



FHWA GREENHOUSE GAS (GHG) EMISSIONS MEASURE

Commonwealth Transportation Board

| Angel Deem, Chief of Policy

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FHWA Transportation Management 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 GREENHOUSE GAS (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

Greenhouse Gas Emissions (GHG) Measure - Background

Proposed GHG Emissions Measure issued July 2022

- **Baseline set as 2021**
- **Required 2- and 4-year targets demonstrating declining CO₂ emissions**
- **Required alignment with federal goals (50% reduction by 2030 & 100% or net-zero reduction by 2050)**

Final GHG Emissions Measure released November 22, 2023

- **Changed baseline to 2022**
- **Changed target requirements**
- **Federal Register publication currently pending**

Greenhouse Gas Emissions Measure – Requirements

By February 1, 2024 -

- **Provide 2022 baseline emissions for transportation**
- **Set initial CO₂ emissions reduction target for 2026**
 - **Provide basis for the target**
 - **Discuss how target relates to other longer-term performance expectations**

In 2026 -

- **Report progress and update 2- and 4-year targets**

GHG Emissions Coordination

GHG baseline and target must be coordinated considering existing Commonwealth requirements:

- **Virginia Code § 45.2-1706.1. Commonwealth Clean Energy Policy**
 - **Goal of net-zero GHG emissions in all sectors by 2045**
 - **Support zero emission targets by reducing the carbon intensity of the transportation sector**
- **Virginia Code § 10.1-1307.04. Greenhouse Gas Emissions Inventory**
 - **Department of Environmental Quality (DEQ) responsible for statewide baseline and projections of all GHG emissions**
- **Virginia Code § 45.2-1710. Development of the Virginia Energy Plan**
 - **Virginia Energy to identify actions to achieve, no later than 2045, a net-zero carbon energy economy for all sectors**

Next Steps

- **VDOT coordinating with Office of Intermodal Planning and Investment, DEQ, and Virginia Energy on GHG emissions data, projections, and targets**

