

**BEFORE THE DEPARTMENT OF TRANSPORTATION AND TRANSPORTATION
COMMISSION
STATE OF COLORADO**

IN THE MATTER OF PROPOSED REVISIONS TO 2 CCR 601-22

**WRITTEN COMMENTS FROM THE BOARD OF COUNTY COMMISSIONERS OF
WELD COUNTY, COLORADO**

The Board of County Commissioners of Weld County (“Weld County”) submits these comments in connection with the above-captioned rulemaking. Weld County appreciates the opportunity to participate in this rulemaking proceeding regarding the Colorado Department of Transportation’s (“CDOT”) revisions to 2 CCR 601-22, Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions (“Proposed Rule”) proposed by the Colorado Department of Transportation (“CDOT”). The Proposed Rule establishes greenhouse gas (“GHG”) reduction targets for transportation and requires CDOT and the Metropolitan Planning Organizations (“MPOs”) 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. The purpose of these requirements is to limit the GHG pollution that would result from the transportation system if the plans were implemented. If compliance cannot be demonstrated, even after committing to GHG mitigation measures, the Proposed Rule requires the Transportation Commission (“TC”) to restrict the use of certain funds to projects that are recognized as approved mitigation measures and help reduce transportation emissions.

The transportation sector is one of the largest contributors to GHG and ozone precursor emissions. Therefore, Weld County generally supports efforts to increase multimodal options and provide more sustainable travel options to achieve reductions in air pollution, including GHG and ozone precursor emissions, from the sector. However, Weld County has several concerns about the Proposed Rule, and more generally, the rushed nature of the rulemaking and lack of data provided by CDOT. This lack of critical information impedes stakeholders’ ability to evaluate the overall efficacy of the Proposed Rule and provide meaningful comments.

Therefore, Weld County is submitting these initial written comments on the Proposed Rule and requests CDOT provide the data requested by stakeholders, including the data requested in Weld County’s CORA request, dated September 17, 2021 (see **Attachment A**). In addition, Weld County requests the Transportation Commission extend the deadline for written comments to no earlier than 30 days after receipt of the requested data, and schedule an additional hearing after the close of the extended comment period. Our request for additional data notwithstanding, Weld County intends to review the cost-benefit analysis (“CBA”), regulatory analysis, and any other data and information provided by CDOT and submit additional written comments before the close of the comment period.

Weld County’s concerns about the Proposed Rule and its corresponding recommendations are outlined below.

Concern No. 1

CDOT has not provided sufficient time before the rulemaking hearings to review supporting documentation for the Proposed Rule, including the CBA, regulatory analysis, and other technical documentation.

- These supporting documents were not released with the notice of the rulemaking and Proposed Rule Language. CDOT has not provided key analyses, data, and the underlying documentation used to develop the Proposed Rule.
- Without such documents, stakeholders are unable to evaluate the accuracy or reasonableness of the GHG emission estimates in the Proposed Rule or the efficacy of the Proposed Rule.
- While CDOT has met the minimum time requirements for public release of the CBA and regulatory analysis, the scope and novelty of the Proposed Rule warrants additional time for stakeholders to review and comments on these documents. Extending the time period for review and comment would benefit stakeholders and the rulemaking process by allowing for more careful consideration and further refinement of the Proposed Rule.
 - A cost-benefit analysis is required under C.R.S. § 25-7-103(2.5) and a separate regulatory impact analysis is required under C.R.S. § 25-7-103(4.5).
 - Per the Department of Regulatory Agencies, a CBA must be made available to the public 10 days prior to the first hearing and the regulatory analysis must be completed and made available to the public 5 days prior to the first hearing.¹

Weld County’s Recommendation

- CDOT should provide supporting documentation—such as a technical support document—describing the methods used to conduct the analysis for the GHG estimates in Table 1 and Table 2 of the Proposed Rule.
- CDOT should provide additional time – beyond regulatory minimums – for stakeholders to review and comment on the CBA and regulatory analysis.

Concern No. 2

The rule allows for different model(s) to be used to demonstrate compliance, as compared with the model(s) used to estimate the baseline. Different models could yield different results complicating compliance with the rule.

- The rule allows for the use of MPO models or the Statewide Travel Model when performing GHG emissions analyses. Examples (emphasis added):

¹ Colo. Dep’t of Regul. Agencies, *Colorado’s Rulemaking and Cost-Benefit Analysis Process*, <https://coprrr.colorado.gov/rulemaking-and-cost-benefit-analysis>.

- “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...”
- “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...”
- “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.”
- It is not clear why the definition of baseline would allow for use of the MPO Models or the Statewide Travel Model when the baseline represents a single set of GHG emission estimates that were presumably prepared using one of the modeling platforms (i.e., either the MPO Models, or the Statewide Travel Model, not both).
- Different models exhibit different sensitivities to inputs and assumptions, whereby running two different models with the same inputs and assumptions could yield different results. Therefore, allowing different model(s) to be used in the GHG emissions analysis than was used in estimate of baseline GHG emissions and development of GHG reduction targets is problematic. For example, while the emission reduction levels shown in Table 1 may be achievable based on modeling conducted using the Statewide Travel Model, demonstrating compliance using the MPO Model(s) may be infeasible.
 - Further, the use of multiple different models among CDOT and the MPOs in their respective GHG emissions analyses complicates review of the GHG Transportation Reports by both APCD and the Transportation Commission (TC) as required in Sections 8.04.1 and 8.05, respectively.
- The role of Section 8.02.2 “Agreements on Modeling Assumptions and Execution of Modeling Requirements” in constraining/coordinating the “development and execution” of the models is not clear and should be clarified per our recommendations below.
- The definition for “Approved Air Quality Model” refers to “the most recent” model, meaning the approved air quality model used in future years to demonstrate compliance with the Proposed Rule may differ from the model that was used to estimate the baseline emissions and reduction targets. Similar to the concerns above, future updates to the approved air quality model (i.e. MOVES3, the Motor Vehicle Emissions Model) may alter the model’s sensitivity to key inputs (e.g., VMT, vehicle miles traveled) used in the GHG emissions analyses and compliance assessments.
 - Such changes may present compliance challenges. For example, if every vehicle is “cleaner” (i.e., lower GHG emissions per mile), then CDOT and MPOs would need to achieve greater VMT reductions to achieve the same GHG emission reductions.

Weld County’s Recommendation:

- The definition of baseline should be revised to refer to only the model(s) used to prepare the estimates of baseline GHG emission estimates and CDOT should provide a technical

support document describing the methods and assumptions used to estimate the baseline emissions.

- Modify rule to require the same model(s) for GHG budget setting (i.e., Table 1 and 2 of the Proposed Rule) and assessing compliance (i.e., GHG emissions analyses and GHG Transportation Reports as required under the Proposed Rule), or outline process for continuity if model changes are determined to be critical.
 - To ensure the same air quality model is used for GHG budget setting and compliance assessments, either:
 - Revise the definition of Approved Air Quality Model to refer to the specific model used in the determination of the GHG emission estimates in Table 1 and Table 2 of the Proposed Rule; or
 - Revise the Proposed Rule to require the GHG emission estimates in Table 1 and Table 2 be updated following the release of a new (or update to an existing) Approved Air Quality Model.
- Should different models be allowed in the Proposed Rule, CDOT should conduct a sensitivity analysis to compare the sensitivity of different models to inputs and assumptions, specifically as related to Travel Choice, Transit, and Land Use considered in the development of the GHG estimates in Table 1 and Table 2 of the Proposed Rule.
- The specific requirements for and components of the “Intergovernmental Agreement” required per Section 8.02.2 should be specified in the rule language, particularly as related to model(s) used in the analyses and assumptions used in the modeling, to ensure consistent modeling methodology.

Concern No. 3

For areas outside the urban corridor (i.e., rural areas and/or those with a lower population density) the GHG mitigation measures specified in the Proposed Rule may be overly restrictive and may present compliance challenges for CDOT and/or MPOs.

- Urban and rural lifestyles, land usage, density, and thus transportation patterns are critically different. To date, most GHG mitigation strategies for the transportation sector have been targeted to more densely populated, urban areas.^{2,3} According to the Transportation Research Board, “By far, and not surprisingly, most of the research on GHG emissions reduction strategies has focused on metropolitan areas or at the national and state levels.” and that “...very little attention has been given to nonurban areas”.⁴ The

² New England Transport Consortium, *Data and Information to Support Cost Effective Transportation GHG Mitigation in Rural Communities* (2020), <https://www.newenglandtransportationconsortium.org/wp-content/uploads/N20ME2-GHG-Mitigation-1.pdf>.

³ Org. for Econ. Co-operation and Dev., *Decarbonising Urban Mobility with Land Use and Transport Policies: The Case of Auckland, New Zealand* (2020), <https://www.oecd-ilibrary.org/sites/5181a1e0-en/index.html?itemId=/content/component/5181a1e0-en>.

⁴ PB Americas, Inc., Cambridge Systematics, Inc., E.H. Pechan & Assocs., Inc., EuQuant, Inc., Strategic Highway Rsch. Program Capacity Focus Area, Transp. Rsch. Bd., & Nat’l Academies of Scis., Eng’g, and Med., *Incorporating*

example GHG mitigation strategies given in Section 8.03 are less feasible and/or less effective in rural areas, especially given that rural roads tend to have lower traffic flows and thus have less traffic impacts.⁵ For example, the California Air Pollution Control Officers Association finds that reducing VMT through carpooling measures is not applicable for implementation in rural areas.⁶ Rural areas also have less financial and logistical resources, and may bear disproportionate financial burdens from higher taxes, and fuel and vehicle costs that are associated with GHG reduction strategies.^{7,8}

- Examples of mitigation measures provided in Section 8.03 of the Proposed Rule are largely infeasible or ineffective outside of metropolitan areas and transportation GHG mitigation measures are generally less available in rural areas and/or areas with a lower population density.
- Additionally, per Section 1.19, GHG mitigation measures are defined as strategies that reduce transportation GHG pollution. Thus, mitigation measures that reduce GHG emissions from other sources or sectors would not qualify as mitigation measures to help achieve GHG Reduction Levels set forth in the Proposed Rule. This further constrains the availability of mitigation measures.

Weld County's Recommendation

- CDOT should evaluate the feasibility of, and provide examples of, transportation GHG mitigation measures for rural areas.
- The definition of GHG Mitigation Measures in the Proposed Rule should be revised to allow for strategies that reduce GHG pollution from sources and sectors other than transportation, provided that there is a transportation nexus.

Concern No. 4

The timeframes specified in the Proposed Rule are problematic and may lead to implementation and/or compliance challenges.

- First, the 30-day time window for APCD to provide review and verification of the technical data contained in the draft GHG Transportation Reports may be insufficient, and may allow for GHG Transportation Reports to be provided to the TC for compliance

Greenhouse Gas Emissions into the Collaborative Decision-Making Process, at 22805 (2012), <https://doi.org/10.17226/22805>.

⁵ N. Singru, *Reducing Carbon Emissions from Transport Projects*, at 107 (2010), <https://www.oecd.org/derec/adb/47170274.pdf>.

⁶ Cal. Air Pollution Control Officers Ass'n, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (2021), http://www.airquality.org/ClimateChange/Documents/Handbook%20Public%20Draft_2021-Aug.pdf.

⁷ Marisa Beck, Nicholas Rivers, & Hidemichi Yonezawa, *A rural myth? Sources and implications of the perceived unfairness of carbon taxes in rural communities*, *Ecological Economics*, at 124, 124–134 (2016), <https://doi.org/10.1016/j.ecolecon.2016.01.017>.

⁸ Cynthia J. Burbank, *Greenhouse Gas (GHG) and Energy Mitigation for the Transportation Sector* (2009), <http://onlinepubs.trb.org/onlinepubs/sr/sr299GHG.pdf>.

assessment without sufficient technical review. Per Section 8.04.1 of the Proposed Rule, “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.”

- As currently written, there is the potential for GHG Transportation Reports to be considered acceptable without having undergone technical review and verification from APCD. Presumably the technical review and verification from APCD is intended to ensure accuracy and validity of the GHG emissions estimates, so it is critical reports are reviewed by APCD prior to a compliance determination from the TC. It is unclear if APCD has provided feedback to CDOT regarding the feasibility of meeting this time requirement.
 - In the event the GHG Transportation Report is not reviewed by APCD and is considered acceptable after 30 days, it’s not clear if the TC is equipped or expected to perform technical review and verification of the analysis. Thus, there is the potential for the TC to act upon the GHG emissions estimates presented in the GHG Transportation Report without such estimates having undergone technical review.
 - Similarly, Per Section 8.05, the TC shall review “the sufficiency of any GHG Mitigation Measures needed for compliance.” However, the Proposed Rule does not specify what the review for “sufficiency” requires and it is not clear if the TC is equipped to perform this review (i.e., technical knowledge, time, resources, etc).
- Second, per Section 8.02.5, GHG Transportation Reports must be submitted to the TC at least thirty (30) days prior to adoption of any Applicable Planning Document.
 - Based on the timeframes specified in Section 8.04.1 and Section 8.02.5, it seems there the potential for a GHG Transportation Report to be submitted to the TC 15 days after submission to APCD, whereby the TC could potentially reach a compliance determination prior to the end of the 30-day APCD review period. In such a scenario, the TC could act upon the GHG emissions estimates presented in the GHG Transportation Report without such estimates having undergone technical review, or while technical review from APCD is still underway.
- Third, there is no timeframe for the TC to complete their review of the GHG Transportation Report and determine compliance per Section 8.05 of the Proposed Rule. Section 8.05 specifies the enforcement of the Proposed Rule, stating that “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.” However, there is no timeframe specified.
- Finally, the Proposed Rule does not specify the timeline for enforcement actions taken under Section 8.05.2 of the Proposed Rule. Specifically, it is not clear when funding restrictions would be implemented or to which projects they would apply should the TC

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.

Weld County's Recommendation

The rule language should be modified to ensure that:

- GHG Transportation reports undergo technical review and verification prior to a compliance determination from the TC;
- The TC reviews and evaluates the compliance of GHG Transportation Reports within a specified timeframe; and
- Enforcement timeframes are specified, particularly as related to the restrictions of funds.

Concern No. 5

Some numbers in Table 1 when added together do not meet the total reductions, possibly due to rounding, which may result in actual emission reductions falling short of estimated totals even when all rule requirements are met.

- For example, 2025 reduction levels are shown as 0.27, 0.04, and 0.12, the sum of which is 0.43, as compared with 0.5 reported for TOTAL. While the discrepancy may seem small in magnitude, it is greater than the reduction level for NFRMPO in this year.
- Therefore, even if DRCOG, NFRMPO, and CDOT meet their respective reduction targets of 0.27, 0.04, and 0.12 MMT CO₂e, the total GHG emission reductions achieved would fall short of the 0.5 MMT CO₂e estimated for total reductions in 2025.
 - A similar concern exists for compounding rounding errors in GHG emissions estimates reported by CDOT/MPOs. For example, if each regional area were to round estimated GHG reductions up to demonstrate compliance, actual GHG emission reduction may fall further short of estimated total. For example, 0.265, 0.035, 0.115 may be rounded to 0.27, 0.04, and 0.12 respectively, based on the number of significant figures reported, and would result in actual emission reductions of 0.415 MMT CO₂e.

Weld County's Recommendation

- Clarify calculation of TOTAL row in Table 1 of the Proposed Rule. Table 1 should be revised to show the same significant figures for all of the values. Additional information should be presented in a supplemental technical support document.
- Provide guidance regarding the number of significant figures to be used in GHG emissions estimates, particularly as related to rounding for regional area totals compared against the values in Table 1 of the Proposed Rule.

Concern No. 6

The basis for waivers specified in Sections 8.05.2.1.1 and 8.05.2.1.2 of the Proposed Rule is vague, and it is not clear what criteria or guidelines will be used to ensure fair and equitable evaluation of waivers.

- Per Section 8.05.2.1, a waiver can be requested from the TC imposing restrictions on specific projects not expected to reduce GHG emissions, and the TC may waive the restrictions on specific projects based on the requirements in Sections 8.05.2.1.1 and 8.05.2.1.2. However, the criteria in Sections 8.05.2.1.1 and 8.05.2.1.2 are not quantitative in nature.
 - For example, it is not clear how “significant effort and priority” will be determined, or what is a “substantial increase in GHG emissions when compared to the required reduction levels.”
- Furthermore, waivers (or reconsideration requests) are deemed denied if no action is taken by the TC within 30 days (or at the next regularly scheduled TC meeting), which may result in automatic denial simply due to inaction.

Weld County’s Recommendation

CDOT should clarify, through revised rule language or a guidance document accompanying the Proposed Rule, the criteria used to evaluate waivers. For example, guidance on how “significant effort” will be evaluated should be provided, and a “substantial increase in GHG emissions when compared to the required reduction levels” should be quantified.

Concern No. 7

The Proposed Rule and statement of basis and purpose do not address potential interactions between actions taken by CDOT/MPOs as a part of the Proposed Rule and actions taken by the enterprises⁹ created in SB21-260 to reduce GHG emissions.

- By definition in SB21-260, the four enterprises are created “to serve the primary business purpose of reducing and mitigating the adverse environmental and health impacts of air pollution and greenhouse gas emissions...” Additionally, the specific function of the first three Enterprises is focused primarily on electrification (including infrastructure) and the non-attainment area (NAA) mitigation Enterprise is focused on traffic/VMT reduction, along with projects that “directly reduce air pollution.” Examples in the last category include “retrofitting of construction equipment, construction of roadside vegetation barriers, and planting trees along medians.”
- While it seems unlikely the Enterprises would undertake a “regionally significant project” as defined in the Proposed Rule, the Enterprises may undertake projects that could qualify as GHG Mitigation Measures under the Proposed Rule. It’s not clear from

⁹ SB21-260 created the community access enterprise, the clean fleet enterprise, the clean transit enterprise, the nonattainment area air pollution mitigation enterprise. See Colo. SB 21-260, https://leg.colorado.gov/sites/default/files/2021a_260_signed.pdf.

the Proposed Rule language if projects that reduce GHG emissions undertaken by the Enterprises could be used as mitigation measures by CDOT/MPOs to meet the reduction targets specified in the Proposed Rule. Accurate accounting of GHG reduction projects is critical to avoid double counting and understand the compliance options available to CDOT and MPOs.

- Additionally, it's unclear if the modeling conducted for the Proposed Rule (i.e., values in Table 1 and Table 2) account for any Enterprise projects, either in the baseline or the reduction targets.

Weld County's Recommendation

CDOT should clarify, through revised rule language or a guidance document accompanying the Proposed Rule, how Enterprise activities interact with the actions taken by CDOT/MPOs as a part of the Proposed Rule, particularly as related to GHG mitigation measures.

Concern No. 8

No guidance is provided as to how modeling should be conducted to demonstrate compliance with the applicable reduction targets in Table 1.

- It's not clear from the language in the Proposed Rule what model inputs, assumptions, and methodology can or should be used by CDOT/MPOs to estimate GHG emissions. Further, it's not clear if CDOT/MPOs must meet the reduction levels in Table 1, or if they must meet an absolute GHG emissions target determine based on the baseline projects and reduction levels in each target year.
 - For example, would NFRMPO need to meet a GHG emission level of 2.3-0.04=2.26 MMT CO₂e in 2025? Or would they need to demonstrate, by modeling two or more scenarios, that they have met a reduction level of 0.04 MMT CO₂e?
- Per Section 8.02.1, "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." Thus, this section suggests total CO₂e emissions must be compared to the baseline.
- However, other sections (i.e., 8.02.4.1, 8.02.5.1, 8.02.5.3, 8.05, etc) specifically refer to meeting or demonstrating compliance with the reduction levels. In particular, Section 8.05 states "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."
 - Therefore, it's not clear why Section 8.02.1 requires comparing emissions to the baseline if compliance is assessed based on meeting reduction levels.

Weld County's Recommendation

CDOT should revise the rule language to clarify how compliance is assessed and develop a guidance document that describes the modeling methodology that should be used to determine compliance with the Proposed Rule.

Conclusion

Weld County appreciates the opportunity to participate in this rulemaking and thanks CDOT and the TC in advance for their attention to these initial written comments. Given the concerns outlined above, Weld County requests the Transportation Commission extend the deadline for written comments to no earlier than 30 days after receipt of the requested data, and schedule an additional hearing after the close of the extended comment period.

Respectfully submitted this 24th day of September, 2021.

BOARD OF COUNTY COMMISSIONERS
OF WELD COUNTY, COLORADO

/s/ Bruce T. Barker

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