



COLORADO
Department of Transportation

Division of Transportation Development
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DATE: August 31, 2022

TO: Executive Management Team

FROM: Jane Hann, Environmental Programs Branch Manager

SUBJECT: Regionally Significant and Transportation Capacity Interpretation and Examples for CDOT Projects

The Purpose of this Memo

Provided here for your review is a proposed interpretation of the terms **Transportation Capacity and Regionally Significant Project**. These terms are used in [Senate Bill 21-260](#) (SB260), the resulting [Colorado Revised Statute \(CRS\) 43-1-128](#) and [Colorado Transportation Commission \(Commission\) Pollution Reduction Planning Standard](#). This paper also provides examples of projects that would be considered Regionally Significant Transportation Capacity projects, as well as those that would be excluded from this definition. *These definitions apply to CDOT projects and do not require MPOs to change or update their definitions. The MPOs may keep or modify their definitions as needed, including adopting this language if desired.*

Background

The passage of SB260 put into place a series of new environmental requirements. Section 30 of SB260 includes greenhouse gas (GHG) requirements under Part 3 and air quality requirements in Part 4. The GHG requirements within SB260 resulted in a new rulemaking, the Pollution Reduction Planning Standard, adopted by the Transportation Commission in December of 2021. Parts 4-6 of SB260 include separate environmental requirements, including a requirement for project air quality monitoring and additional outreach to disproportionately impacted communities. Each of these documents use the terms “Regionally Significant” and “Transportation Capacity”, often combined as a single phrase. The Commission’s Pollution Reduction Standard, also known as the GHG Planning Rule, defines Regionally Significant very similarly to a broad EPA definition used for Clean

Air Act (conformity) compliance but allowed for agencies to modify the definition if approved by the Interagency Consultation Team established by the GHG Rule.

Regionally Significant Project (as defined in the GHG Planning Rule)- 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. Modifications of this definition shall be allowed if approved by the State Interagency Consultation Team. 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.

This memo thus provides a refined interpretation of the Regionally Significant Project definition for CDOT's use throughout the state with the intent to provide clarity to staff and the Department's stakeholders on which projects will be subject to the new standards. It also includes a proposed definition for Transportation Capacity Projects (TCP), which takes into consideration important differences between urban and rural areas, along with levels of traffic congestion. This work involved a review of federal and state MPO definitions, and discussions with CDOT Executive Management, regional staff, and FHWA.

Implications of being defined as a Regionally Significant Transportation Capacity Project

A clear interpretation of Regionally Significant Transportation Capacity Project is important to CDOT because these projects require additional measures to address environmental justice, air quality, and GHG emissions. The Statewide Interagency Consultation Team will make the final determination in situations where there is uncertainty or disagreement on whether a project is Regionally Significant. For example, a widening project for short term capacity issues like seasonal traffic or a project which is within one or more planning areas.

- The GHG Planning Rule requires CDOT and the state’s five MPOs to model Regionally Significant Projects within their transportation plans and determine whether the total, predicted GHG emissions resulting from these projects meet the GHG reductions set forth in the GHG Planning Rule. Should CDOT be unable to achieve compliance with the Rule, Regionally Significant Projects located in non-MPO areas would be subject to certain funding restrictions.
- SB260 requires additional air quality measures for Regionally Significant Transportation Capacity Projects as part of the NEPA process, including modeling transportation pollutants, air quality monitoring before construction, and particulate matter monitoring, mitigation and public reporting throughout construction. In addition to these air quality requirements, if the project is within a Disproportionately Impacted (DI) Community, extra consideration must be given to public engagement throughout planning, environmental and delivery of these projects.¹

Project Determinations

An important aspect of this work is also understanding the process for determining which specific projects in the 10 Year Plan are considered “regionally significant.” CDOT staff from the Division of Transportation Development (DTD) and the Regions will make the initial determination based on the criteria and exemptions provided in this memo. Once a project—or list of projects—is initially determined to be Regionally Significant, the following process steps will take place:

- For purposes of clarifying the requirements of the GHG Rule, DTD staff assisted by the Regions, shall seek input and concurrence from the Statewide Interagency Consultation Team.
- For purposes of applying the requirements of SB260 relating to NEPA, CDOT’s Regional Environmental and Planning Managers shall seek guidance from DTD staff.

¹ A Disproportionately Impacted Community means 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, the proportion of households that identify as minority is greater than forty percent, or the proportion of households that are housing cost-burdened is greater than forty percent.

Process for Establishing the Interpretation of Regionally Significant

Staff started with regionally significant definitions that already existed including those established by MPOs or by EPA, FHWA or FTA for purposes of determining transportation conformity. CDOT then held numerous working sessions with staff across the Department to discuss draft concepts and brainstorm possible types of projects. Initial versions of this memo were presented to the State Transportation Advisory Committee (STAC) and the Interagency Consultation Team (established by the GHG Rule) for their input. Lastly, the Interagency Consultation Team was asked to concur on a final version of this memo.

Proposed Interpretations

Although SB260 often references "Regionally Significant Transportation Capacity Projects" as one term, the GHG Planning Rule only references "Regionally Significant" projects. Thus, this memo proposes to establish separate interpretations for **Regionally Significant** and **Transportation Capacity** so they can be used in any context. Project examples are also included to help classify these terms.

- **Regionally Significant Project (RS):** a Transportation Capacity 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 centers, sports complexes, etc., or transportation terminals as well as most terminals themselves) AND would result in demonstrable changes in travel demand modeling outcomes of a regional or statewide transportation network.
- **Transportation Capacity Project (TCP):** a project that results in changes to a transportation facility, including a roadway, transit service or parking facility, which improves travel time reliability or increases the maximum throughput. On urban roads, a TCP consists of a project at least one-centerline mile in length. In rural roadways (defined below), a TCP is at least one-centerline mile in length where the vehicle volume to capacity ratio (V/C) equals or exceeds 85%. If the V/C is less than 85% in a rural area, a TCP will need to be at least two-centerline miles in length.² A centerline mile is measured from the start of the project to the terminus of the project. Section 2) of this memo provides an exempt list of projects where this definition would not apply.

² This is the same threshold as used by the North Front Range MPO.

Table 1: Transportation Capacity Projects

FHWA Urban/Rural	Volume to Capacity Ratio	Transportation Capacity Project Threshold
Urban	Not Applicable	Projects at least <i>one</i> mile in length.
Rural	≥0.85	Projects at least <i>one</i> mile in length.
Rural	<0.85	Projects at least <i>two</i> miles in length.

Urban areas are defined by FHWA “as designated by the Census having a population of 5,000 or more. Urban Area (with population of 5,000 or over) boundaries may be adjusted outwardly and must encompass the entire Census-designated Urban Area. For more guidance on Adjusted Urban Area Boundaries, see Section 6 of FHWA’s [Highway Functional Classification Concepts, Criteria and Procedures](#)”. FHWA’s definition of a Rural Area includes “all areas in the state that are not included in the Urban Areas (with population of 5,000 or over)”. See Figure 1.

The V/C ratio was selected because it can be used at a statewide planning level without additional analysis. CDOT calculates a V/C ratio according to the Transportation Research Board’s Highway Capacity Manual³ and it is publicly available from CDOT’s website⁴. The method for calculating CDOT’s V/C ratio is complex and like all models, the accuracy of the V/C depends primarily on the accuracy of the data going into the model. CDOT collects data from 118 permanent sites and 2,000 to 2,500 temporary locations annually to calculate traffic volumes, which incorporates monthly/seasonal peak traffic throughout the state. A V/C ratio which exceeds 0.85 is correlated with highway Level of Service D and E, where a roadway is approaching unstable flow or there is unstable traffic flow.⁵

A general list of the FHWA defined Urban Areas by community name or highway, listed from west to east, and north to south includes:

- Craig, Steamboat Springs, Estes Park, Ft. Collins/Loveland/Greeley

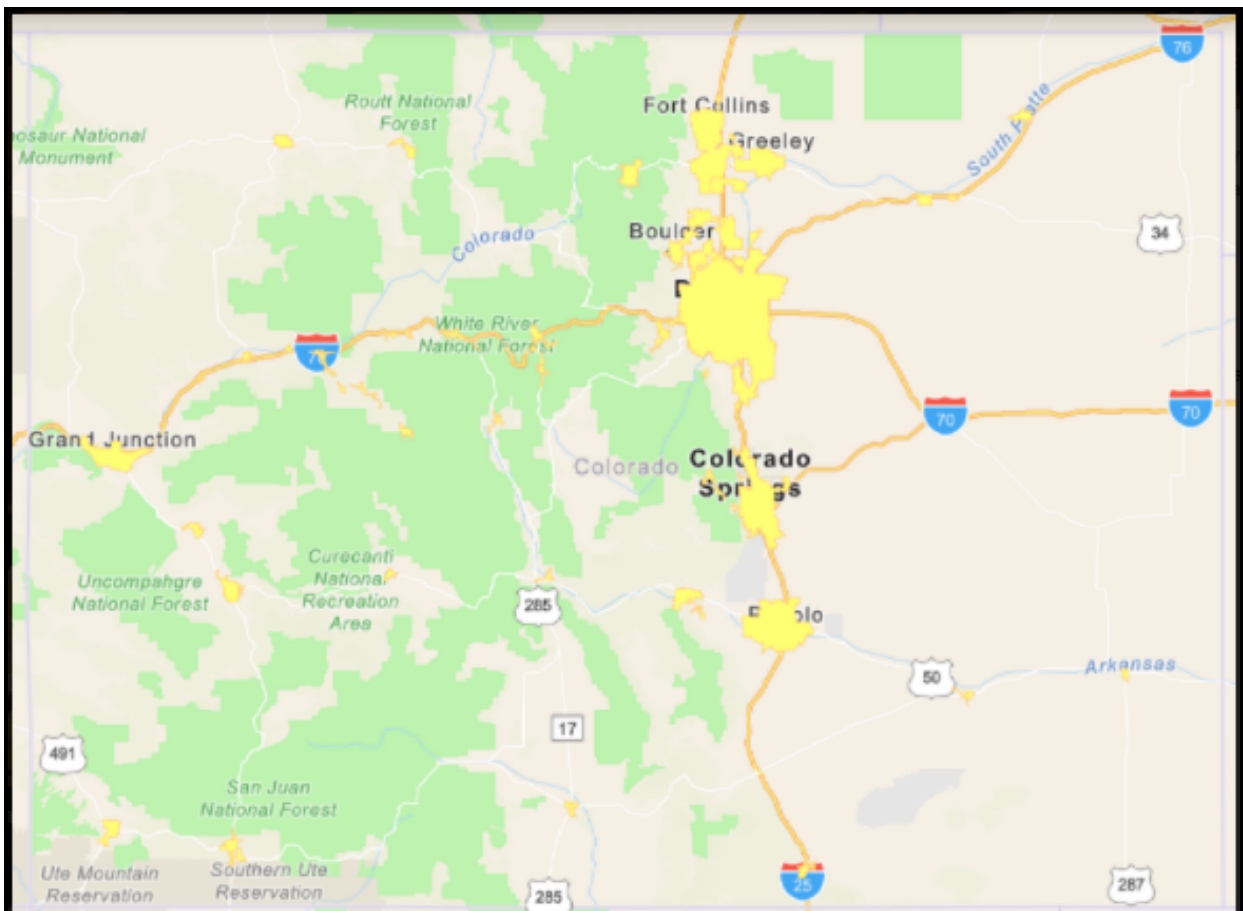
³ Transportation Research Board, Highway Capacity Manual, 2000, Chapter 21 https://www.codot.gov/business/designsupport/bulletins_manuals/roadway-design-guide/dg05-ch-02-design-controls.pdf

⁴ <https://dtdapps.coloradodot.info/MapViewExt/>

⁵ Transportation Research Board, Highway Capacity Manual, 2000, Chapter 21

- Boulder, Longmont, greater Denver area, Golden, Aurora, Castle Rock, Parker general areas including everything within the C470/E470 beltway
- Brush and Sterling
- Grand Junction/Palisade, Rifle, New Castle, Glenwood Springs
- Aspen, Eagle, Vail/Beaver Creek area, Leadville, Frisco, Silverthorne, Keystone, Evergreen
- Delta, Montrose, Gunnison, Salida, Canyon City/Florence, Pueblo, La Junta, Lamar
- Cortez, Durango, Alamosa, and Trinidad

Figure 1: Current FHWA defined Urban areas. (This map uses the 2010 census data and the update with 2020 data is expected in 2023.)



Additional Explanation, Examples and Exemptions

1) Examples and Further Explanation: Regionally Significant Transportation Capacity Projects

- A **new roadway segment** on a regional transportation facility of at least one-centerline mile in length (or, two miles in length if in a Rural area with a V/C above 85%).
- A **new roadway segment** on a regional transportation facility less than a mile that completes a missing connection to another roadway on the roadway system; or provides access to major activity centers, planned developments, or transportation terminals.
 - However, intersection improvements (such as the addition of turn lanes or other auxiliary lanes at an intersection, or median improvements) are not considered regionally significant transportation capacity projects.
- A **roadway-widening project** (via construction or restriping) adding at least one general purpose through lane of one lane-mile or more in length (or two miles in length if in a Rural area with a V/C ratio less than 85%).
- A **new managed lane** (e.g. HOV, toll-express, Bus Rapid Transit) of one-mile or more in length. This includes major operational changes, for example, minimum vehicle occupancy requirements for free use or operational changes of more than 5 hours.
 - However, a lane converted from general purpose into a managed lane, while regionally significant, would not add vehicle capacity and is therefore not a transportation capacity project.
- **New Type 1 and Type 2 interchanges⁶**, or major improvements to existing interchanges such as freeway or tollway acceleration/deceleration/climbing/auxiliary lanes that connect an on-ramp from one interchange to an on-ramp of a second interchange within one mile, or that add or delete a ramp which permits new directional travel movement between freeway and roadway.
- A **rail rapid transit guideway corridor** or an extension of an existing rail line to a new station that extends an existing line one mile or more.
- A **new bus rapid transit guideway corridor** or guideway segment extension of at least one mile.
- **Addition or deletion of major bus routes** with sufficient capacity to result in a demonstrable change in the regional or statewide transportation model. The

⁶<https://www.codot.gov/about/transportation-commission/documents/2021-supporting/march-2021/06-pd-1601.pdf>

- CDOT Statewide Travel Demand Model is sensitive to location, other adjacent modal options, and predicted land use development when estimating mode shifts. Generally, the addition or deletion of major bus routes with a minimum of 2,000 riders per day should be reviewed for regional significance.
- A **mobility hub or parking facility** with sufficient capacity to result in a demonstrable change in the regional or statewide transportation model. The CDOT Statewide Travel Demand Model is sensitive to location, other adjacent modal options, and predicted land use development when estimating mode shifts. Generally, mobility hubs with parking structures should be reviewed for regional significance.

2) Exemptions: Non-Regionally Significant Transportation Capacity Projects

All components of the project scope must be eligible for exclusion for a project to be excluded from the Regionally Significant definition. If a project has components not on this exempt list, for example a “median” project that also includes 5 miles of additional lanes, then it is Regionally Significant. This list of exemptions is expanded from the EPA list of “Exempt Projects” for air conformity analysis.⁷

Roadway Improvements

- Intersection improvements (such as the addition of turn lanes or other auxiliary lanes at an intersection).
- Improvements that widen ramps, provide cross-arterial turning lanes, reconfigure existing turning movements, or solve drainage problems (DRCOG exemption).

Safety

- Railroad/highway crossing.
- Shoulder improvements.
- Railroad/highway crossing warning devices.
- Guardrails, median barriers, crash cushions.
- Fencing.
- Skid treatments.
- Safety roadside rest areas.
- Adding medians.

⁷ <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-93>

- Lighting improvements.
- Widening narrow pavements or reconstructing bridges with no additional travel lanes.
- Emergency truck pullovers or runaway truck ramps.
- Projects that correct, improve, or eliminate a hazardous location or feature, and qualify for CDOT Safety Mitigation Funding.
- Increasing sight distance; for example, by making roadway grade changes.
- Traffic control devices and operating assistance, including signalization projects and ramp metering.
- Asset maintenance projects such as pavement resurfacing and/or rehabilitation, including pavement markings with the exception of restriping for adding capacity.
- Truck climbing lanes in rural areas, except for those that are already congested, which means operating at, or above 85% vehicle to capacity ratio.
- Qualifies for Emergency relief in 23 U.S.C. 125.
- Railroad grade separations.

Transit

- Operating assistance to transit agencies.
- Purchase of support vehicles.
- Rehabilitation of transit vehicles.
- Purchase of office, shop, and operating equipment for existing facilities.
- Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.).
- Construction or renovation of power, signal, and communications systems.
- Construction of small passenger shelters and information kiosks.
- Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures).
- Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way.
- Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet.
- Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771.

- A mobility hub or parking facility that does not have a significant change in the regional or statewide transportation model.

Air Quality - projects which reduce GHG emissions and improve air quality

- Continuation of ridesharing and van-pooling promotion activities at current levels.
- Bicycle and pedestrian facilities.
- EV charging stations or other support for low or no emission fuels.
- Operational improvements such as rail vehicle passing tracks, vehicle storage and maintenance tracks, maintenance facilities (DRCOG exemption).

Other - Specific activities which do not involve, or lead directly to, construction, such as:

- Planning and technical studies.
- Grants for training and research programs.
- Planning activities conducted pursuant to titles 23 and 49 U.S.C.
- Federal-aid systems revisions.
- Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action.
- Noise attenuation.
- Emergency or hardship advance land acquisitions (23 CFR 710.503).
- Acquisition of scenic easements.
- Plantings, landscaping, etc.
- Sign removal.
- Directional and informational signs.
- Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities).
- Operational improvements such as timing of traffic lights.