NESCAUM
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Northeast States for Coordinated Air Use Management
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U.S. Department of Transportation
Docket Operations
Docket ID No. FHWA-2013-0020
M-30
West Building Ground Floor
Room W12-140
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: *Notice of Proposed Rulemaking – National Performance Management Measures; Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and Congestion Mitigation and Air Quality Improvement Program*

Dear Sir/Madam:

The Northeast States for Coordinated Air Use Management (NESCAUM)[1] offer the following comments on the April 22, 2016 Notice of Proposed Rulemaking (NPRM) by the Federal Highway Administration (FHWA) (81 Fed. Reg. 23806-23913) in support of establishing a greenhouse gas (GHG) emission performance measure for state departments of transportation and metropolitan planning organizations. Incorporating a GHG measure into the larger suite of measures designed to improve performance of our interstate and national highway systems will help to ensure progress towards state and national climate goals.

Reducing transportation-related GHG emissions is particularly important in our states. The transportation sector is the source of nearly 50 percent of the region's GHG emissions and is the only sector of the economy in which GHG emissions continue to increase. Achieving our long-term climate goals will require significant GHG emission reductions from the transportation sector as a whole, and from on-road mobile sources in particular. It is both necessary and appropriate that transportation planners track and account for the GHG emissions from on-road sources in a manner that informs climate mitigation efforts. Establishing GHG performance measures is an important step toward that end because it allows planners to assess the comparative benefits of different mitigation policies and transportation funding decisions.

The concept of a GHG transportation performance measure is not new. A number of states and municipalities have already incorporated GHG performance measures into their transportation

[1] NESCAUM is the regional association of state air pollution control agencies representing Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. These comments reflect the majority views of NESCAUM as a state membership organization. Individual NESCAUM member states may submit separate comments regarding issues specific to that state's circumstances, which may differ from the NESCAUM states' majority consensus.

planning processes. For example, Massachusetts metropolitan planning organizations must use greenhouse gas emission impacts as a transportation project selection criterion when reviewing projects for inclusion in the state's transportation plan and the Massachusetts Department of Transportation must evaluate and report annually on the total greenhouse gas emission impacts of the State Transportation Improvement Program.[2] Oregon has set greenhouse gas reduction targets for its metropolitan planning organizations.[3] As discussed in further detail below, many of the primary tools needed to accurately assess GHG emissions from the transportation sector are available and in use.

In the NPRM, the FHWA poses 13 specific questions soliciting input on how a GHG performance measure should be structured and implemented.[4] NESCAUM's responses to select questions are provided below.

Question: Should the measure address all on-road mobile sources, or should it focus only on a particular vehicle type (e.g., light-duty vehicles)?

> *Response:* The GHG performance measure should encompass all on-road mobile sources. While light duty passenger cars and trucks account for more than half of transportation GHG emissions, medium- and heavy-duty trucks are responsible for approximately 22 percent of total transportation emissions. Achieving our national and state climate goals will require emission reductions from the medium- and heavy-duty sector as well. Policy makers need GHG emission information on all on-road sources in order to develop and implement a range of effective emission reduction strategies.

Question: Should the measure be normalized by changes in population, economic activity, or other factors (e.g., per capita or per unit of gross state product)?

> *Response:* The GHG performance measure should be normalized to track GHG transportation emissions on a per capita basis to account for differences in population and economic growth, or other factors, but should also be expressed as total emissions to track overall progress. While normalized emissions provide a useful common point of comparison across measures, total emissions are most relevant to emission inventories and their impact on climate.

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[2] 310 CMR 60.05, *Global Warming Solutions Act Requirements for the Transportation Sector* (January 2015); *see also* Massachusetts Department of Transportation, Greenhouse Gas Reduction, www.massdot.state.ma.us/GreenDOT/GreenhouseGasReduction.aspx (accessed August 18, 2016).

[3] OAR 660 – 044, *Metropolitan Greenhouse Gas Reduction Targets* (May 19, 2011); *see also* Oregon Land Conservation and Development Commission, Planning for Climate Change, Metropolitan Greenhouse Gas Reduction Targets, http://www.oregon.gov/LCD/CLIMATECHANGE/pages/metropolitan_greenhouse_gas_reduction_targets.aspx (accessed August 18, 2016).

[4] 81 Fed. Reg. at 23831.

Question: Should the measure be limited to emissions coming from the tailpipe, or should it consider emissions generated upstream in the life cycle of the vehicle operations (e.g., emissions from the extraction/refining of petroleum products and the emissions from power plants to provide power for electric vehicles)?

Response: While a life cycle approach provides a more comprehensive picture of transportation sector emissions, it also adds a level of complexity to the analysis and places an additional burden on state and metropolitan planners. Further, the science is not well established for accurately quantifying full life-cycle emissions. For consistency across states and to reduce the burden on transportation planners, to account for emissions from high carbon fuels, FHWA could develop a single average emission factor for each state or region that could be updated regularly.

Question: Should the measure include non-road sources, such as construction and maintenance activities associated with Title 23 projects?

Response: Emissions from construction and maintenance activities are not insignificant. Given the availability of tools to quantify this category of emissions, the measure should include these emissions to provide the most complete emissions picture possible.

Question: Should CO_2 emissions performance be based on gasoline and diesel fuel sales, system use (VMT), or other surrogates?

Response: Most state departments of transportation utilize VMT to estimate transportation emissions. Because the system for estimating VMT relies in part on gasoline and fuel sales data, it is easily adaptable to GHG emissions.

Question: Due to the nature of CO_2 emissions (e.g., geographic scope and cumulative effects) and their relationship to climate change effects across all parts of the country, should the measure apply to all states and MPOs? Are there any criteria that would limit the criteria to only a portion of the states or MPOs?

Response: The measure should apply broadly to all states and MPOs. Unlike criteria pollutants such as ground-level ozone and particulate matter, which have relatively greater local or regional impacts, the climate impacts of GHGs are global regardless of the location of the source.

Question: The target establishment framework proposed in this rulemaking requires that states and MPOs would establish 2 and 4 year targets that lead to longer term performance expectations documented in longer range plans. Is this framework appropriate for a CO_2 emissions measure? If not, what would be a more appropriate framework?

Response: Two- and four-year targets that are aligned with the currently required two- and four-year updates to state and regional transportation plans would minimize the

burden on transportation planners. A longer-term, 20-year target would also be appropriate for the long-range transportation plan. All interim targets should be consistent with established long-term GHG reduction goals (*i.e.,* 2020, 2030, 2040, and 2050).

Question: Should short term targets be a reflection of improvements from a baseline (e.g., percent reduction in CO_2 emissions) or an absolute value?

Response: Future year GHG emission reduction targets should be established as a percentage reduction from a base year and should be consistent with existing GHG reduction goals.

Question: What tools are needed to help transportation agencies project future emissions and establish targets for a CO_2 emission measure?

Transportation planners would benefit from the development of a national travel demand model to estimate the emission impacts of projects on mode shifting and long distance travel.

Thank you for the opportunity to comment on the establishment of a transportation GHG performance measure. Please feel free to contact me or NESCAUM Transportation Program Manager Matt Solomon with any questions.

Sincerely,

Arthur N. Marin
Executive Director

cc: NESCAUM directors
David Conroy, EPA R1
Richard Ruvo, EPA R2