



## Statewide Transportation Advisory Committee (STAC)

*This meeting will be hosted virtually*

**August 4, 2022**

**8:30 AM – 11:15 AM**

### ***Agenda***

- 8:30-8:35 **Welcome and Introductions** – Vince Rogalski, STAC Chair
- 8:35-8:40 **Approval of the July Meeting Minutes** - Vince Rogalski, STAC Chair
- 8:40-8:55 **CDOT Update on Current Events (Informational Update)** – Herman Stockinger, CDOT Deputy Director
- 8:55-9:05 **Transportation Commission Report (Informational Update)** – Vince Rogalski, STAC Chair
- Summary report of the most recent Transportation Commission meeting.
- 9:05-9:25 **TPR Representative and Federal Partners Reports (Informational Update)**
- A brief update from STAC members on activities in their TPRs and representatives from federal agencies.
- 9:25-10:00 **Environmental Justice & Equity Branch Overview (Informational Item)** - Marsha Nelson, Chief Equity Officer
- An overview of the newly created Environmental Justice and Equity Branch and the Equity 360 initiative.
- 10:00-11:00 **GHG and 10-Year Plan Update (Informational Item)** – Rebecca White, Director, Division of Transportation Development, and Theresa Takushi, Greenhouse Gas Program Specialist
- Update on the GHG compliance effort and 10-Year Plan.
- 11:00-11:15 **Other Business** - Vince Rogalski, STAC Chair

## **Statewide Transportation Advisory Committee (STAC) Summary – July 7, 2022**

- 1) CDOT Update on Current Events (Informational Update) – Herman Stockinger, CDOT Deputy Director
  - New Supreme Court Environmental Protection Agency (EPA) ruling has no relevant impact to Colorado’s Greenhouse Gas (GHG) Rulemaking.
  - A GHG Rule update and correction is required: Current statutory language could imply that only Multimodal Transportation Mitigation Options Fund (MMOF) dollars are restricted (if reduction levels aren’t met), whereas the proposed correction would also restrict CDOT’s 10-Year Plan funds, and if applicable, Congestion Mitigation Air Quality (CMAQ) funds and Surface Transportation Block Grant (STBG) funds if reduction targets aren’t met. An emergency rule will be drafted and adopted within the next 2 weeks for a permanent rule adoption by September 15 (to be effective on November 14, 2022).
  
- 2) 10-Year Plan Update and GHG Compliance Process (Informational Update) – Rebecca White, Director, Division of Transportation Development
  - The 10 Year Plan is being updated to accommodate new or adjusted revenue sources, GHG rulemaking compliance considerations and progress in delivering the first four years of the current plan.
  - Updates to current project tables include changing labeled years from “years 1-5” to actual fiscal year of the project as well as including the project status column.
  - Fact sheets are also being updated on each project to better show multimodal approach and latest funding status.
  - The 10-Year Plan opening text is updated as well to include new resources and GHG definitions.

### STAC Discussion

- There was confusion around the Infrastructure Investment and Jobs Act (IIJA) funding and whether it is being applied to advancing the 10 Year Plan. Refresher slide outlines funding that goes into the 10 Year Plan and how IIJA is incorporated.
- Project tables are still in draft form and they should be live sometime the following week; links will be sent out to STAC members.

### GHG Analysis:

- New GHG Rulemaking requires updates to the 10 Year Plan by October 1st. CDOT’s “jurisdiction” in 10 Year Plan projects is in non-MPO (rural transportation planning regions (rural TPR) portions of the state.
- GHG Modeling: CDOT’s Statewide Travel Model outputs of vehicle miles traveled (VMT) and congestion/speed data (for 2025-2030). This data is used in an EPA MOVES model that outputs Fleet Mix/Age and Fuel type. In combination, both of these models show transportation generated GHG emissions.
- Alternative compliance options are being looked at for 2040 and 2050 given that CDOT only has a 10 Year Plan. The full modeling results and compliance alternatives will be further discussed at the August STAC meeting to allow for an adoption by September.

### STAC Discussion

- Concerns with how CDOT projects will be prioritized if they don't meet the mitigation threshold. Non-compliance funding restrictions will be covered during the August STAC meeting.

- Concerns with connectivity related to electric vehicles (EVs) in rural Colorado and how rural TPRs/MPOs could achieve GHG mitigation points from EV infrastructure. General concerns with feasibility of EV infrastructure in rural Colorado and rise of fuel prices particularly farmers.

3) I-270 Project Update (Informational Update) – Jessica Myklebust, Region 1 Director, and Adam Parks, P.E., Region 1 Resident Engineer

Critical Bridge Replacements Project:

- Eight structures exist within a one- mile stretch of I-270 near Commerce City that have required frequent emergency repairs; 6 of the 8 bridges in this segment are rated as poor and thus eligible for Bridge and Tunnel Enterprise (BTE) funding. CDOT is seeking approval for all 8 bridges to enter the design phase (6 using BTE funds).
- Key Project Elements: full pavement reconstruction at approaches, retaining walls, right-of-way (ROW)/ easements for construction, and floodplain considerations.
- The Construction Management/General Contractor (CM/GC) project delivery method has been approved.

STAC Discussion

- Ron Papsdorf: Wants to understand the implications of moving forward with the I-270 Critical Bridge Replacements Project separate from the larger I-270 Improvement project addressed by the Environmental Assessment (EA). Adam Parks: These bridges are already included and proceeding in parallel with the EA.

4) National Electric Vehicle Infrastructure (NEVI) Program (Informational Update) – Kay Kelly, Chief, Office of Innovative Mobility, and Michael King, Assistant Director of Electrification & Energy

- The transportation sector is the largest emitter of GHG (at 21%) compared to other sectors thus electrification seeks to reduce GHG emissions
- NEVI 2030 Goals for Colorado include: 940,000 registered zero emission vehicles (ZEVs); 1,000 transit ZEVs; 35,000 medium/heavy duty ZEVs; and ensuring 100% of the state's population is within 30 miles of a direct current (DC) fast-charging station.
- Goals Status: 56,010 registered EVs in Colorado. The recent increase is attributed to more vehicle choice and larger EV range.
- Types of EV Charging Infrastructure: Level 1 chargers provide 2 to 5 miles of range per hour; Level 2's provide 10 to 30 miles of range per hour; Level 3 or Direct Current Fast Chargers (DCFC) provide 150 to 350+ miles of range per hour. The NEVI program focuses on Level 3 charging facilities.
- The IIJA provided \$7.5 billion to the NEVI program, including \$5 billion in the NEVI formula program and \$2.5 billion in the Discretionary Grant Program. An EV Infrastructure Deployment Plan is due by August 1st to the Joint Office of Energy and Transportation.

STAC Discussion

- Commissioner Eula Adams and Kristian Stephens raised questions regarding battery and charger technology and impacts to NEVI analysis if technology continues to improve. Data is suggesting that new battery technology could increase vehicle ranges

to 750+ miles and better charging equipment designs will continue to reduce charging times. NEVI analysis is continually being refined and adjusted based on current technology projections (the EV plan will be updated every 2 years).

- Scott James: As we move forward with building out a charging network, has there been communication with electric utility providers to ensure capacity in the energy grid, especially in rural parts of the state? The Energy Office has done modeling and worked with utility companies and found that the grid has plenty of capacity. Only minor concerns exist with some local distribution capacities.
- Richard Elsner: Expressed concerns with winterization of charging infrastructure and also the lack of charging stations west of Colorado Springs into Fairplay. The NEVI program is seeking feedback on winterization as well as future designation of corridors.
- Concerns were raised about inflation and EVs potentially causing gas vehicle ownership costs to increase due to current administration policies and the state of the economy.

5) Other Business - Vince Rogalski, STAC Chair

- Consensus is that the new Thursday STAC meetings time works well for most.
- The process of developing or updating the next Long Range Plan will likely begin in 2023. STAC might consider how the new 10 Year Plan may be integrated into that Long Range Plan without an extraordinary amount of additional effort, so that it can be adopted as required in 2024.
- Next STAC meeting is August 4, 8:30am-12:00, being held virtually only.

## **DRAFT Transportation Commission (TC) Meeting Minutes**

**Workshops – Wednesday, July 20, 2022, 1:30 pm – 5:00 pm, Virtual via Zoom Meeting**

Recording (YouTube): <https://youtu.be/ncdDvVihP1Y>

### **Call to Order, Roll Call – Timestamp 00:00:00**

All eleven Commissioners were present: Commissioners Kathy Hall (TC Chair), Don Stanton (TC Vice Chair), Karen Stuart, Gary Beedy, Kathleen Bracke, Mark Garcia, Lisa Tormoen Hickey, Barbara Vasquez, and Eula Adams, Yessica Holguin, and Terry Hart.

### **1. FY 2022 - 2023 Budget Workshop (Jeff Sudmeier and Bethany Nicholas) – Timestamp 00:00:00**

**Purpose & Action:** The Division of Accounting and Finance (DAF) is requesting the TC to review and approve the first budget amendment to the FY 2022-23 Annual Budget, which consists of three items that require TC approval. The first budget amendment reallocates \$35.9 million from the 10-Year Plan Projects - Multimodal line to Bustang to expand Bustang's operations, allocates \$15.5 million to the 10-Year Plan Projects – Capital AM line to administer the FHWA bridge replacement and rehabilitation program, and reallocates \$5.0 million from the TC Program Reserve to the Maintenance Reserve Fund to address any unforeseen contingencies that arise during FY 2022-23.

#### **Discussion Summary:**

- The Multimodal Transportation and Mitigation Options Fund (MMOF) allocation to Bustang operations does not affect Local MMOF funding allocated to planning regions, but directs only the 15% of program funds dedicated to the State MMOF program. Previous State MMOF program funds were allocated in 2020 to the Revitalizing Main Streets program.

### **2. 10-Year Plan Update (Rebecca White and Marissa Gaughan) – Timestamp 00:16:14**

**Purpose & Action:** The purpose of this workshop is to discuss the draft, updated 10-Year Plan and notable project changes with the TC and provide an overview of the strategies that will be used to demonstrate greenhouse gas (GHG) reduction compliance. No action is required. This update discussion is for informational and discussion purposes only.

#### **Discussion:**

- The Commission reviewed various changes to the project tables as negotiated within those Regions.
- TC will discuss next month the potential to set up a cost-escalation fund that will enable CDOT to more efficiently respond to rapid cost fluctuations on approved projects.
- Additional Highway Safety Improvement Program (HSIP) funds are added to the Plan, with a specific amount allocated to each CDOT Region to augment funding to existing 10-Year Plan projects with eligible safety elements.
- Changes to the Regions' project lists, as negotiated within the planning regions, were reviewed.
- The Region project tables will be updated to specifically identify the rural pavement funding projects.
- The Final Draft 10-Year Plan will be presented to TC in August and will then be considered for adoption in September.

### **3. Greenhouse Gas (GHG) Compliance Update (Commissioner Hickey, Rebecca White and Theresa Takushi) – Timestamp 00:48:56**

**Purpose & Action:** This workshop provided an overview of the compliance strategy for CDOT to meet the GHG Pollution Standard (GHG Planning Rule). No action requested, for information only.

**Discussion:**

- CDOT’s travel demand modeling outputs estimated Vehicle Miles Traveled (VMT), which is then converted to measurements of GHG emissions based on the EPA Moves model. Travel model data, obtained through controlled surveys, are validated to properly represent the traveling public, and the survey methodology is adjusted as needed to obtain the best sample data possible.
- CDOT also relies on some Big Data sources to help validate whether the outcomes of the model are most likely providing realistic results.
- Staff will begin looking at scenarios of future regionally significant projects that will enable the model to project beyond the current 10-Year Plan time horizon to enable 2040 and 2050 emission projections.
- Because the success of meeting emission reduction targets is going to necessitate the adoption of significant new electric vehicles (EV), CDOT will continually monitor how closely EV adoptions follow current estimates. The reductions will also depend upon other traveler behavior changes, such as work from home, bike and pedestrian travel, rural tele-health growth, and others.
- Current model outputs indicate that the current Plan achieves the 2025 targets, and achieves about 75% of the 2030 targets for emission reduction. Staff will bring to the TC next month further discussions on how we’ll achieve those targets.
- Modeling standards have now been set up, and the state’s Metropolitan Planning Organizations (MPOs), supported by CDOT’s statewide travel model, and the MMOF funding granted to them for modeling, can achieve equivalent caliber of travel modeling capabilities.

**4. GHG Rules Update – Appendix A Amendments (Herman Stockinger and Sari Weichbrodt) – Timestamp [01:47:16](#)**

**Purpose & Action:** To update the Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions (“the Planning Rules”) 2 CCR 601-22, to clarify that for plans adopted before October 1, 2022 that fail to meet the required GHG reduction levels, the restriction on funds includes both the statutory restriction on MMOF and the rule restrictions on Congestion Mitigation & Air Quality (CMAQ), Surface Transportation Block Grants (STBG), and CDOT 10-Year Plan Funds. The Rule is not as clear as it could be in this regard, and some stakeholders have interpreted the restriction of funds to only be for the MMOF and not the other funds listed in the Rule. During the Permanent Rulemaking process, CDOT also anticipates making several small, non- substantive changes to the GHG Rule.

**Discussion:**

- TC will consider adoption of an emergency rule adoption, to become effective immediately. A permanent rule process will then be opened simultaneously to effectuate these changes permanently.
- The restriction on use of funds that would apply if the reductions are not met would not affect spending of funds on non-regionally significant projects in rural areas of the state.

**5. Rural Transit – Workshop Roadshow (Amber Blake) – Timestamp [01:59:39](#)**

**Purpose & Action:** This workshop provided an update on rural transit operations in Colorado and introduced the three rural transit agencies who will be participating in the Rural Transit Roadshow presentation. No action is required at this time.

**Discussion:**

- Guest transit representatives from the City of La Junta, Steamboat Springs, and the Northeast Colorado Association of Local Governments (NECALG) presented overviews of the services they provide.

**6. Office of Environmental Justice & Equity – EDI Commissioner Vasquez, Marsha Nelson, Greg Diehl, Anna Mariotti, Brian Fauver, Marie Nakagawa, and Jun Arcilla) – Timestamp [02:30:06](#)**

**Purpose & Action:** CDOT is in the process of updating its 3-year Disadvantaged Business Enterprise (DBE) goal methodology for the Federal Transit Administration (FTA) for FFY 2023-2025, which is separate from the DBE

goal methodology for FHWA that was presented to the TC last year. CDOT's DBE goal methodology for FTA is 100% race-neutral, which means that CDOT does not set DBE contract goals on FTA-assisted contracts. The DBE goal methodology must receive concurrence from the TC prior to submission to FTA on August 1, 2022.

**Discussion:**

- Staff provided an overview of Civil Rights compliance programs being monitored by the Civil Rights and Business Resource Center and also short and long-term opportunities to expand equity initiatives beyond compliance, and the resources that would be needed to support that transition.
- The presentation provided Commissioners with additional information related to the updated goal methodology and explained the differences between FHWA and FTA funded contracting opportunities. The FTA 3-year DBE goal methodology will be presented to the TC for approval on Thursday, July 21, 2022.
- Now that CDOT's new Chief Equity Officer has had the opportunity to ascertain the program's needs and some goals and strategies, subsequent conversations will be had with TC to discuss potential staffing and resources that would support those efforts.

**Workshops concluded at 5:10pm.**

---

**Regular Meeting - Thursday, July 21, 2022, 9:00 am to 10:30 am**

**Recording Link (YouTube):<https://youtu.be/eilK2sBzU8s>**

**1. Call to Order, Roll Call**

Eleven Commissioners were present: Commissioners Kathy Hall (TC Chair), Don Stanton (TC Vice Chair), Karen Stuart, Terry Hart, Yessica Holguin, Gary Beedy, Kathleen Bracke, Mark Garcia, Lisa Tormoen Hickey, Eula Adams, and Barbara Vasquez

**2. Public Comments – [Video link 00:01:46](#)**

Provided to the Commission in writing prior to the meeting:

- Matt Scherr, Eagle County Commissioner and Colorado Communities for Climate Action (CC4CA) representative, urged strong implementation of GHG emission reduction mitigation measures such as rural transit and land use-based solutions.
- Tom Easley, of CC4CA, thanked the TC for adoption of the GHG Rule and for Policy Directive (PD) 1610 that provides guidance for implementation with the mitigation measures having the most potential to lower VMT, such as rural transit.
- Tricia Canonico, Fort Collins City Council Member, requested an aggressive approach to reducing GHG in the 10-Year Plan Update given the high costs of climate change that are already becoming apparent.
- Matt Frommer, Southwest Energy Efficiency Project (SWEEP), thanked CDOT for their hard work on the GHG rule, and urged the Commissioners to think of the 2030 GHG targets as a minimum floor goal. Matt asked that the mitigation action plan focus on opportunities to promote more efficient land use.

**3. Comments of the Chair and Individual Commissioners – [Video link: 00:18:50](#)**

- Commissioners commented on various topics including the monumental efforts associated with work to comply with the GHG Rule, the 10-Year Plan Update process, cost challenges, and projects within their districts.

**4. Executive Director's Management Report (Shoshana Lew) – [Video link 00:54:15](#)**

- Executive Director Lew commented on how hard staff has been working across the state to keep projects moving forward, as well as all the work to keep roads safe in the midst of mudslides that have occurred.
  - A number of project milestones were announced, including: completion of concrete reconstruction on SH179, rural paving of SH149, Central 70 nearing completion, and I-70 Floyd Hill work is progressing.
5. **Chief Engineer's Report (Steve Harelson) – [Video link 00:58:00](#)**
- US550/US160 project is making great progress
  - Central 70 major traffic switch moved forward last weekend and is anticipating project completion to come in under budget.
  - The American Association of State Highway and Transportation Officials (AASHTO) is considering changing bridge inspection standards to allow risk-based inspections, to reduce burden for newer bridges at low risk.
  - Recommended read/book of the month is: *Billionaire Wilderness* by Justin Farrell
6. **Colorado Transportation Investment Office (CTIO) (Formerly HPTE) Director's Report (Piper Darlington) – [Video link: 1:06:40](#)**
- No CTIO Board meeting is happening this month
  - CTIO released a request for qualifications (RFQ) for the commercial tolling back office, and received a lot of interest to date.
  - The Westbound I-70 Mountain Express Lane opened for tolling on July 7, 2022.
  - The Central 70 Transportation Demand Management (TDM) services project that is led by CTIO has a final report that will be provided to TC. This program will transition into the tolling equity program.
  - The Tolling Equity Program will be implemented in the near future.
  - The CTIO-led an effort to create a monitoring process for public private partnership (P3) contracts.
  - The ROADIS proposal was received and the CTIO leadership is reviewing it with CDOT Region 1 and Region 4 staff.
7. **FHWA Division Administrator's Report (Andy Wilson) – [Video link: 1:13:10](#)**
- Andy commented on the great Central 70 project progress.
  - Attended an Infrastructure Summit on the Infrastructure Investment and Jobs Act (IIJA) and it provided an opportunity to learn more about the processes involved, and the funding available through the new grant programs.
  - The Notice of Funding Opportunity (NOFO) for the Bridge Investment Program and the Safe Streets and Roads for All Program have been released.
  - The Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant awards are anticipated to be announced soon, August 12, 2022.
8. **Statewide Transportation Advisory Committee (STAC) Report (Vince Rogalski) – [Video link: 1:18:50](#)**
- STAC expressed concerns about where funding would come from for the mitigation needed to comply with the GHG Rule.
  - The 10-Year Plan Update is nearing completion and staff will clarify in August what types of IIJA programs are accounted for in the funding for the 10-Year Plan.
  - Staff clarified that the Environmental Protection Agency (EPA) ruling is not applicable to the GHG Rule, because the Rule was not established under the authority of the Clean Air Act.
9. **Discuss and Act on Consent Agenda – [Video link: 1:29:45](#)**

A Motion by Commissioner Hall to approve, and seconded by Commissioner Hickey, passed unanimously.

- a. a Proposed Resolution #1: Approve the Regular Meeting Minutes of June 16, 2022 (Herman Stockinger)
- b. Proposed Resolution #2: IGA Approval >\$750,000 (Steve Harelson)
- c. Proposed Resolution #3: Santa Fe/470 Maintenance Site Storm Drainage Easement (David Fox)
- d. Proposed Resolution #4: Legislative Highway Memorial Designations (Andy Karsian)
- e. Proposed Resolution #5: MMOF Match Reduction Request (Rebecca White and Michael Snow)
- f. Proposed Resolution #6: Adoption of Commission Committee Assignments (Herman Stockinger)

**10. Discuss and Act on Proposed Resolution #7: 1st Budget Amendment of FY 2023**

**(Jeff Sudmeier and Bethany Nicholas) – [Video link: 1:30:30](#)**

A Motion by Commissioner Garcia to approve, and seconded by Commissioner Adams, passed unanimously.

**11. Discuss and Act on Proposed Resolution #8: 1st Budget Supplement of FY 2023**

**(Jeff Sudmeier and Bethany Nicholas) – [Video link: 1:33:00](#)**

A Motion by Commissioner Bracke to approve, and seconded by Commissioner Hall, passed unanimously.

**12. Discuss and Act on Proposed Resolution #9: Adoption of Emergency Rules to 2 CCR 601-22**

**(Herman Stockinger and Sari Weichbrodt) – [Video link: 1:37:41](#)**

A Motion by Commissioner Vasquez to approve, and seconded by Commissioner Hickey, passed unanimously.

**13. Discuss and Act on Proposed Resolution #10: Authorize Opening of Permanent Rules for 2 CCR 601-22 and Appointment of a Hearing Officer (Herman Stockinger and Sari Weichbrodt)**

**– [Video link: 1:40:12](#)**

A Motion by Commissioner Stuart to approve, and seconded by Commissioner Hickey, passed unanimously.

**14. Recognition –**

- None

**15. Other Matters – [Video link: 1:41:55](#)**

Commissioner Hall clarified that Commissioners can expect a report from the CDOT Audit Division on the Alternative Delivery Program Audit later this fall.

**16. Meeting Adjourned: 10:48am**



# COLORADO

Department of Transportation

Office of the Chief Engineer

2829 W. Howard Place  
Denver, CO 80204-2305

## MEMORANDUM

---

**TO: STATEWIDE TRANSPORTATION ADVISORY COMMITTEE (STAC)**  
**FROM: CHIEF EQUITY OFFICER, MARSHA NELSON**  
**DATE: AUGUST 4, 2022**  
**SUBJECT: PRELIMINARY ANALYSIS AND VISION FOR NEWLY-CREATED EQUITY AND ENVIRONMENTAL JUSTICE BRANCH**

### Purpose

Introduction of the newly hired Chief Equity Officer and team to the STAC. The Chief Equity Officer will provide an overview of preliminary findings and a future vision of the newly created Equity and Environmental Justice Branch. The discussion will include Nondiscrimination compliance for Project Delivery, Environmental Justice & Outreach and Engagement, and Workforce Development.

### Action

This presentation will provide a status update to the STAC on the existing resources and foundational programs associated with the Civil Rights and Business Resource Center while identifying areas for future enhancement and collaboration as the Equity and Environmental Justice Branch is further developed and structured. This allows the STAC an opportunity to provide input and feedback on the vision to further strengthen the Department's commitment to equity, diversity, and inclusion principles.

### Background

Passed in Spring 2021, Senate Bill 260 required the creation of an Equity and Environmental Justice Branch. The function of the branch is to work directly with disproportionately impacted communities as well as with other department programs, in the project planning, environmental study and project delivery phases of transportation capacity projects. The branch is tasked with identifying and addressing technological, language, and information barriers that may prevent disproportionately impacted communities from participating fully in transportation decisions that affect health, quality of life, and access for disadvantaged and minority businesses in project delivery. A Chief Equity Officer was hired in December 2021 to lead the Equity and Environmental Justice Branch in achieving these tasks. This also includes evaluating existing external equity, diversity and inclusion efforts in an effort to align and coordinate resources as well as develop strategic initiatives focused on enhancing and transforming agency programs.

### Next Steps

Present initial appraisal and highlight strategic opportunities associated with an "EQUITY360" vision designed to further the integration of EDI principles across the Department.

### Attachments

Presentation – Title: *April 2022*



**COLORADO**

Department of Transportation

# EQUITY360



Waze to Connect the DOT



## 90-Day Assessment

**360 listening sessions:** gain understanding of how CDOT does business & learn departments structures

Deep-dive meetings with Civil Rights and Environmental staff to determine best way to integrate Environmental Justice concepts more holistically within CDOT



## Initial Findings

Strong foundation of nondiscrimination compliance

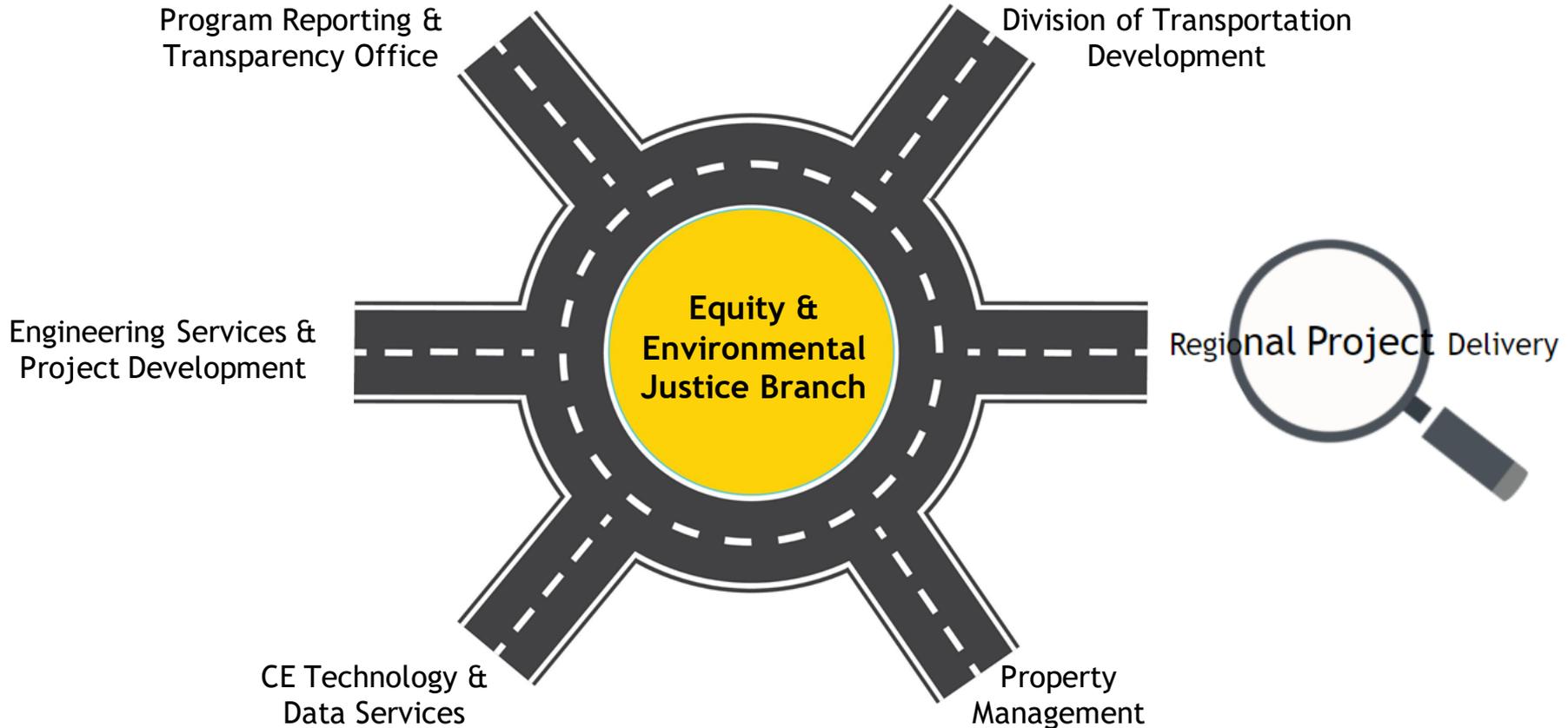
Equity efforts occurring in several departments/work units

Need for increased cohesion, education and clarity of roles and responsibilities

So much opportunity!

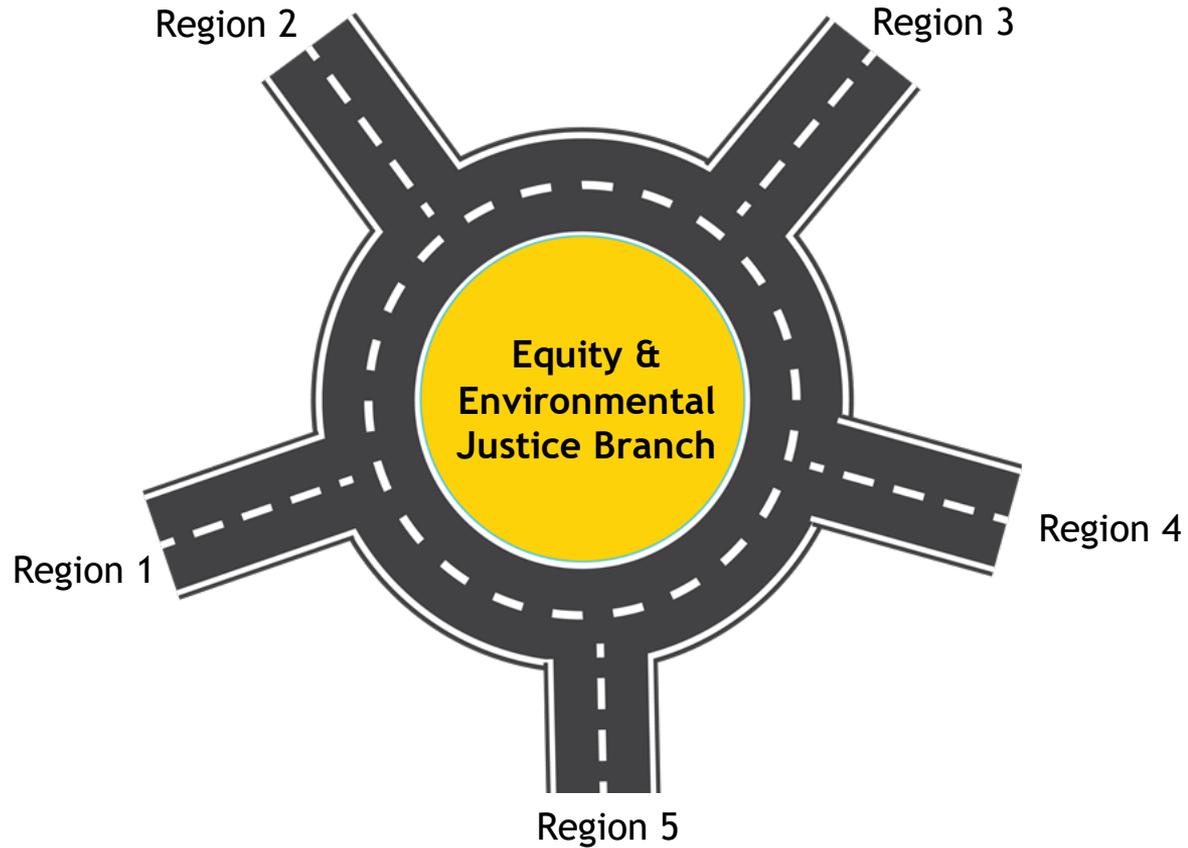


# Office of Chief Engineer





# Zoom in on Regional Project Delivery





# Scenic Tour through Equity & Environmental Justice Branch

Justice Branch



## Environmental Justice

Integrates community engagement & outreach into planning & project delivery processes to impact agency decisions

Equity & Environmental



## Nondiscrimination Compliance

Project delivery & compliance: Ensures compliance with regulatory requirements (state & federal)

## Workforce

Establishing a diverse applicant pool & linking people to work-based learning to help them be successful



## Civil Rights and Business Resource Center

### Project Delivery

Small Business Compliance (DBE and ESB Program)

Labor Compliance (Certified Payroll)

Subrecipient project oversight

Prompt Payment (subcontractors, subconsultants, vendors, and suppliers)

On-The-Job Training Program

### External Programs

Title VI

ADA Title II



# Nondiscrimination Compliance

## *Skills and Tasks*

### Skills

VS

### Tasks

- Analytical
- Proficient communication skills
- Excellent organizational skills
- Critical thinking
- Understanding Federal and State regulatory guidelines and policies
- Up-to-date knowledge for business technology

- Assessing agency risks
- Conducts audits to ensure adherence to Federal and State standards, laws and regulations
- Identifying compliance issues
- Develop risk management strategies and processes
- Investigation of compliance procedures



# Exciting Initiatives and Opportunities



## Initiatives

Local Agency projects in Civil Rights systems (B2GNow/LCPtracker)

ESB Targets and Potential Incentives for state-funded construction projects

Increased pool of DBE & ESB certifications

ESB Mentor-Protege Program

Connect2DOT

Updating ADA Transition Plan

Evaluating all CDOT solicitation and contract templates to ensure legal compliance with Title VI (coordinated effort with FHWA)



## Potential Opportunities

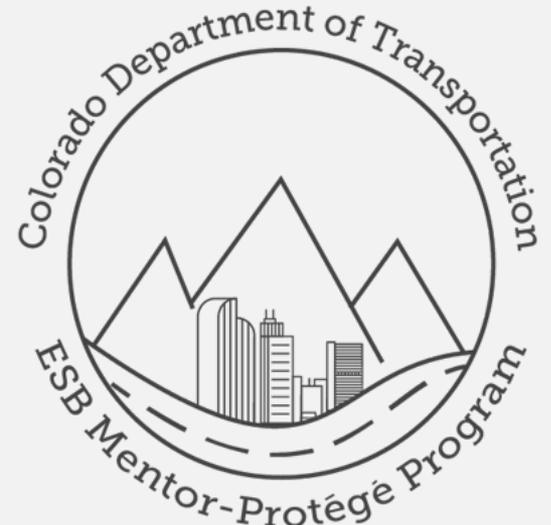
ESB Targets and Potential Incentives for all projects

Transit Project Delivery tracking in Civil Rights systems (B2GNow/LCPtracker)



## Emerging Small Business

# connect 2DOT





## Increased Strategic Community (public citizens & traveling public)



### Engagement & Outreach to Impact Decision Making

Bridge connections  
between  
community &  
agency

Individuals, community-based organizations, other public agencies, students, and academia

Robust training series for CDOT personnel on Transportation Equity and Environmental Justice expectations

Develop CDOT Environmental Justice expectations for projects

To include equity analysis and LEP (language translation) requirements

Increased integration in planning efforts

Leverage recent restructure of planning process to ensure Environmental Justice is incorporated early



# Environmental Justice

## *Skills and Tasks*

### Skills

VS

### Tasks

- Strong communication skills
- Creative & innovative approach to problem solving
- Understanding in Transportation/Construction industry contracting and practices
- Understanding environmental science guidelines and policies
- Presentation skills
- Human-centric approach

- Increase citizen engagement
- Identifies, recruits, engages and convenes strategic and diverse groups of stakeholders
- Develop relationships with community leaders
- Conduct outreach and coordinate events



# Exciting Initiatives and Opportunities



## Exciting Initiatives

Equity analysis implementation for transit projects

CDOT being represented at the EJATF (Colorado Environmental Justice Act) Subcommittee to be in alignment with CDPHE

Greenhouse Gas Mitigation Efforts

Internal EJ taskforce & community advisory committee



## Potential Opportunities

Enhanced use of GIS mapping to support project staff to strategically engage with impacted communities

Increased use of census data and more robust statistical analysis in decision-making



### Helping develop the highway construction labor workforce through work-based learning, training, and other methods:

OJT Supportive Services (FHWA construction only)

Increase the number of minorities and women in OJTs/RAPs

Highway Construction Workforce Partnership Grant - Commercial Drivers License Pipeline

Identify, train, and place workers in highway construction careers

2017 - Central 70 was part of the first HCWP pilot - created WORKNOW





# Current CDOT Construction Workforce Development Initiatives

**Youth Program**  
Gr. 6 -8



National Summer  
Transportation  
Institute

**Adult Programs**  
Ages 16+



Exploring Careers in  
Construction &  
Transportation



Traffic Safety  
Workforce  
Advancement



Commerical Driver's  
License Pipeline  
Development



# Exciting Initiatives & Opportunities

## Cradle to Career Investments



## Adult Workforce Investments





## Skills

VS

## Tasks

- Strong communication skills
- Creative & collaborative approach to program development
- Ability to identify strategic gaps
- Impact, outcomes-oriented
- Understanding construction and transportation career pathways, OJTs, and registered apprenticeships
- Worker-focused approach

- Budget, grant management, and impact reporting
- Identify, recruit, engage and convene strategic and diverse groups of industry stakeholders
- Leverage other resources to create programmatic connection points
- Strategically fund identified gaps
- Coordinate with internal and external subject matter experts



# Charting a New Course



A journey focused on integrating and connecting all of CDOT



# Introducing



## What is EQUITY360?

EQUITY360 describes an agency mindset and philosophy that establishes a holistic approach toward integrating equity, inclusion and diversity principles into processes, procedures and programs that directly impact the residents, businesses and visitors in which CDOT serves. This philosophy will guide the Equity & Environmental Justice Branch in developing strategic plans and initiatives over the next 3-5 years to embed EDI principles into the CDOT organizational culture, in partnership with the Internal Inclusion Excellence team.

## Mission:

Develop the best and most efficient route to equity, inclusion and cohesiveness.





# Guiding Principles

In addition to the CDOT Mission, Vision, and Values, EQUITY360 will integrate the following guiding principles in its execution:

## Proactive Compliance

Strive for 100% comprehensive compliance on all Federal and State laws and regulations, which require 100% of department and subrecipients to comply 100% of the time

## Creativity & Innovation

Embrace change.  
Be courageous.  
Envision an equitable and inclusive future.  
Challenge the status quo and drive creative transformation through experimental discovery.

## Knowledge

Embrace challenging processes and seek to understand different perspectives and experiences to achieve improvements. Develop measures that lead to equitable outcomes.

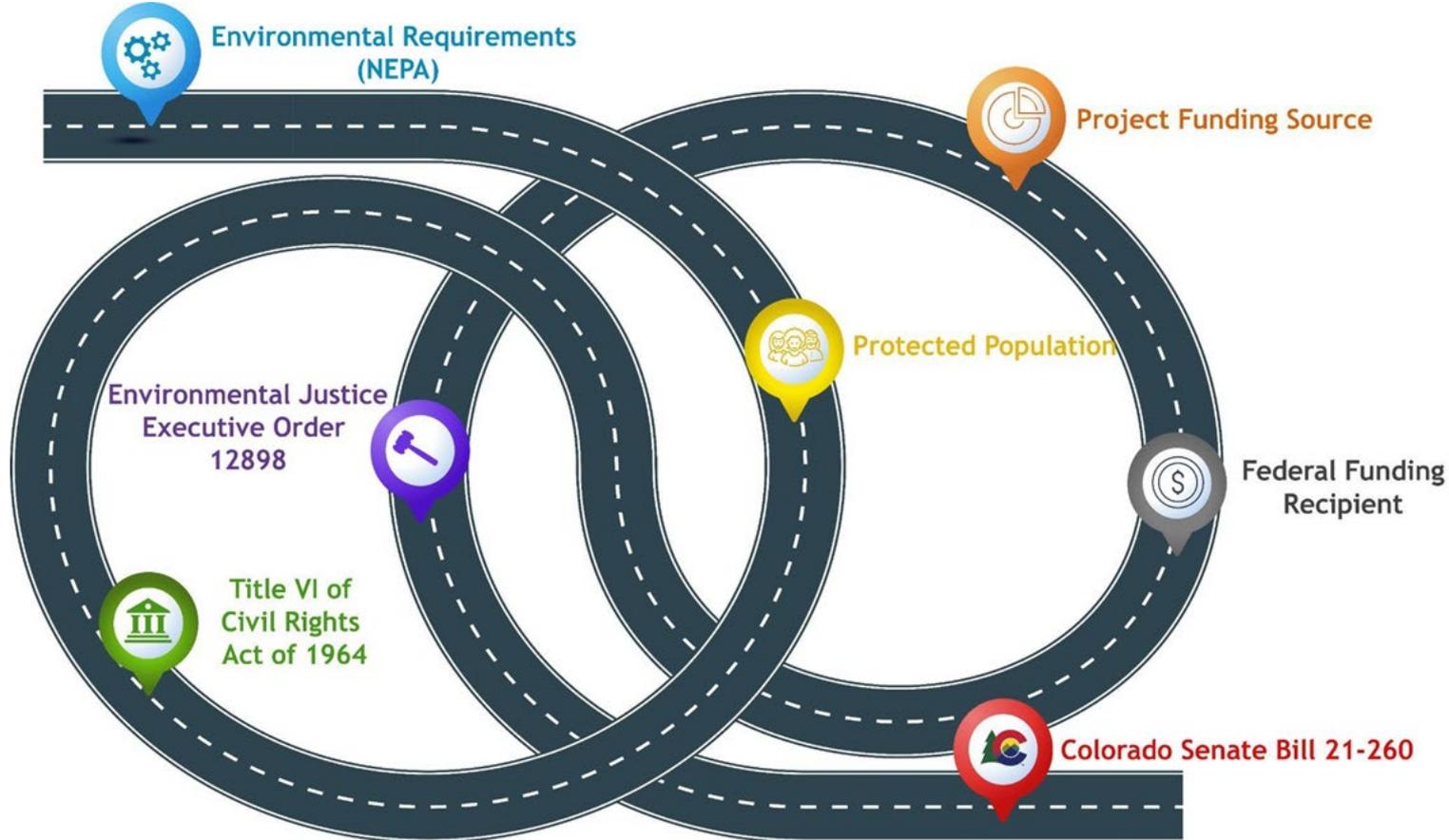
## Humility & Respect

Exemplify intellectual honesty. Treat others and opinions with honesty, dignity, respect, and sensitivity. Appreciate and embrace the value of diversity.



# Navigating Equity Requirements

Challenge & Opportunity





# Example

## Varying regulations have varying scopes for identifying protected populations

### Environmental Justice Executive Order 12898

Minority  
Low-income

### Title VI Civil Rights Act of 1964

Race, color,  
national origin  
  
Limited English  
proficiency

### Senate Bill 21-260

Per census block group, where more than 40% of households are one of the following:

1. low income (income less than or equal to 200% of the federal poverty line)
2. identify as minority
3. housing cost-burdened (spends more than 30% of income on housing)



# Conclusion



**EQUITY360**



**EQUITY360 mindset and philosophy allows CDOT to go beyond simply navigating regulations.**

**CDOT has an opportunity to pave the way and be a leader in equity, diversity, and inclusion.**



# Special Thanks!

Thank  
you

## SPECIAL THANKS TO:

Amber Blake  
Anna Mariotti  
Brian Fauver  
Chessie Price  
Emily Crespin  
Greg Diehl  
Jennifer Uebelher  
Kim Kinnison  
Marie Nakagawa  
Zoë Wilhelmsen



**COLORADO**

**Department of Transportation**

**GHG Pollution Standard for Transportation Planning:  
CDOT Compliance  
August 2022  
Statewide Transportation Advisory Committee**



# Today's Focus

---

- 1-Overview of compliance requirements
- 2-Process for demonstrating compliance
- 3-Results to date
- 4-10-Year Plan Update Timeline and Next steps



# What is Required?

CDOT and each metropolitan planning organization must adopt long-range transportation plans that reduce GHGs to set reduction levels.

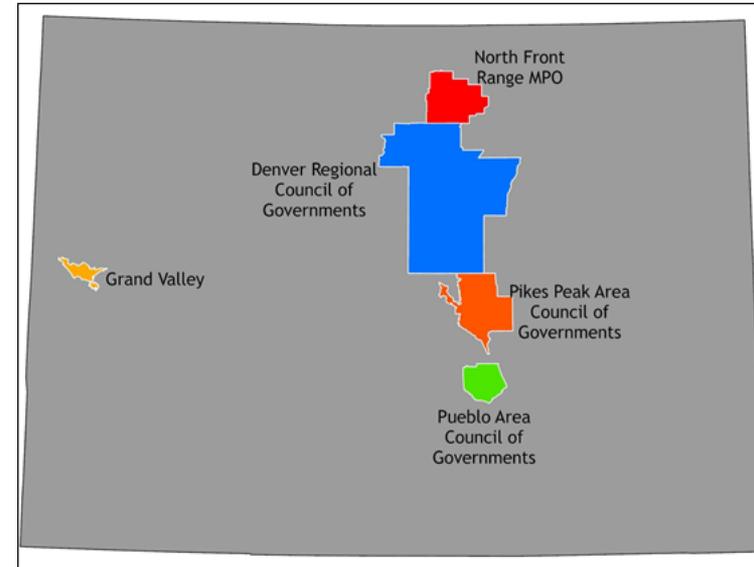
Each plan (e.g. an MPO's regional transportation plan (RTP)) must be modeled--using travel demand models--to make this determination.

Specific GHG reduction level set for each of four compliance years and for each agency (CDOT + Colorado's 5 MPOs).



# Compliance Requirements

- Senate Bill 21-260 and the GHG Planning Rule set a deadline for CDOT, DRCOG and NFRMPO to provide updated, compliant plans by October 1, 2022
- CDOT's obligation is for non-MPO areas only
- “Regionally significant projects” must be modeled--although modeling can also include any project that would be expected to reduce emissions
  - There are very few regionally significant projects in non-MPO area according to the CDOT definition/interpretation recently finalized





# GHG Reduction Requirements

**Table 1: GHG Transportation Planning Reduction Levels in MMT of CO<sub>2</sub>e**

| Regional Areas | 2025 Reduction Level (MMT) | 2030 Reduction Level (MMT) | 2040 Reduction Level (MMT) | 2050 Reduction Level (MMT) |
|----------------|----------------------------|----------------------------|----------------------------|----------------------------|
| DRCOG          | 0.27                       | 0.82                       | 0.63                       | 0.37                       |
| NFRMPO         | 0.04                       | 0.12                       | 0.11                       | 0.07                       |
| PPACG          | N/A                        | 0.15                       | 0.12                       | 0.07                       |
| GVMPO          | N/A                        | 0.02                       | 0.02                       | 0.01                       |
| PACOG          | N/A                        | 0.03                       | 0.02                       | 0.01                       |
| CDOT/Non-MPO   | 0.12                       | 0.36                       | 0.30                       | 0.17                       |
| TOTAL          | 0.43                       | 1.5                        | 1.2                        | 0.7                        |

*\*Reductions are from baseline emission levels.*



# Modeling Approach

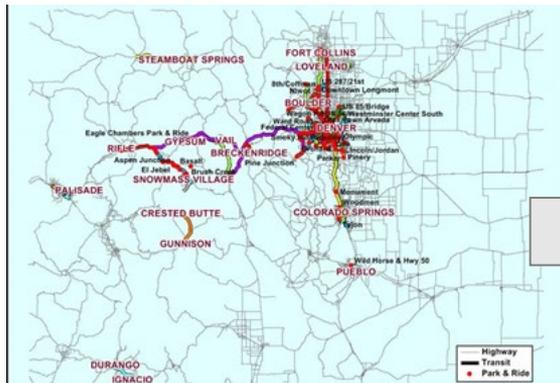
In order to demonstrate compliance, two models must be run:

- 1-CDOT's activity based travel demand model
  - CDOT has one of the most sophisticated travel models of any DOT in the nation
- 2-The EPA MOVES model
  - Typically run by CDPHE however CDOT is moving this capability in-house



# How Are Emissions Calculated?

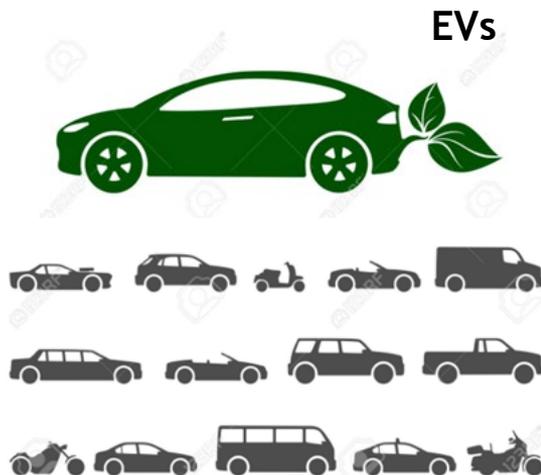
## CDOT TRAVEL MODEL



Outputs: VMT,  
congestion/speed

Baseline = existing transportation plan.

## EPA MOVES MODEL



Fleet Mix/Age & Fuel Type

Compliance = updated plan.

TOGETHER  
these models show

TRANSPORTATION  
GHG  
EMISSIONS



# Addressing 2040 and 2050

- CDOT's 10 Year Plan only has projects identified through ~2030.
- Modeling projections can only be accurately calculated for the 2025 & 2030 compliance years. This limitation requires CDOT to take a different approach for 2040 and 2050.
- The team is looking at scenarios for the types of projects that would meet the reduction levels into 2040 & 2050. These scenarios will help inform future plan updates.



# Process to Demonstrate Compliance with the GHG Reduction Levels: 2025 and 2030

**Step 1:**  
Baseline GHG  
Values for  
2025 & 2030

**Step 2:**  
Model  
Updated  
Plan for  
2025 &  
2030

**Step 3:**  
Further  
examine  
other key  
factors

**Step 4: GHG  
Mitigation  
Measures**

- Land Use
- Transit
- TDM
- MD/HD

**Step 5: Final  
compliance  
results  
(modeling +  
mitigation  
measures)**

Complete.

Complete.

Results  
pending.

Results  
pending.

Results  
pending.

10 Year Plan  
Baseline

- Existing Transportation Network
- Land Use Forecasts
- VMT Forecasts

Adopted 10 Year Plan  
+ Updated Forecasts

- Existing Transportation Network
- 10 YR Plan regionally significant projects
- Land Use, Telework and Bike/Ped Assumptions Updated



# Step 1: Model the Baseline

Baseline for CDOT is the 10 Year Plan as adopted by the Commission in 2019.

- Includes existing transportation network for each future analysis year and existing land use as built.
- Future county-level growth totals from DOLA, located in buildable areas, not yet informed by comp plans.

**Result: Baseline GHG emission values for 2025 and 2030.**

| CDOT (non-MPO area) Reduction Levels   | 2025 | 2030 | 2040 | 2050 |
|--|------|------|------|------|
| GHG Baseline (2019 10 Year Plan) (MMT) | 6.3  | 4.84 | n/a  | n/a  |
| Table 1 Reduction Target (MMT)         | 0.12 | 0.36 | 0.30 | 0.17 |
| % Reduction from Baseline              | 1.9% | 7.4% | n/a  | n/a  |



## Step 2: Model the Updated 10 Year Plan

Model is run again with updated 10 Yr Plan.

- Includes all regionally significant projects within the plan.
- Includes key project changes and investment updates (e.g. Pegasus service on Floyd Hill)

Assumes some key changes in travel behavior we are seeing now and into the future:

- Significant increase in work from home due to pandemic (baseline assumed ~6% WFH, compliance run assumes 20%).
- Increase in tele-health and university in rural areas due to broadband expansion.
- More frequent and increased speeds in biking (e-bikes) and walking due to MMOF, Revitalizing Main Streets and like investments.



# Preliminary Modeling Results

Steps 1 and 2 completed for 2025 and 2030.

These results show us that:

- For 2025: reduction level can be met
- For 2030: achieve significant percentage of the GHG reduction target but falls short
  - we can achieve about 75% of the Table 1 reduction requirement



## Step 3: Further Examine Other Key Factors

### Transit

National modeling practice has limited experience in addressing long-distance rural transit services (including Bustang) so lower confidence in those outcomes at present.

Because Colorado has one of the largest rural transit networks in the nation--made possible by the investments and support CDOT provides through FASTER Transit and FTA funding--we want to quantify the GHG benefits of this system.

Additionally, CDOT has invested considerable resources into helping these rural transit providers return to pre-COVID ridership levels.

### Land Use Patterns

Our model's forecasts of land use location are more approximate because we do not have comp plan / zoning information from local governments.

We are, however, seeing many communities (particularly along I-70) adopt more urban (denser and transit-oriented) land use patterns due to the unique topographic and economic factors of mountain resort regions



## Step 4: Mitigations

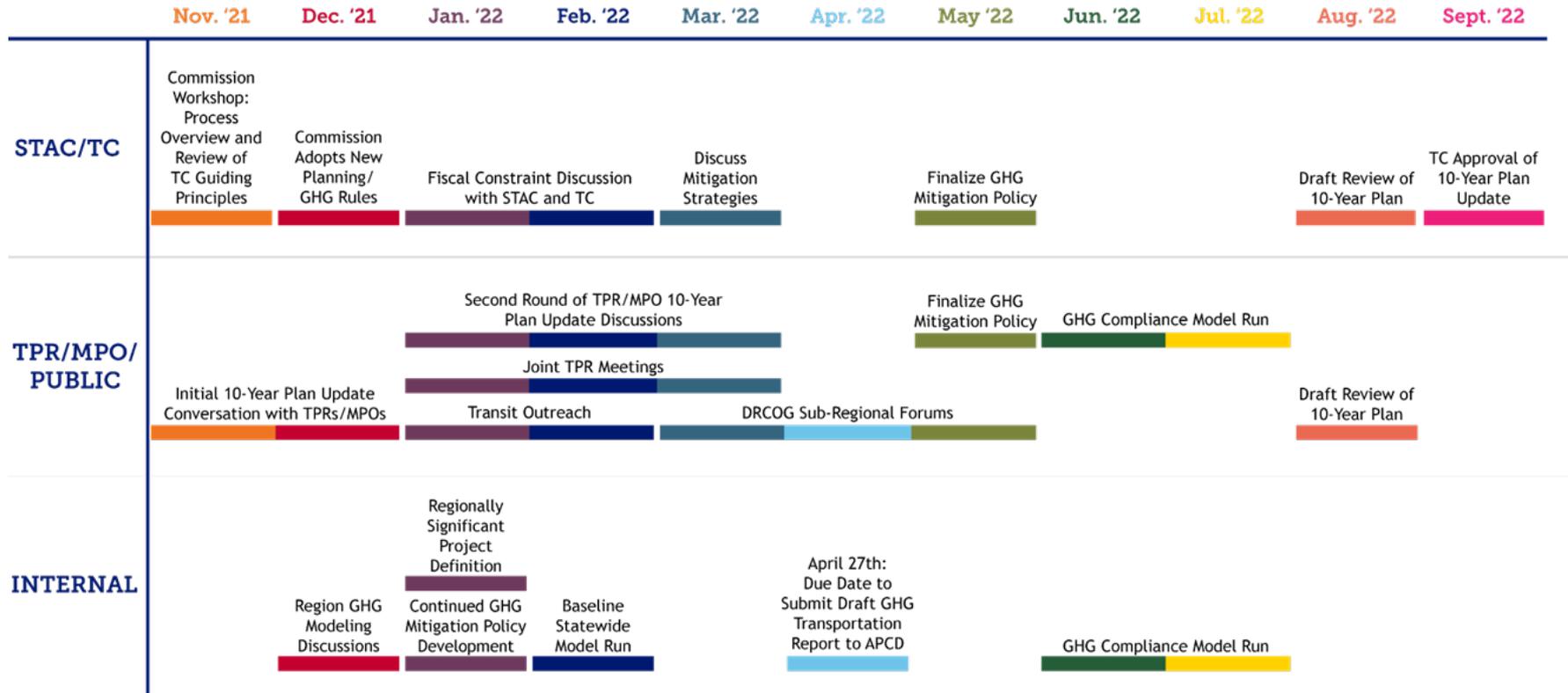
- GHG mitigation measures are a voluntary option (established by the GHG Rule) to achieve further GHG reductions.
- PD 1610 (adopted by Transportation Commission in March of 2022) provides dozens of options, including bike lanes, transit electrification and new transit service.

Currently we are examining the following for CDOT's compliance:

- TDM investments
- Replacing diesel transit buses with electric
- Transit improvements
- Current/future zoning changes



# 10-Year Plan Update Timeline





## Next Steps

- Complete compliance analysis for 2025 and 2030.
- Scenario modeling to determine compliance for 2040 and 2050.
- Prepare GHG Report and Mitigation Action Plan (rule requirement).
- Final results and compliance demonstration in September.



Questions?