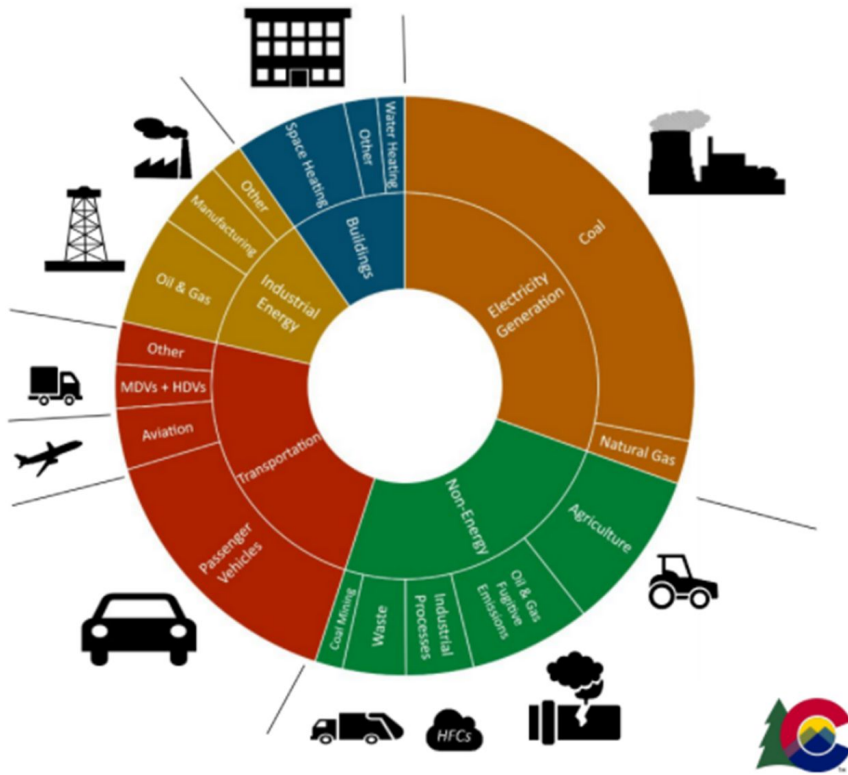




COLORADO
Department of Transportation

Colorado's Greenhouse Gas Pollution Reduction Transportation Planning Standard

Darius Pakbaz - Director, Division of Transportation Development | Colorado Department of Transportation
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House Bill 19-1261 - Climate Action Plan to Reduce Pollution

- Reduce GHG emissions 26% by 2025, 50% by 2030, and 90% by 2050 across all sectors.

Senate Bill 23-016 - Greenhouse Gas Emission Reduction Measures

updated and added additional GHG reduction targets across all sectors.

- Reduce 2035 GHG emissions by at least 65% of 2005 levels
- Reduce 2040 GHG emissions by at least 75% of 2005 levels
- Reduce 2045 GHG emissions by at least 90% of 2005 levels
- Reduce 2050 GHG emissions by 100% of 2005 levels

Colorado Greenhouse Gas Pollution Reduction Roadmap

- A list of near-term actions the State will pursue over the next few years to make significant progress toward the Climate Action Plan goals.
- Roadmap 2.0 is in development currently, expected to be completed this winter.

Senate Bill 21-260 - Sustainability of the Transportation System

- Made the Roadmap recommendation for GHG pollution reduction in transportation planning a requirement.



GHG Roadmap

Transportation Near Term Actions

Reduce pollution from transportation sector ~12.7 million tons by 2030

- 6 MMT reduction — Low & 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)
- 1.5 MMT reduction — GHG Transportation Planning Standard

~3.2 MMT reduction

Collectively, the other strategies will target remaining 3.2 million tons

Incentivize land use to increase housing near jobs and reduce VMT and pollution	HB 21-1271, HB 21-1117; CDOT stakeholder process; affordable housing committee; Strong Communities
Clean trucking strategy - infrastructure, fleet incentives, consider regulatory tools such as advanced clean trucks and fleet rules	Study released October 2021 Stakeholder Engagement - Fall 2021/Winter 2022
Participate in developing post 2025 vehicle standards (state and federal)	Federal and CARB processes
AQCC evaluation of indirect source rules	RAQC has convened committee to start developing proposals
Expansion of public transit, including setting the stage for Front Range Rail	In progress - SB21-238, SB 21-260, Main Streets investments, on-going multimodal emphasis



Stakeholder Engagement/Rulemaking

January 2021: Advisory Board Convened and Regional Stakeholder Engagement

- Advisory Board met regularly - as frequently as 2x a week - to discuss rule concepts
- CDOT held 11 regional public meetings during this time; focused on transportation stakeholders

August 2021: Draft rule issued for 60 day public review

- Nine public hearings across the State during the comment period
- Each meeting held in a hybrid (in person/virtual) format and offered Spanish interpretation

October 2021: Comment period extended another 30+ days and updated draft rule issued

- 10th public hearing on November 10
- In total, over 300 comments received in writing or via hearings
- Vast majority of comments strongly supported the rule

November/December 2021: Final Rule Development - Approved by the Transportation Commission on Dec 16, 2021

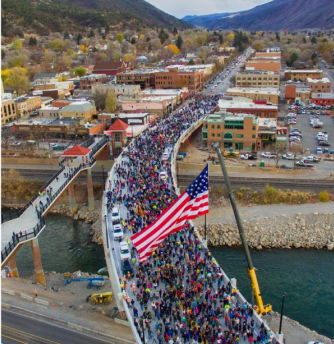


The GHG Planning Standard

PLANNING PRIORITIES POWERED BY YOU COLORADO Department of Transportation

VISION FOR COLORADO'S TRANSPORTATION SYSTEM

10-YEAR STRATEGIC PROJECT PIPELINE



“ In May 2019, I directed the Colorado Department of Transportation (CDOT) to embark on an effort to refresh our transportation plan and priorities based on firsthand input from residents across the state.

Our goals were simple: to hear directly from Coloradans about what they need from our transportation system; to ensure that we are prioritizing precious taxpayer dollars in ways that best deliver on those needs; and to energize an ongoing statewide conversation about the vitality of transportation in connecting our daily lives.

Now, with that input gathered from across the state, we're ready to present our 10-year vision for Colorado's transportation system. ”

Michael M. Tan

- Adopted by the Colorado Transportation Commission on December 2021
- Requires CDOT and the State's five metropolitan planning organizations (MPOs) to create **transportation plans** that provide more travel choices, **resulting in reduced GHG emissions**
- Individual projects on their own provide a smaller opportunity than systems planning decisions when it comes to reducing GHGs

<https://www.codot.gov/programs/environmental/greenhousegas/assets/2-ccr-601-22-eff-10-30-22.pdf>

Planning Standard Goal: Reduce GHG emissions from the transportation sector through the development of long range transportation plans that support more travel choices.



Process Overview: GHG Planning Standard

Develop long range planning docs

Determine GHG Impact of plans in 2025, 2030, 2040, and 2050

Compare results to GHG reduction levels

CDOT:

- 10-Year Plan
- Four-Year Prioritized Plan

MPOs:

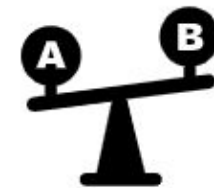
- Regional Transportation Plans (RTPs)
- Transportation Improvement Programs (TIPs)

Using a combination of transportation demand models and EPA MOVES, model the GHG impact of the existing transportation network and the projects in the applicable planning documents.

Do the agencies meet the reduction levels in each year as required by the Planning Standard?

If yes - standard met

If no - can rely on GHG Mitigation Measures





Compliance Determination GHG Transportation Reports

Development of GHG Transportation Reports to the Transportation Commission

The collage includes the following elements:

- CDOT Logo:** COLORADO Department of Transportation
- GHG Transportation Report Cover:** GHG Transportation Report, GHG Transportation, 2022 & 2022
- NFRMPO GHG Transportation Report Cover:** NFRMPO GHG Transportation Report, Determining Compliance with the GHG Transportation Planning Standard, for the North Front Range Metropolitan Planning Area 2050 Regional Transportation Plan And FY2024-2027 Transportation Improvement Program
- Table of Contents:**

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and the Mitigation Action Plans	21
Grant: Creation of the	22
Campaign & Research Effort	25
Bike Share Pilot Expansion	28
Pilot Expansion	31
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	1
- Greenhouse Gas Report Cover:** on Greenhouse Gas Report
- NFRMPO Footer:** The North Front Range Metropolitan Planning Organization, 419 Canyon Avenue, Suite 300 Fort Collins, CO 80521, Preparation of this report has been financed in part through grants from the Federal Highway Administration, Federal Transit Administration, Colorado Department of Health and the Environment, and local government contributions. June 20, 2023

- **Reports will have the following components:**
 - GHG Emissions Analysis
 - GHG Mitigation Action Plan demonstrating compliance with the Planning Standard
 - Documentation of Modeling
- **CDPHE Air Pollution Control Division Confirmation and Verification**
 - APCD provides review and verification of technical data contained within the draft GHG Transportation Report
- **Transportation Commission Acceptance**
 - Transportation Commission, through resolution, accepts the GHG Transportation Report as meeting the reduction levels required within the planning standard, within 30 days of receipt of the report.



Compliance Determination GHG Transportation Reports - Continued

COLORADO
Department of Transportation

GHG Transportation Report
GHG Transportation
2022 &
2022

**NFRMPO GHG
Transportation Report**
Determining Compliance with the
GHG Transportation Planning Standard

for the
North Front Range Metropolitan Planning Area
2050 Regional Transportation Plan
And
FY2024-2027 Transportation Improvement Program

**on Greenhouse
Gas Report**

The North Front Range Metropolitan Planning Organization
419 Canyon Avenue, Suite 300 Fort Collins, CO 80521
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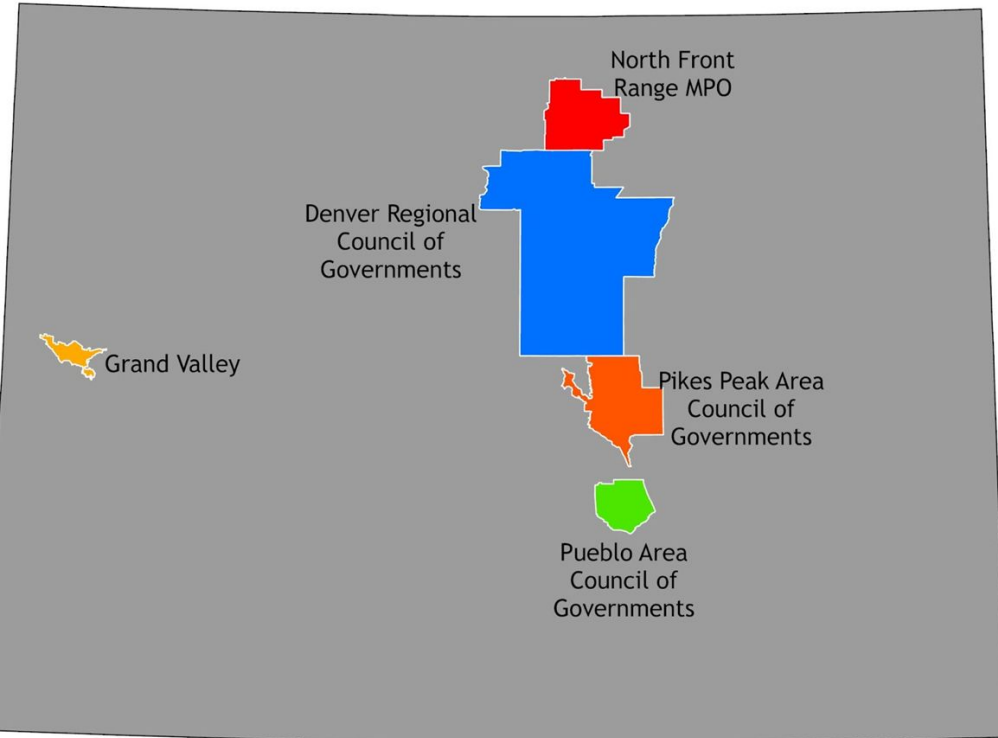
If a **GHG Mitigation Action Plan** is submitted by CDOT or an MPO, they must provide a status report of each GHG Mitigation Measure used for compliance with the planning standard by April 1st each year.

If a applicable planning document is not accepted/report does not meet the requirements of the planning standard:

- The Transportation Commission will restrict the use of certain funds to projects and approved GHG Mitigation measures that reduce GHG Emissions.
- Waivers can be requested for specific projects as long as the project does not increase GHG emissions, based on agency priority and need.



GHG Transportation Planning Reduction Levels



Regional Area	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

*MMT of CO₂e



CDOT Reduction Levels and Compliance

Non-MPO Area of the State

Table of GHG emissions reduction for the CDOT 10-Year Plan, required reduction levels from the planning standard, and compliance from CDOT’s GHG Transportation Report.

	2025 MMT of CO ₂ e	2030 MMT of CO ₂ e	2040 MMT of CO ₂ e	2050 MMT of CO ₂ e
GHG Baseline	6.30	4.84	3.34	2.09
Required Reduction Amount per Planning Standard	0.12	0.36	0.30	0.17
Reduction from Compliance Run	0.30	0.21	0.06	0.04
Reduction from GHG Mitigation Measures	N/A	0.157	0.249	0.135
Total Reduction from 10-Year Plan Projects and GHG Mitigation Measures	0.30	0.367	0.309	0.175
Planning Standard Compliance Result				

- Transit
- Bicycle Infrastructure
- Transit-Oriented Development
- Heavy Duty Charging
- Travel Demand Management
- Walking Infrastructure
- Residential Density
- Parking Supply Reduction
- Micromobility E-Shares





Impacts of GHG Planning Standard

Statewide Examples:

- 117 projects in CDOT's 10-Year Plan focus on providing transit services around the state.
- CDOT initiated new "Pegasus" micro-transit service to complement reconstruction of the "Floyd Hill" segment of I-70.
- Development of Bus Rapid Transit Services on major arterials in the Denver Metro Area, collaborative effort between CDOT, DRCOG, RTD, and local governments.

Examples from Metropolitan Planning Organizations:

- DRCOG's most recently adopted Transportation Improvement Program (TIP) allocates 85 percent the total \$2.2 billion in total investments to active transportation and transit projects, including:
 - East Colfax SH 119, & Federal Blvd. Bus Rapid Transit Projects
 - Complete Streets, Bike and Pedestrian, and other multimodal projects throughout the Denver Region
- NFRMPO's latest regional transportation plan is providing \$470 million in additional investments towards multimodal projects including:
 - US 34 Transit Service between Loveland and Greeley
 - Expansion of Transportation Demand Management Programs in the Region
 - Expansion of local bike and pedestrian networks



Current Transportation Commission Reporting

Completed as of September 2023

GHG Transportation Reports Submitted to the Transportation Commission

- Reporting for the CDOT 10-Year Plan - September 15, 2022.
- DRCOG 2050 Regional Transportation Plan - September 15, 2022.
- NFRMPO 2045 Regional Transportation Plan - September 15, 2022.
- DRCOG 2024-2027 Transportation Improvement Plan - July 19, 2023.
- NFRMPO 2050 Regional Transportation Plan - August 16, 2023.

GHG Mitigation Action Plans Submitted to the Transportation Commission

- CDOT Report Submission - April 1, 2023.
- DRCOG Report Submission - April 1, 2023.

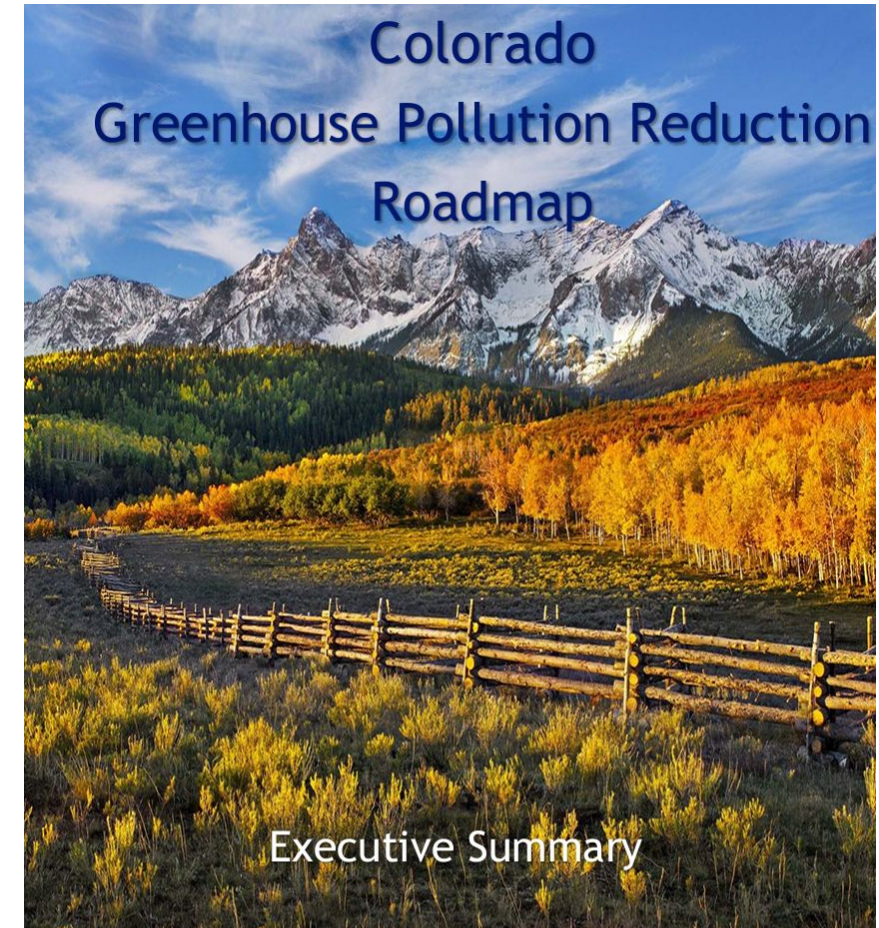


Upcoming Activities

Greenhouse Gas Pollution Reduction Roadmap 2.0

Greenhouse Gas Pollution Reduction Roadmap 2.0

- Update to original roadmap published in January 2021.
- Updating to new sector-wide GHG reduction targets from SB23-016
 - 26% by 2025; 50% by 2030; 65% by 2035; 75% by 2040; 95% by 2045; & 100% by 2050.
 - Updated inventory of GHG emissions by sector.
 - New near term actions for the state to undertake to achieve reduction levels.
- Will inform updates (if needed) to the GHG Pollution Reduction Planning Standard after publication in Winter 2023-24.



COLORADO
Governor Jared Polis



Upcoming Activities

Future GHG Planning Document Compliance Reporting

Future GHG Transportation Report Submission to the Transportation Commission:

- **CDOT GHG Transportation Reports:**

- CDOT Statewide Transportation Improvement Plan - Expected in April 2024.
- CDOT 10-Year Plan Update and next Statewide Planning Effort - Expected on or before July 2026.

- **MPO GHG Transportation Reports:**

- Pikes Peak Area Council of Governments - Expected in December 2024.
- Grand Valley Metropolitan Planning Organization - Expected in January 2025.
- Pueblo Area Council of Governments - Expected in April 2026.
- CDOT provides financial and technical assistance on travel modeling to each of the MPOs as they develop their GHG Transportation Reports.





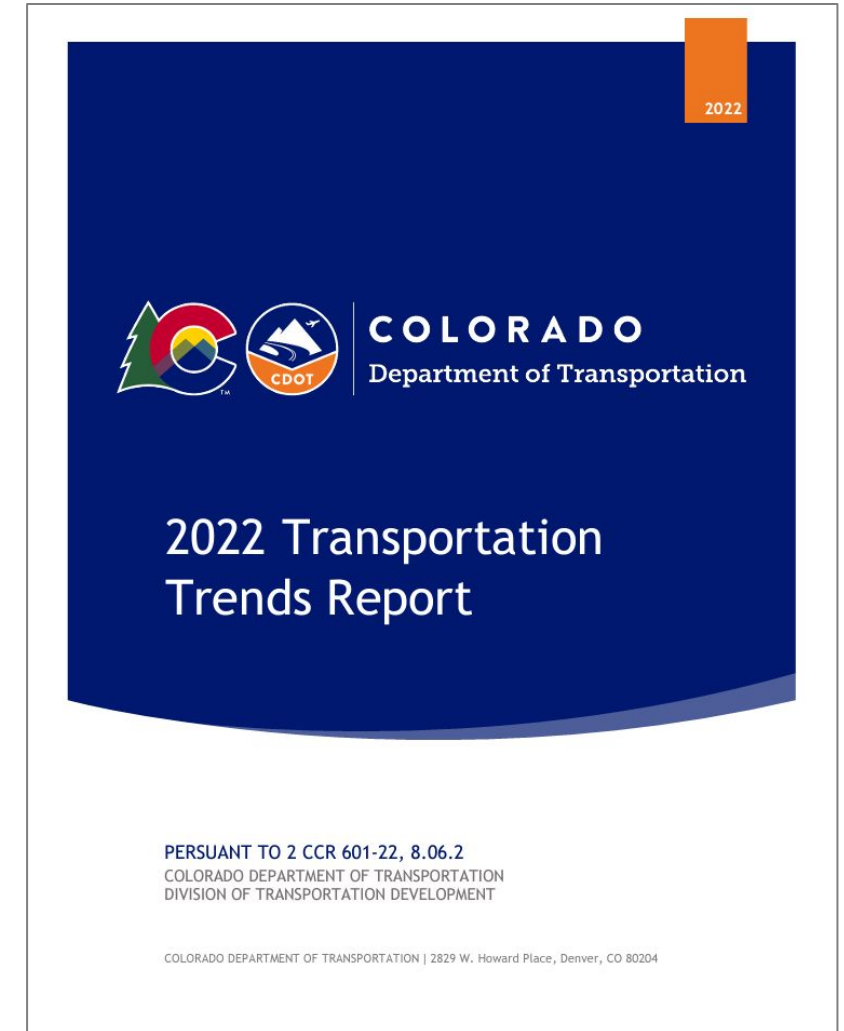
Upcoming Activities

Accomplishment and Trends Reporting

CDOT Produces the **Transportation Trends Report** annually in October and submits to the Transportation Commission. Includes relevant factors that could help the Commission determine if a policy change is needed.

Future Accomplishments Report to the Transportation Commission and CDPHE Air Pollution Control Division

- Statewide Transportation GHG Reduction Accomplishments Report - July 1, 2025.
 - Elements of the report will include:
 - Noted compliance with reduction levels from CDOT and each of the five MPOs.
 - Acceptance of GHG Transportation Reports for each required planning document from 2022 to 2025.
 - Application and effectiveness of GHG Mitigation Measures used by CDOT/MPOs during the reporting period.
 - Updates to the Planning Standard, if applicable.





COLORADO

Department of Transportation

For follow-up questions or comments please contact:

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