

National Performance Management Measures

Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure

Notice of Proposed Rulemaking (NPRM)

August 23 and 24, 2022



U.S. Department of Transportation
Federal Highway Administration



Housekeeping

- FHWA will not be taking questions during this webinar
- The webinar slides will be posted online
- Submit questions or comments on the NPRM to the rulemaking docket

Notice of Proposed Rulemaking
available at
www.Regulations.Gov
using docket number
FHWA-2021-0004



1. FDA/Economics Staff, "Revocation of Methods of Analysis Regulation, Preliminary Regulatory Impact Analysis, Preliminary Regulatory Flexibility Analysis, Unfunded Mandates Reform Act Analysis," 2020. (Available at: <https://www.fda.gov/AboutFDA/ReportsManualsForms/Reports/EconomicAnalyses/default.htm>.)

List of Subjects in 21 CFR Part 2

Administrative practice and procedure, Cosmetics, Drugs, Foods, Drug, and Cosmetic Act, and under authority delegated to the Commissioner of Food and Drugs, FDA proposes that 21 CFR part 2 be amended as follows:

PART 2—GENERAL ADMINISTRATIVE RULINGS AND DECISIONS

■ 1. The authority citation for part 2 continues to read as follows:

Authority: 15 U.S.C. 402, 409; 21 U.S.C. 321, 331, 335, 342, 343, 346a, 348, 351, 352, 355, 360b, 361, 362, 371, 372, 374; 42 U.S.C. 7671 et seq.

§ 2.19 [Removed]

■ 2. Remove § 2.19.

Dated: July 11, 2022.

Robert M. Cahill,

Commissioner of Food and Drugs.

[FR Doc. 2022-15109 Filed 7-14-22; 8:45 am]

BILLING CODE 4164-01-P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

23 CFR Part 490

[Docket No. FHWA-2021-0004]

RIN 2125-AF99

National Performance Management Measures: Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure

AGENCY: Federal Highway Administration (FHWA), U.S. Department of Transportation (DOT).
ACTION: Notice of proposed rulemaking (NPRM); request for comments.

SUMMARY: Extreme weather due to climate change threatens the safety and mobility of Americans and challenges the stability of supply chains. To help address the climate crisis, FHWA proposes to amend its regulations governing national performance management measures to require State departments of transportation (State DOTs) and metropolitan planning organizations (MPOs) to establish declining carbon dioxide (CO₂) targets

and to establish a method for the measurement and reporting of greenhouse gas (GHG) emissions associated with transportation under the Highways title of the United States Code (U.S.C.). The proposed rule would not mandate the level of the targets. Rather, State DOTs and MPOs would have flexibility to set targets that are appropriate for their communities and that work for their respective climate change and other policy priorities, as long as the targets would reduce emissions over time. Specifically, the proposed rule would require State DOTs and MPOs that have National Highway System (NHS) mileage within their State geographic boundaries and metropolitan planning area boundaries, respectively, to establish declining CO₂ emissions targets to reduce CO₂ emissions generated by on-road mobile sources relative to a reference year defined as calendar year 2021, that align with the Administration's net-zero targets as outlined in the national policy established under Executive orders entitled "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis" and "Tackling the Climate Crisis at Home and Abroad" and at the Leaders Summit on Climate. The proposed rule would require MPOs serving urbanized areas with multiple MPOs to establish additional joint targets. The proposed rule also would require State DOTs and MPOs to biennially report on their progress in meeting the targets and require FHWA to assess significant progress toward achieving the targets. DATES: Comments must be received on or before October 13, 2022. ADDRESSES: To ensure that you do not duplicate your docket submissions, please submit comments by only one of the following means:

- **Federal eRulemaking Portal:** Go to <https://www.regulations.gov> and follow the online instructions for submitting comments.

- **Mail:** Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE, Washington, DC 20590.

- **Hand Delivery:** U.S. Department of Transportation, Docket Operations, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is (202) 366-0329.

All submissions should include the agency name and the docket number that appears in the heading of this document or the Regulation Identifier Number (RIN) for the rulemaking. All

comments received will be posted without change to <https://www.regulations.gov>, including any personal information provided. FOR FURTHER INFORMATION CONTACT: Mr. John Davies, Office of Planning, Environment, and Realty, (202) 366-6039, or via email at John.Davies@dot.gov, or Mr. Lev Gabrilovich, Office of the Chief Counsel (HCC-30), (202) 366-3813, or via email at Lev.Gabrilovich@dot.gov. Office hours are from 8:00 a.m. to 4:30 p.m., E.T., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Electronic Access and Filing

This document and all comments received may be viewed online through the Federal eRulemaking portal at www.regulations.gov using the docket number listed above. Electronic retrieval help and guidelines are also available at www.regulations.gov. An electronic copy of this document may also be downloaded from the Office of the Federal Register's website at www.FederalRegister.gov and the Government Publishing Office's website at www.Gpo.gov.

All comments received before the close of business on the comment closing date indicated above will be considered and will be available for examination in the docket at the above address. Comments received after the comment closing date will be filed in the docket and will be considered to the extent practicable. In addition to late comments, FHWA will also continue to file relevant information in the docket as it becomes available after the comment period closing date and interested persons should continue to examine the docket for new material. A final rule may be published at any time after close of the comment period and after DOT has had the opportunity to review the comments submitted.

Table of Contents for Supplementary Information

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- II. Background and Regulatory History
- III. Statement of the Problem, Legal Authority, and Rationale
 - A. Confronting the Climate Crisis
 - B. Legal Authority for the Proposed GHG Measure
 - C. Additional Rationale for the Proposed GHG Measure
 1. Costs and Benefits
 2. Duplication of Efforts
 3. Expected Schedule for Implementation
- IV. Section-by-Section Discussion of the Proposed Changes
 - A. Subpart A—General Information
 - B. Subpart E—National Performance Management Measures to Assess

“With today’s announcement, we are taking an important step forward in tackling transportation’s share of the climate challenge, and we don’t have a moment to waste”

- U.S. Transportation Secretary Pete Buttigieg

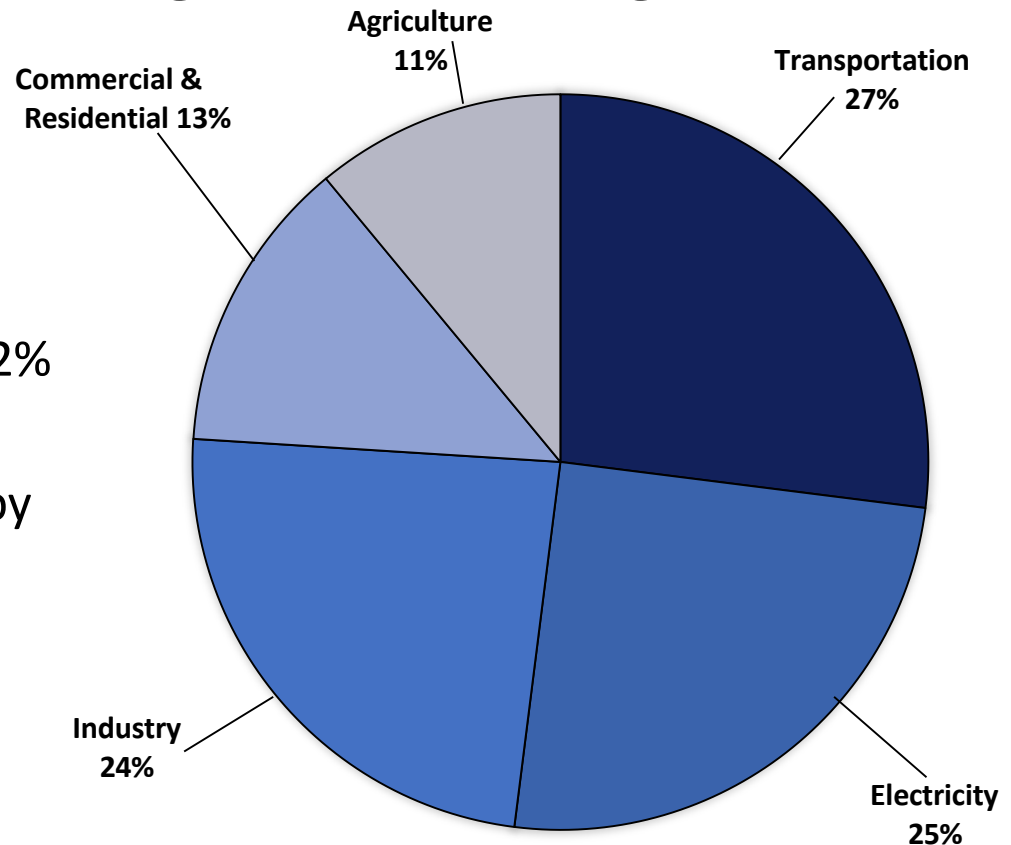
“Every state and local government in this country is seeing the impacts of climate change on their communities and infrastructure. States have a critical role to play as we work nationwide to bring down greenhouse gas emissions and slow those impacts”

- Deputy FHWA Administrator Stephanie Pollack



Integrated Approach to Tackling Climate Change

- National greenhouse gas (GHG) emission reduction goals:
 - Reduce GHG emissions 50-52% below 2005 levels by 2030
 - Achieve net-zero emissions by 2050
- Improved fuel economy standards
- Funding through Bipartisan Infrastructure Law



GHG Emissions by Sector in 2020

Source: EPA



Proposed GHG Measure Part of Integrated Approach

- **Setting Targets:** Would create a **flexible system** for State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to set declining targets for tailpipe GHG emissions from on-road travel
- **Tracking Progress:** Would establish a **national framework** for tracking State-by-State progress by adding a new GHG performance measure to the existing FHWA national performance measures (23 CFR Part 490)
- **Funding Support:** States have **access to over \$27 billion in funding** from the Bipartisan Infrastructure Law for varied GHG reduction strategies



Funding from Bipartisan Infrastructure Law

- Carbon Reduction Program
- National Electric Vehicle Infrastructure (NEVI) Formula Program
- Discretionary Grant Program for Charging and Fueling Infrastructure
- Congestion Relief Program
- Reduction of Truck Emissions at Port Facilities Program
- FTA's Low or No Emission Vehicle Program
- Transportation Alternatives (TA) Set-Aside



Today's Webinar

- Part 1: Proposed GHG Performance Measure, Targets, and Concepts
- Part 2: Calculating the Proposed GHG Performance Measure
- Part 3: Reporting and Significant Progress
- Part 4: Regulatory Impact Analysis
- Part 5: Request for Public Comment



Part 1

Proposed GHG Performance Measure and Concepts

Key Concepts, Performance Targets, and Applicability



U.S. Department of Transportation
Federal Highway Administration



Existing TPM Performance Measures

Performance Area	Performance Measure
Safety	<ul style="list-style-type: none"> Number of fatalities Rate of fatalities per 100 million vehicle miles traveled Number of serious injuries Rate of serious injuries per 100 million vehicle miles traveled Number of non-motorized fatalities and non-motorized serious injuries
Pavement Condition	<ul style="list-style-type: none"> Percentage of pavements of the Interstate System in Good condition Percentage of pavements of the Interstate System in Poor condition Percentage of pavements of the non-Interstate NHS in Good condition Percentage of pavements of the non-Interstate NHS in Poor condition
Bridge Condition	<ul style="list-style-type: none"> Percentage of NHS bridges classified as in Good condition Percentage of NHS bridges classified as in Poor condition
System Performance	<ul style="list-style-type: none"> Percent of person-miles traveled on the Interstate that are reliable Percent of person-miles traveled on the non-Interstate NHS that are reliable NEW: PROPOSED GHG MEASURE
Freight Movement	<ul style="list-style-type: none"> Truck Travel Time Reliability (TTTR) Index
Traffic Congestion	<ul style="list-style-type: none"> Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita Percent of Non-Single Occupancy Vehicle (SOV) Travel
On-Road Mobile Source Emissions	<ul style="list-style-type: none"> Total Emission Reductions for applicable criteria pollutants



Basic Requirements are Consistent with other TPM Measures

- Same target setting requirements
 - State DOTs set 2- and 4-year targets
 - MPOs set 4-year targets
- Would have the same 4-year performance period
- Same approach to reporting on performance
 - State DOTs report on targets and progress Baseline, Mid-Performance and Full Performance Period Reports
 - MPOs report targets to State DOTs and include information on the performance measure in Metropolitan Transportation Plans
- Same approach to determining significant progress (State DOTs Only)

Proposed GHG Performance Measure

Applicability	Proposed Measure	Proposed Metric
All mainline highways on the Interstate and non-Interstate National Highway System (NHS)	Percent change in tailpipe carbon dioxide (CO ₂) emissions on the NHS compared to the reference year (Calendar Year 2021)	Annual total tailpipe CO ₂ emissions on the NHS

Would require ***declining*** targets for GHG emissions



Proposed Requirement for Declining Targets

- DOTs and MPOs shall
 - Establish declining targets that indicate a reduction in CO₂ emissions relative to the reference year (2021)
 - Are lower from one performance period to another performance period
- Targets shall align with the Administration's target of net-zero emissions economywide by 2050



Proposed Performance Targets

State DOTs

- Establish declining 2-year and 4-year statewide target
- Declining targets must demonstrate reductions from 2021 levels and toward net-zero target

MPOs

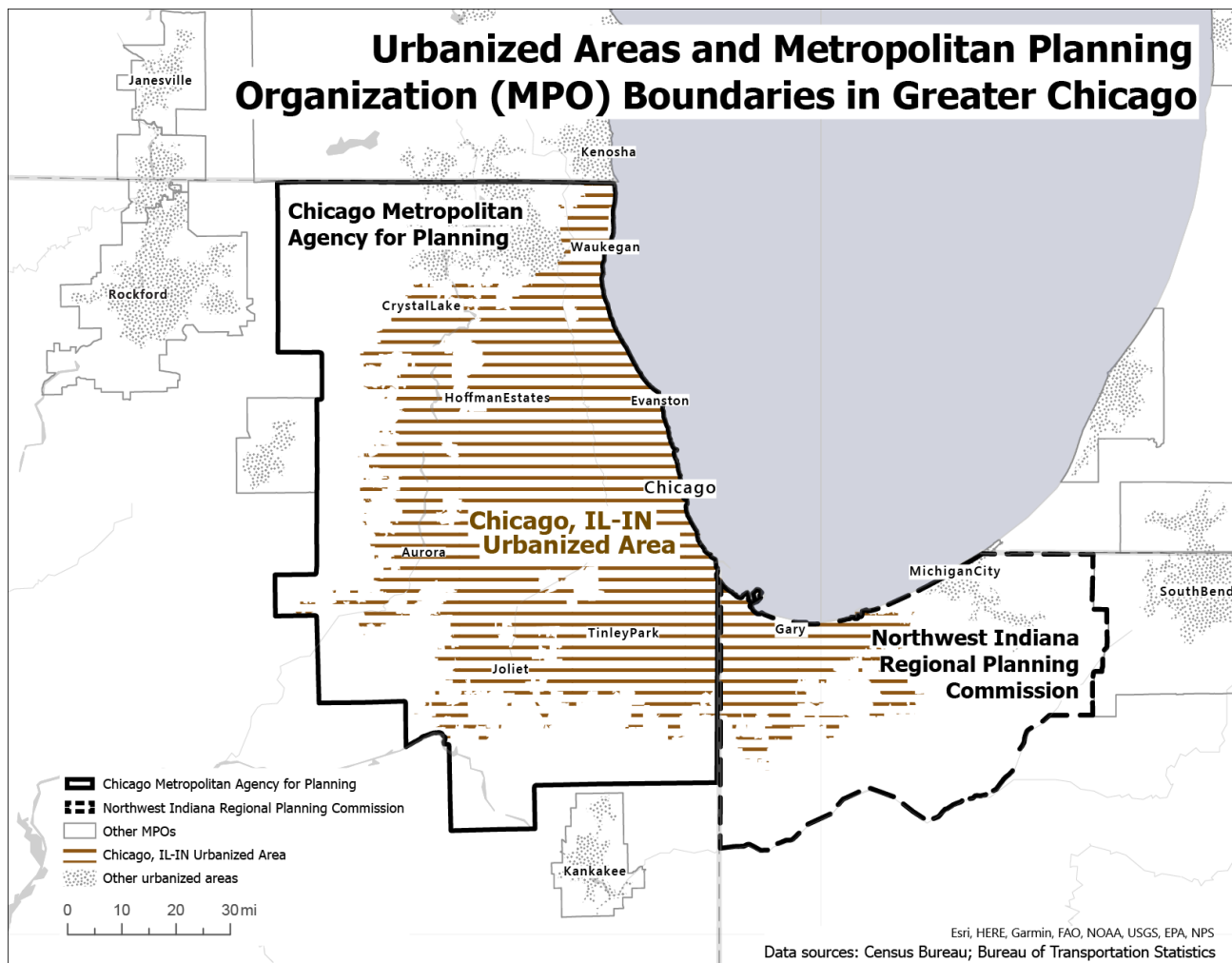
- Establish declining 4-year target for the metropolitan planning area
- Option to commit to support the State DOT target or establish a unique quantifiable target
- Have up to 180 days from when the State DOT established their targets

MPOs in Urbanized Areas with Multiple MPOs

- Establish an additional joint declining 4-year target for the urbanized area
- Must be a single quantifiable target



Urbanized Areas with Multiple MPOs



Please Note: This map is for illustrative purposes.

Part 2

Calculating the Proposed GHG Performance Measure



U.S. Department of Transportation
Federal Highway Administration



Calculating the Proposed GHG Measure

$$\begin{array}{l} \text{\% change} \\ \text{in tailpipe} \\ \text{CO}_2 \\ \text{emissions} \end{array} = \left(\frac{\begin{array}{c} \text{(Tailpipe CO}_2\text{ Emissions} \\ \text{on NHS}_{\text{calendar year}} \end{array} - \begin{array}{c} \text{(Tailpipe CO}_2\text{ Emissions} \\ \text{on NHS}_{\text{reference year}} \end{array}}{\begin{array}{c} \text{(Tailpipe CO}_2\text{ Emissions on NHS}_{\text{reference year}} \end{array}} \right) \times 100$$

Calendar year = analysis year

Reference year = 2021



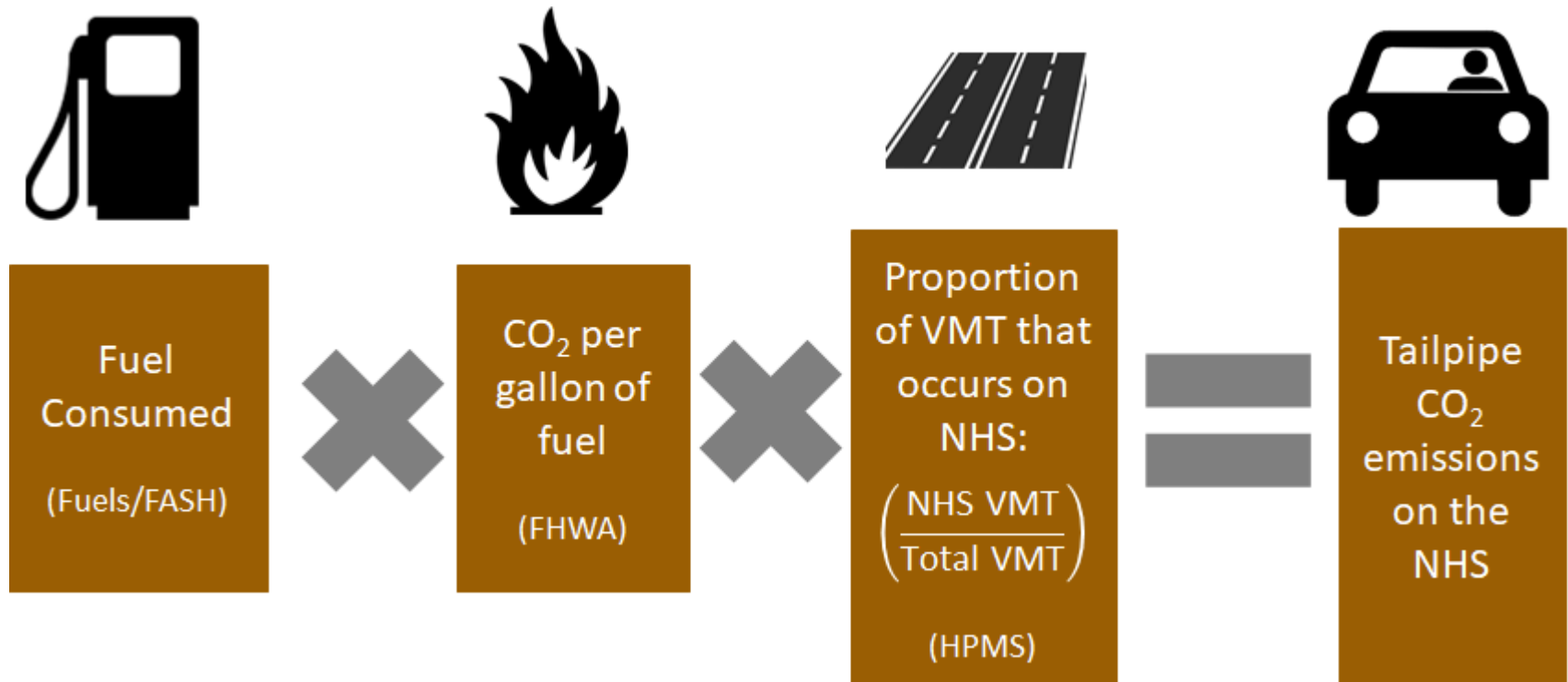
Data Sources for Calculation of the Proposed GHG Measure

Proposed Data Sources	Relevant Data
Fuels and Financial Analysis System-Highways (Fuels/FASH)	<ul style="list-style-type: none"> • Annual fuel use data: Total gallons of fuel consumed by fuel type as of August 15
Highway Performance Monitoring System (HPMS)	<ul style="list-style-type: none"> • Vehicle Miles Traveled (VMT): Estimates of VMT on NHS and all public roads as of August 15
FHWA-supplied emission factors	<ul style="list-style-type: none"> • Carbon dioxide (CO₂) emission factor: CO₂ per gallon for each on-road fuel type that will be used to calculate the GHG metric.

* MPOs would have flexibility to use additional data sources to calculate the measure



Proposed Calculation of Tailpipe CO₂ Emissions (GHG Metric)



- Simple calculation
- Data readily available from all states and already reported
- Nationally consistent for States
- Proportion of VMT on NHS is proxy for proportion of CO₂ on NHS
- MPOs may use other methods, such as VMT from travel demand model & MOVES

Part 3

Reporting and Significant Progress



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Reporting for Proposed GHG Measure

Existing Framework

- State and MPO reports on targets, actual performance, and progress.
- State DOT Biennial Reports
 - Baseline Performance Period Report
 - Mid Performance Period Progress Report
 - Full Performance Period Progress Report
- MPO system performance report in the metropolitan transportation plan.

Proposed Additions

- States and MPOs report total tailpipe CO₂ emissions on the NHS (the GHG metric)
- States and MPOs report total tailpipe CO₂ emissions from on-road sources travelling on all public roads (the step in the calculation prior to computing the GHG metric)
- MPOs only, report metric calculation method

State DOT Reporting

Baseline Performance Period Report

- 2-year and 4-year targets
- Basis for those targets
- Performance at the baseline
- Tailpipe CO₂ emissions for the NHS and all public roads for the reference year and the 2 calendar years preceding the report

Mid Performance Period Progress Report

- Performance at the 2-year point
- Tailpipe CO₂ emissions for the NHS and all public roads for the 2 calendar years preceding the report
- Progress toward achieving 2-year performance target
- Significant progress and target achievement discussion (as applicable)
- Adjusted 4-year target (optional)
- Extenuating circumstances (optional)

Full Performance Period Progress Report

- Performance at the 4-year point
- Tailpipe CO₂ emissions for the NHS and all public roads for the 2 calendar years preceding the report
- Progress toward achieving 4-year performance target
- Significant progress and target achievement discussion (as applicable)
- Extenuating circumstances (optional)

MPO Reporting

Existing Framework

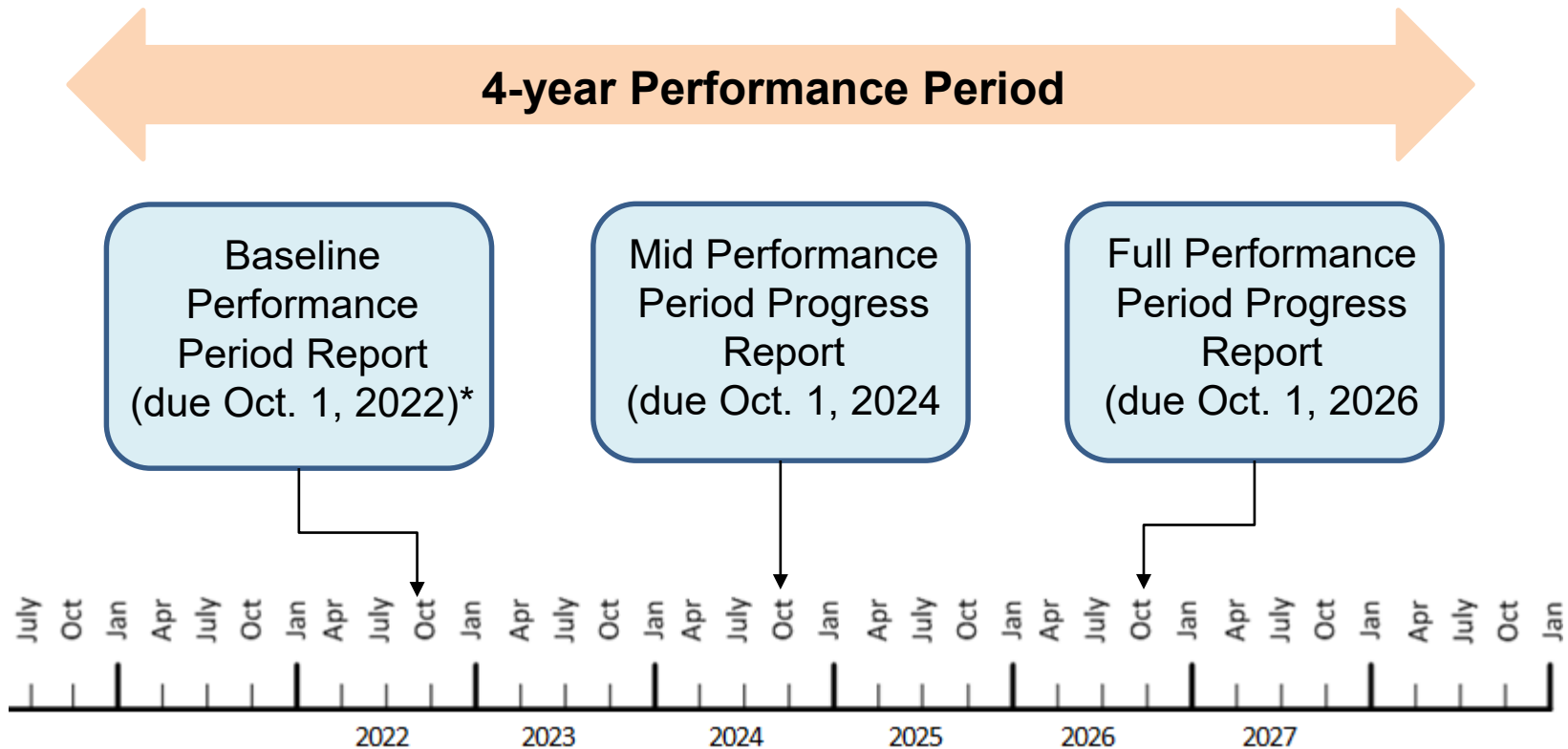
- As with other NHPP measures, MPOs report established targets to their respective State DOT in a manner that is documented and mutually agreed upon by both parties
- Metropolitan Transportation Plan shall include
 - Performance measures and targets
 - Baseline performance and progress towards achievement of targets

Proposed Additions

- Tailpipe CO2 emissions for the NHS and all public roads
- Description of metric calculation method (such as VMT estimates plus MOVES emissions factors)



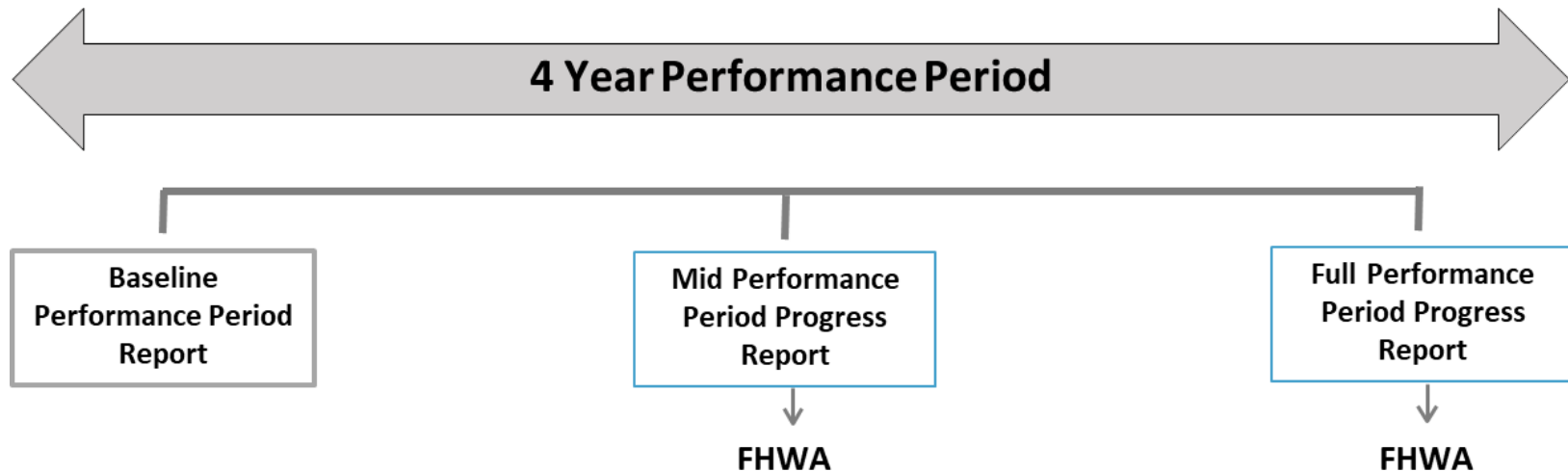
Proposed Timeline for State DOT Biennial Performance Reporting



*Date identified in NPRM; FHWA is seeking comments

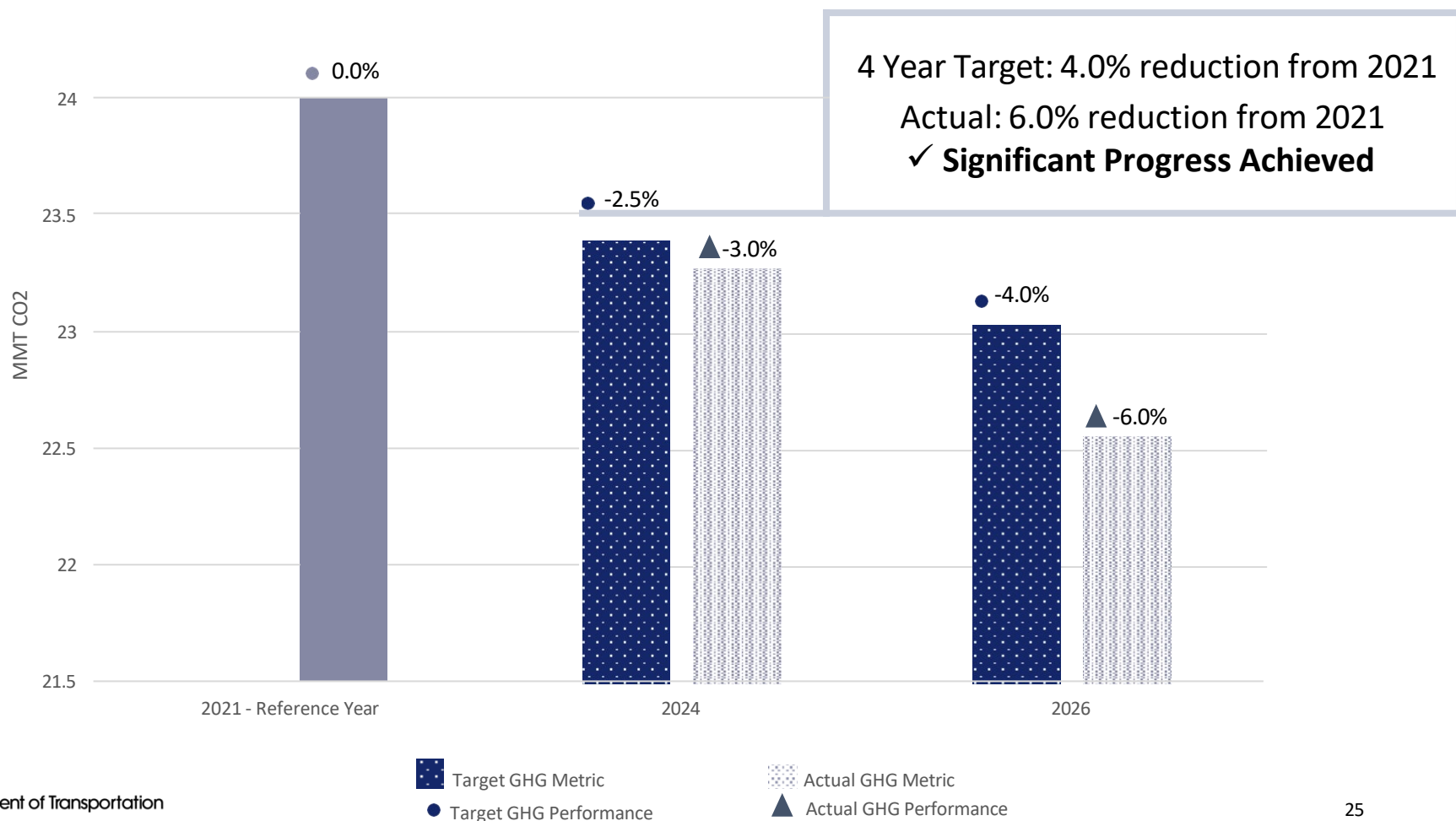


State DOT Significant Progress Determination

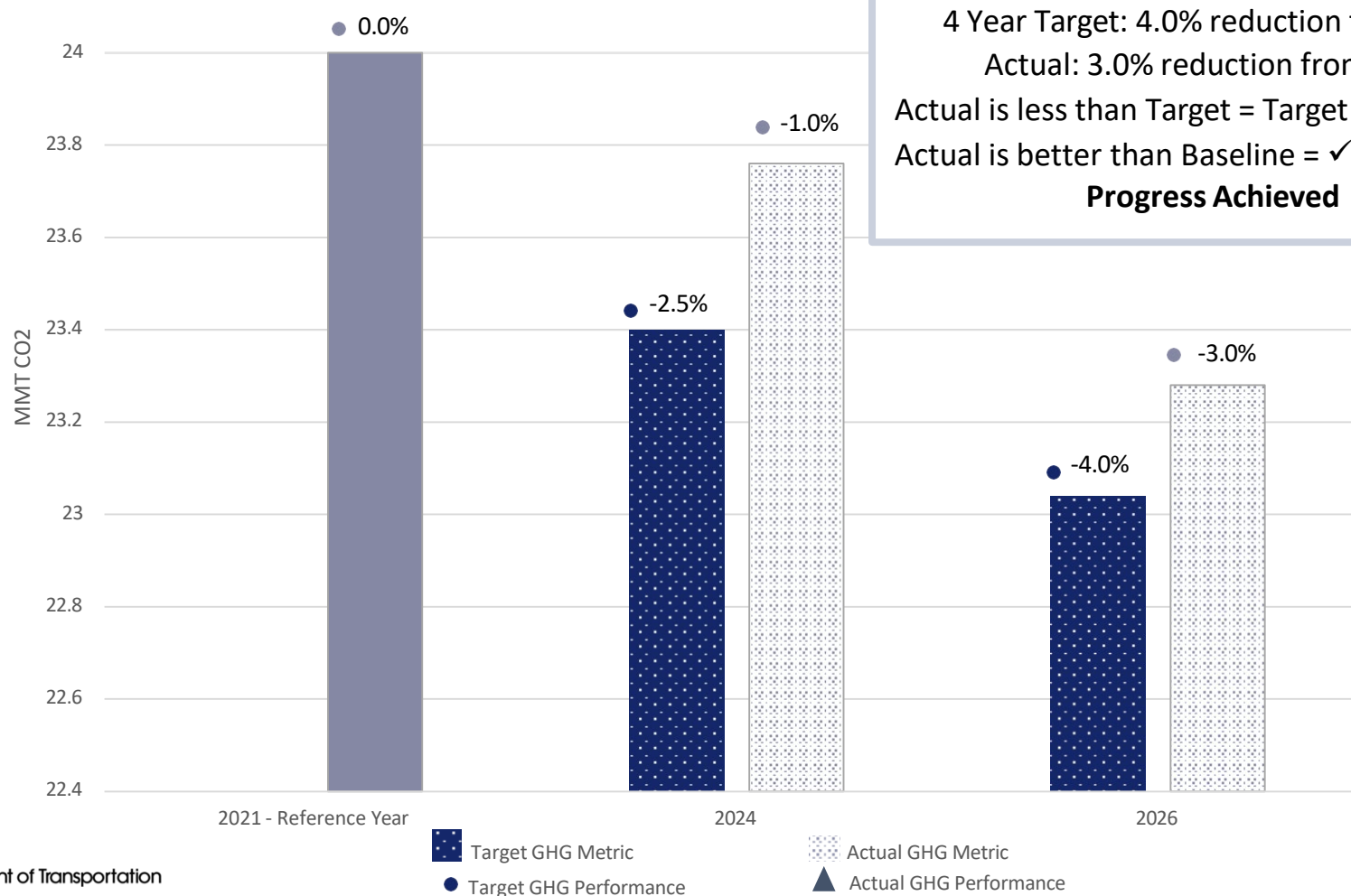


- Significant Progress made if:
 - Actual performance level is better than baseline **OR**
 - Actual performance level is equal to or better than the established target

Significant Progress Example – Equal to/Better than Target



Significant Progress Example – Performance Better than Baseline



Significant Progress Determination

If significant progress
is not made for the
proposed GHG
measure



State DOT must
document the
actions it will take
to achieve its target
in the future

Part 4

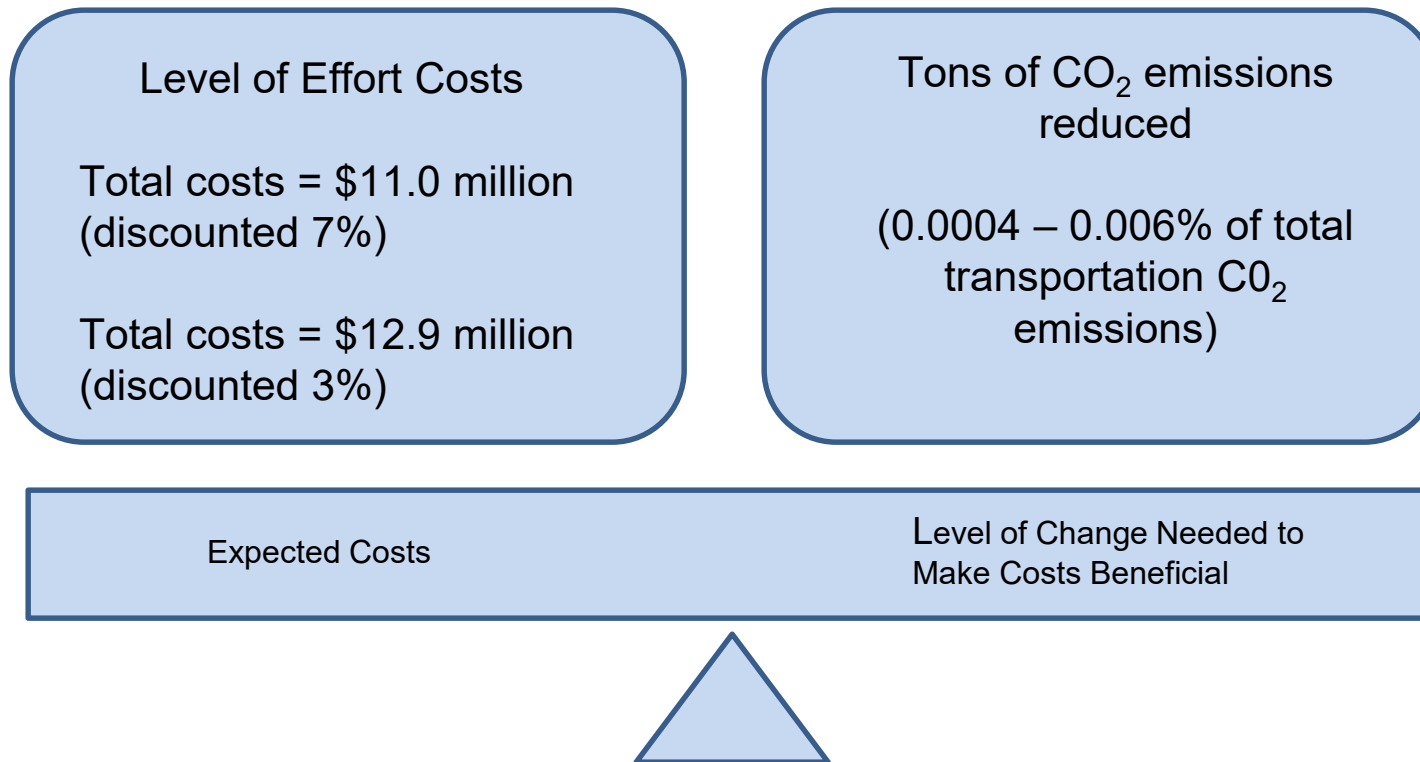
Regulatory Impact Analysis (RIA)



U.S. Department of Transportation
Federal Highway Administration



Regulatory Impact Analysis Findings (2022-2031)



The NPRM contains a summary of the analysis that describes the level of change needed to make the costs beneficial. Refer to the full analysis document in the docket for more details.

Part 5

Request for Public Comments



U.S. Department of Transportation
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Submit comments by October 13, 2022 to:

www.regulations.gov

FHWA-2021-0004

***If you have questions about accessing the docket,
please contact:***

TPMRulemaking@dot.gov



Thank you!

