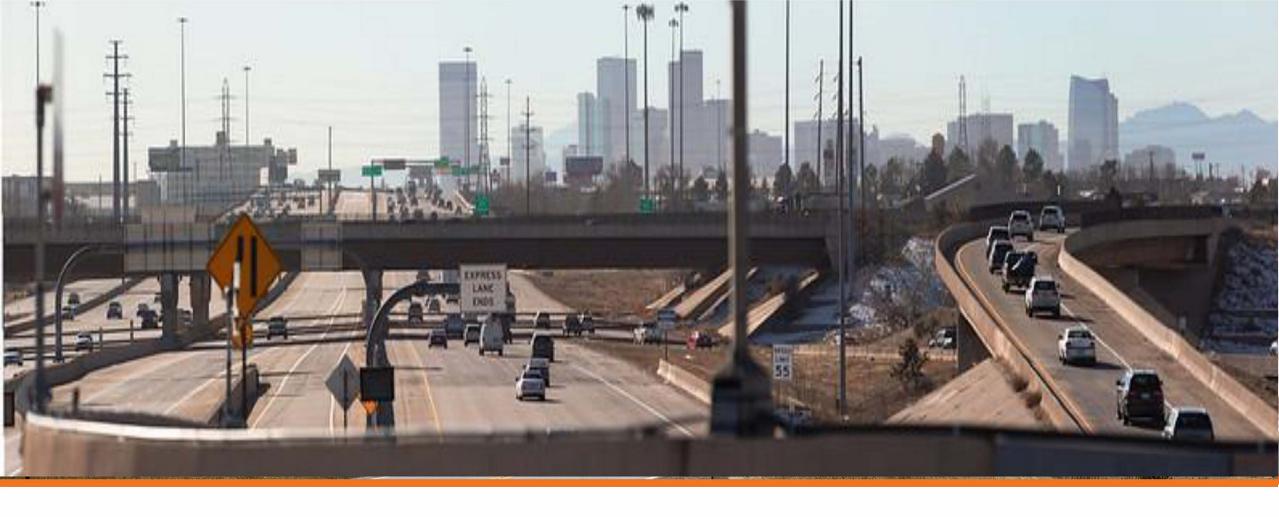
- GHG budgets
- NEPA processes
- Green construction
- Multimodal funding
- Land use

Human factors (behavior change)



Potential action steps include:

- Managed lanes/pricing strategies
- Voluntary/mandatory TDM (marketing and tools to support mobility options)





Transportation Greenhouse Gas Advisory Group - Meeting 2 February 19, 2021



Today's Focus

- 1. Welcome
- 2. Developments since last meeting
- 3. Feedback from Regional Meetings
- 4. Proposed rule How do we set a statewide budget?
- 5. Next Steps



Recap: Proposed Transportation Rule & Policy Directive

AQCC Rulemaking

- CDPHE/Air Quality Control Commission process
 - May draft; August final

CDOT Policy

Policy directive specific to GHG Pollution Standard



Developments Since Last Meeting

Regional Listening Sessions - 4 of 5 completed

Several smaller, requested presentations to stakeholder groups

- RAQC, February 5, 2021
- E-470/Colorado Motor Carriers, February 10, 2021
- Environmental Groups Sierra Club, Conservation Colorado, SWEEP, Western Resource Advocates, February 9, 2021
- STAC, February 12, 2021
- Transportation Commission, February 18, 2021
- PPACG TAC, February 18, 2021

Focusing this process on planning rule only.

• Giving the complexity, different stakeholders, and different lead agency, CDOT and this process will focus on the planning part of the rulemaking while CDPHE will take the lead with the RAQC on the large employer trip reduction rule.



Regional Meeting Feedback

- Feb 16 10:30-11:30 (Region 1 Denver Metro Area)
- Feb 16 1-2pm (Region 4 Northeast)
- Feb 18 3-4pm (Region 2 South/SouthEast)
- Feb 19, 9-10am (Region 3 Northwest)

Main areas of comment include the following:

- Rural and regional differences
- Incentives vs. penalties (carrots vs. sticks)
- Equity considerations
- Enforcement
- MPO roles and responsibilities
- Clarification on capacity projects
- · How this impacts the 10 year plan
- Cost concerns



Setting the GHG Budget

- The concept for this policy is based on comparing projected emissions from a set of projects within a transportation plan against a numeric "budget".
- The first step is to figure out what this budget needs to be at the statewide level; balancing our GHG goals and achievability.

NEAR TERM ACTIONS TO REDUCE POLLUTION			
Sector	Revised 2005 Baseline (MMT CO2e)	2025 Target (MMT CO2e)	2030 Target (MMT CO2e)
Electricity	40.28	21	8
Oil and Gas	20.17	13	8
Transportation	30.71	23	18
Residential, Commercial, Industrial Energy Use	24.65	26	20
Other	23.42	19.9	15.6
Total	139.22	102.9	69.6
Percent Reduction		26%	50%

Page XI Colorado GHG Pollution Reduction Roadmap



Using Emissions Models to Project GHG Emissions

- Technical Team meeting weekly (CDOT/CDPHE/RAQC)
 - Statewide Travel Model (CDOT)
 - VMT per roadway
 - MOVES Model (CDPHE)
 - Takes VMT and calculates GHG emissions using the following information
 - Types of vehicles
 - Number of electric vehicles in the fleet(CEO)
 - Speeds
 - E3 Model Used for the roadmap



GHG Pollution Standard - Proposed Rule Cont.

- Projections Run scenarios to show what types of measures will get us GHG reductions
 - More EV penetration in the market
 - Decrease VMT due to work from home, multimodal options
- Draft rule and policy by end of March
 - Rule:
 - Outline Budget
 - Policy:
 - Offer menu of options to reduce emissions across the transportation lifecycle
 - Calculate GHG reductions



Opportunities for GHG offsets in the Lifecycle of Projects

Planning: What Projects Do We Choose to Invest In?

• PD-14

State PlanningFederal Title 23Planning Regulations

Transportation Guidance and Regulations that Relate to Greenhouse Gas Emissions

- Colorado Administration
 Goals
- Operations and Maintenance: How do we consider GHGS as we take care of our system?
- Greening Government
- Use of an electric powered fleet and maintenance

- Environmental Analysis & Impact: Which solution/alternative do we pick?
 - Federal and State Environmental Regulations

- Project Construction: How do we Consider GHGs During Construction?
 - Anti-idling requirements and enforcement
 - Enforcement of contract requirements relating to materials and equipment
- Operational decisions (e.g. use of a conveyor belt to reduce dump truck trips)

- Project Design & Contracting: What restrictions and requirements do we ask our contractors to follow?
- Contract and procurement requirements.
- Choice and amount of landscaping (trees, native plants)

GHG Mitigation Opportunities can be outlined in the Policy and quantified.

These may include:

- Anti-idling measures during construction
- Green construction opportunities
- Electric fleet/maintenance equipment



Upcoming Meetings

Complete first round of regional meetings

- Feb 22, 1:30-2:30 (Region 5 Southwest)
- Feb 26, 1-2pm (PPACG area)

Individually Requested Meetings/Presentations

- DRCOG Work Session, March 3, 2021
- DRCOG Special TAC, March 22, 2021
- Colorado Contractors Association

CDPHE Public Listening Session - February 25, 2021





Other Stakeholder groups

- Environmental Groups
- Technical Group (once we have the budget/numbers)
- Others?

April - another opportunity for Regional meetings

Interested stakeholders? Please direct them to our website:

https://www.codot.gov/programs/environmental/greenhouse-gas/ghg-transportation-policy-rulemaking-process

Next Advisory Group

• March 9, 1-2PM

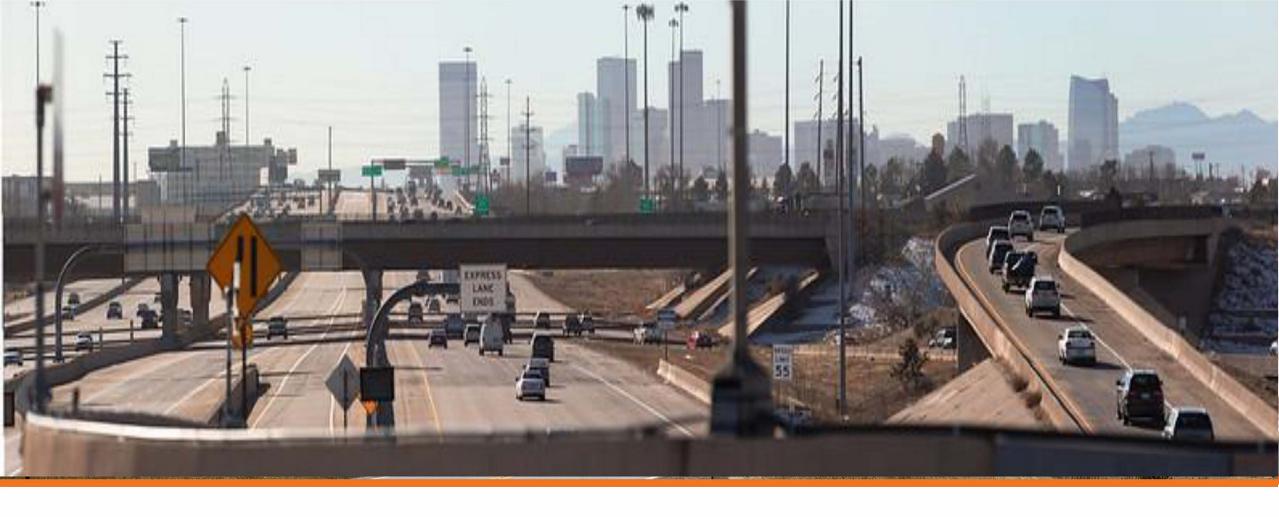


Contact Information

Theresa Takushi GHG Climate Action Specialist

theresa.takushi@state.co.us

303.757.9977





Transportation Greenhouse Gas Advisory Group - Meeting 3 March 9, 2021

Today's Agenda



- 1. Updates on Regional and other Stakeholder Meetings
- 2. GHG advisory group survey results/feedback
- 3. Proposed rule outline/structure
- 4. Economic Impact Analysis Discussion
- 5. Upcoming Stakeholder Opportunities



Updates on Regional and other Stakeholder Meetings

- We've already engaged 125+ Stakeholders
 - Developing a Q&A Document
 - Developing a One Pager on the Rule/Policy objectives
- Region 5 and Region 2 (2nd meeting)
- NFRMPO Technical Workgroup
- DRCOG Board
- Equity Priorities for Upcoming State Transportation GHG Rulemaking





Responses we received were limited....We still want to hear from you!

Questions

- How can or should MPOs and the State balance statewide needs and regional needs?
- Where should GHG emissions reductions fall in terms of priority outcomes for regional transportation planning decision-making?
- If GHG emissions reductions is the top state priority, should transportation resources be made available to regions based on the region's contributions to state GHG emissions?
- Can the timeline for action be accelerated? Colorado is not on track to meet its 2030 goals and has been slow to respond to the mandate in HB-1261. We need to account for the time value of carbon. Because CO2 stays in the atmosphere for so long, we need rapid, early reductions to reduce harm.
- Can you consider tying state transportation funding to requirements that reduce GHG emissions and co-pollutants, rather than only incentives?
- How will you account for the GHG benefits of good land use planning and multi-modal projects? The GHG reductions may be harder to measure than EV adoption or reducing congestion, but are critical to our ability to meet our climate, land use and transportation goals, as well as equity.
- How can we ever be 100% Organic Crude Oil Free??
- How can we actively engage community leaders and the public to buy into the GHG roadmap?



Survey Results

Concerns

- MPOs being required to demonstrate progress toward targets without authority over tools that will be necessary to achieve them (land use, EVs, tax policy, etc.).
- Lack of adequate resources for investments to reach targets.
- New responsibilities for MPOs (planning, oversight, etc.) without resources for that work.
- Not making an arbitrary budget that will be gamed with assumptions about share of EVs.
- Transit is a critical piece of the equation to get the 90% reduction. RTD is experiencing significant challenges and many lack confidence in the agency. All regional partners will need to work together and with RTD to address these issues to grow public support for additional resources.
- We are concerned about the worsening ozone challenge in the Denver Metro Front Range area. With vehicles accounting for a third of the ozone precursors in the region, CDOT could play a key role not just in climate action, but also reducing other pollutants that are harming our health.
- We are concerned that there aren't enough policy ideas on the table to meet the goals.
- If we shut down every refinery where will we get all of the byproducts that we get from Organic crude oil?
- That there will be additional requirements without funding to complete those requirements



Survey Results

Challenges

- Adequately addressing social equity in the process.
- MDVs and HDVs and Aviation are significant components of transportation GHG emissions, particularly in the Denver Metro area. Need to ensure the two specific rule-makings discussed by this group take those into account (in terms of targets, strategies, allowances, etc.).
- A focus on CDOT's 10-Year list of projects and new funding for those, when the majority of projects (transit, bike/ped, etc.)
 necessary to make progress are in regional transportation plans.*
- Need to make substantial progress in the short term to stay on track.
- Increasing state funding participation in urban transit facilities and services to help region's achieve GHG emissions targets.
- Including consideration of supply chains and supply chain regulation, not just make trucking all EV (lean supply chain, circular economies).
- Including consideration of the carbon impact of construction materials selected for transportation projects.
- Ensuring the resources are sufficient to move quickly to take the necessary action to rapidly reduce emissions and transform our transportation system.
- Overcoming barriers in how transportation funding is distributed in order to ensure prioritization on multi-modal, low-carbon, equitable and safe projects.
- You can take baby steps but not aggressive steps
- Buy-in from leaders



CDPHE's Rulemaking Process General Overview

- Request for Hearing before AQCC (May 2021)
 - Petition for Party Status
 - Prehearing Conference
 - Rebuttal
 - Public Comment Deadline
- Hearing(August 2021)



Components of the Draft Regulation

Air Quality Control Regulation 22 -Colorado Greenhouse Gas Reporting and Emission Reduction Requirements

- Purpose and Applicability WHO
 - Who the regulation applies to (e.g. CDOT & MPOs)
- Definitions
- Requirements WHAT
 - Statewide Budget
 - MPO Sub-budgets
- Monitoring & Reporting HOW



Economic Impact Analysis Discussion

- EIA Consultant has notice to proceed (Cambridge Systematics)
- Scope includes three scenarios of VMT-management measures
- Details of the scenarios under discussion. Possibilities:
 - DRCOG's "Travel Choices" scenario (work-from-home, bike/ped, etc.)
 - DRCOG's "Transit" scenario (added rail, BRT, better bus headway, etc.)
 - Combine one of the above with a land use scenario (infill or development around transit centers)
- EIA also includes cost/effectiveness analysis of EV conversion
- And review of social cost of carbon



Upcoming Stakeholder Opportunities

- 1. PPACG Board Meeting, March 10, 2021
- 2. Colorado Contractors Association, March 15, 2021
- Technical Working Group March 19, 2021
- 4. DRCOG Special TAC, March 22, 2021
- 5. CDPHE -virtual listening sessions focus on Equity (available in Spanish)
 - March 11 from 10:30am-12:00pm
 - March 18th from 6:00pm 8:00pm
- 6. Next set of Regional Meetings
 - Friday April 9 1-2:30pm (Region 1 Denver Metro Area)
 - Monday April 12 10:30-12pm (Region 2 South/Southeast)
 - Monday April 12 1-2pm (Region 3 Northwest)
 - Friday April 16 10:30-12pm (Region 4 Northeast)
 - Friday April 16 1-2pm (Region 5 Southwest)



Interested stakeholders? Please direct them to our website:

https://www.codot.gov/programs/environmental/greenhouse-gas/ghg-transportation-policy-rulemaking-process

Next Advisory Group

- March 23, 11am-12 noon
 - Draft Regulation for your review

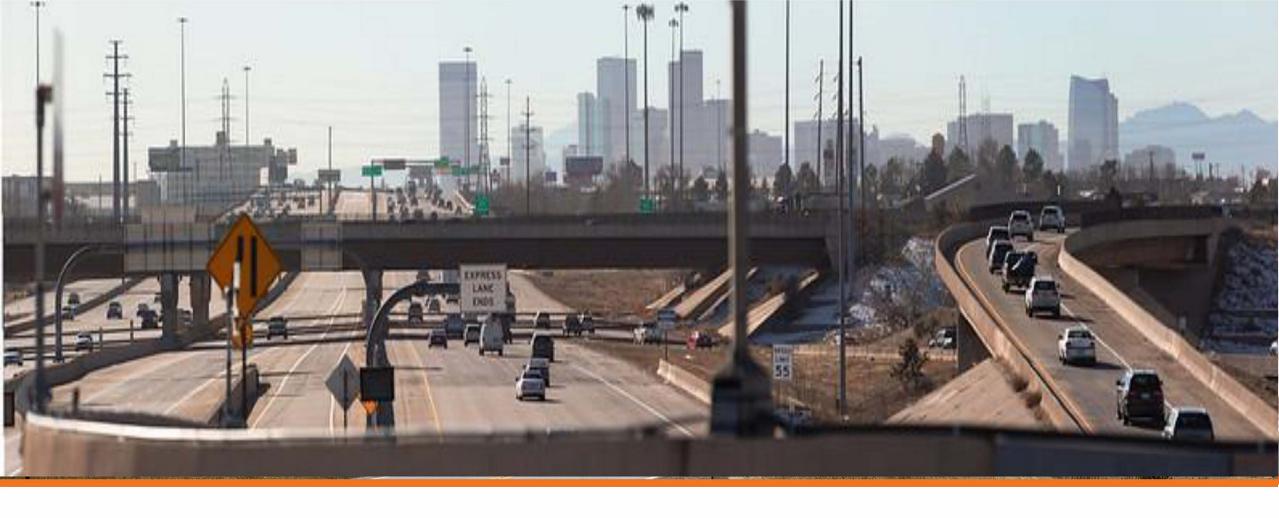


Contact Information

Theresa Takushi GHG Climate Action Specialist

theresa.takushi@state.co.us

303.757.9977



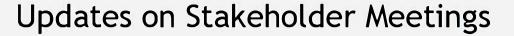


Transportation Greenhouse Gas Advisory Group - Meeting 4 March 23, 2021





- 1. Updates on Stakeholder Meetings
- 2. Preliminary Data
- 3. Proposed rule
- 4. Upcoming Stakeholder Opportunities





- FAQ Document
- One Pager on the Rule/Policy objectives
- PPACG Board Meeting, March 10, 2021
- Colorado Contractors Association, March 15, 2021
- Technical Working Group March 19, 2021
- DRCOG Special TAC, March 22, 2021
- CDPHE -virtual listening sessions focus on Equity (available in Spanish)
 - March 11 from 10:30am-12:00pm
 - March 18th from 6:00pm 8:00pm



CDPHE's Rulemaking Process General Overview

- Request for Hearing before AQCC (May 2021)
 - Petition for Party Status
 - Prehearing Conference
 - Rebuttal
 - Public Comment Deadline
- Hearing(August 2021)





Air Quality Control Regulation 22 - Colorado Greenhouse Gas Reporting and Emission Reduction Requirements



Upcoming Stakeholder Opportunities

1. Next set of Regional Meetings

- Friday April 9 1-2:30pm (Region 1 Denver Metro Area)
- Monday April 12 10:30-12pm (Region 2 South/Southeast)
- Monday April 12 1-2pm (Region 3 Northwest)
- Friday April 16 10:30-12pm (Region 4 Northeast)
- Friday April 16 1-2pm (Region 5 Southwest)



Interested stakeholders? Please direct them to our website:

https://www.codot.gov/programs/environmental/greenhouse-gas/ghg-transportation-policy-rulemaking-process

Next Advisory Group

- March 23, 11am-12 noon
 - Draft Regulation for your review



Contact Information

Theresa Takushi GHG Climate Action Specialist

theresa.takushi@state.co.us

303.757.9977



GHG Transportation Planning Rule Advisory Group - April 6, 2021





- Review and Discuss Major Regulatory Concepts Currently Under Consideration
- Overview of Fee Proposal (pending legislation)
- Relevant Federal Developments



Purpose

The purpose of the regulation is to address the greenhouse gas (GHG) Reduction goals outlined in HB 19-1261, to reduce GHG emissions from the transportation sector by requiring the Colorado Department of Transportation (CDOT) and Metropolitan Planning Organizations (MPOs) to demonstrate through travel demand modeling and approved air quality modeling that [statewide/regional] aggregate emissions resulting from its fiscally constrained transportation plan do not exceed a declining GHG emissions budget.

Discussion Question: Does this make sense? Do we need more clarity?



Main Elements of the Draft RULE

Statewide budget for future years -2025, 2030, 2040 & 2050

Budget based on MMT CO2e

Sub-budgets for MPOs

Phased as outlined in slide 6

Discussion Question: Should the budget apply to the STIP and TIP or to longer term 10yr plan (state) and Regional Transportation Plans (MPO).



10 Year Plan = CDOT's 10 year list of projects based on current and reasonably anticipated funding. Developed via statewide outreach process.

Regional Transportation Plans = minimum 20 year time horizon developed/updated by the Metropolitan Planning Organizations (MPOs) of each of the five metropolitan areas. MPOs develop their plans in cooperation with CDOT. RTPs identify a vision for the region, priorities for needs, programs, or projects, and strategies for achieving the vision. The development of RTPs includes significant stakeholder and public outreach.

STIP = The Statewide Transportation Improvement Program (STIP) is a federally required, four-year program of planned transportation projects. Per the requirements included in the most recent federal transportation authorization bill, Fixing America's Surface Transportation Act (FAST Act, 23 CFR 450), a new STIP should be developed at least every four years, containing a minimum four-year listing of transportation project.

Currently CDOT has a FY20-FY24 STIP; new year to be added this spring

TIP = Transportation Improvement Program - A federally required, fiscally constrained prioritized listing/program of transportation projects covering a period of four years that is developed and formally adopted by an MPO, consistent with the metropolitan transportation plan, and required for projects to be eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53.

-



The MPO subject to the sub-budgets in Phase I: Meet in 2025

Denver Regional Council of Governments (DRCOG)

North Front Range Metropolitan Planning Organization (NFRMPO)

The MPO subject to the sub-budget in Phase II: Meet in 2030

Pikes Peak Area Council of Governments (PPACG)

The MPO subject to the sub-budgets in Phase III: Meet in 2040

Grand Valley MPO (GVMPO)
Pueblo Area Council of Governments (PACOG)



MODELING

- The state/each MPO must demonstrate that their plans meet the future budget by using transportation network models and CDPHE's approved air quality model by comparing projected transportation-related GHG emissions to baseline GHG emissions.
- Projects that are strictly state of good repair or safety features that do not add capacity do not get modeled as having a VMT impact.
- The state/MPO must submit the travel model output including VMT to the Division to run through their approved air quality model to determine GHG emissions.
- The Air Quality Control Division must provide the GHG output data in MMTCO2e back to the MPO.
- MPO will schedule an interagency meeting with CDOT and the Division for their respective sub-budgets and modeling results.

Discussion Question: Does this framework make sense?



Mitigation Ideas

Project Analysis

Additional GHG analysis as part of Alternative Evaluation

Additional monitoring and evaluation of GHG

Multimodal options considered

Reduce the number of vehicles to improve level of service

Final Design/Construction

Reuse or upcycle deconstructed materials

Source materials locally

Consider low-carbon materials or mixes

Ensure contractors have access to recyclable materials

Ensure that reuse agreements are followed

Use fuel efficient or electric equipment and reduce idling.

Encourage responsive bidding

Operation and Maintenance

Consider construction fuels and materials' carbon footprint and reuse/recycle materials

Consider carbon sequestration strategies such as revegetation/ reforestation

Recycle materials

Increase operational efficiencies

Develop a Congestion Management Plan

Traffic light synchronization

Meter ramps

Create HOV and toll lanes

Discussion Question:

What types of mitigation strategies should we include and are quantifiable?



Reporting the Certification of the State & MPO sub-budgets

In order to be deemed complete the certification must include the following:

- Modeling inputs
- Modeling output in approved format.
- Years of the modeling runs included in the analysis
- Offset/Mitigation measures utilized in the model (if needed to meet the budget)

Project-level mitigation measures must be tracked on a Division approved form including date, project name, implementation schedule, and quantity of GHG being reduced.

Discussion Question: Are there other elements we should consider?



Is the Advisory Group available to meet soon to discuss additional regulatory concepts?

Upcoming Regional GHG Stakeholder Meetings

Friday, April 9 - 1-2:30pm (Region 1 - Denver Metro Area)

Monday, April 12 - 10:30-12pm (Region 2 - South/Southeast)

Monday, April 12 - 1-2pm (Region 3 - Northwest)

Friday, April 16 - 10:30-12pm (Region 4 - Northeast)

Friday, April 16 - 1-2pm (Region 5 - Southwest)



GHG Transportation Planning Rule/Policy Advisory Group - April 20, 2021





- 1. Status Update
- 2. Review revised 2005 baseline
- 3. Overview of Modeling Next Steps
 - Setting GHG Budgets
 - Cost/Benefit Analysis
- 4. State legislation overview

Status Update



Stakeholder Outreach

- Second "series" of regional meetings happening now
 - Region 1 Denver Metro Area Friday, April 23 9:30-11:00 a.m.
 - Region 2 South/Southeast Friday, April 23 11:30-1:00 p.m.
 - Region 3 Northwest Friday, April 23 1:30-2:30 p.m.
- CDPHE public meeting
 - Wed, April 21 6-8pm
 - April 28 from 12:00 p.m. to 2:00 p.m.
 - Registration Link
 https://docs.google.com/forms/d/e/1FAIpQLSegXeOLYE5gORL6pOW2xakewHWVs08RGQdH_NpXKpfP423EMw/viewform

Reg and Policy Development

- Significant policy concepts are coming together
- Next big issues are refining the baseline and setting the budget
- Would like to meet next week to review proposed budget #s
- Request for Rulemaking Hearing in front of the AQCC is May 20th



Current Focus: The Numbers

1) Getting the baseline right

2) Setting the proposed budget levels for the state and MPOs

3) Determining C/B



Getting the 2005 Baseline Right

GHG Roadmap Was Starting Point

- Based on E3 (consultant) "sketch model"
 - Can cover all sectors of economy but can't capture complexities of transportation
- Need to transition to CDOT statewide model + MOVES
- More comprehensive model
- "Apples to apples" between 2005 and future years (2025, 2030, 2050)

GHG Roadmap Baseline

Sector	Revised 2005 Baseline (MMT CO2e)
Electricity	40.28
Oil and Gas	20.17
Transportation	30.71
Residential, Commercial, Industrial Energy Use	24.65
Other	23.42
Total	139.22
Percent Reduction	Tae:



2005 Baseline: Refined

CDOT travel model + APCD Moves (instead of E3 Pathways)

- Initial results show that baseline (with aviation) is pretty close to E3 analysis
- Confirming emissions rates for 2005 versus
 2025, VMT totals for both years, etc.

Timing: Should have Q/A complete by week's end

CDOT TRAVEL MODEL EVS Outputs: VMT, congestion/speed



Setting the proposed budget levels for the state and MPOs

- Based on examining a series of scenarios (actions) that should reduce GHG emissions and seeing what results we get in terms of reductions and costs.
- Looking at a range of scenarios helps us consider the scope of what is possible; however feasibility will be an important driver budget levels
- Timing: Model runs due to be complete on 4/26

Input Area: How should the penetration of electric cars be considered for purposes of setting the budget?

Determining C/B



- Required component of regulation
 - Based on same scenarios discussed in earlier meetings
 - "Travel Choices"
 - plus Transit
 - Plus Land Use
- Will give us a range of costs and benefits
- Can be refined before final rulemaking in August
- Social cost of carbon included as separate analysis





Fee Proposal



GHG Transportation Planning Rule/Policy Advisory Group - April 27, 2021





- 1. Status Update
- 2. Revised Regulation Concepts
- 3. Sub-budget Approach
- 4. Next Steps

Status Update



Stakeholder Outreach

- Second "series" of regional meetings completed
 - Region 1 Denver Metro Area Friday, April 23 9:30-11:00 a.m.
 - Region 2 South/Southeast Friday, April 23 11:30-1:00 p.m.
 - Region 3 Northwest Friday, April 23 1:30-2:30 p.m.
- CDPHE public meeting
 - Wed, April 21 6-8pm
 - April 28 from 12:00 p.m. to 2:00 p.m.
 - Registration Link https://docs.google.com/forms/d/e/1FAIpQLSegXeOLYE5gORL6pOW2xakewHWVs08RGQdH_NpXKpfP423EMw/viewform

Reg and Policy Development

- Request for Rulemaking Hearing in front of the AQCC is May 20th
- Significant policy concepts are coming together



Regulation Concepts - Applicability

Applicability

Applies to the State of Colorado Department of Transportation (CDOT) 10-Year Plan.

Applies to MPOs within the State of Colorado and their Regional Transportation Plan.

MPOs subject to the sub-budgets in Table 2 as of October 1, 2021:

- Denver Regional Council of Governments (DRCOG)
- North Front Range Metropolitan Planning Organization (NFRMPO)

MPOs subject to the sub-budget in Table 3 as of January 1, TBD:

- Pikes Peak Area Council of Governments (PPACG)
- Grand Valley MPO (GVMPO)
- Pueblo Area Council of Governments (PACOG)



Regulation Concepts - Statewide GHG Program Submittal

Starting October 1, 2021, 60 days prior to a Resolution approving the 10 Year Plan by the Transportation Commission, CDOT must submit a Statewide GHG Transportation Report that meets the budget requirements for Division approval.

60 days prior to a formal amendment of the 10-Year Plan, CDOT must submit an updated Statewide GHG Report for Division approval.

The Statewide GHG Transportation Report must include in the following elements:

- Statewide Model outputs demonstrating that the effects of regionally significant projects are in compliance with the budgets
- Identification and documentation of the model used to project GHG MMT
- The MMT of CO2e projected for each budget year (i.e. 2030, 2040, 2050)
- List of any GHG mitigation measures needed to meet the budgets and the anticipated start and completion date of each project
- An estimate of the GHG reductions achieved by any GHG mitigation measures
- For plan amendments, the annual mitigation reports, since the last plan was submitted
- An analysis of potential GHG impacts and benefits to disproportionately impacted communities
 including the public comment/outreach that was done for these impacted communities



Regulation Concepts - Regional GHG Program Submittal

- 60 days prior to final adoption by the MPO governing board of the Regional Transportation Plan (RTP), subject MPOs must submit a Regional GHG Transportation Report that meets the regional GHG transportation budget requirements for Division approval.
- 60 days prior to formal amendment of the RTP, the MPO must submit an updated Regional GHG Transportation Report for Division approval.

The Regional GHG Transportation Program must include in the following elements:

- Statewide Model outputs demonstrating that the effects of regionally significant projects are in compliance with the budgets
- Identification and documentation of the model used to project GHG MMT
- The MMT of CO2e projected for each budget year (i.e. 2030, 2040, 2050)
- List of any GHG mitigation measures needed to meet the budgets and the anticipated start and completion date of each project
- An estimate of the GHG reductions achieved by any GHG mitigation measures
- For plan amendments, the annual mitigation reports, since the last plan was submitted
- An analysis of potential GHG impacts and benefits to disproportionately impacted communities
 including the public comment/outreach that was done for these impacted communities



Regulation Concepts - CDOT & MPO Reporting

. Reporting of Mitigation Measures

Annually by April 1, CDOT/MPO must report on a Division-approved form the following:

The list of mitigation measures identified in the most recent GHG Transportation Report

For each mitigation measure:

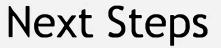
- the anticipated start and end date;
- the current status;
- projected GHG reductions in metric tons of CO2e as identified in the Statewide GHG Transportation Plan;
- for measures that are in progress or completed, quantification of realized reductions, and;
- for measures that are delayed, cancelled, or substituted, an explanation of why that decision was made.



Sub Budget Approach

F21	- fx											
	А	В	С	D	Е	F	G	Н	1	J	K	L
1	All figures 2030		DRCOG	PPACG	NFRMPO	PACOG	Mesa	OTHER	ALL	Total GHO	5 reducti	ion budget
2		Population	4,058,025	892,270	573,146	200,731	202,337	1,047,956	6,974,465			
3	Some statistics	VMT (weekday millio	104	19	19	4.3	3.9	29.8	180	100		
4		VMT/capita	25.66	21.53	24.72	21.59	19.13	29.9	25.78			
5												
6	The idea	Calculation	results (metr	ic tons/year)				>			
7	It is people who drive	proportional to pop	58.18	12.79	8.22	2.88	2.90	15.03				
8	it's the amount of driving that ma	proportional to VMT	57.78	10.56	10.56	2.39	2.17	16.56	100			
9	driving is bad	adjusted for VMT/cap	57.51	8.82	10.12	2.00	1.61	19.94	100.00			
10	driving is necessary	inverse VMT/cap	58.05	12.64	11.01	2.85	2.92	12.53	100.00			
11												
12												

Illustrative Only





Next Advisory Group Meeting - May 4, 1-2PM





GHG Advisory Group - June 21 & 25, 2021



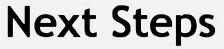
GHG Transportation Planning Rule

- For much of the last month, CDOT and CDPHE have paused on rule development and stakeholder outreach in order to allow the legislative process on SB260 to play out.
- During this time, CDOT also has been preparing a framing paper that explains the major policy issues inherent in this approach and provides the fuller context for how this rulemaking fits into the Department's broader effort to address GHGs.

SB260 Provisions



- By July 1, 2022 develop and implement procedures and guidelines requiring CDOT and MPOs to:
 - Implement relevant rules issued per 25-7-105
 - Otherwise reduce GHGs to help achieve progress toward HB1261 goals
 - Apply the same level of analytical scrutiny to GHGs as to other pollutants of concern and consider the impact of induced demand
 - Consider the role of land use and develop strategies to encourage land use decisions that reduce VMT and GHGs
- While these new policies and procedures must be in place for the next 10-Year Plan adoption (and all future planning cycles), SB260 also establishes a loss of flexibility in MMOF expenditures if CDOT, DRCOG and NFRMPO do not update their plans to comply with these new policies by October 1, 2022.





- SB260 clarifies the regulatory landscape in some key ways; including the role of the Transportation Commission and CDOT.
- CDOT/TC action now focused on conducting a formal rulemaking VS policy directive only.
 - Likely by amending existing planning rules
 - A policy and/or procedural directive will likely still be required but would follow after rulemaking

Next Steps



- Increased Stakeholder Engagement over the coming weeks
 - MPOs
 - Advisory Group
- CDOT will discuss with TC the next steps for officially beginning the rulemaking process
- Development of Procedures including:
 - Reporting Documentation (CDOT/MPOs)
 - GHG Mitigation Measures



Open Discussion on Framing Memo and Rule





GHG Pollution Standard
GHG Reduction Targets & GHG Policy Paper

GHG Advisory Group- July 13, 2021





CDOT developed modeling scenarios for two reasons:

- 1) To determine the range of feasible GHG reductions possible through planning-related changes and investments (in short, to determine the GHG reduction levels).
- 1) To prepare the cost benefit analysis required as part of the rulemaking.
 - Section 24-4-103(2.5)(a) of the Administrative Procedures Act (APA)



Tools used for analysis:

- Statewide Travel Model
 - Run using "no build" scenario
- FHWA Energy and Emissions Reduction Policy Analysis Tool (EERPAT)
 - Models policies at the regional level
- MOVES3
 - Conducted by CDPHE
 - Accounts for Colorado-specific factors such as the age of the vehicle fleet, the distribution of VMT by different vehicle types and road types, and the speeds at which vehicles travel.
 - Accounts for EVs displacing relatively more efficient vehicles than the average vehicle in the on-road fleet



Statewide analysis examines bundles of measures that might be implemented to achieve the targets.

3 scenarios (layer cake - building on each level)

- Travel choices
- Travel choices + Transit
- Travel choices + Transit + Land Use

Additional analysis on light-duty vehicle and bus electrification (separately). Trucks not considered.

Travel Choices



3 scenarios (layer cake)

- Travel choices: measures to reduce SOV commuting by workers, programs that encourage non-work trip reduction, infrastructure investments, and reduced transit fares.
 - Commuter trip reduction
 - Non-work trip reduction (40% for university, 10% personal business for new broadband households)
 - More sidewalk (1,900 miles new/upgrade by 2030, 4,700 by 2050)
 - More bike (2,500 new lane-miles between 2022-2042, 2,500 protected lane/path)
 - Speed limit reduction on urban arterials (avg 6 mph reduction)
 - Reduce transit fare by 50%*
- Travel choices + Transit
- Travel choices + Transit + Land Use

CDOT CDOT

Travel choices + Transit

3 scenarios (layer cake)

- Travel choices
- Travel choices + Transit: Expansion of transit service and bus electrification over time.
 - 6% annual increase, 2022 2030
 - 2% annual increase, 2030 2050
 - Total increase by factor of 2.3 by 2050 (more than doubling)
 - Comparison: Vehicle Revenue Miles increased by factor of 1.75 between 2000 and 2019
- Travel choices + Transit + Land Use



Travel choices + Transit + Land Use

3 scenarios (layer cake)

- Travel choices
- Travel choices + Transit
- Travel choices + Transit + Land Use: Policy changes and incentives (changes to transportation project selection criteria) to encourage transit-supportive land use and walkable neighborhoods.
 - Based on growth of urban mixed use areas defined as areas with a population density of at least 2,000 per square mile and a retail/service job density of at least 500 per square mile.
 - Baseline forecast of growth in mixed-use areas ranges from
 - (between 2023-2030): Action assumes (between 2023-2050):
 - 10% in NFRMPO to

75% in DRCOG

• 42% in DRCOG



DRAFT GHG Reduction Target Ranges

	Million Metric Tons/Year										
Statewide	2005 Baseline	2025	2030	2040	2050						
base GHG	23.4	27.4	21.8	20.6	24.2						
with EV	23.4	27.0	20.0	14.0	8.9						
with EV at VMT	23.4	26.5	18.3	12.8	8.2						
Range		0.4 - 0.9	0.5 - 1.5	0.17 - 1.2	0.1 - 0.7						



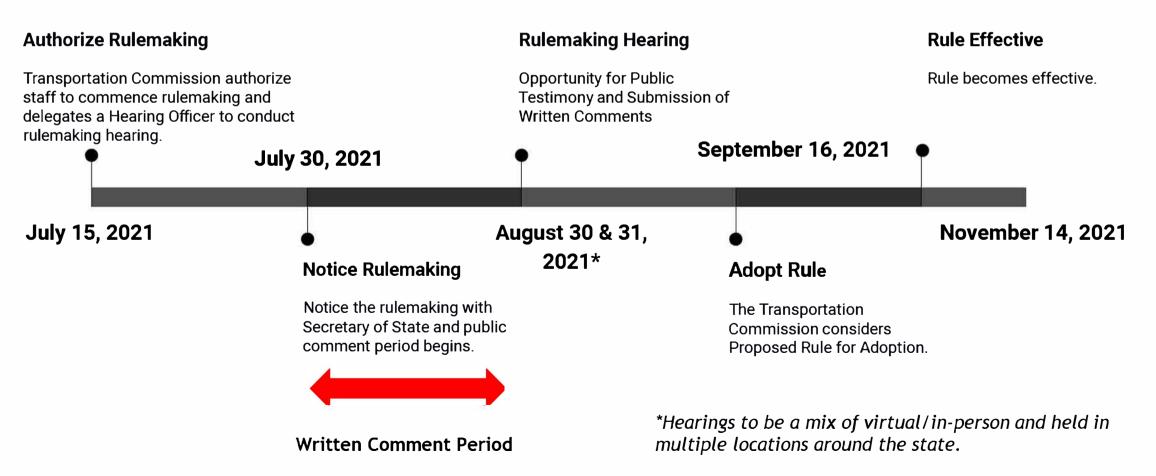
Key Comment Areas Based on TC and Stakeholder Feedback

- · Timeline of rule & how stakeholders can engage
 - How equity will be addressed
- Clarity on Language regionally significant projects, mitigation/offset
- How the scenarios relate to the rule itself and the range
 - Help establish the GHG target levels
 - For use in the cost benefit analysis
- More clarification around vehicle miles traveled (VMT)
- MPO Role/relationship to CDOT/authority



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and rulemaking development





Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protoco-l-workshops
- Multiple Opportunities for Public Comment
 - Department rulemaking often includes one or more stakeholder sessions/opportunities to review potential rules and issue so that we may consider stakeholder comments even before filing the rules
 - Submission of written comments prior to the Rulemaking Hearing
 - · Oral testimony and submission of written comments at Rulemaking Hearing



Next Steps on GHG Rulemaking

Proposed resolution to commence rulemaking process.

 This step would officially begin both the timeline and process steps under the APA.

Statewide public meeting on July 22 (tentative).

Continued engagement with key stakeholder groups.



THANK YOU for your continued engagement

Next Steps

- Continue conversation around the details of the modeling
 - Discuss MPO sub budget amounts
- Look at the regulation text itself





GHG Pollution Standard Modeling Discussion

GHG Advisory Group- July 22, 2021



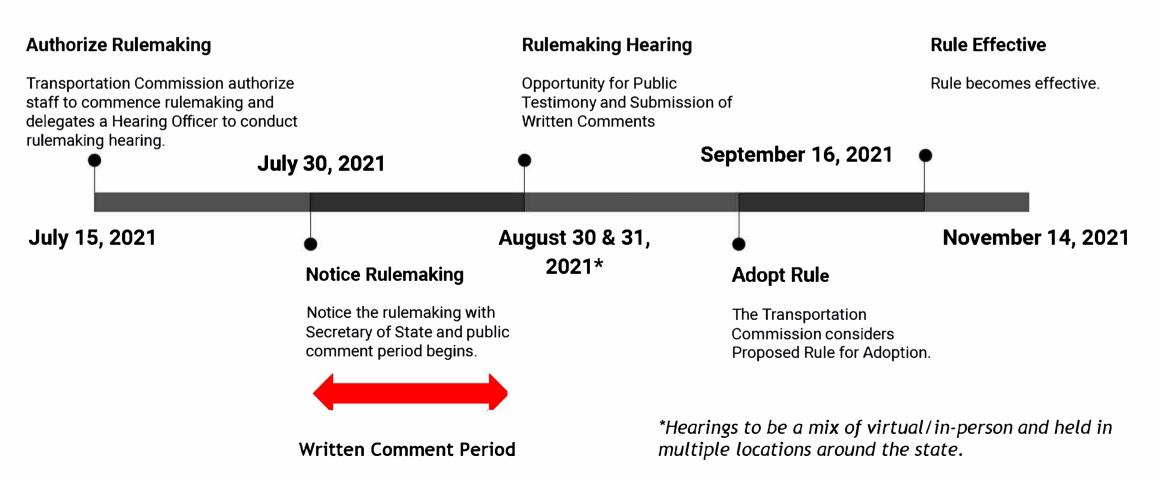


- 1. Update on Transportation Commission Action and discussion
- 2. Update on timing and Public Hearing process
- 3. Modeling topics and questions- Cambridge Systematics staff will be available to answer questions
 - a. Modeling scenarios more detail on assumptions, what specific changes were made to the model
 - b. EERPAT overview including inputs, scope of strategies by area, reasonableness of efficacy and timeline for implementation, etc.
 - c. Modeling platforms and consistency EERPAT, Statewide ABM, MOVES, how they interact and will be used moving forward
 - d. Sub-budgets will require continued coordination with MPOs to see how to best implement
 - e. Questions



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and rulemaking development





Public Engagement in Rulemaking Process

Public Hearings

- Multiple Opportunities for Public Comment
 - Direction from TC to include multiple Public Hearing sessions
 - Submission of written comments prior to the Rulemaking Hearing
 - · Oral testimony and submission of written comments at Rulemaking Hearing
- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - <u>https://www.codot.gov/business/rules/stakeholder-engagement-protoco</u> <u>l-workshops</u>



Modeling topics and questions

- 1. Modeling scenarios more detail on assumptions, what specific changes were made to the model
- 2. EERPAT overview including inputs, scope of strategies by area, reasonableness of efficacy and timeline for implementation, etc.
- 3. Modeling platforms and consistency EERPAT, Statewide ABM, MOVES, how they interact and will be used moving forward
- 4. Sub-budgets will require continued coordination with MPOs to see how to best implement
- 5. Questions





CDOT developed modeling scenarios for two reasons:

- 1) To determine the range of feasible GHG reductions possible through planning-related changes and investments (in short, to determine the GHG reduction levels).
- 1) To prepare the cost benefit analysis required as part of the rulemaking.
 - Section 24-4-103(2.5)(a) of the Administrative Procedures Act (APA)



Tools used for analysis:

- Statewide Travel Model
 - Run using "no build" scenario
- FHWA Energy and Emissions Reduction Policy Analysis Tool (EERPAT)
 - Models policies at the regional level
- MOVES3
 - Conducted by CDPHE
 - Accounts for Colorado-specific factors such as the age of the vehicle fleet, the
 distribution of VMT by different vehicle types and road types, and the speeds at
 which vehicles travel.
 - Accounts for EVs displacing relatively more efficient vehicles than the average vehicle in the on-road fleet



Statewide analysis examines bundles of measures that might be implemented to achieve the targets.

3 scenarios (layer cake - building on each level)

- Travel choices
- Travel choices + Transit
- Travel choices + Transit + Land Use

Additional analysis on light-duty vehicle and bus electrification (separately). Trucks not considered.

Travel Choices



3 scenarios (layer cake)

- Travel choices: measures to reduce SOV commuting by workers, programs that encourage non-work trip reduction, infrastructure investments, and reduced transit fares.
 - Commuter trip reduction
 - Non-work trip reduction (40% for university, 10% personal business for new broadband households)
 - More sidewalk (1,900 miles new/upgrade by 2030, 4,700 by 2050)
 - More bike (2,500 new lane-miles between 2022-2042, 2,500 protected lane/path)
 - Speed limit reduction on urban arterials (avg 6 mph reduction)
 - Reduce transit fare by 50%*
- Travel choices + Transit
- Travel choices + Transit + Land Use



Travel Choices: Commute Trip Reduction

 Telework (telecommuting): The percentage of workers teleworking at least part-time is increased by a factor of 3, from 6.3 percent to 18.9 percent, compared to baseline levels, reflecting a continuation of trends observed during the COVID pandemic.

Broadband access grows from 82.6% to 97% of households

 10% of households in mixed use areas participate in a household based trip reduction program and that these households reduce VMT by 5%



Travel Choices: Bike Improvements

- Build out of bike lanes and paths at ½ mile spacing for the entire urbanized area within Colorado (1,256 square miles) over a 20 year period (2022-2041)
- Corresponds to 5,000 new miles of facility or 250 new miles per year.
 - We maintain a system of state and US highways that spans 9,100 centerline miles
- Split equally between on-street bike lanes and specialized facilities
- Average bike speed increased by 33% to represent electrification

Bicycle Travel Increase From Facility Investment

Year	Baseline BMT (millions)	New Facility- Miles	Additional BMT (millions)	Total BMT (millions)	% Over Base
2030	346	2,250	144	474	37%
2045	405	5,000	320	717	77%

CDOT CDOT

Travel choices + Transit

3 scenarios (layer cake)

- Travel choices
- Travel choices + Transit: Expansion of transit service and bus electrification over time.
 - 6% annual increase, 2022 2030
 - 2% annual increase, 2030 2050
 - Total increase by factor of 2.3 by 2050 (more than doubling)
 - Comparison: Vehicle Revenue Miles increased by factor of 1.75 between 2000 and 2019
- Travel choices + Transit + Land Use





In 2019, based on data reported by Colorado's transit operators to the National Transit Database, 81 million vehicle revenue-miles of service were provided by all modes in Colorado's five metro areas.

Assumed transit revenue-miles will increase by 6.0 percent per year between 2022 and 2030 (69 percent total growth between 2019 and 2030), and by 2.0 percent a year between 2030 and 2050 (151 percent total growth between 2019 and 2050) compared to base year (2019) service levels.

This compares with a statewide growth in transit VRM of 2.9 percent annually (76 percent) between 2000 and 2019 (3.1 percent for the Regional Transit District, 1.2 percent average for other operators in the state).



Travel choices + Transit + Land Use

3 scenarios (layer cake)

- Travel choices
- Travel choices + Transit
- Travel choices + Transit + Land Use: Policy changes and incentives (changes to transportation project selection criteria) to encourage transit-supportive land use and walkable neighborhoods.
 - Based on growth of urban mixed use areas defined as areas with a population density of at least 2,000 per square mile and a retail/service job density of at least 500 per square mile.
 - Baseline forecast of growth in mixed-use areas ranges from
 - (between 2023-2030): Action assumes (between 2023-2050):
 - 10% in NFRMPO to 75% in DRCOG
 - 42% in DRCOG 50% in other MPOs



- Based on growth of urban mixed use areas defined as areas with a population density of at least 2,000 per square mile and a retail/service job density of at least 500 per square mile.
 - Baseline forecast of growth in mixed-use areas ranges from (between 2023-2030):
 - 10% in NFRMPO to
 - 42% in DRCOG
 - Action assumes (between 2023-2050):
 - 75% in DRCOG
 - 50% in other MPOs



DRAFT GHG Reduction Target Ranges

		Millio	n Metric Tons/Y	ear	
Statewide	2005 Baseline	2025	2030	2040	2050
base GHG	23.4	27.4	21.8	20.6	24.2
with EV	23.4	27.0	20.0	14.0	8.9
with EV and					
VMT	23.4	26.5	18.3	12.8	8.2
Range		0.4 - 0.9	0.5 - 1.5	0.17 - 1.2	0.1 - 0.7



Scenario VMT Reductions

Scenario	2030 (millions of vehicle miles)	2040 (millions of vehicle miles)	2050 (millions of vehicle miles)
Baseline	63,551	71,069	78,587
Reduction Range from Modelled Scenarios	5,800-6900	6,100-8,300	6,100-9800



THANK YOU for your continued engagement and participation





Department of Transportation

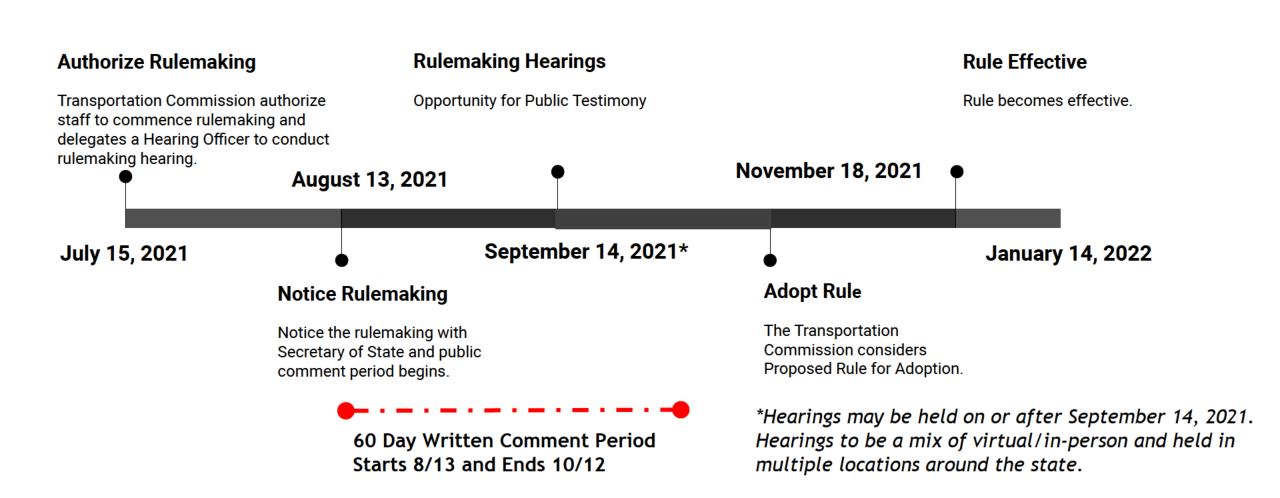
Update: Greenhouse Gas Pollution Standard For Transportation Planning Rulemaking

GHG Advisory Group - August 12, 2021



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and rulemaking development





Rulemaking Hearings

At least 6 public Rulemaking Hearings across the state in September:

- Virtual and in-person option
 - 9/14: Durango
 - 9/17: Grand Junction
 - 9/23: Denver
 - 9/24: Colorado Springs
 - 9/29: Limon
 - o 9/30: Fort Collins
- Overview of rule concepts
- Opportunity for public testimony
- Spanish interpretation offered

→ 60-Day Written Comment Period: 8/13- 10/12



Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protocol-workshops
- Sign up to receive rulemaking updates: DOT Rules@state.co.us or at link above
- Multiple Opportunities for Public Comment (6 public hearings planned)
- Current schedule: Draft rule published in mid-August; hearings must be scheduled no earlier than 20 days later.

Rule Outline



Planning Rule

- Housed in CDOT's existing Rules Governing Statewide Transportation
 Planning which outline planning process requirements for CDOT and MPOs
- No significant changes to other planning rules (e.g. fixing acronyms)
- The GHG Pollution Reduction Standard will require CDOT and MPOs to amend applicable planning documents, perform additional modeling and meet GHG Reduction Levels within this process to comply

Preamble/ Statement of Basis and Purpose

Frames rule, states goals

Definitions



Key Definitions:

- Applicable Planning Documents MPO RTPs, TIPs for NAA MPOs, CDOT 10-year plan and 4-Year Prioritized Plan in non-MPO areas, amendments to Regionally Significant Projects
- <u>Baseline</u> Modeled estimates of GHG emissions for MPOs and non-MPO areas resulting from existing transportation network & most recent plans
- <u>Disproportionately Impacted Communities</u> SB-260 definition.
- GHG Mitigation Measures non-Regionally Significant strategies to reduce GHG emissions that provide option for alternative compliance
- Regionally Significant Project Federal EPA definition. Referenced in SB-260, determines what projects are included in modeling



DRAFT GHG Reduction Level

Table 1: GHG Transportation Planning Reduction Levels

Regional Areas	2025 Baseline Projections (MMT)	2025 Reduction Level (MMT)	2030 Baseline Projections (MMT)	2030 Reducti on Level (MMT)	2040 Baseline Projections (MMT)	2040 Reduct ion Level (MMT)	2050 Baseline Projections (MMT)	2050 Reducti on Level (MMT)
DRCOG	14.9	0.27	11.8	0.82	10.9	0.63	12.8	0.37
NFRMPO	2.3	0.04	1.8	0.12	1.9	0.11	2.2	0.07
PPACG	2.7	N/A	2.2	0.15	2.0	0.12	2.3	0.07
<u>GVMPO</u>	0.38	N/A	0.30	0.02	0.30	0.02	0.36	0.01
PACOG	0.50	N/A	0.40	0.03	0.30	0.02	0.4	0.01
CDOT/No n MPO	6.7	0.12	5.3	0.37	5.2	0.30	6.1	0.18
TOTAL	27.4	0.5	21.8	1.5	20.6	1.2	24.2	0.7



Determining Compliance

Analysis Requirements

- MPOs and CDOT use Approved Air Quality Model
- Intergovernmental Agreements to allow for modeling coordination
- GHG Mitigation Measure process determined by April 1, 2022 by CDOT

Timing

- By October 1, 2022, CDOT, DRCOG, NFRMPO will update their plans (per SB-260).
- PPACG, PACOG and GVMPO will update plans to comply with 2030 targets according to plan cycle



Determining Compliance

Demonstrating Compliance

CDOT and MPOs provide to the Commission a GHG Transportation Report:

- GHG emissions analysis demonstrates that plans meet Reduction Level
- Documentation of model used Statewide Travel Model or Approved Air Quality Model
- A Mitigation Action Plan if Reduction Level is not met including dates, estimates of reductions, and co-benefits of each GHG Mitigation Measure





GHG Mitigation Measures

- Process outlined in regulation, and further developed in future CDOT Policy Directive (April, 2022) to select and verify measures
 - Measure and consider ways to prioritize impacts to DI Communities
 - Quantification of co-benefits

May include, not limited to:

- Addition of transit resources (infrastructure/service/ funding)
- Improving pedestrian and bike access/ resources
- Increased construction efficiency particularly in DI Communities
- Encouraging equitable transit oriented development
- Improving first and final mile connections to transit



APCD Confirmation and Verification

- CDOT and MPOs will submit their GHG Transportation Report drafts to the APCD 45 days prior to Plan adoption for verification
- APCD has 30 days to respond
- Will not delay the adoption of planning document

Enforcement



- If the GHG Reduction Level is not met in non-MPO areas/ MPO areas that do not receive federal suballocations, CDOT will use 10-Year Plan funds on projects that reduce GHG emissions
- If the GHG Reduction Level is not met in MPO areas receiving CMAQ and STBG, the MPO will use those funds on projects that reduce GHG emissions
- The Commission, informed by APCD review, makes determination
- Waiver Clause



- Rulemaking Hearings (hybrid in-person/ virtual)
 - 9/14: Durango
 - 9/17: Grand Junction
 - 9/23: Denver
 - 9/24: Colorado Springs
 - 9/29: Limon
 - 9/30: Fort Collins
- Consideration of Feedback
 - 60-Day Written Comment Period: 8/13-10/12
 - Posted on website→ Public can see all written comments





Department of Transportation

Thank you!



Rulemaking for 2 CCR 601-22, Statewide Transportation Planning Process and Transportation Planning Regions

Colorado Contractors Association

Rulemakin	g for 2 CCR 601-2	22, Statewide T	ransportation P	lanning Pro	cess and Trans	sportation Pla	nning Region
	Contractors Assoc		•				
	Colorado Contractors Association Meetings						
	Date	Time	Location				
	3/15/21	2-3pm	Virtual				
	7/13/21	11am-12pm	Virtual				

do Contractors Association		
g: March 15, 2021 from 2-3pm, Virtual		
	Organization	Email
	CDOT	
	American Concrete Pavement Associaton- Colorado/Wyoming Chapter	
	Hamon Infrastructure Inc.	
	Colorado Contractors Association	
	Hot Shot Supply Company	
	CDOT	
	CDOT	
	United Companies	
	Chatos Concrete LLC	
	American West Construction	
	Colorado Contractors Association	
	CDOT	
	CDOT	
	Western Colorado Contractors Association	
	CDOT	
	CDOT	
	Colorado Barricade Company	
	CDOT	
	Kraemer North America	
	Colorado Contractors Association	
	Colorado Asphalt Pavement Association	
	Ames Construction Company	
	Wagner Equipment Co	

Rulemaking for 2 CCR 601-22, Statewide Transport	rtation Planning Process and Transportation Planning Regions	
Colorado Contractors Association		
Meeting: July 13, 2021 from 11am-12pm, Virtual		
Name	Organization	Email
	CDOT	
an	CDOT	
n	Colorado Contractors Assocation	
	CDOT	
	CDOT	
	CDOT	
hi	CDOT	
	Colorado Contractors Assocation	



Shishido - CDOT, Natalie <natalie.shishido@state.co.us>

Thank You - GHG Stakeholder Meeting w CCA

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Wed, Mar 17, 2021 at 9:40 AM

Good morning,

Thank you for the opportunity to present to you earlier this week.

I have attached the slide presentation, as you requested.

Please let me know if you have any questions.

Aloha,

Theresa

--

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist



P 303.757.9977 2829 W. Howard Pl., Denver, CO 80204 theresa.takushi@state.co.us | www.codot.gov

Regional Transportation Meetings - Updated for March .pdf 1158K



Shishido - CDOT, Natalie <natalie.shishido@state.co.us>

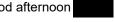
CCA - GHG Meeting

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Fri, Jul 2, 2021 at 1:58 PM

Cc: "Shishido - CDOT, Natalie" <natalie.shishido@state.co.us>

Good afternoon



I wanted to offer a few days/times to meet with CCA - whoever you think would be the best audience - to discuss the GHG Planning Rule.

Or, as an alternative, please let me know if you think it would be better to do this update at one of your weekly meetings with leadership.

7/13 11-12 7/15 12-5 7/21 9-10 7/21 230-4 7/22 11-1

Thanks, and I hope you have a wonderful 4th of July weekend.

Aloha,

Theresa

Theresa Takushi (she/her/hers) **Greenhouse Gas Climate Action Specialist**



P 303.757.9977

2829 W. Howard Pl., Denver, CO 80204 theresa.takushi@state.co.us | www.codot.gov





Department of Transportation

Incorporating Greenhouse Gas Emissions Reductions into Transportation Planning February, 2021



Colorado's Efforts To Address Climate Change

HB-1261

- In 2019, the Colorado General Assembly passed House Bill-1261, the Climate Action Plan to Reduce Pollution.
- HB 1261 established the following GHG reduction targets:
 - 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels

GHG Roadmap

- Lays out near/long term actions in every sector to meet the established targets
- To ensure that Colorado continues to reduce emissions to meet greenhouse gas targets, reduce local air pollution, and realize the full economic benefits of the transition to a clean energy economy.
- Draft document released in Sept 2020; final in Jan 2021.
- https://energyoffice.colorado.gov/climate-energy/ghg-pollutionreduction-roadmap



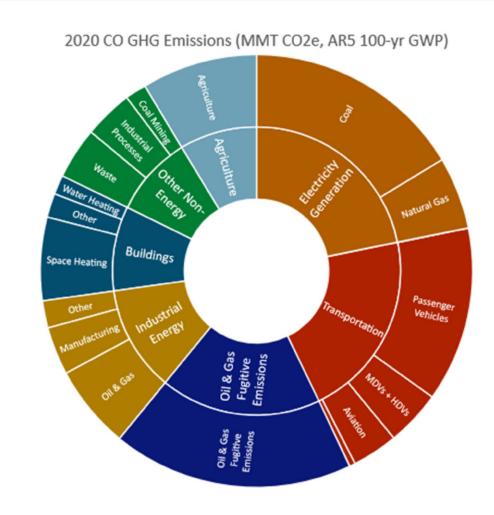
Largest GHG Emissions Sources

2005 Largest Emission Source:

- 1. Electric power
- 2. Transportation
- 3. Oil & Gas
- 4. Buildings

2020 Largest Emissions Sources

- 1. Transportation
- 2. Electric power
- 3. Oil & Gas
- 4. Buildings

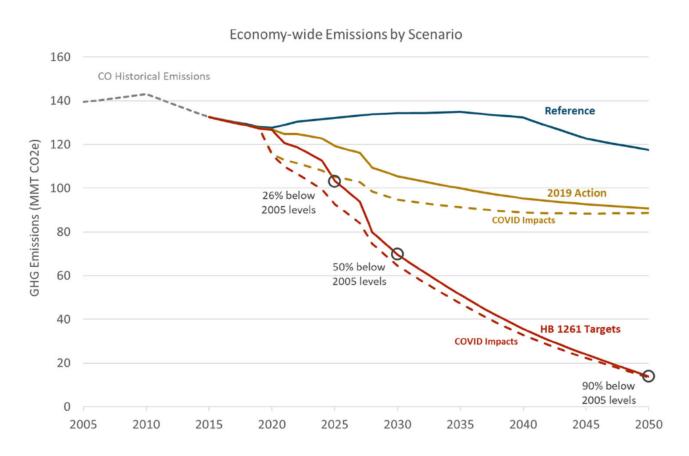




Colorado GHG Pollution Over Time

SIGNIFICANT PROGRESS UNDERWAY & MORE ACTION NECESSARY

- As a result of the state's actions to date, we are on a trajectory to achieving approximately half the level of emission reductions to meet the 2025 and 2030 goals.
- Additional strategies can advance co-benefits such as reducing local air pollution, generating economic growth, advancing environmental justice and equity.





Near-Term Transportation Actions included in the CO GHG Roadmap

(Planning & Projects)

- GHG pollution standards for transportation plans [FOCUS of MTG]
- Indirect source standards for some types of new development.

Human Factors (Behavior Change)

- Trip reduction/TDM requirements and encouraging telecommuting for large employers [Separate process]
- Expansion of public transit, including setting the stage for Front Range Rail
- Incentives for land use decisions by local governments that reduce pollution and support greater access to housing near jobs.
- Clean trucking strategy including evaluation of Advanced Clean Truck
 ZEV standards
- New revenue mechanism to fund infrastructure and incentives to transition to low and zero emissions cars, trucks and buses

Mobile Sources (Vehicles



Regulatory Approach

- The Colorado Air Quality Control Commission (AQCC) is appointed by the governor and authorized by the Colorado General Assembly. The AQCC develops air pollution control policy and regulates pollution sources.
- The AQCC is taking up a series of rulemakings across all sectors to address GHG emissions and implement recommendations in the Roadmap. One of these rulemakings will focus on the transportation sector.
- The Colorado Department of Transportation, and its Governor-appointed Transportation Commission has statutory authority over the transportation planning process. This process is guided by a series of Policy Directives issued by the Transportation Commission.
- The GHG Pollution Standard will therefore include actions by both bodies.



Proposed Transportation Rule & Policy Directive

AQCC Rulemaking

- Integrate GHG pollution standards and analysis in regional and statewide transportation plans: GHG Pollution Standard
- Reduce SOV commuter trips: <u>Large Employer Trip Reduction</u>
- Both included in single rulemaking via the CDPHE/Air Quality Control Commission process
 - May draft; August final

CDOT Policy

 In parallel, CDOT will develop implementation guidance via a policy directive specific to GHG Pollution Standard



GHG Pollution Standard (GPS) Rule Approach

Initial Thinking

- Set a numeric GHG "budget" for transportation plans (statewide and regional).
- Phased implementation with initial focus on state and certain MPO plans.
- Focus on projects that increase capacity
- CDOT guidance will focus on the practicalities of how the policy translates into specific project-based requirements.
- Inclusion of other measures to meet budget.



Setting the GHG Budget

- The concept for this policy is based on comparing projected emissions from a set of projects within a transportation plan against a numeric "budget".
- The first step is to figure out what this budget needs to be at the statewide level; balancing our GHG goals and achievability.

NEAR IERM ACI	IONS TO REDUCE	POLLUTION	
Sector	Revised 2005 Baseline (MMT CO2e)	2025 Target (MMT CO2e)	2030 Target (MMT CO2e)
Electricity	40.28	21	8
Oil and Gas	20.17	13	8
Transportation	30.71	23	18
Residential, Commercial, Industrial Energy Use	24.65	26	20
Other	23.42	19.9	15.6
		and the second second	

102.9

26%

Page XI Colorado GHG Pollution Reduction Roadmap

139.22

Percent Reduction

69.6

50%



Planning: What Projects Do We Choose to Invest In?

PD-14
State Planning
Federal Title 23
Planning Regulations
Colorado Administration

Transportation Guidance and Regulations that Relate to Greenhouse Gas Emissions

- Operations and Maintenance: How do we consider GHGS as we take care of our system?
 - Greening Government
 - Use of an electric powered fleet and maintenance

2 Environmental Analysis & Impact: Which solution/alternative do we pick?

• Federal and State Environmental Regulations

- 4 Project Construction: How do we Consider GHGs During Construction?
 - Anti-idling requirements and enforcement
 - Enforcement of contract requirements relating to materials and equipment
 - Operational decisions (e.g. use of a conveyor belt to reduce dump truck trips)

- Project Design & Contracting: What restrictions and requirements do we ask our contractors to follow?
- Contract and procurement requirements.
- Choice and amount of landscaping (trees, native plants)



Outreach Approach

- Regional Meetings Across the State
 - Feb 16 10:30-11:30 (Region 1 Denver Metro Area)
 - Feb 16 1-2pm (Region 4 Northeast)
 - Feb 18 3-4pm (Region 2 South/SouthEast)
 - Feb 19, 9-10am (Region 3 Northwest)
 - Feb 22, 1:30-2:30 (Region 5 Southwest)
- Standing CDOT Advisory Group
- CDPHE Public Listening Sessions
- 1-1 Meetings and Presentations

Outreach To Date



Regional Meeting Feedback

- Feb 16 10:30-11:30 (Region 1 Denver Metro Area)
- Feb 16 1-2pm (Region 4 Northeast)
- Feb 18 3-4pm (Region 2 South/SouthEast)
- Feb 19, 9-10am (Region 3 Northwest)

Main areas of comment include the following:

- · Rural and regional differences
- Incentives vs. penalties (carrots vs. sticks)
- Equity considerations
- Enforcement
- MPO roles and responsibilities
- Clarification on capacity projects
- How this impacts the 10 year plan
- Cost concerns



Contact Information

Theresa Takushi GHG Climate Action Specialist

theresa.takushi@state.co.us

303.757.9977





Draft Greenhouse Gas Pollution Standard For Transportation Planning

CCA - July 2021

Outline



- SB 260 elements
- Planning Rule Approach
- GHG Policy Paper
- Stakeholder Engagement & Public Listening Session
- TC Rulemaking Process



GHG Transportation Planning Rule

- For much of the last month, CDOT and CDPHE have paused on rule development and stakeholder outreach in order to allow the legislative process on SB260 to play out.
- During this time, CDOT also has been preparing a framing paper that explains the major policy issues inherent in this approach and provides the fuller context for how this rulemaking fits into the Department's broader effort to address GHGs.



- SB260 clarifies the regulatory landscape in some key ways; including the role of the Transportation Commission and CDOT.
- CDOT/TC action now focused on conducting a formal rulemaking vs policy directive only.
 - Plan to amend existing planning rules
 - A policy and/or procedural directive will likely still be required but would follow after rulemaking

SB260 Provisions



- By July 1, 2022 develop and implement procedures and guidelines requiring CDOT and MPOs to:
 - Implement relevant rules issued per 25-7-105
 - Otherwise reduce GHGs to help achieve progress toward HB1261 goals
 - Apply the same level of analytical scrutiny to GHGs as to other pollutants of concern and consider the impact of induced demand
 - Consider the role of land use and develop strategies to encourage land use decisions that reduce VMT and GHGs
- While these new policies and procedures must be in place for the next 10-Year Plan adoption (and all future planning cycles), SB260 also establishes a loss of flexibility in MMOF expenditures if CDOT, DRCOG and NFRMPO do not update their plans to comply with these new policies by October 1, 2022.



CDOT GHG Policy Paper

- Explains intent of rule and key policy issues
- Builds understanding around concept and its intricacies
 - Magnitude of reduction
 - Enforcement
 - Timeline
- Provides initial drafting for rulemaking and format to advance regulatory concepts in a more plain-english format



Key Comment Areas Based on TC and Stakeholder Feedback

- Timeline of rule & how stakeholders can engage
 - How equity will be addressed
- Clarity on Language regionally significant projects, mitigation/offset
- How the scenarios relate to the rule itself and the range
 - · Help establish the GHG target levels
 - For use in the cost benefit analysis
- More clarification around vehicle miles traveled (VMT)
- MPO Role/relationship to CDOT/authority





Virtual Public Meeting: Transportation GHG Pollution Reduction Planning Rule

- Thursday, July 22, 2021, 5:30-7:30PM (TENTATIVE)

At this meeting we'll discuss:

- 1. Senate Bill 21-260 and what it means for this rulemaking
- 2. What CDOT's rulemaking process looks like, including a timeline and how to engage
- 3. Elements of the rule, including who and what it will affect

Public comments

 We will dedicate much of the time to listening to our stakeholders and community members.



Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

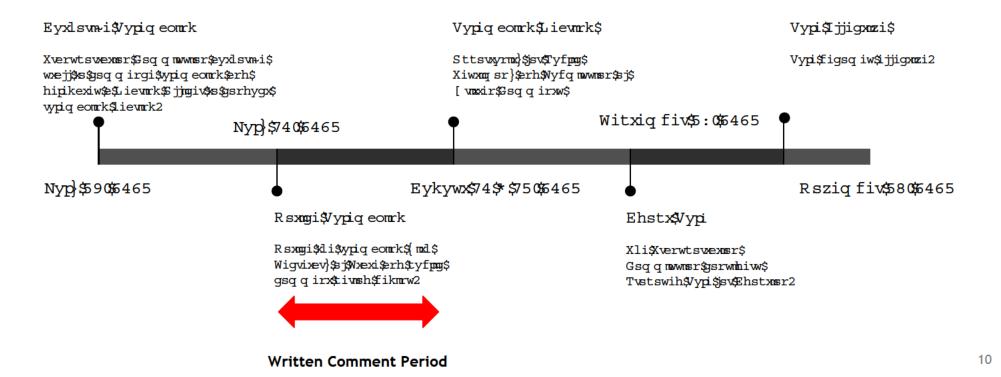
- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagementprotocol-workshops
- Multiple Opportunities for Public Comment
 - Department rulemaking often includes one or more stakeholder sessions/opportunities to review potential rules and issue so that we may consider stakeholder comments even before filing the rules
 - Submission of written comments prior to the Rulemaking Hearing
 - Oral testimony and submission of written comments at Rulemaking Hearing



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and as rulemaking is developed

DRAFT







TC to determine in July whether to commence rulemaking.

Statewide public meeting (July 22nd).

Continued engagement with key stakeholder groups and advisory group.





THANK YOU!

ulemaking for 2 CCR 60	1-22, Statewide Transportation Planning P	rocess and Transportation Pla	anning Regions
TAC Meetings			
STAC Meetir	ngs		
Date	Location		
	2/12/21 Virtual		
	4/9/21 Virtual		
	5/14/21 Virtual		
	6/11/21 Virtual		
	7/14/21 Virtual		
	8/13/21 2829 W Howard PI, Denver, CO, and Virtual		

	STAC Member Email List	
ie Primary R		E-Mail
STAC Re	p Central Front Range	
STAC AI	t Central Front Range	
TPR Cont	act Central Front Range	
STAC Re	p Eastern	
STAC AI	t Eastern	
TPR Cont	act Eastern	
MPO Cha	oir Grand Valley MPO	
STAC Re	p Grand Valley MPO	
STAC AI	t Grand Valley MPO	
STAC AI	t Grand Valley MPO	
	Denver	
STAC Re	p Denver	
TPR Cont		
STAC Rep, Chair	TPR Gunnison Valley	
STAC AI	t Gunnison Valley	
TPR Cont	act Gunnison Valley	
STAC Re	p Intermountain	
STAC AI	t Intermountain	
TPR Cont	act Intermountain	
STAC AI	t North Front Range	
STAC Re	p North Front Range	
TPR Cont	act North Front Range	
TPR Cont	act North Front Range	
STAC Re	p Northwest	

STAC Alt	Northwest
STAC Alt	Northwest
MPO Chair	Pikes Peak
STAC Rep	Pikes Peak
TPR Contact	Pikes Peak
STAC Alt	Pikes Peak
TPR Contact	Pikes Peak
STAC Alt 2	Pikes Peak
TPR Contact	Pikes Peak
STAC Alt 3	Pikes Peak
MPO Chair	PACOG
STAC Rep	PACOG
STAC Alt	PACOG
STAC Rep	San Luis Valley
STAC Alt	San Luis Valley
TPR Contact	San Luis Valley
STAC Rep	South Central
STAC Alt	South Central
STAC Rep	Southeast
STAC Alt	Southeast
STAC Rep	SUIT
TPR Chair	South Central
STAC Rep	Southwest
STAC Alt	Southwest
TPR Contact	Southwest
STAC Rep	UFR
STAC Alt	UFR

L		
	STAC Alt and	
-	TPR Contact	UFR
	Admin	UFR
	STAC Alt	UMU
	STAC Rep	UMU
	STAC Alt	UMU
	FHWA	FHWA Division Director
	FTA	Federal Transit Administration
	FTA	Federal Transit Administration
	FHWA	Federal Highway Administration
	FHWA	Federal Highway Administration
	TC Vice Chair	Transportation Commission
	TC	Transportation Commission
	TC	Transportation Commission
	TC	Transportation Commission
	TC Chair	Transportation Commission
	TC	Transportation Commission
	TC	Transportation Commission
	TC	Transportation Commission
Ì	TC	Transportation Commission
	TC	Transportation Commission

TC

Transportation Commission





Draft Greenhouse Gas Pollution Standard For Transportation Planning

STAC - July 2021

Outline



- SB 260 elements
- Planning Rule Approach
- GHG Policy Paper
- Stakeholder Engagement
- TC Rulemaking Process



GHG Transportation Planning Rule

- For much of the last month, CDOT and CDPHE have paused on rule development and stakeholder outreach in order to allow the legislative process on SB260 to play out.
- During this time, CDOT also has been preparing a framing paper that explains the major policy issues inherent in this approach and provides the fuller context for how this rulemaking fits into the Department's broader effort to address GHGs.



- SB260 clarifies the regulatory landscape in some key ways; including the role of the Transportation Commission and CDOT.
- CDOT/TC action now focused on conducting a formal rulemaking vs policy directive only.
 - Plan to amend existing planning rules
 - A policy and/or procedural directive will likely still be required but would follow after rulemaking

SB260 Provisions



- By July 1, 2022 develop and implement procedures and guidelines requiring CDOT and MPOs to:
 - Implement relevant rules issued per 25-7-105
 - Otherwise reduce GHGs to help achieve progress toward HB1261 goals
 - Apply the same level of analytical scrutiny to GHGs as to other pollutants of concern and consider the impact of induced demand
 - Consider the role of land use and develop strategies to encourage land use decisions that reduce VMT and GHGs
- While these new policies and procedures must be in place for the next 10-Year Plan adoption (and all future planning cycles), SB260 also establishes a loss of flexibility in MMOF expenditures if CDOT, DRCOG and NFRMPO do not update their plans to comply with these new policies by October 1, 2022.



CDOT GHG Policy Paper

- Explains intent of rule and key policy issues
- Builds understanding around concept and its intricacies
- Provides initial drafting for rulemaking and format to advance regulatory concepts in a more plain-english format



Stakeholder Outreach Continues

GHG Advisory Group

Meeting with key stakeholder groups to discuss elements of the Rule

Planning public meetings

Email Blast to our Stakeholder Group



Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

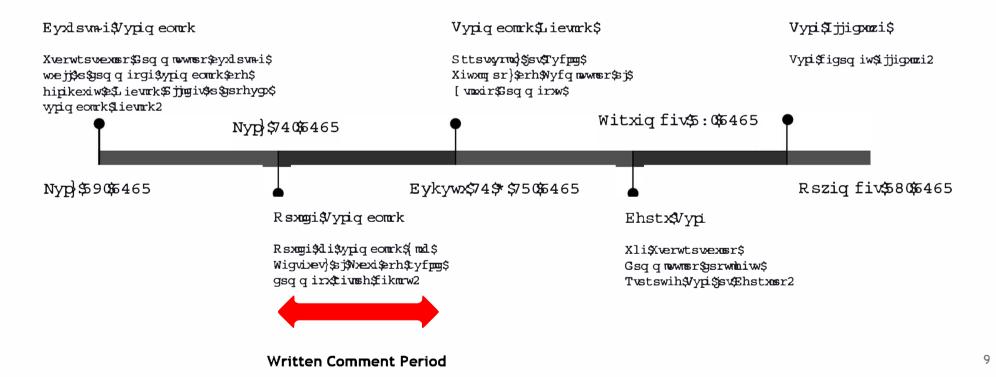
- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagementprotocol-workshops
- Multiple Opportunities for Public Comment
 - Department rulemaking often includes one or more stakeholder sessions/opportunities to review potential rules and issue so that we may consider stakeholder comments even before filing the rules
 - Submission of written comments prior to the Rulemaking Hearing
 - Oral testimony and submission of written comments at Rulemaking Hearing

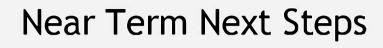


DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and as rulemaking is developed

DRAFT







TC to determine in July whether to commence rulemaking.

Statewide public meeting (July).

Continued engagement with key stakeholder groups and advisory group.





Update: Greenhouse Gas Pollution Standard For Transportation Planning

STAC - August 2021

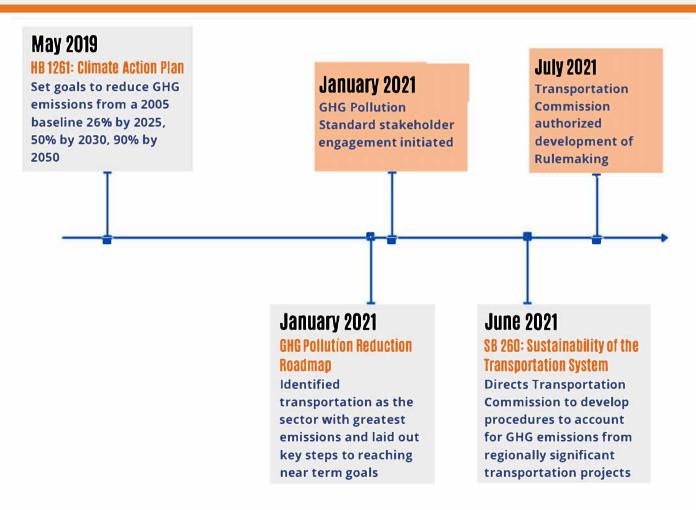


GHG Transportation Planning Rule





Timeline of GHG Reduction Discussion in CO





GHG Planning Rule: Concept Development

Began working with stakeholders in January 2021.

- Convened a statewide GHG Advisory Group that has met continuously over the last 7 months.
- Held 11 Regional Meetings and 5 joint State Listening Sessions with CDPHE from January to April, reaching nearly 800 people
- Individual stakeholder meetings with MPO staff and boards, contractors, enviro NGOs, CCAT, CC4CA, etc

Issued white paper to describe overall approach and key policy issues.

https://www.codot.gov/programs/environmental/greenhouse-gas

Developed Modeling Scenarios to "test" feasible reduction levels

- Work based on DRCOG scenarios; adjusted for feasibility
- Examined combinations of travel choice, transit and land use



GHG Advisory Group Membership

Ashley Stolzman - DRCOG Louisville

Christian Willis - Club 20

Christine Berg - CEO

Cindy Copeland - Boulder County

Clay Clarke - CDPHE

Commissioner Cody Davis - Mesa County

Commissioner Holly Williams - PAACG local govt

representative

Transp Commissioner Karen Stuart

Commissioner Terry Hofmeister - Phillips County

Dana Brosig - GVMPO

David Schwietert - Alliance for Automotive Innovation

Elizabeth Babcock - Denver, CASR

Gail Klapper - Colorado Forum

Grace Rink -City of Denver

Greg Fulton - CMCA

John Adams - PACOG

John Liosatos - PPACG

Transportation Commissioner Kathy Hall

Commissioner Kristin Stephens - Larimer

County

Lauren McDonnell - CDPHE

Matt Frommer - SWEEP

Matt Hopper - Summit Strategies

Medora Bornhoft - NFRMPO

Mike Silverstein - RAQC

Randy Drennen - CCA

Robert Spotts - DRCOG

Ron Papsdorf - DRCOG

Suzette Mallette - NFRMPO

Tony Milo - CCA



Public Stakeholder Meetings

Regional - GHG Stakeholder Meetings (open to the public and virtual):

- 1. Feb 16, 10:30-11:30am (Region 1 Denver Metro Area)
- 2. Feb 16, 1-2pm (Region 4 Northeast)
- 3. Feb 18, 3-4pm (Region 2 South/Southeast)
- 4. Feb 19, 9-10am (Region 3 Northwest)
- 5. Feb 22, 1:30-2:30pm (Region 5 Southwest)
- 6. Mar 1, 4-5pm (Region 2 South/Southeast)
- 7. Apr 16, 10:30am-12pm (Region 4 Northeast, second round)
- 8. Apr 16, 1-2pm (Region 5 Southwest, second round)
- 9. Apr 23, 9:30-11am (Region 1 Denver Metro Area, second round)
- 10. Apr 23, 11:30am-1pm (Region 2 South/Southeast, second round)
- 11. Apr 23, 1:30-2:30pm (Region 3 Northwest, second round)

CDOT/CDPHE State Listening Sessions (open to the public and virtual):

- 1. Jan 28, 6-8pm
- 2. Mar 11, 10:30am-12pm
- 3. Mar 18, 6-8pm
- 4. Apr 21, 6-8pm
- 5. Apr 28, 12-2pm
 - 12 meetings with GHG Advisory Group
 - 20+ meetings with MPO staff and boards
 - Many stakeholder meetings with industry, enviro groups



GHG Planning Rulemaking: Concept & Approach

- Set a GHG "pollution reduction level" in million metric tons of CO2e for transportation plans.
- Basic premise similar to conformity and crafted to align with federal conformity regulations analysis requirements.
- Requirements apply to CDOT and MPOs (the state's primary transportation planning agencies).
- Set reduction levels for same timeframe as GHG Roadmap





- Emissions calculated by modeling a set of transportation projects (included in transportation plans) and determining the total emissions from vehicles traveling across the transportation system.
- Limited to projects that are "regionally significant" projects that increase capacity. Not to basic safety and repaving projects.
- Alternative compliance achieved through mitigation measures that achieve emission reductions in other areas related to transportation.



GHG Mitigation Measures

- If CDOT and MPO plans are determined to be out of compliance with established GHG
 pollution reduction planning targets, they will have the opportunity to utilize approved
 mitigations to offset emissions and achieve progress towards compliance.
- CDOT and MPOs would "select" strategies from a pre-approved list. The approved mitigations list will quantify approximate emissions offsets (possibly in the form of a score). Those emissions credits, pursuant to the pre-approved list, may then be applied to reduce the balance of GHG in modeling a transportation plan.
- Prior to each planning cycle, CDOT shall provide updating scoring methodology for the mitigation list, which shall be applicable during the subsequent planning cycle.
- The specifics of these measures, including the list and the GHG reductions will achieve will be established through a separate policy to come after the rulemaking.



Significant Areas of Feedback

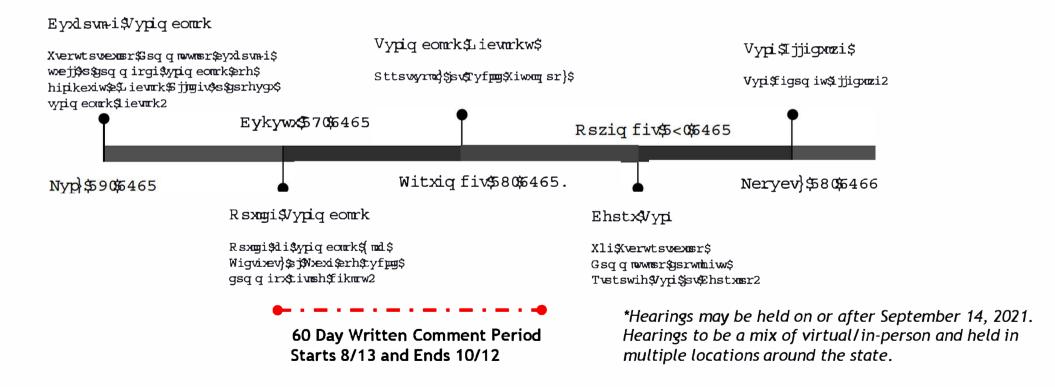
- → Applicability and impacts to rural areas → only applies to Regionally Significant Projects, which is being defined in to rule to capture larger projects
- → Enforcement → how applies to MPOs and CDOT
- → Equity considerations → Opportunities within mitigation measures for DI Communities, focused outreach
- → MPO roles and responsibilities → feasibility for MPOs, particularly with modeling resources
- → Impacts to the 10-Year Plan and Regional Transportation Plans → DRCOG, NRF and CDOT will amend plans by 10/1/22 (per SB260), other MPOs will address in next plan
- → Cost Benefit Analysis → will be provided as part of the rulemaking process
- → GHG reductions feasible through this rule → 2025 feasibility, progress toward Roadmap goals

10



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and rulemaking development





Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protocol-workshops
- Sign up to receive rulemaking updates: DOT Rules@state.co.us or at link above
- Multiple Opportunities for Public Comment (5 public hearings planned)
- Current schedule: Draft rule published in mid-August; hearings must be scheduled no earlier than 20 days later.



Rulemaking Hearings

At least 5 public Rulemaking Hearings across the state in September:

- Virtual and in-person option
 - Denver
 - Fort Collins
 - Colorado Springs
 - Durango
 - Glenwood Springs
- Overview of rule concepts
- Opportunity for public testimony
- Spanish interpretation offered





Thank you!



Rulemaking for 2 CCR 601-22, Statewide Transportation Planning Process and Transportation Planning Regions

Colorado Communities for Climate Action

Rulemaking for 2 CCR	601-22, State	wide Transp	ortation Planning Process and Transporta	tion Planning I	Regions
Stakeholder Groups	Date	Time	Location		
Colorado Communities for Climate Action	3/18/21	4-5pm	Virtual		
Colorado Communities for Climate Action	7/13/21	1:30-2:30pm	Virtual		

Colorado Communities for Clima	te Action	
Meeting: March 18, 2021		
Manus	Our retreation	F11
Name	Organization	Email
	Boulder County	
	City and County of Denver	
	Boulder County	
	CDOT	
	CDOT	
	CC4A	
	CDOT	
	Adams County	
	Boulder County	
	CDOT	
	CDOT	
	Larimer County	
	CC4A	
	CDOT	

Name Organization Boulder County Boulder County City of Aspen Colorado Department of Public Health and Environment City of Broomfield Boulder County City and County of Denver CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County CC4A CDOT Boulder County CC4A CDOT CO4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT City of Aspen CDOT CC4A CDOT CC4A CDOT	colorado Communities for Clima	te Action	
Boulder County City of Aspen Colorado Department of Public Health and Environment City of Broomfield Boulder County City and County of Denver CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT COT COT COT COT COT COT COT COT COT C	eeting: July 13, 2021		
Boulder County City of Aspen Colorado Department of Public Health and Environment City of Broomfield Boulder County City and County of Denver CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT City of Aspen			
Boulder County City of Aspen Colorado Department of Public Health and Environment City of Broomfield Boulder County City and County of Denver CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT City of Aspen CDOT City of Aspen CDOT CC4A CDOT	ame	Organization	Email
City of Aspen Colorado Department of Public Health and Environment City of Broomfield Boulder County City and County of Denver CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT City of Aspen CDOT City of Aspen CDOT CC4A CDOT		Boulder County	
Colorado Department of Public Health and Environment City of Broomfield Boulder County City and County of Denver CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT City of Aspen CDOT CC4A CDOT		Boulder County	
City of Broomfield Boulder County City and County of Denver CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT City of Aspen CDOT CC4A CDOT		City of Aspen	
Boulder County City and County of Denver CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT City of Aspen CDOT CC4A CDOT		Colorado Department of Public Health and Environment	
City and County of Denver CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		City of Broomfield	
CDOT CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		Boulder County	
CC4A City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		City and County of Denver	
City of Aspen Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		CDOT	
Jefferson County CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		CC4A	
CC4A CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		City of Aspen	
CDOT Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		Jefferson County	
Boulder County, Transportation Comission Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		CC4A	
Tri-County Health Department Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		CDOT	
Colorado Department of Public Health and Environment Boulder County CDOT City of Aspen CDOT CC4A CDOT		Boulder County, Transportation Comission	
Boulder County CDOT City of Aspen CDOT CC4A CDOT		Tri-County Health Department	
CDOT City of Aspen CDOT CC4A CDOT		Colorado Department of Public Health and Environment	
City of Aspen CDOT CC4A CDOT		Boulder County	
CDOT CC4A CDOT		CDOT	
CC4A CDOT			
CDOT		CDOT	
		CC4A	
City and County of Denver		CDOT	
ony and outing or points.		City and County of Denver	





Department of Transportation

Draft Greenhouse Gas Pollution Standard For Transportation Planning

CC4CA- July 2021

Outline



- SB 260 elements
- Planning Rule Approach
- GHG Policy Paper
- Stakeholder Engagement & Public Listening Session
- TC Rulemaking Process



GHG Transportation Planning Rule

- For much of the last month, CDOT and CDPHE have paused on rule development and stakeholder outreach in order to allow the legislative process on SB260 to play out.
- During this time, CDOT also has been preparing a framing paper that explains the major policy issues inherent in this approach and provides the fuller context for how this rulemaking fits into the Department's broader effort to address GHGs.



- SB260 clarifies the regulatory landscape in some key ways; including the role of the Transportation Commission and CDOT.
- CDOT/TC action now focused on conducting a formal rulemaking vs policy directive only.
 - Plan to amend existing planning rules
 - A policy and/or procedural directive will likely still be required but would follow after rulemaking

SB260 Provisions



- By July 1, 2022 develop and implement procedures and guidelines requiring CDOT and MPOs to:
 - Implement relevant rules issued per 25-7-105
 - Otherwise reduce GHGs to help achieve progress toward HB1261 goals
 - Apply the same level of analytical scrutiny to GHGs as to other pollutants of concern and consider the impact of induced demand
 - Consider the role of land use and develop strategies to encourage land use decisions that reduce VMT and GHGs
- While these new policies and procedures must be in place for the next 10-Year Plan adoption (and all future planning cycles), SB260 also establishes a loss of flexibility in MMOF expenditures if CDOT, DRCOG and NFRMPO do not update their plans to comply with these new policies by October 1, 2022.



CDOT GHG Policy Paper

Explains intent of rule and key policy issues

- Builds understanding around concept and its intricacies
 - Magnitude of reduction
 - Enforcement
 - Timeline
- Provides initial drafting for rulemaking and format to advance regulatory concepts in a more plain-english format



Key Comment Areas Based on TC and Stakeholder Feedback

- Timeline of rule & how stakeholders can engage
 - How equity will be addressed
- Clarity on Language regionally significant projects, mitigation/offset
- How the scenarios relate to the rule itself and the range
 - Help establish the GHG target levels
 - For use in the cost benefit analysis
- More clarification around vehicle miles traveled (VMT)
- MPO Role/relationship to CDOT/authority



Stakeholder Outreach Continues

GHG Advisory Group

Meeting with key stakeholder groups to discuss elements of the Rule

Planning public meetings





Virtual Public Meeting: Transportation GHG Pollution Reduction Planning Rule

- Thursday, July 22, 2021, 5:30-7:30PM (TENTATIVE)

At this meeting we'll discuss:

- 1. Senate Bill 21-260 and what it means for this rulemaking
- 2. What CDOT's rulemaking process looks like, including a timeline and how to engage
- 3. Elements of the rule, including who and what it will affect

Public comments

 We will dedicate much of the time to listening to our stakeholders and community members.



Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

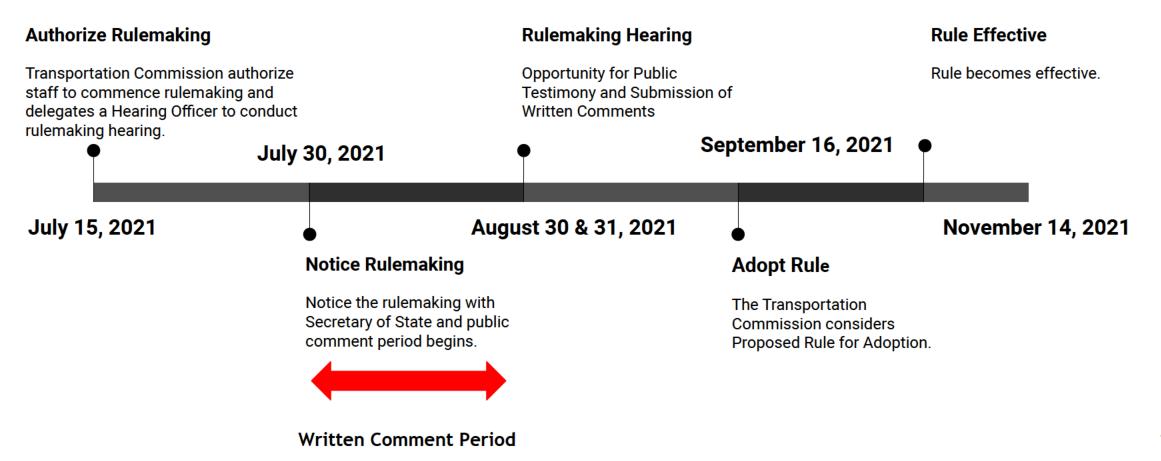
- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protoco l-workshops
- Multiple Opportunities for Public Comment
 - Department rulemaking often includes one or more stakeholder sessions/opportunities to review potential rules and issue so that we may consider stakeholder comments even before filing the rules
 - Submission of written comments prior to the Rulemaking Hearing
 - · Oral testimony and submission of written comments at Rulemaking Hearing



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and as rulemaking is developed

DRAFT







TC to determine in July whether to commence rulemaking.

Statewide public meeting (July 22nd--tentative).

Continued engagement with key stakeholder groups and advisory group.





THANK YOU!

Department of Transportation



Rulemaking for 2 CCR 601-22, Statewide Transportation Planning Process and Transportation Planning Regions

MPO Staff Groups

Rulemaking for 2 CCR 601-22, Statewide Trans	sportation Plan	ning Process	and Transporta	ition Planning Regi
	MPO Staff G	roup Meeting	s	
Stakeholder Groups	Date	Time	Location	
NFRMPO Modeling Discussion		12:30-1:30pm	Virtual	
MPO Staff Deep Dive Meeting		3-4pm	Virtual	
NFRMPO Meeting		3-4pm	Virtual	
DRCOG Meeting	102403-040-04	2:30-3:15pm	Virtual	
NFRMPO Meeting	4/12/21	3:15-4pm	Virtual	
PPACG Meeting	4/13/21	12-12:45pm	Virtual	
PACOG Meeting	5/6/21	1:30-2pm	Virtual	
GVMPO Meeting	5/18/21	2-3pm	Virtual	
CDOT/ MPOs GHG Discussion	6/29/21	11am-12pm	Virtual	
CDOT/ MPOs GHG Discussion	7/6/21	8:30-9:30am	Virtual	
CDOT/ MPOs GHG Discussion	7/8/21	3-4pm	Virtual	
CDOT/ MPOs GHG Discussion	7/15/21	2-3pm	Virtual	
CDOT/ MPOs GHG Discussion	7/21/21	9-10am	Virtual	
CDOT/ MPOs/ Cambridge Sytematics EERPAT Deep Dive	7/22/21	11am-12pm	Virtual	
CDOT/ MPOs GHG Discussion	7/27/21	1-2pm	Virtual	
CDOT/ MPOs GHG Discussion	8/2/21	1-1:30pm	Virtual	
CDOT/ MPOs GHG Discussion	8/3/21	2-3pm	Virtual	
CDOT/ MPOs GHG Discussion	8/4/21	2-3:30pm	Virtual	
CDOT/ GVMPO	8/6/21	3-3:30pm	Virtual	
CDOT/ MPOs GHG Discussion	8/10/21	12-1pm	Virtual	
CDOT/ MPOs GHG Discussion	8/11/21	8-9am	Virtual	

MPO Staff Group		
Meeting: NFRMPO Modelin	ng Discussion, February 26, 2021 from 12:30-1:30pr	n, Virtual
Name	Organization	Email
personal de deservir	CDPHE	
	CDOT	
	RAQC	
	CDPHE	
	NRFMPO	
	CDPHE	
	CDOT	
	CDOT	
	CDOT	

IPO Staff Group			
Meeting: MPO Staff Deep D	Dive Meeting, 3/30/21, from 3-4pm, Virtual		
lame	Organization	Email	
	CDOT		
	CDOT		
	CDOT		
	PPACG		
	CDOT		
	NFRMPO		
	CDOT		
	DRCOG		
	DRCOG		
	DRCOG		
	NFRMPO		
	CDOT		
	PPACG		

Meeting: NFRMPO Meeting, 4/8	8/21 from 3-4pm, Virtual	
Name	Organization	Email
	CDOT	
	CDOT	
	NFRMPO	
	CDOT	
	NFRMPO	
	CDOT	

MPO Staff Group		
Meeting: DRCOG Meeting, 4/	12/21, from 2:30-3:15pm, Virtual	
Name	Organization	Email
	DRCOG	
	DRCOG	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	DRCOG	
	CDOT	

MPO Staff Group		
Meeting: NFRMPO Meeting,	1/12/21, from 3:15-4pm, Virtual	
	100 000 000	
Name	Organization	Email
	CDOT	
	CDOT	
	NFRMPO	
	CDOT	
	NFRMPO	
	CDOT	

icoting. I I Acc mooting, 4/10/21	from 12-12:45pm, Virtual	
lame	Organization	Email
	PPACG	
	CDOT	
	CDOT	
	PPACG	
	CDOT	
	CDOT	
	PPACG	

MPO Staff Group		
Meeting: PACOG Meeting, 5/	6/21 from 1:30-2pm, Virtual	
Name	Organization	Email
	CDOT	
	PACOG	
	DRCOG	
	CDOT	

MPO Staff Group		
Meeting: GVMPO Meeting, 5/18/2	21 from 2-3pm, Virtual	
Name	Organization	Email
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	

PO Staff Group		
eeting: CDOT/ MPOs GHG	Discussion, 6/29/21 from 11am-12pm, Virtual	
ıme	Organization	Email
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

Group		
OOT/ MPOs GHG Discuss	sion, 7/6/21 from 8:30-9:30am,Virtual	
	Organization	Email
	CDOT	
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	4. P. Control 18	
	Partie Cipotica Cipot	

MPO Staff Group		
Meeting: CDOT/ MPOs GHG D	iscussion, 7/8/21 from 3-4pm, Virtual	
Name	Organization	Email
	CDOT	
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

aff Group		
: CDOT/ MPOs GHG Dis	cussion, 7/15/21 from 2-3pm, Virtual	
	Organization	Email
	CDOT	
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

ff Group		
OT/ MPOs GHG Dis	cussion, 7/21/21 from 9-10am, Virtual	
	Organization	Email
	CDOT	
	CDOT	
	Cambridge Systematics	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

Staff Group		
ng: CDOT/ MPOs/ Cambridg	e Sytematics EERPAT Deep Dive, 7/22/21 fro	m 11am-12pm, Virtual
	Organization	Email
	CDOT	
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	Transportation Commissioner	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

IPO Staff Group		
eting: CDOT/ MPOs GHG	Discussion, 7/27/21 from 1-2pm, Virtual	
ame	Organization	Email
	CDOT	
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	Transportation Commissioner	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

O Staff Group		
ting: CDOT/ MPOs GHG Dis	scussion, 8/2/21 from 1-1:30pm, Virtual	
	Organization	Email
	CDOT	
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	Transportation Commissioner	
	CDOT	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

taff Group		
g: CDOT/ MPOs GHG D	iscussion, 8/3/21 from 2-3pm, Virtual	
	Organization	Email
	CDOT	
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	DRCOG	
	CDOT	
	PACOG	
	PPACG	
	Transportation Commissioner	
	CDOT	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

MPO Staff Group		
Meeting: CDOT/ MPOs GHG Di	scussion, 8/4/21 from 2-3:30pm, Virtual	
Name	Organization	Email
	CDOT	
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	Transportation Commissioner	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

MPO Staff Group		
Meeting: CDOT/ MPOs GHG	Discussion, 8/6/21 from 3:30-4:30pm, Virtual	
Name	Organization	Email
	GVMPO	
	GVMPO	
	CDOT	

O Staff Group		
eting: CDOT/ MPOs GHG Di	scussion, 8/10/21 from 12-1pm, Virtual	
ne	Organization	Email
Y .	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	CDOT	
	PACOG	
	PPACG	
	Transportation Commissioner	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	

MPO Staff Group		
Meeting: CDOT/ MPOs GHG	Discussion, 8/11/21 from 8-9am, Virtual	
Name	Organization	Email
	CDOT	
	GVMPO	
	GVMPO	
	CDOT	
	CDOT	
	DRCOG	
	CDOT	
	PACOG	
	PPACG	
	Transportation Commissioner	
	CDOT	
	NFRMPO	
	CDOT	
	CDOT	
	CDOT	
	DRCOG	
	DRCOG	
	CDOT	
	DRCOG	
	NFRMPO	
	CDOT	
	PPACG	





Department of Transportation

Pollution Reduction Planning for Transportation

MPO Briefing - June 29, 2021





CDOT Rulemaking Process

GHG Policy Paper

Major Policy Issues and Outstanding Questions



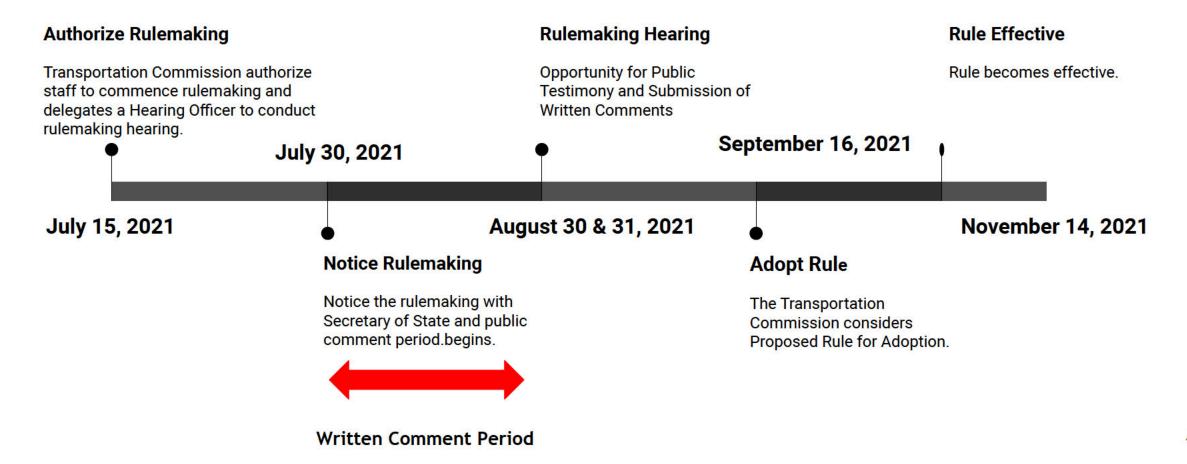
Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protoco l-workshops
- Sign up to receive rulemaking updates: <u>DOT Rules@state.co.us</u> or at link above
- Multiple Opportunities for Public Comment
 - Department rulemaking often includes one or more stakeholder sessions/opportunities to review potential rules and issue so that we may consider stakeholder comments even before filing the rules
 - Submission of written comments prior to the Rulemaking Hearing
 - Oral testimony and submission of written comments at Rulemaking Hearing



Tentative Rulemaking Timeline





CDOT GHG Policy Paper

Explains intent of rule and key policy issues

- Builds TC understanding around concept and its intricacies
- Provides initial drafting for rulemaking and format to advance regulatory concepts in a more plain-english format



Major Policy Issues and Outstanding Questions

Practical Implementation

- Role of modeling and mitigations
- How mitigation measures are conducted and approved

Primary Policy Issues

- Determining reduction levels
 - The role of personal choice
 - Magnitude of the reductions
 - VMT
 - Technology
- Enforcement



Future Discussion Topics

- Modeling
 - MPO and Statewide Model consistency
 - Modelling input assumptions
 - Platforms
 - Baseline analysis
 - Modelling outputs and methods for setting budgets
- Changes in vehicle fleet
- Quantifying impact of VMT reductions vs. operational improvements
- Process for public review of mitigation measures
- Enforcement





Department of Transportation

GHG Pollution Standard Scenario Discussion

July, 2021





CDOT developed modeling scenarios for two reasons:

- 1) To determine the range of feasible GHG reductions possible through planning-related changes and investments (in short, to determine the GHG reduction levels).
- 1) To prepare the cost benefit analysis required as part of the rulemaking.
 - Section 24-4-103(2.5)(a) of the Administrative Procedures Act (APA)



Tools used for analysis:

- Statewide Travel Model
 - Run using "no build" scenario
- FHWA Energy and Emissions Reduction Policy Analysis Tool (EERPAT)
 - Models policies at the regional level
- MOVES3
 - Conducted by CDPHE
 - Accounts for Colorado-specific factors such as the age of the vehicle fleet, the
 distribution of VMT by different vehicle types and road types, and the speeds at
 which vehicles travel.
 - Accounts for EVs displacing relatively more efficient vehicles than the average vehicle in the on-road fleet



Statewide analysis examines bundles of measures that might be implemented to achieve the targets.

3 scenarios (layer cake - building on each level)

- Travel choices
- Travel choices + Transit
- Travel choices + Transit + Land Use

Additional analysis on light-duty vehicle and bus electrification (separately). Trucks not considered.

Travel Choices



3 scenarios (layer cake)

- Travel choices: measures to reduce SOV commuting by workers, programs that encourage non-work trip reduction, infrastructure investments, and reduced transit fares.
 - Commuter trip reduction
 - Non-work trip reduction (40% for university, 10% personal business for new broadband households)
 - More sidewalk (1,900 miles new/upgrade by 2030, 4,700 by 2050)
 - More bike (2,500 new lane-miles between 2022-2042, 2,500 protected lane/path)
 - Speed limit reduction on urban arterials (avg 6 mph reduction)
 - Reduce transit fare by 50%*
- Travel choices + Transit
- Travel choices + Transit + Land Use



Travel Choices: Commute Trip Reduction

 Telework (telecommuting): The percentage of workers teleworking at least part-time is increased by a factor of 3, from 6.3 percent to 18.9 percent, compared to baseline levels, reflecting a continuation of trends observed during the COVID pandemic.

Broadband access grows from 82.6% to 97% of households

 10% of households in mixed use areas participate in a household based trip reduction program and that these households reduce VMT by 5%



Travel Choices: Bike Improvements

- Build out of bike lanes and paths at ½ mile spacing for the entire urbanized area within Colorado (1,256 square miles) over a 20 year period (2022-2041)
- Corresponds to 5,000 new miles of facility or 250 new miles per year.
 - We maintain a system of state and US highways that spans 9,100 centerline miles
- Split equally between on-street bike lanes and specialized facilities
- Average bike speed increased by 33% to represent electrification

Bicycle Travel Increase From Facility Investment

Year	Baseline BMT (millions)	New Facility- Miles	Additional BMT (millions)	Total BMT (millions)	% Over Base
2030	346	2,250	144	474	37%
2045	405	5,000	320	717	77%



Travel choices + Transit

3 scenarios (layer cake)

- Travel choices
- Travel choices + Transit: Expansion of transit service and bus electrification over time.
 - 6% annual increase, 2022 2030
 - 2% annual increase, 2030 2050
 - Total increase by factor of 2.3 by 2050 (more than doubling)
 - Comparison: Vehicle Revenue Miles increased by factor of 1.75 between 2000 and 2019
- Travel choices + Transit + Land Use





In 2019, based on data reported by Colorado's transit operators to the National Transit Database, 81 million vehicle revenue-miles of service were provided by all modes in Colorado's five metro areas.

Assumed transit revenue-miles will increase by 6.0 percent per year between 2022 and 2030 (69 percent total growth between 2019 and 2030), and by 2.0 percent a year between 2030 and 2050 (151 percent total growth between 2019 and 2050) compared to base year (2019) service levels.

This compares with a statewide growth in transit VRM of 2.9 percent annually (76 percent) between 2000 and 2019 (3.1 percent for the Regional Transit District, 1.2 percent average for other operators in the state).



Travel choices + Transit + Land Use

3 scenarios (layer cake)

- Travel choices
- Travel choices + Transit
- Travel choices + Transit + Land Use: Policy changes and incentives (changes to transportation project selection criteria) to encourage transit-supportive land use and walkable neighborhoods.



- Based on growth of urban mixed use areas defined as areas with a population density of at least 2,000 per square mile and a retail/service job density of at least 500 per square mile.
 - Baseline forecast of growth in mixed-use areas ranges from (between 2023-2030):
 - 10% in NFRMPO to
 - 42% in DRCOG
 - Action assumes (between 2023-2050):
 - 75% in DRCOG
 - 50% in other MPOs



GHG Pollution Reduction Roadmap Re: VMT

"Impacts of COVID-19 on pollution may be large in the near term, but long term effects are unknown...... And while the state is not relying on COVID-19 sensitivity assumptions for purposes of achieving emission reduction targets, it will continue to evaluate how they impact actual emissions trajectories over time and update relevant modeling accordingly."

"For 2030, the HB 1261 Targets Scenario models a 10% VMT reduction below the levels in the Reference Scenario...The state has embedded this 10% reduction in its projections based on the assumption that shifts in behavior over a meaningful period of time may make this reduced level of VMT sustainable, especially when coupled with supportive policies to help manage driving demand such as affordable housing close to job locations and ensuring that Colorado's economy remains in the top tier of the nation. This will likely require a suite of policy solutions...(page 63)"



Scenario VMT Reductions

Scenario	2030 (millions of vehicle miles)	2040 (millions of vehicle miles)	2050 (millions of vehicle miles)
Baseline	63,551	71,069	78,587
Reduction Range from Modelled Scenarios	5,800-6900	6,100-8,300	6,100-9800



Rulemaking for 2 CCR 601-22, Statewide Transportation Planning Process and Transportation Planning Regions

Equity Group Meetings

Rulemaking fo	r 2 CCR 601	-22, Statewide	· e Transportati	⊔ on Planning P	rocess and T	ransportation	Planning Reg	ions
Equity Group			_					
E	quity Group	Meetings						
D	ate	Time	Location					
	3/5/21	12:30-2pm	Virtual					
	4/14/21	1-2:30pm	Virtual					
	8/5/21	10-11:30am	Virtual					

roups		
arch 5, 202	1 from 12:30-2pm, Virtual	
	Organization	Email
	Western Colorado University	
	GRID Alternatives Colorado	
	Natural Resource Defense Council	
	Colorado Latino Leadership, Advocacy, and Resear Organization	ch
	Colorado Department of Public Health and Environr	nent
	Globeville Elyria-Swansea Coalition	
	Wilderness Workshop	
	RTD Denver	
	City of Longmont	
	Ground Work Colorado	
	Colorado Department of Public Health and Environr	nent
	Boulder County (OSCAR)	
	EPA Region 8	
	Mile High Connects	
	Green Latios	
	Norteast Transportation Connections	
	City of Longmont	
	The Wilderness Society	
	Colorado Fiscal Institute	
	Sierra Club Colorado	
	Ground Work Colorado	
	Western Plains District Church of the Brethran	
	Conservation Colorado	
	Regional Air Quality Council	
	Cappelli Consulting	
	Colorado School of Public Health	

Commerce City Colorado Department of Public Health and Environment **Energy Outreach Colorado** Colorado People's Alliance Colorado Energy Office Colorado Dept. of Natural Resources Southwest Energy Spirit of the Sun Colorado Department of Public Health and Environment Mi Familia Vota **Boulder County** Moms Clean Air Force City and County of Denver Healthier Colorado State Conference National Association for the Advancement of Colored People Colorado Department of Public Health and Environment Colorado Department of Labor and Employment Govenor's Office

ulemaking for 2 CCR 601-22, Statewi	de Transportation Planning Process and Transporta	tion Planning Regions
quity Groups		
leeting: April 14, 2021 from 1-2:30pm	, Virtual	
ame	Organization	Email
	Western Colorado University	
	CDOT	
	GRID Alternatives Colorado	
	Natural Resource Defense Council	
	Colorado Latino Leadership, Advocacy, and Research Organization	
	Globeville Elyria-Swansea Coalition	
	Wilderness Workshop	
	City of Longmont	
	Ground Work Colorado	

Colorado Department of Public Health and Environment

Colorado Department of Public Health and Environment

Colorado Department of Public Health and Environment

EPA Region 8
Mile High Connects
Green Latios

CDOT

CDOT

Commerce City

Southwest Energy

Spirit of the Sun

Mi Familia Vota

The Wilderness Society
Colorado Fiscal Institute
Sierra Club Colorado
Cappelli Consulting

Colorado School of Public Health

Colorado People's Alliance

Boulder County
Moms Clean Air Force
City and County of Denver
Healthier Colorado
State Conference National Association for the Advancement of Colored People
Colorado Department of Public Health and Environment
CDOT
Colorado Department of Public Health and Environment

Rulemaking for 2 CCR 601-22, Statewick	le Transportation Planning Process and Transportation	on Planning Regions
Equity Groups		
Meeting: August 5, 2021 from 10-11:30,	Virtual	
Name	Organization	Email

Organization
Western Colorado University
GRID Alternatives Colorado
Natural Resource Defense Council
Colorado Latino Leadership, Advocacy, and Research Organization
Globeville Elyria-Swansea Coalition
CDPHE
Wilderness Workshop
RTD
City of Longmont
Ground Work Colorado
Colorado Department of Public Health and Environment
Boulder County
EPA Region 8
Mile High Connects
Green Latios
Northeast Transportation Connections
City of Longmont
The Wilderness Society
Colorado Fiscal Institute
Sierra Club Colorado
Conservation Colorado
Groundwork Colorado
Conservation Colorado
RAQC
CDPHE
Cappelli Consulting

Colorado School of Public Health
Conservation Colorado
Columbia University
Commerce City
Colorado Department of Public Health and Environment
Energy Outreach Colorado
Colorado People's Alliance
CEO
DNR
Southwest Energy
Conejos Clean Water
CDOT
Spirit of the Sun
RMI
Mi Familia Vota
Boulder County
Moms Clean Air Force
Healthier Colorado
State Conference National Association for the Advancement of Colored People
CDOT
Colorado Department of Labor and Employment



Shishido - CDOT, Natalie <natalie.shishido@state.co.us>

Response Needed: Equity Priorities for State Transportation GHG Rulemaking (meeting #2)



Hi Everyone,

Thank you again to those of you who were able to participate in the first brainstorming session on equity considerations of upcoming state transportation greenhouse gas reduction rules. You all had some wonderful ideas to share and we're so grateful for your input! The notes from that meeting are attached (let me know if you have any corrections/additions). Thank you to Natalie Shishido with CDOT for taking notes and summarizing the great Jam Board ideas.

Please complete this Doodle poll by Wednesday, March 24th to help us schedule the second discussion and we'll be in touch soon with more details.

Have a wonderful weekend! Lauren

Lauren McDonell Climate Change Outreach Planner



COLORADO

Air Pollution Control Division

Department of Public Health & Environment

Phone: (303) 692-6461 lauren.mcdonell@state.co.us





Department of Transportation

Equity Discussion: GHG Pollution Standard For Transportation Planning

Equity Organizations- August 2021





- Update on SB260 Implementation
- Review equity priorities that we heard voiced in our March and April meetings (held jointly with CDPHE)
- 1. Provide an update on the timeline, Transportation Commission rulemaking process, and upcoming public Rulemaking Hearings
- 1. Listen to your ideas and feedback



SB260 Background and Update

SB260 is transformative legislation for Colorado and our transportation system for reasons beyond providing new, stable transportation funding.

- Requires creation of an <u>Environmental Justice Branch</u> within CDOT.
- Creates a <u>dedicated funding source</u> "to serve the primary business purpose
 of <u>mitigating the environmental and health impacts of increased air</u>
 <u>pollution from motor vehicle emissions in nonattainment areas.</u>" Allocates
 \$183M over next 10 years.
- Requires CDOT to review, update and improve its public engagement
 program for transportation projects to "promote transparency and increase
 public participation and public confidence in project selection, planning
 and implementation"
- Establishes new requirements for how transportation projects are selected, studied and constructed with the intent to "minimize the adverse environmental and health impacts and address inequitable distribution of the burdens of such projects."



SB260 Background and Update

- Requires establishment of a Environmental Justice Branch within CDOT.
 - CDOT will post position to hire executive-level head of this office later this month.
- Creates a dedicated funding source "to serve the primary business purpose of mitigating the environmental and health impacts of increased air pollution from motor vehicle emissions in nonattainment areas." Allocates \$183M over next 10 years.
 - Legislation requires governing board to be established by October 2021. First year of funding becomes available in FY23.
- Requires CDOT to review, update and improve its public engagement program for transportation projects to "promote transparency and increase public participation and public confidence in project selection, planning and implementation"
 - Initial focus of EJ Branch to review current engagement strategies and recommend improvements.
- Establishes new requirements for both how transportation projects are selected, studied and constructed with the intent to "minimize the adverse environmental and health impacts and address inequitable distribution of the burdens of such projects."
 - GHG Rulemaking (today's focus) is one requirement within this section of the legislation.
 - CDOT has begun work to amend our policies to incorporate these requirements and is immediately implementing these changes on I-270 environmental study.



I-270 Air Quality Monitoring

CURRENTLY

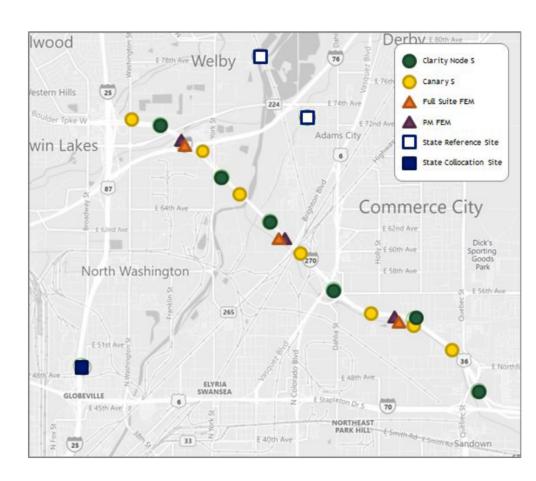
12 monitors in place and being calibrated

NEAR FUTURE ADD

3 additional stations to be deployed along I-270 next month.
 Including TSI DustTrak (PM 1, PM2.5, PM10) and Met.

COMMUNITY ACCESSIBILITY TO DATA

 Monitoring results will be posted on the "Love My Air" app/website-- a citywide air quality (AQ) monitoring network that provides real-time air quality data



notional setup during construction phase



Equity Requirements Beyond SB260

CDOT realizes that there are requirements and state commitments beyond SB260, including HB1266 and the Climate Equity Framework.

We also realize that today's meeting (and earlier meetings held by CDPHE) are just a part of what is needed to meet the full intent of these requirements.



GHG Rulemaking

Greenhouse Gas Roadmap

Reduce pollution ~12.7 million tons (MMT) by 2030

6 MMT reduction

Low and Zero Emission Vehicle rules

2 MMT reduction

Utility and public investment in fleet turnover and infrastructure for light-duty zero emission vehicles (SB19-077, electrification investments from SB21-260)

Collectively, the other strategies will target remaining 4.7 million tons

4.7 MMT reduction

GHG Pollution Standards for transportation plans	In progress - CDOT TC Rulemaking - Summer 2021
Incentivize land use to increase housing near jobs and reduce VMT a pollution	nd Under evaluation
Clean trucking strategy - infrastructure, fleet incentives, consider retools such as advanced clean trucks and fleet rules	gulatory In progress - Study to be Completed - Summer 2021 Stakeholder Engagement - Summer/Fall 2021; plus fleet investments from SB21-260
Participate in developing post 2025 vehicle standards (state and fede	Federal and CARB processes
AQCC evaluation of indirect source rules	Pending - AQCC Rulemaking
Expansion of public transit, including setting the stage for Front Range	ge Rail In progress - SB21-238, on-going multimodal emphasis

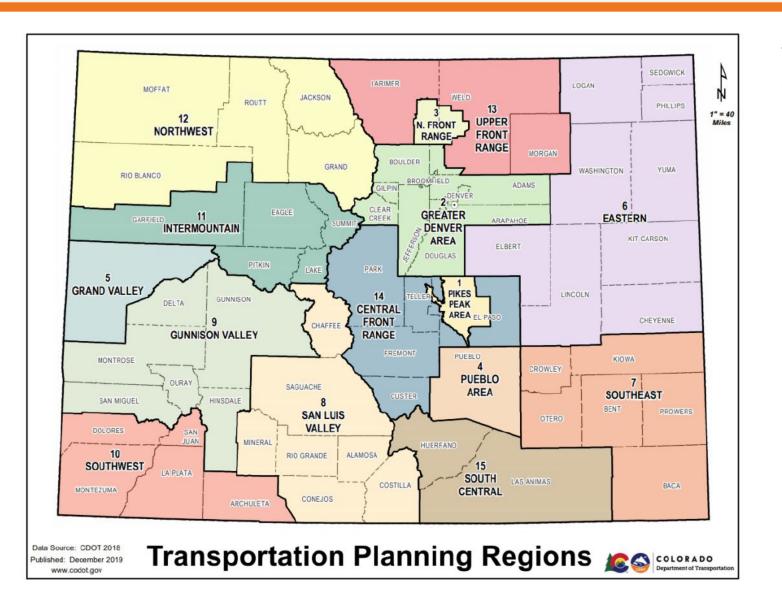


GHG Planning Rulemaking: Concept & Approach

- Rulemaking responds to both the GHG Roadmap and SB260
- Overall premise is that the transportation projects we build, combined with the emissions of vehicles themselves, influences driving patterns and ultimately GHG pollution
- Rule would set a GHG "pollution reduction level" for transportation plans
- Basic premise similar to Clean Air Act "conformity" for ozone in Colorado
- Requirements would apply to CDOT and Metropolitan Planning Organizations (the state's primary transportation planning agencies)



MPO Areas



There are five metropolitan areas in Colorado:

- Denver Regional Council of Governments
- North Front Range Metropolitan Planning Organization
- Pikes Peak Area Council of Governments
- Pueblo Area Council of Governments
- Grand Valley Metropolitan
 Planning Organization



GHG Mitigation Measures

- If CDOT and MPO plans are determined to be out of compliance with established GHG
 pollution reduction planning targets, they will have the opportunity to utilize approved
 mitigations to offset emissions and achieve progress towards compliance.
- CDOT and MPOs would "select" strategies from a pre-approved list. The approved
 mitigations list will quantify approximate emissions offsets (possibly in the form of a
 score). Those emissions credits, pursuant to the pre-approved list, may then be applied
 to reduce the balance of GHG in modeling a transportation plan.
- Prior to each planning cycle, CDOT shall provide updating scoring methodology for the mitigation list, which shall be applicable during the subsequent planning cycle.
- The specifics of these measures, including the list and the GHG reductions will
 achieve will be established through a separate policy to come after the rulemaking.

Recent Progress

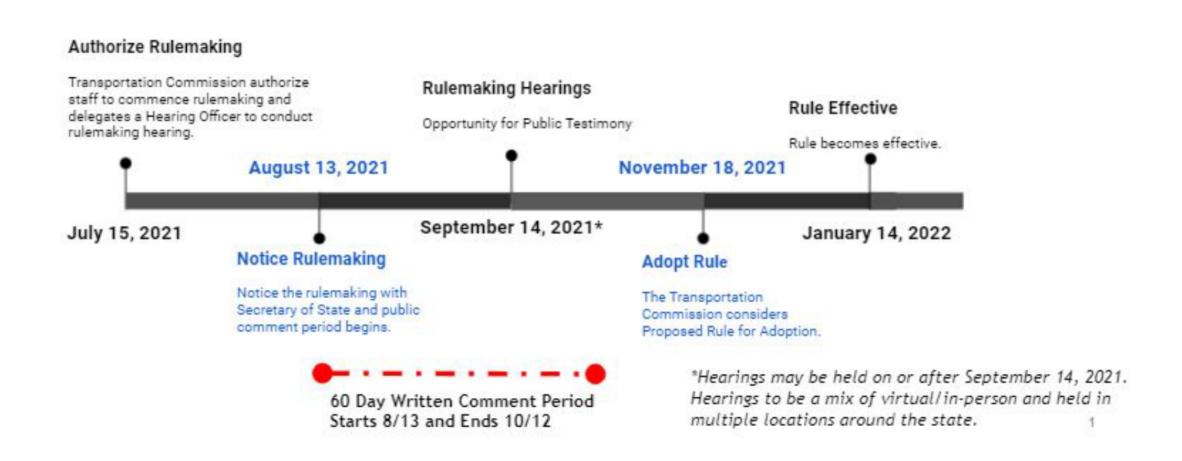


- Rulemaking transitioned to CDOT and its Transportation Commission. Will be conducted under the Administrative Procedures Act guidelines
- The Transportation Commission authorized rulemaking to proceed at July 2021 meeting
- Conducted scenario analysis of aggressive but feasible GHG reductions possible through transportation planning decisions
- CDOT team is working to draft rule language within the context of a complicated transportation planning process with long standing state and federal requirements



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and rulemaking development





Previous Meetings: Input

CDPHE led meetings with equity groups

• March 5, 2021

• April 14, 2021

What does it mean for this policy to be "equitable"?

Equity Considerations: GHG Pollution Standard

Promote equitable TOD (transit oriented development)

Unclear how

areas

budgets will require

traffic reductions in

already affected DI

Creating an authentic community mobility needs assessment for each DI community to voice transportation

needs

Better understand the current tressors & how limate will interact with them long term

highest polluting sources, not JUST GHGs but also othe pollutants where they impact peop locally. Focus on

Focus on the

nonattainment fund

> Where does the emphasis on equitable access in multi-modal projects in the CDOT and MPO planning process come in? It's not apparent in either **GHG standard or ERTP** topic.

Induced demand modeling in other states has been unreliable in predicting unintended consequences from latent demand

> Insurance and risk. great to get folks out of cars but if they fall off a scooter what happens then.

Education. education. education and meeting people where they are.

> electric bikes. electric car sharing

nonattainment fund

How do we work with local governments **AND DI communities** together on land use incentives to support transit-oriented development and more walkable communities?

> Nonattainment Fund

Vertical green walls

along major roads to

emission near trails

and neighborhoods

(vines and other

help filter vehicle

native species)

Trees for shade along major roads like Federal Blvd

2nd the treeincorporate more permeable surfaces

How can we we apply an lens to the project-level evaluation? form of acco to individual communities there be?

Study

Consider intersectionality of the impacts of climate change that might fall outside of greenhouse gas and air quality but are impacting communities in different ways (e.g.

access to water)

There are concerns that lack of "compliance" will lead to funding cuts, which could reduce programs and benefits to disproportionately impacted communities.

Going beyond GHGs how can CDOT incorporate the co-benefits of transportation projects like air quality, affordability, mobility access, public health, into their project selection process?

Indigenous knowledge of the biosphere is and can be key here with mycelium for water retention in soil and so many ways to clean and protect the land for sustainable transportation efforts with community.

How do we apply a climate equity lens to the transportation planning process? Do we require a certain percentage of projects to provide direct benefits for disproportionately impacted communities, like Denver 2A's 50%?

plans to encourage walking and biking (like investing in bike lanes, sidewalks. beautifying streets. etc.)

ow do we make sure projects in the 10 Year Plan actually decrease GHGs, so more investment in projects that generate multimodal trips and less in traffic signal improvements that reduce idling, but crease VMT?

Will the equity screening tool and rule be used to not only not cause more harm but also advance equity in pollution reductions?

linimize or liminate framing badway or intersection expansion to be considered a mitigation.

using watering trucks water vegetation ____ median of major roads IF watering infrastructure is "impossible" or not feasible, can also use grey water



Examples of GHG Mitigation Measures

Mitigation measures will include projects or strategies that are not "regionally significant" and thus would not be modeled as part of the plan.

The addition of transit resources in a manner that can displace vehicle miles traveled.

Improving pedestrian and bike access, particularly in areas that allow citizens to shift multiple daily trips for everything from work to dining to retail.

Encouraging transportation projects that facilitate or incentivize more efficient forms of vertical development that integrate mixed use facilities in an equitable manner.

Incorporating local zoning plans into the plan that will increase density of housing proximate to transit and multi-use facilities.

Improving first-and-final mile access to transit stops and stations that make transit resources safer and more usable by consumers.

Improving the safety and efficiency of crosswalks for pedestrians, bicyclists, and other non-motorized vehicles, including to advance compliance with the Americans with Disabilities Act.

Adopting locally driven changes to parking policies and physical configuration that encourage more walking and transit trips.

Incorporating medium/heavy duty vehicle electric charging and hydrogen refueling infrastructure -- as well as upgrading commensurate grid improvements -- into the design of key freight routes to accelerate truck electrification.

Establishing policies for clean construction that result in scalable improvements as a result of factors like lower emission materials, recycling of materials, and lower truck emissions during construction, especially in disproportionately impacted neighborhoods.



Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protocol-workshops
- Sign up to receive rulemaking updates: DOT Rules@state.co.us or at link above
- Multiple Opportunities for Public Comment (5 public hearings planned)
- Current schedule: Draft rule published in mid-August; hearings must be scheduled no earlier than 20 days later.



Rulemaking Hearings

At least 5 public Rulemaking Hearings across the state in September:

- Virtual and in-person option
 - Denver
 - Fort Collins
 - Colorado Springs
 - Durango
 - Glenwood Springs
- Overview of rule concepts
- Opportunity for public testimony
- Spanish interpretation offered

Engage with CDOT and prepare to apply for funding and drive opportunities for paid participation into DI communities to support this

Nonattainment Fund

Translation of materials as well as interpretation

Community translators -See East Colfax Community Collective

Hearings or opportunities to meaningfully participate *not during traditional working hours.

Spanish translation for full hearings, not just translation for testimony

Start with some loose categories of strategies to seed the conversation so people have some place to start providing input.

In educational webinar on how to engage, how the rulemaking process works, what authorities CDOT, CDPHE, AQCC has how to request fo rulemaking, ...

Community Engagement Ideas

Start with some loose categories of strategies to seed the conversation so people have some place to start providing input.

Give examples and options for what CDOT, CDPHE, AQC can do legally so the people know what possible to get don Don't assume that people have any background in the staject.

Rural communities how are we engaging them? 've received feedback locally saying that some folks don't know how to use many online tools like Zoom and therefore, they find giving feedback/input difficult or impossible. Maybe we need to provide some basic tech training to encourage more participation.

second the tech training- maybe provide small tech training & honorarium grants to orgs/nonprofits rooted in & working with community give them what they want- comfortable place (with shade) to wait for the bus, safe bike lanes protected/divided rom streets, cleaner air quality through increased vegetation

Nonattainment Fund

Create a 'road show'
with materials like
flyers, yard signs
and have a hotline
people can call. That
can help our
organizations do
more outreach

ally/ accomplices training and intercultural training

Use Facebook, What's App! Leverage existing mailers that municipalities/other stakeholders are already sending to residents & partner with them to spread the word and get to cale

Discussion



Questions?

How Can We Do This Better?

Concerns?

How will feedback be incorporated into final rule?





THANK YOU!

Department of Transportation

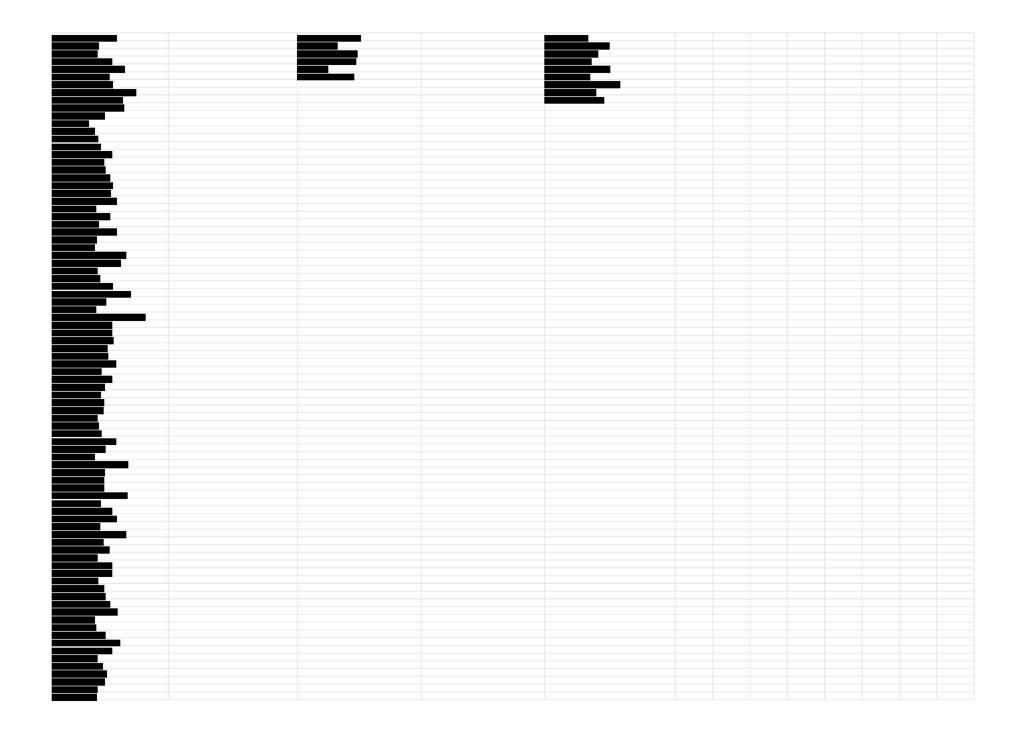


Rulemaking for 2 CCR 601-22, Statewide Transportation Planning Process and Transportation Planning Regions

CDPHE/CDOT State Listening Sessions

Rule	making for 2 CCR 60	1-22. Statewid	e Transportati	on Planning	Process and T	ransportation	Planning Rec	iions
	Listening Sessions							
	CDPHE/CDC	T State Listen	ing Sessions					
	Date	Time	Location					
	1/28/2	1 6-8pm	Virtual					
	3/11/2	1 10:30am-12pm	Virtual					
	3/18/2	1 6-8pm	Virtual					
	4/21/2	1 6-8pm	Virtual					
	4/28/2	1 12-2pm	Virtual					

PHE/CDOT State Listening Session	ons	s and Transportation Planning Regions					
HE/CDOT State Listening Session 1, 1/28/21	CDPHE/CDOT State Listening Session 2, 3/11/21	CDPHE/ CDOT State Listening Session 3, 3/18/21	CDPHE/ CDOT State Listening Session 4, 4/21/21	CDPHE/ CDOT State Listening Session 5, 4/28/21			
_							





State Listening Session: Reducing Greenhouse Gas Emissions from Transportation





Colorado state government is seeking public input on an upcoming rule to reduce greenhouse gas emissions from transportation in Colorado. This rule is part of an ambitious effort to address climate change and meet the <u>state's science-based climate targets</u> of 26% by 2025, 50% by 2030% and 90% by 2050 from 2005 levels.

During the meeting, staff will give a brief overview of key concepts being considered and the majority of the time will be dedicated to hearing your ideas and concerns. The state is committed to promoting racial equity and economic justice through its greenhouse gas reduction strategies, so we especially would like to hear from community members and organizations about ideas on how to best achieve greenhouse gas reductions in the transportation sector.

This Listening Session will be Thursday, January 28, 2012 from 6:00-8:00pm via Zoom

Participants will be able to participate in either English or Spanish.

Please register below in order to attend and/or provide public comment.

REGISTRATION (CLICK HERE)

Comments may also be submitted any time to cdphe.commentsapcd@state.co.us
Subject: GHG Transportation Comment.

Sign up to receive email notifications from the Division on greenhouse gas, climate equity, and other air quality issues <u>HERE</u>.

Contact: Lauren McDonell 303-692-6461

<u>climatechange@state.co.us</u>

Sesión de conversación pública del estado: Reducción de las emisiones de gases de efecto invernadero del transporte

El gobierno del estado de Colorado está buscando el aporte del público respecto a una próxima normativa para reducir las emisiones de gases de efecto invernadero del transporte en Colorado. Esta norma forma parte de una ambiciosa iniciativa para abordar el cambio climático y cumplir con los <u>objetivos climáticos del estado, con base científica</u>, del 26 % para 2025, del 50 % para 2030 y del 90 % para 2050 respecto a los niveles de 2005.

Durante la reunión, el personal hará una breve exposición de los conceptos clave que se están considerando y la mayor parte del tiempo se dedicará a escuchar sus ideas e inquietudes. El estado está comprometido a promover la equidad racial y la justicia económica mediante sus estrategias de reducción de gases de efecto invernadero. Es por ello que nos gustaría escuchar especialmente a los integrantes y las organizaciones de la comunidades respecto a sus ideas sobre la mejor forma de lograr las reducciones de gases de efecto invernadero en el sector del transporte.

La sesión de conversación pública será el jueves 28 de enero de 2021, de 6:00 a 8:00 p. m. vía Zoom.

Los asistentes podrán participar en inglés y en español.

Inscríbase a continuación para concurrir o hacer un comentario público.

INSCRIPCIÓN(CLIC AQUÍ)

Los comentarios también se pueden enviar en cualquier momento a cdphe.commentsapcd@state.co.us
Asunto: Comentario sobre gases de efecto invernadero del transporte

Para recibir notificaciones por correo electrónico de la División sobre gases de efecto invernadero, equidad climática y otros temas de calidad del aire, suscríbase AQUÍ.

Contacto: Lauren McDonell 303-692-6461 climatechange@state.co.us

Colorado Air Pollution Control Division | 4300 Cherry Creek Drive South, Denver, CO 80246

Unsubscribe {recipient's email}

Update Profile | About our service provider

Sent by angel.lazalde@state.co.us powered by





Employee Traffice Reduction Program (ETRP) Stakeholder Updates

McDonell - CDPHE, Lauren < lauren.mcdonell@state.co.us > To: CDPHE Climate Change - CDPHE < cdphe_climatechange@state.co.us >

Thu, Apr 1, 2021 at 10:34 AM

Dear Stakeholders,

The state of Colorado has held several listening sessions on the upcoming transportation greenhouse gas (GHG) reduction rule concepts, and we've heard valuable input from a diverse range of stakeholders. Thanks to all of you who participated and shared your thoughts, questions, and concerns with us. Here's where we are headed as we move into drafting the Employee Traffic Reduction Program (ETRP) rule:

- Focus on large employers (those that employ 100 or more employees at a single worksite).
- Focus on the Ozone Nonattainment Area (NAA), building on significant work performed by the Regional Air Quality Council to develop an ETRP framework for the NAA.
- Achieve significant climate and air quality benefits with equity in mind.
 - Recognize NAA has resources available through Transportation Management Associations (TMAs) and other support to assist in a successful and fair implementation of an ETRP rule.
 - Recognize some Colorado communities currently lack transit access and have a different mix of economic, social, health and environmental benefits.
- Support operational success through partnerships with Planning Organizations, TMAs and other partners to allow large businesses to plan, implement, assess and adjust.

We look forward to building upon a great foundation and sharing the work with other businesses that may want to implement ETRP strategies.

The presentation slides from the recent listening sessions are attached. We are planning to hold additional stakeholder meetings in April 2021 and you can register HERE or see more details are available on our website at: https://cdphe.colorado.gov/reducing-greenhouse-gas-emissions-from-transportation. As a reminder, you can still submit written comments to us through the comment form here: https://bit.ly/3sEdljd (please let us know which rule component your comment addresses).

Sincerely, Lauren McDonell

Lauren McDonell Climate Change Outreach Planner



Phone: (303) 692-6461 lauren.mcdonell@state.co.us





REMINDER: Upcoming Stakeholder Meetings for State Greenhouse Gas Transportation Rule

McDonell - CDPHE, Lauren lauren.mcdonell@state.co.us
To: CDPHE Climate Change - CDPHE cdphe climatechange@state.co.us>

Fri, Apr 16, 2021 at 1:31 PM



Colorado state government is seeking public input on an upcoming rule to reduce greenhouse gas (GHG) emissions and other air pollutants from transportation. The rule will include a GHG Pollution Standard for transportation planning, an Employee Traffic Reduction Program requirement for employers with 100+ employees in the ozone nonattainment area, and improvements to the state vehicle emission inspection program. More information is available at <u>our webpage</u>.

<u>Upcoming Stakeholder Engagement Opportunities</u>

State Transportation Rule Informational and Listening Sessions #4 and #5 These two identical events will provide an overview of all rule concepts and welcome public comments and questions.

Wednesday, April 21, 6:00 p.m. - 8:00 p.m. Wednesday, April 28, 12:00 p.m. - 2:00 p.m.

REGISTER HERE

Sesiones informativas y de escucha de la regla estatal de transporte Estos dos eventos idénticos proporcionarán una descripción general de todos los conceptos de las reglas y recibirán comentarios y preguntas del público.

Miércoles 21 de abril, 6:00 p.m. - 8:00 p.m. Miércoles 28 de abril, 12:00 p.m. - 2:00 p.m.

REGISTRARSE AQUÍ

Employee Traffic Reduction Program (ETRP) Listening Session
This last listening session will provide more details on the Employee Traffic Reduction
Program rule component and welcome questions and comments.

Tuesday, April 20 10:00 am - 11:00 am

REGISTER HERE

The Air Pollution Control Division will request a Rulemaking Hearing before the Air Quality Control Commission May 20-21, 2021, with an anticipated Rulemaking Hearing on August 19-20, 2021.

You can submit written comments to us through the comment form **HERE** (please select which rule component your comment addresses).

We hope you can participate! Please share this notice with your networks,

Colorado Air Pollution Control Division | 4300 Cherry Creek Drive South, Denver, CO 80246



Employee Traffic Reduction Program (ETRP) slides and additional info

McDonell - CDPHE, **Lauren** Lauren <a href="mailto:lauren.mcdonell@state.co.

Tue, Apr 20, 2021 at 2:25 PM

Thank you for your interest in the state's Employee Traffic Reduction Program (ETRP). The presentation from the April ETRP listening sessions is attached.

You can find more information on ETRP and the rest of the state's Transportation Greenhouse Gas (GHG) Reduction rule package HERE. Written comments on any part of the rule package can be submitted HERE. In order to be able to consider comments for the draft rule, we ask that written comments be submitted by May 1.

Our final two public listening sessions on the state Transportation GHG Reduction rule will be on Wednesday, April 21 from 6:00 p.m. to 8:00 p.m. and Wednesday, April 28 from 12:00 p.m. to 2:00 p.m. (REGISTER)

On May 20-21, the Air Pollution Control Division will request a rulemaking hearing before the Air Quality Control Commission (AQCC). If approved, the hearing will be held August 19-20, 2021. To stay updated about the AQCC rulemaking process, visit the AQCC website at: https://cdphe.colorado.gov/aqcc and make sure you're signed up for AQCC notices by emailing your contact information to cdphe.aqcc-comments@state.co.us Subject: Email Distribution List.

We sincerely appreciate your participation and input!

Lauren

Lauren McDonell Climate Change Outreach Planner



Phone: (303) 692-6461 lauren.mcdonell@state.co.us

April 2021 ETRP Stakeholder Meeting Pres.pdf 200K



Rulemaking for 2 CCR 601-22, Statewide Transportation Planning Process and Transportation Planning Regions

Environmental Groups

Rulemaking for 2 CCR	601-22, State	ewide Transpo	rtation Planning Process and Transpor	tation Planning Region
	Environment	al Group Meet	tings	
Stakeholder Groups	Date	Time	Location	
Environmental Groups	2/9/21	12-1pm	Virtual	
Environmental Groups	3/10/21	12-1pm	Virtual	
GHG Modeling with Environmental Groups	7/1/21	11:30am-12:30pi	Virtual	
Environmental Groups	7/7/21	3pm-4pm	Virtual	
Environmental Groups	7/13/21	9-10:30am	2829 W Howard PI, Denver, CO, and Virtual	
Environmental Groups	7/22/21	12-1:30	Virtual	
Environmental Groups	8/6/21	2:30-3:30	2829 W Howard PI, Denver, CO, and Virtual	
Environmental Groups	8/11/21	4:00-5:00pm	2830 W Howard PI, Denver, CO, and Virtual	

nvironmental Groups		
leeting: February 9, 2021, f	rom 12:00-1:00 pm, Virtual	
ame	Organization	Email
	Western Resources Advocates	
	Colorado Energy Office	
	COPIRG	
	Sierra Club	
	Conservation Colorado	
	Western Resources Advocates	
	Conservation Colorado	
	CDOT	
	CDPHE	
	Southwest Energy Efficiency Project	
	CDOT	
	Western Resources Advocates	
	CDOT	
	Southwest Energy Efficiency Project	
	CDOT	

eeting: July 1, 2021 from 11:30 am-12:30		
coming. Total 1, 2021 Hom 11.00 am-12.00	pm, Virtual	
ame	Organization	Email
	CDOT	
	Natural Resource Defense Council	
	CDOT	
	Earth justice	
	Natural Resource Defense Council	
	Colorado Pubilic Interest Research Group	
	Southwest Energy Efficieny Office	
	CDOT	
	CDOT	
	CDOT	
	Conservation Colorado	
	Conservation Colorado	
	Further Strategies	
	Law Office of Matthew Sura	
	Southwest Energy Efficieny Office	
	Natural Resource Defense Council	
	CDOT	
	Southwest Energy Efficieny Office	

ronmental Groups ring: July 7, 2021, from 3pm-4pm, Virtual CDOT Natural Resource Defense Council CDOT Earth Justice Natural Resource Defense Council Colorado Pubilic Interest Research Group Green Latinos CDOT CDOT CDOT CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT CDOT CDOT CDOT CDOT CDOT	ation Planning Regions
CDOT Natural Resource Defense Council CDOT Earth Justice Natural Resource Defense Council Colorado Pubilic Interest Research Group Green Latinos CDOT CDOT CDOT CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT CDOT	
Natural Resource Defense Council CDOT Earth Justice Natural Resource Defense Council Colorado Pubilic Interest Research Group Green Latinos CDOT CDOT CDOT CONSERVATION COLORADO CONSERVATION COLORADO Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT CDOT	
Natural Resource Defense Council CDOT Earth Justice Natural Resource Defense Council Colorado Pubilic Interest Research Group Green Latinos CDOT CDOT CDOT CONSERVATION COLORADO CONSERVATION COLORADO Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT CDOT	
Natural Resource Defense Council CDOT Earth Justice Natural Resource Defense Council Colorado Pubilic Interest Research Group Green Latinos CDOT CDOT CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	naii
Earth Justice Natural Resource Defense Council Colorado Pubilic Interest Research Group Green Latinos CDOT CDOT CDOT COOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
Earth Justice Natural Resource Defense Council Colorado Pubilic Interest Research Group Green Latinos CDOT CDOT CDOT CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
Natural Resource Defense Council Colorado Pubilic Interest Research Group Green Latinos CDOT CDOT CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
Colorado Pubilic Interest Research Group Green Latinos CDOT CDOT CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
Green Latinos CDOT CDOT CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
CDOT CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
CDOT CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
CDOT Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT	
Conservation Colorado Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT	
Conservation Colorado Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
Further Strategies Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
Law Office of Matthew Sura Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
Southwest Energy Efficieny Office Natural Resource Defense Council CDOT CDOT CDOT	
Natural Resource Defense Council CDOT CDOT CDOT	
CDOT CDOT	
CDOT	
CDOT	
CDOT	
Southwest Energy Efficieny Office	

ntal Groups		
ıly 13, 2021, from	9:00-10:30 am, at 2829 W Howard PI, Denver, CO (CDOT Headquarters) and Vii	tual
	Organization Email	
	Natural Resource Defense Council	
	CDOT	
	Earth Justice	
	Cambridge Systematics	
	Natural Resource Defense Council	
	Colorado Pubilic Interest Research Group	
	Green Latinos	
	Southwest Energy Efficieny Office	
	CDOT	
	CDOT	
	Conservation Colorado	
	Conservation Colorado	
	Further Strategies	
	Law Office of Matthew Sura	
	Southwest Energy Efficieny Office	
	Natural Resource Defense Council	
	CDOT	
	Southwest Energy Efficieny Office	

mental Groups		
: July 22, 2021 from	I2-1:30pm, Virtual	
	Organization	Email
	Natural Resource Defense Council	
	CDOT	
	Earth Justice	
	Natural Resource Defense Council	
	Colorado Pubilic Interest Research Group	
	Green Latinos	
	Southwest Energy Efficieny Office	
	CDOT	
	CDOT	
	Conservation Colorado	
	Conservation Colorado	
	Transportation Commission	
	Further Strategies	
	Law Office of Matthew Sura	
	Southwest Energy Efficieny Office	
	Natural Resource Defense Council	
	CDOT	
	CDOT	
	CDOT	
	Southwest Energy Efficieny Office	

2 CCR 601-22, Stat	ewide Transportation Planning Process a	and Transportation Planning Regions
Groups		
9, 2021 from 9-10:3	Dam, at 2829 W Howard PI, Denver, CO (C	DOT Headquarters) and Virtual
	Organization	Email
	Natural Resource Defense Council	
	CDOT	
	Earth Justice	
	Natural Resource Defense Council	
	Colorado Pubilic Interest Research Group	
	Green Latinos	
	Southwest Energy Efficieny Office	
	CDOT	
	CDOT	
	Conservation Colorado	
	Conservation Colorado	
	Transportation Commission	
	Further Strategies	
	Law Office of Matthew Sura	
	Southwest Energy Efficieny Office	
	Natural Resource Defense Council	
	CDOT	
	CDOT	
	CDOT	
	Southwest Energy Efficieny Office	

101 2 CCR 001-22,	Statewide Transportation Planning Process a	and Transportation Planning Regions
tal Groups		
gust 6, 2021 from 2	2:30-3pm, at 2829 W Howard PI, Denver, CO (CDOT Headquarters) and Virtual
	Organization	Email
	Natural Resource Defense Council	
	CDOT	
	Earth Justice	
	Natural Resource Defense Council	
	Colorado Pubilic Interest Research Group	
	Green Latinos	
	Southwest Energy Efficieny Office	
	CDOT	
	CDOT	
	Conservation Colorado	
	Conservation Colorado	
	Transportation Commission	
	Further Strategies	
	Law Office of Matthew Sura	
	Southwest Energy Efficieny Office	
	Natural Resource Defense Council	
	CDOT	
	CDOT	
	CDOT	
	Southwest Energy Efficieny Office	

vironmental Groups		
eeting: August 11, 2021 fr	om 3-4pm, at 2829 W Howard PI, Denver, C	CO (CDOT Headquarters) and Virtual
me	Organization	Email
	Natural Resource Defense Council	
	CDOT	
	Earth Justice	
	Natural Resource Defense Council	
	Colorado Pubilic Interest Research Grou	up
	Green Latinos	
	Southwest Energy Efficieny Office	
	CDOT	
	CDOT	
	Conservation Colorado	
	Conservation Colorado	
	Transportation Commission	
	Further Strategies	
	Law Office of Matthew Sura	
	Southwest Energy Efficieny Office	
	Natural Resource Defense Council	
	CDOT	
	CDOT	
	CDOT	
	Southwest Energy Efficieny Office	



Presentation From Today's Meeting

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>
Cc:

Tue, Feb 9, 2021 at 3:33 PM

Good afternoon,

I have attached the powerpoint presentation from today's meeting, as you requested.

Please let me know if you have any further questions.

Thank you!

Aloha,

Theresa

--

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist



P 303.757.9977 2829 W. Howard Pl., Denver, CO 80204 theresa.takushi@state.co.us | www.codot.gov





CDOT/Environmental Groups GHG discussion - MOVING TO VIRTUAL



Hi everyone,

We were hoping to do these meetings in person, but it sounds like 2/3 of the group will be calling in remotely because of July 4th travel. So unless there are any objections, we're going to move today's meeting to 100% virtual and shoot for inperson next week. My apologies for the last minute notice!

Theresa and I put together a draft agenda for today:

- · Introductions and Meeting Guidelines and Format
- Conservation Community Input on GHG Paper
 - Particular issues to highlight
- · Intent of Rule: GHG vs VMT
- · Enforcement Provisions

I've attached the comments a few of our groups submitted last Friday on the CDOT's draft GHG white paper.

Thanks.

From: theresa.takushi@state.co.us When: 3:00 PM - 4:00 PM July 7, 2021

Subject: CDOT/Environmental Groups GHG discussion - Alliance Center/Virtual **Location**: The Alliance Center, 1536 Wynkoop St, Denver, CO 80202, USA

This event has been changed with this note:

"Now in person at the Alliance Center or via Google Meet"

Changed: CDOT/Environmental Groups GHG discussion - Alliance Center/Virtual

When Wed Jul 7, 2021 3pm – 4pm Mountain Time - Denver

Where Changed: The Alliance Center, 1536 Wynkoop St, Denver, CO 80202, USA (map)

Joining info Join with Google Meet

meet.google.com/avb-gmms-uai

Join by phone

(US) +1 832-521-1264 (PIN: 780350780)

More phone numbers

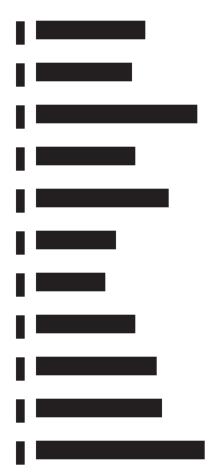
Calendar

• organizer

•

.

.



more details »

Changed: In Person or Virtual Option - Please Note - we'll be meeting in person at the Alliance Center

Going (mfrommer@swenergy.org)? Yes - Maybe - No more options »

Invitation from Google Calendar

You are receiving this courtesy email at the account mfrommer@swenergy.org because you are an attendee of this event.

To stop receiving future updates for this event, decline this event. Alternatively you can sign up for a Google account at https://calendar.google.com/calendar/ and control your notification settings for your entire calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.







Transportation Greenhouse Gas Rule & Policy Directive

COLORADO

Department of Transportation

February 9, 2021



Today's Focus

- 1. Overview of Colorado's climate legislation/policy framework
- 2. Proposed rules and policy for transportation sector
- 3. Outreach Approach
- 4. Questions



Colorado's Efforts To Address Climate Change

HB-1261

- In 2019, the Colorado General Assembly passed House Bill-1261, the *Climate Action Plan to Reduce Pollution*.
- HB 1261 established the following GHG reduction targets:
 - 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels

GHG Roadmap

- To ensure that Colorado continues to reduce emissions to meet greenhouse gas targets, reduce local air pollution, and realize the full economic benefits of the transition to a clean energy economy.
- Draft document released in Sept 2020; final in Jan 2021.
- https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reductionroadmap



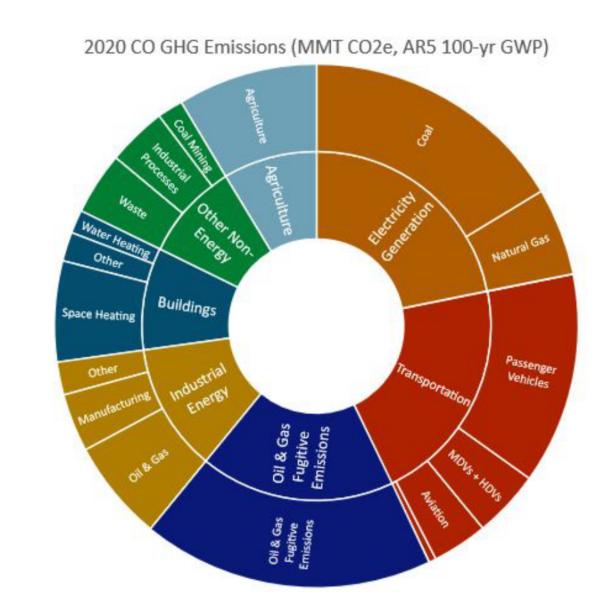
Largest GHG Emissions Sources

2005 Largest Emission Source:

- Electric power
- 2. Transportation
- 3. Oil & Gas
- 4. Buildings

2020 Largest Emissions Sources

- 1. Transportation
- Electric power
- 3. Oil & Gas
- 4. Buildings

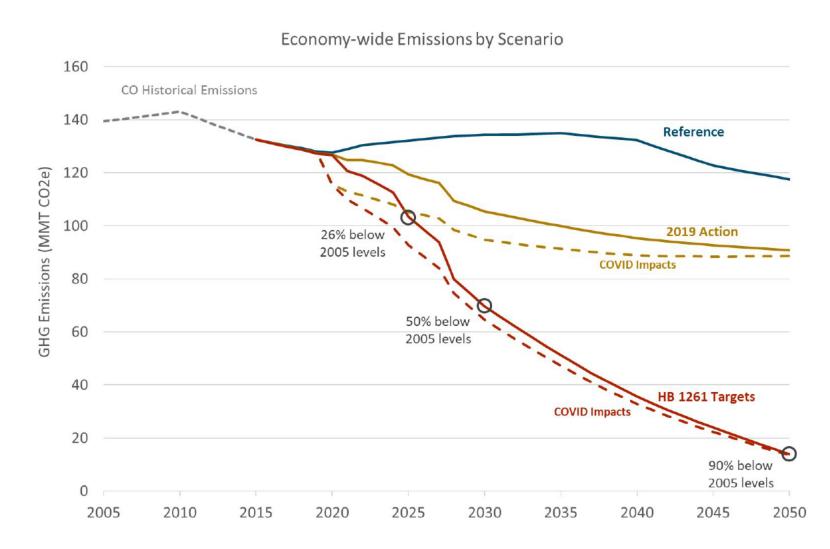




Colorado GHG Pollution Over Time

SIGNIFICANT PROGRESS UNDERWAY & MORE ACTION NECESSARY

- As a result of the state's actions to date, we are on a trajectory to achieving approximately half the level of emission reductions to meet the 2025 and 2030 goals.
- Additional strategies can advance co-benefits such as reducing local air pollution, generating economic growth, advancing environmental justice and equity.





Near-Term Transportation Actions included in the CO GHG Roadmap

Infrastructure (Planning & Projects) GHG pollution standards for transportation plans

- Indirect source standards for some types of new development.
- Trip reduction/TDM requirements and encouraging telecommuting for large employers

Human Factors (Behavior Change)

- Expansion of public transit, including setting the stage for Front Range Rail
- Incentives for land use decisions by local governments that reduce pollution and support greater access to housing near jobs.
- Clean trucking strategy including evaluation of Advanced Clean Truck
 ZEV standards
- New revenue mechanism to fund infrastructure and incentives to transition to low and zero emissions cars, trucks and buses

Mobile Sources (Vehicles)



Proposed Transportation Rule & Policy Directive

AQCC Rulemaking

- Integrate GHG pollution standards and analysis in regional and statewide transportation plans: GHG Pollution Standard
- Reduce SOV commuter trips: <u>Large Employer Trip Reduction</u>
- Both included in single rulemaking via the CDPHE/Air Quality Control Commission process
 - May draft; August final

CDOT Policy

 In parallel, CDOT will develop implementation guidance via a policy directive specific to GHG Pollution Standard



GHG Pollution Standard (GPS) Rule Approach

Initial Thinking

- Set a GHG "budget" for transportation plans (statewide and regional).
- Phased implementation with initial focus on state and certain MPO plans.
- Exempt state of good repair/maintenance projects.
- CDOT guidance will focus on the practicalities of how the policy translates into specific project-based requirements.
- Inclusion of other measures to meet budget.



1

Planning: What Projects Do We Choose to Invest In?

Transportation Guidance and Regulations that Relate to Greenhouse Gas Emissions

- PD-14
- State Planning
- Federal Title 23
 Planning Regulations
- Colorado Administration Goals
- Operations and Maintenance: How do we consider GHGS as we take care of our system?
 - Greening Government
 - Use of an electric powered fleet and maintenance

- 2 Environmental Analysis & Impact: Which solution/alternative do we pick?
 - Federal and State Environmental Regulations

- Project Construction: How do we Consider GHGs
 During Construction?
- Anti-idling requirements and enforcement
- Enforcement of contract requirements relating to materials and equipment
- Operational decisions (e.g. use of a conveyor belt to reduce dump truck trips)

- Project Design & Contracting: What restrictions and requirements do we ask our contractors to follow?
- Contract and procurement requirements.
- Choice and amount of landscaping (trees, native plants)

Federal Environmental Laws/Regs National Environmental Policy Act

- CEQ and FHWA Guidance on Implementing NEPA
- CDOT NEPA Manual
- Clean Air Act
- Transportation Conformity
- Clean Water Act
- Endangered Species Act
- Title VI
- Environmental Justice

State Environmental Laws/Regs

- HB 1261 and implementing regulations (TBD)
- CDOT Environmental Stewardship Guide
- Air Quality Project-Level Analysis Guidance (AQ-PLAG)



Outreach Approach Stakeholder Involvement and Public Outreach

- Multiple agency involvement (CDOT/CDPHE/CEO)
 - Virtual public meetings and focused equity conversations
 - First meeting; January 28th at 6pm,
 - Next meeting: February 25th at 6pm
- CDOT Advisory Group

CDOT Regional Meetings

Environmental & Technical Meetings



Two Transportation Rules Air Quality Control Commission Rulemaking in 2021

Transportation GHG Pollution Standard & Large Employer Trip Reduction

- What are your questions?
- What concerns do you have?
- What challenges do you see as important to address when developing these rules and policies?
- Who should we reach out to for regional discussions?



Contact Information

Theresa Takushi GHG Climate Action Specialist

theresa.takushi@state.co.us

303.757.9977





GHG Pollution Standard
GHG Reduction Targets & Enforcement Discussion

Department of Transportation

Environmental Groups/CDOT - July 13, 2021





- 1. GHG reduction ranges
- 2. Enforcement
- 3. SB260/267 project proposals





CDOT developed modeling scenarios for two reasons:

- 1) To determine the range of feasible GHG reductions possible through planning-related changes and investments (in short, to determine the GHG reduction levels).
- 1) To prepare the cost benefit analysis required as part of the rulemaking.
 - Section 24-4-103(2.5)(a) of the Administrative Procedures Act (APA)

Models/Tools Used



Tools used for analysis:

- Statewide Travel Model
 - Run using "no build" scenario
- FHWA Energy and Emissions Reduction Policy Analysis Tool (EERPAT)
 - Models policies at the regional level
- MOVES3
 - Conducted by CDPHE
 - Accounts for Colorado-specific factors such as the age of the vehicle fleet, the
 distribution of VMT by different vehicle types and road types, and the speeds at
 which vehicles travel.
 - Accounts for EVs displacing relatively more efficient vehicles than the average vehicle in the on-road fleet



Statewide analysis examines bundles of measures that might be implemented to achieve the targets.

3 scenarios (layer cake - building on each level)

- Travel choices
- Travel choices + Transit
- Travel choices + Transit + Land Use

Additional analysis on light-duty vehicle and bus electrification (separately). Trucks not considered.

Travel Choices



3 scenarios (layer cake)

- Travel choices: measures to reduce SOV commuting by workers, programs that encourage non-work trip reduction, infrastructure investments, and reduced transit fares.
 - Commuter trip reduction
 - Non-work trip reduction (40% for university, 10% personal business for new broadband households)
 - More sidewalk (1,900 miles new/upgrade by 2030, 4,700 by 2050)
 - More bike (2,500 new lane-miles between 2022-2042, 2,500 protected lane/path)
 - Speed limit reduction on urban arterials (avg 6 mph reduction)
 - Reduce transit fare by 50%*
- Travel choices + Transit
- Travel choices + Transit + Land Use

CDOT CDOT

Travel choices + Transit

3 scenarios (layer cake)

- Travel choices
- Travel choices + Transit: Expansion of transit service and bus electrification over time.
 - 6% annual increase, 2022 2030
 - 2% annual increase, 2030 2050
 - Total increase by factor of 2.3 by 2050 (more than doubling)
 - Comparison: Vehicle Revenue Miles increased by factor of 1.75 between 2000 and 2019
- Travel choices + Transit + Land Use



Travel choices + Transit + Land Use

3 scenarios (layer cake)

- Travel choices
- Travel choices + Transit
- Travel choices + Transit + Land Use: Policy changes and incentives (changes to transportation project selection criteria) to encourage transit-supportive land use and walkable neighborhoods.
 - Based on growth of urban mixed use areas defined as areas with a population density of at least 2,000 per square mile and a retail/service job density of at least 500 per square mile.
 - Baseline forecast of growth in mixed-use areas ranges from
 - (between 2023-2030): Action assumes (between 2023-2050):
 - 10% in NFRMPO to 75% in DRCOG
 - 42% in DRCOG 50% in other MPOs



DRAFT GHG Reduction Target Ranges

	Million Metric Tons/Year								
Statewide	2005 Baseline	2025	2030	2040	2050				
base GHG	23.4	27.4	21.8	20.6	24.2				
with EV	23.4	27.0	20.0	14.0	8.9				
with EV and VMT	23.4	26.5	18.3	12.8	8.2				
Range		0.4 - 0.9	0.5 - 1.5	0.17 - 1.2	0.1 - 0.7				



Scenario VMT Reductions

Scenario	2030 (millions of vehicle miles)	2040 (millions of vehicle miles)	2050 (millions of vehicle miles)
Baseline	63,551	71,069	78,587
Reduction Range from Modelled Scenarios	5,800-6900	6,100-8,300	6,100-9800



Regulatory Language Discussion: Enforcement



DRAFT Regulatory Language

8.05 Enforcement

- 8.05.1 The Commission shall assess compliance with the requirements concurrent with State and MPO planning processes, as described in section XX.
 - 8.05.1.1 With respect to the Statewide Transportation Plan and 10-Year Plan, compliance shall be measured prior to Commission approval of a Four Year Funded Plan of the 10-Year Plan, and in the event of an Amendment.
 - 8.05.1.2 With respect to MPO planning, compliance shall be measured as part of the plan approval or in the event of an amendment.
- 8.05.2 If CDOT or any of the MPOs subject to the requirements in this section fail to comply with the requirements outlined in 8.03., the Commission shall require the following:
 - 8.05.2.1 For MPOs in receipt of federal suballocations pursuant to the CMAQ and STBG programs, this section shall apply to those sub-allocated dollars.
 - 8.05.2.1.1 In the event that the Commission determines an MPO plan to be out of compliance with this rule, the Commission shall require the MPO to utilize all suballocated CMAQ and STBG dollars programmed within that plan on approved mitigations, as defined by section XXX, that meet federal eligibility for those programs.
 - 8.05.2.1.2 In an MPO noncompliance event, the Commission shall require, as a condition of any CMAQ or STBG capital funding suballocation, an annual report documenting expenditure of funds on approved mitigations.
 - 8.05.2.1.3 In the event that mitigations, plan amendments or other circumstances are determined sufficient to achieve compliance, pursuant to the methodology outlined in this rule, the flexibility for the balance of suballocated funds may be restored at the discretion of the Commission.



DRAFT Regulatory Language

- 8.05.2.2 For CDOT, this section shall apply to federal and state dollars allocated to capital projects as part of the funded four year subset of the Department's 10-Year Plan.
 - 8.05.2.2.1 In the event that the Commission determines the 10-Year Plan to be out of compliance with this rule, the Commission shall require that the Department revise its plan in a manner that utilizes funds programmed within that plan on approved mitigations, as defined by section XXX.
 - 8.05.2.2.2 In a Department noncompliance event, the Commission shall require, as a condition of approval of expenditure of funds within the 10-Year Plan, an annual report documenting expenditure of funds on approved mitigations.
 - 8.05.2.2.3 In the event that mitigations, plan amendments or other circumstances are determined sufficient to achieve compliance, pursuant to the methodology outlined in this rule, the flexibility for the balance of the funded four year subset of the Department's 10-Year Plan may be restored at the discretion of the Commission.
- 8.05.2.3 Pursuant to Section 43-4-1103, C.R.S., in the event of a noncompliance event at CDOT or an MPO, the organization in noncompliance shall be restricted in its use of funds allocated through the MMOF to project types approved as greenhouse gas pollution mitigations, pursuant to the process outlined in this rule.
 - 8.05.2.3.1 In any noncompliance event, the Commission shall require, as a condition of any MMOF funding suballocation, an annual report documenting expenditure of funds on approved mitigation.
 - 8.05.2.3.2 In the event the mitigations are determined to achieve compliance, pursuant to the methodology outlined in this rule, the flexibility for the balance of the MMOF funds shall be restored by the Commission.



THANK YOU & Next Steps



Extra Slides





NEAR TERM ACTIONS TO REDUCE POLLUTION

Sector	Revised 2005 Baseline (MMT CO2e)	2025 Target (MMT CO2e)	2030 Target (MMT CO2e)
Electricity	40.28	21	8
Oil and Gas	20.17	13	8
Transportation	30.71	23	18
Residential, Commercial, Industrial Energy Use	24.65	26	20
Other	23.42	19.9	15.6
Total	139.22	102.9	69.6
Percent Reduction	-	26%	50%



AQCC Resolution

A. The Commission hereby adopts the following sector-specific emission targets in Table 1 (using AR5, 100 yr global warming potential) to demonstrate that Colorado is on track to achieve the GHG reduction goals:

Table 1: Sector GHG Emissions Targets

Sector	Revised 2005 Baseline (MMT CO2e)	2025 Target (MMT CO2e)	2030 Target (MMT CO2e)
Electricity	40.28	21	8
Oil and Gas	20.17	13	8
Transportation	30.71	23	18
Residential, Commercial, Industrial Energy Use	24.65	26	20
Other	23.42	19.9	15.6
Total	139.22	102.9	69.6
Percent Reduction		26%	50%

- B. The Air Pollution Control Division (Division) will issue a draft GHG Inventory by December 31, 2020 that includes: a revised 2005 baseline; and updated projections based on current and future state actions to reduce GHGs.
- C. The Division will issue a final GHG Inventory, including the revised 2005 baseline and updated projections, in August 2021.
 - D. The Commission will hold a public meeting in September 2021 and at that



Technical Appendix to the GHG Roadmap

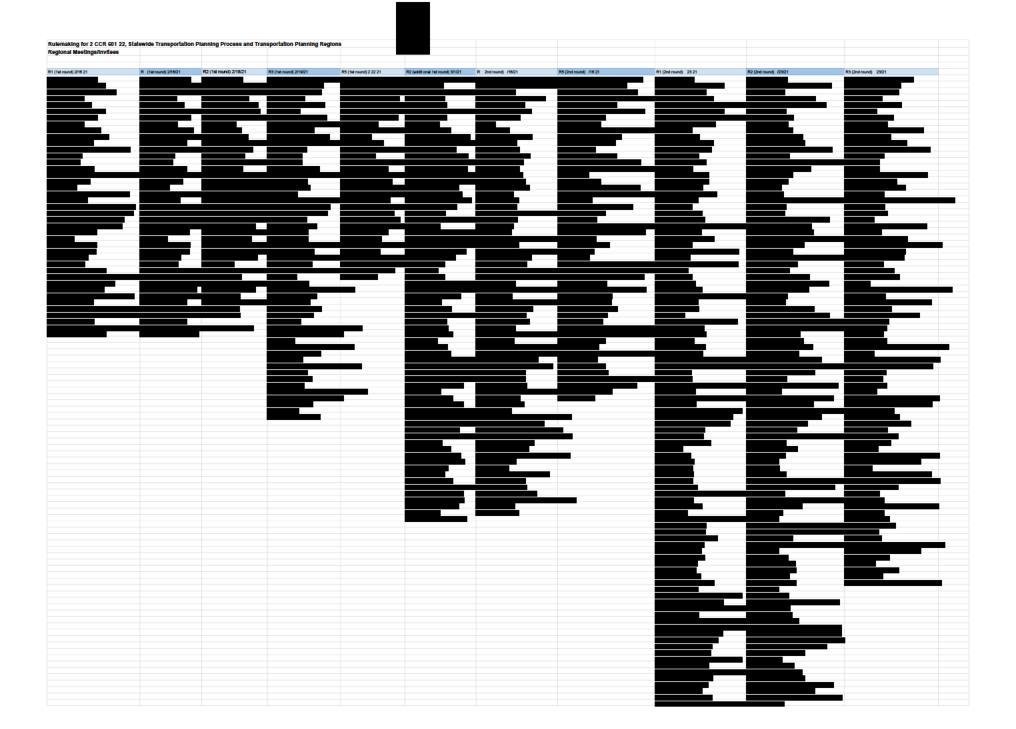
Colorado Agency GHG Reductions Spreadsheet.xlsx				Op	oen with 🔻			■ 8 ± :			
		С	D								
2005 Revised Baseline (AR5-100 yr):	139.22 MMT CO2e										
Reduction Needed to Meet HB 19-1261 Targets:				36.20 for 2025			69.61 for 2030				
		2025 Reductions Low End	2025 Reductions High End	2025 Target Reduction	2030 Reductions Low End	2030 Reductions High End	2030 Target Reduction	Regulatory Actions (AQCC actions in BOLD)	Legislative Action(s)		
Economic Effects of COVID		0.00	5.00	0.00	0.00	2.00	0.00				
Recent, Ongoing and Near Term Actions											
Electric Generation Sector Transition	Ongoing / Near Term	17.96	19.85	18.90	30.59	33.81	32.20	AQCC 2020 Rulemaking: Regional Haze Phase 1 (Tri State, Colorado Springs, PRPA); AQCC 2020 Guidance Approval: Clean Energy Plan Guidance; AQCC 2021 Rulemaking: Regional Haze Phase 2 (Xcel); 2021 and 2022 PUC and AQCC Coordination: Utility Clean Energy Plan and Electric Resource Plan Approvals	n/a		
Ongoing SB19-181 Rulemakings	Priority / Near Term	4.00	8.00	7.00	10.00	15.00	12.00	AQCC 2020 and Beyond Rulemakings; COGCC 2020 Mission Change Rulemaking	n/a		
Coal Mine Methane	Ongoing	5.04	6.16	5.60	6.30	7.70	7.00	AQCC 2020/2021 Rulemakings: Regional Haze; APCD permitting	n/a		
Transportation: Business As Usual including CAFE and LEV	Ongoing	4.50	5.50	5.00	5.40	6.60	6.00	None - Long term trend modeled by E3 reference scenario in Roadmap process shows "26 MMT in 2025 and "25 MMT in 2030, 2005 Baseline was "31 MMT.	n/a		
Comprehensive Transportation Efforts: GHG Planning and Pollution Standard; Vehicle Miles Travelled Reduction; Medium-and Heavy-Duty Strategy; Additional Light Duty Vehicle Standards and Incentives; Indirect Source Rules	Priority / Near Term	1.80	2.20	2.00	4.14	5.06	4.60	AQCC 2021 Rulemaking: GHG Planning and MDV/HDV Rules; AQCC 2022 Rulemaking: Possible New CA LEV/ZEV Rules; AQCC 2022-23 Rulemaking: Indirect Source Rules; Transportation Commission Implementation; Implementation of investment strategy (agency TBD); PUC Tariff and Distribution Network Actions	Potential transportation funding and authority bills; resources needed for Al staffing and investment programs		
Local Action Programs (Denver, Boulder, Ft. Collins, and others)	Ongoing	0.90	1.10	1.00	2.25	2.75	2.50	Local actions to implement climate and energy plans; APCD/AQCC Inventory Efforts to accurately capture and avoid double counting	n/a		
Reg 22 Hydrofluorocarbon Phase-Out (May 2020)	Ongoing	0.50	0.62	0.56	1.04	1.27	1.15	AQCC May 2020 Rulemaking [COMPLETE]	n/a		
Waste Diversion Programs — Front Range Waste Diversion Enterprise	Ongoing	0.50	0.61	0.55	0.50	0.61	0.55	Front Range Waste Diversion Enterprise Implementation	n/a		
ZEV Regulations and Utility Transportation Electrification Plans	Ongoing / Near Term	0.36	0.44	0.40	1.35	1.65	1.50	AQCC August 2019 Rulemaking: ZEV [COMPLETE]; PUC Approval of Plans; CEO/CDPHE Engagement in PUC Process	n/a		
Focus Areas under Comprehensive Economy Wide Program											
Renewable Natural Gas Standard for gas utilities	Priority	0.56	0.68	0.62	1.00	4.50	1.55	Potential legislation, PUC rulemaking; could be AQCC role	Need legislative authority and budget action		
Landfill and Wastewater Methane Rulemaking and Investment	Phonty	0.47	0.57	0.52	0.95	1.16	1.05	AQCC 2021 or 2022 Rulemaking(s)	Legislative renewable natural gas action would support		
Refrigerant Management Program	Medium Term	TBD	TBD	TBD	0.45	0.55	0.50	AQCC 2021 or 2022 Rulemaking(s)	n/a		
Residential Hydrofluorocarbon High Global Warming Potential Phase-out		2						AQCC 2021 or 2022 Rulemaking(s)	n/a		
Beneficial electrification requirements					0.90	1.10	1.00	AQCC 2021 or 2022 Rulemaking(s); potential legislation and PUC action on utility investments			
Expanded natural gas demand side management requirements	Priority	TBD	TBD	TBD				Potential legislation, PUC rulemaking			
Building Benchmarking and Peformance Standards	,			3.77//	2.11	2.57	2.34	AQCC 2021 or 2022 Rulemaking(s)	Potential building benchmarking and standards bill; potential bill on natural; DSM; potential legislation on beneficial electrification. Resources needed fo		
Industrial Energy and Emissions Audits and Efficiency Rulemakings								AQCC 2021 or 2022 Rulemaking(s)	transition programs and APCD staffing and PUC action		
TOTAL Reductions		36.58	50.73	42.15	66.97	86.32	73.95		-		
Estimated GHG Growth (R-C-I Fuel, Ag, Waste, Industrial Use)		3.26	3.26	3.26	5.09	5.09	5.09	Growth determined by difference between 2015 and target years using the 2019 Action Scenario	io. Value reported is the cumulative total from categories listed.		
Overall Change		33.32	47.47	38.89	61.88	81.23	68.86				
CO2e MMT Reduction Needed for 1261 Targets				36,20			69.61				



Rulemaking for 2 CCR 601-22, Statewide Transportation Planning Process and Transportation Planning Regions

Regional Meetings/Invitees

Rulemaki	ng for 2 CCR 601	-22, Statewid	e Transport	ation Plannii	ng Process ai	nd Transport	ation Planning	Regions
	Regional Mee	etings						
Region	Date	Time	Location					
R1	2/16/21	10:30-11:30am	Virtual					
R4	2/16/21	1-2pm	Virtual					
R2	2/18/21	3-4pm	Virtual					
R3	2/19/21	9-10am	Virtual					
R5	2/22/21	1:30-2:30pm	Virtual					
R2	3/1/21	4-5pm	Virtual					
R4	4/16/21	10:30am-12pm	Virtual					
R5	4/16/21	1-2pm	Virtual					
R1	4/23/21	9:30-11am	Virtual					
R2	4/23/21	11:30am-1pm	Virtual					



				_	



Thank You - Region 4 Stakeholders - GHG Transportation Planning

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Fri, Feb 19, 2021 at 4:12 PM

Good afternoon Stakeholders,

Thank you for your participation in the GHG Transportation Planning Regional Meeting.

We appreciate the discussion, and look forward to continued collaboration as we develop this rule/policy.

We will reach back out to you when our next Regional discussions are scheduled (likely in April), and any additional public meetings on this topic (CDPHE). Or, you can also check out our GHG Webpage.

You will find the slide presentation attached, including NFRMPO's presentation. You can also find the recorded Regional presentations <u>here</u> (Public Meeting Notice - bottom of the page).

Please email me if you would like to discuss any specific items prior to that time.

Thank you again,

Theresa

--

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist



P 303.757.9977 2829 W. Howard Pl., Denver, CO 80204 theresa.takushi@state.co.us | www.codot.gov

2 attachments







Thank You - Region 1 - GHG Transportation Planning Stakeholders

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Fri, Feb 19, 2021 at 4:20 PM

Good afternoon Stakeholders,

Thank you for your participation in the GHG Transportation Planning Regional Meeting.

We appreciate the discussion, and look forward to continued collaboration as we develop this rule/policy.

We will reach back out to you when our next Regional discussions are scheduled (likely in April), and any additional public meetings on this topic (CDPHE). Or, you can also check out our GHG Webpage.

You will find the slide presentation attached. You can also find the recorded Regional presentations <u>here</u> (Public Meeting Notice - bottom of the page).

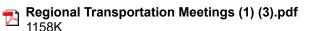
Please email me if you would like to discuss any specific items prior to that time.

Thank you again,

Theresa

Theresa Takushi (she/her/hers)
Greenhouse Gas Climate Action Specialist







Thank You - Region 2 - GHG Transportation Planning Stakeholders

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Fri, Feb 19, 2021 at 4:26 PM

Good afternoon Stakeholders,

Thank you for your participation in the GHG Transportation Planning Regional Meeting.

We appreciate the discussion, and look forward to continued collaboration as we develop this rule/policy.

We will reach back out to you when our next Regional discussions are scheduled (likely in April), and any additional public meetings on this topic (CDPHE). Or, you can also check out our GHG Webpage.

You will find the slide presentation attached. You can also find the recorded Regional presentations <u>here</u> (Public Meeting Notice - bottom of the page).

Please email me if you would like to discuss any specific items prior to that time.

Thank you again,

Theresa

--

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist







Thank You - Region 3 - GHG Transportation Planning Stakeholders

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Fri, Feb 19, 2021 at 4:30 PM

Good afternoon Stakeholders,

Thank you for your participation in the GHG Transportation Planning Regional Meeting.

We appreciate the discussion, and look forward to continued collaboration as we develop this rule/policy.

We will reach back out to you when our next Regional discussions are scheduled (likely in April), and any additional public meetings on this topic (CDPHE). Or, you can also check out our GHG Webpage.

You will find the slide presentation attached. You can also find the recorded Regional presentations <u>here</u> (Public Meeting Notice - bottom of the page).

Please email me if you would like to discuss any specific items prior to that time.

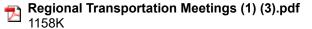
Thank you again,

Theresa

--

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist







Thank You - Region 5 - GHG Transportation Planning Stakeholders

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Thu, Feb 25, 2021 at 8:28 AM

Good morning Stakeholders,

Thank you for your participation in the GHG Transportation Planning Regional Meeting.

We appreciate the discussion, and look forward to continued collaboration as we develop this rule/policy.

We will reach back out to you when our next Regional discussions are scheduled (likely in April), and any additional public meetings on this topic. Or, you can also check out our GHG Webpage.

You will find the slide presentation attached. You can also find the recorded Region 5 presentation <u>here</u> (Public Meeting Notice - bottom of the page).

Please note CDPHE's Listening Sessions are now scheduled for March 11 from 10:30am-12:00pm & March 18th from 6:00pm - 8:00pm. See more details here.

Please email me if you would like to discuss any specific items prior to the April meetings.

Thank you again,

Theresa

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist







Thank You - Region 2 Stakeholders

Takushi - CDOT, Theresa <theresa.takushi@state.co.us>

Wed, Mar 17, 2021 at 2:56 PM

Good afternoon Stakeholders,

I apologize for the delay in sending this email.

We want to thank you for your participation in the GHG Transportation Planning Regional Meeting.

We appreciate the discussion, and look forward to continued collaboration as we develop this rule/policy.

We have set up our next Regional meetings for early April. Please check out our GHG Webpage.

You will find the slide presentation attached. You can also find the recorded Regional presentations here

Please email **CDOT_transportationghg@state.co.us** if you would like to discuss any specific items prior to that time.

Thank you again,

Theresa

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist







Thank You for Your Participation - Regional GHG Transportation Planning Meeting

Takushi - CDOT, Theresa <theresa.takushi@state.co.us> Cc: "CDOT_transportationghg@state.co.us" <CDOT_transportationghg@state.co.us>

Thu, Apr 22, 2021 at 3:15 PM

Good afternoon Stakeholders,

Thank you for your participation in the Regional Meeting on GHG Transportation Planning.

We appreciate the discussion, and look forward to continued collaboration as we develop this rule/policy.

You will find the slide presentation attached. You can also find the recorded Regional Meetings on <u>CDOT's Youtube Page</u>. Please check out our <u>GHG Webpage</u> for more information.

Our next steps will be to take your feedback into consideration prior to the rule package submission to the Air Quality Control Commission. If you have additional feedback or questions, please share them with us through this comment form.

Additionally, CDPHE is hosting another Listening Session which is scheduled for **April 28th from 12pm-2pm**. See more details <u>here</u>.

Please contact us at CDOT transportationghg@state.co.us with any questions.

Thank you again.

Aloha,

Theresa

Theresa Takushi (she/her/hers)
Greenhouse Gas Climate Action Specialist







Thank You for Your Participation - Regional GHG Transportation Planning Meeting

Takushi - CDOT, Theresa <theresa.takushi@state.co.us> Cc: "CDOT_transportationghg@state.co.us" <cdot_transportationghg@state.co.us>

Fri, Apr 23, 2021 at 3:35 PM

Good afternoon Stakeholders,

Thank you for your participation in the Regional Meeting on GHG Transportation Planning.

We appreciate the discussion, and look forward to continued collaboration as we develop this rule/policy.

You will find the slide presentation attached. You can also find the recorded Regional Meetings on CDOT's
Youtube Page. Please check out our GHG Webpage for more information.

Our next steps will be to take your feedback into consideration prior to the rule package submission to the Air Quality Control Commission. If you have additional feedback or questions, please share them with us through this <u>comment form</u>.

Additionally, CDPHE is hosting another Listening Session which is scheduled for **April 28th from 12pm-2pm.** See more details here.

Thank you again.

Aloha,

Theresa

Theresa Takushi (she/her/hers) Greenhouse Gas Climate Action Specialist









Department of Transportation

Draft Greenhouse Gas Pollution Standard For Transportation Planning

Regional Meetings - April, 2021



Agenda

- 1. Background Colorado's Climate Legislation & GHG Goals
- 2. Proposed rule and policy for transportation sector
- 3. GHG Modeling for Transportation in Colorado
- 4. Next Steps



Colorado's Efforts To Address Climate Change

HB-1261

- Colorado General Assembly passed House Bill-1261 in 2019
 The Climate Action Plan to Reduce Pollution
- GHG reduction targets:
 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels

GHG Roadmap

 Lays out near/long term actions in every sector to meet the established targets

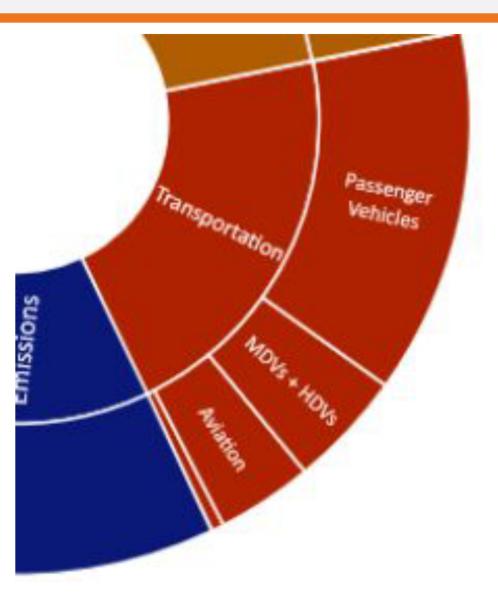


CO GHG Emissions from the GHG Roadmap

2020 CO GHG Emissions (MMT CO2e, AR5 100-yr GWP) **Buildings** Space Heating Passenger Other Vehicles



Transportation GHG Emissions



- Transportation is a large and complex sector that involves several different emissions sources--from passenger cars, to semi-trucks, and airplanes.
- Reducing emissions within this sector will require a range of actions, including new technologies.
- This proposed Rule/Policy focuses on the transportation planning process, recognizing that the projects we invest in are an important factor in how people travel.
- This proposed Rule/Policy would apply to CDOT and Metropolitan Planning Organizations (MPOs) and the long range transportation plans these organizations are charged with developing.



Regulatory Approach

This framework includes two components: 1) A rulemaking promulgated by the Air Quality Control Commission and 2) Policy Directives issued by the Colorado Department of Transportation.

GHG Transportation Rule

Sets overall framework and GHG reduction goals

Draft Rule Concepts development led by CDOT

Informed by Stakeholders, Advisory Group

Rulemaking Process led by CDPHE & supported by CDOT

Approved by the Air Quality Control Commission (AQCC)

GHG Transportation Policy

Describes specific requirements as it relates to the planning process

Led by CDOT

Informed by Stakeholders, Advisory Group

Approved by the Transportation Commission



Timeline: GHG Transportation Planning Rule and Policy

CDPHE Rulemaking

May 20 **June 2-7** July 15-16 Aug 19-20 July 30 Request for Public Become a **Parties** Rulemaking Hearing party to work Comment Hearing before the through Deadline AQCC Jan-March rulemaking elements of April April-May the rule Early Rule concepts Stakeholder stakeholder and draft policy feedback outreach, directive incorporated emphasis on available for into regulation transportation public comment and policy partners and directive equity impacts June- July May-June August Draft policy Stakeholder **Transporation** directive outline feedback Commission presented to incorporated into approves policy Transportation policy directive directive Commission **CDOT Policy Directive**



Overall Concept & Approach

Set a GHG "budget" in MMT CO2e for transportation plans.

Emissions calculated by modeling a set of transportation projects (included in transportation plans) and determining the total emissions from vehicles traveling across the transportation system.

Limited to projects that are "regionally significant" - projects that increase capacity. Not to basic safety and repaving projects.

Alternative compliance through mitigation measures that achieve emission reductions in other areas related to transportation



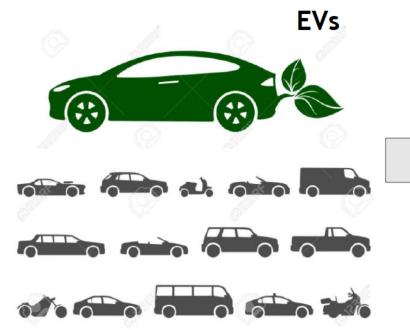
How Are Emissions Calculated?

CDOT TRAVEL MODEL

FORT GOLLINS LOVELAND BRICCHIONNI LINE STORE STORE BRICCHIONNI LONG GENERAL LONG GENERAL LONG GENERAL BRICCHIONNI LONG GENERAL LONG

Outputs: VMT, congestion/speed

CDPHE MOVES MODEL



Fleet Mix/Age & Fuel Type

TOGETHER these models show

TRANSPORTATION GHG EMISSIONS



Incorporating Stakeholder Feedback

Over 30 Meetings Held, Over 250 Participating Stakeholders

- Statewide Advisory Group
- Regional Stakeholder Meetings
- Meetings with MPOs, Planners and Transportation Partners
- CDPHE/CDOT Listening Sessions
- Other Smaller Stakeholder Meetings

CDOT

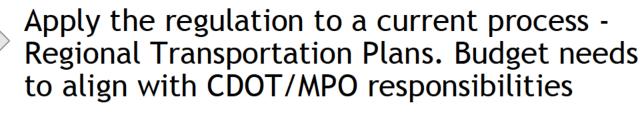
Areas of Feedback

- → Rural and regional differences
- → Incentives vs. penalties/unfunded mandate (carrots vs. sticks)
- → Equity considerations
- → Enforcement
- → MPO roles and responsibilities
- → Clarification on which projects included/excluded
- → How the rule impacts the 10 year plan and adopted regional plans
- → Cost and interest in Cost Benefit Analysis
- → Concern about feasibility of 2025 GHG sub-budgets
- → Importance of a clearly separating ozone conformity process and this rule
- → GHG reductions feasible through this rule

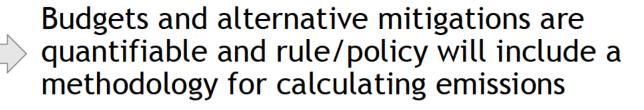


Incorporating Stakeholder Feedback

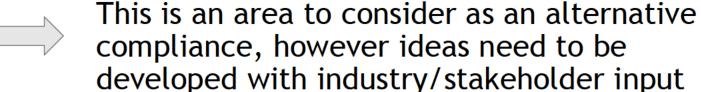
MPOs concern about workload and achievable budgets. Land use is a huge determinant and not directly controlled by CDOT/MPOs



Environmental groups want quantifiable GHG reductions



What will this mean for how construction projects are delivered?



Rural areas concerned about how the rule would apply to them



Focus is on urban areas and projects that add capacity.



GHG Transportation Planning Rule

Primary Draft RULE CONCEPTS

Statewide GHG "Budget" and Regional "Sub-budgets" for MPOs.

• Budget applies to total, projected emissions from vehicles

Budgets set at 10 year intervals (2030, 2040, 2050)

Phased implementation that starts with next planning cycles

Reporting requirements to CDPHE



GHG Transportation Planning Rule Concepts

Reporting Requirements

Reporting the Certification of the State & MPO sub-budgets

In order to be deemed complete the certification must include the following:

- Modeling inputs
- Modeling output in approved format.
- Years of the modeling runs included in the analysis
- Offset/Mitigation measures utilized in the model (if needed to meet the budget)

Project-level mitigation measures must be tracked on a standardized form including date, project name, implementation schedule, and quantity of GHG being reduced.



GHG Transportation Planning Rule Concepts

Rule Concepts Discussion Questions

- Do the proposed rule concepts and approach incorporate and balance the stakeholder input?
- Is it clear to you how the proposed concepts will be implemented?
- Are there other reporting requirements that should be considered in the rule?



Timeline: GHG Transportation Planning Rule and Policy

CDPHE Rulemaking

May 20 **June 2-7** July 15-16 Aug 19-20 July 30 Request for Public Become a **Parties** Rulemaking Hearing party to work Comment Hearing before the through Deadline AQCC Jan-March rulemaking elements of April April-May the rule Early Rule concepts Stakeholder stakeholder and draft policy feedback outreach, directive incorporated emphasis on available for into regulation transportation public comment and policy partners and directive equity impacts June- July May-June August Draft policy Stakeholder **Transporation** directive outline feedback Commission presented to incorporated into approves policy Transportation policy directive directive Commission **CDOT Policy Directive**



CDOT GHG Policy Concepts

Main Elements of the Draft **POLICY**

Describes the GHG reduction requirements in HB19-1261 & the GHG Pollution Reduction Roadmap

Outlines the Transportation Commission's role

Includes a schedule for incorporation of GHG in transportation plans

Describes opportunities for GHG reductions in project analysis (NEPA), delivery and maintenance

Explains equity consideration of GHG reductions in areas where mitigation occurs



Possible Mitigation Areas--CDOT

Construction Practices

- Reuse or upcycle deconstructed materials
- Ensure contractors have access to recyclable materials
- Use fuel efficient, Tier IV, or electric equipment and reduce idling

Operation and Maintenance

- Zero emission vehicles (e.g. electric sweepers)
- Carbon sequestration strategies such as revegetation/ reforestation
- Recycle materials
- Traffic light synchronization
- Ramp metering

Specific investments in GHG reducing activities:

- Fleet conversions to electric, Tier IV
- Transit
- Bike and micro-mobility programs
- TDM

Efforts Thru Clean Trucking Strategy

- In July 2020, CDOT, CDPHE, and CEO announced an all-of-the-above strategy to reduce pollution from medium and heavy duty transportation.
- The draft strategy includes a suite of ideas that will be evaluated comprehensively to determine the most impactful and reasonable actions
 - Accelerating fleet turnover in the conventional truck fleet
 - Incorporating clean technology and developing ZEV infrastructure, especially for critical freight corridors
 - Encouraging participation in programs like SmartWay
 - Exploring adoption of Advanced Clean Truck standard
 - Supporting workforce development
 - Leading by example through green procurement



Possible Mitigation Areas--MPOs

Project Selection: Evaluation metrics that reward projects that include GHG reduction measures:

- Inclusion of electric charging stations
- New/expanded transit service
- Consider complete streets
- Operational improvements

Specific investments in GHG reducing activities:

- Fleet conversions to electric, Tier IV
- Transit
- Bike and micro-mobility programs
- TDM



Stakeholder Input - Questions

Discussion Question

 What additional mitigation strategies should be included in the transportation planning policy?



Rule

- CDPHE Rulemaking Process will begin with a
 - Request for Hearing May 20, 2021
 - Petition for Party Status
 - Formal Public Comment process

Policy Directive

- CDOT will continue meeting with the Advisory Group and stakeholders to inform the PD and mitigation measures through project delivery
- Transportation Commission will approve



Contact Information

Theresa Takushi
GHG Climate Action Specialist

CDOT_transportationghg@state.co.us

303.757.9977

Comment Form

https://www.codot.gov/programs/environmental/greenhouse-gas/ghg-transportation-policy-rulemaking-process





THANK YOU!

Department of Transportation





COLORADO

Department of Transportation

Incorporating Greenhouse Gas Emissions Reductions into Transportation Planning Regional Meetings - February, 2021



Today's Focus

- 1. Overview of Colorado's climate legislation/policy framework
- 2. Proposed rules and policy for transportation sector
- 3. Stakeholder Input



Colorado's Efforts To Address Climate Change

HB-1261

- In 2019, the Colorado General Assembly passed House Bill-1261, the *Climate Action Plan to Reduce Pollution*.
- HB 1261 established the following GHG reduction targets:
 - 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels

GHG Roadmap

- Lays out near/long term actions in every sector to meet the established targets
- To ensure that Colorado continues to reduce emissions to meet greenhouse gas targets, reduce local air pollution, and realize the full economic benefits of the transition to a clean energy economy.
- Draft document released in Sept 2020; final in Jan 2021.
- https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reductionroadmap



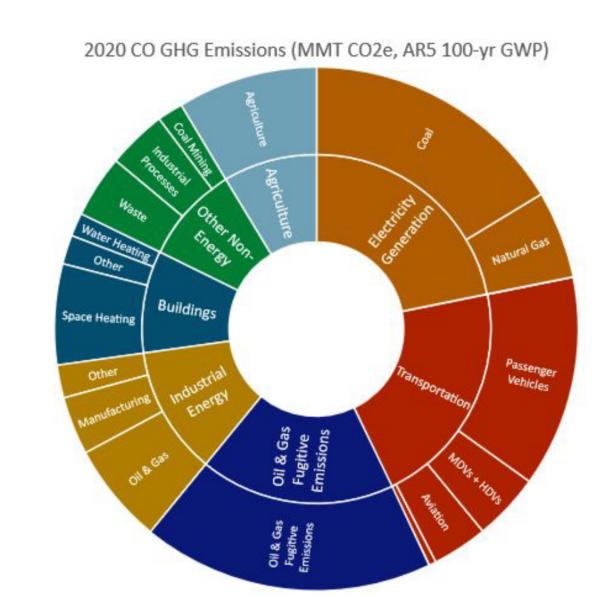
Largest GHG Emissions Sources

2005 Largest Emission Source:

- Electric power
- 2. Transportation
- 3. Oil & Gas
- 4. Buildings

2020 Largest Emissions Sources

- 1. Transportation
- 2. Electric power
- 3. Oil & Gas
- 4. Buildings

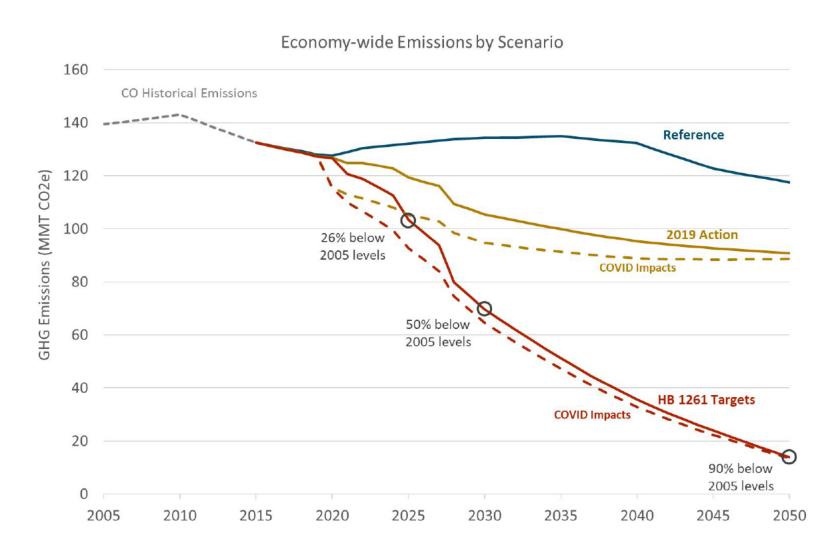




Colorado GHG Pollution Over Time

SIGNIFICANT PROGRESS UNDERWAY & MORE ACTION NECESSARY

- As a result of the state's actions to date, we are on a trajectory to achieving approximately half the level of emission reductions to meet the 2025 and 2030 goals.
- Additional strategies can advance co-benefits such as reducing local air pollution, generating economic growth, advancing environmental justice and equity.





Near-Term Transportation Actions included in the CO GHG Roadmap

Infrastructure (Planning & Projects)

GHG pollution standards for transportation plans [FOCUS of MTG]

- Indirect source standards for some types of new development.
- Trip reduction/TDM requirements and encouraging telecommuting for large employers [Separate process]

Human Factors (Behavior Change)

- Expansion of public transit, including setting the stage for Front Range Rail
- Incentives for land use decisions by local governments that reduce pollution and support greater access to housing near jobs.
- Clean trucking strategy including evaluation of Advanced Clean Truck
 ZEV standards
- New revenue mechanism to fund infrastructure and incentives to transition to low and zero emissions cars, trucks and buses

Mobile Sources (Vehicles)



Regulatory Approach

- The Colorado Air Quality Control Commission (AQCC) is appointed by the governor and authorized by the Colorado General Assembly. The AQCC develops air pollution control policy and regulates pollution sources.
- The AQCC is taking up a series of rulemakings across all sectors to address GHG emissions and implement recommendations in the Roadmap. One of these rulemakings will focus on the transportation sector.
- The Colorado Department of Transportation, and its Governor-appointed Transportation Commission has statutory authority over the transportation planning process. This process is guided by a series of Policy Directives issued by the Transportation Commission.
- The GHG Pollution Standard will therefore include actions by both bodies.



Proposed Transportation Rule & Policy Directive

AQCC Rulemaking

- Integrate GHG pollution standards and analysis in regional and statewide transportation plans: GHG Pollution Standard
- Reduce SOV commuter trips: <u>Large Employer Trip Reduction</u>
- Both included in single rulemaking via the CDPHE/Air Quality Control Commission process
 - May draft; August final

CDOT Policy

 In parallel, CDOT will develop implementation guidance via a policy directive specific to GHG Pollution Standard



GHG Pollution Standard (GPS) Rule Approach

Initial Thinking

- Set a numeric GHG "budget" for transportation plans (statewide and regional).
- Phased implementation with initial focus on state and certain MPO plans.
- Focus on projects that increase capacity
- CDOT guidance will focus on the practicalities of how the policy translates into specific project-based requirements.
- Inclusion of other measures to meet budget.



Planning:
What Projects Do We
Choose to Invest In?

Transportation Guidance and Regulations that Relate to Greenhouse Gas Emissions

- PD-14
- State Planning
- Federal Title 23 Planning Regulations
- Colorado Administration
- Operations and Maintenance: How do we consider GHGS as we take care of our system?
 - Greening Government
 - Use of an electric powered fleet and maintenance

- 2 Environmental Analysis & Impact: Which solution/alternative do we pick?
 - Federal and State Environmental Regulations

- 4 Project Construction: How do we Consider GHGs During Construction?
 - Anti-idling requirements and enforcement
 - Enforcement of contract requirements relating to materials and equipment
 - Operational decisions (e.g. use of a conveyor belt to reduce dump truck trips)

- Project Design & Contracting: What restrictions and requirements do we ask our contractors to follow?
- Contract and procurement requirements.
- Choice and amount of landscaping (trees, native plants)



Transportation Rule Air Quality Control Commission Rulemaking in 2021

Transportation GHG Pollution Standard

- What are your questions?
- What concerns do you have?
- What challenges do you see as important to address when developing these rules and policies?
- Who else should we reach out to for future regional discussions?





Regional Meetings

- Feb 16 10:30-11:30 (Region 1 Denver Metro Area)
- Feb 16 1-2pm (Region 4 Northeast)
- Feb 18 3-4pm (Region 2 South/SouthEast)
- Feb 19, 9-10am (Region 3 Northwest)
- Feb 22, 1:30-2:30 (Region 5 Southwest)

CDOT Advisory Group

Feb 25 - CDPHE Listening Session

April - another opportunity to hear from Regional Stakeholders



Contact Information

Theresa Takushi GHG Climate Action Specialist

theresa.takushi@state.co.us

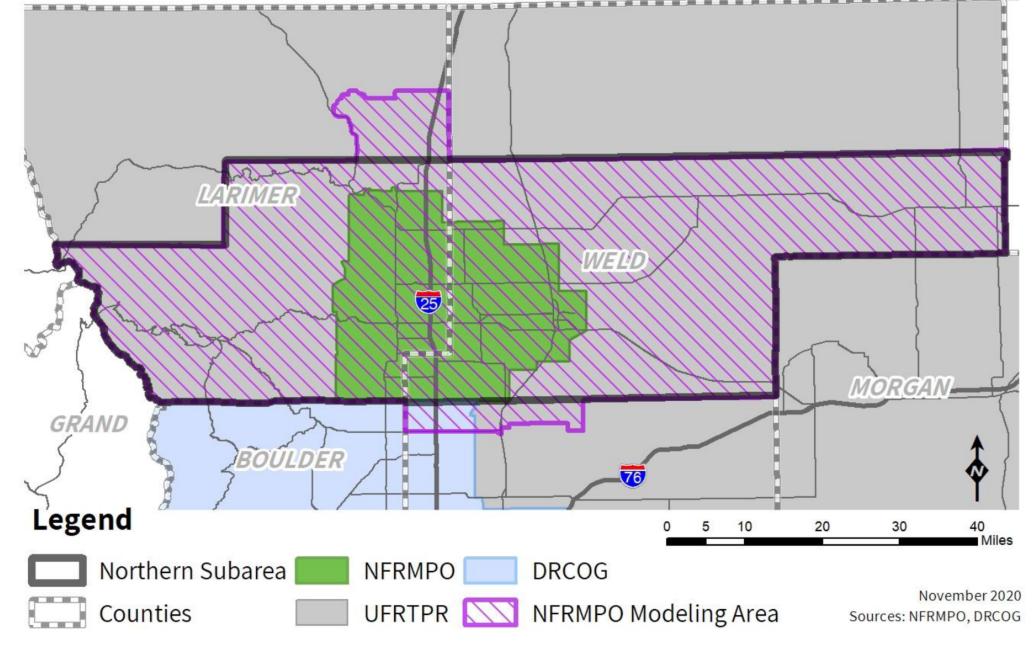
303.757.9977

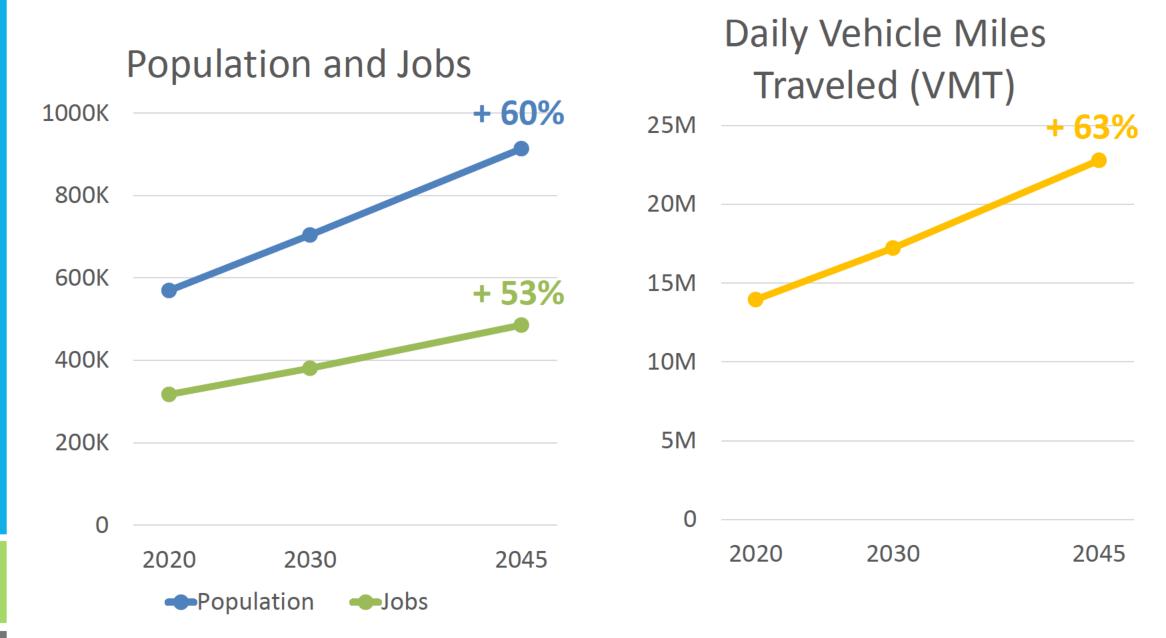


CDOT's Region 4 GHG Transportation Stakeholder Meeting



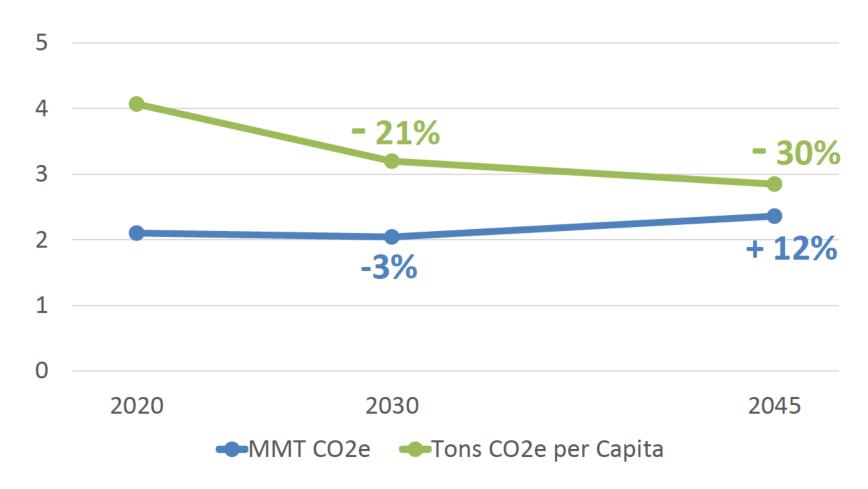






Sources: NFRMPO 2010 Land Use Allocation Model (LUAM) and NFRMPO 2015 Regional Travel Demand Model (RTDM)

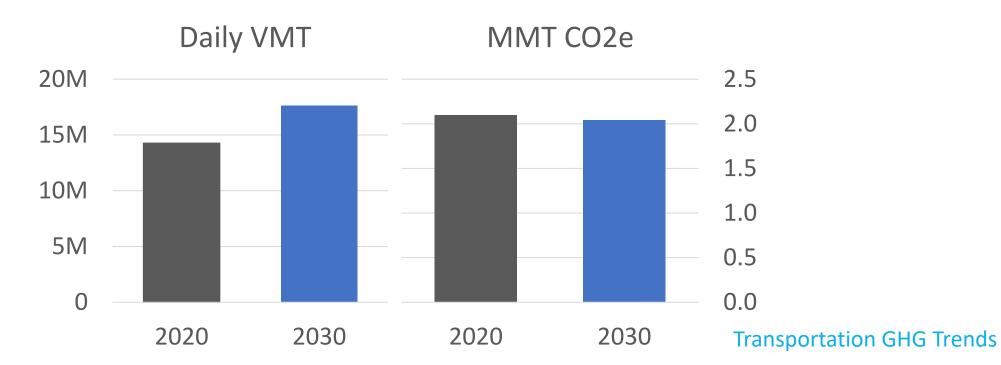
Annual On-Road Transportation GHG Emissions



Note: **Preliminary** results from EPA MOVES 2014b; does not account for current or forecasted EV share

VMT ≠ GHG

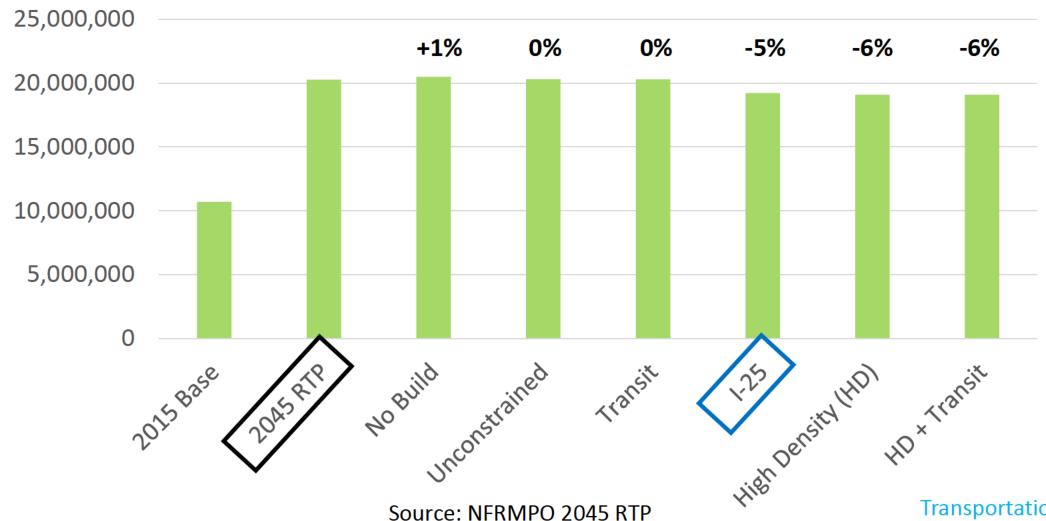
- Based on MOVES2014b, GHG emissions are forecasted to decline from 2020 to 2030 despite an increase in VMT
- Some GHG emissions tools use VMT and fleet mix to estimate GHG
- More accurate tools consider additional factors, such as speed, idling, ambient temperature, and fuel type

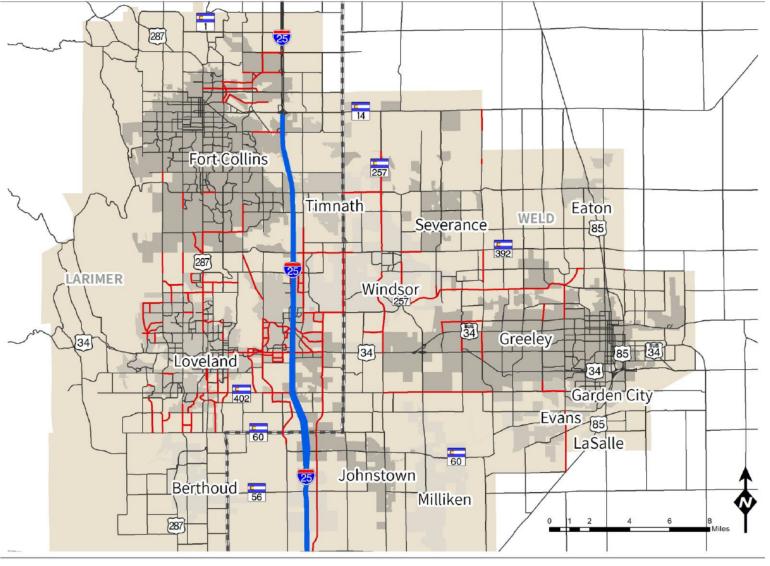


VMT by Scenario



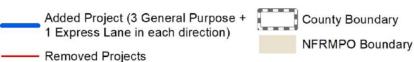
Daily VMT





Legend

Roadway Network

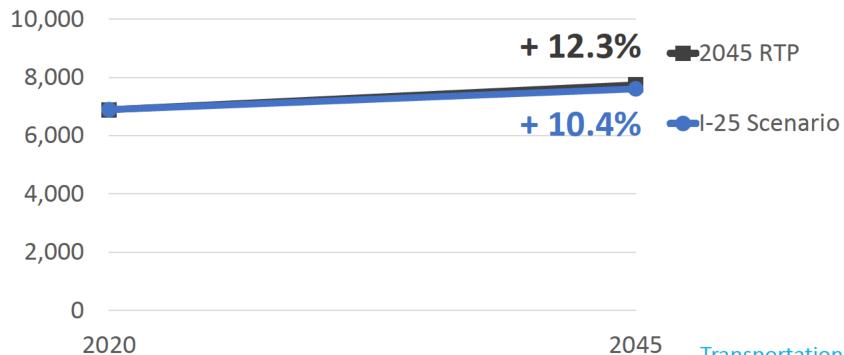


July 2019 Sources: CDOT, NFRMPO



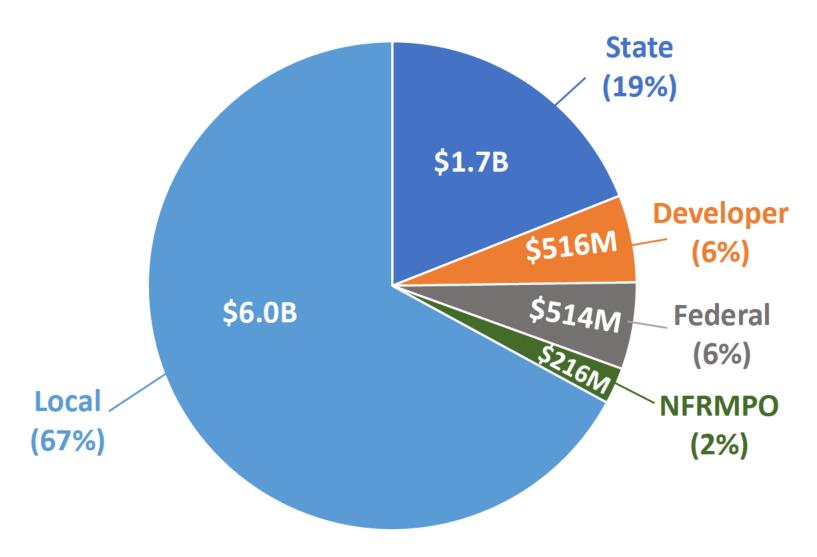
	2045 RTP	2045 I-25 Scenario	Change
Daily VMT	23.3M	22.2M	-5.0%
CO2e TPD	7,743	7,606	-1.8%

CO2e Tons per Day (TPD)



Revenue Forecast by Controlling Entity, 2020-2045





GHG Drivers and MPO Authorities



Transportation Sector GHG Driver	MPO Authority
Forecasted demographics	None
Land use	None (Information sharing)
Cost of travel by mode	None (Information sharing)
Operations	None (Information sharing)
Fleet mix / emissions standards	None (Information sharing)
Fuel type	None (Information sharing)
Project selection	2% (Information sharing)

GHG Budget Recommendations



- GHG budgets should be required statewide to provide a comprehensive approach to addressing on road GHG emissions
- GHG budgets should account for anticipated population growth (e.g. GHG per capita)
- Due to federal requirements to forecast land use based on latest assumptions, budgets should be voluntary and/or should allow for an alternative demonstration
- GHG budgets should not be set based on VMT reductions, as this fails to consider non-VMT-based reductions (e.g. operations improvements, alternative work schedules, anti-idling programs, etc.)
- Resources are needed for additional modeling work

Questions?







Rulemaking for 2 CCR 601-22, Statewide Transportation Planning Process and Transportation Planning Regions

Other Meetings

ther Gro	ups				
	Other Meetings				
	Meeting	Date			
	RAQC	2/5/21			
	E-470/Colorado Motor Carriers	2/10/21			
	PPACG Technical Advisory Committee	2/18/21			
	DRCOG Work Session	3/3/21			
	PPACG Board Meeting	3/10/21			
	DRCOG Special TAC	3/22/21			
	NFRMPO Council Meeting	4/1/21			
	Commuting Solutions Membership Me	4/6/21			
	350 Colorado	7/16/21			
	Workshop GHG Measures (Denver)	7/29/21			
	DRCOG Work Session	8/4/21			
	JeffCo LCC	8/5/21			
	NWTC Workshop	8/5/21			

Meeting: 350 Colorado, 7/16/21 from 12-12:30pm, Virtual Name	Other Groups		
350 Colorado 350 Colorado 350 Colorado 350 Colorado 350 Colorado CDOT 350 Colorado CDOT	Meeting: 350 Colorado, 7/	16/21 from 12-12:30pm, Virtual	
350 Colorado 350 Colorado 350 Colorado 350 Colorado 350 Colorado CDOT 350 Colorado CDOT	V		
350 Colorado 350 Colorado 350 Colorado 350 Colorado CDOT 350 Colorado CDOT	Name		Email
350 Colorado 350 Colorado 350 Colorado CDOT 350 Colorado CDOT		350 Colorado	
350 Colorado 350 Colorado CDOT 350 Colorado CDOT		350 Colorado	
350 Colorado CDOT 350 Colorado CDOT		350 Colorado	
CDOT 350 Colorado CDOT		350 Colorado	
350 Colorado CDOT		350 Colorado	
CDOT		CDOT	
		350 Colorado	
CDOT		CDOT	
		CDOT	

ther Groups			
eeting: Worshop GHG Measures (De	nver), 7/29/21 from 2:30-4:30pm, CDOT HQ and Virtual		
	Organization	Email	
	CDOT		
	CDOT		
	City and County of Denver		
	CDOT		
	CDOT		
	City and County of Denver		
	CDOT		

Other Groups			
Meeting: Worshop GHG Measures (Denver), 7/29/21 from 2:30-4:30pm, CDOT HQ and Virtual			
mail			





Transportation Greenhouse Gas Rule & Policy Directive Regional Air Quality Council Board Meeting

COLORADO

Department of Transportation

February 5, 2021



Today's Focus

- 1. Overview of Colorado's climate legislation/policy framework
- 2. Proposed rules and policy for transportation sector
- 3. Outreach Approach
- 4. Questions



Colorado's Efforts To Address Climate Change

HB-1261

- In 2019, the Colorado General Assembly passed House Bill-1261, the *Climate Action Plan to Reduce Pollution*.
- HB 1261 established the following GHG reduction targets:
 - 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels

GHG Roadmap

- To ensure that Colorado continues to reduce emissions to meet greenhouse gas targets, reduce local air pollution, and realize the full economic benefits of the transition to a clean energy economy.
- Draft document released in Sept 2020; final in Jan 2021.
- https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reductionroadmap



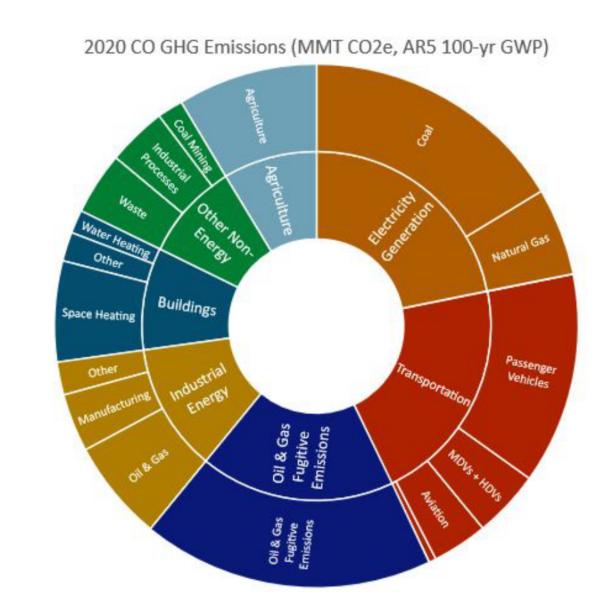
Largest GHG Emissions Sources

2005 Largest Emission Source:

- Electric power
- 2. Transportation
- 3. Oil & Gas
- 4. Buildings

2020 Largest Emissions Sources

- 1. Transportation
- Electric power
- 3. Oil & Gas
- 4. Buildings

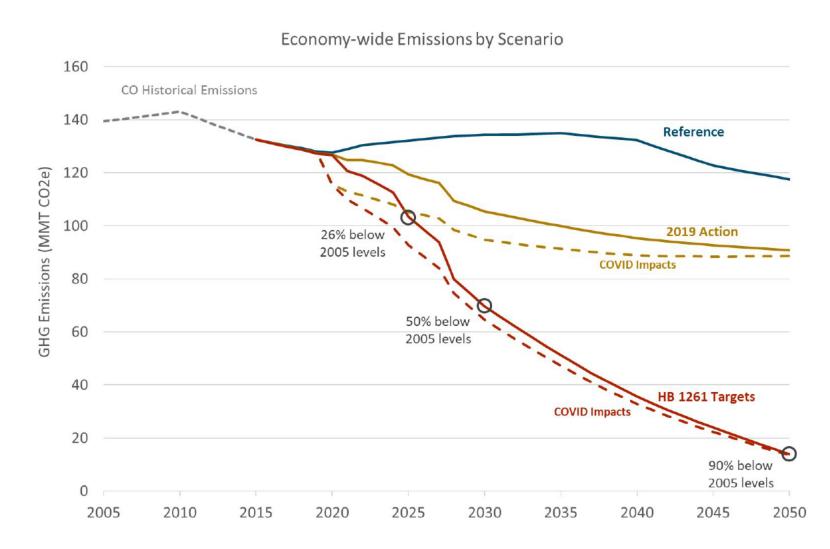




Colorado GHG Pollution Over Time

SIGNIFICANT PROGRESS UNDERWAY & MORE ACTION NECESSARY

- As a result of the state's actions to date, we are on a trajectory to achieving approximately half the level of emission reductions to meet the 2025 and 2030 goals.
- Additional strategies can advance co-benefits such as reducing local air pollution, generating economic growth, advancing environmental justice and equity.





Near-Term Transportation Actions included in the CO GHG Roadmap

Infrastructure (Planning & Projects) GHG pollution standards for transportation plans

- Indirect source standards for some types of new development.
- Trip reduction/TDM requirements and encouraging telecommuting for large employers

Human Factors (Behavior Change)

- Expansion of public transit, including setting the stage for Front Range Rail
- Incentives for land use decisions by local governments that reduce pollution and support greater access to housing near jobs.
- Clean trucking strategy including evaluation of Advanced Clean Truck
 ZEV standards
- New revenue mechanism to fund infrastructure and incentives to transition to low and zero emissions cars, trucks and buses

Mobile Sources (Vehicles)



Proposed Transportation Rule & Policy Directive

AQCC Rulemaking

- Integrate GHG pollution standards and analysis in regional and statewide transportation plans: GHG Pollution Standard
- Reduce SOV commuter trips: <u>Large Employer Trip Reduction</u>
- Both included in single rulemaking via the CDPHE/Air Quality Control Commission process
 - May draft; August final

CDOT Policy

 In parallel, CDOT will develop implementation guidance via a policy directive specific to GHG Pollution Standard



GHG Pollution Standard (GPS) Rule Approach

Initial Thinking

- Set a GHG "budget" for transportation plans (statewide and regional).
- Phased implementation with initial focus on state and certain MPO plans.
- Exempt state of good repair/maintenance projects.
- CDOT guidance will focus on the practicalities of how the policy translates into specific project-based requirements.
- Inclusion of other measures to meet budget.



1

Planning: What Projects Do We Choose to Invest In?

Transportation Guidance and Regulations that Relate to Greenhouse Gas Emissions

- PD-14
- State Planning
- Federal Title 23
 Planning Regulations
- Colorado Administration Goals
- Operations and Maintenance: How do we consider GHGS as we take care of our system?
 - Greening Government
 - Use of an electric powered fleet and maintenance

- 2 Environmental Analysis & Impact: Which solution/alternative do we pick?
 - Federal and State Environmental Regulations

- Project Construction: How do we Consider GHGs
 During Construction?
- Anti-idling requirements and enforcement
- Enforcement of contract requirements relating to materials and equipment
- Operational decisions (e.g. use of a conveyor belt to reduce dump truck trips)

- Project Design & Contracting: What restrictions and requirements do we ask our contractors to follow?
- Contract and procurement requirements.
- Choice and amount of landscaping (trees, native plants)

Federal Environmental Laws/Regs National Environmental Policy Act

- CEQ and FHWA Guidance on Implementing NEPA
- CDOT NEPA Manual
- Clean Air Act
- Transportation Conformity
- Clean Water Act
- Endangered Species Act
- Title VI
- Environmental Justice

State Environmental Laws/Regs

- HB 1261 and implementing regulations (TBD)
- CDOT Environmental Stewardship Guide
- Air Quality Project-Level Analysis Guidance (AQ-PLAG)



Outreach Approach Stakeholder Involvement and Public Outreach

- Multiple agency involvement (CDOT/CDPHE/CEO)
 - Virtual public meetings and focused equity conversations
 - First meeting; January 28th at 6pm,
 - Next meeting: February 25th at 6pm
- CDOT Advisory Group

- CDOT Regional Meetings
 - Region 1 (Denver Metro Area) February 16, 10:30am
 - Region 4 (Northeast) February 16, 1pm



Two Transportation Rules Air Quality Control Commission Rulemaking in 2021

Transportation GHG Pollution Standard & Large Employer Trip Reduction

- What are your questions?
- What concerns do you have?
- What challenges do you see as important to address when developing these rules and policies?
- Who should we reach out to for regional discussions?



Contact Information

Theresa Takushi GHG Climate Action Specialist

theresa.takushi@state.co.us

303.757.9977



Extra Slides (if needed)



Trip reduction/TDM requirements and encouraging telecommuting for large employers

- Utilizing incentives, marketing, and other creative tools to encourage non-SOV travel, is a core strategy to reducing VMT.
- In light of COVID-19, a specialized focus on making teleworking more permanent will be essential in promoting a longer-term shift towards alternatives to driving.
- One recommended strategy is a trip reduction requirement for large employers, which would require employers over a size threshold to develop TDM programs for their employees













CDOT's Tools to Achieve GHG Goals

Mobile sources (vehicles)









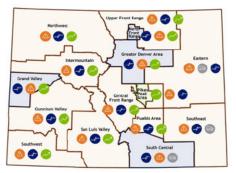




Potential action steps include:

- New regulatory actions
- Charging infrastructure
- Consumer education
- Fleet replacements

Infrastructure (planning and projects)



Potential action steps include:

- GHG budgets
- NEPA processes
- Green construction
- Multimodal funding
- Land use

Human factors (behavior change)



Potential action steps include:

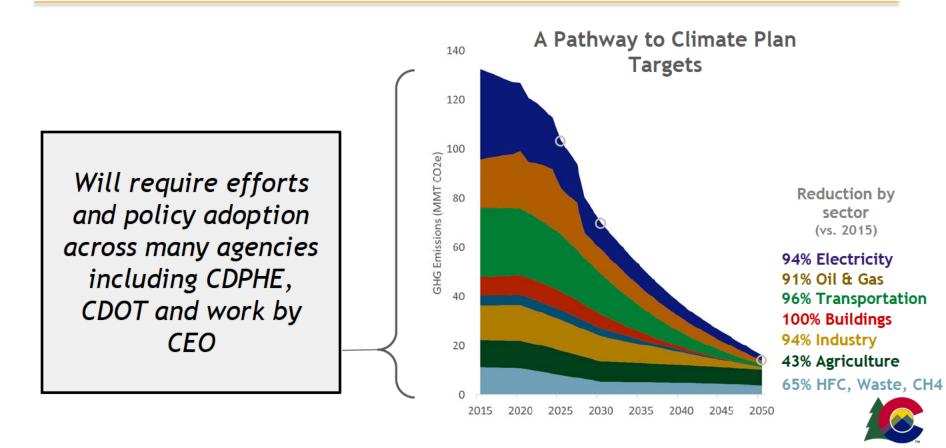
- Managed lanes/pricing strategies
- Voluntary/mandatory TDM (marketing and tools to support mobility options)



GHG Rulemaking Update

NWTPR Aug 5, 2021

Getting to Colorado's 2050 Climate Goals



GHG Roadmap: Transportation

Reduce pollution ~12.7 million tons (MMT) by 2030

6 MMT reduction

Low and Zero Emission Vehicle rules

2 MMT reduction

Utility and public investment in fleet turnover and infrastructure for light-duty zero emission vehicles (SB19-077, electrification investments from SB21-260)

Collectively, the other strategies will target remaining 4.7 million tons

~4.7 MMT reduction

-	
GHG Pollution Standards for transportation plans	In progress - CDOT TC Rulemaking - Summer 2021
Incentivize land use to increase housing near jobs and reduce VMT and pollution	Under evaluation
Clean trucking strategy - infrastructure, fleet incentives, consider regulatory tools such as advanced clean trucks and fleet rules	In progress - Study to be Completed - Summer 2021 Stakeholder Engagement - Summer/Fall 2021; plus fleet investments from SB21-260
Participate in developing post 2025 vehicle standards (state and federal)	Federal and CARB processes
AQCC evaluation of indirect source rules	Pending - AQCC Rulemaking
Expansion of public transit, including setting the stage for Front Range Rail	In progress - SB21-238, on-going multimodal emphasis



SB-260 Requirements

For Regionally Significant Projects:

- Requires CDOT and the Transportation Commission to develop and <u>implement new procedures and guidelines</u> that account for the impact these projects will have on statewide greenhouse gas emissions and vehicle miles traveled.
- CDOT (and DRCOG and NFRMPO) must update their plans to be in compliance with these policies by October 1, 2022. If this date is not met, MMOF expenditures can only be spent on those projects/programs that help meet compliance.



GHG Planning Rulemaking: Concept & Approach

- Set a GHG "pollution reduction level" in million metric tons of CO2e for transportation plans.
- Basic premise similar to conformity and crafted to align with federal conformity regulations analysis requirements.
- Requirements apply to CDOT and MPOs (the state's primary transportation planning agencies).
- Provide more sustainable options for travelers across Colorado.



GHG Planning Rule: Concept Development

Began working with stakeholders in January 2021. Rulemaking moved to CDOT in June 2021.

- Convened a statewide GHG Advisory Group that has met continuously over the last 7 months.
- Held 11 Regional Meetings and 5 joint State Listening Sessions with CDPHE from January to April, reaching nearly 800 people
- Individual stakeholder meetings with MPO staff and boards, contractors, enviro NGOs, CCAT, CC4CA, etc

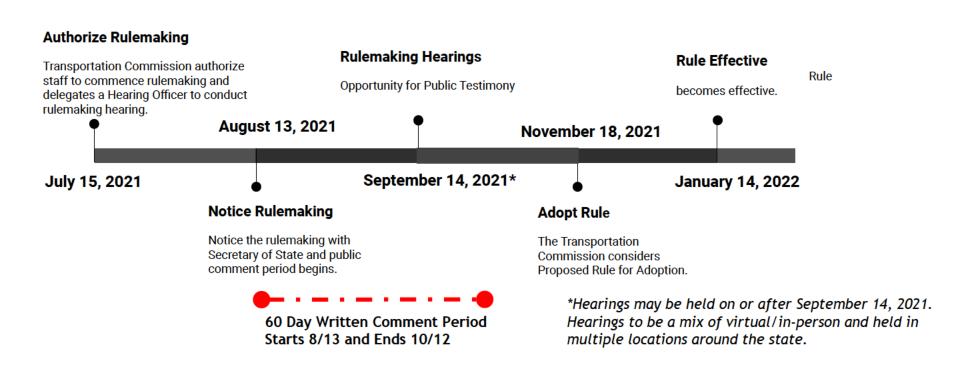
Issued white paper to describe overall approach and key policy issues.

https://www.codot.gov/programs/environmental/greenhouse-gas



DRAFT Rulemaking Timeline

Subject to change and refinement due to TC action and rulemaking development





Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protocol-workshops
- Sign up to receive rulemaking updates: DOT Rules@state.co.us or at link above
- Multiple Opportunities for Public Comment (5 public hearings planned)
- Current schedule: Draft rule published in mid-August; hearings must be scheduled no earlier than 20 days later.



QUESTIONS?





Incorporating Greenhouse Gas Emissions Reductions into Transportation Planning

Department of Transportation

COLORADO

NFRMPO Council Meeting - April 1, 2021



Today's Focus

- 1. Overview of Colorado's climate legislation/policy framework
- 2. Proposed rules and policy for transportation sector
- 3. Stakeholder Input



Colorado's Efforts To Address Climate Change

HB-1261

- In 2019, the Colorado General Assembly passed House Bill-1261, the *Climate* Action Plan to Reduce Pollution.
- HB 1261 established the following GHG reduction targets:
 - 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels

GHG Roadmap

- Lays out near/long term actions in every sector to meet the established targets
- To ensure that Colorado continues to reduce emissions to meet greenhouse gas targets, reduce local air pollution, and realize the full economic benefits of the transition to a clean energy economy.
- Draft document released in Sept 2020; final in Jan 2021.
- https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reductionroadmap



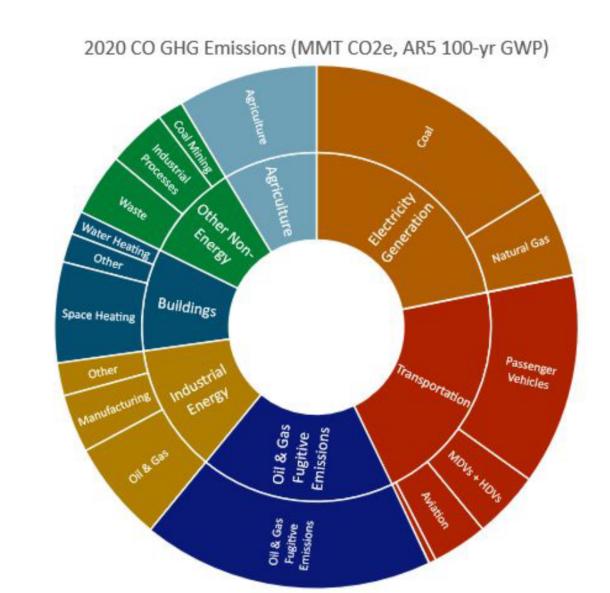
Largest GHG Emissions Sources

2005 Largest Emission Source:

- Electric power
- 2. Transportation
- 3. Oil & Gas
- 4. Buildings

2020 Largest Emissions Sources

- 1. Transportation
- Electric power
- 3. Oil & Gas
- 4. Buildings

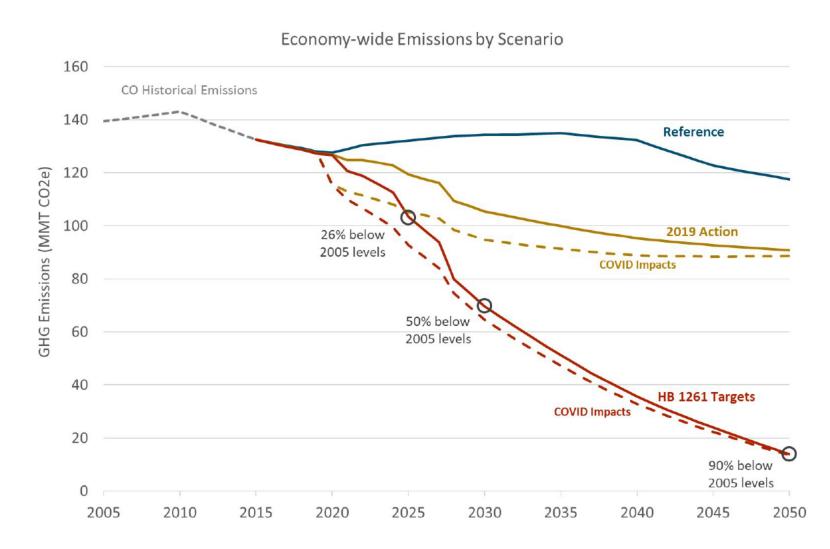




Colorado GHG Pollution Over Time

SIGNIFICANT PROGRESS UNDERWAY & MORE ACTION NECESSARY

- As a result of the state's actions to date, we are on a trajectory to achieving approximately half the level of emission reductions to meet the 2025 and 2030 goals.
- Additional strategies can advance co-benefits such as reducing local air pollution, generating economic growth, advancing environmental justice and equity.





Near-Term Transportation Actions included in the CO GHG Roadmap

Infrastructure (Planning & Projects) GHG pollution standards for transportation plans [Led by CDOT]

- Indirect source standards for some types of new development.
- Trip reduction/TDM requirements and encouraging telecommuting for large employers [Led by CDPHE]

Human Factors (Behavior Change)

- Expansion of public transit, including setting the stage for Front Range Rail
- Incentives for land use decisions by local governments that reduce pollution and support greater access to housing near jobs.
- Clean trucking strategy including evaluation of Advanced Clean Truck
 ZEV standards
- New revenue mechanism to fund infrastructure and incentives to transition to low and zero emissions cars, trucks and buses

Mobile Sources (Vehicles)



Regulatory Approach

- The Colorado Air Quality Control Commission (AQCC) is appointed by the governor and authorized by the Colorado General Assembly. The AQCC develops air pollution control policy and regulates pollution sources.
- The AQCC is taking up a series of rulemakings across all sectors to address GHG emissions and implement recommendations in the Roadmap. One of these rulemakings will focus on the transportation sector.
- The Colorado Department of Transportation, and its Governor-appointed Transportation Commission has statutory authority over the transportation planning process. This process is guided by a series of Policy Directives issued by the Transportation Commission.
- The GHG Pollution Standard will therefore include actions by both bodies.



Proposed Transportation Rule & Policy Directive

AQCC Rulemaking

- Integrate GHG pollution standards and analysis in regional and statewide transportation plans: GHG Pollution Standard
- Reduce SOV commuter trips: <u>Large Employer Trip Reduction</u>
- Both included in single rulemaking via the CDPHE/Air Quality Control Commission process
 - May draft; August final

CDOT Policy

 In parallel, CDOT will develop implementation guidance via a policy directive specific to GHG Pollution Standard



GHG Pollution Standard (GPS) Rule Approach

Initial Thinking

- Set a numeric GHG "budget" for transportation plans (statewide and regional).
- Phased implementation with initial focus on state and certain MPO plans.
- Focus on projects that increase capacity
- CDOT guidance will focus on the practicalities of how the policy translates into specific project-based requirements.
- Inclusion of other measures to meet budget.



Planning:
What Projects Do We
Choose to Invest In?

Transportation Guidance and Regulations that Relate to Greenhouse Gas Emissions

- PD-14
- State Planning
- Federal Title 23 Planning Regulations
- Colorado Administration
- Operations and Maintenance: How do we consider GHGS as we take care of our system?
 - Greening Government
 - Use of an electric powered fleet and maintenance

- Environmental Analysis & Impact: Which solution/alternative do we pick?
 - Federal and State Environmental Regulations

- Project Construction: How do we Consider GHGs During Construction?
 - Anti-idling requirements and enforcement
 - Enforcement of contract requirements relating to materials and equipment
 - Operational decisions (e.g. use of a conveyor belt to reduce dump truck trips)

- Project Design & Contracting: What restrictions and requirements do we ask our contractors to follow?
- Contract and procurement requirements.
- Choice and amount of landscaping (trees, native plants)



Transportation Rule Air Quality Control Commission Rulemaking in 2021

Transportation GHG Pollution Standard

- What are your questions?
- What concerns do you have?
- What challenges do you see as important to address when developing these rules and policies?
- Who else should we reach out to for future regional discussions?



Stakeholder Meetings to Date

Over 24 Meetings Held, Over 125 Participating Stakeholders

CDOT Advisory Group

Regional - GHG Stakeholder Meetings

CDPHE/CDOT Listening Sessions

Other Smaller Stakeholder Meetings as Requested





CDOT Advisory Group

Next Regional - GHG Stakeholder Meetings

- Friday April 9 1-2:30pm (Region 1 Denver Metro Area)
- Monday April 12 10:30-12pm (Region 2 South/Southeast)
- Monday April 12 1-2pm (Region 3 Northwest)
- Friday April 16 10:30-12pm (Region 4 Northeast)
- Friday April 16 1-2pm (Region 5 Southwest)



Contact Information

Theresa Takushi GHG Climate Action Specialist

theresa.takushi@state.co.us

303.757.9977

https://www.codot.gov/programs/environmental/greenhouse-gas/ghg-transport ation-policy-rulemaking-process





Department of Transportation

Update: GHG Rule and 10-Year Plan July 2021



GHG Planning: Rulemaking Background

- Policy concept still places us at the forefront nationwide and years ahead of national action.
 - Colorado may be model for future FHWA policy.
- From the beginning, concept relied on strong involvement from CDOT both for drafting and implementation.
- Placing rulemaking within CDOT also allows for enforcement provisions and, importantly, a more permanent embedding of policy into CDOT's culture and administrative structure.





Stakeholder Engagement: CDOT began working with stakeholders in January of '21; soon after GHG Roadmap was finalized.

- Standing statewide Advisory Group: meeting continuously since January
- · Virtual public meetings: both regional and statewide
- Dozens of individual stakeholder discussions including, most recently, 1-2hr long weekly meetings with conservation community and MPOs

Transportation Commission: Receiving monthly updates on the GHG rule

- In June the Commission formed an Adhoc Committee (comprised of three commissioners) that is meeting regularly with staff.
- This month the TC will be voting on a resolution to formally commence the rulemaking process (essentially directing staff to proceed with filing a draft rule).



Developing Rulemaking Concepts

Policy Paper (June/July):

- Stakeholder discussions and staff work led to the development of a policy paper that outlined the major issues inherent in the rule
- Provides initial drafting for rulemaking in a more plain-english format
 - How to determine and enforce GHG reduction levels
 - Timing (compliance years) and phasing
 - Which plans (near term/long term) to apply reduction to
 - Role of alternative compliance through offset measures that achieve emission reductions in other areas related to transportation
 - Roles and responsibilities between MPOs and CDOT

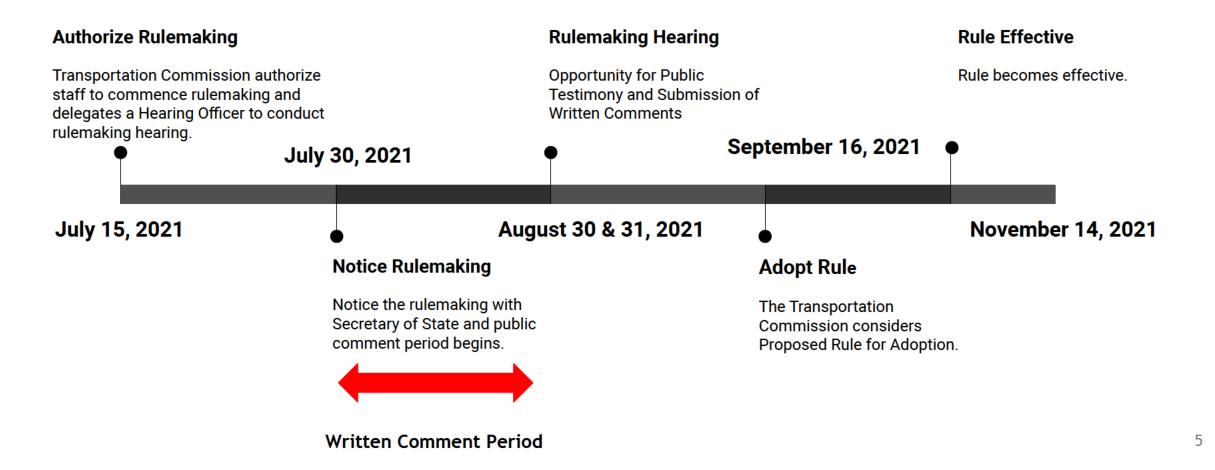
Draft Rule (July/Aug): In development now.



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and as rulemaking is developed

DRAFT





Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protoco l-workshops
- Multiple Opportunities for Public Comment
 - Department rulemaking often includes one or more stakeholder sessions/opportunities to review potential rules and issue so that we may consider stakeholder comments even before filing the rules
 - Submission of written comments prior to the Rulemaking Hearing
 - Oral testimony and submission of written comments at Rulemaking Hearing



Near Term Next Steps

- July TC Resolution directing staff to commence rulemaking
- Draft rule filed with Secretary of State (July 30 or mid-Aug).

- Statewide public meeting (July 22nd--tentative).
- Continued engagement with key stakeholder groups and advisory group.
- Formal public hearings 30 days after draft filed.



10 Year Plan



Delivering the Plan...and SB 260

- The Transportation Commission was created 100 years ago to help ensure a stable and statewide perspective in project selection.
- By many measures, the 10-Year Plan (and its 4 year "funded/prioritized list") is the most comprehensive and most consistent planning document CDOT has had in recent history.
- SB 260 established clear requirements on greenhouse gases (and other air pollutants) for our planning process and in the environmental study phase of projects.
- While we are working to fully implement these requirements and meet the Oct 2022 deadline for updating the plan, CDOT has already begun incorporating this focus into planning and studies as well as project selection.





Year "3B"

- 25 projects proposed
- \$238,365,680 amount proposed project allocations
 - Over 20% of this funding is proposed for transit and multimodal projects. This mix of projects will help move vehicles & improve safety while improving access to options beyond the single-occupant trip.
 - The funded rural paving projects in Years 1-3, plus 3B requests, represent a ~\$400 million investment, with over 600 miles of rural Colorado roads on the state highway system improved.





Fixing our Assets

- Critical repairs to the EJMT
- Addressing poor interstate pavement along I-76 (avoiding federal penalty)
- Improving safety and road conditions along SH 13 by adding shoulders, drainage and wildlife underpass.

Providing More Multimodal Options

- Completing mobility hubs along North I-25
- Expanding Bustang service
- Preparing for BRT along SH 7

Improving Safety

- Advancing current work on urban arterials and main streets
- Slowing traffic and increasing bike/ped options along US 160 in Pagosa



Fixing our Assets: EJMT Critical Repairs

Funding will address the most critical "red list" repairs at the EJMT, including:

- Revitalizing the exterior of the tunnel including drainage, guardrail, building repairs, etc.
- Modern, energy efficient heated water circulation for fire hydrants (to prevent water from freezing)
- Tunnel liner and ventilation building water infiltration prevention/repairs
- Upgrades to the aging groundwater collection and treatment system in the tunnel
- Replacement and capacity expansion of emergency generator system





Fixing Our Assets: Repairing Pavement Along I-76 and Avoiding Funding Restrictions

- I-76 includes several major segments of pavement that is classified as "interstate poor" condition.
- These segments are a major contributor to the state's overall downward trend in interstate pavement condition.
- SB 260 funding, combined with a parallel investment in 24 miles of concrete diamond grind repairs using surface treatment dollars, will provide immediate and long-term repair for I-76.
- These investments on I-76 will bring our total percentage of poor pavement from 3.9% to 2.3%; likely avoiding reaching the 5% poor threshold (which triggers significant federal funding restrictions).

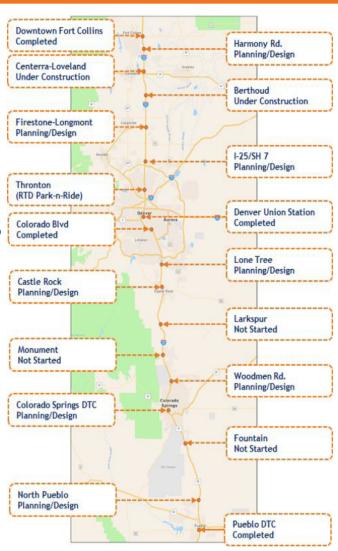


Providing More Multimodal Options: I-25 Mobility Hubs

- 3b funding will make the I-25 North portion of CDOT's Mobility Hub vision operational, achieving a major milestone in this key statewide multimodal effort.
- In parallel, CDOT is working to significantly increase frequency
 of the popular North I-25 Bustang route over the coming months
 with the goal of reaching 18 hour/day service.

Current Mobility Hub Status:

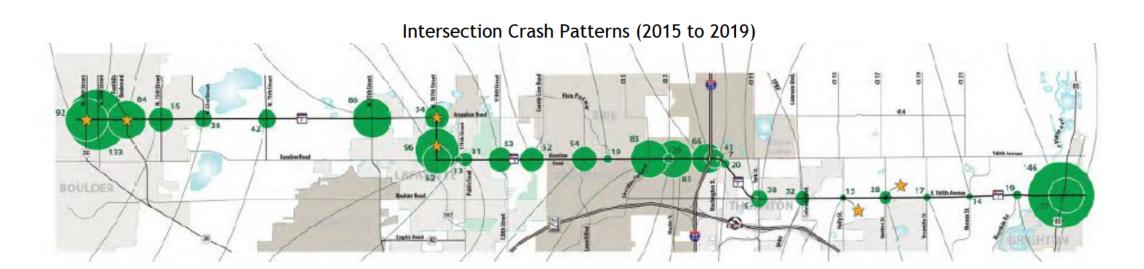
- 4 Fully Functional Future enhancements necessary to achieve vision
- 2 Under Construction
- 8 in Planning/Design





Providing More Multimodal Options: SH 7

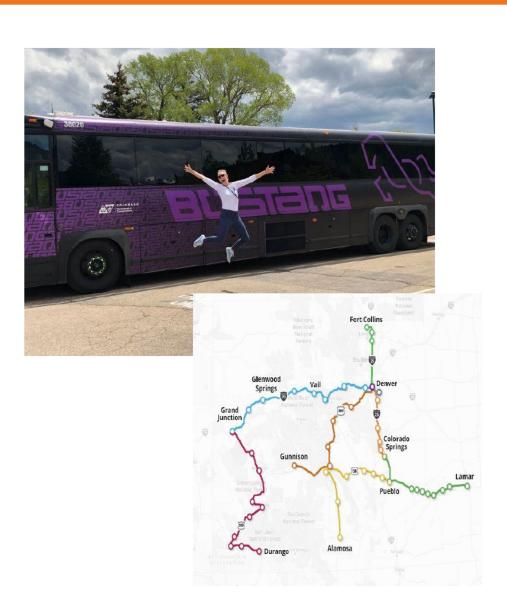
- SH 7 is a busy regional connection serving northern Denver communities. The corridor lacks transit and multimodal facilities for walking and bicycling.
- · It also has a significantly higher crash rate compared to that of similar highways.
- This project includes intersection improvements at high-priority intersections along SH 7, helping to prepare for future Bus Rapid Transit (BRT), commuter bikeways, and other multimodal improvements.





Providing More Multimodal Options: Expansion of Bustang Service

- Bus purchases (4 coaches) enable service expansion to Pueblo and Greeley
- Frequency enhancements to the new mobility hubs (North Line and West Line)
- Service and maintenance facilities (proposed in several locations) provide secure storage and maintenance of vehicle assets along with enabling expansion into new areas of the state





Improving Safety: Holistic Look at Urban Arterials in Denver Metro

- The Safer Main Streets (SMS) grant program provided approximately \$75M in safety improvements along urban arterials in the Denver metro area.
- The response we received to this program suggests this is just the tip of the iceberg.
- Funding would support a comprehensive study and pilot program for 10-15 urban arterials/state highways.
- While this study will close out the 1st phase of the SMS program in the Denver Metro Area, it also serves to identify a longer term pipeline of projects for the area.





Improving Safety: Preparing for Long-Term Statewide Revitalizing Main Streets Funding

- Looking statewide, we have an opportunity to reflect on the rapid investments we made to help communities adapt their infrastructure to respond to COVID-19.
- This second study will take a critical look at some of the complexities of changing street spaces (e.g., parking revenue loss) and help determine which of these changes we should hold on to --and continue to support--in the post-COVID period.
- This second study would be funded with the initial allocation of MMOF (~\$500K).





Improving Safety: Pagosa US 160 Reconstruct

- This project will reconstruct US 160 and provide multimodal improvements in Pagosa Springs. This "Main Street" is active with cars, trucks, pedestrians and cyclists interacting along the highway, which can create stressful and unsafe conditions for travelers.
- Project will add a center median, bike lanes and wider sidewalks; effectively narrowing the road and slowing traffic through downtown while improving the streetscape to make it safer and more attractive for residents and visitors to navigate on foot or bike.







THANK YOU!

Department of Transportation





GHG Pollution Standard For Transportation Planning JeffCO LCC, August 2021

Greenhouse Gas Pollution Reduction Roadmap

Reduce pollution ~12.7 million tons (MMT) by 2030

6 MMT reduction

Low and Zero Emission Vehicle rules

2 MMT reduction

Utility and public investment in fleet turnover and infrastructure for light-duty zero emission vehicles (SB19-077, electrification investments from SB21-260)

Collectively, the other strategies will target remaining 4.7 million tons

4.7 MMT reduction

_			
	GHG Pollution Standards for transportation plans	In progress - CDOT TC Rulemaking - Summer 2021	
	Incentivize land use to increase housing near jobs and reduce VMT and pollution	Under evaluation	
	Clean trucking strategy - infrastructure, fleet incentives, consider regulatory tools such as advanced clean trucks and fleet rules	In progress - Study to be Completed - Summer 2021 Stakeholder Engagement - Summer/Fall 2021; plus fleet investments from SB21-260	
	Participate in developing post 2025 vehicle standards (state and federal)	Federal and CARB processes	
	AQCC evaluation of indirect source rules	Pending - AQCC Rulemaking	
	Expansion of public transit, including setting the stage for Front Range Rail	In progress - SB21-238, on-going multimodal emphasis	



SB-260 Requirements

For Regionally Significant Projects:

- Requires CDOT and the Transportation Commission to develop and <u>implement new procedures and guidelines</u> that account for the impact these projects will have on statewide greenhouse gas emissions and vehicle miles traveled.
- CDOT (and DRCOG and NFRMPO) must update their plans to be in compliance with these policies by October 1, 2022. If this date is not met, MMOF expenditures can only be spent on those projects/programs that help meet compliance.



GHG Planning Rulemaking: Concept & Approach

- Set a GHG "pollution reduction level" in million metric tons of CO2e for transportation plans.
- Basic premise similar to conformity and crafted to align with federal conformity regulations analysis requirements.
- Requirements apply to CDOT and MPOs (the state's primary transportation planning agencies).
- Provide more sustainable options for travelers across Colorado.





- Emissions calculated by modeling a set of transportation projects (included in transportation plans) and determining the total emissions from vehicles traveling across the transportation system.
- Limited to projects that are "regionally significant" projects that increase capacity. Not to basic safety and repaving projects.
- Alternative compliance could be achieved through offset measures that achieve emission reductions in other areas related to transportation.



GHG Planning Rule: Concept Development

Began working with stakeholders in January 2021. Rulemaking moved to CDOT in June 2021.

- Convened a statewide GHG Advisory Group that has met continuously over the last 7 months.
- Held 11 Regional Meetings and 5 joint State Listening Sessions with CDPHE from January to April, reaching nearly 800 people
- Individual stakeholder meetings with MPO staff and boards, contractors, environmental NGOs, CCAT, CC4CA, etc

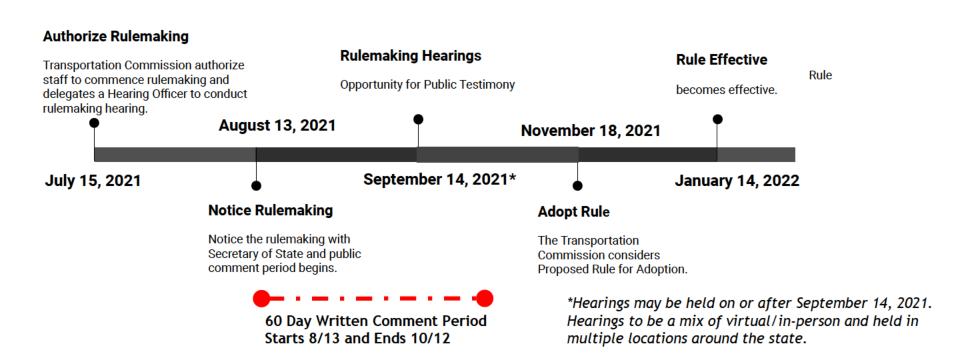
Issued white paper to describe overall approach and key policy issues.

https://www.codot.gov/programs/environmental/greenhouse-gas



DRAFT Rulemaking Timeline

Subject to change and refinement due to TC action and rulemaking development





Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protocol-workshops
- Sign up to receive rulemaking updates: DOT Rules@state.co.us or at link above
- Multiple Opportunities for Public Comment (5 public hearings planned)





THANK YOU!

Department of Transportation



GHG Rulemaking

DRCOG Work Session August 4 2021

GHG Roadmap: Transportation

Reduce pollution ~12.7 million tons (MMT) by 2030

6 MMT reduction

Low and Zero Emission Vehicle rules

2 MMT reduction

Utility and public investment in fleet turnover and infrastructure for light-duty zero emission vehicles (SB19-077, electrification investments from SB21-260)

Collectively, the other strategies will target remaining 4.7 million tons

~4.7 MMT reduction

GHG Pollution Standards for transportation plans	In progress - CDOT TC Rulemaking - Summer 2021
Incentivize land use to increase housing near jobs and reduce VMT and pollution	Under evaluation
Clean trucking strategy - infrastructure, fleet incentives, consider regulatory tools such as advanced clean trucks and fleet rules	In progress - Study to be Completed - Summer 2021 Stakeholder Engagement - Summer/Fall 2021; plus fleet investments from SB21-260
Participate in developing post 2025 vehicle standards (state and federal)	Federal and CARB processes
AQCC evaluation of indirect source rules	Pending - AQCC Rulemaking
Expansion of public transit, including setting the stage for Front Range Rail	In progress - SB21-238, on-going multimodal emphasis



What Do These Numbers Mean?

Rule is still in development however DRCOG board has seen possible target of 1.5 MMT for 2030.

What does this amount signify?

- 1.5 MMT is 25% of the 6 MMT reduction projected in the Roadmap by 2030
- Taking 326,220 passenger vehicles off the road for a year
- Removing over 3.7 billion passenger vehicle miles traveled (3,769,796,806)
- Removing the emissions from 168,785,867 gallons of gasoline (nearly 20,000 tanker trucks worth of gas)



GHG Planning Rule: Concept Development

Began working with stakeholders in January 2021.

- Convened a statewide GHG Advisory Group that has met continuously over the last 7 months.
- Held 11 Regional Meetings and 5 joint State Listening Sessions with CDPHE from January to April, reaching nearly 800 people
- Individual stakeholder meetings with MPO staff and boards, contractors, enviro NGOs, CCAT, CC4CA, etc

Issued white paper to describe overall approach and key policy issues. https://www.codot.gov/programs/environmental/greenhouse-gas

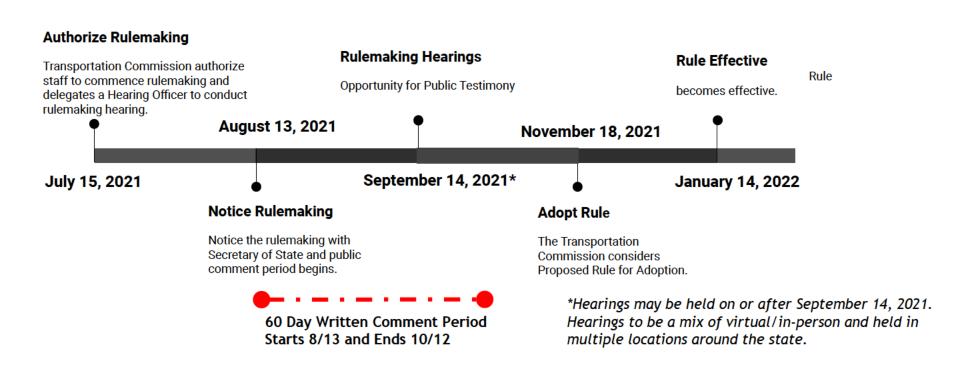
Developed Modeling Scenarios to "test" feasible reduction levels

- Work based on DRCOG scenarios; adjusted for feasibility
- Examined combinations of travel choice, transit and land use



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and rulemaking development





Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protocol-workshops
- Sign up to receive rulemaking updates: DOT Rules@state.co.us or at link above
- Multiple Opportunities for Public Comment (5 public hearings planned)
- Current schedule: Draft rule published in mid-August; hearings must be scheduled no earlier than 20 days later.



GHG Planning Rulemaking: Concept & Approach

- Set a GHG "pollution reduction level" in million metric tons of CO2e for transportation plans.
- Basic premise similar to conformity and crafted to align with federal conformity regulations analysis requirements.
- Requirements apply to CDOT and MPOs (the state's primary transportation planning agencies).
- Set reduction levels for same timeframe as GHG Roadmap





- Emissions calculated by modeling a set of transportation projects (included in transportation plans) and determining the total emissions from vehicles traveling across the transportation system.
- Limited to projects that are "regionally significant" projects that increase capacity. Not to basic safety and repaving projects.
- Alternative compliance could be achieved through offset measures that achieve emission reductions in other areas related to transportation.
- Apply same "enforcement" approach as SB260; directing MMOF dollars to GHG reduction projects/strategies





Overview of GHG Pollution Standard for Transportation Planning July, 2021



SB260 and the GHG Rule

EFFECTIVE AS OF JULY 1, 2022, THE DEPARTMENT SHALL ESTABLISH AND PROPOSE TO THE COMMISSION FOR ITS REVIEW IMPLEMENTING PROCEDURES AND GUIDELINES THAT REQUIRE THE DEPARTMENT AND METROPOLITAN PLANNING ORGANIZATIONS TO TAKE ADDITIONAL STEPS IN THE PLANNING PROCESS FOR REGIONALLY SIGNIFICANT TRANSPORTATION CAPACITY PROJECTS TO ACCOUNT FOR THE IMPACTS ON THE AMOUNT OF STATEWIDE GREENHOUSE GAS POLLUTION AND STATEWIDE VEHICLE MILES TRAVELED THAT ARE EXPECTED TO RESULT FROM SUCH PROJECTS. SUCH GUIDELINES AND PROCEDURES SHALL APPLY TO ADOPTION OF THE NEXT TEN-YEAR PLAN AND SUBSEQUENT PLANNING CYCLES AND SHALL FULLY EVALUATE THE POTENTIAL ENVIRONMENTAL AND HEALTH IMPACTS ON DISPROPORTIONATELY IMPACTED COMMUNITIES.



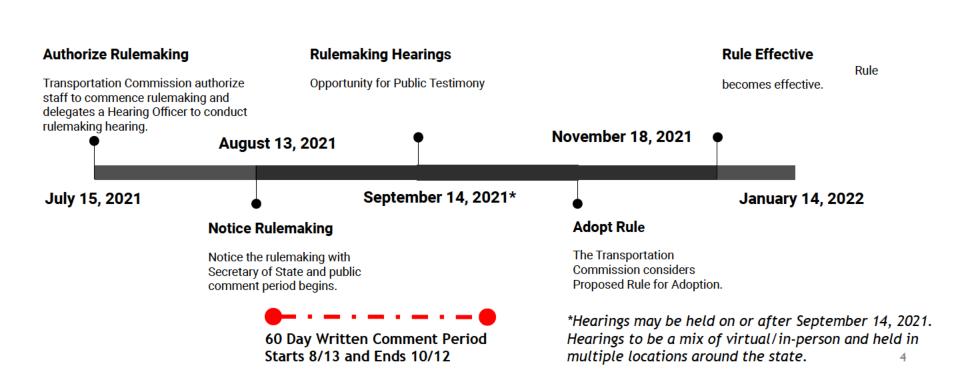
Rulemaking Concept & Approach

- Set a GHG "pollution reduction level" in million metric tons of CO2e for transportation plans. Applies to CDOT and MPOs.
- Emissions calculated by modeling a set of transportation projects (included in transportation plans) and determining the total emissions from vehicles traveling across the transportation system.
- Limited to projects that are "regionally significant" projects that increase capacity. Not to basic safety and repaving projects.
- Alternative compliance could be achieved through mitigation measures that achieve emission reductions in other areas related to transportation



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and rulemaking development





GHG Reduction Measures

- If CDOT and MPO plans are determined to be out of compliance with established GHG
 pollution reduction planning targets, they will have the opportunity to utilize approved
 mitigations to offset emissions and achieve progress towards compliance.
- CDOT and MPOs can "select" strategies from a pre-approved list. The approved
 mitigations list will quantify approximate emissions offsets (possibly in the form of a
 score). Those emissions credits, pursuant to the pre-approved list, may then be applied
 to reduce the balance of GHG in modeling a transportation plan.
- Prior to each planning cycle, CDOT shall provide updating scoring methodology for the mitigation list, which shall be applicable during the subsequent planning cycle.



Other Thinking on This Topic...

"Caltrans may ultimately develop or participate in a VMT credit or banking and exchange system operated by Caltrans, an MPO, RTPA, or another entity. Under a banking system, Caltrans could purchase mitigation credits to reduce project impacts related to VMT. In exchange for implementing a project that induces VMT, Caltrans would invest in a project identified by a local or regional transportation partner that reduces VMT. One example of a system that relies on VMT reduction as a nexus is the City of Los Angeles Westside Mobility Plan Transportation Impact Fee Program."

https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-tac-fnl-a11y.pdf

Table 2. Project-Level Measures to Reduce VMT on the SHS

Description

- Include detours for bicycles and pedestrians in all areas potentially affected by project construction.
- 2. Incorporate Complete Streets Elements
- 3. Consider and accommodate alternate modes of transportation consistent with the purpose and need of the project:
 - Bicycle paths and facilities
 - Pedestrian infrastructure and pedestrian-friendly features (wide sidewalks, overpasses on busy roads, signalized intersections with appropriate signal timing, etc.)
 - Routes connecting to public transportation
- Include measures to support multi modal transportation that will offset project impacts: additional Park & Ride lots
- 5. Social marketing efforts and incentives promoting mass transportation and carpooling. (Possible use of Cap and Trade Funds)
- 6. Social marketing and public education activities to improve awareness of the impacts of driving habits and opportunities to reduce climate change impacts.
- 7. Incorporate infrastructure electrification into project design (e.g., charging for electric bikes).
- 8. Implement intelligent transportation systems and transportation demand management elements to smooth traffic flow and increase system efficiency.
- 9. Implement Traffic Management Strategies:
 - Modify roadways to allow more efficient bus operation, including bus lanes and signal priority/preemption where necessary. Coordinate improvements on the SHS with arterials roadways.
 - Create an interconnected transportation system that allows a shift in travel from private passenger vehicles to alternative modes, including public transit, ride sharing, car sharing, bicycling and walking, if determined feasible and applicable by the Lead Agency.



Examples of GHG Mitigation Measures

Mitigation measures will include projects or strategies that are not "regionally significant" and thus would not be modeled as part of the plan.

- The addition of transit resources in a manner that can displace vehicle miles traveled.
- Improving pedestrian and bike access
- Encouraging transportation projects that facilitate or incentivize more efficient forms of vertical development that integrate mixed use facilities.

First/final mile??



Improve first/last mile.

ETRP actions--TDM

Additional EV penetration "above and beyond" (e.g. massive charging center for a project like I-270)

Incentivizing around truck delivery space

Pedestrian-designed infrastructure

Land use...density/parking ratio...planning depts + incentives for developers

HD vehicle replacement

Focus on analysis--multimodal service level analysis

Connecting TOD fully (across the highway for example)

Build into MPO requirements...so that cities have something to turn to/use

Use CDOT MMOF/CMAQ dollars as incentive; possibly state infrastructure bank

TIFIA TOD eligibility



9A

Rules - CDOT, DOT_ <dot_rules@state.co.us>

Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22 1 message

CDOT Rules <cdot_rules@state.co.us>
To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

Bcc

Hello GHG Advisory Group member:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at <u>dot_rules@state.co.us</u> if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

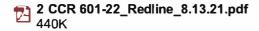
Thanks, Natalie Natalie Lutz Rules, Policies, and Procedures Administrator



P: 303.757.9441
2829 W. Howard Place, Denver, CO 80204
dot_rules@state.co.us | www.codot.gov | www.cotrip.org

4 attachments







GHG Pollution Standard Fact Sheet.pdf 237K



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

1 message

CDOT Rules <cdot_rules@state.co.us> To: Natalie Lutz - CDOT <natalie.lutz@state.co.us></natalie.lutz@state.co.us></cdot_rules@state.co.us>	Mon, Aug 16, 2021 at 1:53 PM
Bc	

Hello MPO Representative:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at dot rules@state.co.us if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks, **Natalie**

4 attachments

Notice and Statement.pdf 240K

2 CCR 601-22 Redline 8.13.21.pdf

GHG Pollution Standard Fact Sheet.pdf 237K

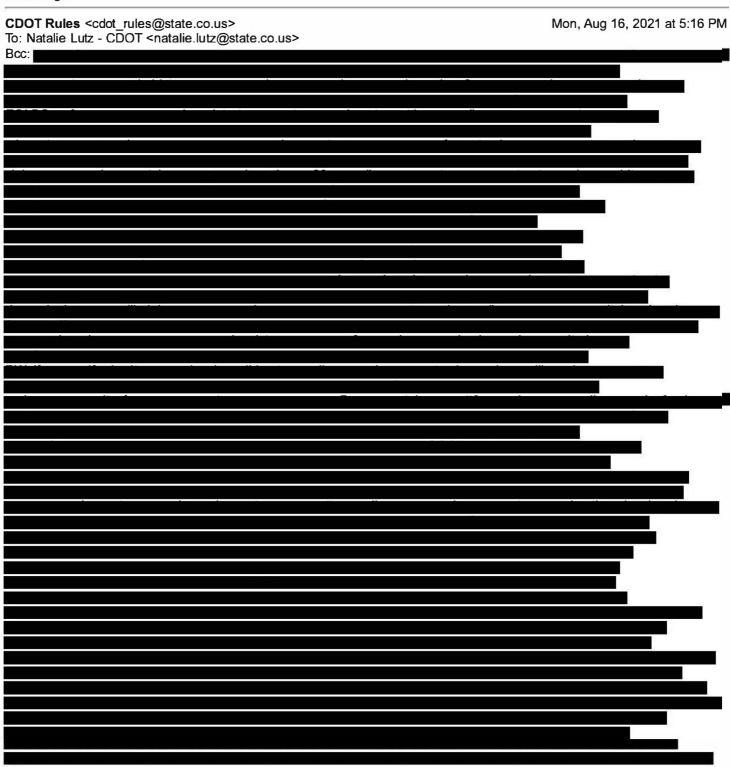
GHG rule press release final CDOT.pdf 122K



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22/Aviso de la Propuesta de Reglamentación para las Reglas que Rigen la Planificación del Transporte en todo el Estado y las Regiones de Planificación del Transporte, 2 CCR 601-22

1 message





Hello Stakeholder:

9/7/2021

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot_rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at <u>dot_rules@state.co.us</u> if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks,

9/7/2021

Hola Accionistas:

Este correo electrónico informa que el Departamento de Transporte de Colorado (CDOT) en nombre de la Comisión de Transporte de Colorado (Comisión) ha presentado un Aviso de Reglamentación Propuesta ante el Secretario de Estado de Colorado con el propósito de considerar modificaciones a la reglas que rigen el proceso de planificación del transporte en todo el estado y las regiones de planificación del transporte, 2 CCR 601-22.

La Comisión propone establecer niveles de planificación para la reducción de la contaminación por gases de efecto invernadero (GEI) para el transporte que mejorarán la calidad del aire, reducirán el smog y brindarán opciones más sostenibles para las personas que viajan en Colorado. Adjunto el Aviso de Reglamentación Propuesta y una copia en PDF de las revisiones de reglas propuestas para su revisión. También usted puede obtener más información sobre los Patrones de Planificación para la Reducción de la Contaminación en la hoja con datos adjunta.

La Comisión planea llevar a cabo ocho (8) audiencias en todo el estado como se indica en el Aviso de Propuesta de Reglamentación adjunto para escuchar testimonios y recibir comentarios. Las audiencias públicas se llevarán a cabo en un formato híbrido, tanto presencial como virtual. Si usted planea asistir virtualmente a cualquiera de las audiencias programadas, regístrese a través de los enlaces de registro proporcionados en el Aviso de Reglamentación adjunto o en la página de Internet de CDOT en https://www.codot.gov/business/rules/proposed-rules.html para que podamos brindarle instrucciones sobre cómo puede unirse virtualmente a las audiencias que usted elija y brindar su testimonio si lo desea.

Por favor envíe todos sus comentarios por escrito a dot rules@state.co.us antes de las 5:00 de la tarde del 15 de octubre de 2021. Todos los comentarios recibidos de las personas interesadas se publicarán en la Página de Internet de Reglamentación del CDOT y estarán disponibles para que usted puede revisarlas durante el período de comentarios públicos. Nosotros redactaremos la siguiente información para proteger la privacidad de los datos de los envíos antes de publicarlos en Internet: nombre y apellido, información de contacto, incluidas las direcciones comerciales y particulares, direcciones de correo electrónico y números de teléfono.

No dude en ponerse en contacto conmigo a dot <u>rules@state.co.us si</u> tiene alguna pregunta o le gustaría que su nombre no aparezca en nuestra lista de personas interesadas.

Gracias por participar en el proceso de elaboración de normas.

Próximamente se publicarán los adjuntos en español. Los documentos se están traduciendo en este momento.

Se publicarán en nuestra página de Internet.

Gracias,

Natalie

4 attachments

Notice and Statement.pdf 240K

2 CCR 601-22_Redline_8.13.21.pdf 440K

GHG rule press release final CDOT.pdf

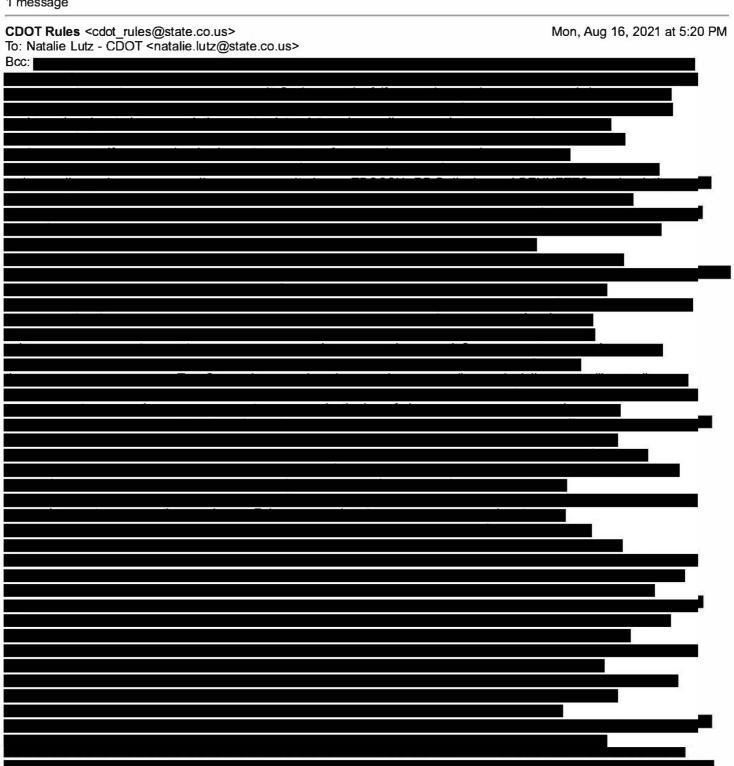


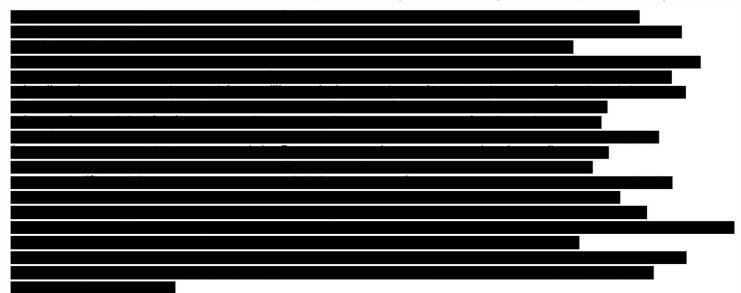


Rules - CDOT, DOT_ <dot_rules@state.co.us>

Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22/Aviso de la Propuesta de Reglamentación para las Reglas que Rigen la Planificación del Transporte en todo el Estado y las Regiones de Planificación del Transporte, 2 CCR 601-22

1 message





Hello Stakeholder:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot_rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at <u>dot_rules@state.co.us</u> if you have any questions or would like to be removed from our stakeholder list.

_		•			
	hank vall	tor no	articinating	in the rii	lemaking process.
	Halik VUU	IUI D	ai licipa liile	III LIIE IU	ICIIIa VIIIE DI OCC33.

Thanks,			
Natalie			

Hola Accionistas:

Este correo electrónico informa que el Departamento de Transporte de Colorado (CDOT) en nombre de la Comisión de Transporte de Colorado (Comisión) ha presentado un Aviso de Reglamentación Propuesta ante el Secretario de Estado de Colorado con el propósito de considerar modificaciones a la reglas que rigen el proceso de planificación del transporte en todo el estado y las regiones de planificación del transporte, 2 CCR 601-22.

La Comisión propone establecer niveles de planificación para la reducción de la contaminación por gases de efecto invernadero (GEI) para el transporte que mejorarán la calidad del aire, reducirán el smog y brindarán opciones más sostenibles para las personas que viajan en Colorado. Adjunto el Aviso de Reglamentación Propuesta y una copia en PDF de las revisiones de reglas propuestas para su revisión. También usted puede obtener más información sobre los Patrones de Planificación para la Reducción de la Contaminación en la hoja con datos adjunta.

La Comisión planea llevar a cabo ocho (8) audiencias en todo el estado como se indica en el Aviso de Propuesta de Reglamentación adjunto para escuchar testimonios y recibir comentarios. Las audiencias públicas se llevarán a cabo en un formato híbrido, tanto presencial como virtual. Si usted planea asistir virtualmente a cualquiera de las audiencias programadas, regístrese a través de los enlaces de registro proporcionados en el Aviso de Reglamentación adjunto o en la página de Internet de CDOT en https://www.codot.gov/business/rules/proposed-rules.html para que podamos brindarle instrucciones sobre cómo puede unirse virtualmente a las audiencias que usted elija y brindar su testimonio si lo desea.

Por favor envíe todos sus comentarios por escrito a dot rules@state.co.us antes de las 5:00 de la tarde del 15 de octubre de 2021. Todos los comentarios recibidos de las personas interesadas se publicarán en la Página de Internet de Reglamentación del CDOT y estarán disponibles para que usted puede revisarlas durante el período de comentarios públicos. Nosotros redactaremos la siguiente información para proteger la privacidad de los datos de los envíos antes de publicarlos en Internet: nombre y apellido, información de contacto, incluidas las direcciones comerciales y particulares, direcciones de correo electrónico y números de teléfono.

No dude en ponerse en contacto conmigo a dot <u>rules@state.co.us</u> si tiene alguna pregunta o le gustaría que su nombre no aparezca en nuestra lista de personas interesadas.

Gracias por participar en el proceso de elaboración de normas.

Próximamente se publicarán los adjuntos en español. Los documentos se están traduciendo en este momento.

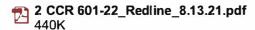
Se publicarán en nuestra página de Internet.

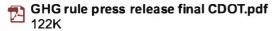
Gracias.

Natalie

4 attachments









3/3



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

1 message

CDOT Rules <cdot_rules@state.co.us> To: Natalie Lutz - CDOT <natalie.lutz@state.co.us></natalie.lutz@state.co.us></cdot_rules@state.co.us>	Mon, Aug 16, 2021 at 1:42 PM		
Bc			

Hello CCA Member:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at dot rules@state.co.us if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks, Natalie

4 attachments



2 CCR 601-22_Redline_8.13.21.pdf 440K

GHG rule press release final CDOT.pdf

9/7/2021 State.co.us Executive Branch Mail - Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes an...







Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

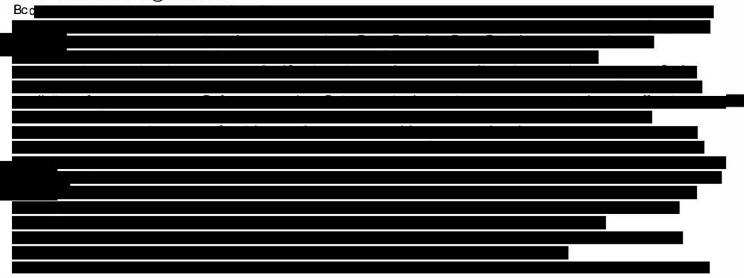
1 message

CDOT Rules <cdot_rules@state.co.us>

Mon, Aug 16, 2021 at 1:35 PM

To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

Cc: Herman Stockinger - CDOT <herman.stockinger@state.co.us>, Rebecca White - CDOT <rebecca.white@state.co.us>, Theresa Takushi - CDOT <theresa.takushi@state.co.us>, Erik Sabina - CDOT <Erik.Sabina@state.co.us>, Natalie Shishido - CDOT <natalie.shishido@state.co.us>



Hello STAC Member:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot_rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at dot rules@state.co.us if you have any questions or would like to be removed from our stakeholder list.

Thanks, Natalie

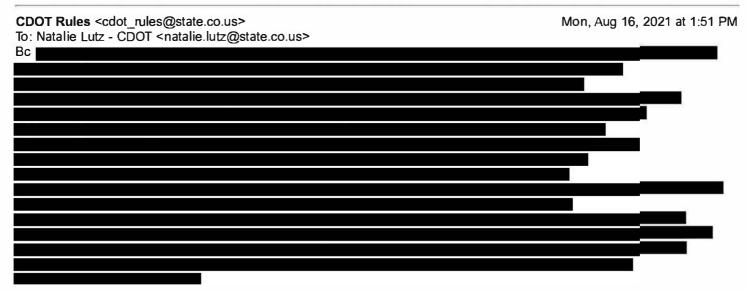
4 attachments

- Notice and Statement.pdf 240K
- 2 CCR 601-22_Redline_8.13.21.pdf 440K
- GHG Pollution Standard Fact Sheet.pdf 237K
- GHG rule press release final CDOT.pdf



Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

1 message



Hello Stakeholder:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at dot rules@state.co.us if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks, Natalie

4 attachments

- Notice and Statement.pdf 240K
- 2 CCR 601-22_Redline_8.13.21.pdf 440K
- GHG Pollution Standard Fact Sheet.pdf 237K
- GHG rule press release final CDOT.pdf 122K



Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

1 message

CDOT Rules <cdot_rules@state.co.us> To: Natalie Lutz - CDOT <natalie.lutz@state.co.us></natalie.lutz@state.co.us></cdot_rules@state.co.us>	Mon, Aug 16, 2021 at 1:48 PM
Bc	

Hello Stakeholder:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at dot rules@state.co.us if you have any questions or would like to be removed from our stakeholder list.

Thanks, Natalie

4 attachments



Notice and Statement.pdf 240K

2 CCR 601-22 Redline 8.13.21.pdf

Thank you for participating in the rulemaking process.

6...

9/7/2021 State.co.us Executive Branch Mail - Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes an...

GHG Pollution Standard Fact Sheet.pdf 237K

GHG rule press release final CDOT.pdf 122K

... 2/2



Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

1 message

CDOT Rules <cdot_rules@state.co.us></cdot_rules@state.co.us>	Mon, Aug 16, 2021 at 1:44 PM
To: Natalie Lutz - CDOT <natalie.lutz@state.co.us></natalie.lutz@state.co.us>	
Bcc	

Hello Stakeholder:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at dot rules@state.co.us if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks, Natalie

4 attachments



2 CCR 601-22 Redline 8.13.21.pdf

9/7/2021 State.co.us Executive Branch Mail - Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes an...

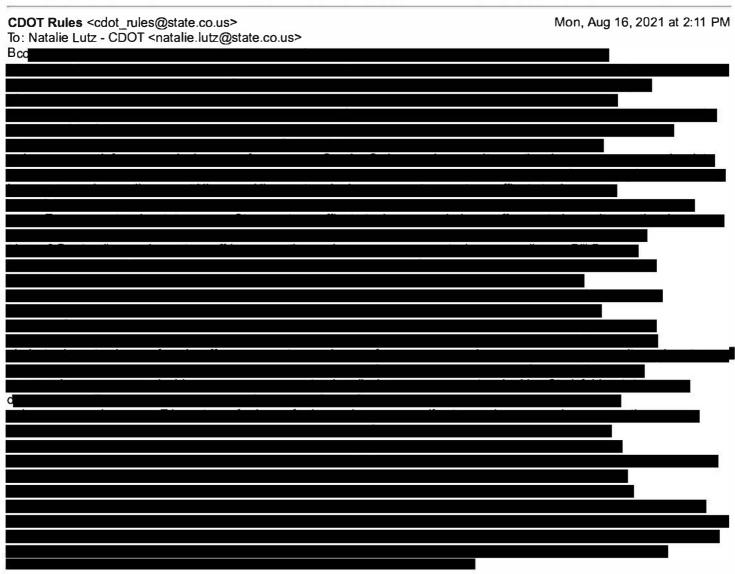


GHG Pollution Standard Fact Sheet.pdf 237K



Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

1 message



Hello Stakeholder:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the

registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

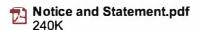
Please submit all written comments to dot_rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

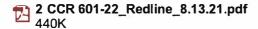
Please feel free to contact me at dot rules@state.co.us if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks, Natalie

4 attachments







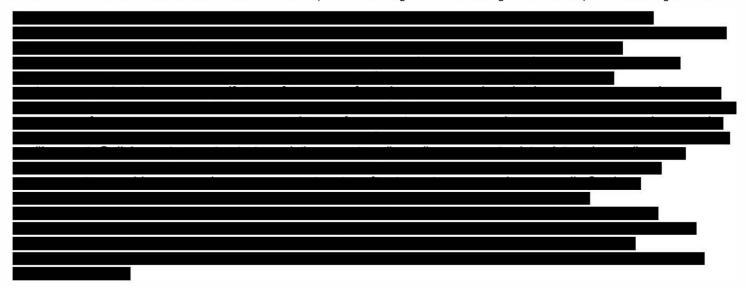
GHG rule press release final CDOT.pdf



Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

1 message





Hello Stakeholder:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at <u>dot_rules@state.co.us</u> if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks, Natalie

4 attachments

Notice and Statement.pdf 240K

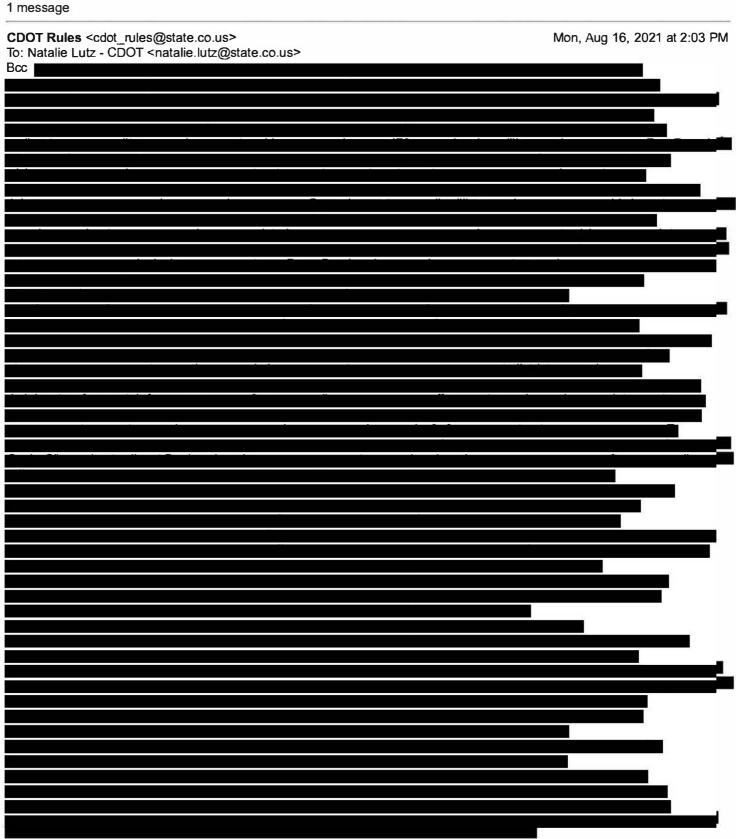
2 CCR 601-22_Redline_8.13.21.pdf 440K

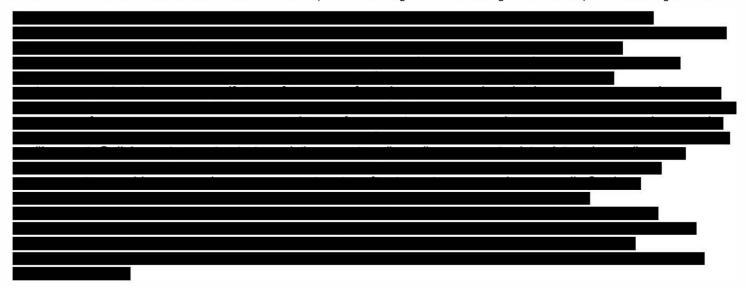
GHG rule press release final CDOT.pdf
122K

GHG Pollution Standard Fact Sheet.pdf 237K



Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22





Hello Stakeholder:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at <u>dot_rules@state.co.us</u> if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks, Natalie

4 attachments

Notice and Statement.pdf 240K

2 CCR 601-22_Redline_8.13.21.pdf 440K

GHG rule press release final CDOT.pdf
122K

GHG Pollution Standard Fact Sheet.pdf 237K



Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

1 message

CDOT Rules <cdot_rules@state.co.us>
To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

Mon, Aug 16, 2021 at 1:51 PM



Hello Stakeholder:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

Please feel free to contact me at dot rules@state.co.us if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks, Natalie

4 attachments

- Notice and Statement.pdf 240K
- 2 CCR 601-22_Redline_8.13.21.pdf 440K
- GHG Pollution Standard Fact Sheet.pdf
- GHG rule press release final CDOT.pdf 122K



2829 W. Howard Place Denver, CO 80204-2305

Notice of Proposed Rulemaking

Transportation Commission of Colorado
Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions
2 CCR 601-22

I. Notice

As required by the Colorado Administrative Procedure Act found at section 24-4-103, C.R.S., the Transportation Commission of Colorado (Commission) gives notice of proposed rulemaking.

II. Subject

The Commission is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms.

A detailed Statement of Basis, Purpose, and Specific Statutory Authority follows this notice and is incorporated by reference.



III. Rulemaking Hearings

The Commission plans to hold eight (8) hearings across the State as listed in the below table to hear testimony and receive comments on the proposed rule revisions. The public hearings will be conducted in a hybrid format, both in-person and virtually. All interested and affected parties may choose to attend one (1) or all eight (8) scheduled hearings either in-person or virtually.

Please note that the Commission may hold additional hearings, which will be posted on CDOT's website: https://www.codot.gov/business/rules/proposed-rules.html

Date	Location	Time	Virtual Hearing Registration Links
9/14/202	CDOT Regional Office US160 Maintenance Training Facility 20581 Highway 160 Durango, CO 81301	3-7 p.m.	Virtual Registration Form
9/17/2021	CDOT Regional Office Bookcliff Conference Room 2328 G Road Grand Junction CO 81505	3-7 p.m.	Virtual Registration Form
9/23/2021	Swansea Recreation Center 2650 E. 49th Ave. Denver, CO 80216	3-7 p.m.	Virtual Registration Form
9/24/2021	CDOT Regional Office 1480 Quail Lake Loop #A Colorado Springs, CO 80906	3-7 p.m.	<u>Virtual Registration Link</u>
9/27/2021	South Suburban Sports Complex 4810 E. County Line Rd. Littleton, CO 80126	3-7 p.m.	<u>Virtual Registration Link</u>
9/29/2021	CDOT Regional Office Big Sandy Conference Room 2738 Victory Highway Limon, CO 80828	3-7 p.m.	Virtual Registration Form
9/30/2021	Christ United Methodist Church 301 East Drake Road Fort Collins, CO 80525	3-7 p.m.	Virtual Registration Form
10/4/2021	City Hall City Council Chambers 101 West 8th Street Glenwood Springs, CO 81601	3-7 p.m.	Virtual Registration Form

How to Register to Attend Hearings Virtually

If you plan to attend any of the scheduled hearings virtually, you must click on the registration link in the above table for each hearing that you wish to attend virtually. The registration links for each hearing are also available on the CDOT's website at

https://www.codot.gov/business/rules/proposed-rules.html. When you register, you must provide your full name and email address. You may also provide your telephone number and the organization that you are representing. Lastly, please indicate whether you plan to testify during the hearing and/or submit written comments. You will receive instructions the day before the scheduled hearing on how to join, listen, and provide testimony if you wish.



IV. Statutory Authority

The specific authority under which the Commission shall establish these proposed rule revisions is set forth in §§ 43-1-106(8)(k) and 43-1-1103(5), C.R.S.

V. Copies of the Notice, Proposed Rule Revisions, and the Statement of Basis, Purpose & Authority

The notice of hearing, the proposed rule revisions, and the proposed statement of basis, purpose and authority are available for review at CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html.

If there are changes made to the proposed rule revisions before the first scheduled hearing on September 14, 2021, the updated proposed rule revisions will be available to the public and posted on CDOT's website by September 9, 2021.

Please note that the proposed rule revisions being considered are subject to further changes and modifications after the public hearings and the deadline for the submission of written comments.

VI. Opportunity to testify and submit written comments

The Commission and CDOT strive to make the rulemaking process inclusive to all. Everyone will have the opportunity to testify and provide written comments concerning the proposed rule revisions. Interested and affected parties are welcome to testify and submit written comments.

Each hearing will have an identical format. The Hearing Officer opens the hearing and provides a brief introduction of the hearing procedures. CDOT will review exhibits to establish that the CDOT on behalf of the Commission met all the procedural requirements of the Administrative Procedure Act. A summary of the proposed rule revisions will be presented by CDOT staff. Interested and affected parties will then have the opportunity to give testimony either in-person or virtually.

Testimony

The testimony phase of each hearing will proceed as follows:

- The Hearing Officer will identify the participants who indicated that they plan to testify during the hearing based on the registration records.
- When the Hearing Officer exhausts the list, they will ask whether any additional participants wish to testify.

To ensure that the hearing is prompt and efficient, oral testimony may be time-limited.

Written Comments

You may submit written comments to <u>dot rules@state.co.us</u> during the comment period between August 13, 2021, and October 15, 2021. All written comments must be received on or before Friday, October 15, 2021, at 5 pm.



Additionally, we will post all written comments to CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html. However, please note that we will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

All written comments will be added to the official rulemaking record.

VII. Recording of the Hearings

Each hearing will be recorded. After each hearing concludes, the recording will be available on CDOT's YouTube Channel at https://www.youtube.com/channel/UCOWFfi0-SE4kV07saKZdueA/videos.

VIII. Special Accommodations

If you need special accommodations, please contact CDOT's Rules Administrator at 303.757.9441 or dot rules@state.co.us at least one (1) week prior to the scheduled hearing date.

IX. Contact Information

Please contact CDOT's Rules Administrator, at 303.757.9441 or <u>dot_rules@state.co.us</u> if you have any questions.





2829 W. Howard Place Denver, CO 80204-2305

Transportation Commission of Colorado Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions 2 CCR 601-22

Proposed Statement of Basis and Purpose, Statutory Authority, and Preamble

Statement of Basis and Purpose and Preamble

<u>Overview</u>

The purpose of the Rules Governing the Statewide Transportation Planning Process and Transportation Planning Regions (Rules) is to prescribe the statewide transportation planning process through which a long-range multimodal, comprehensive Statewide Transportation Plan will be developed, integrated, updated, and amended by the Colorado Department of Transportation (Department or CDOT), in cooperation with local governments, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions, Indian tribal governments, relevant state and federal agencies, the private sector, transit and freight operators, and the general public. This cooperative process is designed to coordinate regional transportation planning, guided by the statewide transportation policy set by the Department and the Transportation Commission of Colorado ("Commission"), as a basis for developing the Statewide Transportation Plan. The result of the statewide transportation planning process shall be a long-range, financially feasible, environmentally sound, multimodal transportation system plan for Colorado that will reduce traffic and smog.

Further, the purpose of the Rules is to define the state's Transportation Planning Regions for which long-range Regional Transportation Plans are developed, prescribe the process for conducting and initiating transportation planning in the non-MPO Transportation Planning Regions and coordinating with the MPOs for planning in the metropolitan areas. Memoranda of Agreement (MOA) that serve as the Metropolitan Planning Agreements (MPAs) pursuant to 23 C.F.R. § 450 between the Department, each MPO, and applicable transit provider(s) further prescribe the transportation planning process in the MPO Transportation Planning Regions. In addition, the purpose of the Rules is to describe the organization and function of the Statewide Transportation Advisory Committee (STAC) as established by § 43-1-1104, Colorado Revised Statutes (C.R.S.).

The Rules are promulgated to meet the intent of both the U.S. Congress and the Colorado General Assembly for conducting a continuing, cooperative, and comprehensive statewide performance-based multimodal transportation planning process for producing a Statewide Transportation Plan and Regional Transportation Plans that address the transportation needs of the State. This planning process, through comprehensive input, results in systematic project prioritization and resource allocation.

The Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of multimodal, cost-effective, and environmentally sound means of transportation which leads to cleaner air and reduced traffic. The Rules reflect the Commission's and the Department's focus on multimodal transportation projects including highways, transit, rail, bicycles and pedestrians. Section 8 of these Rules establishes an ongoing administrative process for identifying, measuring, confirming, and verifying those best practices and their impacts, so that CDOT and MPOs can easily apply them to their plans in order to achieve the pollution reduction levels required by these Rules.



The specific purpose of this rulemaking is to establish Greenhouse Gas (GHG) pollution reduction planning levels for transportation within Section 8 of these Rules that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of these requirements is to limit the GHG pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This is accomplished by requiring CDOT and MPOs to establish plans that meet targets through a mix of projects that limit and mitigate air pollution and improve quality of life and Multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. In the event that a plan fails to comply, CDOT and MPOs have the option to commit to implementing GHG Mitigation Measures that provide travelers with cleaner and more equitable transportation options such as safer pedestrian crossings and sidewalks, better transit and transit-access, or infrastructure that supports access to housing, jobs, and retail.

Examples of these types of mitigations, which also benefit quality of place and the economic resilience of communities, will include but not be limited to: adding bus rapid transit facilities and services, enhancing first-and-last mile connections to transit, adding bike-sharing services including electric bikes, improving pedestrian facilities like sidewalks and safe accessible crosswalks, investments that support vibrant downtown density and local zoning decisions that favor sustainable building codes and inclusive multi-use facilities downtown, and more. The process of identifying and approving mitigations will be established by a policy process that allows for ongoing innovations from local governments and other partners to be considered on an iterative basis.

If compliance still cannot be demonstrated, even after committing to GHG Mitigation Measures, the Commission shall restrict the use of certain funds, requiring that dollars be focused on projects that help reduce transportation emissions and are recognized as approved mitigations. These requirements address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms.

Context of Section 8 of these Rules Within Statewide Objectives

The passage of House Bill (HB)19-1261 set Colorado on a course to dramatically reduce GHG emissions across all sectors of the economy. In HB 19-1261, now codified in part at §§ 25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" acknowledged that "Colorado is already experiencing harmful climate impacts[,]" and that "many of these impacts disproportionately affect" certain Disproportionately Impacted Communities. see § 25-7-102(2), C.R.S. The General Assembly also recognized that "[b]y reducing [GHG] pollution, Colorado will also reduce other harmful air pollutants, which will, in turn, improve public health, reduce health care costs, improve air quality, and help sustain the environment." see § 25-7-102(2)(d), C.R.S.



Since 2019, the State has been rigorously developing a plan to achieve the ambitious GHG pollution reduction goals in § 25-7-102(2)(g), C.R.S. In January 2021, the State published its Greenhouse Gas Pollution Reduction Roadmap (Roadmap). Available at:

https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap. The Roadmap identified the transportation sector as the single largest source of statewide GHG pollution as of 2020, with passenger vehicles the largest contributor within the transportation sector. Additionally, the Roadmap determined that emissions from transportation are a "significant contributor to local air pollution that disproportionately impacts lower-income communities and communities of color." see Roadmap, p. XII.

A key finding in the Roadmap recognized that "[m]aking changes to transportation planning and infrastructure to reduce growth in driving is an important tool" to meet the statewide GHG pollution reduction goals. see Roadmap, p. 32. Section 8 of these Rules also advances the State's goals to reduce emissions of other harmful air pollutants, including ozone.

Why the Commission is Taking This Action

Senate Bill 21-260, signed into law by the Governor on June 17, 2021, and effective upon signature, includes a new § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Section 43-1-128, C.R.S. also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and Vehicle Miles Traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.

Under Colorado law governing transportation planning, CDOT is charged with and identified as the proper body for "developing and maintaining the state transportation planning process and the state transportation plan" in cooperation with Regional Planning Commissions and local government officials. see § 43-1-1101, C.R.S.

The Commission is responsible for formulating policy with respect to transportation systems in the State and promulgating and adopting all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs. see § 43-1-106(8), C.R.S. The Commission is statutorily charged "to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado." see § 43-1-106(8)(b), C.R.S. In addition, the Commission is generally authorized "to make all necessary and reasonable orders, rules and regulations in order to carry out the provisions of this part . . ." see § 43-1-106(8)(k), C.R.S.

As such, CDOT and the Commission are primarily responsible for ensuring compliance with GHG reductions in transportation planning.

What Relevant Regulations Currently Apply to Transportation Planning

Transportation planning is subject to both state and federal requirements. Under federal law governing transportation planning and federal-aid highways, it is declared to be in the national interest to promote transportation systems that accomplish a number of mobility objectives "while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes..." see 23 U.S.C. § 134; see also 23 U.S.C. § 135(a)(1). In the metropolitan planning process, consideration must be given to projects and strategies that will "protect and enhance the environment, promote energy conservation, improve the quality of life..." see 23 U.S.C. § 134(h)(1)(E); see also 23 C.F.R. Part 450, Subpart B (federal regulations governing statewide transportation planning and programming). The same planning objective applies to statewide transportation planning. see 23 U.S.C. § 135(d)(1)(E); see also 23 C.F.R. Part 450, Subpart C (governing metropolitan transportation planning and programming). Further, the Statewide Transportation Plan shall be developed, as appropriate, in



consultation with State...local agencies responsible for...environmental protection..." see 23 U.S.C. \$ 135(f)(2)(D)(i).

Under conforming Colorado law, the Statewide Transportation Plan is developed by integrating and consolidating Regional Transportation Plans developed by MPOs and regional transportation planning organizations into a "comprehensive statewide transportation plan" pursuant to rules and regulations promulgated by the Commission. *see* § 43-1-1103(5), C.R.S. The Statewide Transportation Plan must address a number of factors including, but not limited to, "environmental stewardship" and "reduction of greenhouse gas emissions." *see* § 43-1-1103(5)(h) and (j), C.R.S.

Regional Transportation Plans must account for the "expected environmental, social, and economic impacts of the recommendations in the plan, including a full range of reasonable transportation alternatives...in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." see § 43-1-1103(1)(d), C.R.S. Further, in developing Regional Transportation Plans, MPOs "[s]hall assist other agencies in developing transportation control measures for utilization in accordance with state...regulations...and shall identify and evaluate measures that show promise of supporting clean air objectives." see § 43-1-1103(1)(e), C.R.S.

Putting Section 8 of these Rules into Perspective

Section 8 establishes GHG regulatory requirements that are among the first of their kind in the U.S. However, from an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a Nonattainment Area are consistent with or "conform to" a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and the Denver Regional Council of Governments' MPOs to demonstrate conformity with each plan adoption and amendment.

However, because the transportation sector encompasses the millions of individual choices people make every day that have an impact on climate, a variety of strategies are necessary to achieve the State's climate goals. Section 8 of these Rules is one of many steps needed to achieve the totality of reduction goals for the transportation sector.

Purpose of GHG Mitigation Measures

The transportation modeling conducted for this rulemaking may demonstrate that certain projects increase GHG pollution for a variety of reasons. These reasons may include factors such as induced demand as a result of additional lane mileage attracting additional vehicular traffic, or additional traffic facilitated by access to new commercial or residential development in the absence of public transit options or bicycle/pedestrian access that provides consumers with other non-driving options. Transportation infrastructure itself can also increase or decrease GHG and other air pollutants by virtue of factors like certain construction materials, removal or addition of tree cover that captures carbon pollution, or integration with vertical construction templates of various efficiencies that result in higher or lower levels of per capita energy use. The pollution impacts of various infrastructure projects will vary significantly depending on their specifics and must be modeled in a manner that is context-sensitive to a range of issues such as location, footprint of existing infrastructure, design, and how it fits together with transportation alternatives.

Of note, many types of infrastructure have been demonstrated not to generate significant induced demand or increased emissions. For example, the state of California conducted a study of project types that should be considered "neutral" from the perspective of GHG pollution -- due to their use being related primarily to issues like safety and utility for emergency services. See here:



https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1 st-edition-tac-fnl-a11v.pdf

Furthermore, other aspects of transportation infrastructure can facilitate reductions in emissions and thus serve as mitigations rather than contributors to pollution. For example, the addition of transit resources in a manner that can displace Vehicle Miles Traveled can reduce emissions. Moreover, improving downtown pedestrian and bike access, particularly in areas that allow individuals to shift multiple daily trips for everything from work to dining to retail, can improve both emissions and quality of life.

There is an increasing array of proven best practices for reducing pollution and smog and improving economies and neighborhoods that can help streamline decision-making for state and local agencies developing plans and programs of projects.

Statutory Authority

The statutory authority is as follows:

- House Bill 19-1261 enacted into law on May 30, 2019.
- Senate Bill 20-260 enacted into law on June 17, 2021.
- § 25-7-102(2), C.R.S., which sets forth the legislative declaration to reduce statewide GHG pollution and establishes statewide GHG pollution targets.
- § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling, and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and vehicle miles traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.
- § 43-1-1101, C.R.S., which authorizes CDOT to develop and maintain the state transportation planning process and the State Transportation Plan in cooperation with Regional Planning Commissions and local government.
- § 43-1-1103(5), C.R.S., which authorizes the Commission to promulgate rules to establish the formation of the Statewide Transportation Plan and the statewide planning process. Also requires the consideration of environmental stewardship and reducing GHG emissions as part of transportation planning.
- § 43-1-106(8), C.R.S, which authorizes the Commission to formulate policy with respect to transportation systems in the State and promulgate and adopt all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs.
- § 43-1-106(8)(b), C.R.S., which requires the Commission to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado.
- § 43-1-106(8)(k), C.R.S., which authorizes the Commission to make all necessary and reasonable order, rules and regulations.



DEPARTMENT OF TRANSPORTATION

Transportation Commission

RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS AND TRANSPORTATION PLANNING REGIONS

2 CCR 601-22

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

August 13, 2021, Version

Please note the following formatting key:

Font Effect	Meaning
<u>Underline</u>	New Language
Strikethrough	Deletions
[Blue Font Text]	Annotation

STATEMENT OF BASIS AND PURPOSE, AND-STATUTORY AUTHORITY AND PREAMBLE

The purpose of the Rules Governing the Statewide Transportation Planning Process and Transportation Planning Regions (Rules) is to prescribe the statewide transportation planning process through which a long-range multimodal comprehensive statewide Statewide transportation Transportation plan Plan will be developed, integrated, updated, and amended by the Colorado Department of Transportation (Department or CDOT), in cooperation with local governments, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions, Indian tribal governments, relevant state and federal agencies, the private sector, transit and freight operators, special-interest groups, and the general public. This cooperative process is designed to coordinate regional transportation planning, guided by the statewide transportation policy set by the Department and the transportation Transportation commission Commission of Colorado ("Commission"), as a basis for developing the statewide Statewide transportation planning process shall be a long-range, financially feasible, environmentally sound, multimodal Multimodal transportation system plan for Colorado that will reduce traffic and smog.

Further, the purpose of the Rules is to define the state's Transportation Planning Regions for which long-range Regional Transportation Plans are developed, prescribe the process for conducting and initiating transportation planning in the non-MPO Transportation Planning Regions and coordinating with the Metropolitan Planning OrganizationsMPOs for planning in the metropolitan areas. Memoranda of Agreement (MOA) that serve as the Metropolitan Planning Agreements (MPAs) per-pursuant to 23 C.F.R. § 450 between the Department, each MPO, and applicable transit provider(s) further prescribe the transportation planning process in the MPO transportation Transportation planning Planning regions Planning. In addition, the purpose of the Rules is to describe the organization and function of the

Statewide Transportation Advisory Committee (STAC) as established by § 43-1-1104, Colorado Revised Statutes (C.R.S.).

The Rules are promulgated to meet the intent of both the U.S. Congress and the Colorado General Assembly for conducting a continuing, cooperative, and comprehensive statewide performance-based multimodal transportation planning process for producing a Statewide Transportation Plan and Regional Transportation Plans that address the transportation needs of the stateState. This planning process, through comprehensive input, results in systematic project prioritization and resource allocation.

The Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of Multimodal, cost-effective, and environmentally sound means of transportation which leads to cleaner air and reduced traffic. The Rules reflect the Commission's and the Department's focus on Multimodal transportation projects including highways, transit, rail, bicycles and pedestrians. Section 8 of these Rules establishes an ongoing administrative process for identifying, measuring, confirming, and verifying those best practices and their impacts, so that CDOT and MPOs can easily apply them to their plans in order to achieve the pollution reduction levels required by these Rules.

The Rules are promulgated by the Commission pursuant to the specific statutory authority in § 43-1-1103 (5), C.R.S., and § 43-1-106 (8)(k), C.R.S.

Preamble for 2018 Rulemaking

In 2018, rulemaking was initiated to update the rules to conform to recently passed federal legislation, update expired rules, clarify the membership and duties of the Statewide Transportation Advisory Committee STAC pursuant to HB 16-1169 and HB 16-1018, and to make other minor corrections. The Rules are intended to be consistent with and not be a replacement for the federal transportation planning requirements contained in 23 United States Code (U.S.C.) §§ 134, 135 and 150, Pub. L. No. 114-94 (Fixing America's Surface Transportation Act or the "FAST Act") signed into law on December 4, 2015, and its implementing regulations, where applicable, contained in 23 Code of Federal Regulations (C.F.R.) Part 450, including Subparts A, B and C and 25 C.F.R. § 170.421 in effect as of August 1, 2017, which are hereby incorporated into the Rules by this reference, and do not include any later amendments. All referenced laws and regulations shall be available for copying or public inspection during regular business hours from the Office of Policy and Government Relations, Colorado Department of Transportation, 2829 W. Howard Pl., Denver, Colorado 80204.

Copies of the referenced United States Code may be obtained from the following address:

Office of the Law Revision Counsel U.S. House of Representatives H2-308 Ford House Office Building Washington, DC 20515 (202) 226-2411

Copies of the referenced Code of Federal Regulations may be obtained from the following address:

U.S. Government Publishing Office 732 North Capitol Street, N.W. Washington, DC 20401 (202) 512-1800

The Statewide Planning Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of multimodal, cost effective and environmentally sound means of transportation. The Rules reflect the Department's focus on multimodal transportation projects including highways, aviation, transit, rail, bicycles and pedestrians.

The Rules are promulgated by the Commission pursuant to the specific statutory authority in § 43–1–1103 (5), C.R.S., and § 43–1–106 (8)(k), C.R.S. The Commission may, at their discretion, entertain petitions for declaratory orders pursuant to § 24–4–105(11), C.R.S.

Preamble for 2021 Rulemaking

Overview

Section 8 of these Rules establishes Greenhouse Gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of these requirements is to limit the GHG pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This is accomplished by requiring CDOT and MPOs to establish plans that meet targets through a mix of projects that limit and mitigate air pollution and improve quality of life and Multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. In the event that a plan fails to comply, CDOT and MPOs have the option to commit to implementing GHG Mitigation Measures that provide travelers with cleaner and more equitable transportation options such as safer pedestrian crossings and sidewalks, better transit and transit-access, or infrastructure that supports access to housing, jobs, and retail.

Examples of these types of mitigations, which also benefit quality of place and the economic resilience of communities, will include but not be limited to: adding bus rapid transit facilities and services, enhancing first-and-last mile connections to transit, adding bike-sharing services including electric bikes, improving pedestrian facilities like sidewalks and safe accessible crosswalks, investments that support vibrant downtown density and local zoning decisions that favor sustainable building codes and inclusive multi-use facilities downtown, and more. The process of identifying and approving mitigations will be established by a policy process that allows for ongoing innovations from local governments and other partners to be considered on an iterative basis.

If compliance still cannot be demonstrated, even after committing to GHG Mitigation Measures, the Commission shall restrict the use of certain funds, requiring that dollars be focused on projects that help reduce transportation emissions and are recognized as approved mitigations. These requirements address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Context of Section 8 of these Rules Within Statewide Objectives

The passage of House Bill (HB)19-1261 set Colorado on a course to dramatically reduce GHG emissions across all sectors of the economy. In HB 19-1261, now codified in part at §§ 25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" acknowledged that "Colorado is already experiencing harmful climate impacts[,]" and that "many of these impacts disproportionately affect" certain Disproportionately Impacted Communities. see § 25-7-102(2), C.R.S. The General Assembly also recognized that "[b]y reducing [GHG] pollution, Colorado will also reduce other harmful air pollutants, which will, in turn, improve public health, reduce health care costs, improve air quality, and help sustain the environment." see § 25-7-102(2)(d), C.R.S.

Since 2019, the State has been rigorously developing a plan to achieve the ambitious GHG pollution reduction goals in § 25-7-102(2)(g), C.R.S. In January 2021, the State published its Greenhouse Gas Pollution Reduction Roadmap (Roadmap). The Roadmap identified the transportation sector as the single largest source of statewide GHG pollution as of 2020, with passenger vehicles the largest contributor within the transportation sector. Additionally, the Roadmap determined that emissions from transportation

are a "significant contributor to local air pollution that disproportionately impacts lower-income communities and communities of color." see Roadmap, p. XII.

A key finding in the Roadmap recognized that "[m]aking changes to transportation planning and infrastructure to reduce growth in driving is an important tool" to meet the statewide GHG pollution reduction goals. see Roadmap, p. 32. Section 8 of these Rules also advances the State's goals to reduce emissions of other harmful air pollutants, including ozone.

Why the Commission is Taking This Action

Senate Bill 21-260, signed into law by the Governor on June 17, 2021, and effective upon signature, includes a new § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Section 43-1-128, C.R.S. also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and Vehicle Miles Traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.

Under Colorado law governing transportation planning, CDOT is charged with and identified as the proper body for "developing and maintaining the state transportation planning process and the state transportation plan" in cooperation with Regional Planning Commissions and local government officials. see § 43-1-1101, C.R.S.

The Commission is responsible for formulating policy with respect to transportation systems in the State and promulgating and adopting all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs. see § 43-1-106(8), C.R.S. The Commission is statutorily charged "to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado." see § 43-1-106(8)(b), C.R.S. In addition, the Commission is generally authorized "to make all necessary and reasonable orders, rules and regulations in order to carry out the provisions of this part . . ." see § 43-1-106(8)(k), C.R.S.

As such, CDOT and the Commission are primarily responsible for ensuring compliance with GHG reductions in transportation planning.

What Relevant Regulations Currently Apply to Transportation Planning

Transportation planning is subject to both state and federal requirements. Under federal law governing transportation planning and federal-aid highways, it is declared to be in the national interest to promote transportation systems that accomplish a number of mobility objectives "while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes..." see 23 U.S.C. § 134; see also 23 U.S.C. § 135(a)(1). In the metropolitan planning process, consideration must be given to projects and strategies that will "protect and enhance the environment, promote energy conservation, improve the quality of life..." see 23 U.S.C. § 134(h)(1)(E); see also 23 C.F.R. Part 450, Subpart B (federal regulations governing statewide transportation planning and programming). The same planning objective applies to statewide transportation planning. see 23 U.S.C. § 135(d)(1)(E); see also 23 C.F.R. Part 450, Subpart C (governing metropolitan transportation planning and programming). Further, the Statewide Transportation Plan shall be developed, as appropriate, in consultation with State...local agencies responsible for...environmental protection..." see 23 U.S.C. § 135(f)(2)(D)(i).

Under conforming Colorado law, the Statewide Transportation Plan is developed by integrating and consolidating Regional Transportation Plans developed by MPOs and regional transportation planning organizations into a "comprehensive statewide transportation plan" pursuant to rules and regulations promulgated by the Commission. see § 43-1-1103(5), C.R.S. The Statewide Transportation Plan must

address a number of factors including, but not limited to, "environmental stewardship" and "reduction of greenhouse gas emissions." see § 43-1-1103(5)(h) and (i), C.R.S.

Regional Transportation Plans must account for the "expected environmental, social, and economic impacts of the recommendations in the plan, including a full range of reasonable transportation alternatives...in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." see § 43-1-1103(1)(d), C.R.S. Further, in developing Regional Transportation Plans, MPOs "[s]hall assist other agencies in developing transportation control measures for utilization in accordance with state...regulations...and shall identify and evaluate measures that show promise of supporting clean air objectives." see § 43-1-1103(1)(e), C.R.S.

Putting Section 8 of these Rules into Perspective

Section 8 establishes GHG regulatory requirements that are among the first of their kind in the U.S. However, from an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a Nonattainment Area are consistent with or "conform to" a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and the Denver Regional Council of Governments' MPOs to demonstrate conformity with each plan adoption and amendment.

However, because the transportation sector encompasses the millions of individual choices people make every day that have an impact on climate, a variety of strategies are necessary to achieve the State's climate goals. Section 8 of these Rules is one of many steps needed to achieve the totality of reduction goals for the transportation sector.

Purpose of GHG Mitigation Measures

The transportation modeling conducted for this rulemaking may demonstrate that certain projects increase GHG pollution for a variety of reasons. These reasons may include factors such as induced demand as a result of additional lane mileage attracting additional vehicular traffic, or additional traffic facilitated by access to new commercial or residential development in the absence of public transit options or bicycle/pedestrian access that provides consumers with other non-driving options.

Transportation infrastructure itself can also increase or decrease GHG and other air pollutants by virtue of factors like certain construction materials, removal or addition of tree cover that captures carbon pollution, or integration with vertical construction templates of various efficiencies that result in higher or lower levels of per capita energy use. The pollution impacts of various infrastructure projects will vary significantly depending on their specifics and must be modeled in a manner that is context-sensitive to a range of issues such as location, footprint of existing infrastructure, design, and how it fits together with transportation alternatives.

Furthermore, other aspects of transportation infrastructure can facilitate reductions in emissions and thus serve as mitigations rather than contributors to pollution. For example, the addition of transit resources in a manner that can displace Vehicle Miles Traveled can reduce emissions. Moreover, improving downtown pedestrian and bike access, particularly in areas that allow individuals to shift multiple daily trips for everything from work to dining to retail, can improve both emissions and quality of life.

There is an increasing array of proven best practices for reducing pollution and smog and improving economies and neighborhoods that can help streamline decision-making for state and local agencies developing plans and programs of projects.

[Note: The Commission proposes to repeal Section 1 of these Rules in its entirety and re-enact Section 1 of these Rules below to re-format the numbering of the administrative rules into alphabetical order.]

1.00 Definitions.

- 4.01 Accessible ensure that reasonable efforts are made that all meetings are reachable by persons from households without vehicles and that the meetings will be accessible to persons with disabilities in accordance with the Americans with Disabilities Act (ADA), and also accessible to persons with limited English proficiency. Accessible opportunities to on planning related matters include those provided on the internet and through such methods as telephone town halls.
- 1.02 Attainment Area any geographic region of the United States that meets the national primary or secondary National Ambient Air Quality Standards (NAAQS) for the pollutants as defined in the Clean Air Act (CAA) (Amendments of 1990).
- 1.03 Commission the transportation commission of Colorado created by § 43-1-106, C.R.S.
- 1.04 Corridor a transportation system that includes all modes and facilities within a described geographic area.
- 1.05 Corridor Vision a comprehensive examination of a specific transportation corridor, which includes a determination of needs and an expression of desired state of the transportation system that includes transportation modes and facilities over a planning period.
- 1.06 Department the Colorado Department of Transportation created by § 43-1-103, C.R.S.
- 1.07 Division the Division of Transportation Development within the Colorado Department of Transportation.
- 1.08 Division Director the Director of the Division of Transportation Development.
- 1.09 Fiscally Constrained the financial limitation on transportation plans and programs based on the projection of revenues as developed cooperatively with the MPOs and the rural TPRs and adopted by the Commission that are reasonably expected to be available over the long-range transportation planning period and the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP) programming periods.
- 1.10 Intergovernmental Agreement an arrangement made between two or more political subdivisions that form associations for the purpose of promoting the interest and welfare of said subdivisions.
- 1.11 Intermodal Facility- A site where goods or people are conveyed from one mode of transportation to another, such as goods from rail to truck or people from passenger vehicle to bus.
- 1.12 Land Use—the type, size, arrangement, and use of parcels of land.
- 1.13 Limited English Proficiency (LEP) individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.
- 1.14 Long-range Planning a reference to a planning period with a minimum 20-year planning horizon.
- 1.15 Maintenance Area any geographic region of the United States previously designated by the U.S. Environmental Protection Agency (EPA) as a nonattainment area pursuant to the Clean Air Act (CAA) Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended in 1990.
- 1.16 Memorandum of Agreement (MOA) a written agreement between two or more parties on an intended plan of action.

- 1.17 Metropolitan Planning Agreement (MPA) a written agreement between the MPO, the State, and the providers of public transportation serving the metropolitan planning area that describes how they will work cooperatively to meet their mutual responsibilities in carrying out the metropolitan planning process.
- 1.18 Metropolitan Planning Area a geographic area determined by agreement between the Metropolitan Planning Organization for the area and the Governor, in which the metropolitan transportation planning process is carried out pursuant to 23 U.S.C. § 134.
- 1.19 Metropolitan Planning Organization (MPO) an organization designated by agreement among the units of general purpose local governments and the Governor, charged to develop the regional transportation plans and programs in a metropolitan planning area pursuant to 23 U.S.C. § 134.
- 4.20 Mobility the ability to move people, goods, services, and information among various origins and destinations.
- 1.21 Multimodal an integrated approach to transportation that takes into account all modes of travel, such as bicycles and walking, personal mobility devices, buses, transit, rail, aircraft, and motor vehicles.
- 1.22 National Ambient Air Quality Standards (NAAQS) are those established by the U.S.

 Environmental Protection Agency for air pollutants considered harmful to public health and environment. These criteria pollutants are: carbon monoxide, lead, nitrogen dioxide, ozone, small particles, and sulfur dioxide.
- 1.23 Nonattainment Area any geographic region of the United States which has been designated by the EPA under section 107 of the CAA for any pollutants for which an NAAQS exists.
- 1.24 Non-metropolitan Area a rural geographic area outside a designated metropolitan planning area.
- 1.25 Plan Integration Plan integration is a comprehensive evaluation of the statewide transportation system that includes all modes, an identification of needs and priorities, and key information from other related CDOT plans.
- 1.26 Planning Partners local and tribal governments, the rural Transportation Planning Regions and MPOs.
- 1.27 Project Priority Programming Process ("4P") the process by which CDOT adheres to 23 U.S.C. § 135 and 23 C.F.R. Part 450 when developing and amending the statewide transportation improvement program (STIP).
- 1.28 Regional Planning Commission (RPC) a planning body formed under the provisions of § 30-28-105, C.R.S., and designated under these Rules for the purpose of transportation planning within a rural Transportation Planning Region.
- 1.29 Regional Transportation Plan (RTP) a long-range plan designed to address the future transportation needs for a Transportation Planning Region including, but not limited to, anticipated funding, priorities, and implementation plans, pursuant to, but not limited to, § 43-1-1103, C.R.S. and 23 C.F.R. Part 450. All rural and urban Transportation Planning Regions in the state produce RTPs.
- 1.30 State Transportation System refers to all state-owned, operated, and maintained transportation facilities in Colorado, including, but not limited to, interstate highways, other highways, and aviation, bicycle and pedestrian, transit, and rail facilities.

- 1.31 Statewide Transportation Advisory Committee (STAC) the committee created by § 43-1-1104, C.R.S., comprising one representative from each Transportation Planning Region and one representative from each tribal government to review and comment on Regional Transportation Plans, amendments, and updates, and to advise both the Department and the Commission on the needs of the transportation system in Colorado.
- 1.32 Statewide Transportation Improvement Program (STIP) a staged, fiscally constrained, multiyear, statewide, multimodal program of transportation projects which is consistent with the statewide transportation plan and planning processes, with metropolitan planning area plans, Transportation Improvement Programs and processes, and which is developed pursuant to 23 U.S.C. § 135.
- 1.33 Statewide Transportation Plan the long-range, comprehensive, multimodal statewide transportation plan covering a period of no less than 20 years from time of adoption, developed through the statewide transportation planning process described in these Rules and 23 U.S.C. § 135, and adopted by the Commission pursuant to § 43-1-1103, C.R.S.
- 1.34 System Continuity includes, but is not limited to, appropriate intermodal connections, integration with state modal plans, and coordination with neighboring Regional Transportation Plans, and, to the extent practicable, other neighboring states' transportation plans.
- 1.35 Traditionally Underserved refers to groups such as seniors, persons with disabilities, low-income households, minorities, and student populations, which may face difficulties accessing transportation systems, employment, services, and other amenities.
- 1.36 Transit and Rail Advisory Committee (TRAC) an advisory committee created specifically to advise the Executive Director, the Commission, and the Division of Transit and Rail on transit and rail-related activities.
- 1.37 Transportation Commonality the basis on which Transportation Planning Regions are established including, but not limited to: Transportation Commission Districts, the Department's Engineering Regions, travelsheds, watersheds, geographic unity, existing intergovernmental agreements, and socioeconomic unity.
- 1.38 Transportation Improvement Program (TIP) a staged, fiscally constrained, multi-year, multimodal program of transportation projects developed and adopted by MPOs, and approved by the Governor, which is consistent with an MPO's RTP and which is developed pursuant to 23 U.S.C. § 134.
- 1.39 Transportation Mode a particular form of travel including, but not limited to, bus, motor vehicle, rail, transit, aircraft, bicycle, pedestrian travel, or personal mobility devices.
- 1.40 Transportation Planning and Programming Process all collaborative planning-related activities including the development of regional and statewide transportation plans, the Department's Project Priority Programming Process, and development of the Transportation Improvement Programs (TIPs) and Statewide Transportation Improvement Program (STIP).
- 1.41 Transportation Planning Region (TPR) a geographically designated area of the state, defined by section 2.00 of these Rules in consideration of the criteria for transportation commonality, and for which a regional transportation plan is developed pursuant to the provisions of § 43-1-1102 and 1103, C.R.S. and 23 U.S.C. § 134. The term TPR is inclusive of these types: non-MPO Transportation Planning Regions, MPO Transportation Planning Regions, and Transportation Planning Regions with both MPO and non-MPO areas.

- 1.42 Transportation Systems Planning provides the basis for identifying current and future deficiencies on the state highway system and outlines strategies to address those deficiencies and make improvements to meet Department goals.
- 1.43 Travelshed the region or area generally served by a major transportation facility, system, or corridor-
- 1.44 Tribal Transportation Improvement Program (TTIP) a multi-year fiscally constrained list of proposed transportation projects developed by a tribe from the tribal priority list or tribal long-range transportation plan, and which is developed pursuant to 25 C.F.R. Part 170. The TTIP is incorporated into the STIP without modification.
- 1.45 Urbanized Area an area with a population of 50,000 or more designated by the Bureau of the Census.
- 1.46 Watershed a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.

[Note: The Commission proposes to add nineteen (19) new definitions. New proposed defined terms include: Applicable Planning Document, Approved Air Quality Model, Baseline, Carbon Dioxide Equivalent, Congestion Mitigation and Air Quality, Disproportionately Impacted Communities, Four-Year Prioritized Plan, Greenhouse Gas, Greenhouse Mitigation Measures, Greenhouse Gas Reduction Levels, Mitigation Action Plan, MPO Model, Multimodal Transportation and Mitigation Options Fund, Regionally Significant Project, State Interagency Consultation Team, Statewide Travel Model, Surface Transportation Block Grant, Vehicle Miles Traveled, and 10-Year Plan. Only minor non-substantive changes, such as correcting grammar errors or capitalizing defined terms, were made to the existing forty-six (46) defined terms.]

1.00 Definitions.

- 1.01 Accessible ensure that reasonable efforts are made that all meetings are reachable by persons from households without vehicles and that the meetings will be accessible to persons with disabilities in accordance with the Americans with Disabilities Act (ADA), and also accessible to persons with Limited English Proficiency. Accessible opportunities to comment on planning related matters include those provided on the internet and through such methods as telephone town halls.
- 1.02 Applicable Planning Document refers to MPO Fiscally Constrained RTPs,TIPs for MPOs in NAAs, CDOT's 10-Year Plan and Four-Year Prioritized Plan in non-MPO areas, and amendments to the MPO RTPs and CDOT's 10-Year Plan and Four-Year Prioritized Plan in non-MPO areas that include the addition of Regionally Significant Projects.
- 1.03 Approved Air Quality Model the most recent Environmental Protection Agency issued model that quantifies GHG emissions from transportation.
- 1.04 Attainment Area any geographic region of the United States that meets the national primary or secondary National Ambient Air Quality Standards (NAAQS) for the pollutants as defined in the Clean Air Act (CAA) (Amendments of 1990).
- 1.05 Baseline estimates of GHG emissions for each of the MPOs, and for the non-MPO areas, prepared using the MPO Models or the Statewide Travel Model. Estimates must include GHG emissions resulting from the existing transportation network and implementation of the most recently adopted RTP for all MPOs and the 10-Year Plan in non-MPO areas as of the effective date of these Rules.

- 1.06 Carbon Dioxide Equivalent (CO2e) a metric measure used to compare the emissions from various GHG based upon the 100-year global warming potential (GWP). CO2e is multiplying the mass amount of emissions (metric tons per year), for each GHG constituent by that gas's GWP, and summing the resultant values to determine CO2e (metric tons per year). This calculation allows comparison of different greenhouse gases and their relative impact on the environment over different time periods.
- 1.07 Commission the Transportation Commission of Colorado created by § 43-1-106, C.R.S.
- 1.08 Congestion Mitigation and Air Quality (CMAQ) a federally mandated program established in 23

 U.S.C § 149 to improve air quality in Nonattainment and Maintenance Areas for ozone, carbon monoxide, and particulate matter. References related to this program include any successor programs as established by the federal government.
- 1.09 Corridor a transportation system that includes all modes and facilities within a described geographic area.
- 1.10 Corridor Vision a comprehensive examination of a specific transportation Corridor, which includes a determination of needs and an expression of desired state of the transportation system that includes Transportation Modes and facilities over a planning period.
- 1.11 Department or CDOT the Colorado Department of Transportation created by § 43-1-103, C.R.S.
- 1.12 Disproportionately Impacted Communities defined in § 24-38.5-302(3), C.R.S. as a community that is in a census block group, as determined in accordance with the most recent United States Decennial Census where the proportion of households that are low income is greater than forty percent (40%), the proportion of households that identify as minority is greater than forty percent (40%), or the proportion of households that are housing cost-burdened is greater than forty percent (40%).
- 1.13 Division the Division of Transportation Development within CDOT.
- 1.14 Division Director the Director of the Division of Transportation Development.
- 1.15 Fiscally Constrained the financial limitation on transportation plans and programs based on the projection of revenues as developed cooperatively with the MPOs and the rural TPRs and adopted by the Commission that are reasonably expected to be available over the long-range transportation planning period and the TIP and STIP programming periods.
- 1.16 Four-Year Prioritized Plan a four-year subset of the 10-Year Plan consisting of projects prioritized for near-term delivery and partial or full funding.
- 1.17 Greenhouse Gas (GHG) for purposes of these Rules, GHG is defined as the primary transportation greenhouse gases: carbon dioxide, methane, and nitrous oxide.
- 1.18 Greenhouse Gas (GHG) Reduction Level the amount of the GHG expressed as CO2e reduced from the projected Baseline that CDOT and MPOs must attain through transportation planning.
- 1.19 Greenhouse Gas (GHG) Mitigation Measures non-Regionally Significant Project strategies implemented by CDOT and MPOs that reduce transportation GHG pollution and help meet the GHG Reduction Levels.
- 1.20 Intergovernmental Agreement an arrangement made between two or more political subdivisions that form associations for the purpose of promoting the interest and welfare of said subdivisions.

- 1.21 Intermodal Facility a site where goods or people are conveyed from one mode of transportation to another, such as goods from rail to truck or people from passenger vehicle to bus.
- 1.22 Land Use the type, size, arrangement, and use of parcels of land.
- 1.23 Limited English Proficiency individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.
- 1.24 Long-Range Planning a reference to a planning period with a minimum 20-year planning horizon.
- 1.25 Maintenance Area any geographic region of the United States previously designated by the U.S. Environmental Protection Agency (EPA) as a Nonattainment Area pursuant to the Clean Air Act (CAA) Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under § 175A of the CAA, as amended in 1990.
- 1.26 Memorandum of Agreement (MOA) a written agreement between two or more parties on an intended plan of action.
- 1.27 Metropolitan Planning Agreement (MPA) a written agreement between the MPO, the State, and the providers of public transportation serving the Metropolitan Planning Area that describes how they will work cooperatively to meet their mutual responsibilities in carrying out the metropolitan planning process.
- 1.28 Metropolitan Planning Area a geographic area determined by agreement between the MPO for the area and the Governor, in which the metropolitan transportation planning process is carried out pursuant to 23 U.S.C. § 134.
- 1.29 Metropolitan Planning Organization (MPO) an organization designated by agreement among the units of general purpose local governments and the Governor, charged to develop the RTPs and programs in a Metropolitan Planning Area pursuant to 23 U.S.C. § 134.
- 1.30 Mitigation Action Plan an element of the GHG Transportation Report that specifies which GHG Mitigation Measures shall be implemented that help achieve the GHG Reduction Levels.
- 1.31 Mobility the ability to move people, goods, services, and information among various origins and destinations.
- MPO Models one (1) or more of the computer-based models maintained and operated by the MPOs which depict the MPO areas' transportation systems (e.g., roads, transit, etc.) and development patterns (i.e., number and location of households and jobs) for a defined year (i.e., past, present, or forecast) and produce estimates of roadway VMT, delays, operating speeds, transit ridership, and other characteristics of transportation system use.
- Multimodal an integrated approach to transportation that takes into account all modes of travel, such as bicycles and walking, personal mobility devices, buses, transit, rail, aircraft, and motor vehicles.
- 1.34 Multimodal Transportation and Mitigation Options Fund (MMOF) a program created in the State
 Treasury pursuant to § 43-4-1003, C.R.S. which funds bicycle, pedestrian, transit and other
 Multimodal projects as defined in § 43-4-1002(5), C.R.S. and GHG Mitigation projects as defined in § 43-4-1002(4.5), C.R.S.
- 1.35 National Ambient Air Quality Standards (NAAQS) are those established by the U.S. Environmental Protection Agency for air pollutants considered harmful to public health and

- environment. These criteria pollutants are: carbon monoxide, lead, nitrogen dioxide, ozone, small particles, and sulfur dioxide.
- 1.36 Nonattainment Area any geographic region of the United States which has been designated by the EPA under section 107 of the CAA for any pollutants for which a NAAQS exists.
- 1.37 Non-Metropolitan Area a rural geographic area outside a designated Metropolitan Planning Area.
- 1.38 Plan Integration a comprehensive evaluation of the statewide transportation system that includes all modes, an identification of needs and priorities, and key information from other related CDOT plans.
- 1.39 Planning Partners local and tribal governments, the rural TPRs and MPOs.
- 1.40 Project Priority Programming Process the process by which CDOT adheres to 23 U.S.C. § 135 and 23 C.F.R. Part 450 when developing and amending the STIP.
- 1.41 Regional Planning Commission (RPC) a planning body formed under the provisions of § 30-28-105, C.R.S., and designated under these Rules for the purpose of transportation planning within a rural TPR.
- 1.42 Regionally Significant Project a transportation project that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network or state transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel. If the MPOs have received approval from the EPA to use a different definition of regionally significant project as defined in 40 C.F.R. § 93.101, the State Interagency Consultation Team will accept the modified definition. Necessary specificity for MPO Models or the Statewide Travel Model will be approved by the State Interagency Consultation Team.
- 1.43 Regional Transportation Plan (RTP) a long-range plan designed to address the future transportation needs for a TPR including, but not limited to, Fiscally Constrained or anticipated funding, priorities, and implementation plans, pursuant to, but not limited to, § 43-1-1103, C.R.S. and 23 C.F.R. Part 450. All rural and urban TPRs in the state produce RTPs.
- 1.44 State Interagency Consultation Team consists of the Division Director or the Division Director's designee, the Colorado Department of Public Health and Environment (CDPHE) Director of Air Pollution Control Division or the Director's designee, and the Director of each MPO or their designee.
- 1.45 State Transportation System refers to all state-owned, operated, and maintained transportation facilities in Colorado, including, but not limited to, interstate highways, other highways, and aviation, bicycle and pedestrian, transit, and rail facilities.
- 1.46 Statewide Transportation Advisory Committee (STAC) the committee created by § 43-1-1104,

 C.R.S., comprising one representative from each TPR and one representative from each tribal government to review and comment on RTPs, amendments, and updates, and to advise both the Department and the Commission on the needs of the transportation system in Colorado.
- 1.47 Statewide Transportation Improvement Program (STIP) a Fiscally Constrained, multi-year, statewide, Multimodal program of transportation projects which is consistent with the Statewide

- <u>Transportation Plan and planning processes, with Metropolitan Planning Area plans,</u>
 <u>Transportation Improvement Programs and processes, and which is developed pursuant to 23 U.S.C. § 135.</u>
- 1.48 Statewide Travel Model the computer-based model maintained and operated by CDOT which depicts the state's transportation system (roads, transit, etc.) and development scale and pattern (number and location of households, number and location of firms/jobs) for a selected year (past, present, or forecast) and produces estimates of roadway VMT and speed, transit, ridership, and other characteristics of transportation system use.
- 1.49 Statewide Transportation Plan the long-range, comprehensive, Multimodal statewide transportation plan covering a period of no less than 20 years from time of adoption, developed through the statewide transportation planning process described in these Rules and 23 U.S.C. § 135, and adopted by the Commission pursuant to § 43-1-1103, C.R.S.
- Surface Transportation Block Grant (STBG) a flexible federal funding source established under 23 U.S.C. § 133 for state and local transportation needs. Funds are expended in the areas of the State based on population. References related to this program include any successor programs established by the federal government.
- 1.51 System Continuity includes, but is not limited to, appropriate intermodal connections, integration with state modal plans, and coordination with neighboring RTPs, and, to the extent practicable, other neighboring states' transportation plans.
- 1.52 Traditionally Underserved refers to groups such as seniors, persons with disabilities, low-income households, minorities, and student populations, which may face difficulties accessing transportation systems, employment, services, and other amenities.
- 1.53 Transit and Rail Advisory Committee (TRAC) an advisory committee created specifically to advise the Executive Director, the Commission, and the Division of Transit and Rail on transit and rail-related activities.
- 1.54 Transportation Commonality the basis on which TPRs are established including, but not limited to: Transportation Commission Districts, the Department's Engineering Regions, Travelsheds, Watersheds, geographic unity, existing Intergovernmental Agreements, and socioeconomic unity.
- 1.55 Transportation Improvement Program (TIP) a staged, Fiscally Constrained, multi-year,

 Multimodal program of transportation projects developed and adopted by MPOs, and approved
 by the Governor, which is consistent with an MPO's RTP and which is developed pursuant to 23

 U.S.C. § 134.
- 1.56 Transportation Mode a particular form of travel including, but not limited to, bus, motor vehicle, rail, transit, aircraft, bicycle, pedestrian travel, or personal mobility devices.
- 1.57 Transportation Planning and Programming Process all collaborative planning-related activities including the development of regional and Statewide Transportation Plans, the Department's Project Priority Programming Process, and development of the TIPs and STIP.
- 1.58 Transportation Planning Region (TPR) a geographically designated area of the state, defined by section 2.00 of these Rules in consideration of the criteria for Transportation Commonality, and for which a regional transportation plan is developed pursuant to the provisions of § 43-1-1102 and 1103, C.R.S. and 23 U.S.C. § 134. The term TPR is inclusive of these types: non-MPO TPRs, MPO TPRs, and TPRs with both MPO and non-MPO areas.

- 1.59 Transportation Systems Planning provides the basis for identifying current and future deficiencies on the state highway system and outlines strategies to address those deficiencies and make improvements to meet Department goals.
- 1.60 Travelshed the region or area generally served by a major transportation facility, system, or Corridor.
- 1.61 Tribal Transportation Improvement Program (TTIP) a multi-year Fiscally Constrained list of proposed transportation projects developed by a tribe from the tribal priority list or tribal long-range transportation plan, and which is developed pursuant to 25 C.F.R. Part 170. The TTIP is incorporated into the STIP without modification.
- 1.62 Urbanized Area an area with a population of 50,000 or more designated by the Bureau of the Census.
- 1.63 Vehicle Miles Traveled (VMT) the traffic volume of a roadway segment or system of roadway segments multiplied by the length of the roadway segment or system.
- 1.64 Watershed a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.
- 1.65 10-Year Plan a vision for Colorado's transportation system that includes a specific list of projects categorized across priority areas as identified in the Statewide Transportation Plan.
- 2.00 Transportation Planning Regions (TPR).
- 2.01 Transportation Planning Region Boundaries. <u>Transportation Planning Region TPR</u>s are geographically designated areas of the state with similar transportation needs that are determined by considering transportation commonalities. Boundaries are hereby established as follows:
 - 2.01.1 The Pikes Peak Area Transportation Planning Region TPR comprises the Pikes Peak Area Council of Governments' metropolitan area within El Paso and Teller counties.
 - 2.01.2 The Greater Denver Transportation Planning RegionTPR, which includes the Denver Regional Council of Governments' planning area, comprises the counties of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, Jefferson, and parts of Weld.
 - 2.01.3 The North Front Range Transportation Planning RegionTPR comprises the North Front Range Transportation and Air Quality Planning Council's metropolitan area within Larimer and Weld counties.
 - 2.01.4 The Pueblo Area Transportation Planning RegionTPR comprises Pueblo County, including the Pueblo Area Council of Governments' metropolitan area.
 - 2.01.5 The Grand Valley Transportation Planning Region TPR comprises Mesa County, including the Grand Valley Metropolitan Planning Organization's metropolitan area.
 - 2.01.6 The Eastern Transportation Planning Region TPR comprises Cheyenne, Elbert, Kit Carson, Lincoln, Logan, Phillips, Sedgwick, Washington, and Yuma counties.
 - 2.01.7 The Southeast Transportation Planning Region TPR comprises Baca, Bent, Crowley, Kiowa, Otero, and Prowers counties.

- 2.01.8 The San Luis Valley Transportation Planning Region TPR comprises Alamosa, Chaffee, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties.
- 2.01.9 The Gunnison Valley Transportation Planning Region TPR comprises Delta, Gunnison, Hinsdale, Montrose, Ouray, and San Miguel counties.
- 2.01.10 The Southwest Transportation Planning RegionTPR comprises Archuleta, Dolores, La Plata, Montezuma, and San Juan counties, including the Ute Mountain Ute and Southern Ute Indian Reservations.
- 2.01.11 The Intermountain Transportation Planning RegionTPR comprises Eagle, Garfield, Lake, Pitkin, and Summit counties.
- 2.01.12 The Northwest Transportation Planning Region TPR comprises Grand, Jackson, Moffat, Rio Blanco, and Routt counties.
- 2.01.13 The Upper Front Range Transportation Planning Region TPR comprises Morgan County, and the parts of Larimer and Weld counties, that are outside both the North Front Range and the Greater Denver (metropolitan) TPRs.
- 2.01.14 The Central Front Range Transportation Planning RegionTPR comprises Custer, El Paso, Fremont, Park, and Teller counties, excluding the Pikes Peak Area Council of Governments' metropolitan area.
- 2.01.15 The South Central Transportation Planning Region TPR comprises Huerfano, and Las Animas Counties.
- 2.02 Boundary Revision Process.
 - 2.02.1 TPR boundaries, excluding any MPO-related boundaries, will be reviewed by the Commission at the beginning of each regional and statewide transportation planning process. The Department will notify counties, municipalities, MPOs, Indian tribal governments, and RPCs for the TPRs of the boundary review revision requests. MPO boundary review shall be conducted pursuant to 23 U.S.C. § 134 and 23 C.F.R. Part 450 Subpart B and any changes shall be provided to the Department to update the Rules. All boundary revision requests shall be sent to the Division Director, and shall include:
 - 2.02.1.1 A geographical description of the proposed boundary change.
 - 2.02.1.2 A statement of justification for the change considering transportation commonalities.
 - 2.02.1.3 A copy of the resolution stating the concurrence of the affected Regional Planning CommissionRPC.
 - 2.02.1.4 The name, title, mailing address, telephone number, fax number and electronic mail address (if available) of the contact person for the requesting party or parties.
 - 2.02.2 The Department will assess and STAC shall review and comment (as set forth in these Rules) on all nonNon-metropolitan Metropolitan area Area TPR boundary revision requests based on transportation commonalities and make a recommendation to the Commission concerning such requests. The Department will notify the Commission of MPO boundary changes. The Commission may initiate a rule-making proceeding under the State-Colorado Administrative Procedure Act, § 24-4-103, C.R.S. to consider a

- boundary revision request. Requests received for a MPO or non-metropolitan TPR boundary revision outside of the regularly scheduled boundary review cycle must include the requirements identified above.
- 2.02.3 In the event that the Commission approves a change to the boundary of a TPR that has a Regional Planning CommissionRPC, the RPC in each affected TPR shall notify the Department of any changes to the intergovernmental Intergovernmental agreement Agreement governing the RPC as specified in these Rules.
- 2.03 Transportation Planning Coordination with MPOs.
 - 2.03.1 The Department and the MPOs shall coordinate activities related to the development of Regional Transportation PlanRTPs, the Statewide Transportation Plan, TIPs, and the STIP in conformance with 23 U.S.C. § 134 and 135 and § 43-1-1101 and § 43-1-1103, C.R.S. The Department shall work with the MPOs to resolve issues arising during the planning process.
- 2.04 Transportation Planning Coordination with Non-MPO RPCs.
 - 2.04.1 The Department and RPCs shall work together in developing Regional Transportation PlanRTPs and in planning future transportation activities. The Department shall consult with all RPCs on development of the Statewide Transportation Plan; incorporation of RTPs into the Statewide Transportation Plan; and the inclusion of projects into the STIP that are consistent with the RTPs. In addition, the Department shall work with the RPCs to resolve issues arising during the planning process.
- 2.05 Transportation Planning Coordination among RPCs.
 - 2.05.1 If transportation improvements cross TPR boundaries or significantly impact another TPR, the RPC shall consult with all the affected RPCs involved when developing the regional transportation planRTP. In general, RPC planning officials shall work with all planning Planning partners Partners affected by transportation activities when planning future transportation activities.
- 2.06 Transportation Planning Coordination with the Southern Ute and the Ute Mountain Ute Tribal Governments.
 - 2.06.1 Regional transportation planning within the Southwest TPR shall be coordinated with the transportation planning activities of the Southern Ute and the Ute Mountain Ute tribal governments. The long-range transportation plans for the tribal areas shall be integrated in the Statewide Transportation Plan and the Regional Transportation PlanRTP for this TPR. The TTIP is incorporated into the STIP without modification.
- 3.00 Statewide Transportation Advisory Committee (STAC).
- 3.01 Duties of the Statewide Transportation Advisory Committee (STAC). Pursuant to § 43-1-1104 C.R.S. the duties of the STAC shall be to meet as necessary and provide advice to both the Department and the Commission on the needs of the transportation system in Colorado including, but not limited to: budgets, transportation improvement programs TIPs of the metropolitan planning organizations MPOs, the Statewide Transportation Improvement Program STIP, transportation plans, and state transportation policies.

The STAC shall review and provide to both the Department and the Commission comments on:

- 3.01.1 All Regional Transportation PlanRTPs, amendments, and updates as described in these Rules.
- 3.01.2 Transportation related communication and/or conflicts which arise between RPCs or between the Department and a RPC.
- 3.01.3 The integration and consolidation of RTPs into the Statewide Transportation Plan.
- 3.01.4 Colorado's mobility Mobility requirements to move people, goods, services, and information by furnishing regional perspectives on transportation problems requiring interregional and/or statewide solutions.
- 3.01.5 Improvements to modal choice, linkages between and among modes, and transportation system balance and system System continuity.
- 3.01.6 Proposed TPR boundary revisions.
- 3.02 Notification of Membership
 - 3.02.1 Each RPC and tribal government shall select its representative to the STAC pursuant to § 43-1-1104(1), C.R.S. The Ute Mountain Ute Tribal Council and the Southern Ute Indian Tribal Council each appoint one representative to the STAC. Each TPR and tribal government is also entitled to name an alternative representative who would serve as a proxy in the event their designated representative is unable to attend a STAC meeting and would be included by the Department in distributions of all STAC correspondence and notifications. The Division Director shall be notified in writing of the name, title, mailing address, telephone number, fax number and electronic mail address (if available) of the STAC representative and alternative representative from each TPR and tribal government within thirty (30) days of selection.
- 3.03 Administration of Statewide Transportation Advisory Committee STAC
 - 3.03.1 STAC recommendations on Regional and Statewide Transportation Plans, amendments, and updates shall be documented in the STAC meeting minutes, and will be considered by the Department and Commission throughout the statewide transportation planning process.
 - 3.03.2 The STAC shall establish procedures to govern its affairs in the performance of its advisory capacity, including, but not limited to, the appointment of a chairperson and the length of the chairperson's term, meeting times, and locations.
 - 3.03.3 The Division Director will provide support to the STAC, including, but not limited to:
 - 3.03.3.1 Notification of STAC members and alternates of meeting dates.
 - 3.03.3.2 Preparation and distribution of STAC meeting agendas, supporting materials, and minutes.
 - 3.03.3.3 Allocation of Department staff support for STAC-related activities.
- 4.00 Development of Regional and Statewide Transportation Plans.
- 4.01 Regional Planning Commission RPCs, MPOs, and the Department shall comply with all applicable provisions of 23 U.S.C. § 134 and § 135, 23 C.F.R. Part 450, and § 43-1-1103, C.R.S. and all

4.02.5.1

applicable provisions of Commission policies and guidance documents in development of regional and statewide transportation plans, respectively.

4.02 Public Participation

- 4.02.1 The Department, in coordination with the RPCs of the rural TPRs, shall provide early and continuous opportunity for public participation in the transportation planning process. The process shall be proactive and provide timely information, adequate public notice, reasonable public access, and opportunities for public review and comment at key decision points in the process. The objectives of public participation in the transportation planning process include: providing a mechanism for public perspectives, needs, and ideas to be considered in the planning process; developing the public's understanding of the problems and opportunities facing the transportation system; demonstrating explicit consideration and response to public input through a variety of tools and techniques; and developing consensus on plans. The Department shall develop a documented public participation process pursuant to 23 C.F.R. Part 450.
- 4.02.2 Statewide Plans and Programs. Pursuant to 23 C.F.R. Part 450 Subpart B, the Department is responsible, in cooperation with the RPCs and MPOs, for carrying out public participation for developing, amending, and updating the statewide—Statewide transportation—Transportation planPlan, the Statewide Transportation Improvement Program (STIP), and other statewide transportation planning activities.
- 4.02.3 MPO Plans and Programs. Pursuant to 23 C.F.R. Part 450 Subpart C, the MPOs are responsible for carrying out public participation for the development of regional transportation planning activities for their respective metropolitan Metropolitan planning areas Areas. Public participation activities carried out in a metropolitan area in response to metropolitan planning requirements shall by agreement of the Department and the MPO, satisfy the requirements of this subsection.
- 4.02.4 Non-MPO TPR Plans and Programs. Regional Planning CommissionRPCs for non-MPO TPRs are responsible for public participation related to regional planning activities in that TPR, in cooperation with the Department. Specific areas of cooperation shall be determined by agreement between the Regional Planning CommissionRPC and the Department.
- 4.02.5 Public Participation Activities. Public participation activities at both the rural TPR and statewide level shall include, at a minimum:
 - Establishing and maintaining for the geographic area of responsibility a list of all known parties interested in transportation planning including, but not limited to: elected officials; municipal and county planning staffs; affected public agencies; local, state, and federal agencies eligible for federal and state transportation funds; local representatives of public transportation agency employees and users; freight shippers and providers of freight transportation services; public and private transportation providers; representatives of users of transit, bicycling and pedestrian, aviation, and train facilities; private industry; environmental and other interest groups; Indian tribal governments and the U.S. Secretary of the Interior when tribal lands are involved; and representatives of persons or groups that may be underserved by existing transportation systems, such as minority, low-income, seniors, persons with disabilities, and those with limited Limited English proficiency Proficiency; and members of the general public expressing such interest in the transportation planning process.

4.02.5.2 Providing reasonable notice and opportunity to comment through mailing lists and other various communication methods on upcoming transportation planning-related activities and meetings. 4.02.5.3 Utilizing reasonably available internet or traditional media opportunities. including minority and diverse media, to provide timely notices of planning-related activities and meetings to members of the public, including LEP Limited English Proficiency individuals, and others who may require reasonable accommodations. Methods that will be used to the maximum extent practicable for public participation could include, but not be limited to, use of the internet; social media, news media, such as newspapers, radio, or television, mailings and notices, including electronic mail and online newsletters. 4.02.5.4 Seeking out those persons or groups traditionally Traditionally underserved Underserved by existing transportation systems including, but not limited to, seniors, persons with disabilities, minority groups, lowincome, and those with limited Limited English proficiency Proficiency, for the purposes of exchanging information, increasing their involvement, and considering their transportation needs in the transportation planning process. Pursuant to § 43-1-601, C.R.S., the Department shall prepare a statewide survey identifying the transportation needs of seniors and of persons with disabilities. 4.02.5.5 Consulting, as appropriate, with Regional Planning CommissionRPCs, and federal, state, local, and tribal agencies responsible for land use management, natural resources, environmental protection, conservation and historic preservation concerning the development of long-range transportation plans. 4.02.5.6 Providing reasonable public access to, and appropriate opportunities for public review and comment on criteria, standards, and other planningrelated information. Reasonable public access includes, but is not limited to, LEP Limited English Proficiency services and access to ADAcompliant facilities, as well as to the internet. 4.02.5.7 Where feasible, scheduling the development of regional and statewide plans so that the release of the draft plans may be coordinated to provide for the opportunity for joint public outreach. 4.02.5.8 Documentation of Responses to Significant Issues, Regional Planning Commissions RPCs and the Department shall respond in writing to all significant issues raised during the review and comment period on transportation plans, and make these responses available to the public. 4.02.5.9 Review of the Public Involvement Process. All interested parties and the Department shall periodically review the effectiveness of the Department's public involvement process to ensure that the process provides full and open access to all members of the public. When necessary, the process will be revised and allow time for public review

4.03 Transportation Systems Planning. Regional Planning Commission RPCs, and the Department, shall use an integrated multimodal Multimodal transportation-Transportation systems—Systems planning approach in developing and updating the long-range Regional Transportation PlansRTPs and the long-range Statewide Transportation Plan for a minimum 20-year forecasting

and comment per 23 C.F.R. Part 450.

- period. Regional Planning Commission RPCs shall have flexibility in the methods selected for transportation Transportation systems Systems planning Planning based on the complexity of transportation problems and available resources within the TPR. The Department will provide guidance and assistance to the Regional Planning Commission RPCs regarding the selection of appropriate methods.
- 4.03.1 Transportation systems Systems planning by Regional Planning CommissionRPCs and the Department shall consider the results of any related studies that have been completed. Regional Planning CommissionRPCs and the Department may also identify any corridorCorridor(s) or sub-area(s) where an environmental study or assessment may need to be performed in the future.
- 4.03.2 Transportation systems Systems planning Planning by Regional Planning CommissionRPCs shall consider corridor vision needs and desired state of the transportation system including existing and future land use and infrastructure, major activity centers such as industrial, commercial and recreation areas, economic development, environmental protection, and modal choices.
- 4.03.3 Transportation systems Systems planning Planning by Regional Planning CommissionRPCs shall include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility Mobility of people goods, and services.
- 4.03.4 Transportation <u>systems Systems planning Planning</u> by the Department should include capital, operations, maintenance and management strategies, investments, procedures, and other measures to ensure the preservation and most efficient and effective use of the <u>state State transportation Transportation systemSystem</u>.
- 4.03.5 Transportation systems Systems Pplanning by the Department shall consider and integrate all modes into the Statewide Transportation Plan and include coordination with Department modal plans and modal committees, such as the Transit and Rail Advisory Committee (TRAC).
- 4.03.6 Transportation Systems Planning by the Department shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals described in 23 U.S.C. § 150 (FAST Act, P.L. 114-94). Performance targets that the Department establishes to address the performance measures described in 23 U.S.C. § 150, where applicable, are to be used to track progress towards attainment of critical outcomes for the state. The state shall consider the performance measures and targets when developing policies, programs, and investment priorities reflected in the Statewide Transportation Plan and STIP.
- 4.04 Regional Transportation Plans (RTP). Long-range regional transportation plans RTPs shall be developed, in accordance with federal (23 U.S.C. § 134 and § 135) and state (§ 43-1-1103 and § 43-1-1104, C.R.S.) law and implementing regulations. Department selection of performance targets that address the performance measures shall be coordinated with the relevant MPOs to ensure consistency, to the maximum extent practicable.
 - 4.04.1 Content of Regional Transportation PlanRTPs. Each RTP shall include, at a minimum, the following elements:
 - 4.04.1.1 Transportation system facility and service requirements within the MPO TPR over a minimum 20-year planning period necessary to meet expected demand, and the anticipated capital, maintenance and operating cost for these facilities and services.

	4.04.1.2	State and federal transportation system planning factors to be considered by Regional Planning CommissionRPCs and the Department during their respective transportation Transportation systems planning shall include, at a minimum, the factors described in § 43-1-1103 (5), C.R.S., and in 23 U.S.C. § 134 and § 135.			
	4.04.1.3	Identification and discussion of potential environmental mitigation measures, corridor Corridor studies, or corridor Corridor visions Visions, including a discussion of impacts to minority and low-income communities.			
	4.04.1.4	A discussion of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.			
	4.04.1.5	For rural RTPs, the integrated performance-based multimodal Multimodal transportation plan based on revenues reasonably expected to be available over the minimum 20-year planning period. For metropolitan RTPs, a fiscally Fiscally constrained financial plan.			
	4.04.1.6	Identification of reasonably expected financial resources developed cooperatively among the Department, MPOs, and rural TPRs for longLong-range-Range-planning-Planning-purposes , and results expected to be achieved based on regional priorities.			
	4.04.1.7	Documentation of the public notification and public participation process pursuant to these Rules.			
	4.04.1.8	A resolution of adoption by the responsible Metropolitan Planning Organization MPO or the Regional Planning Commission RPC.			
4.04.2	2 Products and reviews				
	4.04.2.1	Draft Plan. Transportation Planning Region TPRs shall provide a draft of the RTP to the Department through the Division of Transportation Development.			
	4.04.2.2	Draft Plan Review. Upon receipt of the draft RTPs, the Department will initiate its review and schedule the STAC review (pursuant to these Rules). The Department will provide its comments and STAC comments to the Transportation-Planning-Region_TPR within a minimum of 30 days of receiving the draft RTP. Regional transportation-plan-RTP in metropolitan areas completed pursuant to the schedule identified in 23 C.F.R. § 450.322 shall be subject to the provisions of this section prior to being submitted to the Department for consideration as an amendment to the Transportation-plan-Plan .			
	4.04.2.3	Final Plan. Transportation Planning RegionTPRs shall provide the final RTP to the Department through the Division of Transportation Development.			
	4.04.2.4	Final Plan Review. Upon receipt of the final RTP, the Department will initiate its review and schedule the STAC review (pursuant to these			

Rules) of the final RTPs to determine if the plans incorporate the elements required by the Rules. If the Department determines that a final RTP is not complete, including if the final RTP does not incorporate the elements required by these Rules, then the Department will not integrate that RTP into the statewide plan until the Transportation Planning RegionTPR has sufficiently revised that RTP, as determined by the Department with advice from the STAC. The Department will provide its comments and STAC comments to the Transportation Planning Region TPR within a minimum of 30 days of receiving the final RTP. Transportation Planning RegionTPRs shall submit any RTP revisions based on comments from the Department and STAC review within 30 days of the Department's provision of such comments. Regional transportation plansRTPs in metropolitan areas completed pursuant to the schedule identified in 23 C.F.R. § 450.322 shall be subject to the provisions of this section prior to being submitted to the Department for consideration as an amendment to the statewide Statewide transportation-Transportation planPlan.

- 4.05 Maintenance and Nonattainment Areas. Each RTP, or RTP amendment, shall include a section that:
 - 4.05.1 Identifies any area within the TPR that is designated as a maintenance Maintenance or nonattainment Nonattainment area Area.
 - 4.05.2 Addresses, in either a qualitative or quantitative manner, whether transportation related emissions associated with the pollutant of concern in the TPR are expected to increase over the lengtong-range-Range planning-Planning period and, if so, what effect that increase might have in causing a maintenance area-Area for an NAAQS pollutant to become a nonattainment-Nonattainment-Nonattainment area-Area to exceed its emission budget in the approved State Implementation Plan.
 - 4.05.3 If transportation related emissions associated with the pollutant are expected to increase over the lengtong-range-Range-planning-planning-period, identifies which programs or measures are included in the RTP to decrease the likelihood of that area becoming a nonattainment Nonattainment area Area for the pollutant of concern.
- 4.06 Statewide Transportation Plan. The Regional Transportation PlansRTPs submitted by the Regional Planning CommissionsRPCs shall, along with direction provided through Commission policies and guidance, form the basis for developing and amending the Statewide Transportation Plan. The Statewide Transportation Plan shall cover a minimum 20-year planning period at the time of adoption and shall guide the development and implementation of a performance-based multimodal Multimodal transportation system for the State.
 - 4.06.1 The Statewide Transportation Plan shall:
 - 4.06.1.1 Integrate and consolidate the RTPs and the Department's systems planning, pursuant to these Rules, into a long-range 20-year multimodal Multimodal transportation plan that presents a clear, concise path for future transportation in Colorado.
 - 4.06.1.2 Include the long-term transportation concerns of the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe in the development of the Statewide Transportation Plan.

- 4.06.1.3 Coordinate with other state and federal agencies responsible for land use management, natural resources, environmental protection. conservation, and historic preservation. 4.06.1.4 Include a discussion of potential environmental mitigation activities and potential areas to carry out these activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan developed in consultation with federal, state, and tribal wildlife, land management and regulatory agencies. 4.06.1.5 Include a comparison of transportation plans to state and tribal conservation plans or maps and to inventories of natural or historical resources. 4.06.1.6 Provide for overall multimodal Multimodal transportation system management on a statewide basis. 4.06.1.7 The Statewide Transportation Plan shall be coordinated with metropolitan transportation plans pursuant to 23 C.F.R. Part 450, § 43-1-1103 and § 43-1-1105, C.R.S. Department selection of performance targets shall be coordinated with the MPOs to ensure consistency, to the maximum extent practicable. 4.06.1.8 Include an analysis of how the Statewide Transportation Plan is aligned with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. 4.06.1.9 Includes the 10-Year Plan as an appendix.
- 4.06.2 Content of the Statewide Transportation Plan. At a minimum, the Statewide Transportation Plan shall include priorities as identified in the RTPs, as identified in these Rules and pursuant to federal planning laws and regulations. The Statewide Transportation Plan shall be submitted to the Colorado Transportation Commission for its consideration and approval.
- 4.06.3 Review and Adoption of the Statewide Transportation Plan.
 - 4.06.3.1 The Department will submit a draft Statewide Transportation Plan to the Commission, the STAC, and all interested parties for review and comment. The review and comment period will be conducted for a minimum of 30 days. The Statewide Transportation Plan and appendices The publication will be available in physical form upon requestat public facilities, such as at the Department headquarters and region offices, state depository libraries, county offices, TPR offices, Colorado Division offices of the Federal Highway Administration and Federal Transit Administration, and made available on the internet.
 - 4.06.3.2 The Department will submit the final Statewide Transportation Plan to the Colorado Transportation Commission for adoption.
- 5.00 Updates to Regional and Statewide Transportation Plans.
- 5.01 Plan Update Process. The updates of Regional Transportation Plan RTP and the Statewide Transportation Plan shall be completed on a periodic basis through the same process governing development of these plans pursuant to these Rules. The update cycle shall comply with federal

- and state law and be determined in consultation with the Transportation Commission, the Department, the STAC and the MPOs so that the respective update cycles will coincide.
- 5.02 Notice by Department of Plan Update Cycle. The Department will notify Regional Planning CommissionRPCs and the MPOs of the initiation of each plan update cycle, and the schedule for completion.
- 6.00 Amendments to the Regional and Statewide Transportation Plans.
- 6.01 Amendment Process
 - 6.01.1 The process to consider amendments to Regional Transportation PlanRTP s shall be carried out by rural RPCs and the MPOs. The amendment review process for Regional Transportation PlanRTP s shall include an evaluation, review, and approval by the respective RPC or MPO.
 - 6.01.2 The process to consider amendments to the Statewide Transportation Plan shall be carried out by the Department, either in considering a proposed amendment to the Statewide Transportation Plan from a requesting RPC or MPO or on its own initiative.
 - 6.01.3 The process to consider amendments to the 10-Year Plan shall be carried out by CDOT in coordination with the rural RPCs and the MPOs.
- 7.00 Transportation Improvement Programs (TIPs) and Statewide Transportation Improvement Program (STIP).
- 7.01 TIP development shall occur in accordance with 23 C.F.R. Part 450, Subpart C. The Department will develop the STIP in accordance with 23 C.F.R. Part 450, Subpart B.
- 7.02 The Department will work with its <u>planning_Planning_partners_Partners_to</u> coordinate a schedule for development and adoption of TIPs and the STIP.
- 7.03 A TIP for an MPO that is in a non-attainment or Maintenance Area must first receive a conformity determination by FHWA and FTA before inclusion in the STIP pursuant to 23 C.F.R. Part 450.
- 7.04 MPO TIPs and Colorado's STIP must be <u>fiscally_Fiscally_constrainedConstrained</u>. Under 23 C.F.R. Part 450, each project or project phase included in an MPO TIP shall be consistent with an approved metropolitan RTP, and each project or project phase included in the STIP shall be consistent with the long-range <u>statewide_Statewide_transportation_Transportation_plan_Plan.</u> MPO TIPs shall be included in the STIP either by reference or without change upon approval by the MPOs and the Governor.

8.00 GHG Emission Requirements

- 8.01 Establishment of Regional GHG Transportation Planning Reduction Levels
 - 8.01.1 The GHG emission reduction levels within Table 1 apply to MPOs and the Non-MPO area within the state of Colorado as of the effective date of these Rules. Baseline values are specific to each MPO and CDOT area and represent estimates of GHG emissions resulting from the existing transportation network and implementation of the most recently adopted RTP for all MPOs and the 10-Year Plan in non-MPO areas as of the effective date of these Rules. Table 2 reflects the difference in Baseline levels from year to year assuming a rapid growth in electric vehicles across the State (940,000 light duty electric vehicles in 2030, 3.38 million in 2040 and a total of 97% of all light duty vehicles in 2050).

Values in both tables include estimates of population growth as provided by the state demographer.

8.01.2 Regional GHG Transportation Planning Reduction Levels

<u>Table 1: GHG Transportation Planning Reduction Levels in MMT of CO2e</u>

<u>Regional</u>	2025 Baseline	2025 Reduction	2030 Baseline	2030 Reduction	2040 Baseline	2040 Reduction	2050 Baseline	2050 Reduction
<u>Areas</u>	Projections (MMT)	<u>Level</u> (MMT)	Projections (MMT)	<u>Level</u> (MMT)	Projections (MMT)	<u>Level</u> (MMT)	Projections (MMT)	<u>Level</u> (MMT)
DRCOG	<u>14.9</u>	0.27	<u>11.8</u>	0.82	<u>10.9</u>	0.63	<u>12.8</u>	0.37
<u>NFRMPO</u>	<u>2.3</u>	0.04	<u>1.8</u>	<u>0.12</u>	<u>1.9</u>	0.11	<u>2.2</u>	0.07
PPACG	<u>2.7</u>	<u>N/A</u>	2.2	<u>0.15</u>	2.0	0.12	<u>2.3</u>	0.07
<u>GVMPO</u>	0.38	N/A	0.30	0.02	0.30	0.02	<u>0.36</u>	<u>0.01</u>
PACOG	<u>0.50</u>	<u>N/A</u>	0.40	0.03	0.30	0.02	0.4	0.01
CDOT/Non-MPO	<u>6.7</u>	0.12	<u>5.3</u>	0.37	<u>5.2</u>	0.30	<u>6.1</u>	<u>0.18</u>
TOTAL	<u>27.4</u>	<u>0.5</u>	<u>21.8</u>	<u>1.5</u>	20.6	1.2	24.2	0.7

8.01.3 Baseline Emissions Due to Projected Number of Light Duty Electric Vehicles

Table 2: Baseline Emissions Due to Projected Number of Light Duty Electric Vehicles

	2025 Projections	2030 Projections	2040 Projections	2050 Projections
	(MMT)	(MMT)	(MMT)	(MMT)
TOTAL	<u>27.0</u>	20.0	<u>14.0</u>	<u>8.9</u>

8.02 Process for Determining Compliance

- 8.02.1 Analysis Requirements When Adopting or Amending an Applicable Planning Document Each MPO and CDOT shall conduct a GHG emissions analysis using MPO Models or the
 Statewide Travel Model, and the Approved Air Quality Model, to estimate total CO2e
 emissions. Such analysis shall include the existing transportation network and
 implementation of Regionally Significant Projects. The emissions analysis must estimate
 total CO2e emissions in million metric tons (MMT) for each year in Table 1 and compare
 these emissions to the Baseline specified in Table 1. This provision shall not apply to
 MPO TIP amendments.
- 8.02.2 Agreements on Modeling Assumptions and Execution of Modeling Requirements. Prior to the adoption of the next RTP for any MPO, CDOT, CDPHE, and each MPO shall enter into an Intergovernmental Agreement which outlines CDOT, CDPHE, and MPO

- responsibilities for development and execution of MPO Models or the Statewide Travel Model, and Approved Air Quality Model.
- 8.02.3 By April 1, 2022, CDOT shall establish an ongoing administrative process, through a public process, for selecting, measuring, confirming, and verifying GHG Mitigation

 Measures, so that CDOT and MPOs can incorporate one or more into each of their plans in order to reach the Regional GHG Planning Reduction Levels in Table 1. Such a process shall include, but not be limited to, determining the relative impacts of GHG Mitigation Measures, measuring and prioritizing localized impacts to communities and Disproportionately Impacted Communities in particular. The mitigation credit awarded to a specific solution shall consider both aggregate and community impact.
- 8.02.4 Timing for Determining Compliance
 - 8.02.4.1 By October 1, 2022, CDOT shall update their 10-Year Plan and DRCOG and NFRMPO shall update their RTPs pursuant to § 43-4-1103, C.R.S. and meet the reduction levels in Table 1 or the requirements pursuant to § 43-4-1103, C.R.S and restrictions on funds.
 - 8.02.4.2 After October 1, 2022
 - 8.02.4.2.1 CDOT must for each Applicable Planning Document, meet either the reduction levels within Table 1 for Non-MPO areas or the requirements as set forth in Rule 8.05.
 - 8.02.4.2.2 MPOs must meet either the corresponding reduction levels within Table 1 for each Applicable Planning Document, or the relevant MPO and CDOT each must meet the requirements as set forth in Rule 8.05.
- 8.02.5 Demonstrating Compliance. At least thirty (30) days prior to adoption of any Applicable Planning Document, CDOT for Non-MPO areas and the MPOs for their areas shall provide to the Commission a GHG Transportation Report containing the following information:
 - 8.02.5.1 GHG emissions analysis demonstrating that the Applicable Planning

 Document is in compliance with the GHG Reduction Levels in MMT of

 CO2e for each compliance year in Table 1 or that the requirements in

 Rules 8.02.5.1.1 or 8.02.5.1.2., as applicable, have been met.
 - 8.02.5.1.1 In non-MPO areas or for MPOs that are not in receipt of federal suballocations pursuant to the CMAQ and/or STBG programs, the Department utilizes 10-Year Plan funds anticipated to be expended on Regionally Significant Projects in those areas on projects that reduce GHG emissions.
 - 8.02.5.1.2 In MPO areas that are in receipt of federal suballocations
 pursuant to the CMAQ and/or STBG programs, the MPO utilizes
 those funds on projects or approved GHG Mitigation Measures
 that reduce GHG emissions, and CDOT utilizes 10-Year Plan
 funds anticipated to be expended on Regionally Significant
 Projects in that MPO area, on projects that reduce GHG
 emissions.

8.03

8.02.5.2 Identification and documentation of the MPO Model or the Statewide Travel Model and the Approved Air Quality Model used to determine GHG emissions in MMT of CO2e.						
8.02.5.3		gation Action Plan that identifies GHG Mitigation Measures needed et the reduction levels within Table 1 shall include:				
8.02.5	5.3.1	The anticipated start and completion date of each measure.				
8.02.5	5.3.2	An estimate, where feasible, of the GHG emissions reductions in MMT of CO2e achieved by any GHG Mitigation Measures.				
8.02.5	5.3.3	Quantification of specific co-benefits including reduction of co-pollutants (PM2.5, NOx, etc.) as well as travel impacts (changes to VMT, pedestrian/bike use, transit ridership numbers, etc. as applicable).				
8.02.5	5.3.4	Description of benefits to Disproportionately Impacted Communities.				
8.02.6 Reporting on Compliance- Annually by April 1, CDOT and MPOs must provide a status report to the Commission on an approved form with the following items for each GHG Mitigation Measure identified in their most recent GHG Transportation Report:						
8.02.6.1 The implementation timeline;						
8.02.6.2 The current status;						
8.02.6.3 For measures that are in progress or completed, quantification of the benefit or impact of such measures; and						
8.02.6.4 For measures that are delayed, cancelled, or substituted, an explanation of why that decision was made.						
GHG Mitigation Measures. When assessing compliance with the GHG Reduction Levels, CDOT						
and MPOs shall have the opportunity to utilize approved GHG Mitigation Measures as set forth in						
Rules 8.02.3 and 8.02.5.3 to offset emissions and demonstrate progress toward compliance. Illustrative examples of GHG Mitigation Measures include, but are not limited to:						
8.0.3.1 The addition of transit resources in a manner that can displace VMT.						
8.03.2 Improving pedestrian and bike access, particularly in areas that allow individuals to						

- 8.0.3.
- 8.03.2 reduce multiple daily trips.
- 8.03.3 Encouraging local adoption of more effective forms of vertical development and zoning plans that integrate mixed use in a way that links and rewards transportation project investments with the city making these changes.
- 8.03.4 Improving first-and-final mile access to transit stops and stations that make transit resources safer and more usable by consumers.
- 8.03.5 Improving the safety and efficiency of crosswalks for pedestrians, bicyclists, and other non-motorized vehicles, including to advance compliance with the ADA.

- 8.03.6 Adopting locally driven changes to parking policies and physical configuration that encourage more walking and transit trips.
- 8.03.7 Incorporating medium/heavy duty vehicle electric charging and hydrogen refueling infrastructure -- as well as upgrading commensurate grid improvements -- into the design of key freight routes to accelerate truck electrification.
- 8.03.8 Establishing policies for clean construction that result in scalable improvements as a result of factors like lower emission materials, recycling of materials, and lower truck emissions during construction.
- 8.03.9 Adoption of transportation demand management practices that reduce VMT.
- 8.04 Air Pollution Control Division (APCD) Confirmation and Verification
 - 8.04.1 At least forty-five (45) days prior to adoption of any Applicable Planning Document,

 CDOT for Non-MPO areas and the MPOs for their areas shall provide to APCD for review
 and verification of the technical data contained in the draft GHG Transportation Report
 required per Rule 8.02.5. If APCD has not provided written verification within thirty (30)
 days, the document shall be considered acceptable.
 - 8.04.2 At least thirty (30) days prior to adoption or amendment of policies per Rule 8.02.3,

 CDOT shall provide APCD the opportunity to review and comment. If APCD has not provided written comment within forty-five (45) days, the document shall be considered acceptable.
- 8.05 Enforcement. The Commission shall review all GHG Transportation Reports to determine whether the applicable reduction targets in Table 1 have been met and the sufficiency of any GHG Mitigation Measures needed for compliance.
 - 8.05.1 If the Commission determines the requirements of Rule 8.02.5 have been met, the Commission shall, by resolution, accept the GHG Transportation Report.
 - 8.05.2 If the Commission determines, by resolution, the requirements of Rule 8.02.5 have not been met, the Commission shall restrict the use of funds pursuant to Rules 8.02.5.1.1 or 8.02.5.1.2, as applicable, to projects and approved GHG Mitigation Measures that reduce GHG. Prior to the enforcement of such restriction, an MPO, CDOT or a TPR in a non-MPO area, may, within thirty (30) days of Commission action, issue one or both of the following opportunities to seek a waiver or to ask for reconsideration accompanied by an opportunity to submit additional information:

8.05.2.1	Reque	Request a waiver from the Commission imposing restrictions on specific				
	project	s not expected to reduce GHG emissions. The Commission may				
	waive	the restrictions on specific projects on the following basis:				
<u>8.05.2</u>	2.1.1	The GHG Transportation Report reflected significant				
		effort and priority placed, in total, on projects and GHG				
		Mitigation Measures that reduce GHG emissions; and				
<u>8.05.2</u>	2.1.2	In no case shall a waiver be granted if such waiver				
		results in a substantial increase in GHG emissions when				
		compared to the required reduction levels in this Rule.				

- 8.05.2.2 Request reconsideration of a non-compliance determination by the

 Commission and provide written explanation of how the requirements of Rule 8.02.5 have been met.
- 8.05.2.3 The Commission shall act, by resolution, on a waiver or reconsideration request within thirty (30) days of receipt of the waiver or reconsideration request or at the next regularly scheduled Commission Meeting, whichever is later. If no action is taken within this time period, the waiver or reconsideration request shall be deemed to be denied.
- 8.05.3 Notwithstanding any other provision of this Rule, CDOT, DRCOG and NFRMPO must meet the requirements of § 43-4-1103, C.R.S.

-

8.06 Reporting. Beginning July 1, 2025, and every 5 years thereafter, the Executive Director on behalf of CDOT shall prepare and make public a comprehensive report on the statewide GHG reduction accomplishments.

9.00 Materials Incorporated by Reference

- 9.01 The Rules are intended to be consistent with and not be a replacement for the federal transportation planning requirements in Rule 9.01.1 and federal funding programs in Rules 9.01.2 and 9.01.3, which are incorporated into the Rules by this reference, and do not include any later amendments.
 - 9.01.1 Fixing America's Surface Transportation Act or the "FAST Act"), 23 U.S.C. §§ 134, 135 and 150, Pub. L. No. 114-94, signed into law on December 4, 2015, and its accompanying regulations, where applicable, contained in 23 C.F.R.Part 450, including Subparts A, B and C in effect as of November 29, 2017, and 25 C.F.R. § 170 in effect as of November 7, 2016.
 - 9.01.2 Congestion Mitigation and Air Quality Improvement (CMAQ) Program, 23 U.S.C. § 149, in effect as of March 23, 2018.
 - 9.01.3 Surface Transportation Block Grant (STBG) Program, 23 U.S.C. § 133, in effect as of December 4, 2015.
- 9.02 Also incorporated by reference are the following federal laws and regulations and do not include any later amendments:
 - 9.02.1 Americans with Disabilities Act (ADA), 42 U.S.C. § 12101, et. seq., in effect as of January 1, 2009.
 - 9.02.2 Clean Air Act (CCA), 42 U.S.C. §§ 7407-7410, and 7505a, in effect as of November 15, 1990.
 - 9.02.2 <u>Transportation Conformity Regulations, 40 C.F.R. § 93.101, in effect as November</u> 24,1993.
- 9.03 Also incorporated by reference are the following documents, standards, and models and do not include any later amendments:
 - 9.03.1 Greenhouse Gas Pollution Reduction Roadmap by the Colorado Energy Office and released on January 14, 2021.

- 9.03.2 MOVES3 Motor Vehicle Emissions Model for SIPs and Transportation Conformity released by the U.S. Environmental Protection Agency, in effect as of January 7, 2021.
- 9.04 All referenced laws and regulations are available for copying or public inspection during regular business hours from the Office of Policy and Government Relations, Colorado Department of Transportation, 2829 W. Howard Pl., Denver, Colorado 80204.
- 9.05 Copies of the referenced federal laws and regulations, planning documents, and models.
 - 9.05.1 Copies of the referenced United States Code (U.S.C.) may be obtained from the following address:

Office of the Law Revision Counsel
U.S. House of Representatives
H2-308 Ford House Office Building
Washington, DC 20515
(202) 226-2411
https://uscode.house.gov/browse.xhtml

9.05.2 Copies of the referenced Code of Federal Regulations (C.F.R.) may be obtained from the following address:

U.S. Government Publishing Office 732 North Capitol State, N.W. Washington, DC 20401 (866) 512-1800 https://www.govinfo.gov/

9.0.5.3 Copies of the Greenhouse Gas Pollution Reduction Roadmap (Roadmap) may be obtained from the following address:

Colorado Energy Office
1600 Broadway, Suite 1960
Denver, CO 80202
(303) 866-2100
energyoffice.colorado.gov

9.0.5.4 To download MOVES3 released by the U.S. Environmental Protection Agency may be obtained from the following address:

U.S. Environmental Protection Agency
The Office of Transportation and Air Quality
1200 Pennsylvania Ave, N.W.
Washington, DC 20460
(734) 214–4574 or (202) 566-0495

mobile@one.gov

mobile@epa.gov

https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves

10.00 Declaratory Orders

10.01 The Commission may, at their discretion, entertain petitions for declaratory orders pursuant to § 24-4-105(11), C.R.S.

Editor's Notes

History

Entire rule eff. 12/15/2012. Section SB&P eff. 05/30/2013. Entire rule eff. 09/14/2018.

Annotations

Rules 1.22, 1.25, 1.42, 2.03.1 - 2.03.1.4, 4.01, 4.02.1 - 4.02.3, 4.02.5.9, 4.04.2.2, 4.04.2.4, 4.06.1.7, 6.01.2, 7.01, 7.03 - 7.04 (adopted 10/18/2012) were not extended by Senate Bill 13-079 and therefore expired 05/15/2013.

NEWS FROM:



www.codot.gov www.facebook.com/coloradodot @coloradodot

Tim Hoover
Communications Integration Lead
303.619.2674 | timothy.hoover@state.co.us

Aug. 16, 2021

Colorado Developing New Pollution Reduction Planning Standards to Address Climate Change and Air Quality

DENVER - The Colorado Transportation Commission today proposed bold new transportation pollution reduction planning standards that will reduce pollution and greenhouse gas emissions from the transportation sector, improve air quality, reduce smog and provide more travel options for Coloradans.

This proposal will shape how state and local governments will make plans for future projects to make sure Coloradans have more travel options and that the infrastructure we build supports cleaner air and helps us fight climate change.

The <u>proposed rule</u> focuses on transportation planning — the process for how CDOT and the state's largest metropolitan regions select future transportation projects. Long before a transportation project is built, it is first identified in plans developed with local public input. These plans often include a decade or more of projects and thus represent a short- and medium-term vision for coming changes. CDOT's current 10-year plan <u>can be found here</u>.

The draft standard would require CDOT and the state's five Metropolitan Planning Organizations to determine the total pollution and greenhouse gas emission increase or decrease expected from future transportation projects and take steps to ensure that greenhouse gas emission levels do not exceed set reduction amounts. This approach will also streamline the planning and delivery of innovations that have proven successful in improving quality of life and air quality, like adding sidewalks, improving downtowns for active transportation with "complete streets," improving local and intercity transit and first-and-last-mile connectivity to transit facilities, and adding bike-shares. This policy recognizes that the transportation projects we build have an impact on how Coloradans travel and encourages choices for travelers across the state.

"Between the recent smoke-filled air and the extreme weather that caused devastating mudslides in Glenwood Canyon, Colorado has received powerful reminders of the importance of taking bold climate action as it continues to threaten our economy and Colorado way of life," said Gov. Jared Polis. "Transportation is our largest source of air pollutants, and this standard will help ensure that Coloradans have every possible ability to make a difference."

The proposed Greenhouse Gas Pollution Reduction Planning Standard builds on the state's efforts to rapidly expand electric vehicles by also addressing the transportation infrastructure itself to better support clean transportation. This two-pronged strategy delivers on a commitment in the <u>Greenhouse Gas Roadmap</u> and implements a key provision of the state's landmark transportation legislation, SB-260, which requires a number of steps to embed air quality and equity analysis and goals into transportation planning.

"What we build matters. It matters for safety, for our economy, for resiliency and for our ability to reduce air pollution and improve the quality of places where Coloradans across the state live and thrive," said Shoshana Lew, executive director of the Colorado Department of Transportation. "From smoke-filled air to a confluence of fire and 500-year flooding in Glenwood Canyon, we are reminded that we have no time to waste in fighting climate change in the transportation sector, and this policy will be an important step. This draft standard wouldn't be possible without the hundreds of hours of input we've received over the last few months, and I look forward to hearing from all stakeholders on this draft."

CDOT has been reaching out to Coloradans across the state for their feedback for months and has worked continuously with groups including metropolitan planning organization staff and board members, environmental groups, contractors, equity organizations that represent disproportionately impacted communities, local governments, members of the Transportation Commission and other key stakeholders. The department convened a Greenhouse Gas Advisory Group consisting of transportation stakeholders from across the state to inform this standard and has held 11 public regional meetings and five joint state listening sessions with the Colorado Department of Public Health and Environment and has held or presented at over 60 smaller meetings with stakeholders.

"The Transportation Commission is pleased to take this important step today to lead Colorado's transition to a more sustainable transportation system, which will promote efficiency, equity and economic vitality while preserving our Colorado way of life," said Transportation Commission Chair Kathy Hall.

Publication of the draft standard begins a 60-day public review period. During this time, CDOT will host public hearings in Grand Junction, Glenwood Springs, Fort Collins, the Denver metropolitan area, Colorado Springs, Durango and Limon. The hearings will have a virtual option so that any interested stakeholders can participate without attending in person. You may also submit a written comment during the 60-day comment period from Aug. 13 to Oct. 15. Sign up to become a stakeholder and receive updates here.

The Transportation Commission is expected to consider the proposed standard in November, and if adopted at that time, the standard will take effect in January of next year.

For more information, read CDOT's fact sheet on the greenhouse gas standard process.

ADDITIONAL OUOTES FROM ORGANIZATIONS AND COMMUNITY LEADERS

"As the Mayor of Westminster, and a long-time Colorado resident, I am excited to see the Colorado Department of Transportation move forward with a new rulemaking to reduce Greenhouse Gas (GHG) Emissions from the transportation sector. The outcome of the rulemaking should help address the largest source of GHG pollution in Colorado by encouraging a future transportation system that improves transit, biking and walking options which could make a fundamental change to our transportation system. With the release of the rulemaking, CDOT begins the 60-day statewide public outreach and comment period to shape the final recommendations of the rule. The City of Westminster looks forward to being one of many voices helping to shape the final GHG rule, committing CDOT and others to the steps necessary for dramatic reductions in climate pollution."

- Mayor Anita Seitz, City of Westminster

"While we believe the draft rule has several issues that need to be addressed during the Transportation Commission rulemaking process, CDOT staff did a yeoman's job of conducting an inclusive process with a diverse group of stakeholders to develop a draft to start the conversation."

- Andrew Gunning, Executive Director, Pikes Peak Area Council of Governments (PPACG)

"The need to take urgent action to reduce greenhouse gas emissions from the transportation sector could not be clearer. Just last week, the Northern Front Range broke records for the number of ozone action alerts issued in a single year. Transportation is the single largest emitter of greenhouse gases in Colorado and CDOT's proposed greenhouse gas reduction rule is a necessary step in the right direction. We look forward to reviewing the proposed rule closely to ensure it protects the health of our residents and reduces climate impacts." - Claire Levy, Boulder County Commissioner

"Local governments and local communities across the state appreciate CDOT's proposal. From Salida to Superior and Gilpin County to Glenwood Springs, the impacts of climate change have become intensely and dangerously real. We look forward to this rulemaking process and are hopeful that the Transportation Commission will adopt a forward-leaning, enforceable plan that substantially and urgently reduces climate pollution across Colorado."

- Jacob Smith, Executive Director, Colorado Communities for Climate Action, a coalition of 38 counties, cities and towns across the state advocating for stronger statewide climate policy.

"It isn't possible to tackle an issue like this without hearing from different voices. CDOT not only took the time to listen to a range of viewpoints in crafting this rule, they reached out and made sure we were at the table."

- Phillips County Commissioner Terry Hofmeister

"Glenwood Springs is the poster child community for climate change. We have had three major fires over the last 25 years, the latest being the Grizzly Creek Fire last year. These fires have destroyed major infrastructure, homes, and cost lives. We are also seeing other effects of climate change with the recent 500-year rain event two weeks ago that shut down I-70 and paralyzed the region's transportation network. While we have switched our electrical grid over to 100% renewable energy, changed building codes and fortified our domestic water, we need partners throughout the state, country, and planet to join us in addressing this crisis at its source. Doing anything less is simply treating the symptoms instead of the disease. That's why I'm excited to see CDOT take this step to reduce greenhouse gas emissions from transportation. I encourage residents across the western slope to engage with CDOT and provide input on this important work."

- Glenwood Springs Mayor Jonathan Godes

"Recently, Denver residents experienced first-hand the direct impact of a changing climate as wildfire smoke clouded our skyline and created some of the most polluted air in the world at the time. Now, more than ever, we need bold policies like those CDOT is proposing with the Greenhouse Gas Pollution Reduction Planning rule. Denver applauds CDOT for taking these steps and is committed to continuing to do our part to create a sustainable transportation system."

- Grace Rink, Executive Director, City and County of Denver Office of Climate Action, Sustainability and Resiliency

###

Greenhouse Gas Pollution Reduction for Transportation **Planning Proposed Standards**

OVERVIEW

CDOT is proposing a new standard to reduce greenhouse gas emissions from the transportation sector, improve air quality and reduce smog, and provide more travel options. The standard would require CDOT and the state's five Metropolitan Planning Organizations (MPOs) to determine the total GHG emissions expected from future transportation projects and take steps to ensure that greenhouse gas (GHG) emission levels do not exceed set GHG reduction amounts. This proposed standard recognizes that the projects we build have an impact on how Coloradans travel and will help bring about a transportation system that provides more choices for travelers across the state.

PROPOSED RULE SCHEDULE

Engagement and Rule Concept Development Winter-Summer 2021

Early outreach on purpose of rule and overall framework. Input rulemaking sought through dozens of development and rule is meetings with a broad range of stakeholders.

Formal Processes Begin

Summer 2021 Transportation **Commission authorizes** noticed with Secretary

Public Rulemaking Hearings

Fall 2021: 60-Day Review Period Eight virtual and inperson hearings held across the state with opportunity for public testimony and submission of written comment.

Adopt Rules

Fall 2021

The Transportation **Commission considers** the proposed rule for adoption.

Rules Take Effect and Implementation

Winter 2022

If adopted by the Transportation Commission, the rule becomes effective with implementation.

BENEFITS AND BACKGROUND

of State.

The GHG Pollution Reduction Planning Standard is one of several transportation strategies identified in the state's Greenhouse Gas (GHG) Pollution Reduction Roadmap and is a key requirement established in the 2021 state transportation funding bill (SB260). The standard builds on the state's effort to rapidly deploy electric vehicles by encouraging a future transportation system that improves transit, biking and walking options. The focus is on large transportation projects that make a fundamental change to our transportation system. The basic repair and maintenance of our roads and bridges is not impacted.

The benefits made possible by this standard are meaningful; equivalent to burning 169 million fewer gallons of gasoline or taking approximately 300,000 cars off the road for a year. These benefits directly improve air quality by also reducing the harmful pollutants that cause ozone and smog.

GET INVOLVED

CDOT will hold eight public hearings across the state to provide opportunities for public comment on the standard. These meetings will have options to participate either in-person or virtually and offer Spanish interpretation. Comments also are accepted in writing via dot_rules@state.co.us. We welcome your feedback.

Visit our website for more information on public meetings and the rulemaking: https://www.codot.gov/programs/environmental/greenhouse-gas

Questions? Contact: CDOT_transportationghg@state.co.us

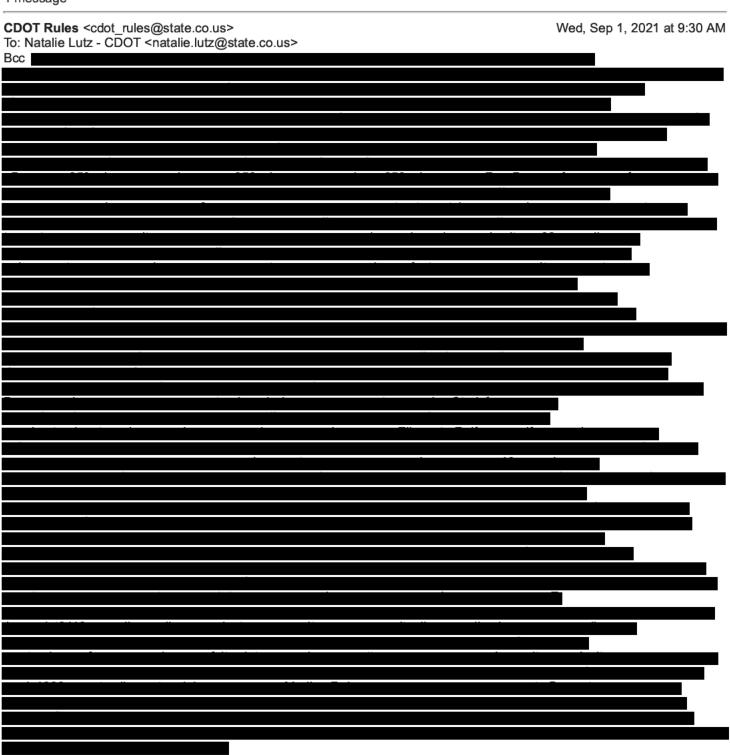




Rules - CDOT, DOT_ <dot_rules@state.co.us>

GHG Stakeholders/Accionistas de GEI

1 message



GHG Stakeholders,

Please note that we have changed the dates/times of hearings at multiple locations to comply with the requirement to complete the cost-benefit analysis at least ten (10) days before the first public hearing. We have also added a new 9th hearing in Weld County. For reference, we have posted the Miscellaneous Rulemaking Public Notice, the updated Notice

of Proposed Rulemaking, and the updated Proposed Statement of Basis & Purpose on <u>CDOT's Proposed Rules and Public Hearing Dates website</u>.

We are still offering all of the meetings in a hybrid format: you may attend a hearing in person, or call in through Zoom to give testimony. You do not need to attend the specific hearing location in your area - you can attend or call in to any of the hearings.

If you are attending virtually, you will need to register through the registration links on <u>CDOT's Proposed Rules and Public Hearing Dates website</u> so we can provide instructions to you on how to join, listen, and provide testimony if you wish.

We have also posted a Frequently Asked Questions document on <u>CDOT's Greenhouse Gas Emissions Reduction</u>
<u>Opportunities website</u>.

Thank you, Natalie

Accionistas de GEI,

Tenga en cuenta que hemos cambiado las fechas / horas de las audiencias en varios lugares para cumplir con el requisito de completar el análisis de costo-beneficio al menos diez (10) días antes de la primera audiencia pública. También hemos agregado una novena audiencia en el condado de Weld. Como referencia, hemos publicado el Aviso Público de Reglamentación Diverso, el Aviso Público de Reglamentación Propuesta actualizado y la Declaración de Base y Propósito Propuesta actualizada en la página de Internet de Fechas de Audiencia Pública y Reglas Propuestas del CDOT.

Seguimos ofreciendo todas las reuniones en un formato híbrido: usted puede asistir a una audiencia en persona o llamar a través del Zoom para dar su testimonio. No es necesario que asista al lugar específico de la audiencia en su área; usted puede asistir o llamar a cualquiera de las audiencias.

Si usted asiste virtualmente, deberá registrarse a través de los enlaces de registro en la página de Internet de Reglas Propuestas y Fechas de Audiencia Pública del CDOT para que podamos brindarle instrucciones sobre cómo unirse, escuchar y brindar testimonio si lo desea.

También hemos publicado un documento de Preguntas Frecuentes sobre <u>Oportunidades de Reducción de Emisiones de Gases de Efecto Invernadero del CDOT</u> en la página de Internet.

Gracias. Natalie

Natalie Lutz Rules, Policies, and Procedures Administrator

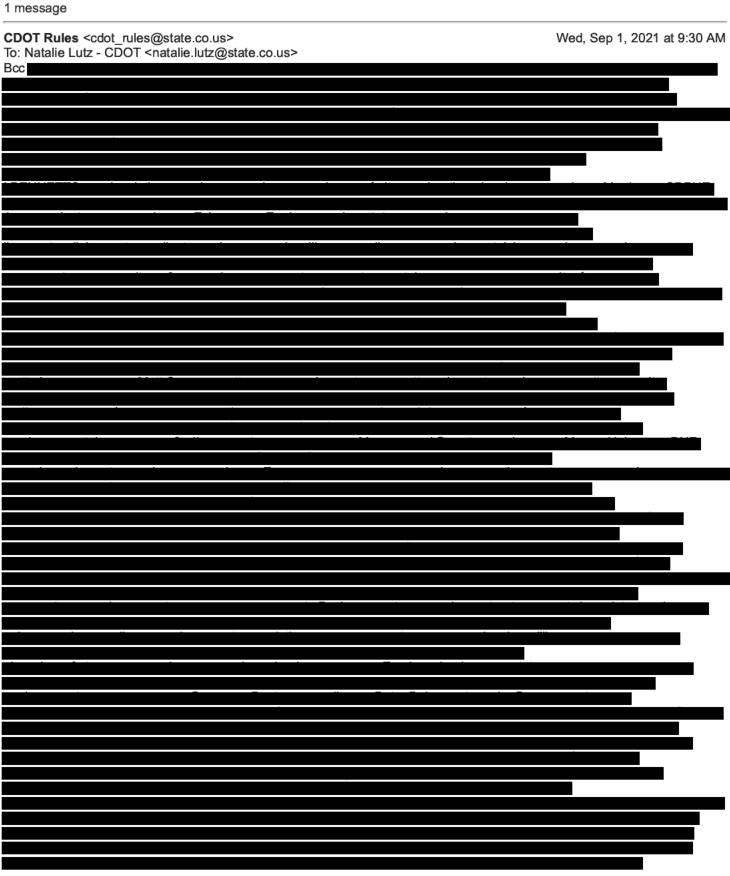


P: 303.757.9441 2829 W. Howard Place, Denver, CO 80204 dot_rules@state.co.us | www.codot.gov | www.cotrip.org



Rules - CDOT, DOT_ <dot_rules@state.co.us>

GHG Stakeholders/Accionistas de GEI





GHG Stakeholders,

Please note that we have changed the dates/times of hearings at multiple locations to comply with the requirement to complete the cost-benefit analysis at least ten (10) days before the first public hearing. We have also added a new 9th hearing in Weld County. For reference, we have posted the Miscellaneous Rulemaking Public Notice, the updated Notice of Proposed Rulemaking, and the updated Proposed Statement of Basis & Purpose on CDOT's Proposed Rules and Public Hearing Dates website.

We are still offering all of the meetings in a hybrid format: you may attend a hearing in person, or call in through Zoom to give testimony. You do not need to attend the specific hearing location in your area - you can attend or call in to any of the hearings.

If you are attending virtually, you will need to register through the registration links on <u>CDOT's Proposed Rules and Public Hearing Dates website</u> so we can provide instructions to you on how to join, listen, and provide testimony if you wish.

We have also posted a Frequently Asked Questions document on <u>CDOT's Greenhouse Gas Emissions Reduction</u> <u>Opportunities website</u>.

Thank you,
Natalie

Accionistas de GEI,

Tenga en cuenta que hemos cambiado las fechas / horas de las audiencias en varios lugares para cumplir con el requisito de completar el análisis de costo-beneficio al menos diez (10) días antes de la primera audiencia pública. También hemos agregado una novena audiencia en el condado de Weld. Como referencia, hemos publicado el Aviso Público de Reglamentación Diverso, el Aviso Público de Reglamentación Propuesta actualizado y la Declaración de Base y Propósito Propuesta actualizada en la página de Internet de Fechas de Audiencia Pública y Reglas Propuestas del CDOT.

Seguimos ofreciendo todas las reuniones en un formato híbrido: usted puede asistir a una audiencia en persona o llamar a través del Zoom para dar su testimonio. No es necesario que asista al lugar específico de la audiencia en su área; usted puede asistir o llamar a cualquiera de las audiencias.

Si usted asiste virtualmente, deberá registrarse a través de los enlaces de registro en la página de Internet de Reglas Propuestas y Fechas de Audiencia Pública del CDOT para que podamos brindarle instrucciones sobre cómo unirse, escuchar y brindar testimonio si lo desea.

También hemos publicado un documento de Preguntas Frecuentes sobre <u>Oportunidades de Reducción de Emisiones de Gases de Efecto Invernadero del CDOT</u> en la página de Internet.

Gracias. Natalie

Natalie Lutz Rules, Policies, and Procedures Administrator

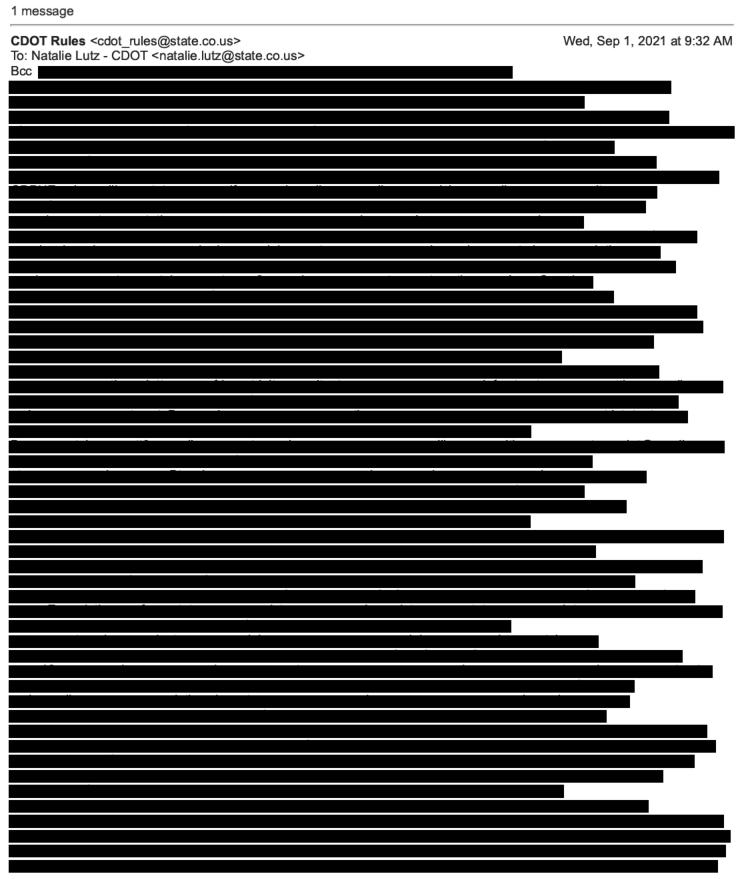


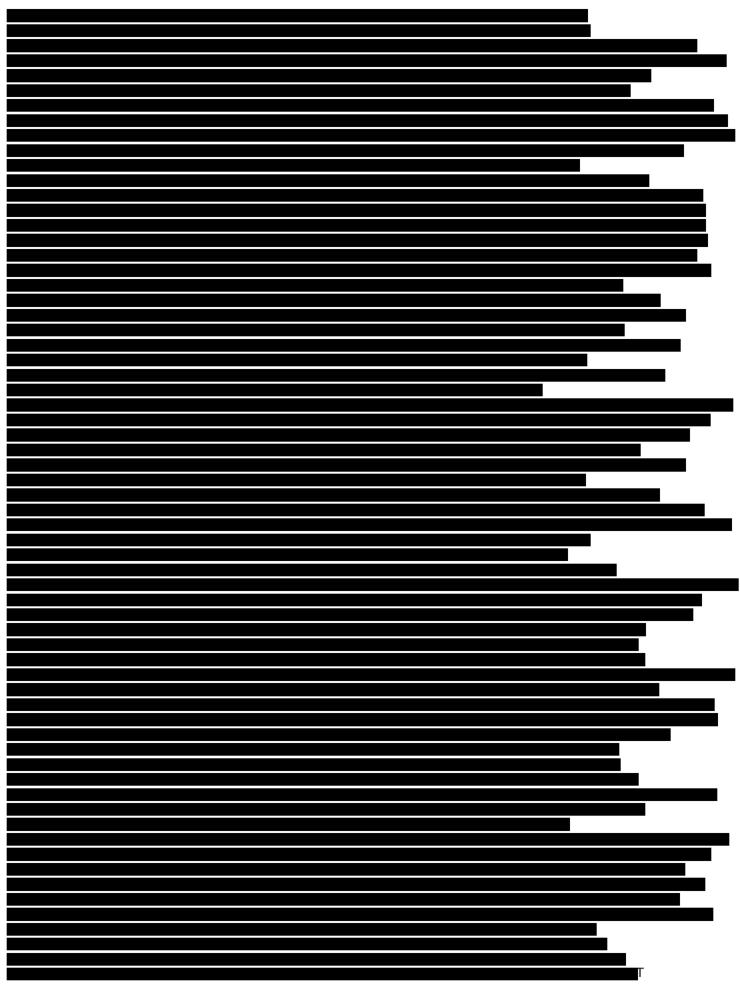
P: 303.757.9441 2829 W. Howard Place, Denver, CO 80204 dot_rules@state.co.us | www.codot.gov | www.cotrip.org



Rules - CDOT, DOT_ <dot_rules@state.co.us>

GHG Stakeholders/Accionistas de GEI





GHG Stakeholders,

Please note that we have changed the dates/times of hearings at multiple locations to comply with the requirement to complete the cost-benefit analysis at least ten (10) days before the first public hearing. We have also added a new 9th hearing in Weld County. For reference, we have posted the Miscellaneous Rulemaking Public Notice, the updated Notice of Proposed Rulemaking, and the updated Proposed Statement of Basis & Purpose on CDOT's Proposed Rules and Public Hearing Dates website.

We are still offering all of the meetings in a hybrid format: you may attend a hearing in person, or call in through Zoom to give testimony. You do not need to attend the specific hearing location in your area - you can attend or call in to any of the hearings.

If you are attending virtually, you will need to register through the registration links on <u>CDOT's Proposed Rules and Public Hearing Dates website</u> so we can provide instructions to you on how to join, listen, and provide testimony if you wish.

We have also posted a Frequently Asked Questions document on <u>CDOT's Greenhouse Gas Emissions Reduction</u>
<u>Opportunities website</u>.

Thank you,		
Natalie		

Accionistas de GEI,

Tenga en cuenta que hemos cambiado las fechas / horas de las audiencias en varios lugares para cumplir con el requisito de completar el análisis de costo-beneficio al menos diez (10) días antes de la primera audiencia pública. También hemos agregado una novena audiencia en el condado de Weld. Como referencia, hemos publicado el Aviso Público de Reglamentación Diverso, el Aviso Público de Reglamentación Propuesta actualizado y la Declaración de Base y Propósito Propuesta actualizada en la página de Internet de Fechas de Audiencia Pública y Reglas Propuestas del CDOT.

Seguimos ofreciendo todas las reuniones en un formato híbrido: usted puede asistir a una audiencia en persona o llamar a través del Zoom para dar su testimonio. No es necesario que asista al lugar específico de la audiencia en su área; usted puede asistir o llamar a cualquiera de las audiencias.

Si usted asiste virtualmente, deberá registrarse a través de los enlaces de registro en la página de Internet de <u>Reglas Propuestas y Fechas de Audiencia Pública del CDOT</u> para que podamos brindarle instrucciones sobre cómo unirse, escuchar y brindar testimonio si lo desea.

También hemos publicado un documento de Preguntas Frecuentes sobre <u>Oportunidades de Reducción de Emisiones de Gases de Efecto Invernadero del CDOT</u> en la página de Internet.

Gracias. Natalie

Natalie Lutz Rules, Policies, and Procedures Administrator



P: 303.757.9441 2829 W. Howard Place, Denver, CO 80204 dot_rules@state.co.us | www.codot.gov | www.cotrip.org

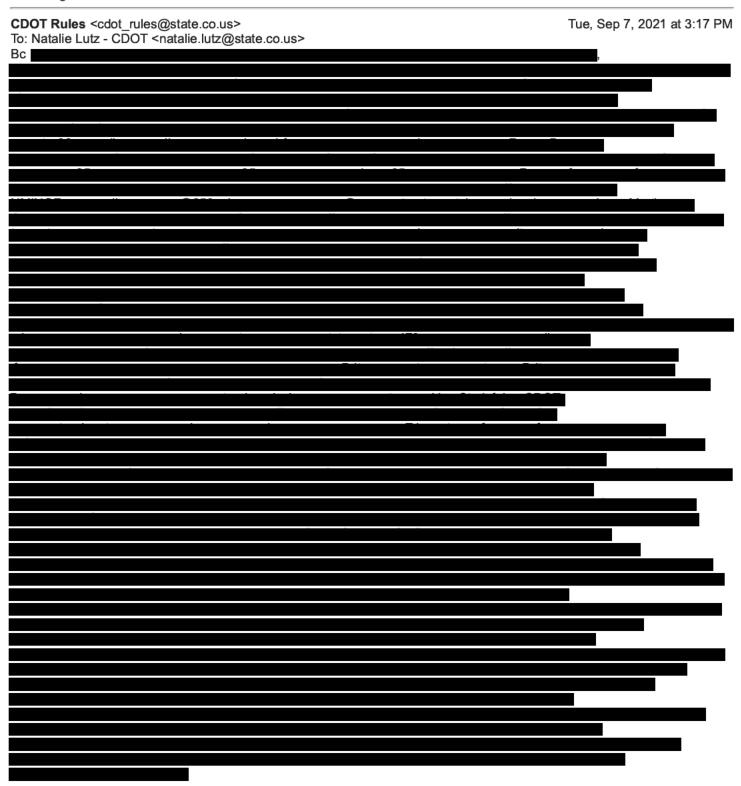


9C

Rules - CDOT, DOT_ <dot_rules@state.co.us>

Cost Benefit Analysis for Proposed Pollution Reduction Planning Standards/ Análisis de Costo-Beneficio para Normas de Planificación de Reducción de la Contaminación Propuestos

1 message



Hello Stakeholder,

9/13/21, 11:25 PM State.co.us Executive Branch Mail - Cost Benefit Analysis for Proposed Pollution Reduction Planning Standards/ Análisis de Cos...

The Colorado Department of Transportation (CDOT) has completed the cost-benefit analysis for the proposed pollution reduction planning standards. I have attached a copy of the cost-benefit analysis for your reference. You can also find it on CDOT's Proposed Rules and Public Hearing Dates website.

Thank you,
Natalie

Hola Accionista,

El Departamento de Transporte de Colorado (CDOT) ha finalizado el análisis de costo-beneficio para las normas de planificación de reducción de la contaminación propuestos. Adjunto una copia del análisis de costo-beneficio para su referencia. También usted puede encontrarlo en la página de Internet de Reglas Propuestas y Fechas de Audiencias Públicas del CDOT

Gracias.

Natalie



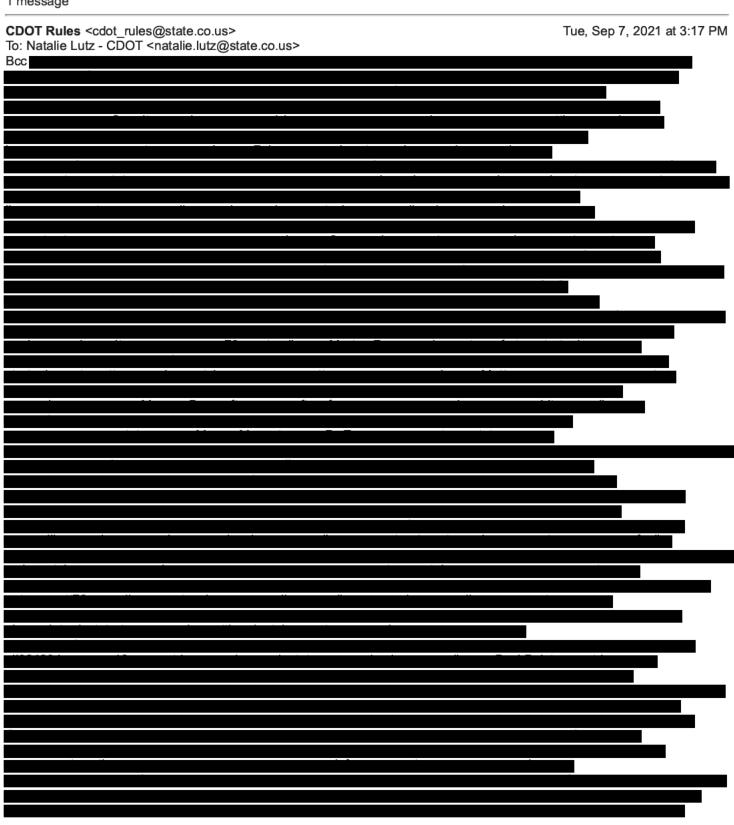
CDOT Cost Benefit Analysis for GHG Rule Sept 2021.pdf 332K



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Cost Benefit Analysis for Proposed Pollution Reduction Planning Standards/ Análisis de Costo-Beneficio para Normas de Planificación de Reducción de la **Contaminación Propuestos**

1 message



<u> </u>

Hello Stakeholder,

The Colorado Department of Transportation (CDOT) has completed the cost-benefit analysis for the proposed pollution reduction planning standards. I have attached a copy of the cost-benefit analysis for your reference. You can also find it on CDOT's Proposed Rules and Public Hearing Dates website.

Thank you,	Than	k	you,
------------	------	---	------

Natalie

Hola Accionista,

El Departamento de Transporte de Colorado (CDOT) ha finalizado el análisis de costo-beneficio para las normas de planificación de reducción de la contaminación propuestos. Adjunto una copia del análisis de costo-beneficio para su

9/13/21, 11:25 PM State.co.us Executive Branch Mail - Cost Benefit Analysis for Proposed Pollution Reduction Planning Standards/ Análisis de Cos...

referencia. También usted puede encontrarlo en la página de Internet de Reglas Propuestas y Fechas de Audiencias Públicas del CDOT.

Gracias.

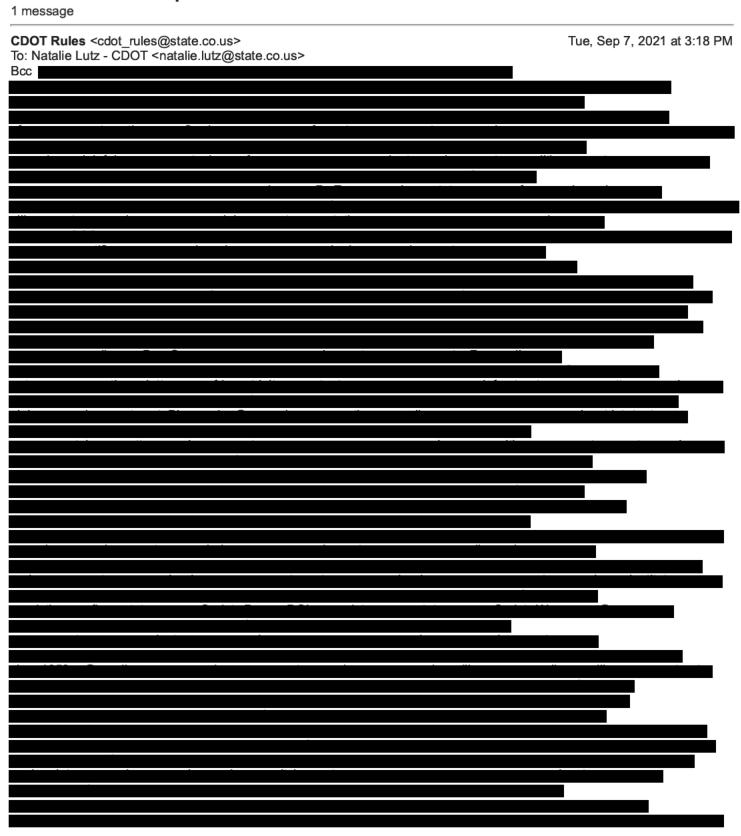
Natalie

CDOT Cost Benefit Analysis for GHG Rule Sept 2021.pdf 332K



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Cost Benefit Analysis for Proposed Pollution Reduction Planning Standards/ Análisis de Costo-Beneficio para Normas de Planificación de Reducción de la Contaminación Propuestos



Hello Stakeholder,

The Colorado Department of Transportation (CDOT) has completed the cost-benefit analysis for the proposed pollution reduction planning standards. I have attached a copy of the cost-benefit analysis for your reference. You can also find it on CDOT's Proposed Rules and Public Hearing Dates website.

Thank you,

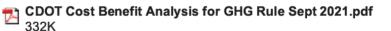
Natalie

Hola Accionista,

El Departamento de Transporte de Colorado (CDOT) ha finalizado el análisis de costo-beneficio para las normas de planificación de reducción de la contaminación propuestos. Adjunto una copia del análisis de costo-beneficio para su referencia. También usted puede encontrarlo en la página de Internet de Reglas Propuestas y Fechas de Audiencias Públicas del CDOT.

Gracias.

Natalie



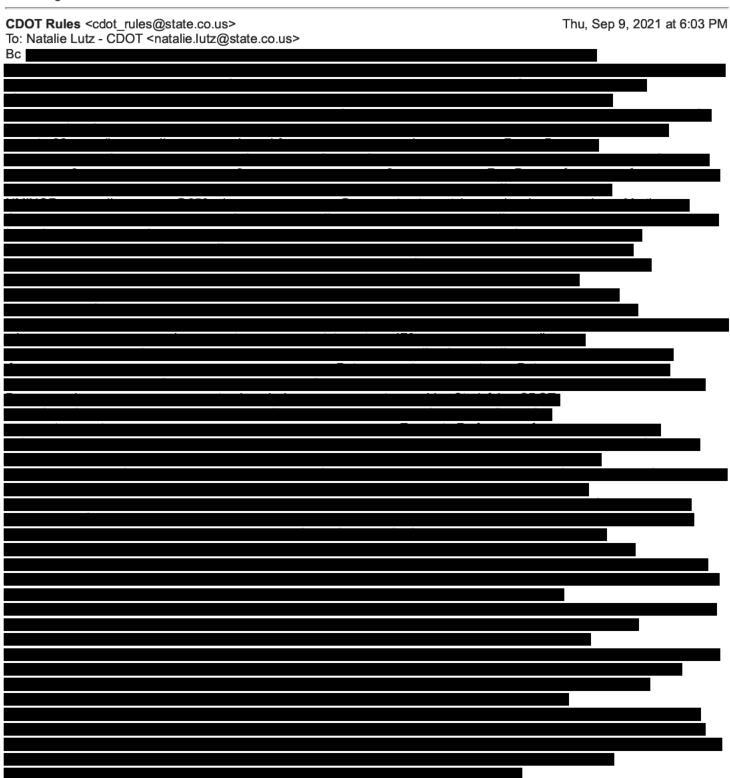


9D

Rules - CDOT, DOT_ <dot_rules@state.co.us>

Regulatory Analysis for Proposed Pollution Reduction Planning Standards/ Análisis Regulatorio para Normas de Planificación de Reducción de la Contaminación Propuestos

1 message



Hello Stakeholder,

The Colorado Department of Transportation (CDOT) has completed the regulatory analysis for the proposed pollution reduction planning standards. I have attached a copy of the regulatory analysis for your reference. You can also find it on CDOT's Proposed Rules and Public Hearing Dates website.

Hola Accionista,

El Departamento de Transporte de Colorado (CDOT) ha finalizado el análisis regulatorio para las normas de planificación de reducción de la contaminación propuestos. Adjunto una copia del análisis regulatorio para su referencia. También usted puede encontrarlo en la página de Internet de Reglas Propuestas y Fechas de Audiencias Públicas del CDOT.

Gracias.

Natalie

Regulatory Analysis For Pollution Reduction Standard.pdf 408K



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Regulatory Analysis for Proposed Pollution Reduction Planning Standards/ Análisis Regulatorio para Normas de Planificación de Reducción de la Contaminación Propuestos



Hello Stakeholder,

The Colorado Department of Transportation (CDOT) has completed the regulatory analysis for the proposed pollution reduction planning standards. I have attached a copy of the regulatory analysis for your reference. You can also find it on CDOT's Proposed Rules and Public Hearing Dates website.

Thank you,

Natalie

Hola Accionista,

El Departamento de Transporte de Colorado (CDOT) ha finalizado el análisis regulatorio para las normas de planificación de reducción de la contaminación propuestos. Adjunto una copia del análisis regulatorio para su referencia. También usted puede encontrarlo en <u>la página de Internet de Reglas Propuestas y Fechas de Audiencias Públicas del CDOT</u>.

Gracias.

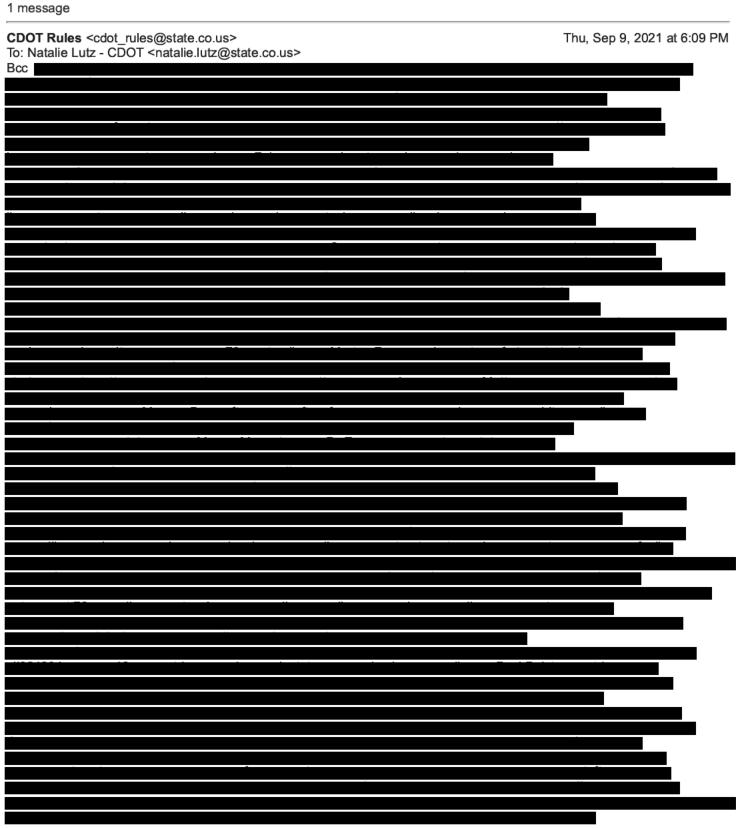
Natalie

Regulatory Analysis For Pollution Reduction Standard.pdf



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Regulatory Analysis for Proposed Pollution Reduction Planning Standards/ Análisis Regulatorio para Normas de Planificación de Reducción de la Contaminación **Propuestos**





Hello Stakeholder,

The Colorado Department of Transportation (CDOT) has completed the regulatory analysis for the proposed pollution reduction planning standards. I have attached a copy of the regulatory analysis for your reference. You can also find it on CDOT's Proposed Rules and Public Hearing Dates website.

Thank you,	
Natalie	

Hola Accionista,

El Departamento de Transporte de Colorado (CDOT) ha finalizado el análisis regulatorio para las normas de planificación de reducción de la contaminación propuestos. Adjunto una copia del análisis regulatorio para

9/13/21. 11:40 PM	State.co.us Executive Branch Mail -	Regulatory Analysis for Proposed F	Pollution Reduction Planning Standards/	Análisis Regulato.
o, . o, = .,	Otatologica Executive Elanen man	regulatory / analysis is: 1 reposes .	character it is a second of the second of th	, aranoro i togarato.

su referencia. También usted puede encontrarlo en <u>la página de Internet de Reglas Propuestas y Fechas de</u> <u>Audiencias Públicas del CDOT</u>.

Gracias.

Natalie







Rules - CDOT, DOT_ <dot_rules@state.co.us>

Notice of Proposed Rulemaking for Rules Governing Statewide Transportation Planning Processes and Transportation Planning Regions, 2 CCR 601-22

1 message

CDOT Rules <cdot_rules@state.co.us>
To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

Mon, Aug 16, 2021 at 1:58 PM



Hello Stakeholder:

This email serves as notification that the Colorado Department of Transportation (CDOT) on behalf of the Transportation Commission of Colorado (Commission) filed a Notice of Proposed Rulemaking with the Colorado Secretary of State to consider revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22.

The Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. I have attached the Notice of Proposed Rulemaking and a PDF copy of the proposed rule revisions for your review. You can also learn more about the Pollution Reduction Planning Standards through the attached Press Release and Fact Sheet.

The Commission plans to hold eight (8) hearings across the State as listed in the attached Notice of Proposed Rulemaking to hear testimony and receive comments. The public hearings will be conducted in a hybrid format, both in-person and virtually. If you plan to attend any of the scheduled hearings virtually, please register through the registration links provided either on the attached Notice of Proposed Rulemaking or CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html so we can provide instructions on how you can join the hearings of your choice virtually and provide testimony if you wish.

Please submit all written comments to dot rules@state.co.us on or before 5:00 p.m. on October 15, 2021. All comments received from stakeholders will be posted on CDOT's Rulemaking Web Page and will be available for review during the public comment period. We will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

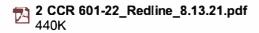
Please feel free to contact me at <u>dot_rules@state.co.us</u> if you have any questions or would like to be removed from our stakeholder list.

Thank you for participating in the rulemaking process.

Thanks, Natalie

4 attachments









212



2829 W. Howard Place Denver, CO 80204-2305

Notice of Proposed Rulemaking

Transportation Commission of Colorado
Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions
2 CCR 601-22

I. Notice

As required by the Colorado Administrative Procedure Act found at section 24-4-103, C.R.S., the Transportation Commission of Colorado (Commission) gives notice of proposed rulemaking.

II. Subject

The Commission is considering revisions to the rules governing the statewide transportation planning process and transportation planning regions, 2 CCR 601-22. Specifically, the Commission proposes to establish greenhouse gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of the Pollution Reduction Planning Standards is to limit the pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This will be accomplished by requiring the Colorado Department of Transportation (CDOT) and the Metropolitan Planning Organizations (MPOs) to establish plans that meet GHG transportation reduction targets through a mix of transportation projects that limit and mitigate air pollution and improve quality of life and multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. These standards address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms.

A detailed Statement of Basis, Purpose, and Specific Statutory Authority follows this notice and is incorporated by reference.



III. Rulemaking Hearings

The Commission plans to hold eight (8) hearings across the State as listed in the below table to hear testimony and receive comments on the proposed rule revisions. The public hearings will be conducted in a hybrid format, both in-person and virtually. All interested and affected parties may choose to attend one (1) or all eight (8) scheduled hearings either in-person or virtually.

Please note that the Commission may hold additional hearings, which will be posted on CDOT's website: https://www.codot.gov/business/rules/proposed-rules.html

Date	Location	Time	Virtual Hearing Registration Links
9/14/202	CDOT Regional Office US160 Maintenance Training Facility 20581 Highway 160 Durango, CO 81301	3-7 p.m.	Virtual Registration Form
9/17/2021	CDOT Regional Office Bookcliff Conference Room 2328 G Road Grand Junction CO 81505	3-7 p.m.	Virtual Registration Form
9/23/2021	Swansea Recreation Center 2650 E. 49th Ave. Denver, CO 80216	3-7 p.m.	Virtual Registration Form
9/24/2021	CDOT Regional Office 1480 Quail Lake Loop #A Colorado Springs, CO 80906	3-7 p.m.	<u>Virtual Registration Link</u>
9/27/2021	South Suburban Sports Complex 4810 E. County Line Rd. Littleton, CO 80126	3-7 p.m.	<u>Virtual Registration Link</u>
9/29/2021	CDOT Regional Office Big Sandy Conference Room 2738 Victory Highway Limon, CO 80828	3-7 p.m.	Virtual Registration Form
9/30/2021	Christ United Methodist Church 301 East Drake Road Fort Collins, CO 80525	3-7 p.m.	Virtual Registration Form
10/4/2021	City Hall City Council Chambers 101 West 8th Street Glenwood Springs, CO 81601	3-7 p.m.	Virtual Registration Form

How to Register to Attend Hearings Virtually

If you plan to attend any of the scheduled hearings virtually, you must click on the registration link in the above table for each hearing that you wish to attend virtually. The registration links for each hearing are also available on the CDOT's website at

https://www.codot.gov/business/rules/proposed-rules.html. When you register, you must provide your full name and email address. You may also provide your telephone number and the organization that you are representing. Lastly, please indicate whether you plan to testify during the hearing and/or submit written comments. You will receive instructions the day before the scheduled hearing on how to join, listen, and provide testimony if you wish.



IV. Statutory Authority

The specific authority under which the Commission shall establish these proposed rule revisions is set forth in §§ 43-1-106(8)(k) and 43-1-1103(5), C.R.S.

V. Copies of the Notice, Proposed Rule Revisions, and the Statement of Basis, Purpose & Authority

The notice of hearing, the proposed rule revisions, and the proposed statement of basis, purpose and authority are available for review at CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html.

If there are changes made to the proposed rule revisions before the first scheduled hearing on September 14, 2021, the updated proposed rule revisions will be available to the public and posted on CDOT's website by September 9, 2021.

Please note that the proposed rule revisions being considered are subject to further changes and modifications after the public hearings and the deadline for the submission of written comments.

VI. Opportunity to testify and submit written comments

The Commission and CDOT strive to make the rulemaking process inclusive to all. Everyone will have the opportunity to testify and provide written comments concerning the proposed rule revisions. Interested and affected parties are welcome to testify and submit written comments.

Each hearing will have an identical format. The Hearing Officer opens the hearing and provides a brief introduction of the hearing procedures. CDOT will review exhibits to establish that the CDOT on behalf of the Commission met all the procedural requirements of the Administrative Procedure Act. A summary of the proposed rule revisions will be presented by CDOT staff. Interested and affected parties will then have the opportunity to give testimony either in-person or virtually.

Testimony

The testimony phase of each hearing will proceed as follows:

- The Hearing Officer will identify the participants who indicated that they plan to testify during the hearing based on the registration records.
- When the Hearing Officer exhausts the list, they will ask whether any additional participants wish to testify.

To ensure that the hearing is prompt and efficient, oral testimony may be time-limited.

Written Comments

You may submit written comments to <u>dot rules@state.co.us</u> during the comment period between August 13, 2021, and October 15, 2021. All written comments must be received on or before Friday, October 15, 2021, at 5 pm.



Additionally, we will post all written comments to CDOT's website at https://www.codot.gov/business/rules/proposed-rules.html. However, please note that we will redact the following information for data privacy from the submissions prior to posting online: first and last names, contact information, including business and home addresses, email addresses, and telephone numbers.

All written comments will be added to the official rulemaking record.

VII. Recording of the Hearings

Each hearing will be recorded. After each hearing concludes, the recording will be available on CDOT's YouTube Channel at https://www.youtube.com/channel/UCOWFfi0-SE4kV07saKZdueA/videos.

VIII. Special Accommodations

If you need special accommodations, please contact CDOT's Rules Administrator at 303.757.9441 or dot rules@state.co.us at least one (1) week prior to the scheduled hearing date.

IX. Contact Information

Please contact CDOT's Rules Administrator, at 303.757.9441 or <u>dot_rules@state.co.us</u> if you have any questions.





2829 W. Howard Place Denver, CO 80204-2305

Transportation Commission of Colorado Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions 2 CCR 601-22

Proposed Statement of Basis and Purpose, Statutory Authority, and Preamble

Statement of Basis and Purpose and Preamble

<u>Overview</u>

The purpose of the Rules Governing the Statewide Transportation Planning Process and Transportation Planning Regions (Rules) is to prescribe the statewide transportation planning process through which a long-range multimodal, comprehensive Statewide Transportation Plan will be developed, integrated, updated, and amended by the Colorado Department of Transportation (Department or CDOT), in cooperation with local governments, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions, Indian tribal governments, relevant state and federal agencies, the private sector, transit and freight operators, and the general public. This cooperative process is designed to coordinate regional transportation planning, guided by the statewide transportation policy set by the Department and the Transportation Commission of Colorado ("Commission"), as a basis for developing the Statewide Transportation Plan. The result of the statewide transportation planning process shall be a long-range, financially feasible, environmentally sound, multimodal transportation system plan for Colorado that will reduce traffic and smog.

Further, the purpose of the Rules is to define the state's Transportation Planning Regions for which long-range Regional Transportation Plans are developed, prescribe the process for conducting and initiating transportation planning in the non-MPO Transportation Planning Regions and coordinating with the MPOs for planning in the metropolitan areas. Memoranda of Agreement (MOA) that serve as the Metropolitan Planning Agreements (MPAs) pursuant to 23 C.F.R. § 450 between the Department, each MPO, and applicable transit provider(s) further prescribe the transportation planning process in the MPO Transportation Planning Regions. In addition, the purpose of the Rules is to describe the organization and function of the Statewide Transportation Advisory Committee (STAC) as established by § 43-1-1104, Colorado Revised Statutes (C.R.S.).

The Rules are promulgated to meet the intent of both the U.S. Congress and the Colorado General Assembly for conducting a continuing, cooperative, and comprehensive statewide performance-based multimodal transportation planning process for producing a Statewide Transportation Plan and Regional Transportation Plans that address the transportation needs of the State. This planning process, through comprehensive input, results in systematic project prioritization and resource allocation.

The Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of multimodal, cost-effective, and environmentally sound means of transportation which leads to cleaner air and reduced traffic. The Rules reflect the Commission's and the Department's focus on multimodal transportation projects including highways, transit, rail, bicycles and pedestrians. Section 8 of these Rules establishes an ongoing administrative process for identifying, measuring, confirming, and verifying those best practices and their impacts, so that CDOT and MPOs can easily apply them to their plans in order to achieve the pollution reduction levels required by these Rules.



The specific purpose of this rulemaking is to establish Greenhouse Gas (GHG) pollution reduction planning levels for transportation within Section 8 of these Rules that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of these requirements is to limit the GHG pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This is accomplished by requiring CDOT and MPOs to establish plans that meet targets through a mix of projects that limit and mitigate air pollution and improve quality of life and Multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. In the event that a plan fails to comply, CDOT and MPOs have the option to commit to implementing GHG Mitigation Measures that provide travelers with cleaner and more equitable transportation options such as safer pedestrian crossings and sidewalks, better transit and transit-access, or infrastructure that supports access to housing, jobs, and retail.

Examples of these types of mitigations, which also benefit quality of place and the economic resilience of communities, will include but not be limited to: adding bus rapid transit facilities and services, enhancing first-and-last mile connections to transit, adding bike-sharing services including electric bikes, improving pedestrian facilities like sidewalks and safe accessible crosswalks, investments that support vibrant downtown density and local zoning decisions that favor sustainable building codes and inclusive multi-use facilities downtown, and more. The process of identifying and approving mitigations will be established by a policy process that allows for ongoing innovations from local governments and other partners to be considered on an iterative basis.

If compliance still cannot be demonstrated, even after committing to GHG Mitigation Measures, the Commission shall restrict the use of certain funds, requiring that dollars be focused on projects that help reduce transportation emissions and are recognized as approved mitigations. These requirements address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Additionally, the Commission proposes to clarify that the Statewide Transportation Plan will include an analysis of how it aligns with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. The Commission proposes to include the 10-Year Plan as a required appendix of the Statewide Transportation Plan. The Commission also proposes to establish a State Interagency Consultation Team, consisting of CDOT's Director of the Division of Transportation Development, the Colorado Department of Public Health and Environment's Director of Air Pollution Control Division, and the Director of each MPO. The Commission proposes to add nineteen (19) new defined terms relating to the establishment of the GHG pollution reduction planning levels for transportation and to reformat the defined terms into alphabetical order. Finally, the Commission proposes to make other minor changes or updates, such as capitalizing defined terms.

Context of Section 8 of these Rules Within Statewide Objectives

The passage of House Bill (HB)19-1261 set Colorado on a course to dramatically reduce GHG emissions across all sectors of the economy. In HB 19-1261, now codified in part at §§ 25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" acknowledged that "Colorado is already experiencing harmful climate impacts[,]" and that "many of these impacts disproportionately affect" certain Disproportionately Impacted Communities. see § 25-7-102(2), C.R.S. The General Assembly also recognized that "[b]y reducing [GHG] pollution, Colorado will also reduce other harmful air pollutants, which will, in turn, improve public health, reduce health care costs, improve air quality, and help sustain the environment." see § 25-7-102(2)(d), C.R.S.



Since 2019, the State has been rigorously developing a plan to achieve the ambitious GHG pollution reduction goals in § 25-7-102(2)(g), C.R.S. In January 2021, the State published its Greenhouse Gas Pollution Reduction Roadmap (Roadmap). Available at:

https://energyoffice.colorado.gov/climate-energy/ghg-pollution-reduction-roadmap. The Roadmap identified the transportation sector as the single largest source of statewide GHG pollution as of 2020, with passenger vehicles the largest contributor within the transportation sector. Additionally, the Roadmap determined that emissions from transportation are a "significant contributor to local air pollution that disproportionately impacts lower-income communities and communities of color." see Roadmap, p. XII.

A key finding in the Roadmap recognized that "[m]aking changes to transportation planning and infrastructure to reduce growth in driving is an important tool" to meet the statewide GHG pollution reduction goals. see Roadmap, p. 32. Section 8 of these Rules also advances the State's goals to reduce emissions of other harmful air pollutants, including ozone.

Why the Commission is Taking This Action

Senate Bill 21-260, signed into law by the Governor on June 17, 2021, and effective upon signature, includes a new § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Section 43-1-128, C.R.S. also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and Vehicle Miles Traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.

Under Colorado law governing transportation planning, CDOT is charged with and identified as the proper body for "developing and maintaining the state transportation planning process and the state transportation plan" in cooperation with Regional Planning Commissions and local government officials. see § 43-1-1101, C.R.S.

The Commission is responsible for formulating policy with respect to transportation systems in the State and promulgating and adopting all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs. see § 43-1-106(8), C.R.S. The Commission is statutorily charged "to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado." see § 43-1-106(8)(b), C.R.S. In addition, the Commission is generally authorized "to make all necessary and reasonable orders, rules and regulations in order to carry out the provisions of this part . . ." see § 43-1-106(8)(k), C.R.S.

As such, CDOT and the Commission are primarily responsible for ensuring compliance with GHG reductions in transportation planning.

What Relevant Regulations Currently Apply to Transportation Planning

Transportation planning is subject to both state and federal requirements. Under federal law governing transportation planning and federal-aid highways, it is declared to be in the national interest to promote transportation systems that accomplish a number of mobility objectives "while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes..." see 23 U.S.C. § 134; see also 23 U.S.C. § 135(a)(1). In the metropolitan planning process, consideration must be given to projects and strategies that will "protect and enhance the environment, promote energy conservation, improve the quality of life..." see 23 U.S.C. § 134(h)(1)(E); see also 23 C.F.R. Part 450, Subpart B (federal regulations governing statewide transportation planning and programming). The same planning objective applies to statewide transportation planning. see 23 U.S.C. § 135(d)(1)(E); see also 23 C.F.R. Part 450, Subpart C (governing metropolitan transportation planning and programming). Further, the Statewide Transportation Plan shall be developed, as appropriate, in



consultation with State...local agencies responsible for...environmental protection..." see 23 U.S.C. \$ 135(f)(2)(D)(i).

Under conforming Colorado law, the Statewide Transportation Plan is developed by integrating and consolidating Regional Transportation Plans developed by MPOs and regional transportation planning organizations into a "comprehensive statewide transportation plan" pursuant to rules and regulations promulgated by the Commission. *see* § 43-1-1103(5), C.R.S. The Statewide Transportation Plan must address a number of factors including, but not limited to, "environmental stewardship" and "reduction of greenhouse gas emissions." *see* § 43-1-1103(5)(h) and (j), C.R.S.

Regional Transportation Plans must account for the "expected environmental, social, and economic impacts of the recommendations in the plan, including a full range of reasonable transportation alternatives...in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." see § 43-1-1103(1)(d), C.R.S. Further, in developing Regional Transportation Plans, MPOs "[s]hall assist other agencies in developing transportation control measures for utilization in accordance with state...regulations...and shall identify and evaluate measures that show promise of supporting clean air objectives." see § 43-1-1103(1)(e), C.R.S.

Putting Section 8 of these Rules into Perspective

Section 8 establishes GHG regulatory requirements that are among the first of their kind in the U.S. However, from an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a Nonattainment Area are consistent with or "conform to" a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and the Denver Regional Council of Governments' MPOs to demonstrate conformity with each plan adoption and amendment.

However, because the transportation sector encompasses the millions of individual choices people make every day that have an impact on climate, a variety of strategies are necessary to achieve the State's climate goals. Section 8 of these Rules is one of many steps needed to achieve the totality of reduction goals for the transportation sector.

Purpose of GHG Mitigation Measures

The transportation modeling conducted for this rulemaking may demonstrate that certain projects increase GHG pollution for a variety of reasons. These reasons may include factors such as induced demand as a result of additional lane mileage attracting additional vehicular traffic, or additional traffic facilitated by access to new commercial or residential development in the absence of public transit options or bicycle/pedestrian access that provides consumers with other non-driving options. Transportation infrastructure itself can also increase or decrease GHG and other air pollutants by virtue of factors like certain construction materials, removal or addition of tree cover that captures carbon pollution, or integration with vertical construction templates of various efficiencies that result in higher or lower levels of per capita energy use. The pollution impacts of various infrastructure projects will vary significantly depending on their specifics and must be modeled in a manner that is context-sensitive to a range of issues such as location, footprint of existing infrastructure, design, and how it fits together with transportation alternatives.

Of note, many types of infrastructure have been demonstrated not to generate significant induced demand or increased emissions. For example, the state of California conducted a study of project types that should be considered "neutral" from the perspective of GHG pollution -- due to their use being related primarily to issues like safety and utility for emergency services. See here:



https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1 st-edition-tac-fnl-a11v.pdf

Furthermore, other aspects of transportation infrastructure can facilitate reductions in emissions and thus serve as mitigations rather than contributors to pollution. For example, the addition of transit resources in a manner that can displace Vehicle Miles Traveled can reduce emissions. Moreover, improving downtown pedestrian and bike access, particularly in areas that allow individuals to shift multiple daily trips for everything from work to dining to retail, can improve both emissions and quality of life.

There is an increasing array of proven best practices for reducing pollution and smog and improving economies and neighborhoods that can help streamline decision-making for state and local agencies developing plans and programs of projects.

Statutory Authority

The statutory authority is as follows:

- House Bill 19-1261 enacted into law on May 30, 2019.
- Senate Bill 20-260 enacted into law on June 17, 2021.
- § 25-7-102(2), C.R.S., which sets forth the legislative declaration to reduce statewide GHG pollution and establishes statewide GHG pollution targets.
- § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling, and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and vehicle miles traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.
- § 43-1-1101, C.R.S., which authorizes CDOT to develop and maintain the state transportation planning process and the State Transportation Plan in cooperation with Regional Planning Commissions and local government.
- § 43-1-1103(5), C.R.S., which authorizes the Commission to promulgate rules to establish the formation of the Statewide Transportation Plan and the statewide planning process. Also requires the consideration of environmental stewardship and reducing GHG emissions as part of transportation planning.
- § 43-1-106(8), C.R.S, which authorizes the Commission to formulate policy with respect to transportation systems in the State and promulgate and adopt all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs.
- § 43-1-106(8)(b), C.R.S., which requires the Commission to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado.
- § 43-1-106(8)(k), C.R.S., which authorizes the Commission to make all necessary and reasonable order, rules and regulations.



DEPARTMENT OF TRANSPORTATION

Transportation Commission

RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS AND TRANSPORTATION PLANNING REGIONS

2 CCR 601-22

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

August 13, 2021, Version

Please note the following formatting key:

Font Effect	Meaning
<u>Underline</u>	New Language
Strikethrough	Deletions
[Blue Font Text]	Annotation

STATEMENT OF BASIS AND PURPOSE, AND-STATUTORY AUTHORITY AND PREAMBLE

The purpose of the Rules Governing the Statewide Transportation Planning Process and Transportation Planning Regions (Rules) is to prescribe the statewide transportation planning process through which a long-range multimodal comprehensive statewide Statewide transportation Transportation plan Plan will be developed, integrated, updated, and amended by the Colorado Department of Transportation (Department or CDOT), in cooperation with local governments, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions, Indian tribal governments, relevant state and federal agencies, the private sector, transit and freight operators, special-interest groups, and the general public. This cooperative process is designed to coordinate regional transportation planning, guided by the statewide transportation policy set by the Department and the transportation Transportation commission Commission of Colorado ("Commission"), as a basis for developing the statewide Statewide transportation planning process shall be a long-range, financially feasible, environmentally sound, multimodal Multimodal transportation system plan for Colorado that will reduce traffic and smog.

Further, the purpose of the Rules is to define the state's Transportation Planning Regions for which long-range Regional Transportation Plans are developed, prescribe the process for conducting and initiating transportation planning in the non-MPO Transportation Planning Regions and coordinating with the Metropolitan Planning OrganizationsMPOs for planning in the metropolitan areas. Memoranda of Agreement (MOA) that serve as the Metropolitan Planning Agreements (MPAs) per-pursuant to 23 C.F.R. § 450 between the Department, each MPO, and applicable transit provider(s) further prescribe the transportation planning process in the MPO transportation Transportation planning Planning regions Planning. In addition, the purpose of the Rules is to describe the organization and function of the

Statewide Transportation Advisory Committee (STAC) as established by § 43-1-1104, Colorado Revised Statutes (C.R.S.).

The Rules are promulgated to meet the intent of both the U.S. Congress and the Colorado General Assembly for conducting a continuing, cooperative, and comprehensive statewide performance-based multimodal transportation planning process for producing a Statewide Transportation Plan and Regional Transportation Plans that address the transportation needs of the stateState. This planning process, through comprehensive input, results in systematic project prioritization and resource allocation.

The Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of Multimodal, cost-effective, and environmentally sound means of transportation which leads to cleaner air and reduced traffic. The Rules reflect the Commission's and the Department's focus on Multimodal transportation projects including highways, transit, rail, bicycles and pedestrians. Section 8 of these Rules establishes an ongoing administrative process for identifying, measuring, confirming, and verifying those best practices and their impacts, so that CDOT and MPOs can easily apply them to their plans in order to achieve the pollution reduction levels required by these Rules.

The Rules are promulgated by the Commission pursuant to the specific statutory authority in § 43-1-1103 (5), C.R.S., and § 43-1-106 (8)(k), C.R.S.

Preamble for 2018 Rulemaking

In 2018, rulemaking was initiated to update the rules to conform to recently passed federal legislation, update expired rules, clarify the membership and duties of the Statewide Transportation Advisory Committee STAC pursuant to HB 16-1169 and HB 16-1018, and to make other minor corrections. The Rules are intended to be consistent with and not be a replacement for the federal transportation planning requirements contained in 23 United States Code (U.S.C.) §§ 134, 135 and 150, Pub. L. No. 114-94 (Fixing America's Surface Transportation Act or the "FAST Act") signed into law on December 4, 2015, and its implementing regulations, where applicable, contained in 23 Code of Federal Regulations (C.F.R.) Part 450, including Subparts A, B and C and 25 C.F.R. § 170.421 in effect as of August 1, 2017, which are hereby incorporated into the Rules by this reference, and do not include any later amendments. All referenced laws and regulations shall be available for copying or public inspection during regular business hours from the Office of Policy and Government Relations, Colorado Department of Transportation, 2829 W. Howard Pl., Denver, Colorado 80204.

Copies of the referenced United States Code may be obtained from the following address:

Office of the Law Revision Counsel U.S. House of Representatives H2-308 Ford House Office Building Washington, DC 20515 (202) 226-2411

Copies of the referenced Code of Federal Regulations may be obtained from the following address:

U.S. Government Publishing Office 732 North Capitol Street, N.W. Washington, DC 20401 (202) 512-1800

The Statewide Planning Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of multimodal, cost effective and environmentally sound means of transportation. The Rules reflect the Department's focus on multimodal transportation projects including highways, aviation, transit, rail, bicycles and pedestrians.

The Rules are promulgated by the Commission pursuant to the specific statutory authority in § 43-1-1103 (5), C.R.S., and § 43-1-106 (8)(k), C.R.S. The Commission may, at their discretion, entertain petitions for declaratory orders pursuant to § 24-4-105(11), C.R.S.

Preamble for 2021 Rulemaking

Overview

Section 8 of these Rules establishes Greenhouse Gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of these requirements is to limit the GHG pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This is accomplished by requiring CDOT and MPOs to establish plans that meet targets through a mix of projects that limit and mitigate air pollution and improve quality of life and Multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. In the event that a plan fails to comply, CDOT and MPOs have the option to commit to implementing GHG Mitigation Measures that provide travelers with cleaner and more equitable transportation options such as safer pedestrian crossings and sidewalks, better transit and transit-access, or infrastructure that supports access to housing, jobs, and retail.

Examples of these types of mitigations, which also benefit quality of place and the economic resilience of communities, will include but not be limited to: adding bus rapid transit facilities and services, enhancing first-and-last mile connections to transit, adding bike-sharing services including electric bikes, improving pedestrian facilities like sidewalks and safe accessible crosswalks, investments that support vibrant downtown density and local zoning decisions that favor sustainable building codes and inclusive multi-use facilities downtown, and more. The process of identifying and approving mitigations will be established by a policy process that allows for ongoing innovations from local governments and other partners to be considered on an iterative basis.

If compliance still cannot be demonstrated, even after committing to GHG Mitigation Measures, the Commission shall restrict the use of certain funds, requiring that dollars be focused on projects that help reduce transportation emissions and are recognized as approved mitigations. These requirements address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Context of Section 8 of these Rules Within Statewide Objectives

The passage of House Bill (HB)19-1261 set Colorado on a course to dramatically reduce GHG emissions across all sectors of the economy. In HB 19-1261, now codified in part at §§ 25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" acknowledged that "Colorado is already experiencing harmful climate impacts[,]" and that "many of these impacts disproportionately affect" certain Disproportionately Impacted Communities. see § 25-7-102(2), C.R.S. The General Assembly also recognized that "[b]y reducing [GHG] pollution, Colorado will also reduce other harmful air pollutants, which will, in turn, improve public health, reduce health care costs, improve air quality, and help sustain the environment." see § 25-7-102(2)(d), C.R.S.

Since 2019, the State has been rigorously developing a plan to achieve the ambitious GHG pollution reduction goals in § 25-7-102(2)(g), C.R.S. In January 2021, the State published its Greenhouse Gas Pollution Reduction Roadmap (Roadmap). The Roadmap identified the transportation sector as the single largest source of statewide GHG pollution as of 2020, with passenger vehicles the largest contributor within the transportation sector. Additionally, the Roadmap determined that emissions from transportation

are a "significant contributor to local air pollution that disproportionately impacts lower-income communities and communities of color." see Roadmap, p. XII.

A key finding in the Roadmap recognized that "[m]aking changes to transportation planning and infrastructure to reduce growth in driving is an important tool" to meet the statewide GHG pollution reduction goals. see Roadmap, p. 32. Section 8 of these Rules also advances the State's goals to reduce emissions of other harmful air pollutants, including ozone.

Why the Commission is Taking This Action

Senate Bill 21-260, signed into law by the Governor on June 17, 2021, and effective upon signature, includes a new § 43-1-128, C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Section 43-1-128, C.R.S. also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and Vehicle Miles Traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.

Under Colorado law governing transportation planning, CDOT is charged with and identified as the proper body for "developing and maintaining the state transportation planning process and the state transportation plan" in cooperation with Regional Planning Commissions and local government officials. see § 43-1-1101, C.R.S.

The Commission is responsible for formulating policy with respect to transportation systems in the State and promulgating and adopting all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs. see § 43-1-106(8), C.R.S. The Commission is statutorily charged "to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado." see § 43-1-106(8)(b), C.R.S. In addition, the Commission is generally authorized "to make all necessary and reasonable orders, rules and regulations in order to carry out the provisions of this part . . ." see § 43-1-106(8)(k), C.R.S.

As such, CDOT and the Commission are primarily responsible for ensuring compliance with GHG reductions in transportation planning.

What Relevant Regulations Currently Apply to Transportation Planning

Transportation planning is subject to both state and federal requirements. Under federal law governing transportation planning and federal-aid highways, it is declared to be in the national interest to promote transportation systems that accomplish a number of mobility objectives "while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes..." see 23 U.S.C. § 134; see also 23 U.S.C. § 135(a)(1). In the metropolitan planning process, consideration must be given to projects and strategies that will "protect and enhance the environment, promote energy conservation, improve the quality of life..." see 23 U.S.C. § 134(h)(1)(E); see also 23 C.F.R. Part 450, Subpart B (federal regulations governing statewide transportation planning and programming). The same planning objective applies to statewide transportation planning. see 23 U.S.C. § 135(d)(1)(E); see also 23 C.F.R. Part 450, Subpart C (governing metropolitan transportation planning and programming). Further, the Statewide Transportation Plan shall be developed, as appropriate, in consultation with State...local agencies responsible for...environmental protection..." see 23 U.S.C. § 135(f)(2)(D)(i).

Under conforming Colorado law, the Statewide Transportation Plan is developed by integrating and consolidating Regional Transportation Plans developed by MPOs and regional transportation planning organizations into a "comprehensive statewide transportation plan" pursuant to rules and regulations promulgated by the Commission. see § 43-1-1103(5), C.R.S. The Statewide Transportation Plan must

address a number of factors including, but not limited to, "environmental stewardship" and "reduction of greenhouse gas emissions." see § 43-1-1103(5)(h) and (j), C.R.S.

Regional Transportation Plans must account for the "expected environmental, social, and economic impacts of the recommendations in the plan, including a full range of reasonable transportation alternatives...in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." see § 43-1-1103(1)(d), C.R.S. Further, in developing Regional Transportation Plans, MPOs "[s]hall assist other agencies in developing transportation control measures for utilization in accordance with state...regulations...and shall identify and evaluate measures that show promise of supporting clean air objectives." see § 43-1-1103(1)(e), C.R.S.

Putting Section 8 of these Rules into Perspective

Section 8 establishes GHG regulatory requirements that are among the first of their kind in the U.S. However, from an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a Nonattainment Area are consistent with or "conform to" a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and the Denver Regional Council of Governments' MPOs to demonstrate conformity with each plan adoption and amendment.

However, because the transportation sector encompasses the millions of individual choices people make every day that have an impact on climate, a variety of strategies are necessary to achieve the State's climate goals. Section 8 of these Rules is one of many steps needed to achieve the totality of reduction goals for the transportation sector.

Purpose of GHG Mitigation Measures

The transportation modeling conducted for this rulemaking may demonstrate that certain projects increase GHG pollution for a variety of reasons. These reasons may include factors such as induced demand as a result of additional lane mileage attracting additional vehicular traffic, or additional traffic facilitated by access to new commercial or residential development in the absence of public transit options or bicycle/pedestrian access that provides consumers with other non-driving options.

Transportation infrastructure itself can also increase or decrease GHG and other air pollutants by virtue of factors like certain construction materials, removal or addition of tree cover that captures carbon pollution, or integration with vertical construction templates of various efficiencies that result in higher or lower levels of per capita energy use. The pollution impacts of various infrastructure projects will vary significantly depending on their specifics and must be modeled in a manner that is context-sensitive to a range of issues such as location, footprint of existing infrastructure, design, and how it fits together with transportation alternatives.

Furthermore, other aspects of transportation infrastructure can facilitate reductions in emissions and thus serve as mitigations rather than contributors to pollution. For example, the addition of transit resources in a manner that can displace Vehicle Miles Traveled can reduce emissions. Moreover, improving downtown pedestrian and bike access, particularly in areas that allow individuals to shift multiple daily trips for everything from work to dining to retail, can improve both emissions and quality of life.

There is an increasing array of proven best practices for reducing pollution and smog and improving economies and neighborhoods that can help streamline decision-making for state and local agencies developing plans and programs of projects.

[Note: The Commission proposes to repeal Section 1 of these Rules in its entirety and re-enact Section 1 of these Rules below to re-format the numbering of the administrative rules into alphabetical order.]

1.00 Definitions.

- 1.01 Accessible ensure that reasonable efforts are made that all meetings are reachable by persons from households without vehicles and that the meetings will be accessible to persons with disabilities in accordance with the Americans with Disabilities Act (ADA), and also accessible to persons with limited English proficiency. Accessible opportunities to on planning related matters include those provided on the internet and through such methods as telephone town halls.
- 1.02 Attainment Area any geographic region of the United States that meets the national primary or secondary National Ambient Air Quality Standards (NAAQS) for the pollutants as defined in the Clean Air Act (CAA) (Amendments of 1990).
- 1.03 Commission the transportation commission of Colorado created by § 43-1-106, C.R.S.
- 1.04 Corridor a transportation system that includes all modes and facilities within a described geographic area.
- 1.05 Corridor Vision a comprehensive examination of a specific transportation corridor, which includes a determination of needs and an expression of desired state of the transportation system that includes transportation modes and facilities over a planning period.
- 1.06 Department the Colorado Department of Transportation created by § 43-1-103, C.R.S.
- 1.07 Division the Division of Transportation Development within the Colorado Department of Transportation.
- 1.08 Division Director the Director of the Division of Transportation Development.
- 1.09 Fiscally Constrained the financial limitation on transportation plans and programs based on the projection of revenues as developed cooperatively with the MPOs and the rural TPRs and adopted by the Commission that are reasonably expected to be available over the long-range transportation planning period and the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP) programming periods.
- 1.10 Intergovernmental Agreement an arrangement made between two or more political subdivisions that form associations for the purpose of promoting the interest and welfare of said subdivisions.
- 1.11 Intermodal Facility- A site where goods or people are conveyed from one mode of transportation to another, such as goods from rail to truck or people from passenger vehicle to bus.
- 1.12 Land Use—the type, size, arrangement, and use of parcels of land.
- 1.13 Limited English Proficiency (LEP) individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.
- 1.14 Long-range Planning a reference to a planning period with a minimum 20-year planning horizon.
- 1.15 Maintenance Area any geographic region of the United States previously designated by the U.S. Environmental Protection Agency (EPA) as a nonattainment area pursuant to the Clean Air Act (CAA) Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended in 1990.
- 1.16 Memorandum of Agreement (MOA) a written agreement between two or more parties on an intended plan of action.

- 1.17 Metropolitan Planning Agreement (MPA) a written agreement between the MPO, the State, and the providers of public transportation serving the metropolitan planning area that describes how they will work cooperatively to meet their mutual responsibilities in carrying out the metropolitan planning process.
- 1.18 Metropolitan Planning Area a geographic area determined by agreement between the Metropolitan Planning Organization for the area and the Governor, in which the metropolitan transportation planning process is carried out pursuant to 23 U.S.C. § 134.
- 1.19 Metropolitan Planning Organization (MPO) an organization designated by agreement among the units of general purpose local governments and the Governor, charged to develop the regional transportation plans and programs in a metropolitan planning area pursuant to 23 U.S.C. § 134.
- 4.20 Mobility the ability to move people, goods, services, and information among various origins and destinations.
- 1.21 Multimodal an integrated approach to transportation that takes into account all modes of travel, such as bicycles and walking, personal mobility devices, buses, transit, rail, aircraft, and motor vehicles.
- 1.22 National Ambient Air Quality Standards (NAAQS) are those established by the U.S.

 Environmental Protection Agency for air pollutants considered harmful to public health and environment. These criteria pollutants are: carbon monoxide, lead, nitrogen dioxide, ozone, small particles, and sulfur dioxide.
- 1.23 Nonattainment Area any geographic region of the United States which has been designated by the EPA under section 107 of the CAA for any pollutants for which an NAAQS exists.
- 1.24 Non-metropolitan Area a rural geographic area outside a designated metropolitan planning area.
- 1.25 Plan Integration Plan integration is a comprehensive evaluation of the statewide transportation system that includes all modes, an identification of needs and priorities, and key information from other related CDOT plans.
- 1.26 Planning Partners local and tribal governments, the rural Transportation Planning Regions and MPOs.
- 1.27 Project Priority Programming Process ("4P") the process by which CDOT adheres to 23 U.S.C. § 135 and 23 C.F.R. Part 450 when developing and amending the statewide transportation improvement program (STIP).
- 1.28 Regional Planning Commission (RPC) a planning body formed under the provisions of § 30-28-105, C.R.S., and designated under these Rules for the purpose of transportation planning within a rural Transportation Planning Region.
- 1.29 Regional Transportation Plan (RTP) a long-range plan designed to address the future transportation needs for a Transportation Planning Region including, but not limited to, anticipated funding, priorities, and implementation plans, pursuant to, but not limited to, § 43-1-1103, C.R.S. and 23 C.F.R. Part 450. All rural and urban Transportation Planning Regions in the state produce RTPs.
- 1.30 State Transportation System refers to all state-owned, operated, and maintained transportation facilities in Colorado, including, but not limited to, interstate highways, other highways, and aviation, bicycle and pedestrian, transit, and rail facilities.

- 1.31 Statewide Transportation Advisory Committee (STAC) the committee created by § 43-1-1104, C.R.S., comprising one representative from each Transportation Planning Region and one representative from each tribal government to review and comment on Regional Transportation Plans, amendments, and updates, and to advise both the Department and the Commission on the needs of the transportation system in Colorado.
- 1.32 Statewide Transportation Improvement Program (STIP) a staged, fiscally constrained, multiyear, statewide, multimodal program of transportation projects which is consistent with the statewide transportation plan and planning processes, with metropolitan planning area plans, Transportation Improvement Programs and processes, and which is developed pursuant to 23 U.S.C. § 135.
- 1.33 Statewide Transportation Plan the long-range, comprehensive, multimodal statewide transportation plan covering a period of no less than 20 years from time of adoption, developed through the statewide transportation planning process described in these Rules and 23 U.S.C. § 135, and adopted by the Commission pursuant to § 43-1-1103, C.R.S.
- 1.34 System Continuity includes, but is not limited to, appropriate intermodal connections, integration with state modal plans, and coordination with neighboring Regional Transportation Plans, and, to the extent practicable, other neighboring states' transportation plans.
- 1.35 Traditionally Underserved refers to groups such as seniors, persons with disabilities, low-income households, minorities, and student populations, which may face difficulties accessing transportation systems, employment, services, and other amenities.
- 1.36 Transit and Rail Advisory Committee (TRAC) an advisory committee created specifically to advise the Executive Director, the Commission, and the Division of Transit and Rail on transit and rail-related activities.
- 1.37 Transportation Commonality the basis on which Transportation Planning Regions are established including, but not limited to: Transportation Commission Districts, the Department's Engineering Regions, travelsheds, watersheds, geographic unity, existing intergovernmental agreements, and socioeconomic unity.
- 1.38 Transportation Improvement Program (TIP) a staged, fiscally constrained, multi-year, multimodal program of transportation projects developed and adopted by MPOs, and approved by the Governor, which is consistent with an MPO's RTP and which is developed pursuant to 23 U.S.C. § 134.
- 1.39 Transportation Mode a particular form of travel including, but not limited to, bus, motor vehicle, rail, transit, aircraft, bicycle, pedestrian travel, or personal mobility devices.
- 1.40 Transportation Planning and Programming Process all collaborative planning-related activities including the development of regional and statewide transportation plans, the Department's Project Priority Programming Process, and development of the Transportation Improvement Programs (TIPs) and Statewide Transportation Improvement Program (STIP).
- 1.41 Transportation Planning Region (TPR) a geographically designated area of the state, defined by section 2.00 of these Rules in consideration of the criteria for transportation commonality, and for which a regional transportation plan is developed pursuant to the provisions of § 43-1-1102 and 1103, C.R.S. and 23 U.S.C. § 134. The term TPR is inclusive of these types: non-MPO Transportation Planning Regions, MPO Transportation Planning Regions, and Transportation Planning Regions with both MPO and non-MPO areas.

- 1.42 Transportation Systems Planning provides the basis for identifying current and future deficiencies on the state highway system and outlines strategies to address those deficiencies and make improvements to meet Department goals.
- 1.43 Travelshed the region or area generally served by a major transportation facility, system, or corridor.
- 1.44 Tribal Transportation Improvement Program (TTIP) a multi-year fiscally constrained list of proposed transportation projects developed by a tribe from the tribal priority list or tribal long-range transportation plan, and which is developed pursuant to 25 C.F.R. Part 170. The TTIP is incorporated into the STIP without modification.
- 1.45 Urbanized Area an area with a population of 50,000 or more designated by the Bureau of the Census.
- 1.46 Watershed a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.

[Note: The Commission proposes to add nineteen (19) new definitions. New proposed defined terms include: Applicable Planning Document, Approved Air Quality Model, Baseline, Carbon Dioxide Equivalent, Congestion Mitigation and Air Quality, Disproportionately Impacted Communities, Four-Year Prioritized Plan, Greenhouse Gas, Greenhouse Mitigation Measures, Greenhouse Gas Reduction Levels, Mitigation Action Plan, MPO Model, Multimodal Transportation and Mitigation Options Fund, Regionally Significant Project, State Interagency Consultation Team, Statewide Travel Model, Surface Transportation Block Grant, Vehicle Miles Traveled, and 10-Year Plan. Only minor non-substantive changes, such as correcting grammar errors or capitalizing defined terms, were made to the existing forty-six (46) defined terms.]

1.00 Definitions.

- 1.01 Accessible ensure that reasonable efforts are made that all meetings are reachable by persons from households without vehicles and that the meetings will be accessible to persons with disabilities in accordance with the Americans with Disabilities Act (ADA), and also accessible to persons with Limited English Proficiency. Accessible opportunities to comment on planning related matters include those provided on the internet and through such methods as telephone town halls.
- Applicable Planning Document refers to MPO Fiscally Constrained RTPs,TIPs for MPOs in NAAs, CDOT's 10-Year Plan and Four-Year Prioritized Plan in non-MPO areas, and amendments to the MPO RTPs and CDOT's 10-Year Plan and Four-Year Prioritized Plan in non-MPO areas that include the addition of Regionally Significant Projects.
- 1.03 Approved Air Quality Model the most recent Environmental Protection Agency issued model that quantifies GHG emissions from transportation.
- 1.04 Attainment Area any geographic region of the United States that meets the national primary or secondary National Ambient Air Quality Standards (NAAQS) for the pollutants as defined in the Clean Air Act (CAA) (Amendments of 1990).
- 1.05 Baseline estimates of GHG emissions for each of the MPOs, and for the non-MPO areas, prepared using the MPO Models or the Statewide Travel Model. Estimates must include GHG emissions resulting from the existing transportation network and implementation of the most recently adopted RTP for all MPOs and the 10-Year Plan in non-MPO areas as of the effective date of these Rules.

- 1.06 Carbon Dioxide Equivalent (CO2e) a metric measure used to compare the emissions from various GHG based upon the 100-year global warming potential (GWP). CO2e is multiplying the mass amount of emissions (metric tons per year), for each GHG constituent by that gas's GWP, and summing the resultant values to determine CO2e (metric tons per year). This calculation allows comparison of different greenhouse gases and their relative impact on the environment over different time periods.
- 1.07 Commission the Transportation Commission of Colorado created by § 43-1-106, C.R.S.
- 1.08 Congestion Mitigation and Air Quality (CMAQ) a federally mandated program established in 23

 U.S.C § 149 to improve air quality in Nonattainment and Maintenance Areas for ozone, carbon monoxide, and particulate matter. References related to this program include any successor programs as established by the federal government.
- 1.09 Corridor a transportation system that includes all modes and facilities within a described geographic area.
- 1.10 Corridor Vision a comprehensive examination of a specific transportation Corridor, which includes a determination of needs and an expression of desired state of the transportation system that includes Transportation Modes and facilities over a planning period.
- 1.11 Department or CDOT the Colorado Department of Transportation created by § 43-1-103, C.R.S.
- 1.12 Disproportionately Impacted Communities defined in § 24-38.5-302(3), C.R.S. as a community that is in a census block group, as determined in accordance with the most recent United States Decennial Census where the proportion of households that are low income is greater than forty percent (40%), the proportion of households that identify as minority is greater than forty percent (40%), or the proportion of households that are housing cost-burdened is greater than forty percent (40%).
- 1.13 Division the Division of Transportation Development within CDOT.
- 1.14 Division Director the Director of the Division of Transportation Development.
- 1.15 Fiscally Constrained the financial limitation on transportation plans and programs based on the projection of revenues as developed cooperatively with the MPOs and the rural TPRs and adopted by the Commission that are reasonably expected to be available over the long-range transportation planning period and the TIP and STIP programming periods.
- 1.16 Four-Year Prioritized Plan a four-year subset of the 10-Year Plan consisting of projects prioritized for near-term delivery and partial or full funding.
- 1.17 Greenhouse Gas (GHG) for purposes of these Rules, GHG is defined as the primary transportation greenhouse gases: carbon dioxide, methane, and nitrous oxide.
- 1.18 Greenhouse Gas (GHG) Reduction Level the amount of the GHG expressed as CO2e reduced from the projected Baseline that CDOT and MPOs must attain through transportation planning.
- 1.19 Greenhouse Gas (GHG) Mitigation Measures non-Regionally Significant Project strategies implemented by CDOT and MPOs that reduce transportation GHG pollution and help meet the GHG Reduction Levels.
- 1.20 Intergovernmental Agreement an arrangement made between two or more political subdivisions that form associations for the purpose of promoting the interest and welfare of said subdivisions.

- 1.21 Intermodal Facility a site where goods or people are conveyed from one mode of transportation to another, such as goods from rail to truck or people from passenger vehicle to bus.
- 1.22 Land Use the type, size, arrangement, and use of parcels of land.
- 1.23 <u>Limited English Proficiency individuals who do not speak English as their primary language and</u> who have a limited ability to read, speak, write, or understand English.
- 1.24 Long-Range Planning a reference to a planning period with a minimum 20-year planning horizon.
- 1.25 Maintenance Area any geographic region of the United States previously designated by the U.S. Environmental Protection Agency (EPA) as a Nonattainment Area pursuant to the Clean Air Act (CAA) Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under § 175A of the CAA, as amended in 1990.
- 1.26 Memorandum of Agreement (MOA) a written agreement between two or more parties on an intended plan of action.
- 1.27 Metropolitan Planning Agreement (MPA) a written agreement between the MPO, the State, and the providers of public transportation serving the Metropolitan Planning Area that describes how they will work cooperatively to meet their mutual responsibilities in carrying out the metropolitan planning process.
- 1.28 Metropolitan Planning Area a geographic area determined by agreement between the MPO for the area and the Governor, in which the metropolitan transportation planning process is carried out pursuant to 23 U.S.C. § 134.
- 1.29 Metropolitan Planning Organization (MPO) an organization designated by agreement among the units of general purpose local governments and the Governor, charged to develop the RTPs and programs in a Metropolitan Planning Area pursuant to 23 U.S.C. § 134.
- 1.30 Mitigation Action Plan an element of the GHG Transportation Report that specifies which GHG Mitigation Measures shall be implemented that help achieve the GHG Reduction Levels.
- 1.31 Mobility the ability to move people, goods, services, and information among various origins and destinations.
- MPO Models one (1) or more of the computer-based models maintained and operated by the MPOs which depict the MPO areas' transportation systems (e.g., roads, transit, etc.) and development patterns (i.e., number and location of households and jobs) for a defined year (i.e., past, present, or forecast) and produce estimates of roadway VMT, delays, operating speeds, transit ridership, and other characteristics of transportation system use.
- Multimodal an integrated approach to transportation that takes into account all modes of travel, such as bicycles and walking, personal mobility devices, buses, transit, rail, aircraft, and motor vehicles.
- 1.34 Multimodal Transportation and Mitigation Options Fund (MMOF) a program created in the State
 Treasury pursuant to § 43-4-1003, C.R.S. which funds bicycle, pedestrian, transit and other
 Multimodal projects as defined in § 43-4-1002(5), C.R.S. and GHG Mitigation projects as defined in § 43-4-1002(4.5), C.R.S.
- 1.35 National Ambient Air Quality Standards (NAAQS) are those established by the U.S. Environmental Protection Agency for air pollutants considered harmful to public health and

- environment. These criteria pollutants are: carbon monoxide, lead, nitrogen dioxide, ozone, small particles, and sulfur dioxide.
- 1.36 Nonattainment Area any geographic region of the United States which has been designated by the EPA under section 107 of the CAA for any pollutants for which a NAAQS exists.
- 1.37 Non-Metropolitan Area a rural geographic area outside a designated Metropolitan Planning Area.
- 1.38 Plan Integration a comprehensive evaluation of the statewide transportation system that includes all modes, an identification of needs and priorities, and key information from other related CDOT plans.
- 1.39 Planning Partners local and tribal governments, the rural TPRs and MPOs.
- 1.40 Project Priority Programming Process the process by which CDOT adheres to 23 U.S.C. § 135 and 23 C.F.R. Part 450 when developing and amending the STIP.
- 1.41 Regional Planning Commission (RPC) a planning body formed under the provisions of § 30-28-105, C.R.S., and designated under these Rules for the purpose of transportation planning within a rural TPR.
- 1.42 Regionally Significant Project a transportation project that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network or state transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel. If the MPOs have received approval from the EPA to use a different definition of regionally significant project as defined in 40 C.F.R. § 93.101, the State Interagency Consultation Team will accept the modified definition. Necessary specificity for MPO Models or the Statewide Travel Model will be approved by the State Interagency Consultation Team.
- 1.43 Regional Transportation Plan (RTP) a long-range plan designed to address the future transportation needs for a TPR including, but not limited to, Fiscally Constrained or anticipated funding, priorities, and implementation plans, pursuant to, but not limited to, § 43-1-1103, C.R.S. and 23 C.F.R. Part 450. All rural and urban TPRs in the state produce RTPs.
- 1.44 State Interagency Consultation Team consists of the Division Director or the Division Director's designee, the Colorado Department of Public Health and Environment (CDPHE) Director of Air Pollution Control Division or the Director's designee, and the Director of each MPO or their designee.
- 1.45 State Transportation System refers to all state-owned, operated, and maintained transportation facilities in Colorado, including, but not limited to, interstate highways, other highways, and aviation, bicycle and pedestrian, transit, and rail facilities.
- 1.46 Statewide Transportation Advisory Committee (STAC) the committee created by § 43-1-1104,

 C.R.S., comprising one representative from each TPR and one representative from each tribal government to review and comment on RTPs, amendments, and updates, and to advise both the Department and the Commission on the needs of the transportation system in Colorado.
- 1.47 Statewide Transportation Improvement Program (STIP) a Fiscally Constrained, multi-year, statewide, Multimodal program of transportation projects which is consistent with the Statewide

- <u>Transportation Plan and planning processes, with Metropolitan Planning Area plans,</u>
 <u>Transportation Improvement Programs and processes, and which is developed pursuant to 23 U.S.C. § 135.</u>
- 1.48 Statewide Travel Model the computer-based model maintained and operated by CDOT which depicts the state's transportation system (roads, transit, etc.) and development scale and pattern (number and location of households, number and location of firms/jobs) for a selected year (past, present, or forecast) and produces estimates of roadway VMT and speed, transit, ridership, and other characteristics of transportation system use.
- 1.49 Statewide Transportation Plan the long-range, comprehensive, Multimodal statewide transportation plan covering a period of no less than 20 years from time of adoption, developed through the statewide transportation planning process described in these Rules and 23 U.S.C. § 135, and adopted by the Commission pursuant to § 43-1-1103, C.R.S.
- Surface Transportation Block Grant (STBG) a flexible federal funding source established under 23 U.S.C. § 133 for state and local transportation needs. Funds are expended in the areas of the State based on population. References related to this program include any successor programs established by the federal government.
- 1.51 System Continuity includes, but is not limited to, appropriate intermodal connections, integration with state modal plans, and coordination with neighboring RTPs, and, to the extent practicable, other neighboring states' transportation plans.
- 1.52 Traditionally Underserved refers to groups such as seniors, persons with disabilities, low-income households, minorities, and student populations, which may face difficulties accessing transportation systems, employment, services, and other amenities.
- 1.53 Transit and Rail Advisory Committee (TRAC) an advisory committee created specifically to advise the Executive Director, the Commission, and the Division of Transit and Rail on transit and rail-related activities.
- 1.54 Transportation Commonality the basis on which TPRs are established including, but not limited to: Transportation Commission Districts, the Department's Engineering Regions, Travelsheds, Watersheds, geographic unity, existing Intergovernmental Agreements, and socioeconomic unity.
- 1.55 Transportation Improvement Program (TIP) a staged, Fiscally Constrained, multi-year,

 Multimodal program of transportation projects developed and adopted by MPOs, and approved
 by the Governor, which is consistent with an MPO's RTP and which is developed pursuant to 23
 U.S.C. § 134.
- 1.56 Transportation Mode a particular form of travel including, but not limited to, bus, motor vehicle, rail, transit, aircraft, bicycle, pedestrian travel, or personal mobility devices.
- 1.57 Transportation Planning and Programming Process all collaborative planning-related activities including the development of regional and Statewide Transportation Plans, the Department's Project Priority Programming Process, and development of the TIPs and STIP.
- 1.58 Transportation Planning Region (TPR) a geographically designated area of the state, defined by section 2.00 of these Rules in consideration of the criteria for Transportation Commonality, and for which a regional transportation plan is developed pursuant to the provisions of § 43-1-1102 and 1103, C.R.S. and 23 U.S.C. § 134. The term TPR is inclusive of these types: non-MPO TPRs, MPO TPRs, and TPRs with both MPO and non-MPO areas.

- 1.59 Transportation Systems Planning provides the basis for identifying current and future deficiencies on the state highway system and outlines strategies to address those deficiencies and make improvements to meet Department goals.
- 1.60 Travelshed the region or area generally served by a major transportation facility, system, or Corridor.
- 1.61 Tribal Transportation Improvement Program (TTIP) a multi-year Fiscally Constrained list of proposed transportation projects developed by a tribe from the tribal priority list or tribal long-range transportation plan, and which is developed pursuant to 25 C.F.R. Part 170. The TTIP is incorporated into the STIP without modification.
- 1.62 Urbanized Area an area with a population of 50,000 or more designated by the Bureau of the Census.
- 1.63 Vehicle Miles Traveled (VMT) the traffic volume of a roadway segment or system of roadway segments multiplied by the length of the roadway segment or system.
- 1.64 Watershed a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.
- 1.65 10-Year Plan a vision for Colorado's transportation system that includes a specific list of projects categorized across priority areas as identified in the Statewide Transportation Plan.
- 2.00 Transportation Planning Regions (TPR).
- 2.01 Transportation Planning Region Boundaries. <u>Transportation Planning Region TPR</u>s are geographically designated areas of the state with similar transportation needs that are determined by considering transportation commonalities. Boundaries are hereby established as follows:
 - 2.01.1 The Pikes Peak Area Transportation Planning Region TPR comprises the Pikes Peak Area Council of Governments' metropolitan area within El Paso and Teller counties.
 - 2.01.2 The Greater Denver Transportation Planning RegionTPR, which includes the Denver Regional Council of Governments' planning area, comprises the counties of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, Jefferson, and parts of Weld.
 - 2.01.3 The North Front Range Transportation Planning Region TPR comprises the North Front Range Transportation and Air Quality Planning Council's metropolitan area within Larimer and Weld counties.
 - 2.01.4 The Pueblo Area Transportation Planning RegionTPR comprises Pueblo County, including the Pueblo Area Council of Governments' metropolitan area.
 - 2.01.5 The Grand Valley Transportation Planning Region TPR comprises Mesa County, including the Grand Valley Metropolitan Planning Organization's metropolitan area.
 - 2.01.6 The Eastern Transportation Planning Region TPR comprises Cheyenne, Elbert, Kit Carson, Lincoln, Logan, Phillips, Sedgwick, Washington, and Yuma counties.
 - 2.01.7 The Southeast Transportation Planning Region TPR comprises Baca, Bent, Crowley, Kiowa, Otero, and Prowers counties.

- 2.01.8 The San Luis Valley Transportation Planning Region TPR comprises Alamosa, Chaffee, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties.
- 2.01.9 The Gunnison Valley <u>Transportation Planning RegionTPR</u> comprises Delta, Gunnison, Hinsdale, Montrose, Ouray, and San Miguel counties.
- 2.01.10 The Southwest Transportation Planning RegionTPR comprises Archuleta, Dolores, La Plata, Montezuma, and San Juan counties, including the Ute Mountain Ute and Southern Ute Indian Reservations.
- 2.01.11 The Intermountain Transportation Planning RegionTPR comprises Eagle, Garfield, Lake, Pitkin, and Summit counties.
- 2.01.12 The Northwest Transportation Planning Region TPR comprises Grand, Jackson, Moffat, Rio Blanco, and Routt counties.
- 2.01.13 The Upper Front Range <u>Transportation Planning Region TPR</u> comprises Morgan County, and the parts of Larimer and Weld counties, that are outside both the North Front Range and the Greater Denver (metropolitan) TPRs.
- 2.01.14 The Central Front Range Transportation Planning RegionTPR comprises Custer, El Paso, Fremont, Park, and Teller counties, excluding the Pikes Peak Area Council of Governments' metropolitan area.
- 2.01.15 The South Central Transportation Planning Region TPR comprises Huerfano, and Las Animas Counties.
- 2.02 Boundary Revision Process.
 - 2.02.1 TPR boundaries, excluding any MPO-related boundaries, will be reviewed by the Commission at the beginning of each regional and statewide transportation planning process. The Department will notify counties, municipalities, MPOs, Indian tribal governments, and RPCs for the TPRs of the boundary review revision requests. MPO boundary review shall be conducted pursuant to 23 U.S.C. § 134 and 23 C.F.R. Part 450 Subpart B and any changes shall be provided to the Department to update the Rules. All boundary revision requests shall be sent to the Division Director, and shall include:
 - 2.02.1.1 A geographical description of the proposed boundary change.
 - 2.02.1.2 A statement of justification for the change considering transportation commonalities.
 - 2.02.1.3 A copy of the resolution stating the concurrence of the affected Regional Planning CommissionRPC.
 - 2.02.1.4 The name, title, mailing address, telephone number, fax number and electronic mail address (if available) of the contact person for the requesting party or parties.
 - 2.02.2 The Department will assess and STAC shall review and comment (as set forth in these Rules) on all nonNon-metropolitan Metropolitan area Area TPR boundary revision requests based on transportation commonalities and make a recommendation to the Commission concerning such requests. The Department will notify the Commission of MPO boundary changes. The Commission may initiate a rule-making proceeding under the State-Colorado Administrative Procedure Act, § 24-4-103, C.R.S. to consider a

- boundary revision request. Requests received for a MPO or non-metropolitan TPR boundary revision outside of the regularly scheduled boundary review cycle must include the requirements identified above.
- 2.02.3 In the event that the Commission approves a change to the boundary of a TPR that has a Regional Planning CommissionRPC, the RPC in each affected TPR shall notify the Department of any changes to the intergovernmental Intergovernmental agreement Agreement governing the RPC as specified in these Rules.
- 2.03 Transportation Planning Coordination with MPOs.
 - 2.03.1 The Department and the MPOs shall coordinate activities related to the development of Regional Transportation PlanRTPs, the Statewide Transportation Plan, TIPs, and the STIP in conformance with 23 U.S.C. § 134 and 135 and § 43-1-1101 and § 43-1-1103, C.R.S. The Department shall work with the MPOs to resolve issues arising during the planning process.
- 2.04 Transportation Planning Coordination with Non-MPO RPCs.
 - 2.04.1 The Department and RPCs shall work together in developing Regional Transportation PlanRTPs and in planning future transportation activities. The Department shall consult with all RPCs on development of the Statewide Transportation Plan; incorporation of RTPs into the Statewide Transportation Plan; and the inclusion of projects into the STIP that are consistent with the RTPs. In addition, the Department shall work with the RPCs to resolve issues arising during the planning process.
- 2.05 Transportation Planning Coordination among RPCs.
 - 2.05.1 If transportation improvements cross TPR boundaries or significantly impact another TPR, the RPC shall consult with all the affected RPCs involved when developing the regional transportation planRTP. In general, RPC planning officials shall work with all planning Planning partners Partners affected by transportation activities when planning future transportation activities.
- 2.06 Transportation Planning Coordination with the Southern Ute and the Ute Mountain Ute Tribal Governments.
 - 2.06.1 Regional transportation planning within the Southwest TPR shall be coordinated with the transportation planning activities of the Southern Ute and the Ute Mountain Ute tribal governments. The long-range transportation plans for the tribal areas shall be integrated in the Statewide Transportation Plan and the Regional Transportation PlanRTP for this TPR. The TTIP is incorporated into the STIP without modification.
- 3.00 Statewide Transportation Advisory Committee (STAC).
- 3.01 Duties of the Statewide Transportation Advisory Committee (STAC). Pursuant to § 43-1-1104 C.R.S. the duties of the STAC shall be to meet as necessary and provide advice to both the Department and the Commission on the needs of the transportation system in Colorado including, but not limited to: budgets, transportation improvement programs TIPs of the metropolitan planning organizations MPOs, the Statewide Transportation Improvement Program STIP, transportation plans, and state transportation policies.

The STAC shall review and provide to both the Department and the Commission comments on:

- 3.01.1 All Regional Transportation PlanRTPs, amendments, and updates as described in these Rules.
- 3.01.2 Transportation related communication and/or conflicts which arise between RPCs or between the Department and a RPC.
- 3.01.3 The integration and consolidation of RTPs into the Statewide Transportation Plan.
- 3.01.4 Colorado's mobility Mobility requirements to move people, goods, services, and information by furnishing regional perspectives on transportation problems requiring interregional and/or statewide solutions.
- 3.01.5 Improvements to modal choice, linkages between and among modes, and transportation system balance and system System continuity.
- 3.01.6 Proposed TPR boundary revisions.
- 3.02 Notification of Membership
 - 3.02.1 Each RPC and tribal government shall select its representative to the STAC pursuant to § 43-1-1104(1), C.R.S. The Ute Mountain Ute Tribal Council and the Southern Ute Indian Tribal Council each appoint one representative to the STAC. Each TPR and tribal government is also entitled to name an alternative representative who would serve as a proxy in the event their designated representative is unable to attend a STAC meeting and would be included by the Department in distributions of all STAC correspondence and notifications. The Division Director shall be notified in writing of the name, title, mailing address, telephone number, fax number and electronic mail address (if available) of the STAC representative and alternative representative from each TPR and tribal government within thirty (30) days of selection.
- 3.03 Administration of Statewide Transportation Advisory Committee STAC
 - 3.03.1 STAC recommendations on Regional and Statewide Transportation Plans, amendments, and updates shall be documented in the STAC meeting minutes, and will be considered by the Department and Commission throughout the statewide transportation planning process.
 - 3.03.2 The STAC shall establish procedures to govern its affairs in the performance of its advisory capacity, including, but not limited to, the appointment of a chairperson and the length of the chairperson's term, meeting times, and locations.
 - 3.03.3 The Division Director will provide support to the STAC, including, but not limited to:
 - 3.03.3.1 Notification of STAC members and alternates of meeting dates.
 - 3.03.3.2 Preparation and distribution of STAC meeting agendas, supporting materials, and minutes.
 - 3.03.3.3 Allocation of Department staff support for STAC-related activities.
- 4.00 Development of Regional and Statewide Transportation Plans.
- 4.01 Regional Planning Commission RPCs, MPOs, and the Department shall comply with all applicable provisions of 23 U.S.C. § 134 and § 135, 23 C.F.R. Part 450, and § 43-1-1103, C.R.S. and all

4.02.5.1

applicable provisions of Commission policies and guidance documents in development of regional and statewide transportation plans, respectively.

4.02 Public Participation

- 4.02.1 The Department, in coordination with the RPCs of the rural TPRs, shall provide early and continuous opportunity for public participation in the transportation planning process. The process shall be proactive and provide timely information, adequate public notice, reasonable public access, and opportunities for public review and comment at key decision points in the process. The objectives of public participation in the transportation planning process include: providing a mechanism for public perspectives, needs, and ideas to be considered in the planning process; developing the public's understanding of the problems and opportunities facing the transportation system; demonstrating explicit consideration and response to public input through a variety of tools and techniques; and developing consensus on plans. The Department shall develop a documented public participation process pursuant to 23 C.F.R. Part 450.
- 4.02.2 Statewide Plans and Programs. Pursuant to 23 C.F.R. Part 450 Subpart B, the Department is responsible, in cooperation with the RPCs and MPOs, for carrying out public participation for developing, amending, and updating the statewide—Statewide transportation—Transportation planPlan, the Statewide Transportation Improvement Program (STIP), and other statewide transportation planning activities.
- 4.02.3 MPO Plans and Programs. Pursuant to 23 C.F.R. Part 450 Subpart C, the MPOs are responsible for carrying out public participation for the development of regional transportation planning activities for their respective metropolitan Metropolitan planning areas Areas. Public participation activities carried out in a metropolitan area in response to metropolitan planning requirements shall by agreement of the Department and the MPO, satisfy the requirements of this subsection.
- 4.02.4 Non-MPO TPR Plans and Programs. Regional Planning CommissionRPCs for non-MPO TPRs are responsible for public participation related to regional planning activities in that TPR, in cooperation with the Department. Specific areas of cooperation shall be determined by agreement between the Regional Planning CommissionRPC and the Department.
- 4.02.5 Public Participation Activities. Public participation activities at both the rural TPR and statewide level shall include, at a minimum:
 - Establishing and maintaining for the geographic area of responsibility a list of all known parties interested in transportation planning including, but not limited to: elected officials; municipal and county planning staffs; affected public agencies; local, state, and federal agencies eligible for federal and state transportation funds; local representatives of public transportation agency employees and users; freight shippers and providers of freight transportation services; public and private transportation providers; representatives of users of transit, bicycling and pedestrian, aviation, and train facilities; private industry; environmental and other interest groups; Indian tribal governments and the U.S. Secretary of the Interior when tribal lands are involved; and representatives of persons or groups that may be underserved by existing transportation systems, such as minority, low-income, seniors, persons with disabilities, and those with limited Limited English proficiency Proficiency; and members of the general public expressing such interest in the transportation planning process.

- 4.02.5.2 Providing reasonable notice and opportunity to comment through mailing lists and other various communication methods on upcoming transportation planning-related activities and meetings.
- 4.02.5.3 Utilizing reasonably available internet or traditional media opportunities, including minority and diverse media, to provide timely notices of planning-related activities and meetings to members of the public, including LEP-Limited English Proficiency individuals, and others who may require reasonable accommodations. Methods that will be used to the maximum extent practicable for public participation could include, but not be limited to, use of the internet; social media, news media, such as newspapers, radio, or television, mailings and notices, including electronic mail and online newsletters.
- 4.02.5.4 Seeking out those persons or groups traditionally underserved Underserved by existing transportation systems including, but not limited to, seniors, persons with disabilities, minority groups, low-income, and those with limited English proficiency Proficiency, for the purposes of exchanging information, increasing their involvement, and considering their transportation needs in the transportation planning process. Pursuant to § 43-1-601, C.R.S., the Department shall prepare a statewide survey identifying the transportation needs of seniors and of persons with disabilities.
- 4.02.5.5 Consulting, as appropriate, with Regional Planning CommissionRPCs, and federal, state, local, and tribal agencies responsible for land use management, natural resources, environmental protection, conservation and historic preservation concerning the development of long-range transportation plans.
- 4.02.5.6 Providing reasonable public access to, and appropriate opportunities for public review and comment on criteria, standards, and other planning-related information. Reasonable public access includes, but is not limited to, <u>LEP-Limited English Proficiency</u> services and access to ADA-compliant facilities, as well as to the internet.
- 4.02.5.7 Where feasible, scheduling the development of regional and statewide plans so that the release of the draft plans may be coordinated to provide for the opportunity for joint public outreach.
- 4.02.5.8 Documentation of Responses to Significant Issues. Regional Planning Commissions RPCs and the Department shall respond in writing to all significant issues raised during the review and comment period on transportation plans, and make these responses available to the public.
- 4.02.5.9 Review of the Public Involvement Process. All interested parties and the Department shall periodically review the effectiveness of the Department's public involvement process to ensure that the process provides full and open access to all members of the public. When necessary, the process will be revised and allow time for public review and comment per 23 C.F.R. Part 450.
- 4.03 Transportation Systems Planning. Regional Planning Commission RPCs, and the Department, shall use an integrated multimodal Multimodal transportation-Transportation systems Systems planning approach in developing and updating the long-range Regional Transportation PlansRTPs and the long-range Statewide Transportation Plan for a minimum 20-year forecasting

period. Regional Planning Commission RPCs shall have flexibility in the methods selected for transportation Transportation systems Systems planning Planning based on the complexity of transportation problems and available resources within the TPR. The Department will provide guidance and assistance to the Regional Planning Commission RPCs regarding the selection of appropriate methods.

- 4.03.1 Transportation systems Systems planning by Regional Planning CommissionRPCs and the Department shall consider the results of any related studies that have been completed. Regional Planning CommissionRPCs and the Department may also identify any corridor(s) or sub-area(s) where an environmental study or assessment may need to be performed in the future.
- 4.03.2 Transportation systems Systems planning Planning by Regional Planning Commission RPCs shall consider corridor vision needs and desired state of the transportation system including existing and future land use and infrastructure, major activity centers such as industrial, commercial and recreation areas, economic development, environmental protection, and modal choices.
- 4.03.3 Transportation systems Systems planning Planning by Regional Planning CommissionRPCs shall include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility Mobility of people goods, and services.
- 4.03.4 Transportation <u>systems Systems planning Planning</u> by the Department should include capital, operations, maintenance and management strategies, investments, procedures, and other measures to ensure the preservation and most efficient and effective use of the <u>state State transportation Transportation systemSystem</u>.
- 4.03.5 Transportation systems—Systems Pplanning by the Department shall consider and integrate all modes into the Statewide Transportation Plan and include coordination with Department modal plans and modal committees, such as the Transit and Rail Advisory Committee (TRAC).
- 4.03.6 Transportation Systems Planning by the Department shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals described in 23 U.S.C. § 150 (FAST Act, P.L. 114-94). Performance targets that the Department establishes to address the performance measures described in 23 U.S.C. § 150, where applicable, are to be used to track progress towards attainment of critical outcomes for the state. The state shall consider the performance measures and targets when developing policies, programs, and investment priorities reflected in the Statewide Transportation Plan and STIP.
- 4.04 Regional Transportation Plans (RTP). Long-range regional transportation plans RTPs shall be developed, in accordance with federal (23 U.S.C. § 134 and § 135) and state (§ 43-1-1103 and § 43-1-1104, C.R.S.) law and implementing regulations. Department selection of performance targets that address the performance measures shall be coordinated with the relevant MPOs to ensure consistency, to the maximum extent practicable.
 - 4.04.1 Content of Regional Transportation PlanRTPs. Each RTP shall include, at a minimum, the following elements:
 - 4.04.1.1 Transportation system facility and service requirements within the MPO TPR over a minimum 20-year planning period necessary to meet expected demand, and the anticipated capital, maintenance and operating cost for these facilities and services.

	4.04.1.2	State and federal transportation system planning factors to be considered by Regional Planning CommissionRPCs and the Department during their respective transportation Transportation systems planning shall include, at a minimum, the factors described in § 43-1-1103 (5), C.R.S., and in 23 U.S.C. § 134 and § 135.			
	4.04.1.3	Identification and discussion of potential environmental mitigation measures, corridor Studies, or corridor Studies, or corridor Studies, including a discussion of impacts to minority and low-income communities.			
	4.04.1.4	A discussion of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.			
	4.04.1.5	For rural RTPs, the integrated performance-based multimodal Multimodal transportation plan based on revenues reasonably expected to be available over the minimum 20-year planning period. For metropolitan RTPs, a fiscally Fiscally constrained financial plan.			
	4.04.1.6	Identification of reasonably expected financial resources developed cooperatively among the Department, MPOs, and rural TPRs for long-range-Range-planning-Planning-purposes , and results expected to be achieved based on regional priorities.			
	4.04.1.7	Documentation of the public notification and public participation process pursuant to these Rules.			
	4.04.1.8	A resolution of adoption by the responsible Metropolitan Planning Organization MPO or the Regional Planning Commission RPC.			
4.04.2	Products and reviews				
	4.04.2.1	Draft Plan. Transportation Planning RegionTPRs shall provide a draft of the RTP to the Department through the Division-of-Transportation Development.			
	4.04.2.2	Draft Plan Review. Upon receipt of the draft RTPs, the Department will initiate its review and schedule the STAC review (pursuant to these Rules). The Department will provide its comments and STAC comments to the Transportation-Planning Region_TPR within a minimum of 30 days of receiving the draft RTP. Regional transportation-plan_RTP in metropolitan areas completed pursuant to the schedule identified in 23 C.F.R. § 450.322 shall be subject to the provisions of this section prior to being submitted to the Department for consideration as an amendment to the Transportation-plan_Plan .			
	4.04.2.3	Final Plan. Transportation Planning Region TPRs shall provide the final RTP to the Department through the Division of Transportation Development.			
	4.04.2.4	Final Plan Review. Upon receipt of the final RTP, the Department will initiate its review and schedule the STAC review (pursuant to these			

Rules) of the final RTPs to determine if the plans incorporate the elements required by the Rules. If the Department determines that a final RTP is not complete, including if the final RTP does not incorporate the elements required by these Rules, then the Department will not integrate that RTP into the statewide plan until the Transportation Planning RegionTPR has sufficiently revised that RTP, as determined by the Department with advice from the STAC. The Department will provide its comments and STAC comments to the Transportation Planning RegionTPR within a minimum of 30 days of receiving the final RTP. Transportation Planning RegionTPRs shall submit any RTP revisions based on comments from the Department and STAC review within 30 days of the Department's provision of such comments. Regional transportation plansRTPs in metropolitan areas completed pursuant to the schedule identified in 23 C.F.R. § 450.322 shall be subject to the provisions of this section prior to being submitted to the Department for consideration as an amendment to the statewide Statewide transportation-Transportation planPlan.

- 4.05 Maintenance and Nonattainment Areas. Each RTP, or RTP amendment, shall include a section that:
 - 4.05.1 Identifies any area within the TPR that is designated as a maintenance Maintenance or nonattainment Nonattainment area Area.
 - 4.05.2 Addresses, in either a qualitative or quantitative manner, whether transportation related emissions associated with the pollutant of concern in the TPR are expected to increase over the lengtong-range-Range planning-Planning period and, if so, what effect that increase might have in causing a maintenance-Area for an NAAQS pollutant to become a nonattainment-Nonattainment-Nonattainment-area-Area to exceed its emission budget in the approved State Implementation Plan.
 - 4.05.3 If transportation related emissions associated with the pollutant are expected to increase over the lengtong-range-Range-planning-Planning period, identifies which programs or measures are included in the RTP to decrease the likelihood of that area becoming a nonattainment Nonattainment area Area for the pollutant of concern.
- 4.06 Statewide Transportation Plan. The Regional Transportation PlansRTPs submitted by the Regional Planning CommissionsRPCs shall, along with direction provided through Commission policies and guidance, form the basis for developing and amending the Statewide Transportation Plan. The Statewide Transportation Plan shall cover a minimum 20-year planning period at the time of adoption and shall guide the development and implementation of a performance-based multimodal transportation system for the State.
 - 4.06.1 The Statewide Transportation Plan shall:
 - 4.06.1.1 Integrate and consolidate the RTPs and the Department's systems planning, pursuant to these Rules, into a long-range 20-year multimodal Multimodal transportation plan that presents a clear, concise path for future transportation in Colorado.
 - 4.06.1.2 Include the long-term transportation concerns of the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe in the development of the Statewide Transportation Plan.

- 4.06.1.3 Coordinate with other state and federal agencies responsible for land use management, natural resources, environmental protection. conservation, and historic preservation. 4.06.1.4 Include a discussion of potential environmental mitigation activities and potential areas to carry out these activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan developed in consultation with federal, state, and tribal wildlife, land management and regulatory agencies. 4.06.1.5 Include a comparison of transportation plans to state and tribal conservation plans or maps and to inventories of natural or historical resources. 4.06.1.6 Provide for overall multimodal Multimodal transportation system management on a statewide basis. 4.06.1.7 The Statewide Transportation Plan shall be coordinated with metropolitan transportation plans pursuant to 23 C.F.R. Part 450, § 43-1-1103 and § 43-1-1105, C.R.S. Department selection of performance targets shall be coordinated with the MPOs to ensure consistency, to the maximum extent practicable. 4.06.1.8 Include an analysis of how the Statewide Transportation Plan is aligned with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. 4.06.1.9 Includes the 10-Year Plan as an appendix.
- 4.06.2 Content of the Statewide Transportation Plan. At a minimum, the Statewide Transportation Plan shall include priorities as identified in the RTPs, as identified in these Rules and pursuant to federal planning laws and regulations. The Statewide Transportation Plan shall be submitted to the Colorado Transportation Commission for its consideration and approval.
- 4.06.3 Review and Adoption of the Statewide Transportation Plan.
 - 4.06.3.1 The Department will submit a draft Statewide Transportation Plan to the Commission, the STAC, and all interested parties for review and comment. The review and comment period will be conducted for a minimum of 30 days. The Statewide Transportation Plan and appendices The publication will be available in physical form upon request at public facilities, such as at the Department headquarters and region offices, state depository libraries, county offices, TPR offices, Colorado Division offices of the Federal Highway Administration and Federal Transit Administration, and made available on the internet.
 - 4.06.3.2 The Department will submit the final Statewide Transportation Plan to the Colorado Transportation Commission for adoption.

5.00 Updates to Regional and Statewide Transportation Plans.

5.01 Plan Update Process. The updates of Regional Transportation Plan RTP and the Statewide Transportation Plan shall be completed on a periodic basis through the same process governing development of these plans pursuant to these Rules. The update cycle shall comply with federal

- and state law and be determined in consultation with the Transportation Commission, the Department, the STAC and the MPOs so that the respective update cycles will coincide.
- 5.02 Notice by Department of Plan Update Cycle. The Department will notify Regional Planning Commission RPC and the MPOs of the initiation of each plan update cycle, and the schedule for completion.
- 6.00 Amendments to the Regional and Statewide Transportation Plans.
- 6.01 Amendment Process
 - 6.01.1 The process to consider amendments to Regional Transportation PlanRTP s shall be carried out by rural RPCs and the MPOs. The amendment review process for Regional Transportation PlanRTP s shall include an evaluation, review, and approval by the respective RPC or MPO.
 - 6.01.2 The process to consider amendments to the Statewide Transportation Plan shall be carried out by the Department, either in considering a proposed amendment to the Statewide Transportation Plan from a requesting RPC or MPO or on its own initiative.
 - 6.01.3 The process to consider amendments to the 10-Year Plan shall be carried out by CDOT in coordination with the rural RPCs and the MPOs.
- 7.00 Transportation Improvement Programs (TIPs) and Statewide Transportation Improvement Program (STIP).
- 7.01 TIP development shall occur in accordance with 23 C.F.R. Part 450, Subpart C. The Department will develop the STIP in accordance with 23 C.F.R. Part 450, Subpart B.
- 7.02 The Department will work with its <u>planning_Planning_partners_Partners_to</u> coordinate a schedule for development and adoption of TIPs and the STIP.
- 7.03 A TIP for an MPO that is in a non-attainment or Maintenance Area must first receive a conformity determination by FHWA and FTA before inclusion in the STIP pursuant to 23 C.F.R. Part 450.
- 7.04 MPO TIPs and Colorado's STIP must be <u>fiscally_Fiscally_eonstrainedConstrained</u>. Under 23 C.F.R. Part 450, each project or project phase included in an MPO TIP shall be consistent with an approved metropolitan RTP, and each project or project phase included in the STIP shall be consistent with the long-range <u>statewide_Statewide_transportation_Transportation_plan_Plan.</u> MPO TIPs shall be included in the STIP either by reference or without change upon approval by the MPOs and the Governor.

8.00 GHG Emission Requirements

- 8.01 Establishment of Regional GHG Transportation Planning Reduction Levels
 - 8.01.1 The GHG emission reduction levels within Table 1 apply to MPOs and the Non-MPO area within the state of Colorado as of the effective date of these Rules. Baseline values are specific to each MPO and CDOT area and represent estimates of GHG emissions resulting from the existing transportation network and implementation of the most recently adopted RTP for all MPOs and the 10-Year Plan in non-MPO areas as of the effective date of these Rules. Table 2 reflects the difference in Baseline levels from year to year assuming a rapid growth in electric vehicles across the State (940,000 light duty electric vehicles in 2030, 3.38 million in 2040 and a total of 97% of all light duty vehicles in 2050).

<u>Values in both tables include estimates of population growth as provided by the state demographer.</u>

8.01.2 Regional GHG Transportation Planning Reduction Levels

Table 1: GHG Transportation Planning Reduction Levels in MMT of CO2e

Regional Areas	2025 Baseline Projections (MMT)	2025 Reduction Level (MMT)	2030 Baseline Projections (MMT)	2030 Reduction Level (MMT)	2040 Baseline Projections (MMT)	2040 Reduction Level (MMT)	2050 Baseline Projections (MMT)	2050 Reduction Level (MMT)
DRCOG	<u>14.9</u>	0.27	<u>11.8</u>	0.82	<u>10.9</u>	0.63	<u>12.8</u>	0.37
<u>NFRMPO</u>	<u>2.3</u>	0.04	<u>1.8</u>	0.12	<u>1.9</u>	0.11	<u>2.2</u>	0.07
PPACG	<u>2.7</u>	N/A	2.2	<u>0.15</u>	2.0	<u>0.12</u>	<u>2.3</u>	0.07
<u>GVMPO</u>	0.38	N/A	0.30	0.02	<u>0.30</u>	0.02	<u>0.36</u>	<u>0.01</u>
PACOG	<u>0.50</u>	<u>N/A</u>	<u>0.40</u>	0.03	<u>0.30</u>	0.02	0.4	0.01
CDOT/Non-MPO	<u>6.7</u>	0.12	<u>5.3</u>	0.37	<u>5.2</u>	0.30	<u>6.1</u>	<u>0.18</u>
TOTAL	<u>27.4</u>	<u>0.5</u>	<u>21.8</u>	<u>1.5</u>	<u>20.6</u>	<u>1.2</u>	<u>24.2</u>	0.7

8.01.3 Baseline Emissions Due to Projected Number of Light Duty Electric Vehicles

Table 2: Baseline Emissions Due to Projected Number of Light Duty Electric Vehicles

	2025 Projections	2030 Projections	2040 Projections	2050 Projections	
	(MMT)	(MMT)	(MMT)	(MMT)	
TOTAL	<u>27.0</u>	20.0	<u>14.0</u>	<u>8.9</u>	

8.02 Process for Determining Compliance

- 8.02.1 Analysis Requirements When Adopting or Amending an Applicable Planning Document Each MPO and CDOT shall conduct a GHG emissions analysis using MPO Models or the
 Statewide Travel Model, and the Approved Air Quality Model, to estimate total CO2e
 emissions. Such analysis shall include the existing transportation network and
 implementation of Regionally Significant Projects. The emissions analysis must estimate
 total CO2e emissions in million metric tons (MMT) for each year in Table 1 and compare
 these emissions to the Baseline specified in Table 1. This provision shall not apply to
 MPO TIP amendments.
- 8.02.2 Agreements on Modeling Assumptions and Execution of Modeling Requirements. Prior to the adoption of the next RTP for any MPO, CDOT, CDPHE, and each MPO shall enter into an Intergovernmental Agreement which outlines CDOT, CDPHE, and MPO

- responsibilities for development and execution of MPO Models or the Statewide Travel Model, and Approved Air Quality Model.
- 8.02.3 By April 1, 2022, CDOT shall establish an ongoing administrative process, through a public process, for selecting, measuring, confirming, and verifying GHG Mitigation

 Measures, so that CDOT and MPOs can incorporate one or more into each of their plans in order to reach the Regional GHG Planning Reduction Levels in Table 1. Such a process shall include, but not be limited to, determining the relative impacts of GHG Mitigation Measures, measuring and prioritizing localized impacts to communities and Disproportionately Impacted Communities in particular. The mitigation credit awarded to a specific solution shall consider both aggregate and community impact.
- 8.02.4 Timing for Determining Compliance
 - 8.02.4.1 By October 1, 2022, CDOT shall update their 10-Year Plan and DRCOG and NFRMPO shall update their RTPs pursuant to § 43-4-1103, C.R.S. and meet the reduction levels in Table 1 or the requirements pursuant to § 43-4-1103, C.R.S and restrictions on funds.
 - 8.02.4.2 After October 1, 2022
 - 8.02.4.2.1 CDOT must for each Applicable Planning Document, meet either the reduction levels within Table 1 for Non-MPO areas or the requirements as set forth in Rule 8.05.
 - 8.02.4.2.2 MPOs must meet either the corresponding reduction levels
 within Table 1 for each Applicable Planning Document, or the
 relevant MPO and CDOT each must meet the requirements as
 set forth in Rule 8.05.
- 8.02.5 Demonstrating Compliance. At least thirty (30) days prior to adoption of any Applicable
 Planning Document, CDOT for Non-MPO areas and the MPOs for their areas shall
 provide to the Commission a GHG Transportation Report containing the following
 information:
 - 8.02.5.1 GHG emissions analysis demonstrating that the Applicable Planning

 Document is in compliance with the GHG Reduction Levels in MMT of

 CO2e for each compliance year in Table 1 or that the requirements in

 Rules 8.02.5.1.1 or 8.02.5.1.2., as applicable, have been met.
 - 8.02.5.1.1 In non-MPO areas or for MPOs that are not in receipt of federal suballocations pursuant to the CMAQ and/or STBG programs, the Department utilizes 10-Year Plan funds anticipated to be expended on Regionally Significant Projects in those areas on projects that reduce GHG emissions.
 - 8.02.5.1.2 In MPO areas that are in receipt of federal suballocations
 pursuant to the CMAQ and/or STBG programs, the MPO utilizes
 those funds on projects or approved GHG Mitigation Measures
 that reduce GHG emissions, and CDOT utilizes 10-Year Plan
 funds anticipated to be expended on Regionally Significant
 Projects in that MPO area, on projects that reduce GHG
 emissions.

8.02.6

	8.02.5.2	Identification and documentation of the MPO Model or the Statewide Travel Model and the Approved Air Quality Model used to determine GHG emissions in MMT of CO2e.
	8.02.5.3	A Mitigation Action Plan that identifies GHG Mitigation Measures needed to meet the reduction levels within Table 1 shall include:
	8.02.5.	The anticipated start and completion date of each measure.
	8.02.5.	An estimate, where feasible, of the GHG emissions reductions in MMT of CO2e achieved by any GHG Mitigation Measures.
	<u>8.02.5.</u>	Quantification of specific co-benefits including reduction of co- pollutants (PM2.5, NOx, etc.) as well as travel impacts (changes to VMT, pedestrian/bike use, transit ridership numbers, etc. as applicable).
	8.02.5.	Description of benefits to Disproportionately Impacted Communities.
<u>S</u>	report to the Co	ompliance- Annually by April 1, CDOT and MPOs must provide a status mmission on an approved form with the following items for each GHG ure identified in their most recent GHG Transportation Report:
	8.02.6.1	The implementation timeline;
	8.02.6.2	The current status;
	8.02.6.3	For measures that are in progress or completed, quantification of the benefit or impact of such measures; and

For measures that are delayed, cancelled, or substituted, an explanation

- 8.03 GHG Mitigation Measures. When assessing compliance with the GHG Reduction Levels, CDOT and MPOs shall have the opportunity to utilize approved GHG Mitigation Measures as set forth in Rules 8.02.3 and 8.02.5.3 to offset emissions and demonstrate progress toward compliance.

 Illustrative examples of GHG Mitigation Measures include, but are not limited to:
 - 8.0.3.1 The addition of transit resources in a manner that can displace VMT.

of why that decision was made.

- 8.03.2 Improving pedestrian and bike access, particularly in areas that allow individuals to reduce multiple daily trips.
- 8.03.3 Encouraging local adoption of more effective forms of vertical development and zoning plans that integrate mixed use in a way that links and rewards transportation project investments with the city making these changes.
- 8.03.4 Improving first-and-final mile access to transit stops and stations that make transit resources safer and more usable by consumers.
- 8.03.5 Improving the safety and efficiency of crosswalks for pedestrians, bicyclists, and other non-motorized vehicles, including to advance compliance with the ADA.

- 8.03.6 Adopting locally driven changes to parking policies and physical configuration that encourage more walking and transit trips.
- 8.03.7 Incorporating medium/heavy duty vehicle electric charging and hydrogen refueling infrastructure -- as well as upgrading commensurate grid improvements -- into the design of key freight routes to accelerate truck electrification.
- 8.03.8 Establishing policies for clean construction that result in scalable improvements as a result of factors like lower emission materials, recycling of materials, and lower truck emissions during construction.
- 8.03.9 Adoption of transportation demand management practices that reduce VMT.
- 8.04 Air Pollution Control Division (APCD) Confirmation and Verification
 - 8.04.1 At least forty-five (45) days prior to adoption of any Applicable Planning Document,

 CDOT for Non-MPO areas and the MPOs for their areas shall provide to APCD for review
 and verification of the technical data contained in the draft GHG Transportation Report
 required per Rule 8.02.5. If APCD has not provided written verification within thirty (30)
 days, the document shall be considered acceptable.
 - 8.04.2 At least thirty (30) days prior to adoption or amendment of policies per Rule 8.02.3,

 CDOT shall provide APCD the opportunity to review and comment. If APCD has not provided written comment within forty-five (45) days, the document shall be considered acceptable.
- 8.05 Enforcement. The Commission shall review all GHG Transportation Reports to determine whether the applicable reduction targets in Table 1 have been met and the sufficiency of any GHG Mitigation Measures needed for compliance.
 - 8.05.1 If the Commission determines the requirements of Rule 8.02.5 have been met, the Commission shall, by resolution, accept the GHG Transportation Report.
 - 8.05.2 If the Commission determines, by resolution, the requirements of Rule 8.02.5 have not been met, the Commission shall restrict the use of funds pursuant to Rules 8.02.5.1.1 or 8.02.5.1.2, as applicable, to projects and approved GHG Mitigation Measures that reduce GHG. Prior to the enforcement of such restriction, an MPO, CDOT or a TPR in a non-MPO area, may, within thirty (30) days of Commission action, issue one or both of the following opportunities to seek a waiver or to ask for reconsideration accompanied by an opportunity to submit additional information:

8.05.2.1		Request a waiver from the Commission imposing restrictions on specific projects not expected to reduce GHG emissions. The Commission may waive the restrictions on specific projects on the following basis:			
8.05.2.1.1 —		The GHG Transportation Report reflected significant effort and priority placed, in total, on projects and GHG Mitigation Measures that reduce GHG emissions; and			
8.05.2.1.2		In no case shall a waiver be granted if such waiver results in a substantial increase in GHG emissions when compared to the required reduction levels in this Rule.			

- 8.05.2.2 Request reconsideration of a non-compliance determination by the

 Commission and provide written explanation of how the requirements of

 Rule 8.02.5 have been met.
- 8.05.2.3 The Commission shall act, by resolution, on a waiver or reconsideration request within thirty (30) days of receipt of the waiver or reconsideration request or at the next regularly scheduled Commission Meeting, whichever is later. If no action is taken within this time period, the waiver or reconsideration request shall be deemed to be denied.
- 8.05.3 Notwithstanding any other provision of this Rule, CDOT, DRCOG and NFRMPO must meet the requirements of § 43-4-1103, C.R.S.

- 8.06 Reporting. Beginning July 1, 2025, and every 5 years thereafter, the Executive Director on behalf of CDOT shall prepare and make public a comprehensive report on the statewide GHG reduction accomplishments.
- 9.00 Materials Incorporated by Reference
- 9.01 The Rules are intended to be consistent with and not be a replacement for the federal transportation planning requirements in Rule 9.01.1 and federal funding programs in Rules 9.01.2 and 9.01.3, which are incorporated into the Rules by this reference, and do not include any later amendments.
 - 9.01.1 Fixing America's Surface Transportation Act or the "FAST Act"), 23 U.S.C. §§ 134, 135 and 150, Pub. L. No. 114-94, signed into law on December 4, 2015, and its accompanying regulations, where applicable, contained in 23 C.F.R.Part 450, including Subparts A, B and C in effect as of November 29, 2017, and 25 C.F.R. § 170 in effect as of November 7, 2016.
 - 9.01.2 Congestion Mitigation and Air Quality Improvement (CMAQ) Program, 23 U.S.C. § 149, in effect as of March 23, 2018.
 - 9.01.3 Surface Transportation Block Grant (STBG) Program, 23 U.S.C. § 133, in effect as of December 4, 2015.
- 9.02 Also incorporated by reference are the following federal laws and regulations and do not include any later amendments:
 - 9.02.1 Americans with Disabilities Act (ADA), 42 U.S.C. § 12101, et. seq., in effect as of January 1, 2009.
 - 9.02.2 Clean Air Act (CCA), 42 U.S.C. §§ 7407-7410, and 7505a, in effect as of November 15, 1990.
 - 9.02.2 <u>Transportation Conformity Regulations, 40 C.F.R. § 93.101, in effect as November</u> 24,1993.
- 9.03 Also incorporated by reference are the following documents, standards, and models and do not include any later amendments:
 - 9.03.1 Greenhouse Gas Pollution Reduction Roadmap by the Colorado Energy Office and released on January 14, 2021.

- 9.03.2 MOVES3 Motor Vehicle Emissions Model for SIPs and Transportation Conformity released by the U.S. Environmental Protection Agency, in effect as of January 7, 2021.
- 9.04 All referenced laws and regulations are available for copying or public inspection during regular business hours from the Office of Policy and Government Relations, Colorado Department of Transportation, 2829 W. Howard Pl., Denver, Colorado 80204.
- Copies of the referenced federal laws and regulations, planning documents, and models. 9.05
 - 9.05.1 Copies of the referenced United States Code (U.S.C.) may be obtained from the following address:

Office of the Law Revision Counsel U.S. House of Representatives H2-308 Ford House Office Building Washington, DC 20515 (202) 226-2411 https://uscode.house.gov/browse.xhtml

9.05.2 Copies of the referenced Code of Federal Regulations (C.F.R.) may be obtained from the following address:

U.S. Government Publishing Office 732 North Capitol State, N.W. Washington, DC 20401 (866) 512-1800 https://www.govinfo.gov/

9.0.5.3 Copies of the Greenhouse Gas Pollution Reduction Roadmap (Roadmap) may be obtained from the following address:

Colorado Energy Office 1600 Broadway, Suite 1960 Denver, CO 80202 (303) 866-2100 energyoffice.colorado.gov

9.0.5.4 To download MOVES3 released by the U.S. Environmental Protection Agency may be obtained from the following address:

U.S. Environmental Protection Agency The Office of Transportation and Air Quality 1200 Pennsylvania Ave, N.W. Washington, DC 20460 (734) 214-4574 or (202) 566-0495

mobile@epa.gov

https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves

10.00 Declaratory Orders

The Commission may, at their discretion, entertain petitions for declaratory orders pursuant to § 24-4-105(11), C.R.S.

Editor's Notes

History

Entire rule eff. 12/15/2012. Section SB&P eff. 05/30/2013. Entire rule eff. 09/14/2018.

Annotations

Rules 1.22, 1.25, 1.42, 2.03.1 - 2.03.1.4, 4.01, 4.02.1 - 4.02.3, 4.02.5.9, 4.04.2.2, 4.04.2.4, 4.06.1.7, 6.01.2, 7.01, 7.03 - 7.04 (adopted 10/18/2012) were not extended by Senate Bill 13-079 and therefore expired 05/15/2013.

NEWS FROM:



www.codot.gov www.facebook.com/coloradodot @coloradodot

Tim Hoover
Communications Integration Lead
303.619.2674 | timothy.hoover@state.co.us

Aug. 16, 2021

Colorado Developing New Pollution Reduction Planning Standards to Address Climate Change and Air Quality

DENVER - The Colorado Transportation Commission today proposed bold new transportation pollution reduction planning standards that will reduce pollution and greenhouse gas emissions from the transportation sector, improve air quality, reduce smog and provide more travel options for Coloradans.

This proposal will shape how state and local governments will make plans for future projects to make sure Coloradans have more travel options and that the infrastructure we build supports cleaner air and helps us fight climate change.

The <u>proposed rule</u> focuses on transportation planning — the process for how CDOT and the state's largest metropolitan regions select future transportation projects. Long before a transportation project is built, it is first identified in plans developed with local public input. These plans often include a decade or more of projects and thus represent a short- and medium-term vision for coming changes. CDOT's current 10-year plan <u>can be found here</u>.

The draft standard would require CDOT and the state's five Metropolitan Planning Organizations to determine the total pollution and greenhouse gas emission increase or decrease expected from future transportation projects and take steps to ensure that greenhouse gas emission levels do not exceed set reduction amounts. This approach will also streamline the planning and delivery of innovations that have proven successful in improving quality of life and air quality, like adding sidewalks, improving downtowns for active transportation with "complete streets," improving local and intercity transit and first-and-last-mile connectivity to transit facilities, and adding bike-shares. This policy recognizes that the transportation projects we build have an impact on how Coloradans travel and encourages choices for travelers across the state.

"Between the recent smoke-filled air and the extreme weather that caused devastating mudslides in Glenwood Canyon, Colorado has received powerful reminders of the importance of taking bold climate action as it continues to threaten our economy and Colorado way of life," said Gov. Jared Polis. "Transportation is our largest source of air pollutants, and this standard will help ensure that Coloradans have every possible ability to make a difference."

The proposed Greenhouse Gas Pollution Reduction Planning Standard builds on the state's efforts to rapidly expand electric vehicles by also addressing the transportation infrastructure itself to better support clean transportation. This two-pronged strategy delivers on a commitment in the <u>Greenhouse Gas Roadmap</u> and implements a key provision of the state's landmark transportation legislation, SB-260, which requires a number of steps to embed air quality and equity analysis and goals into transportation planning.

"What we build matters. It matters for safety, for our economy, for resiliency and for our ability to reduce air pollution and improve the quality of places where Coloradans across the state live and thrive," said Shoshana Lew, executive director of the Colorado Department of Transportation. "From smoke-filled air to a confluence of fire and 500-year flooding in Glenwood Canyon, we are reminded that we have no time to waste in fighting climate change in the transportation sector, and this policy will be an important step. This draft standard wouldn't be possible without the hundreds of hours of input we've received over the last few months, and I look forward to hearing from all stakeholders on this draft."

CDOT has been reaching out to Coloradans across the state for their feedback for months and has worked continuously with groups including metropolitan planning organization staff and board members, environmental groups, contractors, equity organizations that represent disproportionately impacted communities, local governments, members of the Transportation Commission and other key stakeholders. The department convened a Greenhouse Gas Advisory Group consisting of transportation stakeholders from across the state to inform this standard and has held 11 public regional meetings and five joint state listening sessions with the Colorado Department of Public Health and Environment and has held or presented at over 60 smaller meetings with stakeholders.

"The Transportation Commission is pleased to take this important step today to lead Colorado's transition to a more sustainable transportation system, which will promote efficiency, equity and economic vitality while preserving our Colorado way of life," said Transportation Commission Chair Kathy Hall.

Publication of the draft standard begins a 60-day public review period. During this time, CDOT will host public hearings in Grand Junction, Glenwood Springs, Fort Collins, the Denver metropolitan area, Colorado Springs, Durango and Limon. The hearings will have a virtual option so that any interested stakeholders can participate without attending in person. You may also submit a written comment during the 60-day comment period from Aug. 13 to Oct. 15. Sign up to become a stakeholder and receive updates here.

The Transportation Commission is expected to consider the proposed standard in November, and if adopted at that time, the standard will take effect in January of next year.

For more information, read CDOT's fact sheet on the greenhouse gas standard process.

ADDITIONAL OUOTES FROM ORGANIZATIONS AND COMMUNITY LEADERS

"As the Mayor of Westminster, and a long-time Colorado resident, I am excited to see the Colorado Department of Transportation move forward with a new rulemaking to reduce Greenhouse Gas (GHG) Emissions from the transportation sector. The outcome of the rulemaking should help address the largest source of GHG pollution in Colorado by encouraging a future transportation system that improves transit, biking and walking options which could make a fundamental change to our transportation system. With the release of the rulemaking, CDOT begins the 60-day statewide public outreach and comment period to shape the final recommendations of the rule. The City of Westminster looks forward to being one of many voices helping to shape the final GHG rule, committing CDOT and others to the steps necessary for dramatic reductions in climate pollution."

- Mayor Anita Seitz, City of Westminster

"While we believe the draft rule has several issues that need to be addressed during the Transportation Commission rulemaking process, CDOT staff did a yeoman's job of conducting an inclusive process with a diverse group of stakeholders to develop a draft to start the conversation."

- Andrew Gunning, Executive Director, Pikes Peak Area Council of Governments (PPACG)

"The need to take urgent action to reduce greenhouse gas emissions from the transportation sector could not be clearer. Just last week, the Northern Front Range broke records for the number of ozone action alerts issued in a single year. Transportation is the single largest emitter of greenhouse gases in Colorado and CDOT's proposed greenhouse gas reduction rule is a necessary step in the right direction. We look forward to reviewing the proposed rule closely to ensure it protects the health of our residents and reduces climate impacts." - Claire Levy, Boulder County Commissioner

"Local governments and local communities across the state appreciate CDOT's proposal. From Salida to Superior and Gilpin County to Glenwood Springs, the impacts of climate change have become intensely and dangerously real. We look forward to this rulemaking process and are hopeful that the Transportation Commission will adopt a forward-leaning, enforceable plan that substantially and urgently reduces climate pollution across Colorado."

- Jacob Smith, Executive Director, Colorado Communities for Climate Action, a coalition of 38 counties, cities and towns across the state advocating for stronger statewide climate policy.

"It isn't possible to tackle an issue like this without hearing from different voices. CDOT not only took the time to listen to a range of viewpoints in crafting this rule, they reached out and made sure we were at the table."

- Phillips County Commissioner Terry Hofmeister

"Glenwood Springs is the poster child community for climate change. We have had three major fires over the last 25 years, the latest being the Grizzly Creek Fire last year. These fires have destroyed major infrastructure, homes, and cost lives. We are also seeing other effects of climate change with the recent 500-year rain event two weeks ago that shut down I-70 and paralyzed the region's transportation network. While we have switched our electrical grid over to 100% renewable energy, changed building codes and fortified our domestic water, we need partners throughout the state, country, and planet to join us in addressing this crisis at its source. Doing anything less is simply treating the symptoms instead of the disease. That's why I'm excited to see CDOT take this step to reduce greenhouse gas emissions from transportation. I encourage residents across the western slope to engage with CDOT and provide input on this important work."

- Glenwood Springs Mayor Jonathan Godes

"Recently, Denver residents experienced first-hand the direct impact of a changing climate as wildfire smoke clouded our skyline and created some of the most polluted air in the world at the time. Now, more than ever, we need bold policies like those CDOT is proposing with the Greenhouse Gas Pollution Reduction Planning rule. Denver applauds CDOT for taking these steps and is committed to continuing to do our part to create a sustainable transportation system."

- Grace Rink, Executive Director, City and County of Denver Office of Climate Action, Sustainability and Resiliency

###

Greenhouse Gas Pollution Reduction for Transportation **Planning Proposed Standards**

OVERVIEW

CDOT is proposing a new standard to reduce greenhouse gas emissions from the transportation sector, improve air quality and reduce smog, and provide more travel options. The standard would require CDOT and the state's five Metropolitan Planning Organizations (MPOs) to determine the total GHG emissions expected from future transportation projects and take steps to ensure that greenhouse gas (GHG) emission levels do not exceed set GHG reduction amounts. This proposed standard recognizes that the projects we build have an impact on how Coloradans travel and will help bring about a transportation system that provides more choices for travelers across the state.

PROPOSED RULE SCHEDULE

Engagement and Rule Concept Development Winter-Summer 2021

Early outreach on purpose of rule and overall framework. Input rulemaking sought through dozens of development and rule is meetings with a broad range of stakeholders.

Formal Processes Begin

Summer 2021 Transportation **Commission authorizes** noticed with Secretary

Public Rulemaking Hearings

Fall 2021: 60-Day Review Period Eight virtual and inperson hearings held across the state with opportunity for public testimony and submission of written comment.

Adopt Rules

Fall 2021

The Transportation **Commission considers** the proposed rule for adoption.

Rules Take Effect and Implementation

Winter 2022

If adopted by the Transportation Commission, the rule becomes effective with implementation.

BENEFITS AND BACKGROUND

of State.

The GHG Pollution Reduction Planning Standard is one of several transportation strategies identified in the state's Greenhouse Gas (GHG) Pollution Reduction Roadmap and is a key requirement established in the 2021 state transportation funding bill (SB260). The standard builds on the state's effort to rapidly deploy electric vehicles by encouraging a future transportation system that improves transit, biking and walking options. The focus is on large transportation projects that make a fundamental change to our transportation system. The basic repair and maintenance of our roads and bridges is not impacted.

The benefits made possible by this standard are meaningful; equivalent to burning 169 million fewer gallons of gasoline or taking approximately 300,000 cars off the road for a year. These benefits directly improve air quality by also reducing the harmful pollutants that cause ozone and smog.

GET INVOLVED

CDOT will hold eight public hearings across the state to provide opportunities for public comment on the standard. These meetings will have options to participate either in-person or virtually and offer Spanish interpretation. Comments also are accepted in writing via dot_rules@state.co.us. We welcome your feedback.

Visit our website for more information on public meetings and the rulemaking: https://www.codot.gov/programs/environmental/greenhouse-gas

Questions? Contact: CDOT_transportationghg@state.co.us



10B

Rules - CDOT, DOT_ <dot_rules@state.co.us>

Rulemaking Update regarding Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions

1 message

CDOT Rules <cdot_rules@state.co.us>

Wed, Sep 1, 2021 at 9:32 AM

To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>



Stakeholders,

Please note that we have changed the dates/times of hearings at multiple locations to comply with the requirement to complete the cost-benefit analysis at least ten (10) days before the first public hearing. We have also added a new 9th hearing in Weld County. For reference, we have posted the Miscellaneous Rulemaking Public Notice, the updated Notice of Proposed Rulemaking, and the updated Proposed Statement of Basis & Purpose on CDOT's Proposed Rules_and Public Hearing Dates website.

We are still offering all of the meetings in a hybrid format: you may attend a hearing in person, or call in through Zoom to give testimony. You do not need to attend the specific hearing location in your area - you can attend or call in to any of the hearings.

If you are attending virtually, you will need to register through the registration links on <u>CDOT's Proposed Rules and Public Hearing Dates website</u> so we can provide instructions to you on how to join, listen, and provide testimony if you wish.

We have also posted a Frequently Asked Questions document on <u>CDOT's Greenhouse Gas Emissions Reduction</u>
<u>Opportunities website.</u>

Thank you, Natalie

Natalie Lutz

Rules, Policies, and Procedures Administrator



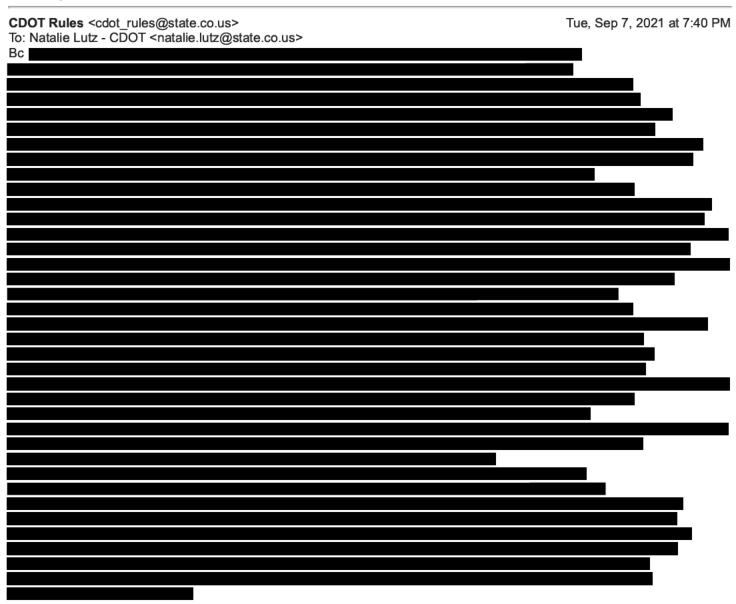
P: 303.757.9441
2829 W. Howard Place, Denver, CO 80204
dot_rules@state.co.us | www.codot.gov | www.cotrip.org



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Cost Benefit Analysis for Proposed Pollution Reduction Planning Standards

1 message



Hello Stakeholder,

The Colorado Department of Transportation (CDOT) has completed the cost-benefit analysis for the proposed pollution reduction planning standards. I have attached a copy of the cost-benefit analysis for your reference. You can also find it on CDOT's Proposed Rules and Public Hearing Dates website.

Thank you,

Natalie

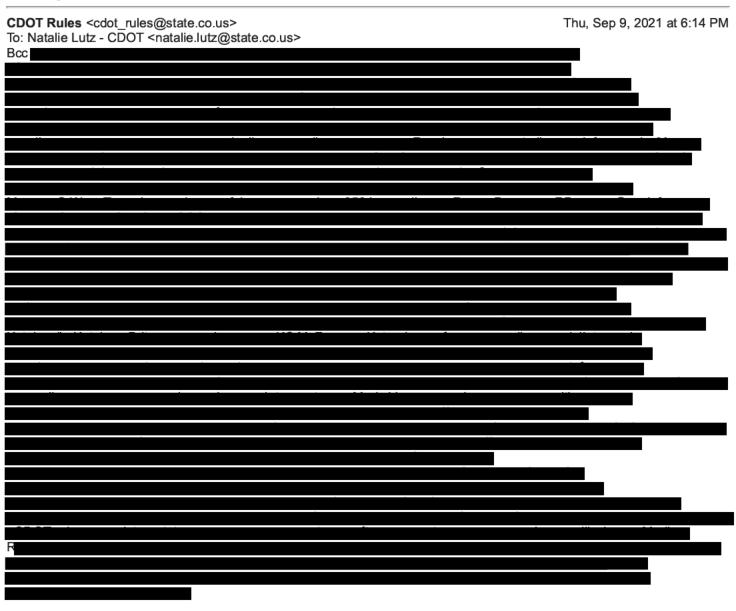
CDOT Cost Benefit Analysis for GHG Rule Sept 2021.pdf 332K



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Regulatory Analysis for Proposed Pollution Reduction Planning Standards/ Análisis Regulatorio para Normas de Planificación de Reducción de la Contaminación Propuestos

1 message



Hello Stakeholder,

The Colorado Department of Transportation (CDOT) has completed the regulatory analysis for the proposed pollution reduction planning standards. I have attached a copy of the regulatory analysis for your reference. You can also find it on <u>CDOT's Proposed Rules and Public Hearing Dates website</u>.

Thank you,	
Natalie	

9/13/21, 8:30 PM

Hola Accionista,

El Departamento de Transporte de Colorado (CDOT) ha finalizado el análisis regulatorio para las normas de planificación de reducción de la contaminación propuestos. Adjunto una copia del análisis regulatorio para su referencia. También usted puede encontrarlo en la página de Internet de Reglas Propuestas y Fechas de Audiencias Públicas del CDOT.

Gracias.

Natalie



Regulatory Analysis For Pollution Reduction Standard.pdf



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Durango Hearing Rescheduled for 10/7/21

1 message

CDOT Rules <cdot_rules@state.co.us>
To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

Wed, Sep 1, 2021 at 2:07 PM

Hello Stakeholder,

Thank you for registering to attend the Durango Hearing regarding the proposed pollution reduction planning standards for transportation virtually. This email serves as notification that the Colorado Department of Transportation has rescheduled the Durango Hearing for Thursday, October 7, 2021, at 2-5 p.m.

We hope that you are still able to join us on October 7, 2021, in which case, we have you marked to attend the hearing virtually. If you are <u>not</u> able to join us on October 7, please notify us so we can update our registration records.

You can find a list of all the hearings on CDOT's website.

We apologize for any inconvenience.

Thank you,

Natalie

Natalie Lutz Rules, Policies, and Procedures Administrator



P: 303.757.9441
2829 W. Howard Place, Denver, CO 80204
dot_rules@state.co.us | www.codot.gov | www.cotrip.org



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Hearing Time Change for Grand Junction Hearing on 9/17/21

1 message

CDOT Rules <cdot_rules@state.co.us>

Wed, Sep 1, 2021 at 2:12 PM

To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

Hello Stakeholder,

Thank you for registering to attend the **Grand Junction Hearing on September 17**, 2021, regarding the proposed pollution reduction planning standards for transportation virtually. This email serves as notification that the Colorado Department of Transportation has adjusted the start and end times for this hearing. The hearing will now start at 2 p.m. and end at 5 p.m.

We hope that you are still able to join us, in which case, we have you marked to attend the hearing virtually. If you are <u>not</u> able to join us, please notify us so we can update our registration records.

You can find a list of all the hearings on CDOT's website.

We apologize for any inconvenience.

Thank you,

Natalie



Hearing End Time Change for Colorado Springs Hearing on 9/24/21

1 message

CDOT Rules <cdot_rules@state.co.us>
To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

Wed, Sep 1, 2021 at 2:15 PM

Hello Stakeholder,

Thank you for registering to attend the Colorado Springs Hearing on September 24, 2021, regarding the proposed pollution reduction planning standards for transportation virtually. This email serves as notification that the Colorado Department of Transportation has adjusted the end time for this hearing. The hearing will now end at 6 p.m.

We hope that you are still able to join us, in which case, we have you marked to attend the hearing virtually. If you are not able to join us, please notify us so we can update our registration records.

You can find a list of all the hearings on CDOT's website.

We apologize for any inconvenience.

Thank you,

Natalie

Natalie Lutz Rules, Policies, and Procedures Administrator



P: 303.757.9441
2829 W. Howard Place, Denver, CO 80204
dot_rules@state.co.us | www.codot.gov | www.cotrip.org



Hearing Time Change for Limon Hearing on 9/29/21

1 message

CDOT Rules <cdot_rules@state.co.us>

Wed, Sep 1, 2021 at 2:26 PM

To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

BC

Hello Stakeholder,

Thank you for registering to attend the Limon Hearing on September 29, 2021, regarding the proposed pollution reduction planning standards for transportation virtually. This email serves as notification that the Colorado Department of Transportation has adjusted the start and end times for this hearing. The hearing will now start at 2 p.m. and end at 5 p.m.

We hope that you are still able to join us, in which case, we have you marked to attend the hearing virtually. If you are <u>not</u> able to join us, please notify us so we can update our registration records.

You can find a list of all the hearings on CDOT's website.

We apologize for any inconvenience.

Thank you,

Natalie



Hearing Time Change for Fort Collins Hearing on 9/30/21

1 message

CDOT Rules <cdot_rules@state.co.us>
To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

Wed, Sep 1, 2021 at 2:32 PM

Hello Stakeholder,

Thank you for registering to attend the Fort Collins Hearing on September 30, 2021, regarding the proposed pollution reduction planning standards for transportation virtually. This email serves as notification that the Colorado Department of Transportation has adjusted the start and end times for this hearing. The hearing will now start at 2 p.m. and end at 5 p.m.

We hope that you are still able to join us, in which case, we have you marked to attend the hearing virtually. If you are <u>not</u> able to join us, please notify us so we can update our registration records.

You can find a list of all the hearings on CDOT's website.

We apologize for any inconvenience.

Thank you,

Natalie



Hearing Time Change for Glenwood Springs Hearing on 10/4/21

1 message

CDOT Rules <cdot_rules@state.co.us>
To: Natalie Lutz - CDOT <natalie.lutz@state.co.us>

Wed, Sep 1, 2021 at 2:36 PM

Вс

Hello Stakeholder,

Thank you for registering to attend the Glenwood Springs Hearing on October 4, 2021, regarding the proposed pollution reduction planning standards for transportation virtually. This email serves as notification that the Colorado Department of Transportation has adjusted the start and end times for this hearing. The hearing will now start at 2 p.m. and end at 5 p.m.

We hope that you are still able to join us, in which case, we have you marked to attend the hearing virtually. If you are <u>not</u> able to join us, please notify us so we can update our registration records.

You can find a list of all the hearings on CDOT's website.

We apologize for any inconvenience.

Thank you,

Natalie

The Transportation Commission (TC) Workshops were held on Wednesday, July 14, 2021, and the Regular Meeting was held on Thursday, July 15, 2021. These meetings were held in a hybrid format with TC and CDOT staff meeting participants invited to participate both in-person and remotely, with members of the public invited to participate via streaming, in an abundance of caution due to the COVID-19 pandemic. The TC Ad Hoc Agency Coordination Committee met on July 13, 2021, and July 27, 2021, to discuss the anticipated amendment to the TC's planning rules to address pollution reduction.

Documents are posted at https://www.codot.gov/about/transportation-commission/meeting-agenda.html no less than 24 hours prior to the meeting. The documents are considered to be in draft form and for information only until final action is taken by the Transportation Commission.

Transportation Commission Workshop Wednesday, July 14, 2021, 12:15 pm – 5:00 pm

Call to Order, Roll Call:

All existing seated Commissioners were present: Commissioners Kathy Hall (TC Chair), Donald Stanton (TC Vice Chair), Terry Hart, Gary Beedy, Kathleen Bracke, Karen Stuart, Mark Garcia, Eula Adams, Barbara Vasquez, and Lisa Hickey. District 1 - Yessica Holguin excused, will start next meeting.

Budget Workshop (Jeff Sudmeier and Bethany Nichols)

FY 2022 Budget Amendment

Purpose: The Division of Accounting and Finance (DAF) is requesting TC review and approval of the first amendment to the FY 2021-22 Annual Budget. The first amendment allocates \$639.5 million in new funding from recent legislation to the Department's Annual Budget, reallocates \$395,361 from Agency Operations to Administration to reconcile the Department's Annual Budget to the final legislative budget, reallocates \$5.5 million from the Strategic Safety Program to the Maintenance Program Areas for 6-inch striping, and reallocates \$1.0 million from the Strategic Safety Program to Safety Education for impaired driving programs.

Discussion:

Commissioners sought clarification on the debt service for the SB267 Certificates of Participation (COP) which, when all four years of COPs have been issued, will be approximately \$141 million annually.
 Senate Bill 21-260 cancels existing General Fund transfers to CDOT for that debt service and reinstates a larger transfer that won't begin until FY2025. SB 260 also transfers stimulus funds to CDOT to cover debt service until those transfers begin, which CDOT is proposing as an economic defeasance, which allows CDOT to prepay some of that debt service until the transfers begin.

SB 267/ SB 260 Funding Allocation (Rebecca White, Marissa Gaughan, Kay Kelly)

Purpose: The purpose of this workshop is to brief the TC on available funding for the first tranche of SB 260 funds plus remaining premium from the Year 3 SB 267 proceeds, present project proposals for this available funding, what the projects would accomplish for the state, provide an update on the regional equity, and discuss next steps.

Discussion:

- Commissioners commented on the efficacy of making the capital investments in the I-25 mobility hubs while also investing in other intermodal enhancements and the Bustang services that will use those facilities. Beyond the funds proposed for these transit investments, CDOT will continue to receive 15% of the approximate \$10 million of SB 260 funding that will come annually to the Multimodal Transportation and Mitigation Options (MMOF) program in future fiscal years.
- The question was raised as to whether CDOT's transit services can be electrified. Bustang services will continue to be served by clean diesel buses, as there is not currently the technology in electric buses to

sustain the ranges that this service provides. The places CDOT will most likely be able to electrify the

fleet would be in future replacement of vehicles used in the urban areas, and not likely for the rural routes.

- Included in the proposed projects is a Denver Area study that will provide guidance on how and where to utilize future Revitalizing Main Streets (RMS) funding to make permanent some of the temporary traffic calming, pedestrian and bicycle safety modifications made on roadways in previous RMS projects. Commissioners stressed the importance of ensuring permanent modifications are only made where former sidewalk and parking spaces would be utilized long-term, beyond the time of the pandemic, to prioritize safety, to guard against unreasonable freight vehicle impedances, and to ensure the study provides guidance to future rural RMS investments and not just those in the Denver Area.
- Commissioners acknowledged the feedback from STAC, noting that the main reason they recommended
 TC postpone this week's adoption of the project list was because of a lack of stakeholder engagement in
 the process and less so the actual projects recommended. Staff was urged to present project lists in
 context to the whole 10-Year Plan and to continually keep stakeholders engaged to continue the
 positive momentum of the Plan's development process.
- Staff emphasized that stakeholders and the TC will soon need to begin updating the 10-Year Plan since there are few Years 1-4 projects remaining unfunded in the Plan. That will require an update to revenue forecasts in order to add years to the current Plan.

CDOT Connected Vehicle (CV) Program Overview (Ashley Nylen and Kay Kelly)

Purpose: Informational briefing to the TC on the Connected Vehicles (CV) Program. Staff will provide an overview and update on the CV Program, present on the current Phase 2 progress, and provide the roadmap for Phase 3 and future work.

Discussion:

- Commissioners were interested to know how likely and when CDOT might expect to see enough vehicles
 on the road that possess the ability to both transmit and use active roadway condition data. Some
 manufacturers such as Cadillac and General Motors already included these abilities in vehicle models as
 early as 2016 and the numbers are expected to increase. Meanwhile, CDOT is seeing significant
 amounts of data being captured by neighboring local and state governments.
- There are significant security protocols in place to protect consumers by removing personally identifiable information from all connected vehicle data. Drivers also have complete control over whether to allow their vehicles to transmit data.
- CDOT's connected vehicle systems engineering analysis document, which portrays the goals, principles, and approach to deploying a CV system, is available publicly should anyone wish to obtain it.
- The Society of Automotive Engineers holds the standards template to guide how agencies and vehicle manufacturers continue to collaboratively develop and implement CV capabilities. CDOT remains directly involved with this, and similar organizations as the technologies evolve and progress.

GHG Pollution Reduction Planning Update and Next Steps (Rebecca White and Theresa Takushi)

Purpose: To provide a status of the GHG Transportation Pollution Reduction Planning Rule and seek approval of the final changes to the GHG Policy Memo.

Discussion:

- While the formal rulemaking process has not yet commenced, CDOT has been engaged with stakeholders and working on it since the GHG Roadmap was published in January 2021.
- The proposed timeline would include a draft Rule being made public July 30 and following requisite
 public hearings and outreach, may be finalized, and adopted in September and become effective in
 November. This would support CDOT and MPOs having approximately a year to complete the required
 Plan updates by October 2022.
- The draft Rule will be reviewed and approved by the Commission's ad hoc committee. Therefore, the
 formal rulemaking process won't commence until that's released. The language in the Rule will be
 amended and refined based on ongoing public input. CDOT staff ensured the Commission to support

- broad participation in the formal public hearing by holding multiple events in different regions of the state and providing both in-person and virtual accessibility.
- The date of release of the final draft Rule will largely depend on the response and material discourse on
 its content, but staff urged the TC not to delay the start of the process merely for the sake of slowing it
 down, but to focus on conducting a solid process of its development. Commissioners expressed that a
 quality review and input process will occur once a draft document is available, and therefore the process
 would not benefit from a delayed start.
- The Commission urged CDOT to ensure the Rulemaking website makes it easy for stakeholders to obtain
 necessary information and that it provides clear information on progress made and the expected events
 and process ahead. Staff will make available the relevant materials provided in the TC packet today,
 including the staff summary memo and the memos sent by the Colorado Communities for Climate
 Action (CCCA).
- Staff will provide the Commission a workshop in August outlining the full details of the proposed process
 to occur. The Commission will ultimately have the discretion to extend the public hearing period if
 needed based on the progress and input received in that time.
- Staff provided clarification on the Land Use planning requirements imparted by SB 260, emphasizing
 that it does not imply or intimate that CDOT would control any local land use decision. Rather, it
 assumes that entities who are subject to the Rule would consider land use decisions among other
 strategies that improve GHG reduction outcomes but does not direct them nor the State to do so.

Freight Committee: Truck Parking Public Private Partnerships (Rebecca White, Michelle Scheuerman, & Craig Hurst)

Purpose: The purpose of this workshop is to provide an overview of the Truck Parking Public Private Partnership Project that CDOT's Freight Office/DTD has just initiated.

Discussion:

- Commissioners discussed how CDOT plays a role in addressing truck parking needs, without outright
 paying for it with public funds, by incentivizing and supporting private and local government solutions.
 CDOT efforts and work to study and understand the issues and needs seek to provide local
 governments, freight companies and other stakeholders the technical support to enter into similar
 public-private initiatives.
- The Commission expressed the need for improvements to our rest areas and their importance to tourism, and their general importance in the state's safety and economy.

Transportation Commission Regular Meeting Thursday, July 15, 2021, 9:00 am to 11:00 am

Call to Order, Roll Call:

Ten of the Commissioners were present: Commissioners Kathy Hall (TC Chair), Don Stanton (TC Vice Chair), Gary Beedy, Kathleen Bracke, Eula Adams, Karen Stuart and Lisa Tormoen Hickey, Barbara Vasquez, Mark Garcia, and Terry Hart. Commissioner Yessica Holguin was excused.

Swearing In of New Commissioners (Herman Stockinger)

Mark Garcia and Terry Hart were sworn in to represent District 8 and District 10 respectively.

Public Comments (provided to Commissioners in writing before meeting)

- Clean Energy Advocate and Mayor Pro Tem of Northglenn, commented on the impact of climate change. She supports the general direction that the Department is taking, stressed the importance of moving forward with greenhouse gas (GHG) rulemaking process quickly with a focus on equity with achievable targets aimed at real results.
- Director of Programs and Services at Clean Energy Economy from Carbondale Colorado, commented on the importance of moving forward with GHG rulemaking. She brought attention to the

devastating wildfires, and another closure of I-70 in Glenwood Canyon. Erica believes Colorado is taking it seriously with electrification, but not doing enough, and is generally enthusiastic with the direction of the rulemaking. The focus on 2030 targets vs. 2025 targets is the main concern. Erica echoed Jenny's request that this rulemaking be pursued as soon as possible.

- noted that it is estimated that 20-40% of all community populations are nondrivers, and that she, representing the Small Business Alliance, supports the comments of previous speaker. She echoed the previous comments raised. Severe air quality is impacting the climate. Separated and protected lanes for bikes and scooters are needed. Good results are directly linked to good land use projects, and vehicle miles traveled (VMT) reduction strategies, that also address safety, public health, and equity issues.
- Clean Transportation Policy Analyst with Southwest Energy Efficiency Project (SWEEP), commented that electric vehicle (EV) technology, even with optimistic assumptions will only lower GHG emissions to a fraction of what is needed to reach the 2050 air quality goals, so he urged that the Department to focus on policies that direct more investment to TDM, multimodal benefits, and requested that they move ahead quickly with the rulemaking process. He commended the Department for focusing the 3B project list on complete streets as a good first step.
- Elyria Swansea neighborhoods, asked that the Department do a better job going forward with transparency and engagement, especially with respect to disproportionally impacted communities such as the Globeville and the Elyria Swansea neighborhoods. He pointed out how difficult it has been to get accurate information and pointed out that the website still does not have contact information for the incoming Transportation Commissioners. Despite his previous disappointment with the Department, he is hopeful that the Commission will do better going forward given the new mandates within the SB 260 legislation. Ean indicated that he will continue to stay engaged and will be contacting the Transportation Commission as they work towards implementing the SB 260 legislation.
- Climate Policy advocate with 350 Colorado welcomed the new TC members and commented on the importance of moving forward with the GHG rulemaking process pointing out that in Pueblo they are already experiencing the impacts of climate change with an average of 3.2 degrees Celsius of warming and record-breaking draught. He pointed out that Colorado is far behind on meeting climate targets and commented on the implementation of the legislation as an opportunity to establish Colorado as a climate champion. He expressed hope that the Commission will adopt rules that align with the greenhouse roadmap and HB19-1261, and hopes to see that they also prioritize communities of color, and use this process as an opportunity to invest in justice.
- Pueblo Community Organizer for Green Latinos commented on looking forward to working collaboratively with the Department and TC to make sure the investment and new rulemaking process benefits disproportionately impacted communities. He commented on how noticeable the brown cloud over Pueblo has become, and that vehicle emissions are a major contributor. Pueblo is already experiencing climate change being one of 3 cities that consistently experiences record highest temperatures each year with projections for increasingly dire draughts with high risks for wildfires. He urged the Department to make the health and wellbeing of the public the highest priority moving forward.
- representing the Natural Resources Defense Council (NRDC), expressed appreciation for the work that staff is putting into GHG rulemaking process, and it's exciting and groundbreaking, and really difficult, and thanked CDOT for taking this on and understands that it is hard, and it is also urgent, and we can start thinking about a transportation system that lets people do other things.
- Denver, noted it is imperative that make these [GHG] rules now and don't delay because that will make reaching targets even more impossible.
- Transportation Advocate for Conservation Colorado, thanked CDOT and the TC for taking on climate challenges through efforts to lower GHG emissions. She pointed out the urgency of moving forward quickly given the dire threat to our way life and pointed to the recent mudslides on I-70 as one example. She commented on the importance of following through with the SB21-260 requirements to update transportation plans by 2022, as daunting as it may be. She also expressed excitement in seeing an emphasis on land use and thanked the Department for continuing to work on improving outreach.

all submitted written

comments on the rulemaking process that were submitted into the record.

<u>Comments of the Chair and Individual Commissioners</u>

New Commissioners:

- Commissioner Mark Garcia indicated that he's excited for the opportunity to represent the state as a TC member and thanked all of those who took the time to submit their comments.
- Commissioner Terry Hart: Thanked everyone for such warm welcomes. Is also excited about the opportunity to serve the state during such an important and exciting time when there is actual funding to plan with and work towards such ambitious goals. Commissioner Hart commented on his previous work with Jamie Valdez, on environmental issues, and acknowledged the big shoes he has to fill. All of those who took the time to participate and submit written and verbal comments were applauded. Understanding was expressed related to how difficult the task ahead is, but it is also exciting to see the opportunity for Colorado to take the lead in this area. Terry heard the message loud and clear that there should be no delay, and he agrees, but is also taking to heart all of the comments urging caution and asking for the TC to go through the process slow enough to get it right. Commissioner Hart also commented on how important it will be to make sure whatever standards that are applied are measurable and that there is broad consensus across the various stakeholder groups. Terry noted his background working at the Pueblo Area Council of Governments (PACOG) on the Southwest Chief and Front Range Rail Commission and expressed excitement to see how that effort links to the current efforts around GHG emission reductions.

Sitting Commissioners:

- Commissioner Hickey commented on how much she appreciated all of the thoughtful public comments, and looks forward to more discussion on the GHG rulemaking process that the TC is already working hard on. She thanked CDOT staff for their work on these rules, and for informing them of all the complexity involved. She expressed concern about climate change, and particularly the potentially large impact it will have on the economy. Effort to combat emissions are just as important for the economy as it is for the air we breathe.
- Commissioner Stanton (Vice Chair) expressed excitement to hear all the public comments and commented on how listening to the public in his view is their primary role, so he will work to listen to perspectives from a broad spectrum of constituents. Remarked on how important this effort is given that Colorado will be one of the first to tackle GHG transportation policy at a statewide level. To illustrate the impacts of climate change that are already visible he shared photo of Greenland from some work he did decades ago measuring levels of ice pack and glaciers, which are now no longer left to be measured.
- Commissioner Adams expressed gratitude for his reappointment to TC and considers it to be the most important and rewarding role that he has ever had the opportunity to serve, as it enables him to serve at both the highest and most grassroots levels. He looks forward to working with all the Commissioners on GHG transportation policy and stressed the importance of approaching it in an equitable manner. Given the complexity, he understands the importance of taking enough time to make sure it is done right, but really does agree that this is an urgent matter that needs to move forward immediately.
- Commissioner Bracke commented on what an exciting and transformative time it is to be working on transportation policy and welcomed the new members to the Commission. She has spent the last month working with the North Front Range Metropolitan Planning Organization (NFRMPO) and the Upper Front Range Transportation Planning Region (UFRTPR). She thanked Andy Karsian who joined her to help inform a community group in the NFRMPO of updates related to SB 260. She thanked Heather Paddock, Region 4 Transportation Director, for updating her on the progress on I-25 and for educating her about all of the innovations that were deployed to save time and money in delivering a sustainable multimodal project. She thanked Nick Farber, HPTE Director, for his work on the I-25 unsolicited proposal. She met with the Town of Wellington in Larimer County and relayed how excited and appreciative they are for the Revitalizing Main Streets grant. She also commented on how important it is to remember that North I-25 goes all the way to the border with the State of Wyoming, and what an

important corridor that is for all of those who commute to Cheyenne from Fort Collins. She expressed appreciation for all of the hard work involved connecting the state through the Bustang service. She remarked on how exciting it is to have the opportunity to work on more multimodal sustainable transportation solutions with the new SB 260 funding.

- Commissioner Beedy thanked all of those who provided public comments. He said that harvest season is underway in his district where they have experienced a challenging year with weather problems. He commented on how impactful all of the supply chain disruptions have been to his region where they have experienced shortages in everything from fuel to equipment, attesting to the importance of a robust distribution system, which highways and railroads are the basis of. So, he believes that the basis of all sustainability and climate efficiency efforts needs to start with maintenance of the system. He pointed out that even with the new funding that SB 260 provides, the 10 Year Plan is still not fully funded. In neighboring States, they are designating US 287 as interstate, he asked that Colorado continue to track this, to avoid falling too out of step with neighboring states.
- Commissioner Stuart welcomed the new Commissioners and commented on how much she missed the
 ones who left. She pointed out the importance of the memorial designations, which they will be
 considering later, on in the consent agenda. She thanked the GHG advisory group for all of their work
 and outreach around the GHG efforts, and she expressed hope that given that so many of Colorado
 residents are here because of its beauty, that finding common ground in saving it will help to propel the
 efforts forward.
- Commissioner Vasquez thanked all of those who provided public comments for offering their insights and thoughts on the rulemaking process. She is very excited to be part of this effort, which is really critical for the economic sustainability of the state, and to play our part in the larger global fight against climate change. In her district, Jackson County is currently suffering from wildfire that started Sunday. She thanked all of those who are involved in responding and fighting the wildfire, and she also expressed gratitude to all of those working remotely and understands that such arrangements leave less time for personal life, making it that much more important for CDOT to ensure that personnel have time and resources for personal care.
- Commissioner Hall (Chair) remarked on how excited she is to serve as Chair of the TC and welcomed all of the new Commissioners. She thanked all of those who provided public comments and remarked on how important that level of engagement is in the process going forward.

Executive Director's Management Report (Shoshana Lew)

- Director Lew welcomed the two new Transportation Commissioners and indicated that a formal announcement will soon be forthcoming.
- It has been a busy month, in large part due to the challenges in Glenwood Canyon. She noted that the ongoing resiliency issues in the canyon are absorbing a lot of CDOT time and resources. She thanked Region 3 staff for their efforts and reiterated that the top priority is to keep people safe, so the closures are put in place with any flash flood warning. Clean-up efforts have been more efficient because of the concrete repairs that were just completed last year. Still staff continues to work around the clock. Due to the complexity of overlapping jurisdictions, there has been extensive coordination with the Federal Highway Administration (FHWA). She expressed appreciation for the coordination with the federal agencies and other jurisdictions involved.
- A remark on how exciting it was to move forward with the 3B project list of strategic investments in taking the first step in tackling the immensity of transportation challenges was included. It was indicated that she anticipated the effort would entail a long implementation process with lots of different pieces to get the projects shovel ready to move forward is an important first step.
- Everyone involved in the rulemaking process was thanked for participating and that this rulemaking process puts Colorado at the forefront of a larger global challenge requiring a great deal of creativity and innovation. She thanked Commissioner Hickey and all of the stakeholders who have shared their views and to the ad hoc committee members. She urged the Commission to move forward immediately with the understanding that outreach will be a high priority over the course of the summer.

Chief Engineer's Report (Steve Harelson)

- Chief Engineer Harelson brought attention to how heroic the mudslide team is for the work they are
 doing around the clock for extended periods over the course of several months to clean up and keep
 people safe.
- CDOT has been working on resiliency efforts for quite some time with Lizzie Kemp at the helm. The most
 recent accomplishment arising from her efforts is a tool that will help bring a resiliency benefit cost
 analysis into decisions on assets, to help CDOT make better decisions about prioritizing assets given the
 likelihood of various events by quantifying the resiliency benefits and offering an objective way to
 measure benefits so CDOT can make the best-informed decisions.
- Commissioner Beedy commented on the importance of being able to be flexible as change with regard to climate is inevitable. He pointed to an example in farming of having to adapt to climate changes impacting wheat crops.
- Commissioner Hall gave a shout out to Mike Goolsby and Region 3 staff for how well they are handling the current crisis in Glenwood Canyon.
- Commissioner Vasquez asked about how the models adapt to the accelerating rate of change associated with climate change.
- CDOT Chief Engineer, Steve Harelson, responded that models use data from USGS which employs a number of statistical methods to account for the accelerating rate of change, and they are continually updating their 100-year flows in the models.

High Performance Transportation Enterprise (HPTE) Director's Report (Nick Farber)

- Nick welcomed Commissioners Garcia and Hart to the TC.
- The HPTE Board appointed Margaret Bowes, from the I-70 Mountain Corridor as Chair, and appointed Transportation Commissioner, Karen Stuart, as Vice Chair.
- HPTE is working with a Silicon Valley startup that is developing a new type of tolling service that can be
 installed every 5,000 feet on a corridor to help correct and enforce toll invasion and weaving to reduce
 leakage by 1% to 1.5%. They are piloting three devices on the mountain express lanes now and will
 bring back the results of the pilot to the HPTE Board in September.
- Increased tolls on I-25 and on the Eastbound Mountain Express Lane is occurring on weekends. He noted that these changes are within staff's authority, and do not require HPTPE Board approval.
- In response to a question from Commissioner Hall about expansion, Nick Farber indicated that they are moving from managing 108 lane miles and to 223 lane miles.
- In response to Commissioner Bracke's request for an update on the North I-25 unsolicited proposal, Nick Farber indicated they are still in Phase 1, which entails a check box evaluation.

Federal Highway Administration (FHWA) Colorado Division Administrator's Report (John Cater)

- The House of Representatives just passed the Reauthorization Bill, which was set to expire in September. John is hopeful that it will pass.
- The bipartisan Infrastructure Bill is still in play.
- FHWA and the Federal Transit Administration (FTA) jointly approved the FY22-25 STIP, which rolls in MPO projects, and then the State Planning and Research (SPR) program, and that's \$15.6 million to support planning activities, and that was approved, and moving forward.
- It was called into attention the fact that the I-25 corridor extends beyond Fort Collins and beyond the state line, so the work on North I-25 and front range rail can have far reaching benefits.
- Commissioner Bracke appreciated John's comments highlighting the shared travel shed with Wyoming where many commute from Fort Collins.

Statewide Transportation Advisory Committee (STAC) Report (STAC Chair, Vince Rogalski)

- Vince welcomed the new Commissioners.
- Commented on the difficult position CDOT finds itself in with the inevitability that they will be criticized for moving forward with SB 260 requirements too fast or too slow.
- Read a letter he got from Commissioner Thiebaut, thanking Vince for his service.

- At the STAC meeting last Friday, Herman gave update on personnel changes and introduced Amber Blake as Division of Transit and Rail (DTR) Director.
- There was a discussion about the debris flows on I-70. We seem to focus in on debris flows as part of wildfires, and there is a contributing factor, and that is what climate change has done to put us in extreme draught which makes soil hydrophobic, so soil can't absorb the water fast enough and becomes increasingly prone to mudslides.
- The federal Invest Act was passed by the House and needs to be passed by September. It calls for \$5.79 billion, 4 times the amount of the Recovery Act, and has a lot to enable the replacement of old bridges in the east. Between now and the final approval a lot of things will likely change in it.
- The National Highway Freight Program briefing gave an overview of the projects that were awarded funding. There were a lot of questions about the process for selecting projects. Funded projects include truck parking in Grand Junction.
- SB 267/260 3B list of projects: STAC has a provision in the bylaws that says if action is proposed on an item, they need to receive all information a full week ahead of the meeting, and packet materials for this item came in a few days before the meeting, so there was a lot of discussion about whether STAC should consider the item at all. Ultimately, STAC decided to go forward with the item given that TC would consider the resolution with or without STAC's recommendation, but they wanted the TC to understand that they had these objections to the process, and to the speed of it moving forward without ample time for them to speak with their constituents. Questions were also raised about why certain projects from year 5 on the 10 Year Plan project list were moving ahead and not others.
- An emergency STAC meeting was held yesterday for GHG rulemaking discussion. STAC mentioned that we have been working on this for all of Colorado, and message is out there, but there are groups of people that haven't seen it yet, and STAC resolution asked TC to wait until August 30th to discuss rulemaking to give more time for outreach, but some members felt that the process needed to start now, and that the start of the public outreach process could occur during a public comment period with public hearings.

<u>Act on Consent Agenda</u> – Passed unanimously on July 15, 2021. Motion by Commissioner Beedy, Second by Commissioner Adams

- 1. Proposed Resolution #1: Approve the Regular Meeting Minutes of June 17, 2021 (Herman Stockinger)
- 2. Proposed Resolution #2: IGA Approval >\$750,000 (Steve Harelson)
- 3. Proposed Resolution #3: Disposal: Region 3, SH 133 & MP 31.5 (Parcel 1 REV-EX) (Mike Goolsby)
- 4. Proposed Resolution #4: Legislative Memorial Designations (Herman Stockinger and Andy Karsian)

<u>Discuss and Act on Proposed Resolution #5: 1st Budget Supplement of FY 2022 (Jeff Sudmeier)</u> – Passed unanimously on July 15, 2021. Motion by Commissioner Adams, Second by Commissioner Bracke

- Requesting approval of 1st supplement includes 2 requests
 - The first is to reallocate \$360,000 in project savings from one Region 5 project to another Region 5 project
 - Second is to approve \$10 million in SB 267 Year 3 funding for the Military Access Mobility
 Safety Improvement Project in Region 2

<u>Discuss and Act on Proposed Resolution #6: 1st Budget Amendment of FY 2022 (Jeff Sudmeier)</u> – Passed unanimously on July 15, 2021. Motion by Commissioner Hickey, Second by Commissioner Vasquez

The amendment results from several changes to the budget resulting from passage of SB21-260
along with other legislative measures. Collectively those changes result in a \$640 million addition to
the budget, which we are also requesting be reallocated between operations and administration
budgets to align with the legislative budget.

<u>Discuss and Act on Proposed Resolution #7: SB 267/ SB260 Funding Allocation (Rebecca White, Marissa</u>

Gaughan and Kay Kelly) - Passed unanimously on July 15, 2021. Motion by Commissioner Vasquez, Second by Commissioner Stuart

- Request is for CDOT to dedicate \$238 million in funding provided by the premium from year 3 of SB-267 together with the FY 22 portion of SB260 funding to the list of projects included in the resolution.
- Rebecca also took the opportunity to address comments requesting that the TC delay consideration, making the case that because this is essentially an allocation of stimulus dollars, that it was intended to go to shovel ready projects quickly, so they are honoring the intent by moving forward with this first step quickly, but made the commitment to take the next step of GHG rulemaking and application to planning documents more slowly to give ample time for careful consideration, reflection and outreach.
- Commissioner Bracke commended Rebecca and staff for being so responsive in putting all this together and commented that they are doing a great job of moving quickly, but also being careful and considerate.
- Commissioner Stuart acknowledged that she reviewed DRCOG's letter requesting more time, and
 for further information about the criteria used to move projects from year 5 up to year 4. She
 indicated that she understands their position, but also thinks that the next step of the process is
 where there is an opportunity to talk more about the criteria that will be used going forward. She
 stated that she was very excited to be able to support this list today.
- Commissioner Hickey commented on how important it is to note the words in this resolution
 focusing on recovery, but agrees that there needs to be criteria, and predictability in decisionmaking, and timing is important, but because this list of projects rests in the 10 Year Plan, she is
 supportive of this resolution.

Discuss and Act on Proposed Resolution #8: Commence Permanent Rulemaking and Delegate Authority to an Administrative Hearing Officer to Conduct a Public Rulemaking Hearing for the Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions ("the Planning Rules"), 2 CCR 601-22 (Herman Stockinger and Rebecca White)

- Passed unanimously on July 15, 2021. Motion by Commissioner Vasquez, Second by Commissioner Stanton
 - Pointed out three changes to the resolution that were made based on STAC feedback. The changes add two additional whereas clauses. The first one, notes that the vote on this resolution, begins the rulemaking process but does not lock in the timeline.
 - The second indicates that the ad-hoc committee will be involved in determining a timeline that garners robust comfort and support, noting the importance of introducing the rulemaking process to understand the full extent of what is being proposed.
 - The 3rd change concerns a clause that all regions will be engaged in the process with multiple public hearings.
 - Commissioner Hickey thanked the TC for putting their trust in the ad-hoc committee and plans to issue
 questions to be addressed in public comments, so comments can be focused and efficiently respond to
 questions from you. Need to move quickly, and with that thank you.
 - Commissioner Bracke thanked Commissioner Hickey for all the work on the Committee in getting to this important milestone.

Recognitions:

No recognitions

Other Matters:

No other matters

<u>Adjournment</u>

• Meeting Adjourned at 11: 21 am.

Transportation Commission Ad Hoc Agency Coordination Committee Tuesday, July 13, 2021, 3:00 pm to 4:00 pm Tuesday, July 27, 2021 3:00 pm to 4:00 pm

On May 20, 2021, the TC Chair established a TC Ad Hoc Committee to study and discuss how to amend the TC planning rules to incorporate pollution reduction standards as required by recently passed legislation. On July 13, 2021, and July 27, 2021, Committee members Commissioner Hickey, Commissioner Stuart, and Commissioner Vasquez met with counsel for the Attorney General's Office and CDOT staff to discuss draft rule language and the anticipated rulemaking process.

The Transportation Commission Workshops were held on Wednesday, August 18, 2021, and the Regular Meeting was held on Thursday, August 19, 2021. These meetings were held in a hybrid format with TC and CDOT staff meeting participants invited to participate both in-person and remotely, with members of the public invited to participate via streaming, in an abundance of caution due to the COVID-19 pandemic.

Documents are posted at https://www.codot.gov/about/transportation-commission/meeting-agenda.html no less than 24 hours prior to the meeting. The documents are considered to be in draft form and for information only until final action is taken by the Transportation Commission.

Transportation Commission Workshops Wednesday, August 18, 2021, 1:00 pm – 5:00 pm

Call to Order, Roll Call:

All 11 Seated Commissioners were in attendance: Commissioners Kathy Hall (TC Chair), Don Stanton (TC Vice Chair), Karen Stuart, Terry Hart, Yessica Holguin, Gary Beedy, Kathleen Bracke, Mark Garcia, Eula Adams, Lisa Tormoen Hickey, and Barbara Vasquez.

Condemnation Authorization Workshop (Steve Harelson)

Region 4 Condemnation Authorization Request

I-25 North: SH 402 to SH 14, Project Code: 21506

Discussion:

- Two separate property ownerships within the condemnation authorization request Jensen Investments, LLC and CWH Properties. CDOT needs immediate possession of the property, which condemnation authorization grants to CDOT.
- Commissioner Bracke referred to the letter recently received, that raises different concerns about the process followed.
 - Steve Harelson, CDOT Chief Engineer, understands that property owner has a question regarding the letter of map revision.
 - CDOT offered \$284,000 to Jensen Investment, LLC, and the counteroffer was \$1.8 million due to floodplain impacts with upcoming changes to the floodplain model. Steve Harelson explained that the FEMA floodplain mapping revision is a separate process from this project.
- Kenneth Skogg, representing Jensen Investments, LLC, explained that their request is to table this item for further discussion with CDOT and property owners before filing condemnation authorization, to discuss how to mitigate the issue with property being considered within the floodplain, even with elevation of the property.
- Commissioner Bracke confirmed that the negotiation may still continue with the TC proceeding with the condemnation authorization process.
- Steve Harelson, noted the concerns raised by Jensen Investments LLC property, regarding the FEMA floodplain mapping related to this site, is over a disagreement on the LOMAR and FEMA mapping from 2013 Floods, and not this project.
- The second property owner, CWH Properties, was concerned with loss of access to recharge ponds on the site that increased the property's value, but CDOT has reached an agreement on the value of the property with the property owner in this instance, only the paperwork needs to be completed. Since CDOT needs possession of the land to proceed with the project, the condemnation authorization is being requested for the TC to approve.

Budget Workshop (Jeff Sudmeier and Bethany Nichols)

Purpose: Obtain TC approval to: increase Maintenance Level of Service (MLOS) Operating Budget and fund Snowplow Operator, Winter Operations Bonus Program. In addition, get TC approval for TC contingency funds to go towards I-70 Glenwood Canyon emergency response and repair, and funding for a Region 1 Homeless Camp Clean Up Pilot Program.

Action: For the Budget Amendment there is one request that is to transfer \$6 million from TC Contingency to Division of Maintenance and Operations (DMO) for the following: \$4 million into MLOS Operating Budgets and \$2 million to the snowplow operator bonus initiative. These funds will be converted into highway maintenance section budgets and the winter operations bonus program. For the Budget Supplement the request is to transfer \$10 million from TC Contingency to I-70 Glenwood Canyon emergency response, and \$1.0 million for a Region 1 Homeless Camp Cleanup pilot project.

Discussion:

- Commissioner Adams asked about the number of maintenance staff impacted by the funding. The number of staff impacted by this roughly 1,600.
- John Lorme, CDOT Division of Maintenance and Operations Director, noted it is a very difficult job for the compensation, and requires being on call for extended periods of time. There is a hot market for CDL drivers right now. Winter operations can't contract out to cover this service. CDOT is aggressively recruiting maintenance staff, looking at bonuses, and how to cover housing costs for workers. A current vacancy of staff is approximately 225 people.
- Commissioner Stanton asked about the \$2,000 bonus at the end of the winter, and wanted to know if it comes with the requirement to stay at CDOT beyond the winter. John responded that will be up to workers to decide, but the thought is that many will stay beyond the bonus this year, and stay on to continue receiving the bonus at the end of the winter.
- Commissioner Vasquez asked if CDOT staff had considered breaking up the bonus on a monthly basis after the winter versus providing a lump sum bonus. John noted that for CDOT it is easier to manage the lump sum, which also encourages recipients to stay at least until then. A performance evaluation would only occur twice a year. John noted he would check into the monthly bonus concept. Commissioner Vasquez also asked about how CDOT compares to what counties pay. John noted some instances where we are low, but other areas where we can be competitive.
- Commissioner Adams supported the bonus plan. And wondered how CDOT could modify bonuses to be sure not to lose too many staff at one time. Asked how do we, at CDOT, become a leader in this category. We would want to be in the top tier for this. We should push harder in this category.
- John noted Human Resources is pushing for this.
- Executive Director Lew expressed her support for compensating workers fairly for their hard work. We have a short, mid and long-term plan to address this problem.
- Commissioner Holguin asked questions about the percentage of the TM 1 Bonus pay and attrition rate of maintenance workers and what time of year folks are leaving CDOT. Also suggested considering non-monetary incentives for workers.
- Paul Jesaitis, CDOT Region 1 Transportation Director, described the pilot homeless area cleanup project, which was supported by several Commissioners. Concern with the potential effectiveness of the project was raised given the cyclical nature of homeless encampments. It was recognized that cleanup projects are not the full solution. Engaging Volunteers of America in these types of projects was also suggested.

Policy Directive (PD) 703.0 (Jeff Sudmeier and Bethany Nichols)

Purpose: To provide an annual review of Policy Directive (PD) 703.0 and request TC consideration of updates to the PD.

Action: TC approval of the updated PD 703.0.

Discussion:

• Bethany Nichols, CDOT Budget Director, explained that PD 703.0 was revised last year. This workshop is being conducted to discuss how changes worked in the past year.

- There are no structural or significant changes to the PD 703.0; added newer definitions highlighted in SB 260 and references to relevant pieces. Also allows staff to transfer funds to different line items, if it helps fund projects that support the intent of the funding as approved. TC will also now approve indirect budget and staff will add construction engineering to the list of the indirect budget items.
- Commissioner Hall asked about the new funding enterprises of SB 260, and how that fits in with TC decision making. Bethany responded that the way the TC works with the Bridge Enterprise is how the TC would work with the newer enterprises, with a separate board established for each enterprise for approvals considered high risk. Jeff Sudmeier, CDOT Chief Financial Officer, noted that once boards are established the PD 703.0 will be revisited to consider the enterprises.
- Commissioner Hall asked about the staffing level changes related to the enterprises. Jeff noted that CDOT staff will provide much support to the enterprise boards, as is done for the Bridge Enterprise.
- Commissioner Vasquez asked if the TC would make policy changes for enterprises. Herman Stockinger,
 CDOT Deputy Executive Director, noted that these new enterprises may likely work as the Aeronautics
 Division does, where the TC approves the Aeronautics budget, as it is statutorily established, and the TC doesn't make any changes to it. This is closer to how we think the enterprises will operate.
- Commissioner Stanton asked if TC members will be on the new enterprise boards. Herman explained that the Governor will make appointments for boards of the Clean Transit Enterprise, but the other new enterprise board will not be Governor appointees.
- Commissioner Hall ended the workshop noting that there are lots of new things to talk about regarding the enterprises and the TC's role and participation, and recognized a lot still needs to be sorted out.

Glenwood Canyon Update (Mike Goolsby)

Purpose: Provide the TC with an update on the status of Glenwood Canyon due to mudslides in the Grizzly Creek burn scar area.

Action: No action.

Discussion:

- Deputy Chief Engineer Stefanik joined in on the conversation with Mike Goolsby, Region 3 Transportation Director, now Incident Commander at Glenwood Canyon.
- CDOT has been dealing with this issue since June 29th.
- Things changed on July 29th with the emergency declaration, and this precipitated the increase in our response. The river in the canyon rose about six feet.
- CDOT has hauled over 4,000 loads or 48,000 tons/96 million pounds of material out of the canyon to two dump sites.
- Protocols put into place last year due to the fire, worked out well for this event. This is a 500-year event. On July 29th 13 different areas along the canyon experienced mud slides.
- Large debris flows changed the channel of the river in the canyon, particularly near MP 123.5
- Commissioner Vasquez asked if this is really a 500-year event, or if we can anticipate these types of events more frequently. Mike Goolsby noted that changes in definitions of event types due to changes in the climate is a larger consideration that is a possibility.
- Keith Stefanik spoke of the Disaster/Emergency Declaration. To summarize it, we had about 66 million in direct damages, as a result of the events that occurred over the past. Since June 26, we also had an earmark/placeholder for \$50 million for redundancy and resiliency throughout. Letters were sent off to request funds from FHWA, and we had an immediate response with a quick release of \$11.6 million, which was very fast, and very effective and appreciated. On August 8 the team took action to get this road open on Saturday just before 7:00 am.
- Steve Harelson also described the events in Glenwood Canyon, and the importance of partnerships with multiple agencies and personnel, which was extensive and led to a great response to this emergency.

Revitalizing Main Street (Rebecca White and Nathan Lindquist)

Purpose: In March 2021, staff briefed the TC on plans to use \$30 million in new state stimulus funding approved by the legislature in Senate Bill 21-110 (SB 110). Staff proposed allocating this funding via two grant opportunities, larger safety infrastructure grants (\$22 million) and smaller economic resiliency grants (\$8 million). This Workshop will outline the projects that have been selected for award for the larger safety infrastructure grants. Because the legislature allocated additional, long term funding support for this program in SB-260, this workshop will also discuss a request for Commission support on next steps.

Action: This agenda item is part informational and part action. The action requested is Commission support (Resolution) for staff to release a notice of funding availability for the first allocation, totaling \$22 million of the Revitalizing Main Streets Program as provided by SB-260.

Discussion:

- Sixteen projects are proposed to be awarded with the initial \$22 million of funding. Requesting TC approval of these.
- Next notice of funding opportunity (NOFO)— get this out soon so those not chosen to have the
 opportunity to respond to a second round of grant funds, and re-apply in September 2021.
- Commissioner Stuart asked about the turnaround time for reimbursement of expenditures for projects.
 Jeff Sudmeier noted the CDOT has generally 60 days to pay invoices, but we endeavor to pay in less than 30 days.
- Commissioner Beedy asked about the number of projects that are on state highway vs. local streets. –
 Per Executive Director Lew most were off-system of the 72 applications. Commissioner Beedy also
 mentioned that the naming of the program is getting confusing with other grant programs with the term
 "Main Streets" in their titles the CDOT program vs. Department of Local Affairs (DOLA) program.
- Commissioner Hall confirmed the ask for the NOFO is for the \$22 million a new \$22 million for round 2 call for projects.
- Commissioner Bracke observed that the local communities like the rolling application process concept.
 She has heard lots of positive feedback on more frequent opportunities to apply. Rebecca White, CDOT Division of Transportation Development Director, noted the cadence of the application process is an important consideration that still needs to be decided. Nathan Lindquist's trip was designed and intended to listen to the communities before determining a process moving forward.
- Commissioner Garcia asked about inclusion of side streets in this program. Rebecca commented that
 many applications were off system/local streets. For example, Lake City wanted an investment on their
 Main Street that is off the highway, so non highway facilities are included in grant applications.
- Just for clarity, Rebecca White explained that the first allocation from SB 260 was \$22 million. The NOFO requested for round 2 is also for \$22 million.

GHG Rule Making Update and Next Steps (Rebecca White and Theresa Takushi)

Purpose: This workshop will provide an update on the status of the Greenhouse Gas (GHG) Pollution Reduction Standard for Transportation Planning rulemaking and stakeholder engagement process.

Action: N/A

Discussion:

- Rebecca White explained that the Rules shared today are not the same as the version in the TC packet.
 The final version was submitted late on Friday, August 13, 2021, for the Rulemaking process. She requested reviewers to read the Preamble for Rulemaking portion of the revised Rules.
- Commissioner Hickey noted the hours of time invested in the process to get the GHG Rules drafted. The public outreach conducted was very effective and CDOT was very responsive to input received.
- Rebecca initiated an overview of the draft Rules. There will be a 60-day public comment period to follow the public posting of the rules.

- Rules are redlined and some work cleaned up text, but GHG-related text changes are the main focus. Led to multiple new definitions. Rules align with SB 260, HB 1261, Ozone Attainment, etc.
- Key definitions (19 new) were added and include but were not limited to: Applicable Planning Documents – shorthand for numerous planning documents, Disproportionately Impacted Communities, Regionally Significant Projects, among others.
- Herman Stockinger, CDOT Deputy Executive Director and TC Secretary, clarified one definition that spoke of amended documents for applicable planning documents – the amendment was to the planning documents and not amending projects, as the text was confusing.
- Commissioner Vasquez noted that the Baseline term in the Rules was related to a modeled baseline vs. a measured baseline in the GHG Roadmap. There is a need to clarify this distinction.
- Rebecca White explained that Metropolitan Planning Organizations (MPOs) are impacted by the Rules differently:
 - o Grand Valley MPO, Pueblo Area Council of Governments (PACOG) and Pikes Peak Area Council of Governments (PPACG) will not need to comply until 2030.
 - Denver Regional Council of Governments (DRCOG) and North Front Range (NFR) MPO need to measure for current planning horizon of 2025.
- Rebecca also explained that GHG Rules are based on GHG modeling (an EPA model called MOVES), and will include data such as population growth, vehicles miles of travel (VMT), and land use.
- Non-MPO areas will be planned and modeled by CDOT.
- All information will be submitted to the TC in a GHG Report.
- Table 1: GHG Transportation Planning Reduction Level in MMT of CO2e outlines the proposed GHG emissions reductions in million metric tons (MMT) explained by Rebecca White. Erik Sabina, CDOT Information Management Branch Director, confirmed Rebecca's explanation of the table that includes estimated GHG emissions in various planning horizons and then includes the number of MMT of reduction required of each MPO, and CDOT for years 2025, 2030, 2040, and 2050. CDOT has its own budget for the non-MPO areas. The amounts of reduction proposed are reduced over time.
- Table 2: Baseline Emissions Due to Projected Number of Light-Duty Electric Vehicles (EVs) provides estimates of GHG emissions associated with projected light-duty electric vehicles (EVs) for years 2025, 2030, 2040, and 2050.
- Rebecca further explained that the gap in GHG emissions highlighted in the GHG Roadmap noted the
 reduction needed was 4.7 MMT to meet the State goals, but these Rules only account for a reduction of
 1.5 MMT. If we comply with the Rules we make a significant reduction, but it is not the full solution.
- Erik Sabina responded that the GHG Rules are based on the built transportation system. The three MPOs GVMPO, PACOG, and PPACG all read N/A for 2025, and kick-in for reductions in 2030, with the other two DRCOG and NFRMPO.
- Commissioner Vasquez asked if the model anticipates EVs just for passenger vehicles or if it includes light, medium and heavy-duty vehicles.
 - Erik Sabina noted that the model only accounts for eventually 100% light-duty vehicles, and doesn't include medium or heavy-duty vehicles. Erik further noted that roughly 85% of tail pipe emissions come from light-duty vehicles.
- A Commissioner asked about EV airplanes.
 - Rebecca noted that the CDOT staff is working closely with David Ulane, the Aeronautics Division Director. CDOT doesn't have much jurisdiction over plane fuels, but there is a biofuel that is expensive, being used in Telluride and Vail airports.
- Commissioner Bracke requested the reductions be translated to per capita reductions to provide context. Erik Sabina noted that the per capita reductions would be possible to calculate and can be provided.
- Herman Stockinger noted two important pieces to consider for the GHG Rules are:
 - The Model
 - o A Collection of Mitigation Measures with known levels of GHG reductions associated with them.
 - By April 2022 CDOT is to provide a Mitigation Action Plan outlining acceptable
 mitigation actions and what reductions in GHG emissions they can provide. CDOT will be
 working on this over the next six months or so. Herman also noted the benefit of not

including specific mitigation measures in the GHG Rules as it allows for the mitigation measures to be living and evolving actions allowing for more flexibility over time.

- In order for the model runs to be properly reviewed the Air Pollution Control District (APCD) will be provided a 30-day opportunity to review the GHG Report to confirm its contents and validity 45 days prior to being submitted to the TC for approval.
- If the APCD does not respond within 30 days, the report is deemed accepted by the APCD.
- If an MPO is not compliant with the Colorado State GHG Rules for State dollars with SB 260 even with mitigation measures taken the MPO will be restricted in use of funds and project selection. More specifically the DRCOG and NRFMPO Transportation Plans need to comply with GHG reduction requirements by October 2022. And Multimodal Mitigation Options Fund (MMOF) projects must be in compliance by 2023.
- For Federal rules related to Surface Transportation Block Grant (STBG) funds and Congestion Mitigation Air Quality (CMAQ) funds if CDOT does not comply with their Statewide Transportation Plan that includes the MPOs and non-MPO areas (including when MPOs do not meet their targets separately) CDOT too can be restricted in how they spend funds on their 10-year Plan and how they conduct project selection activities.
- Commissioner Stanton asked if there was precedent for TC to reject a plan.
- Kathy Young was not able to identify an example.
- Commissioner Stanton observed that the TC has the authority to determine if they deem a project is a special safety project without major GHG emissions issues, and that a waiver for a particular project may be granted.
- CDOT Executive Director Lew stressed the point that the approach used in drafting the GHG Rules were borrowed from other programs that also have enforcement methods, and that the enforcement in the GHG rules mimic other enforcement practices such as the Highway Safety improvement Program (HSIP), and other tried and true approaches.
- A discussion ensued related to the TC's role as a legislative body vs. a judicial body. The enforcement component of the GHG Rules have a judicial feel to them, but attorneys who reviewed the draft GHG Rules paid attention to not supersede the TC's legislative role by stepping into a judicial role. However, one attorney present noted that public comments on this matter would be very welcome to ensure GHG Rules are invoked only where TC authority exists.
- Vince Rogalski, Statewide Transportation Advisory Committee (STAC) Chair noted that in the past funds
 were reduced due to not successfully reducing the DUI levels. This is an example of a previous
 enforcement of legislation.
- It was noted that in the GHG Rules the term reconsideration is included vs. use of the term appeal to avoid a judicial term.
- Commissioner Hart noted that a broader perspective for transportation is needed that includes collaboration and coordination/cooperation of parties along major corridors, which is an important consideration. He asked staff is looking at it as a cooperative effort along major corridors.
- Rebecca White responded that this point was well made and that the drafting team did consider that we are dealing with political boundaries that are somewhat arbitrary when you are thinking about GHG emissions and corridors that cross multiple boundaries. She noted that this would still need further consideration, and is hoping that the public comments will help to clarify how to approach this. There is a need to think more about that in terms of how the GHG Rules will be implemented. For MPOs many projects are CDOT projects due to overlap, a partnership exists there, and we still have to work out how we will deal with that.
- Commissioner Hart also identified the Front Range Rail and Bustang feeder lines as mitigation factors to reduce GHG emissions.
- Vince Rogalski asked about how to consider GHG emissions coming from other states for example Western States' smoke and how to measure that.
- Rebecca responded that CDOT is only looking at GHG emissions from vehicles that operate in the state of Colorado.
- In response to a question from Commissioner Beedy, about how capacity projects in non MPO areas would be impacted, Rebecca White explained that it would be a rare occasion for any project in a rural

area to rise to the threshold of a regionally significant project. In the rare occurrence that a regionally significant project is needed in a rural area, such as US 550/160 in Durango, the project would be modeled with the entire system, so the focus of the GHG rule would be in aggregate and not on one single project, so it would likely not raise the total GHG levels to a point that would require burdensome mitigation measures, and that would not fall solely on one jurisdiction as it would be part of the entire picture for the state. She clarified that passing lanes on rural state highways would not rise to the level of a regionally significant project.

- In follow up Commissioner Beedy asked if adding four lanes on I-76 near the I-70 interchange would be considered regionally significant. CDOT Executive Director Lew responded that although such a project would likely be considered regionally significant, the GHG Rules would not prevent the project from happening. She pointed to Floyd Hill as an example of a regionally significant project that will likely be subject to the mitigation measures required of the GHG Rules. She intends to use Floyd Hill as a case study to showcase a variety of ways to mitigate GHG emissions.
- In response to a follow up question about whether the mitigation measures would need to take place in the same boundary as the project, CDOT Executive Director Lew clarified that the rule is structured by region so the mitigation measures would be considered in aggregate for the state and would be implemented to ensure that benefits of mitigation measures accrue in disproportionately impacted communities. So, in short, implementation of the mitigation measure for a specific project could take place elsewhere, but the focus will still need to be on mitigating the impacts on disproportionately impacted communities.
- Commissioners Vasquez and Bracke asked about checks and balances on modeling assumptions and
 what would be done to ensure that the GHG Rules leads to real change in GHG emissions from mobile
 sources beyond projected changes in a modeling exercise.
- Rebecca White indicated that they would also be checking the modeling assumptions against gas sales
 and other indicators to ensure that it is effective in lowering emissions from mobile sources to meet the
 GHG Roadmap goals.
- Rebecca White and Theresa Takushi closed by giving an overview of the stakeholder engagement efforts
 and efforts to ensure robust public comments with eight public hearings that would be held in each
 region of the state, broad distribution of the public notice, and a user-friendly interface to ensure
 submittal of written public comment is easy and accessible to all.
- Commissioner Hickey added that in addition to the hearing officer presiding over the public hearings a Transportation Commissioner will also be present at each public hearing.
- Commissioner Garcia asked about how the GHG rulemaking process was impacted by the Colorado
 Department of Public Health and Environment (CDPHE's) decision to withdraw the employee trip
 reduction rule. Rebecca White explained that they are responding and preparing for the extra attention
 that it brings with a robust outreach effort on the ground, reminding the Commissioners that the efforts
 to engage stakeholders on the GHG Rules began over a year ago and has already involved a series of
 regional workshops throughout the state.
- Chair Hall expressed gratitude for CDOT's efforts to hold hearings in every region of the state.
- Commissioner Vasquez suggested that CDOT establish an award for all of those who have been working so hard on the engagement piece.

Walking Down Main Streets Listening Tour (Nathan Lindquist)

Purpose: This workshop covers the purpose and lessons learned from the Revitalizing Main Streets Listening Tour.

Action: N/A

Discussion:

 Nate Lindquist, CDOT Land Use and Community Planner, explained that over May and June, CDOT conducted a Main Street Walking tour of 20 communities across Colorado to determine what works and what doesn't for downtown areas.

- There is \$85 million in funds in SB 260 so talking with communities prior to expending these funds is important.
- Locating housing and jobs closer helps with traffic reduction and GHG emissions reduction. There is excitement about the RMS program and what it can offer communities.
- Got a lot of good applications for bike/pedestrian facilities linking to housing and places of employment.
- Broomfield, Wellington, Alamosa, Colorado Springs, and Centennial were just a few communities highlighted as case studies.
- Next steps and priorities include learning to institutionalize innovations that work and convene
 partners to develop the next round of large grant criteria for the RMS program. Working with
 DOLA and the Colorado Energy Office (CEO) to align grant criteria for transportation, housing
 and infrastructure programs. Conduct conversations where locals are interested in regional
 collaboration, and investigating the link between the transportation system's fiscal
 sustainability and downtown access.
- Commissioner Hall asked about how closely CDOT is working with local transportation agencies. Nathan noted that CDOT is working with these and all entities with a stake in this.
- Commissioner Beedy expressed his support to help community streets, but cautioned against any changes that restrict traffic flows, especially to ensure freight can pass through without causing additional delays. Out at Hugo a three semi-truck incident occurred recently with a fatality. Wants to ensure we keep thinking of freight, especially when considering road diet plans. Access controls with new housing development are another concern, and we need more combined access points to keep artery traffic moving, as it is important.
- Commissioner Stuart commented that she attended the meeting at Broomfield, and stressed that partnership is important. The chicken and egg issue with housing and transportation continues. Need to partner with RTD. Need to plan for transit prior to development, but development is needed to support transit. CDOT doesn't have control of land use, and it is important to have partnerships so we can plan ahead and be aware of land use plans.
- Commissioner Bracke echoed comments highlighting the importance of partnerships. With the recent census data that is now available she asked that staff look at growth, and creating more inviting downtowns so that the market creates housing there too. Some projects may spur infill and redevelopment. A retrofit piece is fantastic. Communities that are more walkable and bikeable is what we want and need.
- Commissioner Adams believes directionally, this is the right way to go, and asked about our
 next steps. Does it include RMS program management at this point? How big is the team today
 and what is the budget for this? Rebecca responded that Nathan sits in planning team with
 about 20 folks. The two RFPs are a study on urban arterials as a safety and community barrier.
 Colorado Blvd. is an example. DTD needs to determine the financial and staffing needs as
 months unfold.
- Commissioner Garcia noted that he will abstain from the vote for the RMS NOFO as he will likely be an applicant for RMS funds in his role for his day job.

Small Business and Diversity Committee (Greg Diehl and Emily Crespin)

Purpose: The purpose of this workshop is to provide an introduction to the USDOT Disadvantaged Business Enterprise (DBE) Program and introduce tomorrow's Resolution to Adopt CDOT's FFY22-24 Overall DBE Goal.

Action: TC is asked to adopt a resolution that supports the staff's recommendation to set the FFY22-24 overall DBE goal at 11.89%.

Discussion:

- Greg Diehl, CDOT Civil Rights Program Director, explained that this is an important report we do every three years for the Small Business and Diversity Committee.
- Jun Arcilla, CDOT DBE Program Manager and Certification Lead, provided an overview of two key programs, the Disadvantaged Business Enterprise (DBE a federal program that is race and gender conscience) and the Emerging Small Business program (ESB a CDOT Program that is race and gender-neutral, and increases competition of small businesses for CDOT contracts).
- DBE creates a level playing field for those historically kept out of these types of contracts.
- Resolution tomorrow relates to the proposed DBE percentage requirements for federally funded projects.
- Emily Crespin, CDOT Small Business and Workforce Development Manager, provided a presentation on supportive services CDOT offers for DBEs and ESBs.
- Commissioner Holguin asked about the measures taken to ensure we meet our DBE goals. The response
 was that Supportive Services help to make DBE certification happen and sparks interest in program
 participation. CDOT reports on DBE work contracted. DBE goals in CDOT contracts is another vehicle to
 help meet DBE goals. The Commissioner explained that the Disparity Study did show that woman and
 minorities are not in a level playing field for construction work and thanked CDOT staff for the work
 accomplished.
- Commissioner Adams is a member of Conference of Minority Transportation Officials (COMPTO), and observed folks who have done business with CDOT. There are negative perceptions and difficulties associated with working for CDOT that we need to overcome. This DBE program does excellent work, and the approach is good. It's about working capital and getting paid. However, he urged CDOT to push for more ambitious goals as a 4.83% race and gender-neutral goal is too low. He believes there is more opportunity for small businesses.
- Commissioner Hall adjourned the Committee meeting, recognizing staff for their important work.

Transportation Commission Regular Meeting Thursday, August 19, 2021, 9:00 am to 11:00 am

Call to Order, Roll Call:

All 11 Seated Commissioners were in attendance: Commissioners Kathy Hall (TC Chair), Don Stanton (TC Vice Chair), Mark Garcia, Yessica Holguin, Gary Beedy, Karen Stuart, Kathleen Bracke, Terry Hart, Eula Adams, Barbara Vasquez and Lisa Tormoen Hickey.

Swearing In of New Commissioner (Herman Stockinger)

• Yessica Holguin was sworn in as Transportation Commissioner to represent District 1.

Public Comments (provided to Commissioners in writing before meeting)

- Mesa County Commissioner, came to speak about the economic impacts of the I-70 closure. Commented that while Mesa County was just starting to recover economically from the pandemic the recent closure has been another setback. He requested further consideration be given to alternate route I-70 bypass.
- Clear Creek County Commissioner, discussed emissions that impact Clear Creek County, and pointed out that health concerns are now established. He urged support of an aggressive GHG Rule and looks forward to participating in the public hearing process.
- Mayor of Broomfield, expressed appreciation for the commitment to setting strong GHG targets through the GHG rule, and said that Broomfield is equally committed to taking steps to lower GHG emissions. She pointed to ample evidence that urgent action is needed to prevent the worst impacts of climate change. The proposed Rule must be measurable, equitable, and actionable. She thanked the TC for the opportunity to provide comment and looks forward to participating in the live hearings.

- Mayor Pro Tem of Northglenn, stated that climate change is causing enormous impacts and that it is time for the transportation sector to step up to address climate change. She stated that relying on electrification alone would not be enough to reach the goals set forth in the GHG Roadmap. Furthermore, lowering emissions by 1.5 MMT is simply not enough for Colorado to reach its goals, and CDOT needs to make this Rule strong.
- Air and Climate Policy Analyst of Boulder County, commented on how exciting it is to see this Rule moving forward, and noted that this rulemaking process is critically important considering that the employee trip reduction policy (ETRP) has been withdrawn. It's exciting to see this opportunity for transportation, but this Rule needs to be made stronger as a 12.5 MMT reduction is what is needed to meet goals set forth in the GHG Roadmap. She stated that she looks forward to reviewing further modeling details. She also stated that it is important that the Rules established are enforceable and urged a focus to be on reducing VMT and increasing transit options rather than relying exclusively on EV.
- Conservation Colorado Transportation Advocate-Denver, said that she is excited to see the Transportation Commission moving forward with this rulemaking, but sees room for improvement in the Rule. She started by discussing how more could be done in the area of equity and environmental justice and mitigating impacts for disproportionately impacted communities. Efforts must be spelled out, and it is disheartening to see that this Rule does not include a goal to reduce VMT by 10% by 2020. She urged the TC to strengthen the Rule and looks forward to participating in the public hearing process.
- Southwest Energy Efficiency Project (SWEEP) Transportation Policy Analyst, noted that he has been participating in this process as a member of the Greenhouse Gas Advisory Committee. Matt congratulated CDOT on the herculean efforts in drafting this rule, but echoed the earlier comments requesting more aggressive targets be included. He commended CDOT for their efforts to launch the Revitalizing Main Streets grant program, and for launching and expanding Bustang. He urged a Rule that does more to prevent capacity projects with the bulk of transportation investments in strategies to reduce emissions and maintenance of the existing system. Furthermore, he asked for more to be done to address land use. He also noted the importance of developing an accurate model, and requested that the Rule require review of the statewide model by external experts.
- Resolution #10, the condemnation authorization resolution. He requested that the TC reject or at the very least postpone consideration of condemnation of the Jenson property in light of drainage findings that have not been accounted for in the CDOT offer. It is position that the drainage improvements that CDOT deemed necessary are necessitated by an increase in I-25's elevation that was improperly completed by CDOT, and resulting in Jenson property bearing the burden of CDOT's improper action poted that CDOT now realizes the substantial impact of the drainage, but CDOT's offer doesn't account for these impacts. These drainage improvements need to be explored before a final purchase price agreement can be determined and he requested that they don't allow condemnation authorization process to proceed.
- of Montrose was invited to provide comments, but was not on the line.
- Numerous written public comments contained in the meeting packet were also entered into the record, including written comments from:



Comments of the Chair and Individual Commissioners

- Commissioner Holguin No Comment
- Commissioner Hart No comments
- Commissioner Garcia Echoed the other comments commending CDOT on their amazing work on Glenwood Canyon. He noted that he had the opportunity to meet Region 5's RTD, Julie Constan. He also

was able to attend TPR meetings, and found that it was great to hear from CDOT staff about all the projects going on in the region.

- Commissioner Hickey will comment on GHG rule when the item comes forward, but thanked the public
 for their comments, which will be considered carefully. She thanked CDOT staff for handling Glenwood
 Canyon so well. She noted that freight needs must be considered too. She is looking forward to a US
 285 meeting on Monday where they will be discussing ways to manage the congestion on the corridor.
- Commissioner Vasquez thanked the public for their comments, and commended the CDOT team on the
 draft GHG Rule. All stakeholders have the opportunity to comment on the actual language, instead of
 forming opinions based on rumors, and hopes that this is a collaborative process going forward. On the
 topic of Glenwood Canyon, she noted that her district has suffered severe congestion as the main
 detour route, and that more needs to be done to mitigate and manage the impacts to those
 communities.
- Commissioner Adams No comment
- Commissioner Bracke expressed thanks and appreciation to CDOT staff for all the great work on Glenwood Canyon, and for opening it back up in record time. Acknowledged CDOT's responsiveness around the 10-year list of projects. Appreciates Heather Paddock, CDOT Region 4 RTD, for talking to them about the 10-year pipeline, and pointing out the opportunities going forward. She also called attention to plans to host summit next summer regarding the Pawnee Grasslands and ways to encourage people to see that area of the state.
- Commissioner Beedy called attention to some freight resiliency issues arising from Glenwood Canyon which has led to long detours diverting traffic on I-80. He noted that a typical semi uses significant fuel per mile, and so shorter detour routes are needed, as the current option adds over 700lbs of GHG, to get basic goods and services to the public. Freight needs to be considered to keep good, open, and free moving routes. He also noted the importance of adding longer passing lanes that can accommodate trucks. He noted a recent crash that occurred outside of the Hugo County Fairgrounds that might have been avoided with better passing lanes. He also questioned how many charging stations would be needed to meet the demand on interstates. By some estimates 1,300 charging stations would be needed to meet the demand of EVs on an interstate corridor. He noted that such investment would need to be privately funded as rural communities don't have the resources to fund charging capacity at that scale.
- Commissioner Stuart thanked the staff for all the efforts on Glenwood Canon, and thanked Mike Goolsby for leading such a monumental effort to get the Canyon open in record time.
- Commissioner Stanton (Vice Chair) welcomed the three new commissioners, and thanked CDOT for exceptional work on Glenwood Canyon and the 10-year Plan. He also noted that he attended a report out from interns and thanked them for providing such professional reports on their work and noted how impressed he was with their work on solving very difficult and complex issues.
- Commissioner Hall (Chair) thanked all of the commissioners for their reports.

Executive Director's Management Report (Shoshana Lew)

- Director Lew discussed the difficulty of Glenwood Canyon, and the work that has gone into this situation. The weather is making that situation worse. With all the uncertainty it is too risky to open the canyon back up, but so far, the repairs have held up. There are no perfect solutions. Working group with local partners forming with Keith Stefanik and Steve Harelson leading the team.
- There is no perfect solution for alternate routes as there just aren't a lot of options. Keith Stefanik and Herman Stockinger, Rebecca White and Theresa Takushi, were thanked and recognized for all the work completed and noted that more hard and technical work that will still need to be accomplished, with a sense of urgency.

Chief Engineer's Report (Steve Harelson)

• In addition to the work on Glenwood Canyon, Chief Engineer Harelson detailed four other major projects going on:

- Central 70: The viaduct is 85% down, two areas are left, and they are going down this week.
 CDOT is working through that, Kiewit was recognized for stopping work to keep dust down, took a few days off, and CDOT applauded them for that.
- o I-25 North segment 5,6 7, and 8 moving along and making good time.
- On I-25 Gap project things are going along well.
- US 550/160 project in Durango area, has pulled one deck and working on another, going forward.
- Research on flood led to this information from a USGS resource Peak flow in Fruita in 1884, In 1921 statewide flooding occurred in each basin- Colorado, Arkansas and Platte, downtown Pueblo was completely wiped out, and floods like this aren't unprecedented, and we try to learn from those in the past.
- Recommended an engineer's book club: <u>Wooing a Harsh Mistress: Glenwood Canyon's Highway</u> Odyssey by John L Haley.

High Performance Transportation Enterprise (HPTE) Director's Report (Nick Farber)

- No Board meeting yesterday. Express lane westbound opened July 30th and finished installing equipment for tolling. Estimating that it will start somewhere between November 2021 and/or January 2022.
- Had the 3rd steering committee meeting on Central 70's tolling equity program to narrow down eight options to three options. The first option would be a flat benefit for qualifying drivers for a free sticker transponder, the second option is a neighborhood benefit such as free bus pass to be issued after construction and continuing annually in Globeville and Elyria Swansea, and then the third option would be a combination of both the first and second options. Next steps for the steering committee will be to develop range of costs for each option and then discuss which is best.
- I-25 unsolicited proposal status: Region 1 and Region 4 met with CDOT Executive Management to discuss a response which will be announced in a couple weeks.

Federal Highway Administration (FHWA) Colorado Division Administrator's Report (John Cater)

- Glenwood Canyon: He recognized Mike Goolsby and Keith Stefanik for the phenomenal job they have done to open the canyon in record time. There was progress on the federal side as well. Of the \$116 million requested in emergency federal dollars, there was a quick release of \$11.6 million to CDOT to draw on immediately, and working with FEMA and other partners to get it working on the ground.
- Commissioner Hall commented on how grocery shelves in Grand Junction are really getting empty because of the I-70 Glenwood Canyon closure, highlighting how important the highway network is for delivery of basic goods.
- Discussed a School of Mines pilot that launched the first ever autonomous vehicle program around campus on August 10th. This was the biggest deployment to date of autonomous vehicles, and there will be more of those to come.
- Commissioner Stuart commented on participating in the easy ride shuttle program, which gave a presentation on a Panasonic autonomous vehicle, and how important those pilots are to get the ball rolling.

Statewide Transportation Advisory Committee (STAC) Report (STAC Chair, Vince Rogalski)

- Vince thanked Commissioner Stanton for his comments about STAC being an important input to the TC.
- It is important to show support for how CDOT always comes through on promises in opening I-70 so quickly.
- Herman discussed a reformat of 10- year Plan as a first step to taking another look at this Plan, and everyone was supportive of the new format.
- STAC had a presentation on the new \$1 trillion-dollar federal Infrastructure Bill that passed the U.S Senate and is now being considered by the House of Representatives. It contains \$550 billion in new funding for basic infrastructure (roads and bridges), but also contains funding for transit and other things like resiliency, and given what happened in Glenwood Canyon, and the Little Blue Canyon project

- this is becoming increasingly important. \$795 million would be going to Colorado highways for the next five years representing a \$230 million increase over previous years of funding.
- Had a presentation on Revitalizing Main Streets (RMS) and visits to several communities across the state, and it was interesting to see the public comments and the positive feedback on CDOT's efforts to help communities get revitalized.
- Decided to move the GHG item to the top of the meeting anticipating that it would be contentious, but
 it really wasn't at all. There were some concerns from rural communities about how it will impact them
 since it is a statewide program, and while it will impact urban communities more, rural communities still
 want an opportunity to have a say in the process, given that the Rule is a statewide rule that still might
 impact the rural areas as well.
- The next STAC meeting is September 10th

<u>Act on Consent Agenda</u> – Passed unanimously on August 19, 2021. Motion by Commissioner Stuart, Second by Commissioner Holguin

- o Proposed Resolution #1: Approve the Regular Meeting Minutes of July 15, 2021 (Herman Stockinger)
- Proposed Resolution #2: IGA Approval >\$750,000 (Steve Harelson)
- Proposed Resolution #3: Repeal of Policy Directive 16.0 "Regional Transportation Director Authority for Administrative Settlement of Construction Contract Claims" (Steve Harelson)
- Proposed Resolution #4: Approval of Updated Policy Directive 1301.0 "Transportation Commission Guidelines to Determine Whether Acquisition of Property for a CDOT Highway Project by a Petition in Condemnation will Serve the Public Interest" (Steve Harelson)
- Proposed Resolution #5: PD 703.0 Annual Review (Jeff Sudmeier and Bethany Nichols)
- Proposed Resolution #6: Disposal: Hugo Rest Area US 40 Reaffirm (Parcel 1) (Heather Paddock)

<u>Discuss and Act on Proposed Resolution #7: 2nd Budget Supplement of FY 2022 (Jeff Sudmeier)</u> – Passed unanimously on August 19, 2021. Motion by Commissioner Beedy, Second by Commissioner Vasquez

Includes six items:

- The first is a correction to an amount that was identified previously and is a request from Region 3 for a
 multimodal improvement to I-70B project that increased the amount by \$500,000 from what the
 resolution requested last month, so this would correct that error.
- Second, a Region 2 request to reallocate \$350,000 in SB 267 project savings to the Kiowa County bus facility.
- Third, requests to allocate \$1 million of program reserve funds to a homeless camp clean-up pilot program in Region 1.
- The fourth request is to increase the budget on a signals and FASTER safety project for Wadsworth Blvd widening to \$1.6 million to award to the lowest bidder.
- The fifth request is to allocate \$10 million in TC contingency funds to the Glenwood Canyon response and repair, which was preauthorized by the Chair in response to the emergency.
- The sixth request is to increase the budget on a geohazards project in Region 3, SH 133 landslide repair, to award the project to the lowest bidder.
- Commissioner Beedy pointed out that the packet needed an amendment as information on the \$10 million was missing.

<u>Discuss and Act on Proposed Resolution #8: 2nd Budget Amendment of FY 2022 (Jeff Sudmeier)</u> – Passed unanimously on August 19, 2021. Motion by Commissioner Hickey, Second by Commissioner Garcia

Request to reallocate \$6 million from TC contingency to MLOS to transfer funds from contingency to
maintenance program areas. Includes a \$4 million increase to the base maintenance budget and \$2
million to establish a new winter operations bonus program.

<u>Discuss and Act on Proposed Resolution #9: Adopt FFY 22-24 Statewide DBE Goal (Jun Arcilla)</u> - Passed unanimously on August 19, 2021. Motion by Commissioner Adams, Second by Commissioner Hickey

Commissioner Adams commended staff for their presentation and excellent work on this part of the
presentation, and wanted to go on record to stress the importance of continuing to push the boundaries
in this area because there are still things CDOT can do to support small businesses beyond this work.

Discuss and Act on Proposed Resolution #10: Discuss and Act on Condemnation (Steve Harelson)

- Passed unanimously on August 19, 2021. Motion by Commissioner Bracke, Second by Commissioner Adams.
 - No comments or questions presented.
 - Commissioner Bracke noted that she appreciated the comments from the property owner's representative and based on the staff presentation yesterday she feels comfortable moving forward.

<u>Discuss and Act on Proposed Resolution #11:</u> <u>Approve Moving Forward on Next Round of Revitalizing Main Streets (Rebecca White)</u>

- Passed unanimously on August 19, 2021. Motion by Commissioner Bracke, Second by Commissioner Stanton.
 - Request is for staff to move forward with the Notice of Funding Opportunity (NOFO) for the Revitalizing Main Streets program with the \$22 million for round 2 of funding through SB 260.
 - Commissioner Mark Garcia abstained from the vote on resolution #11.

Recognitions:

No recognitions

Other Matters:

No other matters

Adjournment

Meeting Adjourned at 10:51 a.m.

Live Commenters:
, Mesa County Commissioner
Commissioner
Commissioner
Commissioner
, Mayor of Broomfield
, Mayor Pro-Tem of Northglenn
, City Councilor from Northglenn
(might join right at 9am or later, may be too late for public comment)
SWEEP
Ken Skogg (Condemnation)
Written Public Comments – August (just read their names to acknowledge we received them)

Name (first & last)

Your E-Mail Address

Your Daytime Phone Number

Your Company/Organization
Public

Which group is your comment for?

Transportation Commission

Comment

Re: the GHG pollution rulemaking. Coloradans are desperate for reductions in toxic air pollution & GHGs from transportation given their scale & impact on public health & climate. We want substantial investments in public transit, multi-modal transit, & programs for disproportionately impacted communities that remedy environmental racism & provide healthy, affordable, convenient, & sustainable alternatives to driving in cars — NOT MORE HIGHWAY EXPANSIONS.

Name (first & last)

Your E-Mail Address

Your Daytime Phone Number

Your Company/Organization

Which group is your comment for?

Transportation Commission

Comment

Transportation is Colorado's largest source of greenhouse gas emissions. This rulemaking process could result in a framework that not only drives decarbonization, but makes life better for Coloradans. To do this, please ensure that this rulemaking focuses on reducing vehicle miles traveled (VMT). Please also include a reward for local and regional governments that make land use and housing decisions that allow more people to live near jobs, other destinations, and transit.

----- Forwarded message ------

From:

Date: Tue, Aug 3, 2021 at 1:46 PM

Subject: It is possible, urgent, and CO law requires transportation pollution reductions of 25% by

2025 and 50% by 2030

To: <Jennifer.Uebelher@state.co.us>, <Herman.Stockinger@state.co.us>

Dear Transportation Commissioners,

I'm a mom of two kids who have asthma. A lot of kids have asthma and breathing difficulties here. My mom is on oxygen. This beautiful place is also the third worst in the country for ozone, after L.A. and CA's Central Valley, especially from cars and trucks. Most days the air isn't safe or healthy to breathe here by EPA standards, and now it has been in the "unhealthy" zone since the first day of summer. Note that research doctors have said the EPA safe levels are anything but, and there is NO safe level of the air pollutants we are having to breathe. We need to pause all further widenings this decade; research conclusively shows new lanes produce more traffic and pollution, on a 1:1 basis.

It's time to follow through on promises and Colorado LAW to reduce pollution 26% by 2025 and 50% by 2030. **This can be done in transportation**, but it will require reorientation and for engineers to be engineers and design some new things. Assistance and guides are out there, to do it. The research shows: build what people need and they will come.

Safe ways to travel outside of cars are necessary, especially because 20-30%+ of folks in a given area don't, can't, or shouldn't drive, and this part of the populace has received the impacts but been underserved, infrastructure-wise, by many years of disproportionate focus on highways. My son used to ride his bike to high school, but then he was hit by a car at a gap in a protected bikeway and spent 5 days in the hospital, in a lot of pain, and much longer in a wheelchair. Denver found that 59% of folks are uncomfortable riding without protected networks for non-drivers, but would ride if these were available. Safe, connected bike (and scooter or wheelchair) networks are provided in other countries and are required on/parallel to streets above 20-25 mph. We need that infrastructure here, soon, plus funding for transit and operations, conversion of all school and public buses to EVs, and buildout of missing networks essential for access for all, like broadband for all – not just payments to big out-of-state firms for expensive and poor service. We can do much better and are asking that this be a priority – safe air and the needed missing infrastructure for all, not fossil-fuel based donors and systems -- now.

Thank you,

Colorado Small Business Alliance

Former City Planning Commissioner & CDOT Manager, and current TRB chair, AHD10-1 Environmental Management & Decarbonization

Name (first & last)

Your E-Mail Address

Your Daytime Phone Number

Your Company/Organization

Which group is your comment for?

Transportation Commission

Comment

Re: the rule about the impact of transit projects on climate change: I rely almost exclusively on public transit and walking, which limits my ability to engage in leisure activities, such as visiting state parks. I have used the Bustang service to Boulder multiple times and found it to be pretty easy to navigate, convenient, and pleasant. More trains would be an excellent addition—they can accommodate sustainability and add immeasurable value to the travel experience.

Name (first & last)

Your E-Mail Address

Your Daytime Phone Number

Your Company/Organization

350 Colorado

Which group is your comment for?

Transportation Commission

Comment

The GPS Rulemaking should set clear emissions reduction targets that are aligned with the targets established by the Governor's Roadmap and HB19-1261. The rulemaking

should include a process to calculate GHG emissions from individual projects and reprioritize transportation projects which reduce VMT. Additionally, the reprioritization process should consider racial justice by analyzing the health impacts on nearby populations in project calculations

Name (first & last) Your E-Mail Address Your Daytime Phone Number Your Company/Organization Which group is your comment for? Transportation Commission Comment Hello. My name is and as the mother of three teenagers I feel climate change is extremely urgent. Our world is on track for over 3 degrees warming by 2100. In the west right now we're witnessing catastrophic impacts of warming just over 1 degrees C. We need an ambitious greenhouse gas pollution standard with explicit targets, strong enforcement mechanisms and lowers Colorado's transportation emissions. This is my top priority as a voter. Thank you for your service. Name (first & last) Your E-Mail Address Your Daytime Phone Number

Your Company/Organization

Which group is your comment for?

Transportation Commission

Comment

I'm writing to urge the Transportation Commission to keep to its original timeline for rulemaking on the Greenhouse Gas Pollution Standard. It is of urgent importance that rulemaking on this standard is not delayed, so that CDOT/MPOs have enough time to update their plans prior to October 2022 as SB260 requires. If we are to meet or even make progress on HB19-1261 GHG reductions targets for 2025 and 2030, it is imperative that rules are put in place and not delayed.

Cost-Effective Strategies to Achieve Transportation Greenhouse Gas Pollution Reduction Targets This Decade Chair, TRB AHD10-1 Environmental Management & Decarbonization (former CDOT & DRCOG staff, and Littleton City Planning Commissioner) Venner Consulting, Principal Victoria Transportation Policy Institute Word Count: 5,300 words + 5 graphics (250 words per graphic = 1250) = 6,550 Submitted August 1, 2021

ABSTRACT

1

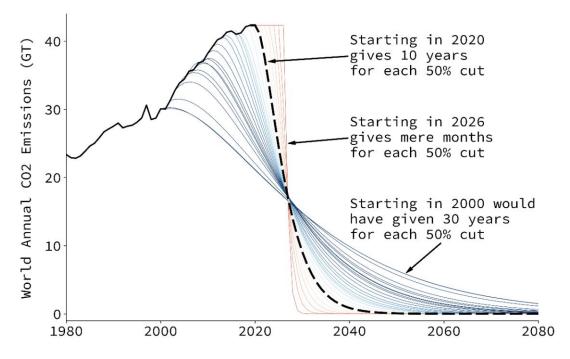
19

2 Many organizations and jurisdictions have ambitious transportation emission reduction targets, 3 such as 30-60% emission reductions within a decade or two and are developing plans to achieve 4 these and other community goals including greater public health, affordability, and social equity. Meanwhile, multiple international analyses concur that emissions must be halved this 5 6 decade, to limit global heating to 1.5 C, as recommended by the International Panel on Climate 7 Change (IPCC). Transportation is far from the most difficult sector and analysts figure 8 transportation must deliver its full share of pollution reductions, now in 8 years. What are the most 9 feasible and cost-effective strategies to achieve these goals? How should planners think about and evaluate the benefits and costs of potential emission reduction policies and programs? This paper 10 11 critically evaluates various transportation emission reduction plans. It identifies various biases in 12 current evaluation practices that tend to exaggerate the benefits of fuel switching and 13 underestimate the benefits of vehicle travel reduction policies. This analysis suggests that large 14 transportation emission reductions are possible, but additional policies and different priorities are now essential, requiring big steps and a rapid shift from policies and funds allocations to date. 15 16 Already performed effectiveness and cost-benefit analysis supports the necessary reallocation of 17 investment. State Transportation Improvement Programs (STIPs) and Long Range Transportation 18 Plans (LRTPs) for this decade should be realigned to accord with the evidence, without delay.

INTRODUCTION

Greenhouse gas (GHG) emissions threaten our environment, economy and human lives. Major emission reductions, often defined as net zero by 2050, are needed to avoid catastrophic damages. Many organizations and jurisdictions have ambitious targets to reduce transportation emissions. For example, in April 2021, President Biden established a target to reduce U.S. GHG emissions 50-52% by 2030.(1) This is a major challenge. Despite past emission reduction plans. Vehicle Miles Traveled (VMT) have increased and transportation emissions have only declined slightly.(2) The 2018 IPCC on the importance of 1.5 C as a limit documented how essential steep fossil fuel emission cuts are by 2025 and 2030.3 The later reductions begin in earnest, the less possible it is to achieve the necessary reductions in time.(4) Starting now, we must halve emissions by 2030 and every decade thereafter. Waiting until 2026 (further planning and studies) to get started gives mere months for each 50% cut, whereas starting in 2000 would have allowed 30 years for each 50% cut in CO2 emissions, to have a reasonable chance of staying under 2 C.5

Figure 1: GHG Emission Reductions of 7-8%/year are necessary the remainder of the decade.



Mitigation curves required to hit a 1.5 C/2.7 F world, Saul Griffith's 2020 redrawing of data from Robbie Andrew.

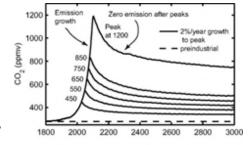
The sufficiency and timeliness of action from today is the most critical consideration. Highlights from a couple key studies of potential interest to planners, engineers, and other public servants convey the seriousness and urgency with which we must now act to change direction.

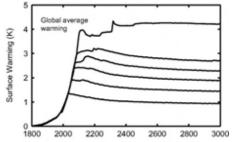
In 2011, the International Energy Agency lead economist and now director Fatih Birol examined the implications of continuing to invest in anything fossil fueled, if allowed to use for projected lifecycles and noted that by 2017 we (would) have built enough to take world temperatures over 2°C.(6) Yet in 2021 the public sector is still allowing registration of vehicles causing 200,000 deaths or more per year just from the air pollution they emit (7) and agencies are currently not discussing setting targets for public phase-out of sales of NEW vehicles until the 2030s, meaning ICE vehicles will operate into the 2030s, 2040s, and 2050s. This endangers health and lives and imposes inequitable impacts across racial and ethnic groups, across economic quintiles, and to children,

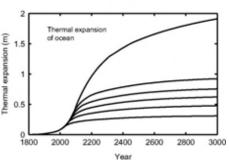
1 entitled to equal protection under the law. Meanwhile, sea

- 2 level rise and ocean acidification are accelerating, and
- 3 current levels of CO2 are unleashing unprecedented changes
- 4 in climate systems, leading to severe ecological and economic
- 5 disruptions, promising worse to come.(8)
- 6 The carbon and emission pollution that we are putting in the
- 7 atmosphere from combustion stays there far beyond our
- 8 timescales. Climate change due to increases in CO2
- 9 concentration is <u>largely irreversible for 1,000 years after</u>
- 10 emissions stop; and 20% of the global-warming pollution we
- 11 <u>emit will still be there in 20,000 years</u> (See S. Solomon, PNAS,
- 12 2009, graphs Figure 2, illustrating how CO2 stays in the
- 13 atmosphere, and for how long, after we stop emitting. Global
- 14 heating stays close to the same point it is when we stop using
- 15 fossil fuels and adding methane and CO2 to the
- 16 atmosphere).(9)
- 17 To date, in terms of carbon emissions, transportation is the
- worst-performing sector of the economy.(10) While many of
- 19 us may have heard we must embrace incremental engine
- 20 efficiency improvements, that transportation was going to be
- 21 one of the most difficult to decarbonize and that allowed
- 22 lower expectations, transportation is no longer considered to
- be a sector that should have a pass because options are few.
- Housing and buildings have a longer life cycle than vehicles,
- and retrofits are costly. Now transportation is considered
- one of the fastest sectors that can be reduced, after electricity
- 27 generation. Large emissions cuts this decade are crucial (11)
- and it is up to us to find, discuss, and accomplish those.

Figure 2: Heating remains at levels near where fossil fuel emissions stop. (S. Solomon, PNAS, 2009, Irreversible Climate Change)







EVALUATION FRAMEWORK

Cutting emissions in half this decade requires a rapid shift, and large investment reallocations.

Many of our key transportation challenges (GHG emission reductions, reducing congestion and

- 22 COLL La la collection characteristics (Grade Chinashor Technology, Technology Collection and
- 32 SOVs, air pollution) are interrelated. The most cost-effective approaches for transportation are
- more comprehensive and integrated.(12) Bhardwaj et al. and Axeson and Plotz list criteria for
- 34 selection: (*13*)

29

35

3637

38

39

40

41

42

43

44

- 1. Effectiveness at GHG mitigation (e.g., achieving 50% GHG reduction by 2030)
- 2. Cost-effectiveness (Does the policy miss achieve the GHG target at least cost to society?)
- 3. +/- Acceptability (Some policies are more acceptable than others, and in certain areas)
- 4. Transformational Signal (Adds clarity and congruence, showing the new direction that is being taken and will occur in the future, prompting many additional parties and actions)

Effectiveness at GHG mitigation is primary, and cost-effectiveness can still be a guide. Some policies have the benefit of also providing a transformational signal and some policies are more acceptable than others. To take an ICE vehicle ban as an example, this policy reduces GHG in a large amount in a sizable sector/mode and delivers an undeniable, clear and strong transformational signal. As it applies to new vehicles and addresses future decision making not retrofits of past poor

- decisions, it is very cost-effective. But political acceptability is low in the near term and many lack
- 2 good alternatives yet. This may imply the benefit of delivering this signal as soon as possible to give
- 3 notice, set direction, and clear and uncontradictory communication. Again, the most important
- 4 criteria is what policies have the capacity to get us to the necessary reductions this decade. The
- 5 most cost-effective and fast to implement ones should be high on our lists.

STRATEGY OVERVIEW

6

15

1617

18

1920

21

22

23

24

2526

27

28

29

30

31

32

35

- 7 The authors have evaluated greenhouse gas reduction strategies, environmental best practice and
- 8 cost-effective climate adaptation over the past 20 years, drafting such guides as are maintained on
- 9 AASHTO's website still, for Design, Construction, Maintenance, and Operations, in addition to
- 10 participation in Sustainable Low Carbon Transportation initiative, international climate action
- follow up meetings for transportation, and as North American consultors on Horizon 2020 projects.
- 12 Pulling from the practices that meet the top criteria of timely and sufficient effect, as well as cost-
- effectiveness, we note a number of cost-effective Transportation Demand Management and Smart
- 14 Growth policies with substantial co-benefits can be implemented relatively quickly: (14)
 - Fully implemented Pay as you drive (PAYD) vehicle insurance, taxes & registration fees could reduce personal travel by 10-15% within a few years.
 - Parking policy reforms, so motorists pay directly rather than indirectly, have parking cash out, and parking unbundling, for a major portion of parking, could reduce 5-15% of vehicle travel within a few years.
 - Cost-recovery road user fees (approximately doubling fuel taxes so they pay all roadway costs) or a gradual but predictable carbon tax, could reduce driving 5-15%, and eventually more as the carbon tax approaches \$50/tonne.
 - Reforming transport funding, so transportation agencies are willing to spend as much on a walk, bike, transit trip as on an automobile trip, which would significantly improve travel by resource-efficient modes. Improving cycling conditions while encouraging micro modes could reduce 5-15% of automobile trips.¹⁵
 - Residents of walkable urban neighborhoods drive 30-60% less than they would in automobile-oriented areas, and there is significant latent demand for housing in such areas. Reforming zoning codes to allow more affordable infill, and retrofitting suburbs to be more multimodal, could allow more households to find high-accessibility housing.
 - **Logistics improvements can reduce commercial travel -** 10% of travel, 30% of emissions, so critical for emission reductions.
- 33 These can provide large economic, social and environmental benefits together achieving 20-30%
- travel reductions by creating opportunities and incentives that reward people for less driving.

RE-EVALUATE PLANS AND PROGRAMS

- 36 A 50% GHG pollution reduction target is achievable in ways that benefit most people overall,
- 37 through a combination of vehicle travel reductions, and shifts to more efficient and alternative
- 38 fueled vehicles. Current planning, programming, and project development procedures should
- 39 minimize induced vehicle travel, promote greater use of roadway pricing, and redirect funding
- 40 streams to greatly increase investment in bicycling, walking, transit, micro and shared mobility, off
- 41 the state highway system as well as on.

- 1 As a general rule, single occupant vehicle (SOV) drivers will shift to an alternative mode only if the
- 2 alternative is equal to or better than SOV travel in terms of factors such as convenience, travel time,
- 3 reliability, perceived safety, and cost. Infrastructure investments need to support these shifts
- 4 rather than continue existing funding patterns. Every individual makes travel choices based on
- 5 these and other decision factors, with variation in the relative importance of each factor. It is
- 6 important to improve the accessibility, safety, comfort, and cost/relative competitiveness of options
- 7 such as transit, rideshare, bicycling, and walking for public health, transportation choice, and
- 8 public well-being as well as GHG reduction. To consider an example how continued highway
- 9 expansion investments are counter-productive for reducing VMT and emissions, early estimates are
- that just eight Colorado DOT projects on 270, I-25, and I-70 will increase vehicle miles traveled and
- associated pollution by 2% over the decade rather than decrease pollution and VMT;
- meanwhile, the Denver Regional Council of Governments has outlined \$3.2 billion in unfunded
- transit, bike and walking projects.(16)
- 14 To achieve large and fast GHG reductions this decade, State DOTs will need to re-evaluate
- and reissue STIPs and LRTPs. Transport model improvements provide better information on the
- 16 impacts and benefits of vehicle travel reductions; (17) when fully implemented such reforms
- typically reduce vehicle travel 10-30% compared with conventional, automobile-oriented
- planning.(18) A framework for local governments and MPOs that also prioritizes carbon reduction,
- 19 clarifies the sources of carbon they are responsible for cutting, and provides the resources to enable
- 20 planning, design, and investments is also desirable. National, regional and local action are
- 21 complementary and there is a strong case for coherence in a multi-scalar approach to carbon action
- plans in the transport sector as transport crosses spatial boundaries and the policy system places
- 23 different levers at different scales. (19) Furthermore, as Marsden and Anable note, "transparency
- 24 will be beneficial for honesty with the public and the difficult politics this rapid transition
- 25 necessitates. It will also mitigate against blame shifting across governments between and within
- scales and the resultant inaction which characterized the previous decade of supposed 'climate
- 27 action'."(20)

28

PAUSE HIGHWAY CAPACITY IMPROVEMENTS

- 29 There are critical things to look for if transportation is going to play its part in delivering rapid and
- deep cuts in emissions and abandoning plans for highway capacity expansions this decade is one of
- 31 them.(21) Capacity expansions should be suspended at least until pollution reductions are
- 32 achieved. Research solidly shows that spending on highway lane additions increase emissions and
- vehicle miles traveled whether those lanes are HOV/managed lanes or not, and improved air
- quality benefits the health of everyone in the region. US research clearly shows that additional
- 35 highway lanes generate additional vehicle miles traveled and pollution, on a 1:1 basis over 5-10
- years, not to mention the opportunity cost for investment on that timeframe.²²
- 37 It is well documented that adding new lanes, even HOV lanes, adds VMT and emissions. Projects
- 38 that expand highway capacity where conditions are congested will induce additional vehicle travel.
- 39 Capacity additions effectively reduce the "price" of driving. As far back as the 1960s, researchers
- 40 have identified this phenomenon, sometimes dubbed the "Fundamental Law of Road Congestion,"
- 41 which asserts that the amount of vehicle travel will increase in exact proportion to the highway
- 42 capacity expansion, so that traffic speeds will revert to their pre-expansion levels.
- 43 In the short term, effects such as new trips, mode shift to automobile travel, and longer automobile
- 44 trips all contribute to a net increase in VMT. The most recent and comprehensive research (Hymel,
- 45 2019) suggests that long-run elasticity is close to 1.0, which means that a 10% expansion of

- 1 highway capacity will lead to a 10% increase in VMT. This can negate any near-term congestion
- relief and lead to an increase in GHG emissions, particularly in urbanized areas. A review of 2
- 3 literature commissioned by the California Air Resources Board concludes: "Capacity expansion
- leads to a net increase in VMT, not simply a shifting of VMT from one road to another."(17) 4
- 5 Table 1: Research on the Impact of Capacity Expansion on Induced Vehicle Travel (Caltrans & CARB,
- 6 2020)

Study	Study Location (and Type)	Study Years	Time Period	Elasticity (change in VMT / Change in Lane- Miles)
Hymel (2019)	U.S (States)	1981-2015	long-term	0.89 to 1.06
Duranton & Turner (2011)	U.S. (Metro Statistical Areas – Interstates)	1983-2003	10 years	0.93 to 1.03 •
Cervero & Hansen (2002)	California	1976-1997	short-term intermediate term	0.59 0.79
Noland (2001)	U.S. (States – all roadway types)	1984-1996	short-term long-term	0.30 to 0.60 0.70 to 1.00
Noland & Cowart (2000)	U.S. (Metro Areas – Freeways and arterials)	1982-1996	short-term long-term	0.28 0.90
Hansen and Huang (1997)	California	1973-1990	short-term long-term	0.20 0.60 to 0.90

- Source: Duranton, G., & Turner, M. A., "The Fundamental Law of Road Congestion: Evidence from US Cities," American Economic 7 Review, 101 (6), 2011; Handy, Susan and Boarnet, Marlon, G., "Impact of Highway Capacity and Induced Travel on Passenger
- 8 Vehicle Use and Greenhouse Gas Emissions," California Air Resources Board, 2014; Hymel, Kent, "If You Build It, They Will Drive:
- 10 Measuring induced demand for vehicle travel in urban areas," Transport Policy. Volume 76, pp. 57-66, 2019.
- Note a Duranton & Turner developed several models and elasticities but report 1.03 as the "most defensible estimate." (from 11
- 12 CARB, 2020)
- 13 Capacity expansions will also be a waste of resources in the face of the lower traffic growth that
- must be achieved. It is important to build accountability around GHG emissions, opportunity costs, 14
- 15 and mitigation. Beyond cost-effectiveness, health effects and climate risks, equity of service for
- 16 public expenditure is another key reason to reason to revamp transportation planning, pause
- 17 highway capacity improvements, and re-focus public spending. 20-40% of the population should
- not or do not drive in any given community, and this segment has been underserved for the last 70 18
- 19 years. (23)

20

REORIENT SPENDING TO ENABLE PEOPLE TO USE THEIR CARS LESS

- 21 Some ways to reduce pollution provide more total benefits than others. There are cost-effective
- 22 policy reforms that can help us make the pollution reductions we need, in time. Many of these will
- 23 also help solve transportation problems by improving resource-efficient mobility options and
- 24 removing market distortions that cause excessive motor vehicle travel.

- 1 Hitting our CO2 budget this decade will require reorienting our transportation investments
- to enable a future in which people can and will use their cars less. This will not be possible if
- 3 car traffic is allowed to continue to rise and public investments facilitate and enable that. While
- 4 extensive dispersed development exists and transition to electric vehicles will be necessary,
- 5 technical substitution alone may be too slow to contribute meaningfully to carbon reduction
- 6 targets. Over-reliance on a shift to electric vehicles and slow pace of ICE vehicle phase-out (without
- 7 very high taxes or bans on registrations of new ICE vehicles) leaves a transition too slow to meet
- 8 the carbon budget. The cumulative amount emitted and timing of the transition matters most and
- 9 insufficient progress is occurring.(24) Meanwhile, average vehicles are being used for a lengthening
- period of time. ICE vehicles in the mix will be operating for longer. Curtailing the lifespan of assets
- 11 (stranding) is less cost-efficient than other options and to be avoided if possible.

SUPPORT A RAPID TRANSITION TO ELECTRIC VEHICLES AND AVIATION

- 13 Transition to electric from fossil fuels, and EVs yield great efficiencies in addition to saving
- 14 **public health and our life support systems**, threatened by climate change. Electricity is much
- more efficient; close to 80% of the electricity goes to move the vehicle compared to high losses to
- heat and inefficiency for fossil-fueled vehicles (12-25% of which goes to move the vehicle), which is
- improving as clean energy becomes a greater portion of the mix.
- 18 New vehicles are driven more annual miles than older ones, so this could represent 50% of all VMT,
- 19 but electric SUVs, light trucks and vans are just coming to market in 2022-2023. Even if 50% of
- VMT is electric by 2030, there will probably be lots of fuel intensive, high-mileage vehicle-miles,
- 21 including those opting for the largest and most polluting passenger vehicles until these are
- disallowed for sale or registration. Many may keep older, dirtier vehicles out of preference or
- 23 nostalgia. EV incentives to date have been costly and regressive.
- 24 Disallow further registration of new ICE vehicles, as soon as possible, especially in urban and
- 25 **nonattainment areas.** Used ICE vehicles may be purchased and registered by the state for some
- years, but disallowance of new ICE vehicle registrations will begin to reduce GHG pollution from
- vehicles at a rate approaching 5% per year. Disallowance can be fully justified on either air
- 28 pollution health effects (immediate) or climate impacts and threats. See former CDC Director
- 29 Thomas Frieden's description of Government's Role in Protecting Health and Safety on government
- 30 has obligations relating to health and air pollution, in his article in the *New England Journal of*
- 31 *Medicine.*(25)

12

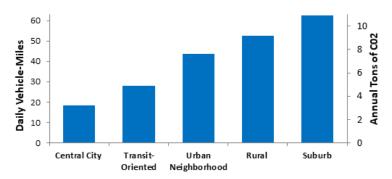
- 32 **Support safe bicycle and e-bike infrastructure, particularly near transit.** This includes more
- complete streets, bike ways, bike parking, plus e-bike subsidies and recharging stations.
- **E-Aviation**. Half of US air travel are flights less than 500 miles. The US could ramp up certification
- and manufacture of light airplanes for half of all flights. EV emissions for car, bus, and the only e-
- aviation possible and in the certification process at this point (9-19 passenger small aircraft, under
- 37 650 mile range) use approximately the same electricity and have similar CO2 emissions. For e-
- 38 aviation this is one-tenth of a conventional plane at 2,500 Btu/mile or 0.73 KWh/mile. A Tesla
- Model 3, which Hawaii DOT's fleet managers found the most economical option, uses about 0.33
- KWh/mile (or 3 miles/KWh), meaning a car that e-aviation (think of a bus) is more efficient than a
- car unless it is full (4 passengers, 0.0825 KWh/passenger miles).

ENSURE FULL PRICING AND COSTS FOR CARS

- 2 Because they have lower operating costs, EVs can encourage more car use, a rebound effect (26).
- 3 Electric vehicles do not get rid of all health problems. Much particulate pollution is from tires and
- 4 brake wear, though regenerative braking means the latter is less with EVs. USEPA and USDOT
- 5 could require tires that generate fewer particulates, which are dangerous for both people and
- 6 aquatic life.

PUBLIC TRANSIT IMPROVEMENTS AND TRANSIT-ORIENTED DEVELOPMENT

There are many ways to improve and encourage public transit travel including increasing service, giving transit vehicles priority in traffic, improving vehicle and station comfort, more convenient user information and payment systems, lower fares, commuter financial incentives, and targeted marketing that encourages commuters to try transit travel. Transit Oriented Development (TOD) uses transit stations as a catalyst to create compact, walkable neighborhoods where residents tend to own fewer cars, drive less and rely more on non-auto modes (World Bank 2018). High quality transit can attract 5-15% of urban trips, and TOD residents typically drive 20-50% less than in automobile-oriented areas (27). See below.



EXTEND ACTIVE TRAVEL IMPROVEMENTS

Active travel includes independent mobility via walking, bicycling, wheelchairs, scooters and more. Approximately 12% of U.S. personal trips are made by active modes, and their potential is much greater.(28) A quarter of current vehicle trips are less than one mile, a distance suitable for walking; half are less than three miles, a distance suitable for bicycling; and most are less than five miles, a distance suitable for e-biking.(29) Active mode improvements can also increase transit travel. Better and more protected facilities (paths, sidewalks, crossing, and bike parking), traffic calming, and more compact development (30) typically reduce automobile travel 5-15%.(31) Frank, et al. (2011) found that increasing the portion of street with sidewalks from 30% to 70% reduces local vehicle travel by 3.4% and emissions 4.9%.(32)

Protected bikeways and networks draw users and commuters. A major academic study, A Global High Shift Cycling Scenario, estimated that improving bicycling conditions could increase urban bicycle and e-bike mode shares from the current 6% up to 17-22%.(33) PNAS reported that in cities where bike infrastructure was added, cycling had increased up to 48% more than in cities that did not add bike lanes.(34) A 2013 Portland study found that build out of a protected bike system could occur for the same cost as 1 mile of 4-lane highway.(35)

1 ENCOURAGE AND ENABLE VEHICLE SHARING & ELECTRIC MICRO MODES

- **Vehicle sharing** with car, scooter, bike and car rental services provides a convenient alternative to
- 3 private vehicle travel and can allow households to own fewer vehicles. Drivers who shift from car
- 4 ownership to carsharing typically reduce their vehicle travel 30-60%, and scooter- and bike-
- 5 sharing can substitute for automobile trips. (36) Cars are only in use for 3-5% of an average day.
- 6 **Electric micro modes** such as e-bikes and e-scooters can travel faster, farther, in more conditions
- 7 and with heavier loads than human powered equivalents. One study, which accounted for various
- 8 climatic and geographic constraints, estimated that in typical urban areas they could achieve 10-
- 9 15% mode shares and 12% vehicle emission reductions.(37)

10 BUILD OUT/ENSURE UNIVERSAL BROADBAND

- 11 USDOT Secretary Buttigieg has spoken about "digital infrastructure, a very important
- part of how we address under-served areas that have been cut off from the kind of
- 13 broadband access they need." DOTs such as California and Maine have taken on their
- state's mandates to extend internet access and explore broadband/fiber along highway
- right of way. In the US, \$13 billion/year is included in the federal infrastructure plan
- currently for broadband. (38) Broadband reduces congestion in a more effective,
- 17 sustainable and permanent way.(39)

18 INSTITUTE EFFICIENT PRICING FOR PARKING, ROADS, AND PAY AS YOU DRIVE

- 19 Efficient parking pricing means drivers pay cost-recovery prices for the parking facilities they use,
- with higher rates under congested conditions (ICAT 2020). It can also include parking cash out,
- 21 which means that non-drivers receive the cash equivalent of parking subsidies offered to motorists,
- 22 and parking unbundling, which means that parking is rented separately from building space, so
- 23 occupants are no longer required to pay for costly parking spaces they don't need. Including land,
- construction and operating expenses, a typical urban parking space has \$500-1,500 annual costs, so
- efficient prices are typically \$2-8 per day, and more during peak periods. (40) Efficient parking
- 26 pricing is facilitated by using new automated pricing methods. Efficient parking pricing typically
- 27 reduces affected vehicle travel 10-30%.(41)
- 28 Efficient **road pricing** to ensure cost recovery (or decongestion pricing during peak periods)
- 29 typically reduces affected vehicle traffic 10-30%, with larger reductions if implemented with
- 30 improvements to alternative modes such as public transit (CARB 2010-2015). Fuel taxes would
- 31 need to approximately double to cover all roadway costs (in 2018 U.S. governments collected \$121
- 32 billion in vehicle fuel taxes and road tolls, about half of the \$225 billion spent on roads [FHWA
- 2018]), and more to internalize other costs. Full coverage of roadway impacts by weight of vehicle
- would help cover road wear and maintenance costs.
- 35 **Eliminating fuel subsidies and increasing fuel taxes** is predicted to reduce global GHG emissions
- 36 11-18% (42).
- 37 **Pay-As-You-Drive** (also called Distance-Based and Mileage-Based) pricing means that vehicle
- insurance, registration, taxes and lease fees are based directly on the vehicle's annual mileage. For
- example, a \$400 annual insurance premium becomes 3¢ per mile and a \$1,200 annual premium
- 40 becomes 10¢ per mile. A typical U.S. motorist would pay about 7¢ per mile for insurance, plus 3¢ for
- 41 registration fees and taxes. This is more equitable and affordable, and typically reduces affected
- vehicles' annual mileage by 5-15%, depending on design. (43)

1 SUPPORT TRANSPORTATION DEMAND MANAGEMENT (TDM)

- 2 TDM programs encourage use of resource-efficient modes. (44) Commute Trip Reduction programs
- 3 target employee travel. School and Campus Trip Management programs target students and school
- 4 staff. Transportation Management Associations target a particular area, such as a commercial or
- 5 industrial center. Although most TDM strategies individually only affect a small portion of total
- 6 travel, an integrated program can typically reduce affected vehicle travel 5-15% if it only provides
- 7 information and encouragement, and 10-30% if it has financial incentives such as efficient road or
- 8 parking pricing (45).

9 SMART GROWTH DEVELOPMENT POLICIES ENABLE SHORTER TRAVEL DISTANCES & MORE

10 TRAVEL OPTIONS

- Smart growth development practices result in more compact, multimodal communities, sometimes
- 12 called a 15-minute neighborhood, where common services are accessible within a 15 minute or
- bike ride. 46 Surveys indicate that many families want to live in such neighborhoods, but cannot due
- 14 to inadequate supply; Smart Growth policies respond to these demands by allowing more infill
- development.⁴⁷ Smart Growth policies typically reduce per capita vehicle travel and emissions 10-
- 16 30%, and more if implemented with complementary strategies such as efficient road and parking
- pricing.⁴⁸ The report, Quantifying the Effect of Local Government Actions on VMT,⁴⁹ found that
- 18 households located in automobile- dependent, urban fringe areas drive about three times more
- miles and produce about three times the carbon emissions as otherwise comparable households
- 20 located in compact, multimodal neighborhoods. Smart Growth policies provide adequate supply for
- 21 most households and businesses to locate in compact, multimodal neighborhoods.

22 FREIGHT TRANSPORT MANAGEMENT

- 23 Freight Transport Management includes various strategies to increase the efficiency of freight and
- commercial transport. (50) This includes improving distribution practices to reduce vehicle trips,
- 25 shifting freight to more resource efficient modes (such as from air and truck to rail and marine),
- improving efficient modes such as marine and rail, and better siting of industrial locations to
- 27 improve distribution efficiency. Freight vehicle represent less than 10% of total vehicle travel but
- 28 about 30% of vehicle emissions. More efficient management typically reduces freight vehicle travel
- 29 5-20%.(51) Axeson (2020) recommends a Low Carbon Fuel Standard for freight.⁵²

SUPPORT FAST TRANSITION TO RENEWABLE ELECTRICITY

- Carbon intensity and transportation emissions from powered vehicles are increasingly related to
- 32 electricity source. DOTs can support the most rapid and affordable reductions that can be achieved
- 33 in fossil fuel emissions; the most rapid and cost-effective CO2 emissions reductions that can be
- 34 achieved overall are by closing coal by 2025, getting to around 70% renewable electricity by then
- and over 95% by 2030.⁵³ Solar photovoltaic (PV) can be constructed in 3 months and wind in 6-12
- 36 months.(54) Today, even wind, solar, and storage tends to be cheaper than continued operation of
- 37 coal, even without accounting for health effects or climate risks. However, Investor Owned Utilities
- 38 (IOUs) are set up to maximize shareholder returns rather than public benefits and tend to try to
- keep plants running longer to achieve their full rate of profit on coal for as long as possible. (55)
- 40 Faster and more affordable transition to renewables have been achieved by municipally owned
- 41 utilities and through community choice aggregation and might be achieved through public
- 42 ownership and financing, as IOUs are guaranteed returns of 7-11% and public financing is
- 43 considerably lower cost.

30

SUMMARY

1

4

5

21

2 The following table indicates the portion of total travel that these strategies can reduce, and the

3 typical emission reductions that they can provide.

Table 2: Travel Impacts of Various TDM Strategies (56)

Emission Reduction Strategy	Portion of Vehicle Travel Affected	Typical Reductions of Affected Travel	Total Reductions
Planning Reforms	100%	10-30%	10-20%
Transit & TOD	30%. Mainly urban travel	10-30%	3-9%
Walking & Cycling	20%. Shorter-distance trips	10-30%	2-6%
Micromobilities	40%. Medium-distance trips	10-30%	4-12%
Carsharing	5%. Suitable households	20-40%	1-2%
Road Pricing	30%. On new or congested roads	10-20%	3-6%
Parking Cash-Out	20%. Commute travel	10-30%	2-6%
Parking Pricing	40%. Mainly urban travel	10-20%	4-8%
Pay-As-You-Drive Pricing	80%. Private automobile travel	10-12%	8-10%
Fuel Taxes - Tax Shifting	100%	5-15%	5-15%
TDM Programs	40%. Travel affected by programs	10-30%	4-12%
Smart Growth Reforms	50%. Mainly urban travel	20-50%	10-25%
Freight Transport Man.	10%. Freight and commercial travel	5-20%	0.5-2%

This table indicates that portion of total travel that each strategy affects & typical magnitude of reductions.

6 This indicates that an integrated package of TDM and Smart Growth policies can reduce travel by

7 20-30% while helping to achieve other economic, social and environmental goals. Other

8 researchers also conclude that TDM and Smart Growth policies can provide large cost- effective

9 emission reductions (57, 58). Most of these strategies reflect market principle: they respond to

10 latent consumer demands for non-auto travel options and housing in multimodal neighborhoods,

11 they more efficiently price vehicle travel, they help achieve multiple planning goals, and they

12 ensure that people who depend on non-auto modes receive their fair share of transportation

13 infrastructure investments.

- 14 These strategies reduce emissions in ways that benefit most people overall, by improving
- 15 affordable and healthy mobility options, reducing congestion and crash risk, and creating more
- 16 livable communities. The COVID pandemic demonstrated that many people can significantly reduce
- 17 their vehicle travel in ways that are efficient and convenient. For example, many people relied
- 18 more on telework, delivery services, and local services. Failing to invest much more in increasing
- 19 the safety and attraction of other ways to travel is a huge missed opportunity that can help achieve
- 20 emission reduction targets and other community goals.

CONCLUSION

- 22 This paper clarifies what will produce adequate and necessary reductions in time as well as what
- 23 needs to be paused that is undermining such efforts and potentially sacrificing the futures of so
- 24 many. Although there are many possible ways to achieve GHG emission targets, some are faster and
- 25 provide more total benefits than others. A useful rule of thumb is that at least half of transportation
- 26 emission reduction targets should be achieved with vehicle travel reduction strategies that provide
- 27 large co-benefits. (59) The necessary GHG reductions may be achieved from transportation this
- decade but there is no time to waste and departure from normal and failure work and paths will be

- 1 necessary. Planning, re-programming and reallocation of funds must occur to reach nationally and
- 2 internationally agreed GHG reduction objectives, in line with many state goals as well. It is no
- 3 longer acceptable to conclude that it cannot be done. It can and strong public benefits can be
- 4 achieved cost-effectively.

³ International Panel on Climate Change Report, Global Warming of 1.5°C, Oct 6, 2018, link

https://www.theguardian.com/environment/2011/nov/09/fossil-fuel-infrastructure-climate-change

 7 MIT News, https://news.mit.edu/2013/study-air-pollution-causes-200000-early-deaths-each-year-in-the-us-0829

⁷Frederica Perera, Pollution from Fossil-Fuel Combustion is the Leading Environmental Threat to Global Pediatric Health and Equity: Solutions Exist, Int J Environ Res Public Health. 2018 Jan; 15(1): 16. 2017 Dec 23. doi: 10.3390/ijerph15010016; John Vidal 24 March 2014,

https://www.theguardian.com/environment/2014/mar/25/air-pollution-single-biggest-environmental-health-risk-who causing nearly one in eight deaths in 2012 according to the World Health Organisation (WHO).

⁸ World Meteorological Organization, "Greenhouse gas concentrations surge to new record, October 2017.

⁹ Susan Solomona, Gian-Kasper Plattnerb, Reto Knuttic, and Pierre Friedlingsteind, Irreversible climate change due to carbon dioxide emissions, Proceedings of the National Academy of Sciences, 2008. http://www.pnas.org/content/106/6/1704.full.pdf

 10 Prof. Jillian Anable, Witness statement, Transport Action Network vs The Secretary of State for Transport. March 16, 2021, https://transportactionnetwork.org.uk/wp-content/uploads/2021/03/Witness-statement-of-Jill-Anable-23-10-2020-16-03-2021_Redacted.pdf

¹¹ Greg Marsden, personal communication and presentation, May 2021. Lynn Sloman, 2020, The Carbon Impact of Roads. Prof. Jillian Anable, Witness statement, Transport Action Network vs The Secretary of State for Transport. Oct 23, 2020 and March 16, 2021, https://transportactionnetwork.org.uk/wp-content/uploads/2021/03/Witness-statement-of-Jill-Anable-23-10-2020-16-03-2021_Redacted.pdf

 12 John Axeson, et al. Crafting strong, integrated policy mixes for deep CO2 mitigation in road transport, Nature Climate Change, Vol 10, Sept 2020, pp. 809–818. jaxsen@sfu.ca

¹³ Jonn Axeson, et al. Crafting strong, integrated policy mixes for deep CO2 mitigation in road transport, Nature Climate Change, Vol 10, Sept 2020, pp. 809–818. jaxsen@sfu.ca

¹⁴ Todd Litman, 2021, "Win-Win Transportation Emission Reduction Strategies Smart Transportation Strategies Can Reduce Pollution and Provide Other Important Economic, Social and Environmental Benefits," Victoria Transport Policy Institute, https://www.vtpi.org/wwclimate.pdf

¹⁵ Michael McQueen et al, "The E-Bike Potential: Estimating regional e-bike impacts on greenhouse gas emissions, TR Part D: Transport & Environment, Vol. 87, Oct '20, https://doi.org/10.1016/j.trd.2020.102482

¹⁶ RMI report, May 2021. Denver Regional Council of Governments MetroVision 2050 Plan.

¹⁷ GOPR 2018; Schneider, Handy and Shafizadeh 2014.

¹⁸ TransForm (2009), Windfall for All: How Connected, Convenient Neighborhoods Can Protect Our Climate and Safeguard California's Economy, TransForm (www.TransFormCA.org); summary at http://transformca.org/files/reports/TransForm-Windfall-Report-Summary.pdf

¹⁹ Greg Marsden and Jillian Anable, Case for coherence in a multi-scalar approach to carbon action plans in the transport sector, Institute for Transportation Studies, https://www.mdpi.com/2071-1050/13/13/7122 *Sustainability* 2021, *13*(13), 7122; https://doi.org/10.3390/su13137122, 25 June 2021

⁴ Saul Griffith et al., 2020, https://www.rewiringamerica.org/s/Rewiring_America_Field_Manual.pdf

⁵ Multiple studies. Authors think the best, simple depiction is in Saul Griffith, 2020, Rewiring America.

⁶ https://www.iea.org/newsroom/news/2011/november/the-world-is-locking-itself-into-an-unsustainable-energy-future.html, 2011 edition of the *World Energy Outlook (WEO)*.

- ²⁰ Greg Marsden and Jillian Anable, Case for coherence in a multi-scalar approach to carbon action plans in the transport sector, Institute for Transportation Studies, https://www.mdpi.com/2071-1050/13/13/7122 *Sustainability* 2021, *13*(13), 7122; https://doi.org/10.3390/su13137122, 25 June 2021
- ²¹Jillian Anable and Greg Marsden, Six ways for Government to make a serious shift to net-zero transport 13th July 2021, https://decarbon8.org.uk/six-ways-for-government-to-make-a-serious-shift-to-net-zero-transport/
- ²² Duranton, G., & Turner, M. A., "The Fundamental Law of Road Congestion: Evidence from US Cities," *American Economic Review*, 101 (6), 2011; Handy, Susan and Boarnet, Marlon, G., "Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions," California Air Resources Board, 2014; Hymel, Kent, "If You Build It, They Will Drive: Measuring induced demand for vehicle travel in urban areas," *Transport Policy*. Volume 76, pp. 57-66, 2019.
- ²³ Todd Litman, Victoria Transport Policy Institute, Win-Win Transportation Emission Reduction Strategies Smart Transportation Strategies Can Reduce Pollution and Provide Other Important Economic, Social and Environmental Benefits, April 2021, https://www.vtpi.org/wwclimate.pdf
- ²⁴ Prof. Jillian Anable, Witness statement, Transport Action Network vs The Secretary of State for Transport. March 16, 2021, https://transportactionnetwork.org.uk/wp-content/uploads/2021/03/Witness-statement-of-Jill-Anable-23-10-2020-16-03-2021_Redacted.pdf
- ²⁵ Thomas Frieden, N Engl J Med 2013; 368:1857-1859 May 16, 2013DOI: 10.1056/NEJMp1303819

https://activelivingresearch.org/sites/activelivingresearch.org/files/Dill_Bicycle_Facility_Cost_June2013.pdf

³² Frank et al., in Litman April 2021.

³³ Mason, Fulton and McDonald 2015.

³⁴Sebastian Kraus and Nicolas Koch, "Provisional COVID-19 infrastructure induces large, rapid increases in cycling," Proceedings of the National Academy of Sciences, April 2021, https://www.pnas.org/content/118/15/e2024399118

³⁵ Jennifer Dill, June 2013, Active Living Research, Cost of a bike network for a city is around \$60million (2008 estimate)

⁴⁰ Litman, 2019

⁴¹ CARB 2010-2015.

⁴⁴ SANDAG 2015; WSDOT 2017.

⁴⁶ AARP and CNU 2021; TfA and SGA 2020.

- ⁴⁷ NAR 2017.
- ⁴⁸ Kimball, et al. 2013.
- ⁴⁹ Salon, 2014.
- ⁵⁰ CIVITAS 2015.
- ⁵¹ Goetz and Alexander 2019.
- ⁵² Axeson, 2020.
- $^{53}\,GridLab, Committing\,to\,Climate\,Action,\,Sept\,2020,\,https://bit.ly/GridLabSept2020$
- ⁵⁴ Tom Solomon, personal communication and presentation on pace of implementation needed and possible in renewable electricity generation, July 28, 2021.
- ⁵⁵ Discovery, July 2021, Xcel/PSCo Electricity Resource Plan, submitted March 30, 2021.

Business as usual is killing us and it is time to invest in the strong state, economy, and communities we can have! There are many alternatives to shoveling money out the door in old ways and the largest chunks possible. (See <u>Freeway expansion is the wrong way to spend Colorado's COVID-19</u> relief dollars: When the pandemic is behind us, will we want increased air pollution and GHG?)

- Affordable housing Rents and home prices have skyrocketed even much more in the last year. It was a crisis even before COVID-19. Now, more people than ever are living out of their cars. What's the extent of the problem, need, and proposal for investment? Building might occur on existing city or state land, land from congregations, or as a height or density incentive on private property.
- Rooftop, parking lot, and on-farm solar + storage distributed investment saves on transmission spending, is more resilient in disasters, and provides returns to citizens/communities, and can be more affordable if financed through a public bank (1-2%) than through out-of-state investor owned utilities (7-11% rate of return). Link:1 in 8 homes.
- Retrofitting low and middle income households Pay As You Save on bill financing for
 water heater, furnace, range, dryer replacements to electric and other efficiency upgrades.
 Implement new decade's building codes, no longer dependent on fossil fuels, requiring
 passive home construction, optimizing solar radiation for power generation and heating.
- **Training for HVAC and appliance installers**. BlocPower has retrofit more than 1000 buildings, many with heat pumps and solar panels, in disadvantaged communities.
- **EV school buses ASAP are an investment in education**, with big health and learning benefits for kids, as pollution inside tends to be several times higher than the diesel outside. A <u>study</u> also found strong evidence of academic improvements from the retrofits... most significant for English test scores. According <u>to the study</u>: "Comparing our results to those of <u>another study</u> looking at pollution and test scores, retrofitting an entire district's fleet is at least as effective as moving all students from a district with average air pollution levels to one with air pollution levels in the 10th percentile." Also see http://bit.ly/AQheadlines
- **Road maintenance and resurfacing must be separated from widening.** Some rural roads haven't been repayed since the 1970s and need repairs; however, road widenings deliver 1:1 <u>extra traffic and pollution within 5-10 years</u>. Additional lanes, even HOV, lead to additional vehicle miles traveled and pollution. See <u>bit.ly/TransportationBestOpportunities</u>
- **Transit, bike, and walking infrastructure** entice people with pleasant/comfortable, safe, convenient, protected ways to travel. Research shows: if we build it, they will come!
 - o \$3.2 billion in transit improvements/backlog DRCOG 2050 MetroVision Plan
 - Every new public bus an EV (finance the difference, pay back in fuel and maintenance savings)
 - o Plan and build out a full network of protected bike & walkways for all. Denver estimates around 1 million/mile for high comfort bikeways or protected bikes lanes. For a network of 400-600 miles that's \$400-\$600M. 20 cities from CO would be about 10Billion.Cost of a bike network for a city is around \$60million (2008 estimate) https://activelivingresearch.org/sites/activelivingresearch.org/files/Dill Bicycle Facility Cost June2013.pdf
- Closing and remediating orphaned and abandoned wellheads \$1.7 billion immediately for already identified orphan wells. 70,000 wells are in some state of abandonment. Let's assume CO has to plug 40,000 of those. Others might be closed by industry or developers as

many as in the track of housing expansion? At a quarter million a piece, closure of 40K wells is \$7 billion. Note: there are 124K abandoned and active wells and research shows all wells tend to leak over 30 years.

- **Offer student loans at 1.25% interest**, like the Bank of North Dakota, and refinancing to such rates. There are **\$26 billion in student loans in Colorado**.
- Agriculture full funding or low interest loans (as above) for family farms implementing improvements to build soils, add PV, etc. Some farmers who have tried to access funds through FSA with their lower rates but they didn't qualify for the lending through them because they could actually get a loan from a commercial bank where the rate would be more in the 6% or higher range.
- Lending to small businesses, farms, and ranches for PV, soil health improvements, and more half of lending from Bank of North Dakota (1-2% interest generally, offered through local banks) is to small businesses.
- Pay off homes for fossil fuel workers/transporters. Finance new businesses, just transition, and enable community ownership of PV, wind, and storage to produce a long-term replacement income stream for communities like Craig and Pueblo. A Colorado Energy Authority could identify what generation, transmission, and distribution investments are most profitable, clean, effective and financially beneficial for Coloradans.
- **Save interest on state Certificates of Participation** (borrowing and what is owed in the future). This is another area that generates a return on investment so is good for public bank financing. Buy the COPs from the current investor, pay half back to the state, the rest to the state's bank, providing a long-term source of income for the state vs. a one-time shot in the arm like the stimulus.

Investments may be divided into two lists - those with potential returns and thus eligible for a loan, say at 1-3% interest from a public bank. Public banks (all banks) can tap funding near zero percent, actually 0.25%, from the Federal Reserve lending window. Loans are made from existing community banks but financing is provided through the state public bank; e.g., Bank of North Dakota. The latter gives half of its loans to small businesses in-state, student loans are available at 1.25% interest. Compare this to private sector banks, which barely loan to small businesses any more or Xcel, which will make investments at 7-10% interest (they tried to have a nearly 11% rate of return approved last year).

Policies for a just transition are detailed in <u>Appendix B of policy suggestions</u> in our letter from 67 organizations, plus Colorado businesses and clergy at <u>bit.ly/COCoalitionLetter</u>, as below.

Policy Recommendations Submitted Earlier

There are multiple approaches to reach the reductions in Colorado statute for 2025 and 2030. Most traditionally and reliably, there can (or should) be **actual limits on emissions from particular sources**. At the end of the day, this is thought to be the only guarantee that reductions will occur. These have been implemented elsewhere both or either: 1) sector by sector or source by source, such that the total amount of pollution allowed is regulated and declines over time, and/or 2) overall multi-sector limits. While our coalition is unified in calling for and counting reliable, enforceable limits that will actually achieve the reductions (get the job done), we agree that the AQCC should be able to consider a wide array of alternatives that have likely ability to get the job done in time and are considered "best practice" in various quarters.

Utilities/Electricity.

The easiest, most straight-forward and reliable progress will be made on the electricity supply until it exceeds 80-90% carbon free **before** 2030 -- 2025 even, targeting 75% by 2025 statewide. It is possible to get to 80% renewable in 5 years, cost-effectively as Xcel's own bids and community bids or requests for indicative pricing have shown over recent years. Although electricity is only 1/3 of CO2 emissions, we should do this ASAP since it supports clean up of other steps too and is cost-effective at present, leaving less CO2 to clean up later.

- **Phase out remaining coal plants by 2025 to reduce** GHGe by ~ 13 MMT This is the single most cost effective large piece the AQCC might implement. Virginia is now requiring coal phase out by 2024.
- Non-wires alternatives should be considered as true alternatives (and has been repeatedly ignored by the utilities). The transmission plan is a joint plan from Xcel, Black Hills and Tri-State. The 10 year plan lacks a big picture view of how to accommodate 80% by 2030, much less by 2025. The next ERP must have this because bidders must have some clue about points of interconnection with the electric system.
- Require all Investor Owned Utilities to assess their current assets in relation to
 - o **Social cost of carbon** and immediately retire what is unprofitable.
 - **Social cost of methane as well**. Given the importance of lowering methane emissions, the social cost is much higher cost than its GHG equivalent.
- **Allow/promote local ownership**/prevention of \$500M \$1Billion/year outflow of residents' dollars that could otherwise be reinvested for the energy transition, community redevelopment and lower costs for communities, individuals and businesses.
 - o Community Choice Energy is a potential first step to allow now.
 - Allow communities to buy back infrastructure (poles/wires) at depreciated value.
- Maximize wind and PV in resource plans. Value commercial and residential PV on distribution and feeder lines for function of avoiding upgrades and improving resiliency. Through better rate / tariff design, remove disincentives and incorporate incentives for DG and non-wire alternatives allowing natural market forces to increase DGRs. For example: provide non-demand based tariffs for commercial customers who invest in minimum 50% on-site load offset and / or minimum 2 EV charging stations per 20,000 sq/ft of building space.
- Audit existing efficiency standards. Upgrade to CA standards when there is a gap.
- Storage Use batteries strategically to integrate the PV and wind and maintain grid reliability. *Bloomberg* and *Utility Dive* reported last December that battery prices have fallen nearly 50% in 3 years and almost 90% since 2010, and they continue to decline at a fast pace.
 - o **Incentivize distributed batteries to optimize** distribution and feeder upgrades.
 - Sell surplus renewables to existing customers for cheap to charge EV batteries, heat water. Synchronize power use with renewables availability in real time by using dynamic pricing based on renewables forecasting (i.e., Time of Use/Renewables rates -- time when either wind or solar are plentiful).
 - Maximize rates/use of renewables in harmony with batteries to have the highest demand flexibility at the lowest cost.

- Demand shifting could be considered to be interchangeable with batteries at a lower cost—especially in the short term as batteries and other storage options scale up and the prices come down.
- Where possible, implement this with smart appliances that require almost no customer interaction after setup grid responsive chargers, thermostats, and hot water heaters. These are all available now. Reward owners fairly for their contribution to synchronizing power use.
- Charging infrastructure should be designed to support the renewables grid rather than fighting it. Charge with renewables whenever possible
- Integrate industrial processes with the electrical grid to decarbonize both at a cost less than each alone. For example, use cold storage and heat storage processes within industrial applications to support the flexible grid by timing the energy use whenever possible.
- Facilitate critical transmission links to support renewables. Investigate the costs and benefits of joining regional transmission organizations.
- Investigate the advantages and costs of joining Energy Imbalance Markets. Model EIMs now verify they will provide the maximum benefit for using inevitable renewables surplus when all neighboring utilities are at high levels of renewables (e.g., 2030). Offer the surplus for cheap for EV charging by residents/voters first, then to other utilities through an energy imbalance market. Enable interface with heating, hot water.
- Maximize competitive bidding for generation, transmission, storage, demandresponse, and efficiency initiatives within the resource planning process to determine and minimize costs in a way that trades off between all of these to result in lowest cost.

Oil & Gas Extraction

Methane is a prominent greenhouse gas, responsible for about 20% of all atmospheric radiative forcing. Research from NASA, Cornell and Harvard show that the worrying global spike in methane over the last decade is largely from a rise in one country and one industry -- US fracking. Further, the industry admits that nearly all wells leak over a period of 30 years, and a substantial number leak immediately (Schlumberger). Meanwhile, financial assurances from the industry are lacking, increasing the state's liabilities fiscally in addition to our air, land, and climate. Common sense tells us that the only way to reduce emissions is to stop adding to them through further permitting. Colorado must properly study and assess the full impact of the industry and begin to transition away from oil and gas, in order to both reduce VOC emissions statewide and address the full climate footprint of this state, especially since the presence in the atmosphere has increased greatly since the advent of fracking over a decade ago. As our planet continues to warm due to radiative forcing caused by greenhouse gases, understanding, monitoring, and reducing these emissions are increasingly important. Diminishing methane emissions is one of the most important opportunities and responsibilities before us, as methane produces immediate and out-sized positive effects. Identifying emission sources and quantifying emission rates can improve regional greenhouse gas budgets and mitigation strategies.

Avoiding adding any more emissions to Colorado air and water (or this unreasonable use of our water) is an immediate, rational and cost-effective path forward.

• Requirement for future rules to have full coverage/bonding (\$200-300K) for continued operation of wells. 2017 estimates for plugging and abandonment costs of

non-horizontal wells were around \$82,000 per well. This range appears to be best to provide coverage for Coloradans and Colorado budgets for what the state has now.

- Eliminate blanket bonding for all operators. Adequate financial assurances are essential for clean-up and closure over the lifetime of the well-head concrete
- o Ingraffea's research shows **5% of wells have methane gas leaks immediately** from failed casing, with the methane migrating up along the well annulus. See https://www.psehealthyenergy.org/wp-content/uploads/2014/03/The-Science-of-Shale-Gas-March-2014.pdf. **Nearly all casings fail within 30 years**.
- For operators in immediate financial stress, eliminate their existing blanket bonds to require full \$100,000 per well under current rules (which can be done under existing rules in North Dakota – CO needs to end blanket bonding immediately due to precipitous increase in industry bankruptcy rates).
- Use of a 20 year timeframe to assess the global warming potential for CO2e, per IPCC's 5th Assessment. This factor of 86 times that of CO2 must be used to calculate 1261 goals of 26% reduction in GHGs by 2025 based on the actual emission inventory to be obtained by the state using aerial and satellite data and NOT by 2005 baseline emission data alone.
- Implementation of a social cost of methane, different from CO2. Under Obama, EPA set the social price of methane at \$1400 per ton for the year 2020 based on \$50/ton CO2 times the 25-28 GWP over 100 years, which would be more than double that under most recent scientific guidance (86x). https://www.scientificamerican.com/article/epa-revises-the-social-cost-of-a-potent-greenhouse-gas/
- Begin top-down assessment of methane leaks NOW. Find the small number of wells, those super emitters, causing most of the - methane fugitive emissions. More accurately estimate pollution overall through...
- Implementation continuous on-the-ground monitoring by operators requiring a new rule based on instruments that have been peer reviewed as valid + robust aerial and satellite monitoring by CDPHE to spot and stop super emitters, financed by an industry fee.
- **Raise and enforce fines** 100x fines could be justified by the social cost of methane
- **No further fracking permits should be issued** while the state is still not meeting its 2025 and 2030 GHG reduction targets. New York, Vermont and Maryland have already banned fracking for health reasons https://www.realnatural.org/three-states-ban-fracking/
- For/in coordination with COGCC, the COGCC should:
 - o Implement a statewide, uniformly applied, minimum setback of 2500-feet from homes, schools, and other occupied buildings, as well as public lands, vulnerable areas and water sources, in siting of gas wells (Section A, Rule 604).
 - Phase out permitting for Colorado to meet IPCC goals.
 - Create science-based rules that take into full account the cumulative health and environmental impacts of oil and gas development in order to adequately meet SB19-181's mandate "to protect against adverse impacts to public health, safety, and welfare, the environment, and wildlife resources" and must meet SB19-181's mandate to "protect against adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations" [C.R.S. 34-60-106(2.5)(a)].

- Perform/require continuous monitoring at all oil and gas sites, as called for in SB19-181, and this data must be made available to the public online in real-time.
- Adopt the most protective standards for emissions and put into place public warning systems and penalties against polluters when there has been a violation of public health standards and regulations.
- o Provide Sovereign Tribal Governments and other Disproportionately Impacted Communities with at least as much deference as Local & Proximate Governments.
- Require Oil and Gas Operators to provide adequate financial assurances to remediate past and future impacts on public health, safety, welfare, the environment, and wildlife resources. The oil and gas industry must pay for environmental and health externalities.
- Assess the financial standing of companies prior to permitting, introduce appropriate bonding of \$270,000 per well, and hold Operators liable should their transferees and/or subsidiaries file for bankruptcy or otherwise fail to fulfill its obligations to the Commission.
- Not allow operators to escape liability through corporate mergers, transfers, corporate veils or bankruptcy - ensure that Parent Corporations and Shareholders of closely held corporations are held liable should transferees not fulfill their responsibilities to the Commission.

Transportation

- Electrify transportation
 - Announce that a phase out date for registration of NEW combustion vehicles is likely to be needed, at least in some areas of Colorado. Further total gas and diesel costs to consumers are over \$6.5 billion per year in CO (including vehicles, commercial, residential). Electricity would cost \$2.5 billion to do all these miles. So savings are \$4 billion per year.
 - **Support/enable widespread and low income purchase of EVs**. State and public receive cleaner air and lower climate risk, less family/job disruption through vehicle repairs and unexpected costs. Invest in savings, reasonable expectation of a half a million miles out of a new Tesla. Depreciation, maintenance costs, and fuel costs are all way lower. Ideally increase registration or annual fees by weight/space/pollution of vehicles.
 - **Home-based charging and storage**. Over 90% of charging is at home and wires to buildings already exist.
 - Support/require installation of chargers at apartments and in new construction
 - TOU Charge EVs big batteries, durable/lasts for weeks, practical. Fill up in surplus, leave almost 100 mile range all the time. Dominion/e-school bus investment to use batteries for grid balancing at the peak.
 - **Get ready for in-state flights and flight training** on eFlyers manufactured in Colorado.
 - **Support establishment of low/no emissions zones**, including cutting delivery vehicle pollution in urban areas.
- **Invest in transit and make it free**. Drivers have indicated again and again they are willing to subsidize getting others off the road and out of their/our way.

• Invest in safe/separated bike, walking infrastructure (reallocated space and \$\$).

Buildings. The AQCC should regulate pollution from gas appliances, both indoor and outdoor.

• Building Standards

- **Study CA standards for new construction and implement best practices** for low-energy-use buildings.
 - Incorporate consideration of building and window orientation to take advantage of passive solar heating and cooling.
 - Educate tree-planting programs about the impact of shading on solar building design or solar generation devices.
- Require all new residential and light commercial buildings to be built to DOE
 Zero Energy Home requirements and without natural gas.

(https://www.energy.gov/eere/buildings/doe-zero-energy-ready-home-partner-central) and without natural gas.

- Heat pumps are less costly than conventional furnaces and AC because the builder doesn't need to install ductwork. If the residence is all electric (e.g. heat pump water heater & electric oven/induction cooktop), the home saves about \$1,500 for installation of the gas line. The fixed portion of the gas bill has been estimated at \$2,080 by SWEEP and Xcel is seeking a 16% rate increase in natural gas. Building construction savings come to ~\$20,000 on a standard 8-plex townhouse
- Home health and safety reasons for shifts 10% of home fires start on gas cooktops/stoves and pollution levels, asthma rates, and medical costs are significantly higher.
- Shifting new buildings off natural gas soon is important to get some people moved, to train the trades, the businesses, get people used to the idea.
 Existing buildings will be one of the biggest challenges as it is labor intensive and costly. Funding will be needed.

Retrofit standards

- Study European building retrofit standards and adopt when it makes sense
- Convene an expert panel to oversee the practical and cost-effective retrofit electrification of existing buildings. Most of the buildings in 2030 and 2040 most likely already exist. Panel to include significant real-world building trade experience.
- New appliances should be electric and incentivized/additional costs covered, again, potentially with the support of a public bank/low interest loans.
- The State should evaluate how to decarbonize buildings. This needs to be more specific to emissions from buildings, as California has done with AB 3232.
 - The PUC should evaluate what regulatory changes are needed. Because the PUC regulates gas utilities there is a lot tied up in the gas business model that can help or hinder progress in decarbonizing buildings. A good place to start is a deeper investigation of this. See example from RI: www.ri.gov/press/view/36269
 - Investigate market development initiatives and incentives (similar to CA, SB 1477 and what various efforts in New York and New England have already been doing for several years). Build incentives, perhaps combined with workforce training or other initiatives, to start to build the market for heat pumps.

- Offer state tax rebates to offset the incremental cost of a high-efficiency coldclimate heat pump over the cost of a conventional gas furnace, so that the first cost of the heat pump is not a disincentive to the consumer. This would be similar to the existing EV credits, but not as large. According to SWEEP, the incremental cost for a typical home is on the order of \$700.
- Allow or require electric utilities to offer discounted electric space heating rates to offset increased operating costs of heat pumps. Heat pumps are far more efficient than gas furnaces, but even so, gas is cheaper than electricity on a per-Btu basis; for the representative existing home that SWEEP modeled, the annual heating cost was about \$880 with a heat pump, vs. \$425 for a gas furnace. Modeling conducted by Vibrant Clean Energy showed that electrification is generally good for all ratepayers, because increased electricity consumption spreads fixed costs for the electric system over more kWh, bringing rates down. It is to everyone's financial benefit (let alone health and environmental benefit) to encourage electrification, so the idea here is to require substantially lower electric rates to consumers who heat with electricity (approximately in half to bring parity with low gas prices). Lower electric rates would also encourage adoption of EVs.
- o Have the state, or possibly the local gas distribution utility, offer long-term, very low-cost financing for anyone who wants to convert their existing gas heating system to a heat pump system, and allow for repayment of the loan in the gas or electric bill. This would further lower the barriers to making the switch and prime the market for heat pump conversions, eventually leading to market transformation: making heat pumps the preferred option (as they are in other parts of the country), reducing their installed cost by increasing production and distribution volumes and growing the ranks of experienced HVAC installers so that installation costs decline. There are existing market transformation programs currently in the Northeast and Northwest that could be used as a model.
- See draft list of user-selectable alternative technologies on the NEAT webpage.

Agriculture

Farmers investments in carbon and methane sequestration, soil and runoff improvement, renewables and storage could also be supported by a public bank.

Many farmers realize that not only our Colorado climate but all of the progress we've achieved through the millennia is at risk with heating, drought, and climate change: the food security and economic progress that have been achieved, public health and life expectancy, and expanding peace. The changes we are seeing threaten to dramatically reverse, not merely stall these advancements as our human systems struggle to deal with a radically changing climate. American farmers can do much. American farmers have advanced agricultural systems and public policy support as well as leading agricultural research institutions. What's needed now is to make it profitable for farmers to help solve the climate crisis, for funding to be made available, via no cost loans through a public bank or through direct public financing, for farmers to lead and innovate so they can develop the agricultural systems that will reduce emissions, capture carbon, and help stabilize the climate, to improve the economics of our farms and rural communities and heal the environment at the same time. Transitioning into the Green Revolution didn't require farmers to tear down their farms and start over. It was a natural evolution where farmers made annual investments and innovated on their own farms. Five practice areas of innovation farmers will use, include 1) Conservation tillage—no till is an example, 2) Permaculture—cover crops and woody vegetation are two examples of keeping roots in the ground all year, 3) Extending crop

rotations—expanding crops on a whole farm basis drawing on 10,000 years of genetics rather than relying on only a narrowing set of crops, and 4) **Generating energy**— on the farm solar, wind, and methane digesters. 5) Adding Compost to soil as a soil amendment--applying compost to agricultural and rangeland soils can greatly increase carbon sequestration.

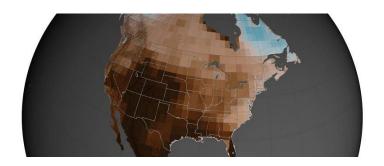
Materials Management

Colorado is one of the worst states when it comes to recycling, diverting only 17% of our waste from landfills compared to the national average of 35%.

- 1. Coordinate with the Colorado Department of Public Health and the Environment (CDPHE) to implement the state materials management plan and establish greater collaboration with the Colorado Climate Plan.
- 2. Include consumption emissions (the total emissions for a product, including its production and consumption) in future greenhouse gas inventories. The City of Boulder recently estimated that its consumption-based emissions were larger than all its current in-boundary emissions (including transportation and electricity), highlighting that how residents and businesses consume and manage their materials offers tremendous potential to reduce the city's climate impacts.
- 3. Dedicate staff at the state level to work on initiating and enhancing recycling, waste reduction, and waste diversion in all state-owned and state-operated buildings and agencies (in support of #4 below), developing markets for sustainable materials management, implementing a state materials management plan, and providing technical assistance to local communities.
- 4. Lead by example in state government by strengthening and enforcing the Green Purchasing Order, by recycling and composting in all state agency facilities, and by expanding state agency efforts to reduce food waste. Ensure these activities are acknowledged and supported by the state's Greening Government Leadership Council. Share these efforts with local government partners.
- 5. Seek avenues for state funding that support innovation in the waste sector, provide expanded waste diversion infrastructure to both rural and urban communities, and provide incentives for markets for recycled materials (e.g. tax breaks for siting a facility to make corrugated cardboard into new paper). Ensure materials recovery programs are eligible for funding sources focused on greenhouse gas reduction.
- 6. Implement policies that reduce organics such as yard-trimmings and food waste going in the landfill, which then become a source of methane, a potent greenhouse gas. Prioritize policies that keep organic materials out of the landfill over mitigation programs such as landfill gas recovery systems.
- 7. Support market development of compost use, including Colorado Department of Transportation purchasing for finishing road re
- 8. Quantify and include the greenhouse gas savings from waste reduction, recycling and composting in any plan updates or annual reports to highlight work already in progress.
- 9. Use the 20-year GWP of methane. Roughly 40% of Colorado's waste is organic materials that contribute to methane emissions.

In conclusion, we want to reiterate our gratitude for your commitment and service around this most important of matters. We have barely discussed land, in the above, but we note that the land unifies all of us in Colorado. We all care about the land, our state, and our future. Some of our ancestors have cared for this land and known it as part of our family for millennia. Many others have been drawn to our beautiful state more recently and value it. From farming or ranching families, living close to the land and across the political spectrum, many of us are wondering how it will support the next generation amidst "one of the deepest 'mega droughts' in the region in more than 1,200 years," recently published in the journal Science, and a third to a half attributable to climate change. For over 5 years we have all known about the extreme threats

to Colorado (see NASA's 2013 and 2015 research, image below), which said we were and are on track for a 30+ year Dustbowl style drought this century, stretching from Kansas to California's Central Valley. Any delaying action unconscionably risks our land, future, and people of Colorado, not just for us, our children and grandchildren, but <u>irreversibly</u>, according to other Colorado-led research. We must rise to the occasion and challenge as those who came before us, and now you!



Colorado Businesses for a Livable Climate

Call to Action Colorado

Together Colorado

League of Women Voters - Colorado

Moms Clean Air Force - Colorado

Colorado Latino Forum

Weld Air and Water

Colorado Immigrant Rights Coalition (CIRC)

International Indigenous Youth Council - Colorado

Unite North Metro Denver

GreenLatinos

CDP Energy & Environment Initiative

JeffCO NAACP Lifetime Members

Parents for the Planet

CatholicNetwork

Estes Valley Clean Energy Coalition (EVCEC)

Ethics and Ecological Economics (EEE) Forum

Rocky Mountain Peace and Justice Center

North Range Concerned Citizens

Broomfield Health and Safety First

Climate Reality Project - Denver-Boulder Chapter

Northern Colorado Community Rights Network (NOCOCRN)

Fort Collins Sustainability Group

Ekar Farms

Larimer Alliance for Health, Safety and Environment

The Land, Methodist Church

Colorado Coalition for a Livable Climate

The Lookout Alliance

Be The Change

Community for Sustainable Energy

Ecolustice Ministries

Loretto Earth Network

EnergyShouldBe.org

Renewables Now Loveland

350 Colorado

350 Colorado Springs

350 JeffCO

350 Denver

350 Northern Colorado

Wall of Women Colorado

Wild Earth Guardians

Resilient Denver

Wind & Solar Denver

Adams County Communities for Drilling Accountability NOW

Denver Catholic Worker

What the Frack?!! Arapahoe

The Wilderness Society

Center for Biological Diversity

Solar United Neighborhoods

Green Task Force, Jefferson Unitarian Church

Creation Care Ministry of Most Precious Blood Church - Denver

St. Ignatius Loyola Church - Care for Our Common Home team

System Change Not Climate Change - Colorado

Clean Energy Action

Sunrise Boulder

Sunrise Denver

Sunrise Fairview

Eco-Cycle, Inc.

Healthy Air & Water Colorado

The Climate Mobilization Colorado

Spirit of the Sun - Indigenous Youth

GreenFaith

Climate Hawks Vote

Climate Reality Denver/Boulder Chapter		
Spirit of the Sun at CHUN		
Defiende Nuestra Tierra		
Wilderness Workshop		
ActivateCO (across justice movements)		
Clean Energy Lakewood		
Businesses:		
Gosar Investigations		
R+B DESIGN Architecture		
Venner Consulting, Inc.		
Dr. Shirley Smithson: Just Imagine LLC!!		
Better Things Shared		
The Mind's Eye		
Mercury Cafe		
Wilwerding Consulting		
EnergyLogic, Inc.		
Sustainable Hiker, LLC		
Bondadosa, LLC		
Hugelrado Farms, LLC		
Book See Financial Group, LLC		
Capitol Solar Energy, LLC (Harvesting Sunlight since 1982)		
Ministers/Rabbis/Imams/other Faith Leaders from the Colorado faith community:		
Ministers/Rabbis/infains/other Partir Leaders from the Colorado faith Community.		

No Safe Level: A Review of Critical Air Pollution Health Effects Research from the Last **Decade and Government Responsibilities** Chair, TRB AHD10-1 Environmental Management & Decarbonization (former CDOT & DRCOG staff, and Littleton City Planning Commissioner) Venner Consulting, Lakewood, CO 80232 Hospitalist Denver Medical Center Denver, Colorado Psychiatrist Former Veterans Administration COS Colorado Springs, Colorado Traffic Engineer City of Kalamazoo, Kalamazoo, Michigan 49001 30 Word Count: 7481 words (no tables) Submitted August 1, 2021

ABSTRACT

1 2 3

4

5

6

7

8

9

10

11

12

13

14

15

16

17 18

19

20

- In the 90s and 2000s transportation agencies wrestled with going beyond mere compliance to environmental stewardship, delivering a "better than before" environment. Such thinking is needed now relative to air quality, given the huge advances and discoveries this past decade, about the much more extensive harms occurring from air pollution. Many agency staff are not aware of this avalanche of research findings, expanding the known health effects from fossil fuel vehicle emissions far beyond the diseases and health indicators known for decades (strokes, cardiac events, lung disease, asthma, and emergency room visits) to a wide span of diseases where air pollution has been found to cause inflammation, physical changes to organs, disease, and marked erosion in well-being and mental health. This paper reviews that literature for transportation agencies so it may be included in investment decisionmaking henceforth, beyond NAAOS and conformity. The paper outlines government responsibilities as described by the Centers for Disease Control, in the New England Journal of Medicine. Executive Orders and policies encompass the disproportionate air pollution health impacts resulting from transportation investments. USDOT's Executive Order on Advancing Racial Equity acknowledges that misguided policies and missed opportunities can reinforce racial, ethnic, geographic, and disability disparities. This inequity, these harms, and the urgent dangers of existing health and climate situations require substantial change on a short timeframe, to protect health and life and avoid further harm. Agencies can do better. Investments this decade can be refocused to dramatically reduce pollution, improve outcomes, and make
- 21 (250 words)

up for past harms.

- 22 **Keywords**: air, pollution, reduction, fossil fuel, health, research, disproportionate impacts, climate, race,
- NAAQS, conformity, equity, Title VI, decarbonization, planning, VMT, NOx, particulate matter, PM,
- 24 ozone, government, roles, responsibilities

25

INTRODUCTION: Well-proven, deadly, long known impacts of vehicle emissions

- A huge number of early deaths in the US, over 360,000 deaths per year, are from particulate matter
- 3 inhalation from fossil fuel combustion.(1) Researchers have found that vehicle emissions are the biggest
- 4 contributor.(2) The science of air pollution health impacts is more settled than that of climate change, on
- 5 which there is scientific consensus.(3) Air pollution from fossil fuel is the world's largest single
- 6 environmental health risk and a major contributor to inequity.(4)
- Air pollution health effects have been known for decades. Cost benefit analysis for most of this time has
- 8 centered around strokes, cardio, lung disease, asthma, and emergency room admissions.(5) In testimony
- 9 before Congress last year, NAS researcher Drew Shindell discussed the health and economic benefits of
- getting on a 2°C policy path over the next 50 years in the US. Doing so would:
- prevent roughly 4.5 million premature deaths in the US, 3.5 million hospitalizations and emergency room visits, and 300 million lost workdays in the US. The avoided deaths are valued at more than \$37 trillion.
- This amounts to over \$700 billion <u>each year</u> in benefits to the US from improved health and labor alone, far more than the energy transition would cost.
- In the next 20 years, roughly 1.4 million lives can be saved from improved air quality by making the energy transition in time to hit a path that keeps heating under 2°C. Air pollution responds immediately to emissions reductions and produces rapid health improvements.(6)
- 19 In the past decade, scientists have uncovered causal links with a whole new set of diseases where
- 20 inflammation from air pollution from motor vehicles is a factor, including dementia, diabetes, organ
- 21 cancers and inflammation, autism, cognition, development and learning, mental health and more.
- 22 NO SAFE LEVEL

25

26

27

28

29

30

31

32

33

34

36

37

38

39 40

41 42

1

- Medical researchers have detected harm from fossil fuels and combustion emissions far below USEPA "safe" levels (more at http://bit.ly/AQheadlines):
 - Joel Schwarz of Harvard notes that "Particulate air pollution is like lead pollution, there is no evidence of a safe threshold even at levels far below current standards, including in rural areas." This research team found harmful effects from PM2.5 in areas where concentrations were less than a third of the current standard set by USEPA and that both short- and longterm PM2.5 exposure resulted in higher death rates, even when restricted to zip codes and times with annual exposures well below EPA standards.
 - Yuming Guo, from Monash School of Public Health and Preventive Medicine notes, "The serious health effects of air pollution are well-documented...there is **no safe level of exposure**."(7)
 - Leo Stockfelt, Univ. of Gothenburg, Sweden: "we do not see any signs of a safe level, but rather that improvements are beneficial at all levels."(8)
- 35 Small exposures have big effects:
 - Pollutants and risks spread further than previously thought; even a miniscule increase in small air pollution particles causes overall increase in death from all causes and in heart and respiratory diseases. (9) Risks increase sharply as traffic increases. (10)
 - Just 1-year exposure to polluted air led to 7.5% increase in mortality for each increment of 10µg/m3 increase in PM2.5.(11)
 - A mere 2-day exposure led to >2% rise in mortality per 10 μg/m3 increase in PM2.5 concentration.(12)

- Exposure to air pollution 30 years ago is associated with increased risk of death.(13) Every additional 10µg/m3of exposure to air pollution 30 years prior increased mortality risk by 2% (vs. 24% increase in risk for exposure the previous year).(14)
- An increase in PM10 particles of 10μg/m3 cuts life expectancy by 9-11 years, among those dying prematurely from the exposure.(15)
- 6 Eliminating a harmful pollutant can lead to enormous improvements in quality of life, higher IQ, and total
- 7 lifetime earnings. For example, lead phase-out made a giant difference in lives. For each 2-year-old the
- 8 estimated economic benefit for each year's cohort of 3.8 million 2-year-old children ranges from \$110
- 9 billion to \$319 billion for lead reductions.(16) In addition to effects on physical health, life, and well-
- being, air pollution has been found even to have an association with crime and violence, after excluding
- other factors that may also affect crime, (17)(18) and in one study showing a much higher effect than
- 12 finishing high school.(19)

1

2

3

4

5

19

- Whether it is the health effects, the trauma and its extent, economic contributions, or climate risks, each
- justifies a rapid shift off fossil fuels to the fossil free alternatives now available. Pollution reductions
- in the range of 50% could be achieved in transportation this decade(20) and much more from the power
- 16 sector.(21) Transport decarbonization researchers now look to transportation to achieve much faster
- 17 pollution reductions than the building sector, for example, given the latter have a much slower turnover
- than vehicles and costly retrofits.(22)

HIGHLIGHTS FROM REVIEW OF HEALTH EFFECTS LITERATURE

- 20 Small particulate pollution is associated with smaller total cerebral brain volume even in low pollution
- 21 areas and among otherwise relatively healthy adults. (23,24) Doctors see changes in brain
- structure(25) from such exposure, linked to poorer cognitive function, dementia and other neurological
- problems.(26) In addition to impairing cognitive performance, mental health problems including
- 24 anxiety and depression increase with air pollution, as do suicides, autism, breast cancer,
- 25 appendicitis cases, and more.(27)

26 Air pollution causes inflammation

- 27 Air pollution triggers the body's inflammation process as the body reacts and mobilizes white blood cells.
- This inflammation can then generate pain, obesity, ADD/ADHD, peripheral neuropathy, diabetes, heart
- disease, stroke, migraines, thyroid issues, dental issues, and cancer. In the past decade researchers have
- 30 learned even more about increased heart and cardiovascular disease associated with polluted air:
- Air pollution -- even at levels below regulatory standards -- accelerates the progression of atherosclerosis and can cause heart attacks: for every 5μg/m3 higher concentration of PM2.5, or 35 parts per billion (ppb) higher concentration of NOx people had a 20% acceleration in the rate of calcium deposits. Arrhythmias, atrial fibrillation, or acute coronary syndromes increase with
- 35 levels of air pollution: 3% increase for every 10μg/m3 increase in PM10.²⁸
- Irregular heartbeat, lung blood clots, atrial fibrillation, and pulmonary embolism are clearly linked to
 air pollution. For every increase in PM of 10μg/ m3 the previous year, risk of deep vein thrombosis
 (blood clots) increased 70%.(29)
- Blood sugar and cholesterol levels worsen with exposure to air pollution, raising heart disease risk.(30)
- Exposure to fine particulate matter over a few hours or weeks can trigger irregular heartbeats, heart failure, cardiovascular deaths, and strokes. (31)
- Difference in air quality between a city like LA and one like St. Louis MO raises a woman's risk of cardiovascular disease by 44% if she has type 2 diabetes, more in some cases.(32)

- Pollution levels are linked to narrowing of arteries, often a precursor to stroke. PM2.5 is linked to faster thickening of carotid artery and indications of atherosclerosis among people with no obvious symptoms of heart disease.(33) Those in higher pollution areas near roads or city centers, controlling for other factors, are twice as likely to suffer from coronary artery calcification than people who live in less polluted urban and rural areas. Accumulations of coronary artery calcium makes patients 6x more likely to suffer a heart attack or die from heart disease.(34) Narrowing of carotid artery is also linked to problems in learning, memory, thinking and decision-making.(35)
- 8 Air pollution induces oxidative stress and inflammation in organs and the circulatory system.
- 9 Higher levels of leptin, an inflammatory cytokine, have been linked to increased rates of **heart disease**,
- obesity, and diabetes. (36) Increased insulin resistance and altered fat tissue are linked with air
- 11 pollution(37), raising risk of insulin resistance (prescursor to diabetes) in children.
- 12 The risk of chronic inflammatory disease and asthma severity rises with exposure to traffic exhaust.
- 13 Those living in higher traffic areas have markedly increased c-reactive protein, a marker of
- inflammation.(38) Air pollution also causes organ inflammation and/or fibrosis; exposure impacts the
- brain, liver, heart, pancreas, kidneys and more, even the appendix, causing more appendicitis
- 16 hospitalizations on "high ozone" days. Doctors have found that the effect of air pollution is strongest
- during summer when people are more often outside. (39) Kidney disease levels also rise with PM2.5 and
- 18 PM10 levels, even at levels of air pollution much lower than typically considered unhealthy. And air
- 19 pollution causes liver fibrosis, which is associated with metabolic disease and advanced stage of chronic
- 20 liver injury (fibrosis) more usually thought to be caused by chronic hepatitis, viral infection, obesity,
- 21 alcoholism or autoimmune diseases. Now doctors have found that air pollution plays a significant
- role.(40) Increased heat is exacerbating these effects too.(41)

23 Lung development and asthma

1

2

3

4

5

6

7

28

29

30

- 24 Air pollution matters more than passive smoking/inhalation of others' smoke and affects lung
- development, even at low levels. US researchers/doctors have commented that "the traditional approach
- to estimating the burden of air pollution-related disease has markedly underestimated the true effect" (42)
- on lung development, asthma and more. Now we know:(43)
 - In utero exposure to traffic air pollution is associated with asthma by age 6.(44)
 - The effect from exposure to traffic pollution matters more than passive smoking (45).
 - Even low levels of air pollution affect a child's lungs (46).

31 Cancer increases with auto exhaust

- 32 Outdoor air pollution is a leading cause of deaths from all cancers. Cancer link with air pollution is so
- 33 pronounced it is now considered a Group 1 human carcinogen along with radiation, dioxins, inhaled
- 34 asbestos. For every 10µg/m³ of increased exposure to PM2.5 the risk of dying from any cancer rose
- by 22%.(47) PM2.5 was associated with increased risk of mortality for all causes of cancer and for
- 36 specific cause of cancer in upper digestive tract, digestive accessory organs in all subjects; breast cancer
- in females; and lung cancer in males. With regard to digestive tract, liver, and pancreatic cancer,
- 38 every additional 10μg/m³ of PM2.5 increased mortality from cancer in the upper digestive tract by 42%
- and by 35% in other digestive organs like the liver, bile ducts, gall bladder, and pancreas. (48)
- 40 Breast cancer, the second leading cause of death in women, has been linked to traffic pollution.
- 41 Breast cancer risk increased by about 25% with every increase of NO2 of 5 pp billion (used as an air
- 42 pollution marker): women exposed to higher pollution levels were almost twice as likely to develop breast

- 1 cancer.⁴⁹ There is an 80% increase in risk of mortality from breast cancer with every 10μg/m³ increase in
- 2 exposure to PM2.5.⁵⁰
- 3 Infectious disease connection Exhaust makes immune cells less responsive to infection
- 4 Tuberculosis is the leading cause of infectious disease in world, killing 1.5 million/year and infecting 4.6
- 5 per million people in the US alone. Carbon monoxide from vehicle emissions triggers the
- 6 mycobacterium; exposure to diesel exhaust particles makes immune cells less responsive to infection,
- 7 **suppressing their function on a cellular level**. 51 "We're talking about huge socio-economic and public
- 8 health implications," said one of the doctors conducting the research.⁵² COVID vulnerability is worsened
- 9 with air pollution too.(53)

10 11

- Fertility, maternal and child health and development
- 12 Air pollution and the inflammation from it negatively affect fertility (30% reduction) and maternal and
- child health and healthy development, and increaes risk of death. (54) Even small amounts of air
- pollution cause observable, biological changes at the cellular level in pregnant women. Women
- exposed to the highest levels of air pollution were twice as likely to have intrauterine inflammation(55),
- which is linked to lifelong neurological and respiratory disorders for the child. (56)
- 17 Traffic-related air pollutants are also associated with pre-term births and still births. The time
- before conception, in early pregnancy, and during the last 6 weeks before birth are especially vulnerable
- to inflammation, which air pollution makes worse. (57) And 4 μ g/m³ increase in exposure to PM2.5 is
- associated with 2% increased risk of stillbirth. This heightened risk also occurs with exposure to NO2,
- 21 carbon monoxide, PM10 and ozone.(58)
- Allergens. Early air pollution exposure raises risk of allergies, and air pollution worsens plant allergen
- severity. Plants produce higher concentrations of allergens when exposed to traffic pollution. 596061.
- 24 Traffic pollution also chemically alters and worsens allergens in other ways too; ozone oxidizes an
- amino acid, setting off a chain of chemical reactions, binding proteins together, making allergens
- stronger. Other auto exhaust pollutants alter polarity, binding capabilities of allergenic proteins. (62)
- 27 Finally, risk of developing all allergies rises with exposure to traffic pollution in first year of life. (63)
- Autism. Multiple studies have found that pollution in utero or and in the early years places children at
- 29 risk of autism. Early exposure to small particulate matter or NOx especially during pregnancy and a
- 30 child's first year of life raises the risk. (64) NOx exposure during the first year doubles the risk of autism
- 31 and the greater risk of autism based on PM2.5 exposure was found in pregnancy through the first two
- 32 years of life. (65). Exposure to high levels of traffic-related air pollution during first year increases autism
- 33 risk by 300%.(66)
- 34 Neuroinflammation and damage to cognitive function and social competence
- 35 Air pollution and the neuroinflammation from it damages neural circuits, harming the brain and cognitive
- 36 function of children and adults.(67)
- Elevated levels of traffic-related air pollution lead to slower cognitive development in children ages 7-10 years old.(68)
- ages 7-10 years old.(00)
 Elevated levels of PM2.5 are associated with smaller cerebral brain volume even in low pollution
- 40 areas and among otherwise relatively healthy adults. A study of men and women age 50+ found that
- every 10% (a couple microgram) increase between 4.1 and 20.7 of PM2.5 led to a .36 point **drop in**
- 42 **cognitive function score** *equivalent to 3 years of aging*. Long-term exposure can cause damage to

- brain structures and directly and negatively affects cognitive function in older adults. Recent studies observe this **even in middle-aged adults**. (69)
 - Traffic pollution produces cognition and brain MRI alterations akin to Alzheimer's. Air pollution is estimated to cause 21% of vascular dementia and Alzheimer's disease. (70) Higher levels of long-term exposure to PM produces significantly faster cognitive decline and physical changes. (71)
 - An increase of only 2µg per cubic meter in PM2.5 was equivalent to one year of brain aging and a 46% greater risk of silent strokes, with systemic inflammation being the likely cause. Silent strokes increase the risk of overt strokes and developing dementia, problems walking, and depression. (72)
 - When people live in areas with air pollution, their brains produce **autoantibodies similar to those found in those of people who have neuroinflammatory diseases like multiple sclerosis**, and long-term exposure to air pollution can cause inflammation and **physical changes to the hippocampus associated with depression, memory, and learning difficulties**.(73)
 - Brain biopsies of young urban children living in areas with high air pollution show neurodegenerative changes, similar to Alzheimer's or Parkinson's.(74)

Cognition, IQ, self-regulation, and social competence. Air pollution exposure from fossil fuel combustion is associated with lower intellectual quotient (IQ), social competence, self-regulation, and academic performance after controlling for other factors that could affect each.

- ADHD, anxiety, depression, inattention, and behavioral disorders increase with prenatal exposure to PAHs from motor vehicles, oil and coal, combustion. Research doctors observe physical changes to the hippocampus (shorter dendrites, reduced cell complexity) with exposure to traffic pollution (PM2.5), along with effects on learning, memory, and increased depression. (75)
- Air toxics are associated with significantly lower GPAs and IQ tests at age 5.(76)
- Prenatal exposure to PAHs raises the odds of behavior problems associated with attention deficit hyperactivity disorder, or ADHD, at age 9.(77)
 - This damage to neural circuits and social competence from early exposure to vehicle pollution leads lifelong effects. Children exposed to higher levels of PAHs **did not improve in self-regulatory function as they grew.** (78)

Psychiatric risk for all people increases with pollution.

- Air pollution is associated with anxiety, the most common psychiatric disorder. (79)
- Prenatal exposure to airborne PAH during gestation associated with **developmental delay at age 3**, reduced verbal and full-scale IQ at age 5, and symptoms of anxiety and depression at age 7.(80) Depression is the leading cause of disability worldwide and results in major economic and life impacts.(81)
- Psychiatric diagnosis and medical treatment thereof correlates with air pollution concentrations: risk increases 9% per 10 mg/cubic meter increased concentration of nitrogen dioxide.(82)
 - Salt Lake City residents were more likely to commit suicide within 3 days of exposure to increased levels of nitrogen oxide or high concentrations of fine particulate matter.(83)
- Short-term air pollution exposure increased suicide risk by 25% for NOx, 5% for PM.(84)

Cognition impacts for otherwise healthy people, from otherwise safe pollutants. Even safer pollutants from fossil fuel combustion, like CO2, erode cognition as CO2 rises and concentrates indoors. When we breathe air with high CO2 levels, blood CO2 levels rise, reducing the oxygen that reaches the

- brain; studies show that this can increase sleepiness and anxiety, and impair cognitive function. (85)
- 2 Indoor CO2 levels can be 3-4x those outside (415 ppm now) and low to moderate levels of CO2 have a
- 3 negative impact on productivity, learning, and test scores. Studies have found cognitive scores 2x higher
- 4 on days with high outdoor air/ventilation(86). Occupant satisfaction drops when building CO2 is over
- 5 600-700 ppm. For every 10% increase in dissatisfaction with air quality, productivity performance
- 6 decreased by 1.1% or more and seems to be noticed more than PM.(87)
- 7 Even stock trading performance decreases steadily with the severity of air pollution.(88) Researchers
- 8 discovered that "being exposed to bad air, even for a day, affects your emotional state. It puts you in a more
- 9 depressed mood. It also reduces your cognitive capability. It negatively affects how you feel and how good
- 10 you are at thinking (and) bad moods and lower cognitive capabilities...associated with (robust 12%) lower
- 11 returns."(89)
- 12 Unjust, inequitable, highly disproportionate impacts, especially on people of color
- 13 Air pollution effects are disproportionate, falling most heavily on people of color (POC), non-drivers, and
- those who drive less.(90) Those living or walking near exhaust sources (typically those with lower
- incomes) face greater exposure, morbidity, and mortality. (91) 70% of the over 20 million people who live
- in counties with failing grades for ozone, short-term and year-round particle pollution are POC.(92) Only
- 17 40% of whites do.

24

25

26

27

28

29

30

31

32

33

34 35

36

37

38

39

40 41

42

43

- In addition to effects on physical health, life, and well-being, air pollution has been found even to have an
- 19 association with crime and violence, after excluding other factors that may also affect
- crime,(93)(94)(95)(96) and in one study showing a much higher effect than finishing high school.

21 RAPID, SIZABLE AIR POLLUTION REDUCTION IS KEY

- 22 Clean Air Act (CAA) compliance through STIP conformance with National Ambient Air Quality
- 23 Standards (NAAQS) for <u>criteria air pollutants</u> is falling short.
 - Evaluations and standards are set separately for pollutants, so when EPA cannot tease apart
 confounding effects, the agency often errs on the side of saying the effect of one cannot be
 determined with confidence.
 - A further problem has been the timing and lack of updates during a critical decade of research and health findings. The last one for PM was published in final form in 2012, with drafts in circulation the previous two years, so research was primarily from the previous decade, but virtually all of the research on air pollution health effects and attribution beyond respiratory and cardio all the other physical diseases and many mental and cognitive conditions -- has occurred since 2010.⁹⁷
 - Even older, inadequate standards are not being complied with. For example, Denver has been in non-attainment for ozone for over a decade. (98) Meanwhile and ironically, the state is spending COVID recovery dollars on highway widenings (99), as the literature confirms vehicle miles traveled rise on a 1:1 level with additional lanes over 5-10 years, (100) causing more pollution (101)(102) and disproportionate impacts. (103) Professionals, including Chicago's, submitted comments to USDOT noting that:
 - Air quality models to prove that roadway capacity projects will conform to emissions limits in nonattainment areas are easily gamed by tweaking inputs to continue to allow roadway expansion in places suffering negative air quality impacts due to transportation. Those impacts are felt more severely by communities that have borne the brunt of road building and already suffer major air quality problems and high rates of associated illnesses -- usually communities of

color. This set of regulations should be completely overhauled and made far more aggressive at protecting human health and directing investments to those that are carbon free. (104)

Greater consideration of such health factors and effective curbs to future widening investments are needed. Former CDC Director Thomas Frieden notes in the *New England Journal of Medicine*:(105) Government's Role in Protecting Health and Safety that government has key obligations:(106)

- Law and public opinion recognize protection of health and safety as a core government function, despite opposition with financial, philosophical or legal bases.
- Government must protect individuals from preventable harm and unhealthy environments caused by others, often through population-wide action, a more effective and efficient means of protecting public health, as individuals cannot feasibly implement this on their own.
- Government is sometimes the only entity capable of promoting the greater good by reconciling social and economic interests. Public acceptance occurs as the benefits are realized.
- Public health agencies operate on the belief that government has a valid interest in a healthier populace.
- Controversy can be reduced by providing data documenting the health burden and building consensus about the problem and the action's efficacy.

Frieden goes on to say: "Opponents of specific public health actions may believe that the health burden is low, the intervention too costly or likely to be ineffective, and that the expected benefits don't warrant the costs. There may also be philosophical objections, such as perceived loss of personal autonomy or the belief that these actions will undermine self-reliance or individual choice. However **the benefits of public health action include economic, health care, and productivity gains, as well as longer, healthier lives**. Dissemination of accurate information on costs and benefits may be the best way to reduce opposition and implement effective public health actions. When government fails to protect and improve people's health, society suffers." For multiple reasons, not least urgent health improvement from transportation emissions that have been imposed for decades, now is the chance for a "do over" to avoid climate change, address injustice, improve public health, safety, and livability.

¹ https://www.hsph harvard.edu/c-change/news/fossil-fuel-air-pollution-responsible-for-1-in-5-deaths-worldwide/

² MIT News, https://news mit.edu/2013/study-air-pollution-causes-200000-early-deaths-each-year-in-the-us-0829

³ Naomi Oreskes, 2004. The Scientific Consensus on Climate Change, *Science* 03 Dec 2004: Vol. 306, Iss. 5702, pp. 1686, DOI: 10.1126/science.1103618 https://science.sciencemag.org/content/306/5702/1686

⁴Frederica Perera, Pollution from Fossil-Fuel Combustion is the Leading Environmental Threat to Global Pediatric Health and Equity: Solutions Exist, Int J Environ Res Public Health. 2018 Jan; 15(1): 16. 2017 Dec 23. doi: 10.3390/ijerph15010016; John Vidal 24 March 2014, https://www.theguardian.com/environment/2014/mar/25/air-pollution-single-biggest-environmental-health-risk-who causing nearly one in eight deaths in 2012 according to the World Health Organisation (WHO).

⁵ Richard D. Wilson & David W. Minnotte (1969) A Cost-Benefit Approach to Air Pollution Control, Journal of the Air Pollution Control Association, 19:5, 303-308, DOI: 10.1080/00022470.1969.10466489 through American Lung Association studies and research in Southern California in the 1990s.

⁶ Drew Shindell, "Health and Economic Benefits of a 2°C Climate Policy: Testimony to the House Committee on Oversight and Reform Hearing on "The Devastating Impacts of Climate Change on Health," Aug 5, 2020.

⁷ Zhiling Guo, Heidi Qunhui Xie, Peng Zhang, Yali Luo, Tuan Xu, Yiyun Liu, Hualing Fu, Li Xu, Eugenia Valsami-Jones, Patricia Boksa, Bin Zhao. Dioxins as potential risk factors for autism spectrum disorder. Environment

International, 2018; 121: 906 DOI: <u>10.1016/j.envint.2018.10.028</u> <u>https://prezi.com/g_nt-ml9jvid/traffic-related-air-pollution-particulate-matterand-autism/.</u>

- ⁸ Quote from Dr. Leo Stockfelt, University of Gothenburg. "Air pollution increases risk of early death in Gothenburg." ScienceDaily. 24 March 2016. www.sciencedaily.com/releases/2016/03/160324104959 httm. Similar quotes from Canadian, Chinese, and Harvard researchers are available.
- ⁹ Richard B. Hayes, Yikyung Park, Ryan Shanley, Chris C. Lim, Michael Jerrett, Harmony R. Reynolds, Yongzhao Shao, Kevin Ryan Cromar, Jiyoung Ahn, George D. Thurston. Ambient Particulate Matter Air Pollution Exposure and Mortality in the NIH-AARP Diet and Health Cohort. *Environmental Health Perspectives*, 2015; DOI: 10.1289/ehp.1509676
- ¹⁰ Zhang K¹, Batterman S. Air pollution and health risks due to vehicle traffic. Sci Total Environ. 2013 Apr 15;450-451:307-16. doi: 10.1016/j.scitotenv.2013.01.074. http://www.ncbi.nlm.nih.gov/pubmed/23500830
- ¹¹ Liuhua Shi, Antonella Zanobetti, Itai Kloog, Brent A. Coull, Petros Koutrakis, Steven J. Melly, Joel D. Schwartz. Low-Concentration PM2.5 and Mortality: Estimating Acute and Chronic Effects in a Population-Based Study. *Environmental Health Perspectives*, 2015; DOI:10.1289/ehp.1409111

Harvard School of Public Health. "Air pollution below EPA standards linked with higher death rates." ScienceDaily. ScienceDaily, 4 June 2015. www.sciencedaily.com/releases/2015/06/150604100801 htm.

¹² Liuhua Shi, Antonella Zanobetti, Itai Kloog, Brent A. Coull, Petros Koutrakis, Steven J. Melly, Joel D. Schwartz. Low-Concentration PM2.5 and Mortality: Estimating Acute and Chronic Effects in a Population-Based Study. *Environmental Health Perspectives*, 2015; DOI:10.1289/ehp.1409111

Harvard School of Public Health. "Air pollution below EPA standards linked with higher death rates." ScienceDaily. ScienceDaily, 4 June 2015. www.sciencedaily.com/releases/2015/06/150604100801 htm.

- ¹³ http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news 8-2-2016-16-20-31 https://lungdiseasenews.com/2016/02/15/air-pollution-can-lead-life-threatening-lung-disease-30-years-later-study-finds/
- ¹⁴ Hansell, Anna; Rebecca E Ghosh, Marta Blangiardo, Chloe Perkins, Danielle Vienneau, Kayoung Goffe, David Briggs, John Gulliver. Historic air pollution exposure and long-term mortality risks in England and Wales: prospective longitudinal cohort study. Thorax, 2016 DOI:10.1136/thoraxjnl-2015-207111
- ¹⁵ Mikael Skou Andersen. Co-benefits of climate mitigation: Counting statistical lives or life-years? Ecological Indicators, 2017; 79: 11 Elsevier, DOI: <u>10.1016/j.ecolind.2017.03.051</u>

Elsevier. "Increased air pollution cuts victims' lifespan by a decade, costing billions: But different calculations mean estimated cost is 3 times lower in EU than with US methodology." ScienceDaily. ScienceDaily, 3 July 2017. www.sciencedaily.com/releases/2017/07/170703083252 htm

- ¹⁶ Scott D Grosse, Thomas D Matte, Joel Schwartz, and Richard J Jackson, Economic gains resulting from the reduction in children's exposure to lead in the United States, Environ Health Perspect. 2002 Jun; 110(6): 563–569. doi: 10.1289/ehp.02110563, PMCID: PMC1240871, PMID: 12055046, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1240871/
- ¹⁷ LA Times, July 2021, http://www.erichmuehlegger.com/Working%20Papers/crime and Pollution fv.pdf
- ¹⁸ Evan Herrnstadt, Erich Muehlegger, Air Pollution and Criminal Activity: Evidence from Chicago Microdata,

NBER Working Paper No. 21787, Issued in December 2015, http://www.nber.org/papers/w21787

- ¹⁹ Environ Health. 2016; 15: 23. Published online 2016 Feb 16. doi: <u>10.1186/s12940-016-0122-3</u> PMCID: PMC4756504
- ²⁰ Marie Venner and Todd Litman, unpublished manuscript, submitted to TRB in July 2021.
- ²¹ GridLab, Committing to Climate Action, Sept 2020, https://bit.ly/GridLabSept2020, most cost-effective path is to phase out coal-fired generation by 2025 even in a coal dependent state, get to over 70% renewable electricity by 2025 and to 98% by 2030.
- ²² Personal communication among researchers participating in multiple years of TRB's decarbonization series of collaborative sessions across committees and groups (2017-2020), in particular, recent communication with Dr. Greg Marsden, Univ. of Leeds, UK, around decarbonization strategy in the UK (spring 2021).

- ²⁵ Pratt, Gregory C. et al. "Traffic, Air Pollution, Minority and Socio-Economic Status: Addressing Inequities in Exposure and Risk." Ed. Brian Caulfield. International Journal of Environmental Research and Public Health 12.5 (2015): 5355–5372. PMC. Web. 20 Nov. 2017 https://www.ncbi.nlm.nih.gov/pubmed/25908455
- ²⁶ Weuve, Jennifer et al. "Exposure to Particulate Air Pollution and Cognitive Decline in Older Women." Archives of internal medicine 172.3 (2012): 219–227. PMC. Web. 20 Nov. 2017. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3622279/
- ²⁷American Thoracic Society (ATS). "Air pollution and impaired lung function prove independent risk factors for cognitive decline." ScienceDaily, 18 May 2015. Www.sciencedaily.com/releases/2015/05/150518121147.htm
- ²⁸ Kaufman, Joel D et al. Association between air pollution and coronary artery calcification within six metropolitan areas in the USA (the Multi-Ethnic Study of Atherosclerosis and Air Pollution): a longitudinal cohort study. *The Lancet*, 2016 DOI: 10.1016/S0140-6736(16)00378-0

University of Washington Health Sciences/UW Medicine. "Study shows how air pollution fosters heart disease: 10-year project revealed air pollutants accelerate plaque build-up in arteries to the heart." ScienceDaily. ScienceDaily, 24 May 2016. <www.sciencedaily.com/releases/2016/05/160524212005.htm.

²⁹ A. Milojevic, P. Wilkinson, B. Armstrong, K. Bhaskaran, L. Smeeth, S. Hajat. Short-term effects of air pollution on a range of cardiovascular events in England and Wales: case-crossover analysis of the MINAP database, hospital admissions and mortality. *Heart*, 2014; DOI:10.1136/heartjnl-2013-304963

BMJ-British Medical Journal. "Air pollution linked to irregular heartbeat, lung blood clots." ScienceDaily. ScienceDaily, 4 June 2014. www.sciencedaily.com/releases/2014/06/140604203052 htm

- ³⁰ Maayan Y. Sade, Itai Kloog, Idit F. Liberty, Joel Schwartz, Victor Novack. The Association Between Air Pollution Exposure and Glucose and Lipids Levels. *The Journal of Clinical Endocrinology & Metabolism*, 2016; jc.2016-1378 DOI: 10.1210/jc.2016-1378
- $\frac{^{31}\ Circulation.}{\text{Lttp://www ncbi.nlm.nih.gov/pubmed/20458016}} 2010\ Jun\ 1;121(21):2331-78.\ doi: 10.1161/CIR.0b013e3181dbece1.\ Epub\ 2010\ May\ 10.$
- ³² Jaime E. Hart, Robin C. Puett, Kathryn M. Rexrode, Christine M. Albert, Francine Laden. Effect Modification of Long-Term Air Pollution Exposures and the Risk of Incident Cardiovascular Disease in US Women. *Journal of the American Heart Association*, 2015; 4 (12): e002301 DOI: 10.1161/JAHA.115.002301

Brigham and Women's Hospital. "Air pollution and cardiovascular disease: Increased risk for women with diabetes: Nationwide study of women reveals that those with diabetes are most susceptible to the adverse cardiovascular risks posed by exposure to air pollution." ScienceDaily, 25 Nov 2015. www.sciencedaily.com/releases/2015/11/151125233030.htm.

³³ Adar SD, Sheppard L, Vedal S, Polak JF, Sampson PD, et al. Fine Particulate Air Pollution and the Progression of Carotid Intima-Medial Thickness: A Prospective Cohort Study from the Multi-Ethnic Study of Atherosclerosis and Air Pollution. *PLoS Med*, 2013 DOI: 10.1371/journal.pmed.1001430

Public Library of Science. "Air pollution and hardening of arteries." ScienceDaily. ScienceDaily, 23 April 2013. www.sciencedaily.com/releases/2013/04/130423172706.htm

³⁴ Jamal S. Rana, Michael Pencina, Michael Blaha, Roger Blumenthal, Arthur Agatston, James K. Min, Ron Blankstein, Nathan D. Wong, Joao Lima, Leslee J. Shaw, Mathew J. Budoff, Mary Cushman, Daniel Berman, Khurram Nasir. Coronary Artery Calcium Score Versus A Multiple Biomarker Approach For Coronary Heart Disease Risk Assessment: Multi-Ethnic Study Of Atherosclerosis. *Journal of the American College of Cardiology*, 2013; 61 (10): E812 DOI: 10.1016/S0735-1097(13)60812-8. Also, Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center (LA BioMed). "Increased risk of heart attack and death with progressive coronary artery calcium buildup." ScienceDaily. 2 May 2013. www.sciencedaily.com/releases/2013/05/130502142657.htm

³⁵ American Academy of Neurology (AAN). "Narrowing of neck artery without warning may signal memory, thinking decline." ScienceDaily. 21 April 2014. sciencedaily.com/releases/2014/04/140421164140 htm.

²³ <u>Wilker EH</u>1 Long-term exposure to fine particulate matter, residential proximity to major roads and measures of brain structure. <u>Stroke.</u> 2015 May; 46(5):1161-6. <u>PMC4414870</u> DOI: <u>10.1161/STROKEAHA.114.008348</u>, <u>https://www.ncbi.nlm.nih.gov/pubmed/25908455</u>.

²⁴ In other studies, Chen and his colleagues linked long-term exposure to high PM2.5 levels to smaller gray and white matter volumes in important areas such as the frontal lobe, which carries out thinking, decision-making and planning. For every 3.5 micrograms of PM2.5 per cubic meter of air, white matter (insulated nerve fibers that connect different brain regions) decreased by 6 cubic centimeters, according to one earlier study.

- ³⁶ Yi Wang, Melissa N. Eliot, George A. Kuchel, Joel Schwartz, Brent A. Coull, Murray A. Mittleman, Lewis A. Lipsitz, Gregory A. Wellenius. Long-Term Exposure to Ambient Air Pollution and Serum Leptin in Older Adults. Journal of Occupational and Environmental Medicine, 2014; 56 (9): e73
 DOI: 10.1097/JOM.0000000000000253
- ³⁷ Y. Wei, J. Zhang, Z. Li, A. Gow, K. F. Chung, M. Hu, Z. Sun, L. Zeng, T. Zhu, G. Jia, X. Li, M. Duarte, X. Tang. Chronic exposure to air pollution particles increases the risk of obesity and metabolic syndrome: findings from a natural experiment in Beijing. *The FASEB Journal*, 2016; DOI: 10.1096/fj.201500142
- ³⁸ Rioux, CL, Katherine L. Tucker, Doug Brugge, Mkaya Mwamburi. Medication type modifies inflammatory response to traffic exposure in a population with type 2 diabetes. *Environmental Pollution*, 2015; 202: 58 DOI: 10.1016/j.envpol.2015.03.012
- Tufts University. "Increase in inflammation linked to high traffic pollution for people on insulin." ScienceDaily. ScienceDaily, 8 April 2015. www.sciencedaily.com/releases/2015/04/150408124514.htm
- ³⁹ American College of Gastroenterology. "Air Pollution May Increase Risk of Appendicitis." ScienceDaily, 7 October 2008. www.sciencedaily.com/releases/2008/10/081006102537 htm
- ⁴⁰ Ze Zheng, Xuebao Zhang, Jiemei Wang, Aditya Dandeka, Hyunbae Kim, Yining Qiu, Xiaohua Xu, Yuqi Cui, Aixia Wang, Lung Chi Chen, Sanjay Rajagopalan, Qinghua Sun, Kezhong Zhang. Exposure to Fine Airborne Particulate Matters Induces Hepatic Fibrosis in Murine Models. *Journal of Hepatology*, 2015; DOI: 10.1016/j.jhep.2015.07.020 zz2391@columbia.edu
- ⁴¹ Glaser et al. Climate Change and the Emergent Epidemic of CKD from Heat Stress in Rural Communities: The Case for Heat Stress Nephropathy <u>Clin J Am Soc Nephrol</u>. 2016 Aug 8; 11(8): 1472–1483. 2016 May 5. doi: <u>10.2215/CJN.13841215</u>; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4974898/; https://www.reuters.com/article/us-health-heatwaves-kidney-disease/rise-in-heat-waves-tied-to-kidney-disease-epidemics-idUSKCN0Y22H4;
- ⁴² Perez, Laura; Nino Kuenzli, Ed Avol, Andrea M. Hricko, Fred Lurmann, Elise Nicholas, Frank Gilliland, John Peters, Rob McConnell. Global Goods Movement and the Local Burden of Childhood Asthma in Southern California. *American Journal of Public Health*, 2009; DOI:10.2105/AJPH.2008.154955
- ⁴³ Kravchenko, Julia; Igor Akushevich, Amy Abernethy, Sheila Holman, William Ross, Kim Lyerly. Long-term dynamics of death rates of emphysema, asthma, and pneumonia and improving air quality. *International Journal of Chronic Obstructive Pulmonary Disease*, 2014; 613 DOI: 10.2147/COPD.S59995
- ⁴⁴ Hind Sbihi, Lillian Tamburic, Mieke Koehoorn, Michael Brauer. *European Respiratory Journal*, 2016 DOI: <u>10.1183/13993003.00746-2015</u>
- ⁴⁵ Laura Perez, Christophe Declercq, Carmen Iñiguez, Inmaculada Aguilera, Chiara Badaloni, Ferran Ballester, Catherine Bouland, Olivier Chanel, FB Cirarda, Francesco Forastiere, Bertil Forsberg, Daniela Haluza, Britta Hedlund, Koldo Cambra, Marina Lacasaña, Hanns Moshammer, Peter Otorepec, Miguel Rodríguez-Barranco, Sylvia Medina, Nino Künzli. Chronic burden of near-roadway traffic pollution in 10 European cities (APHEKOM network). *European Respiratory Journal*, 22 March 2013 DOI: 10.1183/09031936.00031112
- ⁴⁶ Rice, M.B., Sheryl L. Rifas-Shiman, Augusto A Litonjua, Emily Oken, Matthew W. Gillman, Itai Kloog, Heike Luttmann-Gibson, Antonella Zanobetti, Brent A Coull, Joel Schwartz, Petros Koutrakis, Murray A. Mittleman, Diane R Gold. Lifetime Exposure to Ambient Pollution and Lung Function in Children. *American Journal of Respiratory and Critical Care Medicine*, 2015; DOI: 10.1164/rccm.201506-1058OC
- ⁴⁷ C. M. Wong, H. Tsang, H. K. Lai, G. N. Thomas, K. B. Lam, K. P. Chan, Q. Zheng, J. G. Ayres, S. Y. Lee, T. H. Lam, T. Q. Thach. Cancer Mortality Risks from Long-term Exposure to Ambient Fine Particle Pollution. *Cancer Epidemiology Biomarkers & Prevention*, 2016; 25 (5): 839 DOI:10.1158/1055-9965.EPI-15-0626
- ⁴⁸ C. M. Wong, H. Tsang, H. K. Lai, G. N. Thomas, K. B. Lam, K. P. Chan, Q. Zheng, J. G. Ayres, S. Y. Lee, T. H. Lam, T. Q. Thach. Cancer Mortality Risks from Long-term Exposure to Ambient Fine Particle Pollution. *Cancer Epidemiology Biomarkers & Prevention*, 2016; 25 (5): 839 DOI:10.1158/1055-9965.EPI-15-0626
- ⁴⁹ Crouse, Dan L.; Mark S. Goldberg, Nancy A. Ross, Hong Chen, France Labroche. Postmenopausal Breast Cancer is Associated with Exposure to Traffic-related Air Pollution in Montreal, Canada: A Case-Control Study. *Environmental Health Perspectives*, 2010; DOI:10.1289/ehp.1002221
- ⁵⁰ C. M. Wong, H. Tsang, H. K. Lai, G. N. Thomas, K. B. Lam, K. P. Chan, Q. Zheng, J. G. Ayres, S. Y. Lee, T. H. Lam, T. Q. Thach. Cancer Mortality Risks from Long-term Exposure to Ambient Fine Particle Pollution. *Cancer Epidemiology Biomarkers & Prevention*, 2016; 25 (5): 839 DOI: 10.1158/1055-9965.EPI-15-0626

⁵¹ S. Sarkar, Y. Song, S. Sarkar, H. M. Kipen, R. J. Laumbach, J. Zhang, P. A. Ohman Strickland, C. R. Gardner, S. Schwander. Suppression of the NF- B Pathway by Diesel Exhaust Particles Impairs Human Antimycobacterial Immunity. *The Journal of Immunology*, 2012; 188 (6): 2778 DOI: 10.4049/jimmunol.1101380

- ⁵² University of Alabama at Birmingham. "Air Pollution, Smoking Affect Latent Tuberculosis." ScienceDaily. ScienceDaily, 14 May 2008. www.sciencedaily.com/releases/2008/05/080513101721 https://www.sciencedaily.com/releases/2008/05/080513101721 <a href="https://www.sciencedaily.com/releases/2008/05/080513101721 https://www.sciencedaily.com/releases/2008/05/0807 <a hre
- https://www.lung.org/blog/covid-19-mortality-and-air-pollution, https://www.escardio.org/The-ESC/Press-Office/Press-releases/study-estimates-exposure-to-air-pollution-increases-covid-19-deaths-by-15-world, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7277007/
- ⁵⁴ Federation of American Societies for Experimental Biology (FASEB). "Ozone air pollution could harm women's fertility." ScienceDaily, 29 March 2015. www.sciencedaily.com/releases/2015/03/150329141015.htm.
- ⁵⁵ Xiaobin Wang, Marsha Wills-Karp, Barry Zuckerman, Shyam Biswal, Colleen Pearson, Deanna Caruso, Guoying Wang, Huan He, Claire Sampankanpanich Soria, Zhu Chen, Xiumei Hong, Xingyou Zhang, Guangyun Mao, Rebecca Massa Nachman. Intrauterine Inflammation and Maternal Exposure to Ambient PM2.5 during Preconception and Specific Periods of Pregnancy: The Boston Birth Cohort. *Environmental Health Perspectives*, 2016; DOI: 10.1289/EHP243
- ⁵⁶ Xiaobin Wang, Marsha Wills-Karp, Barry Zuckerman, Shyam Biswal, Colleen Pearson, Deanna Caruso, Guoying Wang, Huan He, Claire Sampankanpanich Soria, Zhu Chen, Xiumei Hong, Xingyou Zhang, Guangyun Mao, Rebecca Massa Nachman. Intrauterine Inflammation and Maternal Exposure to Ambient PM2.5 during Preconception and Specific Periods of Pregnancy: The Boston Birth Cohort. *Environmental Health Perspectives*, 2016; DOI: 10.1289/EHP243
- ⁵⁷ Mendola, Pauline; Maeve Wallace, Beom Seuk Hwang, Danping Liu, Candace Robledo, Tuija Männistö, Rajeshwari Sundaram, Seth Sherman, Qi Ying, Katherine L. Grantz. Preterm birth and air pollution: Critical windows of exposure for women with asthma. *Journal of Allergy and Clinical Immunology*, 2016; DOI: 10.1016/j.jaci.2015.12.1309

NIH/Eunice Kennedy Shriver National Institute of Child Health and Human Development. "Air pollution linked to higher risk of preterm birth for mothers with asthma: Early exposure may affect pregnancy outcomes, study finds." ScienceDaily. 1 March 2016. www.sciencedaily.com/releases/2016/03/160301113859.htm

⁵⁸ Jaakkola, Jouni J K. et al. Prenatal ambient air pollution exposure and the risk of stillbirth: systematic review and meta-analysis of the empirical evidence. *Occupational and Environmental Medicine*, May 2016 DOI: 10.1136/oemed-2015-103086

BMJ. "'Suggestive evidence' for link between air pollution, heightened stillbirth risk: Tighter curbs on car exhaust, industrial waste and boost in fuel quality needed." ScienceDaily. 24 May 2016. www.sciencedaily.com/releases/2016/05/160524211812.htm.

- ⁵⁹ https://www nature.com/articles/s41526-019-0071-6
- 60 www.sciencedaily.com/releases/2020/04/200421090556 htm#:~:text=Put%20simply%2C%20when%20we%20bre athe,anxiety%2C%20and%20impair%20cognitive%20function.
- ⁶¹ American Chemical Society. "Air pollutants could boost potency of common airborne allergens." ScienceDaily, 22 March 2015. Materials provided by American Chemical Society. www.sciencedaily.com/releases/2015/03/150322080208 htm
- ⁶² American Chemical Society. "Air pollutants could boost potency of common airborne allergens." ScienceDaily, 22 March 2015. Materials provided by American Chemical Society. www.sciencedaily.com/releases/2015/03/150322080208 htm
- ⁶³ Hind Sbihi, Ryan W. Allen, Allan Becker, Jeffrey R. Brook, Piush Mandhane, James A. Scott, Malcolm R. Sears, Padmaja Subbarao, Tim K. Takaro, Stuart E. Turvey, Michael Brauer. Perinatal Exposure to Traffic-Related Air Pollution and Atopy at 1 Year of Age in a Multi-Center Canadian Birth Cohort Study. *Environmental Health Perspectives*, 2015; DOI: 10.1289/ehp.1408700.
- ⁶⁴ Rich Stoner, Maggie L. Chow, Maureen P. Boyle, Susan M. Sunkin, Peter R. Mouton, Subhojit Roy, Anthony Wynshaw-Boris, Sophia A. Colamarino, Ed S. Lein, Eric Courchesne. Patches of Disorganization in the Neocortex of Children with Autism. *New England Journal of Medicine*, 2014; 370 (13): 1209 DOI: 10.1056/NEJMoa1307491
- ⁶⁵ Evelyn O. Talbott, Vincent C. Arena, Judith R. Rager, Jane E. Clougherty, Drew R. Michanowicz, Ravi K. Sharma, Shaina L. Stacy. Fine particulate matter and the risk of autism spectrum disorder. *Environmental Research*, 2015; 140: 414 DOI: 10.1016/j.envres.2015.04.021

⁶⁶ Evelyn O. Talbott, Vincent C. Arena, Judith R. Rager, Jane E. Clougherty, Drew R. Michanowicz, Ravi K. Sharma, Shaina L. Stacy. Fine particulate matter and the risk of autism spectrum disorder. *Environmental Research*, 2015; 140: 414 DOI: 10.1016/j.envres.2015.04.021

- ⁶⁷ Wilker EH et al, Long-term exposure to fine particulate matter, residential proximity to major roads and measures of brain structure. Stroke. 2015 May;46(5):1161-6. doi: 10.1161/STROKEAHA.114.008348. http://www.ncbi.nlm.nih.gov/pubmed/25908455
- ⁶⁸ Jordi Sunyer, Mikel Esnaola, Mar Alvarez-Pedrerol, Joan Forns, Ioar Rivas, Mònica López-Vicente, Elisabet Suades-González, Maria Foraster, Raquel Garcia-Esteban, Xavier Basagaña, Mar Viana, Marta Cirach, Teresa Moreno, Andrés Alastuey, Núria Sebastian-Galles, Mark Nieuwenhuijsen, Xavier Querol. Association between Traffic-Related Air Pollution in Schools and Cognitive Development in Primary School Children: A Prospective Cohort Study. *PLOS Medicine*, 2015; 12 (3): e1001792 DOI: 10.1371/journal.pmed.1001792
- ⁶⁹ Gerontological Society of America. "Bad air means bad news for seniors' brainpower." ScienceDaily, 16 November 2012. www.sciencedaily.com/releases/2012/11/121116161021 htm.
- ⁷⁰ https://www.sciencemag.org/news/2017/01/brain-pollution-evidence-builds-dirty-air-causes-alzheimer-s-dementia, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6700631/ Greater exposure to PM25, NO2/NOx, and CO were all associated with increased risk of dementia. Also "Association of Air Quality Improvement with Slower Decline of Cognitive Function in Older Women," "Heterogeneous Associations of Air Quality Improvement with Domain-Specific Cognitive Function in Older Women," and "Association of Lower Dementia Risk with Improved Air Quality in Older Women." Previous studies have highlighted associations between poor air quality and the development of Alzheimer's disease-related brain plaques. more than 2,000 women in those older age groups enrolled in the Women's Health Initiative Memory Study-Epidemiology of Cognitive Health Outcomes, a National Institutes of Health-funded effort. None of the women evaluated had dementia at the study's beginning, and all completed annual cognitive function tests for up to 10 years, between 2008 and 2018. Mathematical models were used to estimate annual exposures to air pollutants such as extremely small, inhalable particles known as PM2.5, and nitrogen dioxide, an indicator of traffic-related pollutants.
- Angélica González-Maciel, Rafael Reynoso-Robles, Ricardo Torres-Jardón, Partha S. Mukherjee, Lilian Calderón-Garcidueñas. Combustion-Derived Nanoparticles in Key Brain Target Cells and Organelles in Young Urbanites: Culprit Hidden in Plain Sight in Alzheimer's Disease Development. Journal of Alzheimer's Disease, 2017; 1 DOI: 10.3233/JAD-170012
- Wilker, E.H., Sarah R. Preis, Alexa S. Beiser, Philip A. Wolf, Rhoda Au, Itai Kloog, Wenyuan Li, Joel Schwartz, Petros Koutrakis, Charles DeCarli, Sudha Seshadri, and Murray A. Mittleman. Long-Term Exposure to Fine Particulate Matter, Residential Proximity to Major Roads and Measures of Brain Structure. *Stroke*, 2015 DOI:10.1161/STROKEAHA.114.008348
- ⁷³ Lilian Calderón-Garcidueñas, MA, MD, Ph.D. et al. Air Pollution and Children: Neural and Tight Junction Antibodies and Combustion Metals, the Role of Barrier Breakdown and Brain Immunity in Neurodegeneration. *Journal of Alzheimer's Disease*, August 2014 DOI:

The University of Montana. "Air pollution harmful to young brains, study finds." ScienceDaily. 10 September 2014. www.sciencedaily.com/releases/2014/09/140910093223.htm.

⁷⁴ Lilian Calderón-Garcidueñas, MA, MD, Ph.D. et al. Air Pollution and Children: Neural and Tight Junction Antibodies and Combustion Metals, the Role of Barrier Breakdown and Brain Immunity in Neurodegeneration. *Journal of Alzheimer's Disease*, August 2014 DOI:10.3233/JAD-141365

The University of Montana. "Air pollution harmful to young brains, study finds." ScienceDaily. 10 September 2014. www.sciencedaily.com/releases/2014/09/140910093223.htm.

- ⁷⁵ https://www.mailman.columbia.edu/public-health-now/news/adhd-air-pollution-link https://www.niehs.nih.gov/news/newsletter/2014/12/science-adhd/file738780_alt.pdf
- ⁷⁷ Frederica P. Perera, Hsin-wen Chang, Deliang Tang, Emily L. Roen, Julie Herbstman, Amy Margolis, Tzu-Jung Huang, Rachel L. Miller, Shuang Wang, Virginia Rauh. Early-Life Exposure to Polycyclic Aromatic Hydrocarbons and ADHD Behavior Problems. *PLoS ONE*, 2014; 9 (11): e111670 DOI: 10.1371/journal.pone.0111670
- ⁷⁸ Amy E. Margolis, Julie B. Herbstman, Katie S. Davis, Valerie K. Thomas, Deliang Tang, Ya Wang, Shuang Wang, Frederica P. Perera, Bradley S. Peterson, Andvirginia A. Rauh. Longitudinal effects of prenatal exposure to

air pollutants on self-regulatory capacities and social competence. Journal of Child Psychology and Psychiatry, 17 MAR 2016 DOI: 10.1111/jcpp.12548

⁷⁹ M. C. Power, M.-A. Kioumourtzoglou, J. E. Hart, O. I. Okereke, F. Laden, M. G. Weisskopf. The relation between past exposure to fine particulate air pollution and prevalent anxiety: observational cohort study. BMJ, 2015; 350 (mar23 11): h1111 DOI: 10.1136/bmj.h1111

M. Brauer. Air pollution, stroke, and anxiety. BMJ, 2015; 350 (mar23 11): h1510 DOI: 10.1136/bmj.h1510 BMJ. "Air pollution linked to increased risk of anxiety, stroke." ScienceDaily. ScienceDaily, 24 March 2015. www.sciencedaily.com/releases/2015/03/150324210045.htm.

80 Julia Vishnevetsky, Deliang Tang, Hsin-Wen Chang, Emily L. Roen, Ya Wang, Virginia Rauh, Shuang Wang, Rachel L. Miller, Julie Herbstman, Frederica P. Perera. Combined effects of prenatal polycyclic aromatic hydrocarbons and material hardship on child IQ. Neurotoxicology and Teratology, 2015; DOI: 10.1016/j.ntt.2015.04.002

81 Changsoo K. et al., Ambient Particulate Matter as a Risk Factor for Suicide Published online: September 01, 2010 | http://dx.doi.org/10.1176/appi.ajp.2010.09050706 http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2010.09050706

Bakian A. et al. Acute Air Pollution Exposure and Risk of Suicide Completion. American Journal Epidemiology (2015) doi: 10.1093/aje/kwu341http://aje.oxfordjournals.org/content/early/2015/02/10/aje kwu341

82 Oudin, Anna. Lennart Bråbäck, Daniel Oudin Åström, Magnus Strömgren, Bertil Forsberg. Association between neighbourhood air pollution concentrations and dispensed medication for psychiatric disorders in a large longitudinal cohort of Swedish children and adolescents. BMJ Open, 2016; 6 (6): e010004 DOI: 10.1136/bmjopen-2015-010004

Umea University. "Air pollution affects young people's psychiatric health." ScienceDaily, 8 June 2016. www.sciencedaily.com/releases/2016/06/160608100542.htm.

83 Changsoo K, et al., Ambient Particulate Matter as a Risk Factor for Suicide Published online: September 01, 2010 | http://dx.doi.org/10.1176/appi.ajp.2010.09050706 http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2010.09050706

Bakian A. et al. Acute Air Pollution Exposure and Risk of Suicide Completion, American Journal Epidemiology (2015) doi: 10.1093/aje/kwu341http://aje.oxfordjournals.org/content/early/2015/02/10/aje kwu341

⁸⁴ Changsoo K. et al., Ambient Particulate Matter as a Risk Factor for Suicide Published online: September 01, 2010 | http://dx.doi.org/10.1176/appi.ajp.2010.09050706

http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2010.09050706

Bakian A. et al. Acute Air Pollution Exposure and Risk of Suicide Completion. American Journal Epidemiology (2015) doi: 10.1093/aje/kwu341http://aje.oxfordjournals.org/content/early/2015/02/10/aje kwu341

4109; https://doi.org/10.3390/ijerph18084109, 13 April 2021 https://www.mdpi.com/1660-4601/18/8/4109/htm, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3548274/. Also Karnauskas, K. B., et al. (2020) Fossil fuel combustion is driving indoor CO2 toward levels harmful to human cognition. GeoHealth. doi.org/10.1029/2019GH000237.

⁸⁵ https://www.sciencedaily.com/releases/2020/04/200421090556.htm

⁸⁶ https://www.news-medical.net/news/20200421/Atmospheric-CO2-levels-can-cause-cognitive-impairment.aspx

⁸⁷ Jindong Wu, "The Synergistic Effect of PM2.5 and CO2 Concentrations on Occupant Satisfaction and Work Productivity in a Meeting Room," Int. J. Environ. Res. Public Health 2021, 18(8),

⁸⁸ Jiekun Huang et al., "Pollution and Performance: Do Investors Make Worse Trades on Hazy Days?" Management Science Vol. 66, No. 10, 16 Mar 2020, https://doi.org/10.1287/mnsc.2019.3402

⁸⁹ https://hbr.org/2017/03/air-pollution-brings-down-the-stock-market

⁹⁰ https://bit.ly/InclusiveUSDOTequityComments from 20 organizations.

⁹¹ Pratt, Gregory C. et al. "Traffic, Air Pollution, Minority and Socio-Economic Status: Addressing Inequities in Exposure and Risk." Ed. Brian Caulfield. International Journal of Environmental Research and Public Health 12.5 (2015): 5355–5372. PMC. Web. 20 Nov. 2017. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4454972/

⁹² Paul G. Billings, "Comments of the American Lung Association on USEPA NPRM Increasing Consistency & Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process Docket ID No. EPA-HQ-OAR-2020-00044, July 1, 2020.

¹⁰⁰ Duranton, G., & Turner, M. A., "The Fundamental Law of Road Congestion: Evidence from US Cities," American Economic Review, 101 (6), 2011; Handy, Susan and Boarnet, Marlon, G., "Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions," California Air Resources Board, 2014; Hymel, Kent, "If You Build It, They Will Drive: Measuring induced demand for vehicle travel in urban areas," Transport Policy. Volume 76, pp. 57-66, 2019. Michelle Byars, Yishu Wei and Susan Handy (2017), State-Level Strategies for Reducing Vehicle Miles of Travel, University of California Institute of Transportation Studies (https://its.ucdavis.edu); at https://bit.ly/2LvA6nn.

Datahttps://drive.google.com/file/d/1JnzhxF9GBoL2I4HK76vCRqzBECT8gEli/view

⁹³ LA Times, July 2021, http://www.erichmuehlegger.com/Working%20Papers/crime_and_Pollution_fv.pdf

⁹⁴ Environ Health. 2016; 15: 23. Published online 2016 Feb 16. doi: 10.1186/s12940-016-0122-

³ PMCID: PMC4756504

⁹⁵ Evan Herrnstadt, Erich Muehlegger, Air Pollution and Criminal Activity: Evidence from Chicago Microdata, NBER Working Paper No. 21787, Issued in December 2015, http://www.nber.org/papers/w21787

⁹⁶ Marie Venner, Compendium of AQ and vehicle pollution health effects research, https://docs.google.com/document/d/13QuGI8sDjtj2JSzTFC8i8QNpkvUpkMRG/edit, accessed July 27, 2021.

⁹⁷ Personal communication with Jim Crooks, Epidemiologist and Statistician, National Jewish Medical Center.

⁹⁸ https://coloradosun.com/2021/07/21/ozone-air-pollution-colorado-failing-epa-limits/, accessed July 27, 2021.

⁹⁹ David Mintzer, MD, <u>Freeway expansion is the wrong way to spend Colorado's COVID-19 relief dollars</u>, Colorado Sun, February 2021.

¹⁰¹ https://www.latimes.com/california/story/2020-04-08/air-pollution-linked-to-higher-coronavirus-death-rates

¹⁰² See http://bit.ly/BuildBackStronger-CO, submitted by multiple community and statewide organizations.

¹⁰³ See bit.ly/TransportationBestOpportunities for emissions reductions.

¹⁰⁴ Strong, Prosperous and Resilient Communities Challenge (SPARCC) response to USDOT Request for Information (RFI) on Transportation Equity

¹⁰⁵ Thomas Frieden, N Engl J Med 2013; 368:1857-1859 May 16, 2013DOI: 10.1056/NEJMp1303819

Rulemaki	ng for 2 CCR 601	-22, Statewide 1	ransportation Planning Pro	cess and Trans	portation Planr	ing Regions
Transpor	tation Commissio	n Meetings				
	Transportation	on Commission	Meetings			
	Date	Time	Location			
	2/17/21	3:30-3:50pm	Virtual			
	4/14/21	3:15-4pm	Virtual			
	6/17/21	11:15am-12:15pm	2829 W Howard PI, Denver, CO, a			
	7/14/21	?	2829 W Howard PI, Denver, CO, and Virtual			
	8/18/21	2:30-3:15pm	2829 W Howard PI, Denver, CO, a	and Virtual		





Department of Transportation

Greenhouse Gas Pollution Standard For Transportation Planning

Transportation Commission - April 14, 2021





- 1. Background Colorado's Climate Legislation & GHG Goals
- 2. Proposed rule and policy for transportation sector
- 3. GHG Modeling for Transportation in Colorado
- 4. Next Steps



Colorado's Efforts To Address Climate Change

HB-1261

- Colorado General Assembly passed House Bill-1261 in 2019
 The Climate Action Plan to Reduce Pollution
- GHG reduction targets:
 - 26% by 2025, 50% by 2030, and 90% by 2050 from 2005 levels

GHG Roadmap

 Lays out near/long term actions in every sector to meet the established targets



Regulatory Approach

CDPHE GHG Rule

Initial Draft Rule development led by CDOT & Transportation Stakeholders

Rulemaking Process led by CDPHE with CDOT involvement

Approved by the Air Quality Control Commission

CDOT GHG Policy

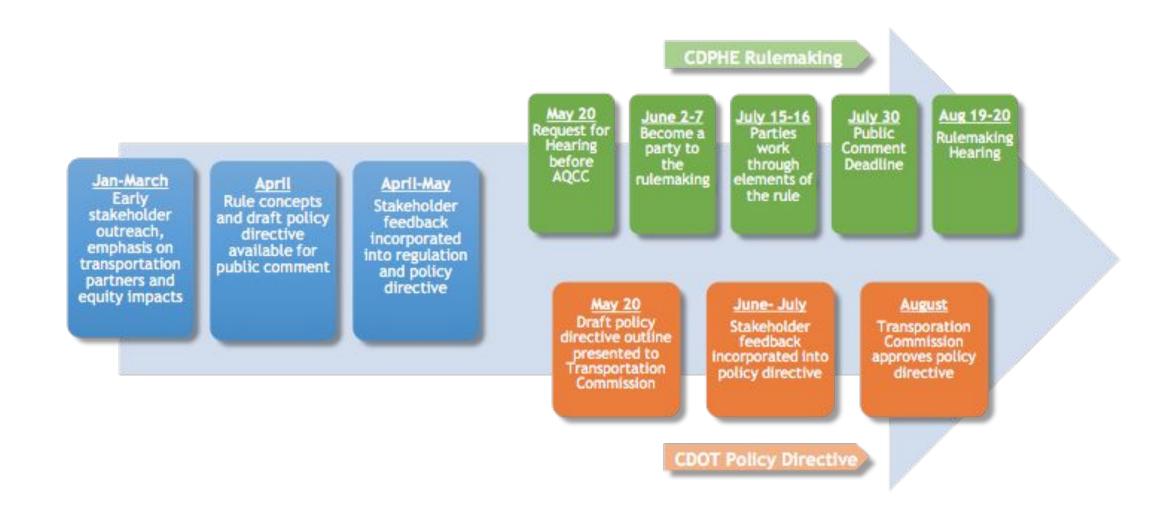
Led by CDOT

Informed by Stakeholders, Advisory Group

Approved by the Transportation Commission



Timeline: GHG Transportation Planning Rule and Policy





Incorporating Stakeholder Feedback

Over 25 Meetings Held, Over 125 Participating Stakeholders

CDOT Advisory Group

Regional - GHG Stakeholder Meetings

CDPHE/CDOT Listening Sessions

Other Smaller Stakeholder Meetings as Requested

CDOT

Areas of Feedback

- Rural and regional differences
- Incentives vs. penalties/unfunded mandate (carrots vs. sticks)
- Equity considerations
- Enforcement
- MPO roles and responsibilities
- Clarification on which projects included/excluded
- How this impacts the 10 year plan and adopted regional plans
- Cost and interest in Cost Benefit Analysis
- Concern about feasibility of 2025 budget
- Importance of a bright line separating ozone conformity and this rule
- GHG reductions feasible through this rule



GHG Transportation Planning Rule

Main Elements of the Draft RULE

Statewide "budget" for future years -(e.g. 2025, 2030, 2040 & 2050)

- Budget refers to MMT CO2e
- Includes sub-budgets for MPOs
- Phased implementation for MPOs

Inter-Agency Coordination and Roles

Contingency/Mitigation Measures to meet budget if needed

Transparent reporting requirements including modeling and mitigation measures



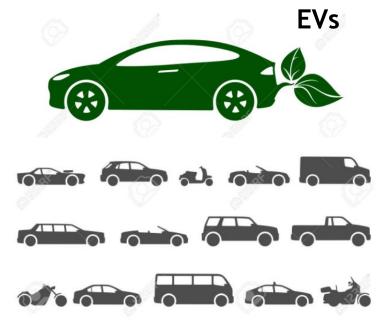
Modeled Data - Transportation Sector

CDOT TRAVEL MODEL

STEAMBOAT SPRINGS FORT COLLINS LOVE LAND BINCOTION LOT SPRING BRICCHIAND COMMON LOT SPRING ROUGH AS SA WASHERINGER CENTER COLOR AVAILABLE GYPSOM VAIL BRICKERRIDGE Appri Junc Sa BRECKERRIDGE Appri Junc Sa BRECKERRIDGE Appri Junc Sa Brick Color Spring Land Color Show Avaida Fine Jancion Fine Jancion

Outputs: VMT, congestion/speed

CDPHE MOVES MODEL



Fleet Mix/Age & Fuel Type

TOGETHER these models show

TRANSPORTATION GHG EMISSIONS



Modeling to Determine Cost/Benefit

Energy & Emissions Reduction Policy Analysis Tool (EERPAT) FHWA simplified tool - *Policy* → *GHG emissions*

Scenario		Measures Included				
1. T	Travel choices	 a. Non-worksite travel reduction/demand management, e.g., i. Neighborhood and school-based trip reduction programs. ii. Tele-shopping, tele-medicine, tele-school, etc. iii. Regional carpool and rideshare programs. b. Bicycle, pedestrian, and micromobility facilities, policies, and incentives. 				
	Fravel choices + ransit	 Scenario 1 measures. Rapid bus and rail service expansion. Enhanced bus frequency, reliability, and/or service hours. Free or reduced-fare transit. 				
	Fravel choices + ransit + land use	 Scenario 2 measures. Land use measures - Incentives (funding, project selection criteria) and technical support to encourage transit-supportive land use/walkable neighborhoods. 				





Main Elements of the Draft POLICY

Describes the GHG reduction requirements in HB19-1261 & the GHG Pollution Reduction Roadmap

Outlines the Transportation Commission's role

Includes a schedule for incorporation of GHG in transportation plans

Describes opportunities for GHG reductions in project analysis (NEPA), delivery and maintenance

Explains equity consideration of GHG reductions in areas where mitigation occurs



Rule

- CDPHE Rulemaking Process will begin with a Request for Hearing - May 20, 2021
 - Petition for Party Status
 - Formal Public Comment process

Policy Directive

- CDOT will continue meeting with the Advisory Group and stakeholders to inform the PD and mitigation measures through project delivery
- Updates to TC as policy directive is developed

Contact info



Theresa Takushi
GHG Climate Action Specialist

theresa.takushi@state.co.us

303.757.9977

https://www.codot.gov/programs/environmental/greenhouse-gas/ghg-transport ation-policy-rulemaking-process





Department of Transportation

Draft Greenhouse Gas Pollution Standard For Transportation Planning

Transportation Commission - June, 2021



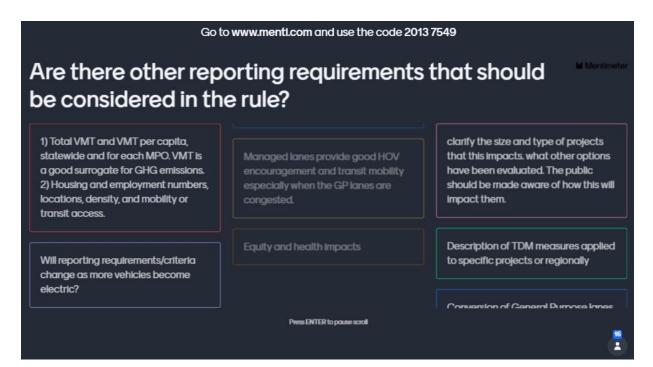
GHG Transportation Planning Rule Concepts

- Working with CDPHE
- Meeting with Advisory Group
- Establishing the State Budget and MPO Sub budgets
 - Interagency coordination (CDOT & CDPHE)
 - Economic Impact Analysis Scenarios
 - Different ways to consider allocating sub budgets
- Incorporating feedback from 5 Regional stakeholder meetings/comment letters

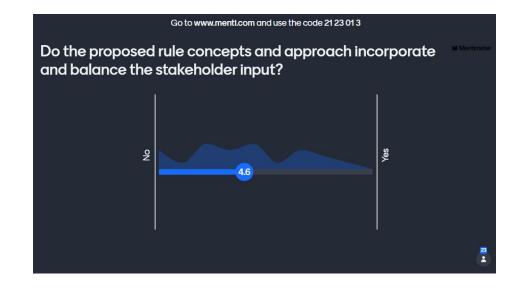


Regional Stakeholder Meetings

Feedback collected at Regional Stakeholder meetings through interactive polling









Regional Stakeholder Meetings

Themes from stakeholder feedback:

Overarching comments about rule

- VMT
- Reporting clarification
- Capacity projects
- Project evaluation

Comments about mitigations

- Managed lanes
- Multimodal & transit
- Land use/ TOD
- CDOT leading in mitigation strategies
- Equity & health impacts

Regionally Specific themes

- R1: Mitigation strategies
- R2: Reporting & impacts to business
- R3: Modeling & implementation
- R4: Incentives & voluntary participation
- R5: No MPO



Framing Document Discussion

TABLE OF CONTENTS

- A. Overview
- B. Background: embracing the challenge of addressing greenhouse gas pollution at CDOT Staffing and governance
- C. Electrification and clean vehicles
- D. Expanding transportation choice and multimodal options
- E. Improving modeling and planning conventions within the department
- F. Bringing more voices into the transportation conversation
- G. GHG Pollution standards and CDOT Policy Approach
- H. Tackling outstanding questions

Tackling outstanding questions





THANK YOU!

Department of Transportation



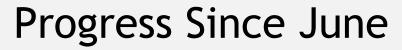


GHG Policy Memo & Pollution Reduction Planning for Transportation

COLORADO

Department of Transportation

Transportation Commission Briefing - July 14, 2021





Updating stakeholders on SB260 language and new approach to rulemaking.

Continued engagement on policy paper and key policy issues inherent in rule.

Upcoming rulemaking opportunity noticed on CDOT rule and GHG website with sign up link.

Coordination with TC inter-agency ad hoc committee members.



Rulemaking Notice

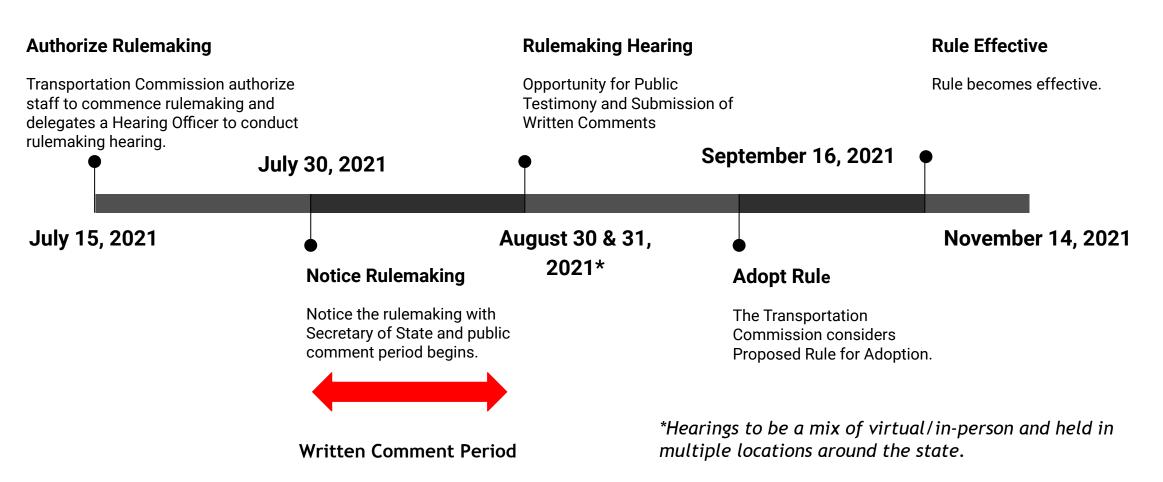
Rule Number	Rule Contact	Rule Title	Proposed Revisions	Deadline	Public Comments	Sign Up for Rulemaking Updates
2 CCR 604-1	Natalie Lutz	Emerging Small Business (ESB) Program	Proposed Redline (<u>PDF</u>)	December 4, 2020	Written Comments	
2 CCR 601-22	Natalie Lutz Theresa Takushi	Statewide Transportation Planning Process and Transportation Planning Regions				Greenhouse Gas Pollution Reduction Planning Rulemaking Sign Up

https://www.codot.gov/business/rules/stakeholder-engagement-protocol-workshops



DRAFT Rulemaking Timeline

subject to change and refinement due to TC action and rulemaking development





Public Engagement in Rulemaking Process

User-friendly and Inclusive Rulemaking Process

- Party Status is not necessary- all interested parties are encouraged to fully participate in the rulemaking process
 - https://www.codot.gov/business/rules/stakeholder-engagement-protoco l-workshops
- Multiple Opportunities for Public Comment
 - Department rulemaking often includes one or more stakeholder sessions/opportunities to review potential rules and issue so that we may consider stakeholder comments even before filing the rules
 - · Submission of written comments prior to the Rulemaking Hearing
 - Oral testimony and submission of written comments at Rulemaking Hearing



CDOT GHG Policy Paper

Explains intent of rule and key policy issues

- Builds understanding around concept and its intricacies
- Provides initial drafting for rulemaking and format to advance regulatory concepts in a more plain-english format



Key Comment Areas Based on TC and Stakeholder Feedback

- Timeline of rule & how stakeholders can engage
 - How equity will be addressed
- Clarity on Language regionally significant projects, mitigation/offset
- How the scenarios relate to the rule itself and the range
 - Help establish the GHG target levels
 - For use in the cost benefit analysis
- More clarification around vehicle miles traveled (VMT)
- MPO Role/relationship to CDOT/authority



Additional Commision feedback on policy paper



Next Steps on GHG Rulemaking

Proposed resolution to commence rulemaking process.

 This step would officially begin both the timeline and process steps under the APA.

Statewide public meeting on July 22 (tentative).

Continued engagement with key stakeholder groups.



Lutz - CDOT, Natalie <natalie.lutz@state.co.us>

Dear Commissioner Hickey,

Thanks for heading up the working group addressing the Greenhouse Pollution Standard rulemaking. We met at a meeting at the Alliance Center last month with CDOT staff. We shared stories in the coffee shop about our bus journeys to the meeting.

We are hoping to schedule a meeting with you soon to discuss the Greenhouse Pollution Standard rulemaking currently before the Transportation Commission. The coalition of conservation groups working on the rulemaking, including NRDC, Conservation Colorado, CoPIRG, Southwest Energy Efficiency Project and Sierra Club, is interested the rule's potential to help meet climate goals and improve equity outcomes in our communities. We're happy to meet via Zoom or the virtual platform of your choice to learn your thoughts on the rulemaking and to share ours. We'll be a small group of leaders from District 9 and the coalition.

My colleagu and I are the leads on scheduling the meetings, so please let us know some times that might work for you.

Thank you,





August 12, 2021

RE: Transportation Greenhouse Gas Rulemaking

Dear Transportation Commissioners, Governor Polis, and CDOT Executive Director Shoshana Lew,

The Colorado Sierra Club, which has more than 100,000 members and supporters in Colorado, and the 119 undersigned Coloradan supporters write to express our gratitude for your work on the Transportation Rulemaking.

As transportation is the top source of GHG emissions in Colorado, it is important to quickly implement new rules to set clear, enforceable GHG emission reduction targets.

A strong GHG pollution standard with clear targets and enforcement mechanisms can get us closer to our emissions reduction goals as outlined by HB-1261, and to meeting the state Climate Roadmap goal of a 10% reduction in vehicle miles traveled (VMT) by 2030. To meet our climate goals, the standard must consider pollution when selecting transportation projects, and all projects should model VMT impacts.

The rulemaking must prioritize reducing VMTs, GHGs, and highway expansion by prioritizing investment in multimodal transit, electrifying vehicles, expanding public transit, and investing in bicycling and pedestrian infrastructure. Across Colorado, these shifted priorities will enable communities to have more non-polluting, reliable, and affordable transportation options, and thus to enjoy better access to healthcare, education, and employment.

These goals must be met while integrating equity into planning, processes, and outcomes.

The rulemaking must apply strong scrutiny to large transportation projects that will increase traffic and pollution already experienced by disproportionately impacted communities. All Coloradans deserve transportation options that don't pollute the places where we live, work and play.

Thank you for your consideration.

Sincerely,























Grand Junction Transportation

To: "dot_rules@state.co.us" <dot_rules@state.co.us>

Mon, Aug 23, 2021 at 12:51 PM

Hello,

- 1. The bus system in Grand Junction and surrounding areas must be substantially increased before we can consider public transportation as an option.
- 2. Employers that already have a large population of car-pooling should be allowed credit for past behavior rather than only an "improvement" metric.



This e-mail message (including attachments, if any) is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged, proprietary, confidential and exempt from disclosure. If you are not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender and erase this e-mail message immediately.



GHG Transportation Planning Standard

1 message

Mon, Aug 30, 2021 at 4:53 PM

To: "dot_rules@state.co.us" <dot_rules@state.co.us>

Hello,

I would like to voice my support for the GHG Transportation Planning Standard code updates under consideration (RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS AND TRANSPORTATION PLANNING REGIONS 2 CCR 601-22). Historically, we have spent the vast majority of transportation funding on building roads and highways, so it is no surprise that the vast majority of our population commutes to their jobs via personal automobile. The greenhouse gas emissions resulting from that system are obvious in Denver's high ozone and this summer's absurdly poor air quality (caused by fires exacerbated by GHG emissions). The natural disasters, like the Morgan Creek Fire and Hurricane Ida, that have become more common every summer for my entire life highlight the urgent need for a reprioritization of how we fund our transportation systems. Coloradans are relying on you to protect the clean mountain air that makes Colorado a great place to call home.

Thank you,

City of Centennial 2 CCR 601-22



August 31, 2021

CDOT Transportation Commission CDOT Headquarters 2829 W. Howard Pl. Denver, CO 80204

Dear Commissioners:

Thank you for the opportunity to provide public comments to the Transportation Commission on the proposed changes to the Rules Governing Statewide Transportation Planning Process Transportation Planning Regions, containing the Greenhouse Gas Transportation Planning Standard, proposed on August 13, 2021. We have continued to discuss this rule with Colorado Department of Transportation (CDOT) staff and appreciate the time spent explaining the proposal and discussing our suggestions. In an effort to continue that process of open collaboration, we are submitting the following comments early in the rulemaking process so we can continue those discussions while making the Transportation Commission aware of the dialogue.

Colorado Communities for Climate Action is a coalition of 39 counties and municipalities across Colorado advocating for effective state and federal climate policy. CC4CA's members span Colorado's Western Slope and Front Range; small rural towns and major suburbs; counties and municipalities; and wealthy, middle income, and low-income neighborhoods. With member populations ranging from under 1,000 to more than 500,000, CC4CA local governments represent nearly one-quarter of all Coloradans. Rural communities make up two-thirds of the membership, including more than half of the members being West Slope communities.

Because the Employee Traffic Reduction Program (ETRP) was withdrawn from consideration by the Air Quality Control Commission, this proposal is Colorado's first major transportation-related rulemaking specifically designed to respond to the climate crisis. As such, we understand that this is new territory for Colorado and all parties involved, but it's important to keep in mind the overarching target established by Colorado's Greenhouse Gas (GHG) Emissions Reduction Roadmap to reduce transportation sector emissions by 12.8 million metric tons (MMT) of carbon dioxide equivalent (CO₂e) by 2030.

This letter reflects initial comments and questions on the proposal, and we expect to have additional input after more discussion with CDOT staff and after the technical documentation is made available for a full review. The main points covered in the comments below include: ensuring that equity is a key focus of this rulemaking, the necessity for robust emission reduction targets and

reductions in vehicle miles traveled (VMT), allowing public review of the modeling analysis and ground truthing the model, and key points related to potential loopholes in the proposal and enforceability of the rule.

Equity Must be a Primary Focus of this Rulemaking

This rule presents one of Colorado's best opportunities to fulfill the intent and requirements of HB19-1261 and HB21-1266 to prioritize benefits and avoid harms to disproportionately impacted communities as defined in § 24-38.5-302(3), C.R.S. We are encouraged to see some seeds planted in the proposed rule towards engaging and serving these communities, and we urge greater specificity and assurance that the most beneficial projects will be realized in those communities according to their expressed needs as well as data-driven approaches to projecting benefits.

Disproportionately impacted community input must inform all measures affecting them Equity engagement for these rules cannot take place primarily through large listening sessions and stakeholder meetings. Before detailed measures are proposed, CDOT should work with climate outreach staff at the Colorado Air Pollution Control Division (APCD) and the Equity Unit at the Colorado Department of Public Health and Environment (CDPHE) to assess transportation priorities in disproportionately impacted communities. We appreciate the existing equitable outreach provisions (4.02.5) but would further recommend that outreach should take place at existing community meetings wherever possible. We have been glad that SB21-260 will establish a new Environmental Justice and Equity Office within CDOT in order to "work directly with disproportionately impacted communities in the project planning, environmental study and project delivery phases of transportation capacity projects." We ask that this Office be stood up in time to help existing state equity outreach staff ensure that measures being considered meet the needs of disproportionately impacted communities.

We are eagerly awaiting the public release of CDPHE's Colorado EnviroScreen tool, based on the EPA EJSCREEN model, that will enable us to delineate communities qualifying as "disproportionately impacted" under HB21-1266. CDOT and Metropolitan Planning Organizations (MPOs) must work with CDPHE as soon as possible to initiate outreach to these communities as located by the tool.

As this rule is refined, we recommend that the Transportation Commission consider the work that CDPHE's Air Pollution Division, together with its Climate Equity Advisory Committee, has already done in drafting a Climate Equity Framework, including six Climate Equity Principles that should be used in shaping state rule development. From those principles, APCD developed a checklist of "Key Questions" and "Other Important Questions to Ask" to help rulemaking staff and boards anticipate potential benefits or burdens to disproportionately impacted communities from rules being considered in order to equitably shape rule development. The Climate Equity Framework is a living document still taking input. We recommend that CDOT work with CDPHE and the Climate Equity Advisory Committee to add shape to the Framework around transportation equity so that it can be most effectively applied to these rules. We urge CDOT and the Transportation Commission to apply these Key Questions for now to develop and evaluate proposed rules, and to work with the APCD, the Climate Equity Advisory Committee, the Climate Equity Community Advisory Group, and the Environmental Justice unit at CDPHE to do so. It may be helpful to index this language to the Equity Principles and/or key questions. Furthermore, it would

inspire confidence in the community if their input is indexed and/or reflected specifically in adopted rules and Applicable Planning Documents. Finally, APCD review (8.04) should answer all the "Key Questions" and "Other Important Questions to Ask," consulting with the Climate Equity Advisory Committee and Climate Equity Community Advisory Group as needed.

The rule must stipulate VMT reductions and specific local benefits in the Applicable Planning Documents as well as in Mitigation Measures

We recognize that disproportionately impacted communities benefit from any project that reduces GHG emissions or that drives down VMT on the major thoroughfares that cut through these communities. However, this rule must prioritize projects that directly improve local air quality while providing needed local clean transportation services by reducing VMT. Section 8.0.3, GHG Mitigation Measures in includes a list of good examples for the type of project that that should be prioritized. Certain measures such as these that (1) fill the transit gap in communities that are being pushed further from community centers; (2) increase affordable EV ownership and charging; and (3) evolve neighborhoods toward "complete streets" should be discussed with the community and considered as best practices that should be implemented in all disproportionately impacted communities.

It's critical that the final rule include specific requirements that will result in defined direct benefits to Disproportionately Impacted Communities. Therefore, we suggest the following specific language be added to section 8 of the proposed rule. Black text is from CDOT's proposal, red text is suggested language:

8.02 Process for Determining Compliance

8.02.3 By April 1, 2022, CDOT shall establish an ongoing administrative process, through a public process, for selecting, measuring, confirming, and verifying GHG Mitigation Measures, so that CDOT and MPOs can incorporate one or more into each of their plans in order to reach the Regional GHG Planning Reduction Levels in Table 1. Such a process shall include, but not be limited to, determining the relative impacts and benefits of GHG Mitigation Measures, measuring and prioritizing localized impacts and benefits to communities and Disproportionately Impacted Communities in particular. The mitigation credit awarded to a specific solution shall consider both aggregate and community impact and benefit. Where such impact or benefit affects a Disproportionately Impacted Community, that consideration shall take precedence over others. At least 25% of the Mitigation Measures must have a direct benefit in terms of increased multimodal options to Disproportionately Impacted Communities.

8.02.5.3 A Mitigation Action Plan that identifies GHG Mitigation Measures needed to meet the reduction levels within Table 1 shall include:

8.02.5.3.1	The anticipated start and completion date of each measure.
8.02.5.3.2	An estimate, where feasible, of the GHG emissions reductions in MMT of CO2e achieved by any GHG Mitigation Measures.
8.02.5.3.3	Quantification of specific co-benefits including reduction of copollutants (PM2.5, NOx, etc.) as well as travel impacts (changes

to VMT, pedestrian/bike use, transit ridership numbers, etc. as applicable).

8.02.5.3.4 Description of benefits to Disproportionately Impacted Communities and a demonstration of how at least 25% of mitigation measures will directly benefit Disproportionately Impacted Communities.

These are just two specific additions to the rule with an equity focus; we would like to discuss other options for adding equity measures to the rule. We appreciate that the plan for selecting GHG Mitigation Measures (8.02.3) and the Mitigation Action Plan (8.02.5.3) express intent to prioritize disproportionately impacted communities. However, since these only take effect "In the event that a plan fails to comply," we ask CDOT to consider commensurate equity provisions in the "Applicable Planning Document[s]" defined in the proposed rule. An emphasis on reducing VMT, discussed in our comments below, also brings a focus on equity because increasing multimodal options can have a direct impact on equity.

GHG Emissions Reduction Targets and VMT Reductions

The proposed emission reduction targets should be the absolute minimum amount of reductions considered for this rule. Colorado's existing and planned transportation measures leave a gap of 4.7 MMT of GHG reductions in 2030, and this proposed rule would reduce that gap by 1.5 MMT. CDOT staff has explained that the 1.5 MMT is the high end of the modeled range and that 0.5 MMT is the low end. That falls far short of the at least 3.3 MMT in reductions by 2030 that should be met in order to reach Colorado's climate goals. Additional strategies to further reduce transportation emissions within the 4.7 MMT category have yet to be developed, so the amount of the associated emissions reductions is uncertain. The Clean Trucking Strategy and indirect source rules are two strategies being considered in this area, but the potential reductions are unknown at this time. Because of the worsening nature of the climate crisis, early reductions have the largest impact and are absolutely necessary to reverse the current devastating course. Therefore, we strongly urge the Commission and CDOT staff to increase the GHG planning reduction levels identified in Table 1 (8.01.2).

The Roadmap's "HB 1261 Targets Scenario" assumes a VMT reduction of 10% by 2030. Because of this statewide goal, VMT reductions should be explicitly included in this rule. VMT reductions should be closely tied to the reduction goals in the budgets that are developed under the GHG planning standard. A primary emphasis of the GHG rule should be to reduce VMT through multimodal strategies such as increased transit, bike paths, and sidewalks. Strong VMT reductions in the next five years are very important because there will not be enough EVs on the road by then to reduce vehicle emissions to meet Colorado's goals. Additionally, an emphasis on VMT reduction will benefit DI communities.

The current definition of multimodal projects includes projects that increase capacity, such as adding several new traffic lanes along with bike paths. This is counterproductive: a heavy emphasis on multimodal that does not reduce VMT won't help us achieve our GHG goals. Any project that increases capacity in turn increases VMT. Yet, transportation modeling and air quality models for transportation conformity incorrectly assume that capacity projects that reduce congestion will decrease emissions.

Comments and suggested edits to Section 8, Table 1, and Table 2 of the proposed rule:

- We suggest adding language in Section 8.01.1 explaining that the reduction targets by MPO area reflect the total reductions in that area and are not the sole responsibility of the MPOs and that CDOT will assist the MPOs in meeting the targets. We understand from CDOT staff that it was too difficult to break out the share of the reductions between CDOT and the MPOs, but an explanation to this effect in the rule should be included to avoid any misunderstanding.
- The baseline projections in Table 1 are confusing despite the explanation in 8.01.1. because the projections only show slight decreases and then increase by 2050. These projections are using a business as usual scenario for modeling the emission reductions from this rule only and don't take account of the other emissions reduction strategies in Colorado. It would be best to remove these projections from the rule because it appears as if transportation emissions will barely decrease in almost 30 years, while in reality, emissions should greatly diminish.
- If the baseline projections remain in the rule, an explanation should be added as to why the projections vary from the Roadmap projections. The 2025 baseline projections in the proposed rule are 27.4 MMT while Colorado's GHG Roadmap figure for 2025 is 23 MMT.
- Table 2 is confusing as well; presumably these figures project total transportation sector emissions with all the strategies implemented, including this proposed rule. But the 2030 projections are 20 MMT while the Roadmap's 2030 projections are 18 MMT (see Colorado's GHG Roadmap Table 7, page 97). Is this meant to indicate that the proposed rule, plus the projected uptake of EVs, will leave us 2.0 MMT short of the Roadmap target?
- Suggested new language for the Table 2 description is provided below. If the figures in this table don't reflect the new explanation, we suggest that they be updated if possible.
- Based on our comments above, please include a table showing VMT reductions for all projection years as well.

Suggested edits follow. Black text is from CDOT's proposal, red text and red strikeouts are suggested edits.

8.00 GHG Emission Requirements

- 8.01 Establishment of Regional GHG Transportation Planning Reduction Levels
 - 8.01.1 The GHG emission reduction levels within Table 1 apply to MPOs areas and the Non-MPO area within the state of Colorado as of the effective date of these Rules. The reduction levels listed by MPO are not meant as the sole responsibility of that MPO, but rather the total reduction for that area. CDOT is responsible for a share of the reductions in the MPO area. Baseline values are specific to each MPO and CDOT area and represent estimates of GHG emissions resulting from the existing transportation network and implementation of the most recently adopted RTP for all MPOs and the 10 Year Plan in non MPO areas as of the effective date of these Rules. Table 2 projects total transportation sector emissions reflects the difference in Baseline levels from year to year assuming a rapid growth in Colorado's electric vehicles goals are met across the State (940,000 light duty electric vehicles in 2030, 3.38 million in 2040 and a total of 97% of all light duty vehicles in 2050) in addition to the emission reductions from this rule.

Values in both tables include estimates of population growth as provided by the state demographer.

8.01.2 Regional GHG Transportation Planning Reduction Levels

Table 1: GHG Transportation Planning Reduction Levels in MMT of CO2e

able 1. GHG Transportation Flamming Reduction Levels in Milit of Coze					
Regional Areas	2025 Reduction Level (MMT)	2030 Reduction Level (MMT)	2040 Reduction Level (MMT)	2050 Reduction Level (MMT)	
<u>, ouo</u>	<u> </u>				
DRCOG	0.27	0.82	0.63	<u>0.37</u>	
<u>NFRMPO</u>	<u>0.04</u>	<u>0.12</u>	<u>0.11</u>	<u>0.07</u>	
<u>PPACG</u>	<u>N/A</u>	<u>0.15</u>	0.12	<u>0.07</u>	
<u>GVMPO</u>	<u>N/A</u>	0.02	0.02	<u>0.01</u>	
PACOG	<u>N/A</u>	<u>0.03</u>	0.02	<u>0.01</u>	
CDOT/Non-MPO	<u>0.12</u>	<u>0.37</u>	<u>0.30</u>	<u>0.18</u>	
<u>TOTAL</u>	<u>0.5</u>	<u>1.5</u>	<u>1.2</u>	<u>0.7</u>	

Table 2: Baseline Emissions Due to Projected Number of Light Duty Electric Vehicles Transportation Sector Emissions Projections from All Implemented Strategies

	2025 Projections	2030 Projections	2040 Projections	2050 Projections
	(MMT)	(MMT)	(MMT)	(MMT)
TOTAL	<u>27.0</u>	<u>20.0</u>	<u>14.0</u>	<u>8.9</u>

Modeling Analysis Review and Modeling Requirements Under the Rule

The technical documentation and the modeling analysis and inputs should be available for the public to review now that the rulemaking process has begun. Without these technical materials, it's difficult to review this rule as a whole. CDOT has said that they are working on finalizing a modeling report and a Q&A document; it would be best if this information is made available well in advance of the scheduled regional hearings. Because we haven't been able to review any technical document associated with this proposal, we aren't able to provide comments on the modeling at this time. But one key question about the modeling at this point is whether EVs and charging infrastructure investments are included in the modeling. We need to ensure those reductions are not

double counted in this proposal because most of those reductions are already covered in other emissions reduction estimates.

Regarding the modeling requirements in the proposed rule itself, we have the following questions and comments:

- Are MPOs going to be required to ground truth their modeled GHG emissions/VMT with real-world data collection (such as traffic counts)? If so, how often will this be required?
- Will a third-party review process be used to review the modeling analyses?
- Will the modeling results and documentation be available for public review?

Measurable Reductions Are Critical

Under the proposal CDOT and MPOs need to provide a GHG Transportation Report that meets several specific requirements, including a GHG emissions analysis demonstrating compliance with the applicable GHG reductions level and a mitigation action plan that identifies the needed mitigation measures and estimates reductions, where feasible (see Section 8.02.5.3.2). We would like more explanation of when GHG estimates would be infeasible and suggest edits to the rule language so that the rule does not imply that estimates would often be infeasible.

8.02.5.3	A Mitigation Action Plan that identifies GHG Mitigation Measures needed to
	meet the reduction levels within Table 1 shall include:

8.02.5.3.1 The anticipated start and completion date of each measure.

8.02.5.3.2 An estimate, where feasible, of the GHG emissions reductions in MMT of CO2e achieved by any GHG Mitigation Measures. It's expected there will be rare situations where GHG estimates are not feasible.

Enforcement is Key to the Success of this Rule

Under the proposed rule, if compliance is not demonstrated after committing to GHG mitigation measures, the Commission will restrict the use of certain funds, requiring that money be focused on projects that reduce GHGs. The proposal includes the option to apply for a waiver if the rule requirements have not been met. We would like to learn more about this potential waiver process and how Colorado's GHG goals will still be met. The proposal states that "a substantial increase in GHG emissions" won't be allowed, but what is considered a substantial increase and how can we meet reduction goals while allowing any increases in emissions? As explained above, the proposed 1.5 MMT reductions by 2030 are not enough to meet the sector's goal of 12.8 MMT reductions. Waivers could also circumvent the requirement to protect and prioritize disproportionately impacted communities that might otherwise see air quality and transportation infrastructure improvements. Any increase in GHG emissions would be counter to the goal of this rule.

We appreciate the opportunity to comment on this proposed rule and the continued communications with CDOT staff to ensure that this is a strong rule that will help Colorado achieve its reduction goals for the transportation sector. Much progress has been made and we look forward to discussing our input with the Transportation Commission and CDOT.

Sincerely,

•

c: Shoshana Lew, Herman Stockinger, Rebecca White, Theresa Takushi



Greenhouse Gas Pollution Reduction for Transportation Planning Proposed Standards

Thu, Sep 2, 2021 at 1:07 PM

To: "dot_rules@state.co.us" <dot_rules@state.co.us>
Cc: "natalie.lutz@state.co.us" <natalie.lutz@state.co.us>

Thank you for the opportunity to comment on the Greenhouse Gas Pollution Reduction for Transportation Planning Proposed Standards.

These common-sense proposed standards are an excellent start to the implementation of Colorado's GHG reduction goals for the transportation sector. Section 4.06.1.8 is a good addition, requiring analysis of how the Statewide Transportation Plan is aligned with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State. In section 8, GHG reduction requirements, the Regional GHG Transportation Planning Reduction Levels contained in table 1 are very reasonable. Since the majority of emissions reductions are assumed to be achieved by an optimistic projection of private (and in some cases public) purchases of electric vehicles, the additional greenhouse gas emission reduction levels that CDOT and the MPOs need to achieve are tiny—in some cases, as little as 40,000 metric tonnes of CO₂-eq. These targets are incredibly reasonable, some might even say they are too small.

These targets can be achieved, and communities may already be further along developing actions to help achieve these goals than the Commission may realize. To illustrate, in my area, the Northwest TPR, our local electricity cooperative is already assisting in achieving these goals by helping businesses and homeowners finance EV chargers, and by funding electric school bus purchases. In the fast-growing east Grand county region, our expanding public bus systems is helping reduce vehicle miles traveled, and new bike lanes, pedestrian walkways and approved e-bike routes are helping provide additional multimodal transportation options. CDOT should consider working closely with Colorado's rural electric cooperatives in addition to local governments—co-ops can be helpful partners in the State's plan to achieve these targets.

Thank you again, and good luck implementing your new rules.



NOTICE TO RECIPIENTS: The information contained in this message, including but not limited to any attachments, may be confidential or protected by the attorney-client or work-product privileges. It is not intended for transmission to, or receipt by, any unauthorized persons. If you have received this message in error, please (i) do not read it, (ii) reply to the sender that you received the message in error, and (iii) erase or destroy the message and any attachments or copies. Any disclosure, copying, distribution or reliance on the contents of this message or its attachments is strictly prohibited, and may be unlawful. Unintended transmission does not constitute waiver of the attorney-client privilege or any other privilege. Unless expressly stated otherwise, nothing contained in this message should be construed as a digital or electronic signature, nor is it intended to reflect an intention to make an agreement by electronic means.



Strengthen the transportation rule

1 message

Mon, Sep 6, 2021 at 8:09 AM

To: dot_rules@state.co.us

Dear Transportation Commission,

In order to ensure the health of Coloradans, I am urging you to strengthen the proposed transportation rule to ensure environmental justice is centered in decision making, and strong pollution reduction methods are enforceable. While the draft rule suggests good policies to mitigate transportation pollution, we need to set solid goals for pollution reduction that will enable us to meet our existing targets. Colorado is in a public health crisis, with over 60 days and counting of unhealthy air quality due to ozone, transportation pollution, and wildfire smoke from climate change.

This rule making should center people and environmental justice, and right now, the draft rule fails us. Black, Indigenous, Latinx, and other people of color are hurt worst by transportation pollution. CDOT should develop a Transportation Equity Framework, and representatives of disproportionately impacted and marginalized communities need to be included in developing, monitoring and implementing the rule.

Furthermore, we've over prioritized investment in single occupancy vehicle infrastructure, like highway expansions, for decades: to the detriment of other, less polluting, modes of transportation. The state's climate roadmap calls for a 10% reduction in driving by 2030. We need to get cars off the road in a permanent, sustainable way that increases options for walking, biking, and public transit for urban and rural Coloradans.

Sincere	ειy,		



Strengthen the transportation rule

1 message

Cincoroly

Mon, Sep 6, 2021 at 10:44 AM

To: dot_rules@state.co.us

Dear Transportation Commission,

In order to ensure the health of Coloradans, I am urging you to strengthen the proposed transportation rule to ensure environmental justice is centered in decision making, and strong pollution reduction methods are enforceable. While the draft rule suggests good policies to mitigate transportation pollution, we need to set solid goals for pollution reduction that will enable us to meet our existing targets. Colorado is in a public health crisis, with over 60 days and counting of unhealthy air quality due to ozone, transportation pollution, and wildfire smoke from climate change.

This rule making should center people and environmental justice, and right now, the draft rule fails us. Black, Indigenous, Latinx, and other people of color are hurt worst by transportation pollution. CDOT should develop a Transportation Equity Framework, and representatives of disproportionately impacted and marginalized communities need to be included in developing, monitoring and implementing the rule.

Furthermore, we've over prioritized investment in single occupancy vehicle infrastructure, like highway expansions, for decades: to the detriment of other, less polluting, modes of transportation. The state's climate roadmap calls for a 10% reduction in driving by 2030. We need to get cars off the road in a permanent, sustainable way that increases options for walking, biking, and public transit for urban and rural Coloradans.

Officer cry,		



Strengthen the transportation rule

1 message

Mon, Sep 6, 2021 at 11:20 AM

To: dot_rules@state.co.us

Dear Transportation Commission,

In order to ensure the health of Coloradans, I am urging you to strengthen the proposed transportation rule to ensure environmental justice is centered in decision making, and strong pollution reduction methods are enforceable. While the draft rule suggests good policies to mitigate transportation pollution, we need to set solid goals for pollution reduction that will enable us to meet our existing targets. Colorado is in a public health crisis, with over 60 days and counting of unhealthy air quality due to ozone, transportation pollution, and wildfire smoke from climate change.

This rule making should center people and environmental justice, and right now, the draft rule fails us. Black, Indigenous, Latinx, and other people of color are hurt worst by transportation pollution. CDOT should develop a Transportation Equity Framework, and representatives of disproportionately impacted and marginalized communities need to be included in developing, monitoring and implementing the rule.

Furthermore, we've over prioritized investment in single occupancy vehicle infrastructure, like highway expansions, for decades: to the detriment of other, less polluting, modes of transportation. The state's climate roadmap calls for a 10% reduction in driving by 2030. We need to get cars off the road in a permanent, sustainable way that increases options for walking, biking, and public transit for urban and rural Coloradans.

Sincerely,	



Strengthen the transportation rule

1 message

Mon, Sep 6, 2021 at 11:53 AM

To: dot_rules@state.co.us

Dear Transportation Commission,

In order to ensure the health of Coloradans, I am strongly urging you to strengthen the proposed transportation rule to ensure environmental justice is centered in decision making, and strong pollution reduction methods are enforceable. While the draft rule suggests good policies to mitigate transportation pollution, we need to set solid goals for pollution reduction that will enable us to meet our existing targets. Colorado is in a public health crisis, with over 60 days and counting of unhealthy air quality due to ozone, transportation pollution, and wildfire smoke from climate change.

This rule making should center people and environmental justice, and right now, the draft rule fails us. Black, Indigenous, Latinx, and other people of color are hurt worst by transportation pollution. CDOT should develop a Transportation Equity Framework, and representatives of disproportionately impacted and marginalized communities need to be included in developing, monitoring and implementing the rule.

Furthermore, we've over prioritized investment in single occupancy vehicle infrastructure, like highway expansions, for decades: to the detriment of other, less polluting, modes of transportation. The state's climate roadmap calls for a 10% reduction in driving by 2030. We need to get cars off the road in a permanent, sustainable way that increases options for walking, biking, and public transit for urban and rural Coloradans.

Climate change, and the associated pollution from the transportation sector, is a dire health crisis.

Coloradans are struggling to breathe and developing chronic conditions from the resulting impacts. We urge CDOT to strengthen the proposed rule by including strengthened provisions regarding environmental justice and more enforcement mechanisms that ensure pollution reduction and reduced vehicle miles traveled.

Sincerely,



Strengthen the transportation rule

1 message

Mon, Sep 6, 2021 at 12:16 PM

To: dot_rules@state.co.us

Dear Transportation Commission,

In order to ensure the health of Coloradans, I am urging you to strengthen the proposed transportation rule to ensure environmental justice is centered in decision making, and strong pollution reduction methods are enforceable. While the draft rule suggests good policies to mitigate transportation pollution, we need to set solid goals for pollution reduction that will enable us to meet our existing targets. Colorado is in a public health crisis, with over 60 days and counting of unhealthy air quality due to ozone, transportation pollution, and wildfire smoke from climate change.

This rule making should center people and environmental justice, and right now, the draft rule fails us. Black, Indigenous, Latinx, and other people of color are hurt worst by transportation pollution. CDOT should develop a Transportation Equity Framework, and representatives of disproportionately impacted and marginalized communities need to be included in developing, monitoring and implementing the rule.

Furthermore, we've over prioritized investment in single occupancy vehicle infrastructure, like highway expansions, for decades: to the detriment of other, less polluting, modes of transportation. The state's climate roadmap calls for a 10% reduction in driving by 2030. We need to get cars off the road in a permanent, sustainable way that increases options for walking, biking, and public transit for urban and rural Coloradans.

Sincerely,	



Strengthen the transportation rule

1 message

Mon, Sep 6, 2021 at 2:04 PM

To: dot_rules@state.co.us

Dear Transportation Commission,

In order to ensure the health of Coloradans, I am urging you to strengthen the proposed transportation rule to ensure environmental justice is centered in decision making, and strong pollution reduction methods are enforceable. While the draft rule suggests good policies to mitigate transportation pollution, we need to set solid goals for pollution reduction that will enable us to meet our existing targets. Colorado is in a public health crisis, with over 60 days and counting of unhealthy air quality due to ozone, transportation pollution, and wildfire smoke from climate change.

This rule making should center people and environmental justice, and right now, the draft rule fails us. Black, Indigenous, Latinx, and other people of color are hurt worst by transportation pollution. CDOT should develop a Transportation Equity Framework, and representatives of disproportionately impacted and marginalized communities need to be included in developing, monitoring and implementing the rule.

Furthermore, we've over prioritized investment in single occupancy vehicle infrastructure, like highway expansions, for decades: to the detriment of other, less polluting, modes of transportation. The state's climate roadmap calls for a 10% reduction in driving by 2030. We need to get cars off the road in a permanent, sustainable way that increases options for walking, biking, and public transit for urban and rural Coloradans.

Sincerely,		
	1	



Strengthen the transportation rule

1 message

Mon, Sep 6, 2021 at 4:22 PM

To: dot_rules@state.co.us

Dear Transportation Commission,

In order to ensure the health of Coloradans, I am urging you to strengthen the proposed transportation rule to ensure environmental justice is centered in decision making, and strong pollution reduction methods are enforceable. While the draft rule suggests good policies to mitigate transportation pollution, we need to set solid goals for pollution reduction that will enable us to meet our existing targets. Colorado is in a public health crisis, with over 60 days and counting of unhealthy air quality due to ozone, transportation pollution, and wildfire smoke from climate change.

This rule making should center people and environmental justice, and right now, the draft rule fails us. Black, Indigenous, Latinx, and other people of color are hurt worst by transportation pollution. CDOT should develop a Transportation Equity Framework, and representatives of disproportionately impacted and marginalized communities need to be included in developing, monitoring and implementing the rule.

Furthermore, we've over prioritized investment in single occupancy vehicle infrastructure, like highway expansions, for decades: to the detriment of other, less polluting, modes of transportation. The state's climate roadmap calls for a 10% reduction in driving by 2030. We need to get cars off the road in a permanent, sustainable way that increases options for walking, biking, and public transit for urban and rural Coloradans.

Sincerely,	



Please strengthen the "Greenhouse Gas Pollution Standard"

1 message

Tue, Sep 7, 2021 at 11:41 AM

To: Colorado Transportation Commission <dot_rules@state.co.us>

Dear The Colorado Transportation Commission,

The climate crisis has never been worse. This summer's ongoing wildfires and drought remind us that dirty air pollution and climate change are already hurting our health—especially in communities of color.

Colorado is not on track to meet our targets to reduce climate pollution—especially from our state's largest source of climate pollution: transportation.

I am writing today to ask that your draft "Greenhouse Gas Pollution Standard" include stronger greenhouse gas reduction targets in order to meet the goals for reductions from the transportation sector in the state's climate roadmap. Unfortunately, the draft rule leaves a gap of two million metric tons of carbon dioxide - reductions that will not come from vehicle electrification and must be achieved through a reduction in statewide vehicle miles traveled.

The draft rule also is insufficient for Black, Indigenous, Latinx, and other people of color who are hurt worst by transportation pollution. We ask you to develop a Transportation Equity Framework, and include representatives of disproportionately impacted and marginalized communities in developing, monitoring and implementing the rule.

Thank you for your work and leadership. Please ensure that your transportation rule is equitable, enforceable, and verifiable.

Sincerely,



Strengthen the transportation rule

1 message

Tue, Sep 7, 2021 at 4:37 PM

To: dot_rules@state.co.us

Dear Transportation Commission,

In order to ensure the health of Coloradans, I am urging you to strengthen the proposed transportation rule to ensure environmental justice is centered in decision making, and strong pollution reduction methods are enforceable. While the draft rule suggests good policies to mitigate transportation pollution, we need to set solid goals for pollution reduction that will enable us to meet our existing targets. Colorado is in a public health crisis, with over 60 days and counting of unhealthy air quality due to ozone, transportation pollution, and wildfire smoke from climate change.

This rule making should center people and environmental justice, and right now, the draft rule fails us. Black, Indigenous, Latinx, and other people of color are hurt worst by transportation pollution. CDOT should develop a Transportation Equity Framework, and representatives of disproportionately impacted and marginalized communities need to be included in developing, monitoring and implementing the rule.

Furthermore, we've over prioritized investment in single occupancy vehicle infrastructure, like highway expansions, for decades: to the detriment of other, less polluting, modes of transportation. The state's climate roadmap calls for a 10% reduction in driving by 2030. We need to get cars off the road in a permanent, sustainable way that increases options for walking, biking, and public transit for urban and rural Coloradans.

Sincerely,	



GHG Rule Redline Suggestions

1 message

Wed, Sep 8, 2021 at 11:24 AM

To: "dot_rules@state.co.us" <dot_rules@state.co.us>

CDOT staff,

The attached document has redline edits for CDOT's consideration for the GHG rule update for tomorrow, 9/9. These edits are technical in nature and the NFRMPO will submit more substantive comments at a later date. Please let me know if you have any questions.

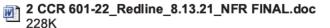
Thank you,

Transportation and Air Quality Planner III

Pronouns: she/her



Website: https://nfrmpo.org



Style Definition: Title1

DEPARTMENT OF TRANSPORTATION

Transportation Commission

RULES GOVERNING STATEWIDE TRANSPORTATION PLANNING PROCESS AND TRANSPORTATION PLANNING REGIONS

2 CCR 601-22

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

August 13, 2021, Version

Please note the following formatting key:

Font Effect	Meaning
<u>Underline</u>	New Language
Strikethrough	Deletions
[Blue Font Text]	Annotation

STATEMENT OF BASIS AND PURPOSE, AND STATUTORY AUTHORITY AND PREAMBLE

The purpose of the Rules Governing the Statewide Transportation Planning Process and Transportation Planning Regions (Rules) is to prescribe the statewide transportation planning process through which a long-range multimedal Multimodal, comprehensive statewide Statewide transportation Transportation plan Plan will be developed, integrated, updated, and amended by the Colorado Department of Transportation (Department or CDOT), in cooperation with local governments, Metropolitan Planning Organizations (MPOs), Regional Planning Commissions, Indian tribal governments, relevant state and federal agencies, the private sector, transit and freight operators, special interest groups, and the general public. This cooperative process is designed to coordinate regional transportation planning, guided by the statewide transportation policy set by the Department and the transportation—Transportation commission—Commission of Colorado ("Commission"), as a basis for developing the statewide—Statewide transportation planning process shall be a long-range, financially feasible, environmentally sound, multimodal_Multimodal_transportation system plan for Colorado that will reduce traffic and smoq.

Further, the purpose of the Rules is to define the state's Transportation Planning Regions for which long-range Regional Transportation Plans are developed, prescribe the process for conducting and initiating transportation planning in the non-MPO Transportation Planning Regions and coordinating with the Metropolitan Planning Organizations MPOs for planning in the metropolitan areas. Memoranda of Agreement (MOA) that serve as the Metropolitan Planning Agreements (MPAs) per-pursuant to 23 C.F.R. § 450 between the Department, each MPO, and applicable transit provider(s) further prescr be the transportation planning process in the MPO transportation Transportation planning regions In addition, the purpose of the Rules is to describe the organization and function of the

Statewide Transportation Advisory Committee (STAC) as established by § 43-1-1104, Colorado Revised Statutes (C.R.S.).

The Rules are promulgated to meet the intent of both the U.S. Congress and the Colorado General Assembly for conducting a continuing, cooperative, and comprehensive statewide performance-based multimedal Multimedal transportation planning process for producing a Statewide Transportation Plan and Regional Transportation Plans that address the transportation needs of the stateState. This planning process, through comprehensive input, results in systematic project prioritization and resource allocation.

The Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of Multimodal, cost-effective, and environmentally sound means of transportation which leads to cleaner air and reduced traffic. The Rules reflect the Commission's and the Department's focus on Multimodal transportation projects including highways, transit, rail, bicycles and pedestrians. Section 8 of these Rules establishes an ongoing administrative process for identifying, measuring, confirming, and verifying those best practices and their impacts, so that CDOT and MPOs can easily apply them to their plans in order to achieve the pollution reduction levels required by these Rules.

The Rules are promulgated by the Commission pursuant to the specific statutory authority in § 43-1-1103 (5), C.R.S., and § 43-1-106 (8)(k), C.R.S.

Preamble for 2018 Rulemaking

In 2018, rulemaking was initiated to update the rules to conform to recently passed federal legislation, update expired rules, clarify the membership and duties of the Statewide Transportation Advisory Committee STAC pursuant to HB 16-1169 and HB 16-1018, and to make other minor corrections. The Rules are intended to be consistent with and not be a replacement for the federal transportation planning requirements contained in 23 United States Code (U.S.C.) §§ 134, 135 and 150, Pub. L. No. 114-94 (Fixing America's Surface Transportation Act or the "FAST Act") signed into law on December 4, 2015, and its implementing regulations, where applicable, contained in 23 Code of Federal Regulations (C.F.R.) Part 450, including Subparts A, B and C and 25 C.F.R. § 170-421 in effect as of August 1, 2017, which are hereby incorporated into the Rules by this reference, and do not include any later amendments. All referenced laws and regulations shall be available for copying or public inspection during regular business hours from the Office of Policy and Government Relations, Colorado Department of Transportation, 2829 W. Howard Pl., Denver, Colorado 80204.

Copies of the referenced United States Code may be obtained from the following address:

Office of the Law Revision Counsel U.S. House of Representatives H2-308 Ford House Office Building Washington, DC 20515 (202) 226 2411

Copies of the referenced Code of Federal Regulations may be obtained from the following address:

U.S. Government Publishing Office 732 North Capitol Street, N.W. Washington, DC 20401 (202) 512 1800

The Statewide Planning Rules, governing the statewide planning process, emphasize Colorado's continually greater integration of multimodal, cost-effective and environmentally sound means of transportation. The Rules reflect the Department's focus on multimodal transportation projects including highways, aviation, transit, rail, bicycles and pedestrians.

The Rules are promulgated by the Commission pursuant to the specific statutory authority in § 43.1.1103 (5), C.R.S., and § 43.1.106 (8)(k), C.R.S. The Commission may, at their discretion, entertain petitions for declaratory orders pursuant to § 24.4.105(11), C.R.S.

Preamble for 2021 Rulemaking

Overview

Section 8 of these Rules establishes Greenhouse Gas (GHG) pollution reduction planning levels for transportation that will improve air quality, reduce smog, and provide more sustainable options for travelers across Colorado. The purpose of these requirements is to limit the GHG pollution which would result from the transportation system if the plan was implemented, consistent with the state greenhouse gas pollution reduction roadmap. This is accomplished by requiring CDOT and MPOs to establish plans that meet targets through a mix of projects that limit and mitigate air pollution and improve quality of life and Multimodal options. CDOT and MPOs will be required to demonstrate through travel demand modeling and approved air quality modeling that statewide and regional aggregate emissions resulting from its state or regional plans do not exceed a specified emissions level in total. In the event that a plan fails to comply, CDOT and MPOs have the option to commit to implementing GHG Mitigation Measures that provide travelers with cleaner and more equitable transportation options such as safer pedestrian crossings and sidewalks, better transit and transit-access, or infrastructure that supports access to housing, jobs, and retail.

Examples of these types of mitigations, which also benefit quality of place and the economic resilience of communities, will include but not be limited to: adding bus rapid transit facilities and services, enhancing first-and-last mile connections to transit, adding b ke-sharing services including electric bikes, improving pedestrian facilities like sidewa ks and safe access ble crosswa ks, investments that support v brant downtown density and local zoning decisions that favor sustainable building codes and inclusive multi-use facilities downtown, and more. The process of identifying and approving mitigations will be established by a policy process that allows for ongoing innovations from local governments and other partners to be considered on an iterative basis.

If compliance still cannot be demonstrated, even after committing to GHG Mitigation Measures, the Commission shall restrict the use of certain funds, requiring that dollars be focused on projects that help reduce transportation emissions and are recognized as approved mitigations. These requirements address the Colorado General Assembly's directive to reduce statewide GHG pollution in § 25-7-102(2)(g), C.R.S., as well as the directive for transportation planning to consider environmental stewardship and reducing GHG emissions, § 43-1-1103(5), C.R.S.

Context of Section 8 of these Rules Within Statewide Objectives

The passage of House Bill (HB)19-1261 set Colorado on a course to dramatically reduce GHG emissions across all sectors of the economy. In HB 19-1261, now codified in part at §§ 25-7-102(2) and 105(1)(e), C.R.S., the General Assembly declared that "climate change adversely affects Colorado's economy, air quality and public health, ecosystems, natural resources, and quality of life[,]" acknowledged that "Colorado is already experiencing harmful climate impacts[,]" and that "many of these impacts disproportionately affect" certain Disproportionately Impacted Communities, see § 25-7-102(2), C.R.S. The General Assembly also recognized that "[bly reducing [GHG] pollution, Colorado will also reduce other harmful air pollutants, which will, in turn, improve public health, reduce health care costs, improve air quality, and help sustain the environment." see § 25-7-102(2)(d), C.R.S.

Since 2019, the State has been rigorously developing a plan to achieve the ambitious GHG pollution reduction goals in § 25-7-102(2)(q), C.R.S. In January 2021, the State published its Greenhouse Gas Pollution Reduction Roadmap (Roadmap). The Roadmap identified the transportation sector as the single largest source of statewide GHG pollution as of 2020, with passenger vehicles the largest contributor within the transportation sector. Additionally, the Roadmap determined that emissions from transportation

Commented : The rule says or, not and.

are a "significant contributor to local air pollution that disproportionately impacts lower-income communities and communities of color." see Roadmap, p. XII.

A key finding in the Roadmap recognized that "[m]aking changes to transportation planning and infrastructure to reduce growth in driving is an important tool" to meet the statewide GHG pollution reduction goals. see Roadmap, p. 32. Section 8 of these Rules also advances the State's goals to reduce emissions of other harmful air pollutants, including ozone.

Why the Commission is Taking This Action

Senate Bill 21-260, signed into law by the Governor on June 17, 2021, and effective upon signature, includes a new § 43-1-128. C.R.S., which directs CDOT and MPOs to engage in an enhanced level of planning, modeling and other analysis to minimize the adverse environmental and health impacts of planned transportation capacity projects. Section 43-1-128, C.R.S. also directs CDOT and the Commission to take steps to account for the impacts of transportation capacity projects on GHG pollution and Vehicle Miles Traveled and to help achieve statewide GHG pollution targets established in § 25-7-102(2)(g), C.R.S.

<u>Under Colorado law governing transportation planning, CDOT is charged with and identified as the proper body for "developing and maintaining the state transportation planning process and the state transportation plan" in cooperation with Regional Planning Commissions and local government officials.</u> see § 43-1-1101, C.R.S.

The Commission is responsible for formulating policy with respect to transportation systems in the State and promulgating and adopting all CDOT financial budgets for construction based on the Statewide Transportation Improvement Programs. see § 43-1-106(8), C.R.S. The Commission is statutorily charged "to assure that the preservation and enhancement of Colorado's environment, safety, mobility and economics be considered in the planning, selection, construction and operation of all transportation projects in Colorado." see § 43-1-106(8)(b), C.R.S. In addition, the Commission is generally authorized "to make all necessary and reasonable orders, rules and regulations in order to carry out the provisions of this part . . ." see § 43-1-106(8)(k), C.R.S.

As such, CDOT and the Commission are primarily respons ble for ensuring compliance with GHG reductions in transportation planning.

What Relevant Regulations Currently Apply to Transportation Planning

Transportation planning is subject to both state and federal requirements. Under federal law governing transportation planning and federal-aid highways, it is declared to be in the national interest to promote transportation systems that accomplish a number of mobility objectives "while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes..." see 23 U.S.C. § 134; see also 23 U.S.C. § 135(a)(1). In the metropolitan planning process, consideration must be given to projects and strategies that will "protect and enhance the environment, promote energy conservation, improve the quality of life..." see 23 U.S.C. § 134(h)(1)(E); see also 23 C.F.R. Part 450, Subpart B (federal regulations governing statewide transportation planning and programming). The same planning objective applies to statewide transportation planning. see 23 U.S.C. § 135(d)(1)(E); see also 23 C.F.R. Part 450, Subpart C (governing metropolitan transportation planning and programming). Further, the Statewide Transportation Plan shall be developed, as appropriate, in consultation with State...local agencies responsible for...environmental protection..." see 23 U.S.C. § 135(f)(2)(D)(i).

<u>Under conforming Colorado law, the Statewide Transportation Plan is developed by integrating and consolidating Regional Transportation Plans developed by MPOs and regional transportation planning organizations into a "comprehensive statewide transportation plan" pursuant to rules and regulations promulgated by the Commission. see § 43-1-1103(5), C.R.S. The Statewide Transportation Plan must</u>

address a number of factors including, but not limited to, "environmental stewardship" and "reduction of greenhouse gas emissions." see § 43-1-1103(5)(h) and (j), C.R.S.

Regional Transportation Plans must account for the "expected environmental, social, and economic impacts of the recommendations in the plan, including a full range of reasonable transportation alternatives...in order to provide for the transportation and environmental needs of the area in a safe and efficient manner." see § 43-1-1103(1)(d), C.R.S. Further, in developing Regional Transportation Plans, MPOs "[s]hall assist other agencies in developing transportation control measures for utilization in accordance with state...regulations...and shall identify and evaluate measures that show promise of supporting clean air objectives." see § 43-1-1103(1)(e), C.R.S.

Putting Section 8 of these Rules into Perspective

Section 8 establishes GHG regulatory requirements that are among the first of their kind in the U.S. However, from an air pollutant standpoint, connecting transportation planning to emissions is not a new policy area. In fact, transportation conformity provisions within the Clean Air Act approach ozone much the same way. Transportation conformity ensures that federally funded or approved highway and transit activities within a Nonattainment Area are consistent with or "conform to" a state's plan to reduce emissions. Colorado's front range has been in ozone nonattainment for many years, which has required the North Front Range and the Denver Regional Council of Governments' MPOs to demonstrate conformity with each plan adoption and amendment.

However, because the transportation sector encompasses the millions of individual choices people make every day that have an impact on climate, a variety of strategies are necessary to achieve the State's climate goals. Section 8 of these Rules is one of many steps needed to achieve the totality of reduction goals for the transportation sector.

Purpose of GHG Mitigation Measures

The transportation modeling conducted for this rulemaking may demonstrate that certain projects increase GHG pollution for a variety of reasons. These reasons may include factors such as induced demand as a result of additional lane mileage attracting additional vehicular traffic, or additional traffic facilitated by access to new commercial or residential development in the absence of public transit options or bicycle/pedestrian access that provides consumers with other non-driving options. Transportation infrastructure itself can also increase or decrease GHG and other air pollutants by virtue of factors like certain construction materials, removal or addition of tree cover that captures carbon pollution, or integration with vertical construction templates of various efficiencies that result in higher or lower levels of per capita energy use. The pollution impacts of various infrastructure projects will vary significantly depending on their specifics and must be modeled in a manner that is context-sensitive to a range of issues such as location, footprint of existing infrastructure, design, and how it fits together with transportation alternatives.

Furthermore, other aspects of transportation infrastructure can facilitate reductions in emissions and thus serve as mitigations rather than contr butors to pollution. For example, the addition of transit resources in a manner that can displace Vehicle Miles Traveled can reduce emissions. Moreover, improving downtown pedestrian and bike access, particularly in areas that allow individuals to shift multiple daily trips for everything from work to dining to retail, can improve both emissions and quality of life.

There is an increasing array of proven best practices for reducing pollution and smog and improving economies and neighborhoods that can help streamline decision-making for state and local agencies developing plans and programs of projects.

[Note: The Commission proposes to repeal Section 1 of these Rules in its entirety and re-enact Section 1 of these Rules below to re-format the numbering of the administrative rules into alphabetical order.]

1.00 Definitions.

- 4.01 Accessible ensure that reasonable efforts are made that all meetings are reachable by persons from households without vehicles and that the meetings will be accessible to persons with disabilities in accordance with the Americans with Disabilities Act (ADA), and also accessible to persons with limited English proficiency. Accessible opportunities to on planning related matters include those provided on the internet and through such methods as telephone town halls. comment
- 4.02 Attainment Area—any geographic region of the United States that meets the national primary or secondary National Ambient Air Quality Standards (NAAQS) for the pollutants as defined in the Clean Air Act (CAA) (Amendments of 1990).
- 1.03 Commission the transportation commission of Colorado created by § 43 1 106, C.R.S.
- 1.04 Corridor a transportation system that includes all modes and facilities within a described geographic area.
- 4.05 Corridor Vision a comprehensive examination of a specific transportation corridor, which includes a determination of needs and an expression of desired state of the transportation system that includes transportation modes and facilities over a planning period.
- 1.06 Department the Colorado Department of Transportation created by § 43 1 103. C.R.S.
- 1.07 Division the Division of Transportation Development within the Colorado Department of Transportation.
- 1.08 Division Director the Director of the Division of Transportation Development.
- 4.09 Fiscally Constrained—the financial limitation on transportation plans and programs based on the projection of revenues as developed cooperatively with the MPOs and the rural TPRs and adopted by the Commission that are reasonably expected to be available over the long-range transportation planning period and the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP) programming periods.
- 1.10 Intergovernmental Agreement—an arrangement made between two or more political subdivisions that form associations for the purpose of promoting the interest and welfare of said subdivisions.
- 1.11 Intermodal Facility- A site where goods or people are conveyed from one mode of transportation to another, such as goods from rail to truck or people from passenger vehicle to bus.
- 1.12 Land Use the type, size, arrangement, and use of parcels of land.
- 1.13 Limited English Proficiency (LEP) individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.
- 1.14 Long-range Planning a reference to a planning period with a minimum 20-year planning horizon.
- 1.15 Maintenance Area any geographic region of the United States previously designated by the U.S. Environmental Protection Agency (EPA) as a nonattainment area pursuant to the Clean Air Act (CAA) Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended in 1990.
- 1.16 Memorandum of Agreement (MOA) a written agreement between two or more parties on an intended plan of action.

- 4.17 Metropolitan Planning Agreement (MPA) a written agreement between the MPO, the State, and the providers of public transportation serving the metropolitan planning area that descr bes how they will work cooperatively to meet their mutual responsibilities in carrying out the metropolitan planning process.
- 1.18 Metropolitan Planning Area a geographic area determined by agreement between the Metropolitan Planning Organization for the area and the Governor, in which the metropolitan transportation planning process is carried out pursuant to 23 U.S.C. § 134.
- 1.19 Metropolitan Planning Organization (MPO)—an organization designated by agreement among the units of general purpose local governments and the Governor, charged to develop the regional transportation plans and programs in a metropolitan planning area pursuant to 23 U.S.C. § 134.
- 1.20 Mobility—the ability to move people, goods, services, and information among various origins and destinations.
- 1.21 Multimodal an integrated approach to transportation that takes into account all modes of travel, such as bicycles and walking, personal mobility devices, buses, transit, rail, aircraft, and motor vehicles.
- 1.22 National Ambient Air Quality Standards (NAAQS)—are those established by the U.S. Environmental Protection Agency for air pollutants considered harmful to public health and environment. These criteria pollutants are: carbon monoxide, lead, nitrogen dioxide, ozone, small particles, and sulfur dioxide.
- 1.23 Nonattainment Area any geographic region of the United States which has been designated by the EPA under section 107 of the CAA for any pollutants for which an NAAQS exists.
- 1.24 Non-metropolitan Area a rural geographic area outside a designated metropolitan planning area.
- 1.25 Plan Integration Plan integration is a comprehensive evaluation of the statewide transportation system that includes all modes, an identification of needs and priorities, and key information from other related CDOT plans.
- 1.26 Planning Partners local and tribal governments, the rural Transportation Planning Regions and MPOs.
- 4.27 Project Priority Programming Process ("4P") the process by which CDOT adheres to 23 U.S.C. § 135 and 23 C.F.R. Part 450 when developing and amending the statewide transportation improvement program (STIP).
- 4.28 Regional Planning Commission (RPC) a planning body formed under the provisions of § 30-28-105, C.R.S., and designated under these Rules for the purpose of transportation planning within a rural Transportation Planning Region.
- 1.29 Regional Transportation Plan (RTP) a long-range plan designed to address the future transportation needs for a Transportation Planning Region including, but not limited to, anticipated funding, priorities, and implementation plans, pursuant to, but not limited to, § 43.1–1103, C.R.S. and 23 C.F.R. Part 450. All rural and urban Transportation Planning Regions in the state produce RTPs.
- 4.30 State Transportation System refers to all state owned, operated, and maintained transportation facilities in Colorado, including, but not limited to, interstate highways, other highways, and aviation, bicycle and pedestrian, transit, and rail facilities.

- 1.31 Statewide Transportation Advisory Committee (STAC) the committee created by § 43-1-1104, C.R.S., comprising one representative from each Transportation Planning Region and one representative from each tribal government to review and comment on Regional Transportation Plans, amendments, and updates, and to advise both the Department and the Commission on the needs of the transportation system in Colorado.
- 1.32 Statewide Transportation Improvement Program (STIP) a staged, fiscally constrained, multi-year, statewide, multimodal program of transportation projects which is consistent with the statewide transportation plan and planning processes, with metropolitan planning area plans, Transportation Improvement Programs and processes, and which is developed pursuant to 23 U.S.C. § 135.
- 1.33 Statewide Transportation Plan—the long-range, comprehensive, multimodal statewide transportation plan covering a period of no less than 20 years from time of adoption, developed through the statewide transportation planning process described in these Rules and 23 U.S.C. § 135, and adopted by the Commission pursuant to § 43-1-1103, C.R.S.
- 1.34 System Continuity includes, but is not limited to, appropriate intermodal connections, integration with state modal plans, and coordination with neighboring Regional Transportation Plans, and, to the extent practicable, other neighboring states' transportation plans.
- 1.35 Traditionally Underserved refers to groups such as seniors, persons with disabilities, low-income households, minorities, and student populations, which may face difficulties accessing transportation systems, employment, services, and other amonities.
- 4.36 Transit and Rail Advisory Committee (TRAC) an advisory committee created specifically to advise the Executive Director, the Commission, and the Division of Transit and Rail on transit and rail related activities.
- 4.37 Transportation Commonality—the basis on which Transportation Planning Regions are established including, but not limited to: Transportation Commission Districts, the Department's Engineering Regions, travelsheds, watersheds, geographic unity, existing intergovernmental agreements, and socioeconomic unity.
- 1.38 Transportation Improvement Program (TIP)—a staged, fiscally constrained, multi year, multimodal program of transportation projects developed and adopted by MPOs, and approved by the Governor, which is consistent with an MPO's RTP and which is developed pursuant to 23 U.S.C. § 134.
- 1.39 Transportation Mode a particular form of travel including, but not limited to, bus, motor vehicle, rail, transit, aircraft, bicycle, pedestrian travel, or personal mobility devices.
- 1.40 Transportation Planning and Programming Process all collaborative planning-related activities including the development of regional and statewide transportation plans, the Department's Project Priority Programming Process, and development of the Transportation Improvement Programs (TIPs) and Statewide Transportation Improvement Program (STIP).
- 1.41 Transportation Planning Region (TPR) a geographically designated area of the state, defined by section 2.00 of these Rules in consideration of the criteria for transportation commonality, and for which a regional transportation plan is developed pursuant to the provisions of § 43.1.1102 and 1103, C.R.S. and 23 U.S.C. § 134. The term TPR is inclusive of these types: non MPO Transportation Planning Regions, MPO Transportation Planning Regions, and Transportation Planning Regions with both MPO and non-MPO areas.

- 1.42 Transportation Systems Planning provides the basis for identifying current and future deficiencies on the state highway system and outlines strategies to address those deficiencies and make improvements to meet Department goals.
- 1.43 Travelshed the region or area generally served by a major transportation facility, system, or corridor.
- 1.44 Tribal Transportation Improvement Program (TTIP) a multi-year fiscally constrained list of proposed transportation projects developed by a tribe from the tribal priority list or tribal long-range transportation plan, and which is developed pursuant to 25 C.F.R. Part 170. The TTIP is incorporated into the STIP without modification.
- 1.45 Urbanized Area an area with a population of 50,000 or more designated by the Bureau of the
- 4.46 Watershed a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.

[Note: The Commission proposes to add nineteen (19) new definitions. New proposed defined terms include: Applicable Planning Document, Approved Air Quality Model, Baseline, Carbon Dioxide Equivalent, Congestion Mitigation and Air Quality, Disproportionately Impacted Communities, Four-Year Prioritized Plan, Greenhouse Gas, Greenhouse Mitigation Measures, Greenhouse Gas Reduction Levels, Mitigation Action Plan, MPO Model, Multimodal Transportation and Mitigation Options Fund, Regionally Significant Project, State Interagency Consultation Team, Statewide Travel Model, Surface Transportation Block Grant, Vehicle Miles Traveled, and 10-Year Plan. Only minor non-substantive changes, such as correcting grammar errors or capitalizing defined terms, were made to the existing forty-six (46) defined terms.]

1.00 Definitions.

- 1.01 Accessible ensure that reasonable efforts are made that all meetings are reachable by persons from households without vehicles and that the meetings will be accessible to persons with disabilities in accordance with the Americans with Disabilities Act (ADA), and also accessible to persons with Limited English Proficiency. Accessible opportunities to comment on planning related matters include those provided on the internet and through such methods as telephone town halls.
- 1.02 Applicable Planning Document refers to MPO Fiscally Constrained RTPs,TIPs for MPOs in NAAs, CDOT's 10-Year Plan and Four-Year Prioritized Plan in non-MPO areas, CDOT's STIP in in non-MPO areas within an NAA, and amendments to the MPO RTPs and CDOT's 10-Year Plan and Four-Year Prioritized Plan in non-MPO areas that include the addition of Regionally Significant Projects.
- 4.03 Approved Air Quality Model the most recent version of the Environmental Protection Agency issued model that quantifies GHG emissions from transportation and is required for transportation conformity analyses per federal regulations.
- 1.04 Attainment Area any geographic region of the United States that meets the national primary or secondary National Ambient Air Quality Standards (NAAQS) for the pollutants as defined in the Clean Air Act (CAA) (Amendments of 1990).
- 1.05 Baseline estimates of GHG emissions for each of the MPOs, and for the non-MPO areas, prepared using the MPO Models or the Statewide Travel Model. Estimates must include GHG emissions resulting from the existing transportation network and implementation of the most

- recently adopted RTP for all MPOs and the 10-Year Plan in non-MPO areas as of the effective date of these Rules.
- 1.06 Carbon Dioxide Equivalent (CO2e) a metric measure used testandard unit for comparinge the emissions from various GHG based upon the 100-year global warming potential (GWP). CO2e is calculated by multiplying the mass amount of emissions (metric tons per year), for each GHG constituent by that gas's GWP, and summing the resultant values to determine CO2e (metric tons per year). This calculation allows comparison of different greenhouse gases and their relative impact on the environment over different standard time periods.
- 1.07 Commission the Transportation Commission of Colorado created by § 43-1-106, C.R.S.
- 1.08 Congestion Mitigation and Air Quality (CMAQ) a federally mandated federal funding program established in 23 U.S.C § 149 to improve air quality in Nonattainment and Maintenance Areas for ozone, carbon monoxide, and particulate matter. References related to this program include any successor programs as established by the federal government.
- 1.09 Corridor a transportation system that includes all modes and facilities within a described geographic area.
- 1.10 Corridor Vision a comprehensive examination of a specific transportation Corridor, which includes a determination of needs and an expression of desired state of the transportation system that includes Transportation Modes and facilities over a planning period.
- 1.11 Department or CDOT the Colorado Department of Transportation created by § 43-1-103, C.R.S.
- 1.12 Disproportionately Impacted Communities defined in § 24-38.5-302(3), C.R.S. as a community that is in a census block group, as determined in accordance with the most recent United States Decennial Census where the proportion of households that are low income is greater than forty percent (40%), the proportion of households that identify as minority is greater than forty percent (40%), or the proportion of households that are housing cost-burdened is greater than forty percent (40%).
- 1.13 Division the Division of Transportation Development within CDOT.
- 1.14 Division Director the Director of the Division of Transportation Development.
- 1.15 Fiscally Constrained the financial limitation on transportation plans and programs based on the projection of revenues as developed cooperatively with the MPOs and the rural TPRs and adopted by the Commission that are reasonably expected to be available over the long-range transportation planning period and the TIP and STIP programming periods.
- 1.16 Four-Year Prioritized Plan a four-year subset of the 10-Year Plan consisting of projects prioritized for near-term delivery and partial or full funding.
- 1.17 Greenhouse Gas (GHG) for purposes of these Rules, GHG is defined as the primary transportation greenhouse gases: carbon dioxide, methane, and nitrous oxide.
- 1.18 Greenhouse Gas (GHG) Reduction Level the amount of the GHG expressed as CO2e reduced from the projected Baseline that CDOT and MPOs must attain through transportation planning.
- 1.19 Greenhouse Gas (GHG) Mitigation Measures non-Regionally Significant Project strategies implemented by CDOT and MPOs that reduce transportation GHG pollution and help meet the GHG Reduction Levels.

Commented : MMT is a metric measure, but CO2e is not inherently metric

Commented : Any agency's GHG measures should be able to count, same as how any regionally significant project (even if locally funded) counts. In addition, better to not use the past tense because almost all the measures are planned measures for future implementation.

- 1.20 Intergovernmental Agreement an arrangement made between two or more political subdivisions that form associations for the purpose of promoting the interest and welfare of said subdivisions.
- 1.21 Intermodal Facility a site where goods or people are conveyed from one mode of transportation to another, such as goods from rail to truck or people from passenger vehicle to bus.
- 1.22 Land Use the type, size, arrangement, and use of parcels of land.
- 1.23 Limited English Proficiency individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.
- 1.24 Long-Range Planning a reference to a planning period with a minimum 20-year planning horizon.
- 1.25 Maintenance Area any geographic region of the United States previously designated by the U.S.

 Environmental Protection Agency (EPA) as a Nonattainment Area pursuant to the Clean Air Act
 (CAA) Amendments of 1990 and subsequently redesignated to attainment subject to the
 requirement to develop a maintenance plan under § 175A of the CAA, as amended in 1990.
- 1.26 Memorandum of Agreement (MOA) a written agreement between two or more parties on an intended plan of action.
- 1.27 Metropolitan Planning Agreement (MPA) a written agreement between the MPO, the State, and the providers of public transportation serving the Metropolitan Planning Area that describes how they will work cooperatively to meet their mutual responsibilities in carrying out the metropolitan planning process.
- 1.28 Metropolitan Planning Area a geographic area determined by agreement between the MPO for the area and the Governor, in which the metropolitan transportation planning process is carried out pursuant to 23 U.S.C. § 134.
- 1.29 Metropolitan Planning Organization (MPO) an organization designated by agreement among the units of general purpose local governments and the Governor, charged to develop the RTPs and programs in a Metropolitan Planning Area pursuant to 23 U.S.C. § 134.
- 1.30 Mitigation Action Plan an element of the GHG Transportation Report that specifies which GHG Mitigation Measures shall be implemented that help achieve the GHG Reduction Levels.
- 1.31 Mobility the ability to move people, goods, services, and information among various origins and destinations.
- MPO Models one (1) or more of the computer-based models maintained and operated by the MPOs which depict the MPO areas' transportation systems (e.g., roads, transit, etc.) and development patterns (i.e., number and location of households and jobs) for a defined year (i.e., past, present, or forecast) and produce estimates of roadway VMT, delays, operating speeds, transit ridership, and other characteristics of transportation system use.
- 1.33 Multimodal an integrated approach to transportation that takes into account all modes of travel, such as bicycles and walking, personal mobility devices, buses, transit, rail, aircraft, and motor vehicles.
- 1.34 Multimodal Transportation and Mitigation Options Fund (MMOF) a program created in the State Treasury pursuant to § 43-4-1003, C.R.S. which funds bicycle, pedestrian, transit and other Multimodal projects as defined in § 43-4-1002(5), C.R.S. and GHG Mitigation projects as defined in § 43-4-1002(4.5), C.R.S.

2 CCR 601-22

- 1.35 National Ambient Air Quality Standards (NAAQS) are those established by the U.S.
 Environmental Protection Agency for air pollutants considered harmful to public health and environment. These criteria pollutants are: carbon monoxide, lead, nitrogen dioxide, ozone, small particles, and sulfur dioxide.
- 1.36 Nonattainment Area any geographic region of the United States which has been designated as nonattainment by the EPA under section 107 of the CAA for any pollutants for which a NAAQS exists
- 1.37 Non-Metropolitan Area a rural qeographic area outside a designated Metropolitan Planning
 Area
- 1.38 Plan Integration a comprehensive evaluation of the statewide transportation system that includes all modes, an identification of needs and priorities, and key information from other related CDOT plans.
- 1.39 Planning Partners local and tribal governments, the rural TPRs and MPOs.
- 1.40 Project Priority Programming Process the process by which CDOT adheres to 23 U.S.C. § 135 and 23 C.F.R. Part 450 when developing and amending the STIP.
- 1.41 Regional Planning Commission (RPC) a planning body formed under the provisions of § 30-28-105, C.R.S., and designated under these Rules for the purpose of transportation planning within a rural TPR.
- 1.42 Regionally Significant Project a transportation project that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network or state transportation network, including at a minimum all principal arterial highways and all fixed quideway transit facilities that offer an alternative to regional highway travel. If the MPOs have received approval from the EPA to use a different definition of regionally significant project as defined in 40 C.F.R. § 93.101, the State Interagency Consultation Team will accept the modified definition. Necessary specificity for MPO Models or the Statewide Travel Model will be approved by the State Interagency Consultation Team
- 1.43 Regional Transportation Plan (RTP) a long-range plan designed to address the future transportation needs for a TPR including, but not limited to, Fiscally Constrained or anticipated funding, priorities, and implementation plans, pursuant to, but not limited to, § 43-1-1103, C.R.S. and 23 C.F.R. Part 450. All rural and urban TPRs in the state produce RTPs.
- 1.44 State Interagency Consultation Team consists of the Division Director or the Division Director's designee, the Colorado Department of Public Health and Environment (CDPHE) Director of Air Pollution Control Division or the Director's designee, and the Director of each MPO or their designee.
- 1.45 State Transportation System refers to all state-owned, operated, and maintained transportation facilities in Colorado, including, but not limited to, interstate highways, other highways, and aviation, bicycle and pedestrian, transit, and rail facilities.
- 1.46 Statewide Transportation Advisory Committee (STAC) the committee created by § 43-1-1104, C.R.S., comprising one representative from each TPR and one representative from each tribal government to review and comment on RTPs, amendments, and updates, and to advise both the Department and the Commission on the needs of the transportation system in Colorado.

Commented: EPA also designates areas as attainment, maintenance, or unclassifiable.

Commented :: Recommend clarifying if this applies to all areas or just those without an EPA-approved definition.

- 1.47 Statewide Transportation Improvement Program (STIP) a Fiscally Constrained, multi-year, statewide, Multimodal program of transportation projects which is consistent with the Statewide Transportation Plan and planning processes, with Metropolitan Planning Area plans, Transportation Improvement Programs and processes, and which is developed pursuant to 23 U.S.C. § 135.
- 1.48 Statewide Travel Model the computer-based model maintained and operated by CDOT which depicts the state's transportation system (roads, transit, etc.) and development scale and pattern (number and location of households, number and location of firms/jobs) for a selected year (past, present, or forecast) and produces estimates of roadway VMT and speed, transit, ridership, and other characteristics of transportation system use.
- 1.49 Statewide Transportation Plan the long-range, comprehensive, Multimodal statewide transportation plan covering a period of no less than 20 years from time of adoption, developed through the statewide transportation planning process described in these Rules and 23 U.S.C. § 135, and adopted by the Commission pursuant to § 43-1-1103, C.R.S.
- 1.50 Surface Transportation Block Grant (STBG) a flex ble federal funding source established under 23 U.S.C. § 133 for state and local transportation needs. Funds are expended in the areas of the State based on population. References related to this program include any successor programs established by the federal government.
- 1.51 System Continuity includes, but is not limited to, appropriate intermodal connections, integration with state modal plans, and coordination with neighboring RTPs, and, to the extent practicable, other neighboring states' transportation plans.
- 1.52 Traditionally Underserved refers to groups such as seniors, persons with disabilities, low-income households, minorities, and student populations, which may face difficulties accessing transportation systems, employment, services, and other amenities.
- 1.53 Transit and Rail Advisory Committee (TRAC) an advisory committee created specifically to advise the Executive Director, the Commission, and the Division of Transit and Rail on transit and rail-related activities.
- 1.54 Transportation Commonality the basis on which TPRs are established including, but not limited to: Transportation Commission Districts, the Department's Engineering Regions, Travelsheds, Watersheds, geographic unity, existing Intergovernmental Agreements, and socioeconomic unity.
- 1.55 Transportation Improvement Program (TIP) a staged, Fiscally Constrained, multi-year,
 Multimodal program of transportation projects developed and adopted by MPOs, and approved
 by the Governor, which is consistent with an MPO's RTP and which is developed pursuant to 23
 U.S.C. § 134.
- 1.56 Transportation Mode a particular form of travel including, but not limited to, bus, motor vehicle, rail, transit, aircraft, bicycle, pedestrian travel, or personal mobility devices.
- 1.57 Transportation Planning and Programming Process all collaborative planning-related activities including the development of regional and Statewide Transportation Plans, the Department's Project Priority Programming Process, and development of the TIPs and STIP.
- 1.58 Transportation Planning Region (TPR) a geographically designated area of the state, defined by section 2.00 of these Rules in consideration of the criteria for Transportation Commonality, and for which a regional transportation plan is developed pursuant to the provisions of § 43-1-1102 and 1103, C.R.S. and 23 U.S.C. § 134. The term TPR is inclusive of these types: non-MPO TPRs, MPO TPRs, and TPRs with both MPO and non-MPO areas.

- 1.59 Transportation Systems Planning provides the basis for identifying current and future deficiencies on the state highway system and outlines strategies to address those deficiencies and make improvements to meet Department goals.
- 1.60 Travelshed the region or area generally served by a major transportation facility, system, or Corridor.
- 1.61 Tribal Transportation Improvement Program (TTIP) a multi-year Fiscally Constrained list of proposed transportation projects developed by a tribe from the tribal priority list or tribal long-range transportation plan, and which is developed pursuant to 25 C.F.R. Part 170. The TTIP is incorporated into the STIP without modification.
- 1.62 Urbanized Area an area with a population of 50,000 or more designated by the Bureau of the Census.
- 1.63 Vehicle Miles Traveled (VMT) the traffic volume of a roadway segment or system of roadway segments multiplied by the length of the roadway segment or system.
- 1.64 Watershed a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean.
- 1.65 10-Year Plan a vision for Colorado's transportation system that includes a specific list of projects categorized across priority areas as identified in the Statewide Transportation Plan.

2.00 Transportation Planning Regions (TPR).

- 2.01 Transportation Planning Region Boundaries. <u>Transportation Planning RegionTPR</u>s are geographically designated areas of the state with similar transportation needs that are determined by considering transportation commonalities. Boundaries are hereby established as follows:
 - 2.01.1 The P kes Peak Area Transportation Planning RegionTPR comprises the Pikes Peak Area Council of Governments' metropolitan area within El Paso and Teller counties.
 - 2.01.2 The Greater Denver Transportation Planning RegionTPR, which includes the Denver Regional Council of Governments' planning area, comprises the counties of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, Jefferson, and parts of Weld.
 - 2.01.3 The North Front Range Transportation Planning Region TPR comprises the North Front Range Transportation and Air Quality Planning Council's metropolitan area within Larimer and Weld counties.
 - 2.01.4 The Pueblo Area Transportation Planning Region TPR comprises Pueblo County, including the Pueblo Area Council of Governments' metropolitan area.
 - 2.01.5 The Grand Valley <u>Transportation Planning RegionTPR</u> comprises Mesa County, including the Grand Valley Metropolitan Planning Organization's metropolitan area.
 - 2.01.6 The Eastern Transportation Planning RegionTPR comprises Cheyenne, E bert, Kit Carson, Lincoln, Logan, Phillips, Sedgwick, Washington, and Yuma counties.
 - 2.01.7 The Southeast Transportation Planning Region TPR comprises Baca, Bent, Crowley, Kiowa, Otero, and Prowers counties.

- 2.01.8 The San Luis Valley Transportation Planning Region TPR comprises Alamosa, Chaffee, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties.
- 2.01.9 The Gunnison Valley Transportation Planning Region TPR comprises Delta, Gunnison, Hinsdale, Montrose, Ouray, and San Miguel counties.
- 2.01.10 The Southwest Transportation Planning Region TPR comprises Archuleta, Dolores, La Plata, Montezuma, and San Juan counties, including the Ute Mountain Ute and Southern Ute Indian Reservations
- 2.01.11 The Intermountain Transportation Planning Region TPR comprises Eagle, Garfield, Lake, Pitkin, and Summit counties.
- 2.01.12 The Northwest Transportation Planning Region TPR comprises Grand, Jackson, Moffat, Rio Blanco, and Routt counties.
- 2.01.13 The Upper Front Range Transportation Planning Region TPR comprises Morgan County, and the parts of Larimer and Weld counties, that are outside both the North Front Range and the Greater Denver (metropolitan) TPRs.
- 2.01.14 The Central Front Range <u>Transportation Planning Region TPR</u> comprises Custer, El Paso, Fremont, Park, and Teller counties, excluding the Pikes Peak Area Council of Governments' metropolitan area.
- 2.01.15 The South Central Transportation Planning Region TPR comprises Huerfano, and Las Animas Counties.
- 2.02 Boundary Revision Process.
 - 2.02.1 TPR boundaries, excluding any MPO-related boundaries, will be reviewed by the Commission at the beginning of each regional and statewide transportation planning process. The Department will notify counties, municipalities, MPOs, Indian tribal governments, and RPCs for the TPRs of the boundary review revision requests. MPO boundary review shall be conducted pursuant to 23 U.S.C. § 134 and 23 C.F.R. Part 450 Subpart B and any changes shall be provided to the Department to update the Rules. All boundary revision requests shall be sent to the Division Director, and shall include:
 - 2.02.1.1 A geographical description of the proposed boundary change.
 - 2.02.1.2 A statement of justification for the change considering transportation commonalities.
 - 2.02.1.3 A copy of the resolution stating the concurrence of the affected Regional Planning CommissionRPC.
 - 2.02.1.4 The name, title, mailing address, telephone number, fax number and electronic mail address (if available) of the contact person for the requesting party or parties.
 - 2.02.2 The Department will assess and STAC shall review and comment (as set forth in these Rules) on all nonNon-metropolitan Metropolitan area Area TPR boundary revision requests based on transportation commonalities and make a recommendation to the Commission concerning such requests. The Department will notify the Commission of MPO boundary changes. The Commission may initiate a rule-making proceeding under the State Colorado Administrative Procedure Act, § 24-4-103, C.R.S. to consider a

- boundary revision request. Requests received for a MPO or non-metropolitan TPR boundary revision outside of the regularly scheduled boundary review cycle must include the requirements identified above.
- 2.02.3 In the event that the Commission approves a change to the boundary of a TPR that has a Regional Planning CommissionRPC, the RPC in each affected TPR shall notify the Department of any changes to the intergovernmental Intergovernmental agreement Agreement governing the RPC as specified in these Rules.
- 2.03 Transportation Planning Coordination with MPOs.
 - 2.03.1 The Department and the MPOs shall coordinate activities related to the development of Regional Transportation PlanRTP, s, the Statewide Transportation Plan, TIPs, and the STIP in conformance with 23 U.S.C. § 134 and 135 and § 43-1-1101 and § 43-1-1103, C.R.S. The Department shall work with the MPOs to resolve issues arising during the planning process.
- 2.04 Transportation Planning Coordination with Non-MPO RPCs.
 - 2.04.1 The Department and RPCs shall work together in developing Regional Transportation PlanRTP and in planning future transportation activities. The Department shall consult with all RPCs on development of the Statewide Transportation Plan; incorporation of RTPs into the Statewide Transportation Plan; and the inclusion of projects into the STIP that are consistent with the RTPs. In addition, the Department shall work with the RPCs to resolve issues arising during the planning process.
- 2.05 Transportation Planning Coordination among RPCs.
 - 2.05.1 If transportation improvements cross TPR boundaries or significantly impact another TPR, the RPC shall consult with all the affected RPCs involved when developing the regional transportation planRTP. In general, RPC planning officials shall work with all planning Planning partners Partners affected by transportation activities when planning future transportation activities.
- 2.06 Transportation Planning Coordination with the Southern Ute and the Ute Mountain Ute Tribal Governments.
 - 2.06.1 Regional transportation planning within the Southwest TPR shall be coordinated with the transportation planning activities of the Southern Ute and the Ute Mountain Ute tribal governments. The long-range transportation plans for the tribal areas shall be integrated in the Statewide Transportation Plan and the Regional Transportation PlanRTP for this TPR. The TTIP is incorporated into the STIP without modification.
- 3.00 Statewide Transportation Advisory Committee (STAC).
- 3.01 Duties of the Statewide Transportation Advisory Committee (STAC). Pursuant to § 43-1-1104 C.R.S. the duties of the STAC shall be to meet as necessary and provide advice to both the Department and the Commission on the needs of the transportation system in Colorado including, but not limited to: budgets, transportation improvement programs TIPs of the metropolitan planning organizations MPOs, the Statewide Transportation Improvement Program STIP, transportation plans, and state transportation policies.

The STAC shall review and provide to both the Department and the Commission comments on:

- 3.01.1 All Regional Transportation PlanRTPs, amendments, and updates as described in these Rules
- 3.01.2 Transportation related communication and/or conflicts which arise between RPCs or between the Department and a RPC.
- 3.01.3 The integration and consolidation of RTPs into the Statewide Transportation Plan.
- 3.01.4 Colorado's mobility Mobility requirements to move people, goods, services, and information by furnishing regional perspectives on transportation problems requiring interregional and/or statewide solutions.
- 3.01.5 Improvements to modal choice, linkages between and among modes, and transportation system balance and system-System continuity.
- 3.01.6 Proposed TPR boundary revisions.
- 3.02 Notification of Membership
 - 3.02.1 Each RPC and tribal government shall select its representative to the STAC pursuant to § 43-1-1104(1), C.R.S. The Ute Mountain Ute Tr bal Council and the Southern Ute Indian Tr bal Council each appoint one representative to the STAC. Each TPR and tribal government is also entitled to name an alternative representative who would serve as a proxy in the event their designated representative is unable to attend a STAC meeting and would be included by the Department in distributions of all STAC correspondence and notifications. The Division Director shall be notified in writing of the name, title, mailing address, telephone number, fax number and electronic mail address (if available) of the STAC representative and alternative representative from each TPR and tribal government within thirty (30) days of selection.
- 3.03 Administration of Statewide Transportation Advisory CommitteeSTAC
 - 3.03.1 STAC recommendations on Regional and Statewide Transportation Plans, amendments, and updates shall be documented in the STAC meeting minutes, and will be considered by the Department and Commission throughout the statewide transportation planning process.
 - 3.03.2 The STAC shall establish procedures to govern its affairs in the performance of its advisory capacity, including, but not limited to, the appointment of a chairperson and the length of the chairperson's term, meeting times, and locations.
 - 3.03.3 The Division Director will provide support to the STAC, including, but not limited to:
 - 3.03.3.1 Notification of STAC members and alternates of meeting dates.
 - 3.03.3.2 Preparation and distribution of STAC meeting agendas, supporting materials, and minutes.
 - 3.03.3.3 Allocation of Department staff support for STAC-related activities.
- 4.00 Development of Regional and Statewide Transportation Plans.
- 4.01 Regional Planning Commission RPCs, MPOs, and the Department shall comply with all applicable provisions of 23 U.S.C. § 134 and § 135, 23 C.F.R. Part 450, and § 43-1-1103, C.R.S. and all

applicable provisions of Commission policies and guidance documents in development of regional and statewide transportation plans, respectively.

4.02 Public Participation

- 4.02.1 The Department, in coordination with the RPCs of the rural TPRs, shall provide early and continuous opportunity for public participation in the transportation planning process. The process shall be proactive and provide timely information, adequate public notice, reasonable public access, and opportunities for public review and comment at key decision points in the process. The objectives of public participation in the transportation planning process include: providing a mechanism for public perspectives, needs, and ideas to be considered in the planning process; developing the public's understanding of the problems and opportunities facing the transportation system; demonstrating explicit consideration and response to public input through a variety of tools and techniques; and developing consensus on plans. The Department shall develop a documented public participation process pursuant to 23 C.F.R. Part 450.
- 4.02.2 Statewide Plans and Programs. Pursuant to 23 C.F.R. Part 450 Subpart B, the Department is respons ble, in cooperation with the RPCs and MPOs, for carrying out public participation for developing, amending, and updating the statewide Statewide transportation Transportation planPlan, the Statewide Transportation Improvement Program (STIP), and other statewide transportation planning activities.
- 4.02.3 MPO Plans and Programs. Pursuant to 23 C.F.R. Part 450 Subpart C, the MPOs are responsible for carrying out public participation for the development of regional transportation planning planning activities for their respective metropolitan planning planning areasAreas. Public participation activities carried out in a metropolitan area in response to metropolitan planning requirements shall by agreement of the Department and the MPO, satisfy the requirements of this subsection.
- 4.02.4 Non-MPO TPR Plans and Programs. Regional Planning CommissionRPCs for non-MPO TPRs are respons ble for public participation related to regional planning activities in that TPR, in cooperation with the Department. Specific areas of cooperation shall be determined by agreement between the Regional Planning CommissionRPC and the Department.
- 4.02.5 Public Participation Activities. Public participation activities at both the rural TPR and statewide level shall include, at a minimum:
 - 4.02.5.1 Establishing and maintaining for the geographic area of responsibility a list of all known parties interested in transportation planning including, but not limited to: elected officials; municipal and county planning staffs; affected public agencies; local, state, and federal agencies elig ble for federal and state transportation funds; local representatives of public transportation agency employees and users; freight shippers and providers of freight transportation services; public and private transportation providers; representatives of users of transit, bicycling and pedestrian, aviation, and train facilities; private industry; environmental and other interest groups; Indian tribal governments and the U.S. Secretary of the Interior when tribal lands are involved; and representatives of persons or groups that may be underserved by existing transportation systems, such as minority, low-income, seniors, persons with disabilities, and those with limited Limited English proficiency Proficiency; and members of the general public expressing such interest in the transportation planning process.

4.03

4.02.5.2	Providing reasonable notice and opportunity to comment through mailing lists and other various communication methods on upcoming transportation planning-related activities and meetings.			
4.02.5.3	Utilizing reasonably available internet or traditional media opportunities, including minority and diverse media, to provide timely notices of planning-related activities and meetings to members of the public, including LEP_Limited English Proficiency individuals, and others who may require reasonable accommodations. Methods that will be used to the maximum extent practicable for public participation could include, but not be limited to, use of the internet; social media, news media, such as newspapers, radio, or television, mailings and notices, including electronic mail and online newsletters.			
4.02.5.4	Seeking out those persons or groups traditionally underserved Underserved by existing transportation systems including, but not limited to, seniors, persons with disabilities, minority groups, low-income, and those with limited Limited English proficiency Proficiency, for the purposes of exchanging information, increasing their involvement, and considering their transportation needs in the transportation planning process. Pursuant to § 43-1-601, C.R.S., the Department shall prepare a statewide survey identifying the transportation needs of seniors and of persons with disabilities.			
4.02.5.5	Consulting, as appropriate, with Regional Planning CommissionRPCs, and federal, state, local, and tribal agencies respons ble for land use management, natural resources, environmental protection, conservation and historic preservation concerning the development of long-range transportation plans.			
4.02.5.6	Providing reasonable public access to, and appropriate opportunities for public review and comment on criteria, standards, and other planning-related information. Reasonable public access includes, but is not limited to, LEP-Limited English Proficiency services and access to ADA-compliant facilities, as well as to the internet.			
4.02.5.7	Where feasible, scheduling the development of regional and statewide plans so that the release of the draft plans may be coordinated to provide for the opportunity for joint public outreach.			
4.02.5.8	Documentation of Responses to Significant Issues. Regional Planning CommissionsRPCs and the Department shall respond in writing to all significant issues raised during the review and comment period on transportation plans, and make these responses available to the public.			
4.02.5.9	Review of the Public Involvement Process. All interested parties and the Department shall periodically review the effectiveness of the Department's public involvement process to ensure that the process provides full and open access to all members of the public. When necessary, the process will be revised and allow time for public review and comment per 23 C.F.R. Part 450.			
Transportation Systems Planning. Regional Planning CommissionRPCs, and the Department, shall use an integrated multimodal Multimodal transportation Transportation systems Systems planning approach in developing and updating the long-range Regional Transportation PlansRTPs and the long-range Statewide Transportation Plan for a minimum 20-year forecasting				

period. Regional Planning CommissionRPCs shall have flexibility in the methods selected for transportation systems Systems planning based on the complexity of transportation problems and available resources within the TPR. The Department will provide guidance and assistance to the Regional Planning CommissionRPCs regarding the selection of appropriate methods.

- 4.03.1 Transportation systems Systems planning Planning by Regional Planning CommissionRPCs and the Department shall consider the results of any related studies that have been completed. Regional Planning CommissionRPCs and the Department may also identify any corridor(s) or sub-area(s) where an environmental study or assessment may need to be performed in the future.
- 4.03.2 Transportation systems Systems planning Planning by Regional Planning CommissionRPCs shall consider corridor vision-needs and desired state of the transportation system including existing and future land use and infrastructure, major activity centers such as industrial, commercial and recreation areas, economic development, environmental protection, and modal choices.
- 4.03.3 Transportation systems Systems planning Planning by Regional Planning CommissionRPCs shall include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility Mobility of people goods, and services.
- 4.03.4 Transportation systems planning by the Department should include capital, operations, maintenance and management strategies, investments, procedures, and other measures to ensure the preservation and most efficient and effective use of the state-State transportation-Transportation systemSystem.
- 4.03.5 Transportation systems Systems Pplanning by the Department shall consider and integrate all modes into the Statewide Transportation Plan and include coordination with Department modal plans and modal committees, such as the Transit and Rail Advisory Committee (TRAC).
- 4.03.6 Transportation Systems Planning by the Department shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals descr bed in 23 U.S.C. § 150 (FAST Act, P.L. 114-94). Performance targets that the Department establishes to address the performance measures described in 23 U.S.C. § 150, where applicable, are to be used to track progress towards attainment of critical outcomes for the state. The state shall consider the performance measures and targets when developing policies, programs, and investment priorities reflected in the Statewide Transportation Plan and STIP.
- 4.04 Regional Transportation Plans (RTP). Long-range regional transportation plans RTPs shall be developed, in accordance with federal (23 U.S.C. § 134 and § 135) and state (§ 43-1-1103 and § 43-1-1104, C.R.S.) law and implementing regulations. Department selection of performance targets that address the performance measures shall be coordinated with the relevant MPOs to ensure consistency, to the maximum extent practicable.
 - 4.04.1 Content of Regional Transportation PlanRTPs. Each RTP shall include, at a minimum, the following elements:
 - 4.04.1.1 Transportation system facility and service requirements within the MPO TPR over a minimum 20-year planning period necessary to meet expected demand, and the anticipated capital, maintenance and operating cost for these facilities and services.

	4.04.1.2	State and federal transportation system planning factors to be considered by Regional Planning CommissionRPC and the Department during their respective transportation_Transportation_systems_Systems_planning_Planning_shall include, at a minimum, the factors described in § 43-1-1103 (5), C.R.S., and in 23 U.S.C. § 134 and § 135.
	4.04.1.3	Identification and discussion of potential environmental mitigation measures, corridor Corridor studies, or corridor Corridor visions Visions, including a discussion of impacts to minority and low-income communities.
	4.04.1.4	A discussion of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.
	4.04.1.5	For rural RTPs, the integrated performance-based multimodal Multimodal transportation plan based on revenues reasonably expected to be available over the minimum 20-year planning period. For metropolitan RTPs, a fiscally-Fiscally constrained Constrained financial plan.
	4.04.1.6	Identification of reasonably expected financial resources developed cooperatively among the Department, MPOs, and rural TPRs for lengLong-range-Range planning-Planning purposes, and results expected to be achieved based on regional priorities.
	4.04.1.7	Documentation of the public notification and public participation process pursuant to these Rules.
	4.04.1.8	A resolution of adoption by the responsible Metropolitan Planning OrganizationMPO or the Regional Planning CommissionRPC.
4.04.2	Products and re	eviews
	4.04.2.1	Draft Plan. Transportation Planning Region TPR shall provide a draft of the RTP to the Department through the Division of Transportation Development.
	4.04.2.2	Draft Plan Review. Upon receipt of the draft RTPs, the Department will initiate its review and schedule the STAC review (pursuant to these Rules). The Department will provide its comments and STAC comments to the Transportation Planning RegionTPR within a minimum of 30 days of receiving the draft RTP. Regional transportation planRTPs in metropolitan areas completed pursuant to the schedule identified in 23 C.F.R. § 450.322 shall be subject to the provisions of this section prior to being submitted to the Department for consideration as an amendment to the statewide Statewide transportation Transportation planPlan.
	4.04.2.3	Final Plan. Transportation Planning Region TPR shall provide the final RTP to the Department through the Division of Transportation Development.
	4.04.2.4	Final Plan Review. Upon receipt of the final RTP, the Department will initiate its review and schedule the STAC review (pursuant to these

Rules) of the final RTPs to determine if the plans incorporate the elements required by the Rules. If the Department determines that a final RTP is not complete, including if the final RTP does not incorporate the elements required by these Rules, then the Department will not integrate that RTP into the statewide plan until the Transportation Planning RegionTPR has sufficiently revised that RTP, as determined by the Department with advice from the STAC. The Department will provide its comments and STAC comments to the Transportation Planning RegionTPR within a minimum of 30 days of receiving the final RTP. Transportation Planning Region TPRs shall submit any RTP revisions based on comments from the Department and STAC review within 30 days of the Department's provision of such comments. Regional transportation plansRTPs in metropolitan areas completed pursuant to the schedule identified in 23 C.F.R. § 450.322 shall be subject to the provisions of this section prior to being submitted to the Department for consideration as an amendment to the statewide Statewide transportation Transportation planPlan.

- 4.05 Maintenance and Nonattainment Areas. Each RTP, or RTP amendment, shall include a section that:
 - 4.05.1 Identifies any area within the TPR that is designated as a maintenance Maintenance or nonattainment Nonattainment areaArea.
 - 4.05.2 Addresses, in either a qualitative or quantitative manner, whether transportation related emissions associated with the pollutant of concern in the TPR are expected to increase over the lengLong-range Range planning Planning period and, if so, what effect that increase might have in causing a maintenance-Maintenance area Area for an NAAQS pollutant to become a nonattainment Nonattainment areaArea, or a nonattainment area-Area to exceed its emission budget in the approved State Implementation Plan.
 - 4.05.3 If transportation related emissions associated with the pollutant are expected to increase over the long-range-Range-planning-Planning-period, identifies which programs or measures are included in the RTP to decrease the I kelihood of that area becoming a nonattainment Nonattainment-area-Area for the pollutant of concern.
- 4.06 Statewide Transportation Plan. The Regional Transportation PlansRTPs submitted by the Regional Planning CommissionsRPCs shall, along with direction provided through Commission policies and guidance, form the basis for developing and amending the Statewide Transportation Plan. The Statewide Transportation Plan shall cover a minimum 20-year planning period at the time of adoption and shall guide the development and implementation of a performance-based multimodal Multimodal transportation system for the State.
 - 4.06.1 The Statewide Transportation Plan shall:
 - 4.06.1.1 Integrate and consolidate the RTPs and the Department's systems planning, pursuant to these Rules, into a long-range 20-year multimodal Multimodal transportation plan that presents a clear, concise path for future transportation in Colorado.
 - 4.06.1.2 Include the long-term transportation concerns of the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe in the development of the Statewide Transportation Plan.

4.06.1.3	Coordinate with other state and federal agencies respons ble for land use management, natural resources, environmental protection, conservation, and historic preservation.
4.06.1.4	Include a discussion of potential environmental mitigation activities and potential areas to carry out these activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan developed in consultation with federal, state, and tribal wildlife, land management and regulatory agencies.
4.06.1.5	Include a comparison of transportation plans to state and tribal conservation plans or maps and to inventories of natural or historical resources.
4.06.1.6	Provide for overall multimodal Multimodal transportation system management on a statewide basis.
4.06.1.7	The Statewide Transportation Plan shall be coordinated with metropolitan transportation plans pursuant to 23 C.F.R. Part 450, § 43-1-1103 and § 43-1-1105, C.R.S. Department selection of performance targets shall be coordinated with the MPOs to ensure consistency, to the maximum extent practicable.
4.06.1.8	Include an analysis of how the Statewide Transportation Plan is aligned with Colorado's climate goals and helps reduce, prevent, and mitigate GHG pollution throughout the State.
4.06.1.9	Includes the 10-Year Plan as an appendix.

- 4.06.2 Content of the Statewide Transportation Plan. At a minimum, the Statewide Transportation Plan shall include priorities as identified in the RTPs, as identified in these Rules and pursuant to federal planning laws and regulations. The Statewide Transportation Plan shall be submitted to the Colorado Transportation Commission for its consideration and approval.
- 4.06.3 Review and Adoption of the Statewide Transportation Plan.
 - 4.06.3.1 The Department will submit a draft Statewide Transportation Plan to the Commission, the STAC, and all interested parties for review and comment. The review and comment period will be conducted for a minimum of 30 days. The Statewide Transportation Plan and appendices The publication will be available in physical form upon requestat public facilities, such as at the Department headquarters and region offices, state depository libraries, county offices, TPR offices, Colorado Division offices of the Federal Highway Administration and Federal Transit Administration, and made available on the internet.
 - 4.06.3.2 The Department will submit the final Statewide Transportation Plan to the Celerade Transportation Commission for adoption.

5.00 Updates to Regional and Statewide Transportation Plans.

5.01 Plan Update Process. The updates of Regional Transportation PlanRTPs and the Statewide Transportation Plan shall be completed on a periodic basis through the same process governing development of these plans pursuant to these Rules. The update cycle shall comply with federal

- and state law and be determined in consultation with the Transportation Commission, the Department, the STAC and the MPOs so that the respective update cycles will coincide.
- 5.02 Notice by Department of Plan Update Cycle. The Department will notify Regional Planning CommissionRPCs and the MPOs of the initiation of each plan update cycle, and the schedule for completion.
- 6.00 Amendments to the Regional and Statewide Transportation Plans.
- 6.01 Amendment Process
 - 6.01.1 The process to consider amendments to Regional Transportation PlanRTPs shall be carried out by rural RPCs and the MPOs. The amendment review process for Regional Transportation PlanRTPs shall include an evaluation, review, and approval by the respective RPC or MPO.
 - 6.01.2 The process to consider amendments to the Statewide Transportation Plan shall be carried out by the Department, either in considering a proposed amendment to the Statewide Transportation Plan from a requesting RPC or MPO or on its own initiative.
 - 6.01.3 The process to consider amendments to the 10-Year Plan shall be carried out by CDOT in coordination with the rural RPCs and the MPOs.
- 7.00 Transportation Improvement Programs (TIPs) and Statewide Transportation Improvement Program (STIP).
- 7.01 TIP development shall occur in accordance with 23 C.F.R. Part 450, Subpart C. The Department will develop the STIP in accordance with 23 C.F.R. Part 450, Subpart B.
- 7.02 The Department will work with its planning Planning partners Partners to coordinate a schedule for development and adoption of TIPs and the STIP.
- 7.03 A TIP for an MPO that is in a non-attainmentNonattainment or Maintenance Area must first receive a conformity determination by FHWA and FTA before inclusion in the STIP pursuant to 23 C.F.R. Part 450.
- 7.04 MPO TIPs and Colorado's STIP must be fiscally_eonstrained_Constrained. Under 23 C.F.R. Part 450, each project or project phase included in an MPO TIP shall be consistent with an approved metropolitan RTP, and each project or project phase included in the STIP shall be consistent with the long-range statewide_transportation_transportation_plan_Plan. MPO TIPs shall be included in the STIP either by reference or without change upon approval by the MPOs and the Governor.
- 8.00 GHG Emission Requirements
- 8.01 Establishment of Regional GHG Transportation Planning Reduction Levels
 - 8.01.1 The GHG emission reduction levels within Table 1 apply to MPOs and the Non-MPO area within the state of Colorado as of the effective date of these Rules. Baseline values are specific to each MPO and CDOT area and represent estimates of GHG emissions resulting from the existing transportation network and implementation of the most recently adopted RTP for all MPOs and the 10-Year Plan in non-MPO areas as of the effective date of these Rules. Table 2 reflects the difference in Baseline levels from year to year assuming a rapid growth in electric vehicles across the State (940,000 light duty electric vehicles in 2030, 3.38 million in 2040 and a total of 97% of all light duty vehicles in 2050).

Values in both tables include estimates of population and employment growth as provided by the state demographer.

8.01.2 Regional GHG Transportation Planning Reduction Levels

Table 1: GHG Transportation Planning Reduction Levels in MMT of CO2e							Commented :: For some of the compliance		
Regional	2025 Baseline	2025 Reduction	2030 Baseline	2030 Reduction	2040 Baseline	2040 Reduction	2050 Baseline	Reduc	years, the TOTAL line at the bottom does not match the sum of the regional areas.
<u>q</u>	Projections	Level	Projections	Level	Projections	Level	Projections	Leve	The same number of significant digits should be used
<u>Areas</u>	(MMT)	(MMT)	<u>(MMT)</u>	(MMT)	(MMT)	(MMT)	(MMT)	(MM ⁻	for all baselines and reduction levels.
DRCOG	14.9	0.27	<u>11.8</u>	0.82	10.9	0.63	12.8	0.37	,
				3.02					<u> </u>
NFRMPO	2.3	0.04	<u>1.8</u>	0.12	<u>1.9</u>	0.11	2.2	0.07	,
<u> </u>	2.0	0.01	1.0	0.12	1.0	0.11	2.2	0.01	·
<u>PPACG</u>	<u>2.7</u>	N/A	2.2	<u>0.15</u>	2.0	0.12	<u>2.3</u>	0.07	,
ITACO	2.1	18/74	2.2	0.13	2.0	0.12	2.0	0.07	•
CVMDO	0.20	NI/A	0.20	0.02	0.20	0.02	0.26	0.01	
<u>GVMPO</u>	0.38	<u>N/A</u>	0.30	0.02	0.30	0.02	<u>0.36</u>	0.01	•
PACOG	<u>0.50</u>	<u>N/A</u>	<u>0.40</u>	0.03	<u>0.30</u>	0.02	<u>0.4</u>	0.0	L
CDOT/Non-MPO	<u>6.7</u>	<u>0.12</u>	<u>5.3</u>	0.37	<u>5.2</u>	0.30	<u>6.1</u>	<u>0.18</u>	
TOTAL	<u>27.4</u>	<u>0.5</u>	<u>21.8</u>	<u>1.5</u>	<u>20.6</u>	<u>1.2</u>	<u>24.2</u>	0.7	

8.01.3 Baseline Emissions Due to Projected Number of Light Duty Electric Vehicles

Table 2: Baseline Emissions Due to Projected Number of Light Duty Electric Vehicles	5
---	---

	2025 Projections	2030 Projections	2040 Projections	2050 Projections
	(MMT)	(MMT)	(MMT)	(MMT)
TOTAL	<u>27.0</u>	20.0	<u>14.0</u>	<u>8.9</u>

Commented :: There is no regulatory purpose for this table. If a regulatory purpose is not provided, it should be removed from the rule. Potential regulatory purpose: Adding in the EV assump ion for each year and stating if the EV assumption changes, then the reduction levels in the rule should be revisited to determine if they are still feasible.

Process for Determining Compliance

8.02.1 Analysis Requirements When Adopting or Amending an Applicable Planning Document -Each MPO and CDOT shall conduct a GHG emissions analysis using MPO Models or the Statewide Travel Model, and the Approved Air Quality Model, to estimate total CO2e emissions. Such analysis shall include the existing transportation network and implementation of Regionally Significant Projects. The emissions analysis must estimate total CO2e emissions in million metric tons (MMT) for each compliance year in Table 1, as long as the compliance year is not in the past-and compare these emissions to the Baseline specified in Table 4. This provision shall not apply to MPO TIP amendments

8.02.2 Agreements on Modeling Assumptions and Execution of Modeling Requirements. Prior to the adoption of the next RTP for any MPO, CDOT, CDPHE, and each MPO shall enter into an Intergovernmental Agreement which outlines CDOT, CDPHE, and MPO

Commented : The comparison to Table 1 should occur using the GHG Emissions Analysis AND the GHG mitigation measures, not just the GHG Emissions analysis.

Commented [3]: CDOT should also have an IGA required prior to the next 10-year plan

responsibilities for development and execution of MPO Models or the Statewide Travel Model, and Approved Air Quality Model.

- 8.02.3 The State Interagency Consultation Team shall meet as needed to address any questions on the classification of projects as Regionally Significant, modeling assumptions, and projects that reduce GHG emissions.
- 8.02.3 By April 1, 2022, CDOT shall establish an ongoing administrative process, through a public process, for selecting, measuring, confirming, and verifying GHG Mitigation Measures, so that CDOT and MPOs can incorporate one or more into each of their plans in order to reach to assist in meeting the Regional GHG Planning Reduction Levels in Table 1. Such a process shall include, but not be limited to, determining the relative impacts of GHG Mitigation Measures, measuring and prioritizing localized impacts to communities and Disproportionately Impacted Communities in particular. The mitigation credit awarded to a specific solution shall consider both aggregate and community impact.

8.02.4 Timing for Determining Compliance

8.02.4.1 By October 1, 2022, CDOT shall update their 10-Year Plan and DRCOG and NFRMPO shall update their RTPs pursuant to § 43-4-1103, C.R.S. and meet the reduction levels in Table 1 or the requirements pursuant to § 43-4-1103, C.R.S and restrictions on funds.

8.02.4.2 After October 1, 2022

- 8.02.4.2.1 CDOT must fFor each Applicable Planning Document adopted or amended after October 1, 2022, CDOT must meet either the reduction levels within Table 1 for Non-MPO areas or the requirements as set forth in Rule 8.058 02 5 1 1
- 8.02.4.2.2 MPOs must meet either the corresponding reduction levels within Table 1 fFor each Applicable Planning Document adopted or amended after October 1, 2022, MPOs must either meet the corresponding reduction levels within Table 1, or the relevant MPO and CDOT each must meet the requirements as set forth in Rule 8.058.02.5.1.1 or Rule 8.02.5.1.2, as applicable This provision shall not apply to MPO TIP Amendments.
- 8.02.5 Demonstrating Compliance. At least thirty (30) days prior to adoption or amendment of any Applicable Planning Document except amendments to MPO TIPs, CDOT for Non-MPO areas and the MPOs for their areas shall provide to the Commission a GHG Transportation Report containing the following information:
 - 8.02.5.1 GHG emissions analysis and, if applicable, a GHG Mitigation Plan demonstrating that the Applicable Planning Document is in compliance with the GHG Reduction Levels in MMT of CO2e for each compliance year in Table 1 or that the requirements in Rules 8.02.5.1.1 or 8.02.5.1.2., as applicable, have been met.
 - 8.02.5.1.1 In non-MPO areas or for MPOs that are not in receipt of -federal suballocations pursuant to the CMAQ and/er STBG programs, the Department utilizes 10-Year Plan funds anticipated to be expended on Regionally Significant Projects in those areas on projects that reduce GHG emissions.

Commented [13]: Unclear what these terms mean. The rule already provides a process for reporting he status of the measures – would this process impact the format/approval process of the mitigation report and/or status report?

Commented [32]: Agencies may choose to report these measures even hough they don't enable reaching the reduction levels (i.e. hey still fall short). Not sure if the suggested language goes far enough to explain that concept.

Commented [13]: As proposed, the rule implies the applicable plans must comply immediately after October 1, 2022.

Commented [13]: Only having this language in §8 02.1 means we'd still have to comply and submit a report for TIP Amendments, it just wouldn't have the emissions analysis. Is that the intent?

Commented []: The rule needs to clearly identify that compliance is not based solely on the GHG emissions analysis (or the GHG emissions analysis needs to clearly identify that the mi iga ion measures are included in the analysis)

Commented [1]: If "or" is retained here, it is unclear which provision applies to MPOs that receive only one of the federal suballocations

8.02.5.1.2

0.01		pursuant to the CMAQ and/or ST	BG programs, the MPO utilizes			
	shall award those funds anticipated to be expended on					
	Regionally Significant Projects onto projects or approved GHG Mitigation					
	Measures that reduce GHG emissions, and CDOT					
	utilizes shall award 10-Year Plan funds anticipated expended on Regionally Significant Projects in that M					
	Projects in that MPO					
	area.	on projects that reduce GHG	emissions.			
<u>8.02.5.2</u>		ification and documentation of the M				
		el Model and the Approved Air Quali	ty Model used to determine			
	GHG	emissions in MMT of CO2e.				
	la con					
8.02.5.3		e discretion of the MPO or CDOT, su				
		n Plan that identifies GHG Mitigation				
		that will count toward the reduction I	levels within Table 1. The			
	Mitig	ation Action Plan shall include:				
0.00		The confidence of standard and second	fire data of analysis			
8.02	2.5.3.1	The anticipated start and comple	tion date of each measure.			
0.00	1522	An actimate where feasible of th	no annual CIIC amissions			
8.02	2.5.3.2	An estimate, where feasible, of the reductions in MMT of CO2e achie				
			eved per year by any GHG			
		Mitigation Measures.				
0.00	2.5.3.3	Ougatification of apositic as bond	ofite whose feasible including			
0.02	2.0.3.3	Quantification of specific co-bene reduction of co-pollutants (PM2.5				
		impacts (changes to VMT, pedes				
		numbers, etc. as applicable).	stran/bike use, transit nuersnip			
		numbers, etc. as applicable).				
8.03	2.5.3.4	Description of benefits to Disprog	portionately Impacted			
0.02		Communities.	ortionately impacted			
		Communica.				
8 02 6 Reporting of	n Complia	ance- Following the submission of a	GHG Transportation Report			
		n Action Plan, Annually by April 1, C				
		ommission annually by April 1 on an				
		ch GHG Mitigation Measure identifie				
Transportati			a in their most recent orro			
rianoportat	on reper	<u></u>				
8 02 6 1	The i	mplementation timeline;				
0.02.0.1	1110	The state of the s				
8.02.6.2	The o	current status;				
8.02.6.3	For n	neasures that are in progress or con	npleted, quantification of the			
		fit or impact of such measures; and				
		,				
8.02.6.4	For n	neasures that are delayed, cancelled	d, or substituted, an explanation			
		y that decision was made.				
GHG Mitigation Mea	sures. W	hen assessing compliance with the	GHG Reduction Levels, CDOT			
LMDO L III	- 41-	adverte to utilize approved CHC Mit				

and MPOs shall have the opportunity to utilize approved GHG Mitigation Measures as set forth in Rules 8.02.3 and 8.02.5.3 to offset emissions and demonstrate progress toward compliance.

Illustrative examples of GHG Mitigation Measures include, but are not limited to:

In MPO areas that are in receipt of federal suballocations

Commented :: Unclear when this takes effect. Projects currently in progress should not have their funding removed, as that would be highly disruptive. The least disruptive approach is to apply he requirement to future awards.

Commented [12]: Rule should allow an agency to not submit a Mitigation Ac ion Plan. If the GHG analysis demonstrates compliance, no mitigation measures would be needed.

Commented :: Again, measures would likely be identified even if they don't allow he agency to meet the reduction levels.

- 8.0.3.1 The addition of transit resources in a manner that can displace VMT.
- 8.03.2 Improving pedestrian and bike access, particularly in areas that allow individuals to reduce multiple daily trips.
- 8.03.3 Encouraging local adoption of more effective forms of vertical development and zoning plans that integrate mixed use in a way that links and rewards transportation project investments with the city making these changes.
- 8.03.4 Improving first-and-final mile access to transit stops and stations that make transit resources safer and more usable by consumers.
- 8.03.5 Improving the safety and efficiency of crosswa ks for pedestrians, bicyclists, and other non-motorized vehicles, including to advance compliance with the ADA.
- 8.03.6 Adopting or encouraging the adoption of locally driven changes to parking policies and physical configuration that encourage more walking and transit trips.
- 8.03.7 Incorporating medium/heavy duty vehicle electric charging and hydrogen refueling infrastructure as well as upgrading commensurate grid improvements into the design of key freight routes to accelerate truck electrification.
- 8.03.8 Establishing policies for clean construction that result in scalable improvements as a result of factors like lower emission materials, recycling of materials, and lower truck emissions during construction.
- 8.03.9 Adoption of Implementing or encouraging the adoption of transportation demand management practices that reduce VMT.
- 8.03.10 Implementing or encouraging the implementation of operations improvements such as ramp metering, signal timing, intersection improvements, access control plans, anti-idling programs, and incident management that result in GHG reductions.
- 8.04 Air Pollution Control Division (APCD) Confirmation and Verification
 - 3.04.1 At least sixty (60)ferty five (45) days prior to adoption of any Applicable Planning
 Document, CDOT for Non-MPO areas and the MPOs for their areas shall provide to
 APCD for review and verification of the technical data contained in the draft GHG
 Transportation Report required per Rule 8.02.5. If APCD has not provided written
 verification within thirty (30) days, the document shall be considered acceptable. The
 APCD shall submit any written verification to the agency adopting the Applicable
 Planning Document and to the Commission.
 - 8.04.2 At least forty-five (45)thirty (30) days prior to adoption or amendment of policies per Rule
 8.02.3, CDOT shall provide APCD the opportunity to review and comment. If APCD has
 not provided written comment within thirty (30)forty five (45) days, the document shall be
 considered acceptable.
- 8.05 Enforcement. The Commission shall review all GHG Transportation Reports to determine whether the applicable reduction targets in Table 1 have been met and the sufficiency of any GHG Mitigation Measures needed for compliance.
 - 8.05.1 If the Commission determines the requirements of Rule 8.02.5 have been met, the Commission shall, by resolution, accept the GHG Transportation Report.

Commented []: This language is unclear.

Commented :: This language is unclear.

- 8.05.2 If the Commission determines, by resolution, the requirements of Rule 8.02.5 have not been met, the Commission shall restrict the use of funds pursuant to Rules 8.02.5.1.1 or 8.02.5.1.2, as applicable, to projects and approved GHG Mitigation Measures that reduce GHG. Prior to the enforcement of such restriction, an MPO, CDOT or a TPR in a non-MPO area, may, within thirty (30) days of Commission action, issue one or both of the following opportunities to seek a waiver or to ask for reconsideration accompanied by an opportunity to submit additional information:
 - 8.05.2.1 Request a waiver from the Commission imposing restrictions on specific projects not expected to reduce GHG emissions. A waiver may be requested at any time, including concurrently with the submission of a GHG Transportation Report. The Commission may waive the restrictions on specific projects on the following basis:
 - 8.05.2.1.1 The GHG Transportation Report reflected significant effort and priority placed, in total, on projects and GHG Mitigation Measures that reduce GHG emissions; and
 - 8.05.2.1.2 In no case shall a waiver be granted if such waiver results in a substantial increase in GHG emissions when compared to the required reduction levels in this Rule.
 - 8.05.2.2 Request reconsideration of a non-compliance determination by the Commission and provide written explanation of how the requirements of Rule 8.02.5 have been met. A request for reconsideration must be submitted within thirty (30) days of Commission action.
 - 8.05.2.3 The Commission shall act, by resolution, on a waiver or reconsideration request within thirty (30) days of receipt of the waiver or reconsideration request or at the next regularly scheduled Commission Meeting, whichever is later. If no action is taken within this time period, the waiver or reconsideration request shall be deemed to be deniedapproved.
- 8.05.3 Notwithstanding any other provision of this Rule, CDOT, DRCOG and NFRMPO must meet the requirements of § 43-4-1103, C.R.S.
- 8.06 Reporting. Beginning July 1, 2025, and every 5 years thereafter, the Executive Director on behalf of CDOT shall prepare and make public a comprehensive report on the statewide GHG reduction accomplishments.

9.00 Materials Incorporated by Reference

- 2.01 The Rules are intended to be consistent with and not be a replacement for the federal transportation planning requirements in Rule 9.01.1 and federal funding programs in Rules 9.01.2 and 9.01.3, which are incorporated into the Rules by this reference, and do not include any later amendments.
 - 9.01.1 Fixing America's Surface Transportation Act or the "FAST Act"), 23 U.S.C. §§ 134, 135 and 150, Pub. L. No. 114-94, signed into law on December 4, 2015, and its accompanying regulations, where applicable, contained in 23 C.F.R.Part 450, including Subparts A, B and C in effect as of November 29, 2017, and 25 C.F.R. § 170 in effect as of November 7, 2016.

- Transportation Commission
 - 9.01.2 Congestion Mitigation and Air Quality Improvement (CMAQ) Program, 23 U.S.C. § 149, in effect as of March 23, 2018.
 - 9.01.3 Surface Transportation Block Grant (STBG) Program, 23 U.S.C. § 133, in effect as of December 4, 2015.
- 9.02 Also incorporated by reference are the following federal laws and regulations and do not include any later amendments:
 - 9.02.1 Americans with Disabilities Act (ADA), 42 U.S.C. § 12101, et. seq., in effect as of January 1, 2009.
 - 9.02.2 Clean Air Act (CCA), 42 U.S.C. §§ 7407-7410, and 7505a, in effect as of November 15, 1990.
 - 9.02.2 Transportation Conformity Regulations, 40 C.F.R. § 93.101, in effect as November 24,1993.
- 9.03 Also incorporated by reference are the following documents, standards, and models and do not include any later amendments:
 - 9.03.1 Greenhouse Gas Pollution Reduction Roadmap by the Colorado Energy Office and released on January 14, 2021.
 - 9.03.2 MOVES3 Motor Vehicle Emissions Model for SIPs and Transportation Conformity released by the U.S. Environmental Protection Agency, in effect as of January 7, 2021.
- 9.04 All referenced laws and regulations are available for copying or public inspection during regular business hours from the Office of Policy and Government Relations, Colorado Department of Transportation, 2829 W. Howard Pl., Denver, Colorado 80204.
- 9.05 Copies of the referenced federal laws and regulations, planning documents, and models.
 - 9.05.1 Copies of the referenced United States Code (U.S.C.) may be obtained from the following address:

Office of the Law Revision Counsel
U.S. House of Representatives
H2-308 Ford House Office Building
Washington, DC 20515
(202) 226-2411
https://uscode.house.gov/browse.xhtml

9.05.2 Copies of the referenced Code of Federal Regulations (C.F.R.) may be obtained from the following address:

U.S. Government Publishing Office 732 North Capitol State, N.W. Washington, DC 20401 (866) 512-1800 https://www.govinfo.gov/

9.0.5.3 Copies of the Greenhouse Gas Pollution Reduction Roadmap (Roadmap) may be obtained from the following address:

Colorado Energy Office
1600 Broadway, Suite 1960
Denver, CO 80202
(303) 866-2100
energyoffice.colorado.gov

9.0.5.4 To download MOVES3 released by the U.S. Environmental Protection Agency may be obtained from the following address:

U.S. Environmental Protection Agency

The Office of Transportation and Air Quality

1200 Pennsylvania Ave, N.W.

Washington, DC 20460

(734) 214-4574 or (202) 566-0495

mobile@epa.gov

https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves

10.00 Declaratory Orders

10.01 The Commission may, at their discretion, entertain petitions for declaratory orders pursuant to § 24-4-105(11), C.R.S.

Editor's Notes

History

Entire rule eff. 12/15/2012. Section SB&P eff. 05/30/2013. Entire rule eff. 09/14/2018.

Annotations

Rules 1.22, 1.25, 1.42, 2.03.1 – 2.03.1.4, 4.01, 4.02.1 – 4.02.3, 4.02.5.9, 4.04.2.2, 4.04.2.4, 4.06.1.7, 6.01.2, 7.01, 7.03 – 7.04 (adopted 10/18/2012) were not extended by Senate Bill 13-079 and therefore expired 05/15/2013.



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Proposed revisions

1 message

Thu, Sep 9, 2021 at 3:10 PM

To: dot_rules@state.co.us

Yes!! Please do everything possible to improve public transportation, bike paths and sidewalks! Our air quality is atrocious and climate change is upon us. It is in everyone's best interest to make changes towards sustainable transportation-NOT more roads and highways.

Thank you,



Rules - CDOT, DOT_ <dot_rules@state.co.us>

GHG Rule Public Comment Extension Request

1 message Mon, Sep 13, 2021 at 4:42 PM To: "governorpolis@state.co.us" <governorpolis@state.co.us>, "shoshana.lew@state.co.us" <shoshana.lew@state.co.us>, "Andrew.Hogle@state.co.us" <Andrew.Hogle@state.co.us>, "dot transp comm@state.co.us" <dot_transp_comm@state.co.us>, "Stockinger, Herman (herman.stockinger@state.co.us)" <herman.stockinger@state.co.us>, Rebecca White - CDOT <rebecca.white@state.co.us>, Theresa Takushi - CDOT <theresa.takushi@state.co.us>, "Lutz -CDOT, Natalie" <natalie.lutz@state.co.us>, "Uebelher - CDOT, Jennifer" <jennifer.uebelher@state.co.us> Governor Polis, Director Lew, Hearing Officer Hogle, and Transportation Commissioners,

Please see the attached comment letter from the North Front Range Metropolitan Planning Organization (NFRMPO) requesting an extension of the public comment period for the TC's proposed Greenhouse Gas (GHG) rule for transportation plans.

Thank you,

Transportation and Air Quality Planner III







September 13, 2021

To: Governor Jared Polis, Director Shoshana Lew, Hearing Officer Andrew Hogle, and Transportation Commissioners

Re: Public Comment Period Extension Request for the Proposed GHG Rule

Thank you for the opportunity to provide comment on the Transportation Commission's (TC's) proposed greenhouse gas (GHG) rule for transportation plans. The North Front Range Transportation & Air Quality Planning Council, also known as the NFRMPO, is comprised of 15 elected officials representing portions of Larimer and Weld counties. As a Metropolitan Planning Organization (MPO), the NFRMPO will be responsible for demonstrating compliance with the proposed rule and NFRMPO staff have engaged extensively in the stakeholder process conducted by the Colorado Department of Transportation (CDOT) that began in January 2021.

The public comment period for this rulemaking began on August 16, 2021, and is scheduled to close on October 15, 2021. This comment letter addresses the need for additional time to make informed public comment on the proposed rule. The NFRMPO anticipates providing substantive comments on the proposed rule in a separate letter prior to the close of the public comment period.

The NFRMPO recognizes CDOT has conducted considerable public outreach and stakeholder engagement on this rule, particularly at the conceptual level. However, there are certain pieces of technical information that must be released during the public comment period to allow for fully informed decision making and meaningful stakeholder involvement. There are four items the NFRMPO has requested from CDOT staff and/or Colorado Department of Public Health and the Environment (CDPHE) staff which have not been provided, although these requests have been acknowledged and NFRMPO staff have been told they are underway.

The specific request is for the **public comment period to extend at least 30 days past the delivery of the following information** to allow for the submission of data-driven comments and development of a data-driven rule:

- 1. The **technical report** from CDOT describing the modeling process for demonstrating compliance and documentation for the Energy and Emissions Reduction Policy Analysis Tool (EERPAT) model.
 - **Status:** This information was requested in mid-July and has not yet been provided. Documentation for the EERPAT model is not available online.
 - Reason: The technical report and EERPAT documentation will enable the staff at agencies subject to the rule to understand how the GHG Baselines and GHG Reduction Levels were set and how modeling for future compliance demonstrations will be conducted. Such understanding may uncover



comments or suggestions for how to improve the rule's timing requirements, clarity (e.g. will the compliance demonstrations be compared against the GHG Baselines and/or the GHG Reduction Levels), and feasibility of the GHG Reduction Levels.

- 2. **GHG Baselines** from CDPHE for each compliance year based on MPO models instead of the statewide model for any MPO that prefers the GHG Baselines in the rule to be set based on their in-house model.
 - Status: The NFRMPO submitted this request to CDPHE on July 29, 2021, for the NFRMPO region. In a best-case scenario, these results will not be available until October 1, 2021. CDPHE staff are experienced and trained in using the EPA's Motor Vehicle Emissions Simulator (MOVES) model, which is the model needed to turn outputs from the travel demand model into GHG emission estimates. MPO and CDOT staff do not have the experience or training to run MOVES.
 - Reason: CDOT and each MPO maintain their own travel demand model. These models have different update schedules, base years, and sensitivities. The GHG baselines in the rule were set using the statewide model; however, the NFRMPO will demonstrate compliance using the travel demand model maintained by the NFRMPO, as allowed by the rule. Using one model to set a baseline and a different model to assess compliance is a concern because they could show different outputs with the same set of inputs. Using the MPO model to demonstrate compliance instead of the statewide model is preferable because it will be more resource efficient allowing for model updates and iterations that would not be feasible if the information needs to pass through to CDOT and incorporated into the statewide model each time a GHG analysis is needed.
- 3. **Corrections to the GHG Reduction Levels** from CDOT for Table 1 to address the likely error that occurred when transferring data between models.
 - **Status:** This issue was originally raised on July 6, 2021, and has been raised several other times since then. On August 31, 2021, CDOT staff agreed it was likely an issue and are currently investigating it.
 - Reason: It appears light-duty VMT reductions were mistakenly applied to all vehicle types, resulting in unreasonably high GHG Reduction Levels in the later compliance years. This can most clearly be seen in the 2050 compliance year, which shows a reduction of 0.7 MMT GHG using strategies that reduce light duty VMT while also assuming only 3 percent of light duty vehicles will be powered by internal combustion engines in 2050. It is not possible for the VMT reductions of 3 percent of the light duty fleet to create 0.7 MMT in GHG reductions.



- 4. **Per capita GHG emissions** from CDOT in each compliance year to enable the rule's GHG estimates to be more tangible.
 - **Status:** Commissioner Bracke requested this information at the TC Workshop on August 18, 2021. CDOT staff agreed to provide this information, and again at a meeting with NFRMPO staff on August 27, 2021, CDOT staff agreed this information would be made available.
 - Reason: The State of Colorado, but particularly the Front Range, is projected to have tremendous population and employment growth. GHG per capita would provide a clearer picture into how the reduction levels are trending while the population increases.

Providing time in the rulemaking for review of these four items will enhance, not jeopardize, the ability of the NFRMPO, DRCOG, and CDOT to meet the October 1, 2022, deadline for updating their plans in compliance with the GHG rule per the requirements of SB21-260.

The NFRMPO appreciates the time and effort CDOT staff has committed to developing a GHG Rule to reduce GHG emissions from transportation planning. We respectfully request the Hearing Officer, TC Ad Hoc Committee, and the TC ensure there is adequate time for public comment, and we look forward to continuing the collaboration of the NFRMPO with CDOT staff in this effort. If you have any questions, please contact

Sincerely,

GHG Rule Time Request 9.13.2021

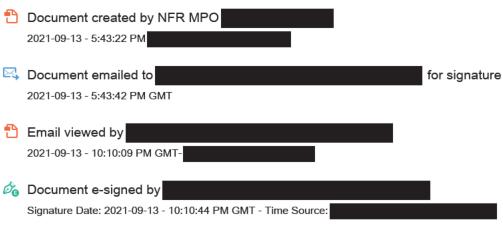
Final Audit Report 2021-09-13

Created: 2021-09-13

By:
Status: Signed

Transaction ID:

"GHG Rule Time Request 9.13.2021" History



Agreement completed.
 2021-09-13 - 10:10:44 PM GMT



Rules - CDOT, DOT_ <dot_rules@state.co.us>

GHG pollution reduction standard comments

1 message

Wed, Sep 15, 2021 at 1:35 PM

To: dot_rules@state.co.us

I am writing today on behalf of myself and my family. Thank you for the opportunity to provide written testimony.

Reducing greenhouse gas pollution is of utmost importance to our community, Colorado, the nation, and the world. If successful, this rulemaking will be among the first of its kind in the country. I appreciate CDOT for undertaking this project.

- While the draft rule suggests good policies to mitigate transportation pollution, we need to set solid goals for pollution reduction that will enable us to meet our existing targets. It's impossible to miss the effects that climate change is having in Western Colorado. From the beetle-killed trees, to the record-breaking heat waves after record-breaking heat-waves, to the intense drought that has gripped our region for nearly 20 years. Wildfire smoke the last two years has been intense, unhealthy, and pervasive. This is not the Colorado that we have come to know and love!
- This rulemaking should center people and environmental justice, and right now, the draft rule fails us. Black, Indigenous, Latinx, and other people of color are hurt worst by transportation pollution. CDOT should develop a Transportation Equity Framework, and representatives of disproportionately impacted and marginalized communities need to be included in developing, monitoring and implementing the rule.
- A transportation system built to serve cars limits how we can move. The state's climate roadmap calls for a 10% reduction in driving by 2030. We need to get cars off the road in a permanent, sustainable way that increases freedom of choice for urban and rural Coloradans.
- As an EV driver and advocate, I applaud the implementation of Colorado's "DC Fast Charging Corridors".
 However, we need more DC fast chargers in visible and usable places such as roadside rest areas. Level 2 chargers should be more present in State Parks, apartment and condo complexes, and major workplaces.

Thank you,



Rules - CDOT, DOT_ <dot_rules@state.co.us>

Please strengthen the Greenhouse Gas Pollution Standard

1 message

Wed, Sep 15, 2021 at 9:31 PM

To: dot_rules@state.co.us

Dear CDOT Rulemaking Comments,

Our car-centric transportation system has divided communities, polluted our air, and left Coloradans with few options for safely and conveniently moving around our state. I'm excited to see this rulemaking moving forward and have a few recommendations for improving the draft.

I urge you to strengthen the rule to center communities most harmed by the impacts of our existing transportation system. A Transportation Equity Framework should be developed as a part of this process and representatives of disproportionately impacted and marginalized communities should be included in developing, monitoring, and implementing this rule.

Colorado is in an air quality crisis and transportation is a top contributor. We must take aggressive action to reduce emissions or we will all continue to pay the price by way of air pollution and the ongoing impacts of the climate crisis. Please outline specific goals for pollution reduction that will enable us to meet existing air quality targets.

I urge you to consider these changes and continue to strengthen this rule through the revision process.

Sincerely,



2829 W. Howard Place Denver, CO 80204-2305

MEMORANDUM

To: Office of Policy and Government Relations

From: Natalie Lutz, Rules Administrator

Date: August 23, 2021

RE: Permanent Records Retention of Rule File for 2 CCR 601-22

Please establish an official rule making file for the rulemaking and hearing process pursuant to § 24-4-103(8.1), C.R.S. which requires that "an agency shall maintain an official rulemaking record for each proposed rule for which a notice of proposed rulemaking has been published in the Colorado Register. Such rulemaking record shall be maintained by the agency until all administrative and judicial review procedures have been completed pursuant to the provisions of this article. The rulemaking record shall be available for public inspection."

For retention purposes, this file should be considered permanent.

Please contact me if you need additional information.

Natalie Lutz 303.757.9441 Natalie.Lutz@state.co.us

