

# Every Day Counts

Integrating GHG Assessment and Reduction Targets in  
Transportation Planning



U.S. Department of Transportation  
**Federal Highway Administration**



# Every Day Counts – GHG Initiative



## Integrating GHG Assessment and Reduction Targets in Transportation Planning



# GHG Initiative Focus

- Address sources and solutions to reduce GHG emissions from the transportation system
- Focus on the role transportation planning can play
- Lift up notable practices from States and MPOs

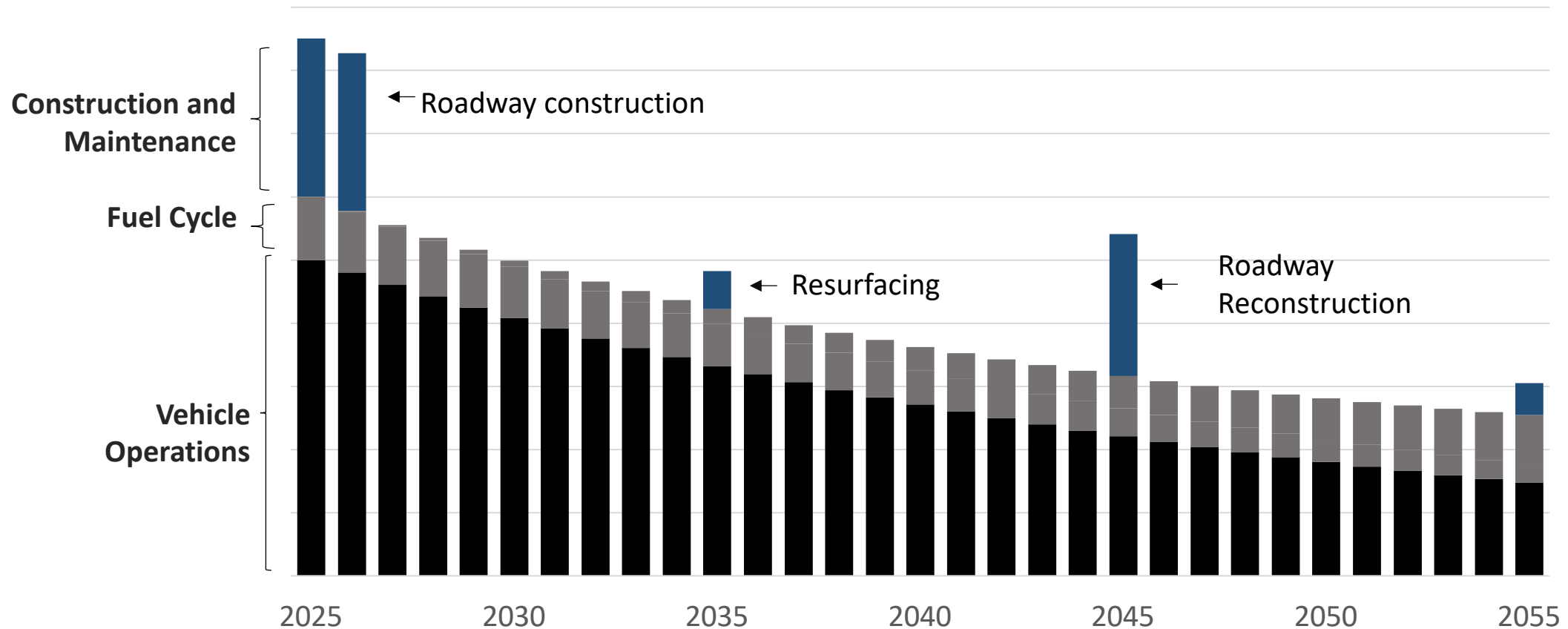
# Differences Between Criteria Pollutants and GHG Emissions

- Criteria pollutants are short-lived with local impacts
- GHGs are long-lived with global impacts

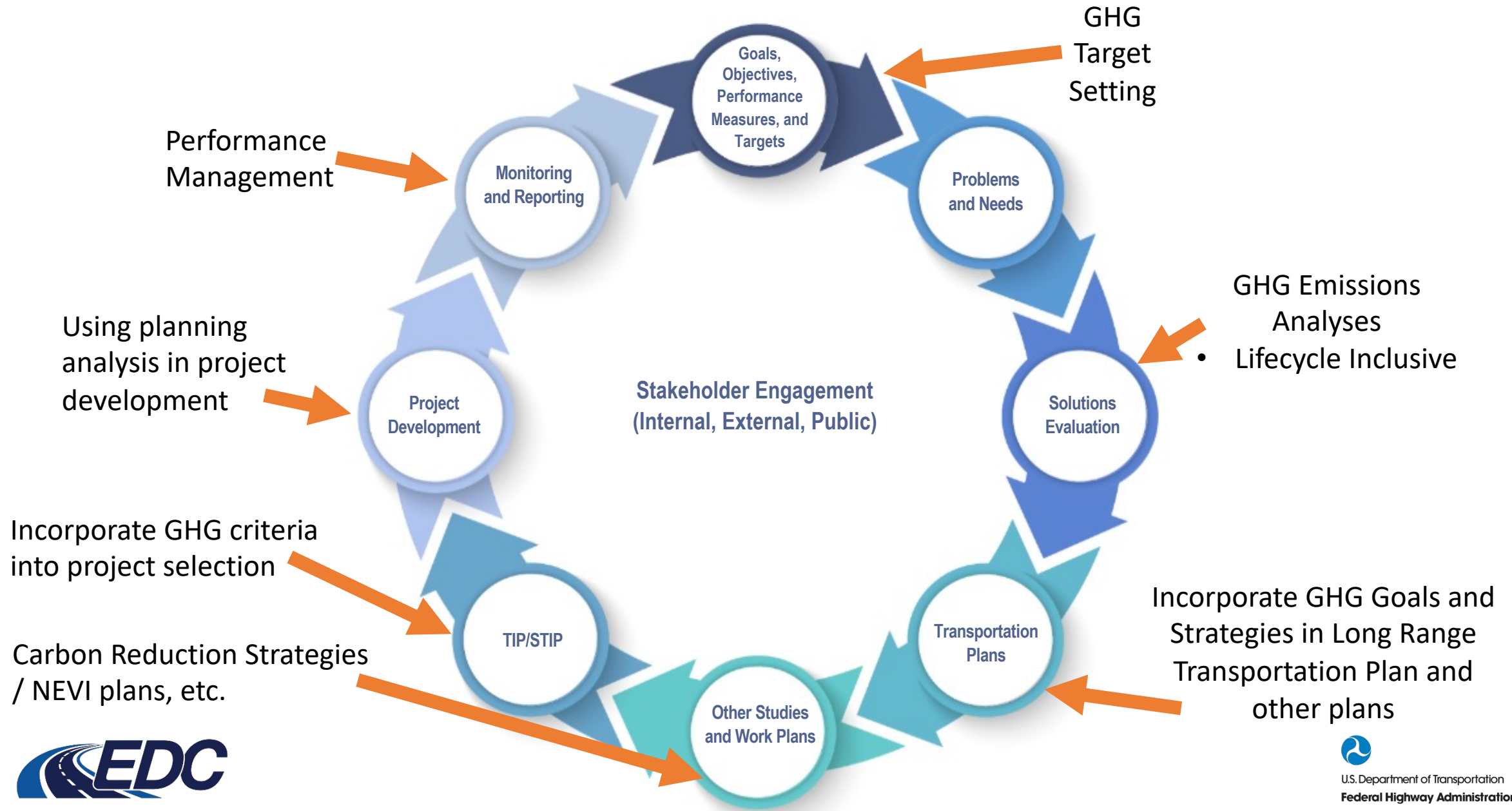
# The GHG Footprint of Transportation is Greater than its Tailpipe Emissions

Fuels	Vehicle Operations	Infrastructure	Vehicles
<ul style="list-style-type: none"><li>• Well-to-Pump emissions</li><li>• Extracting petroleum, mining coal for electricity, growing and harvesting biofuel; transport; refining; distribution</li><li>• Disposal of products</li></ul>	<ul style="list-style-type: none"><li>• Tailpipe emissions</li></ul>	<ul style="list-style-type: none"><li>• Energy and fuel used in raw material extraction &amp; production of construction materials</li><li>• Energy and fuel used by construction and maintenance vehicles</li></ul>	<ul style="list-style-type: none"><li>• Raw material extraction, processing, transport; manufacture; assembly, distribution</li><li>• Maintenance</li><li>• Disposal of vehicles</li></ul>

# Considering Lifecycle Processes in GHG Analysis



# Incorporating GHG Emissions Across Planning





# Information & Approach

## Key Information Provided

- Key methods/processes to incorporate GHG at each stage of the planning process
- Issues to consider to integrate GHGs into transportation planning & decision-making
- Best practices from across the country for different stages of the planning process

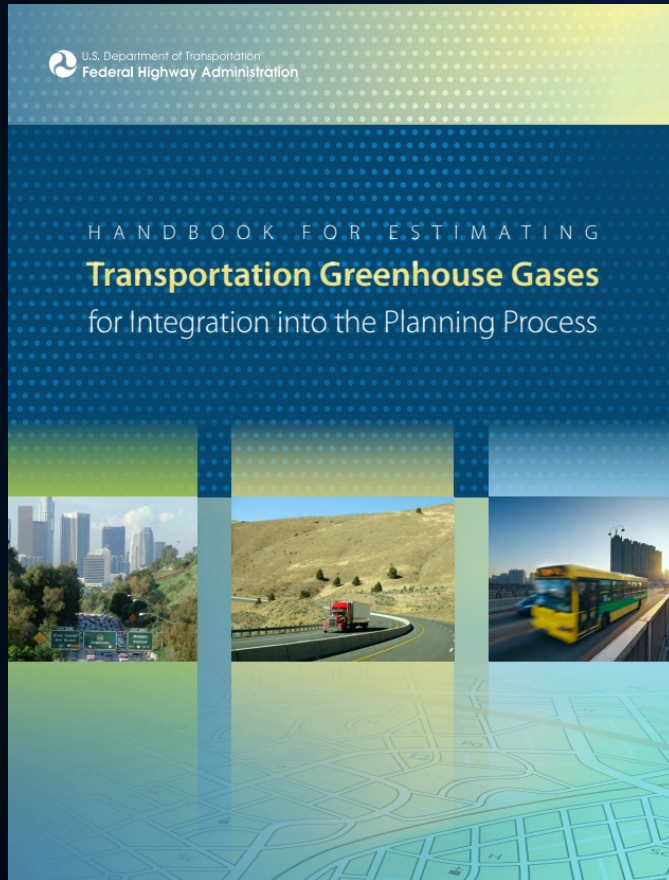
## Benefits of this Approach

- Allows for all agencies (regardless of technical capacity or size) to start integrating GHG into their planning process
- Incorporates GHGs into existing planning structures, offers flexibility

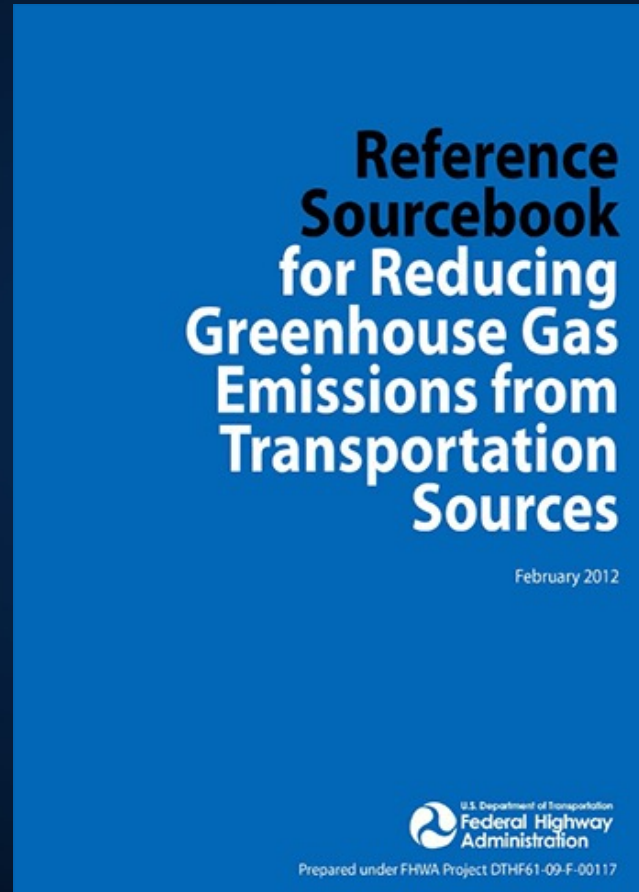


# Initiative Resources

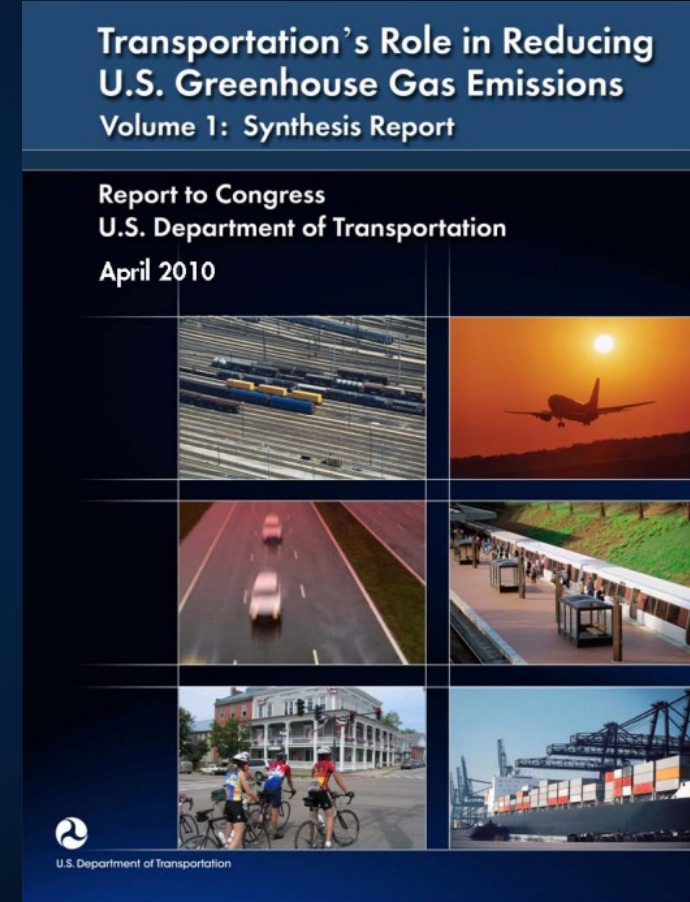
# Existing FHWA Resources



[https://www.fhwa.dot.gov/environment/sustainability/energy/publications/ghg\\_handbook/ghghandbook.pdf](https://www.fhwa.dot.gov/environment/sustainability/energy/publications/ghg_handbook/ghghandbook.pdf)



[https://www.fhwa.dot.gov/environment/sustainability/energy/publications/reference\\_sourcebook/index.cfm](https://www.fhwa.dot.gov/environment/sustainability/energy/publications/reference_sourcebook/index.cfm)



<http://www.reconnectingamerica.org/assets/Uploads/DOTClimateChangeReport-April2010-Volume1and2.pdf>

# Initiative Products

Webinars

Case Studies

GHG Analysis  
Handbook Update

Regional  
Stakeholder Peer  
Exchanges

GHG & Planning  
Wheel Handbook

National  
Roundtable on GHG  
in Transportation

GHG & Scenario  
Planning Peer Event

Web Portal/  
Clearinghouse

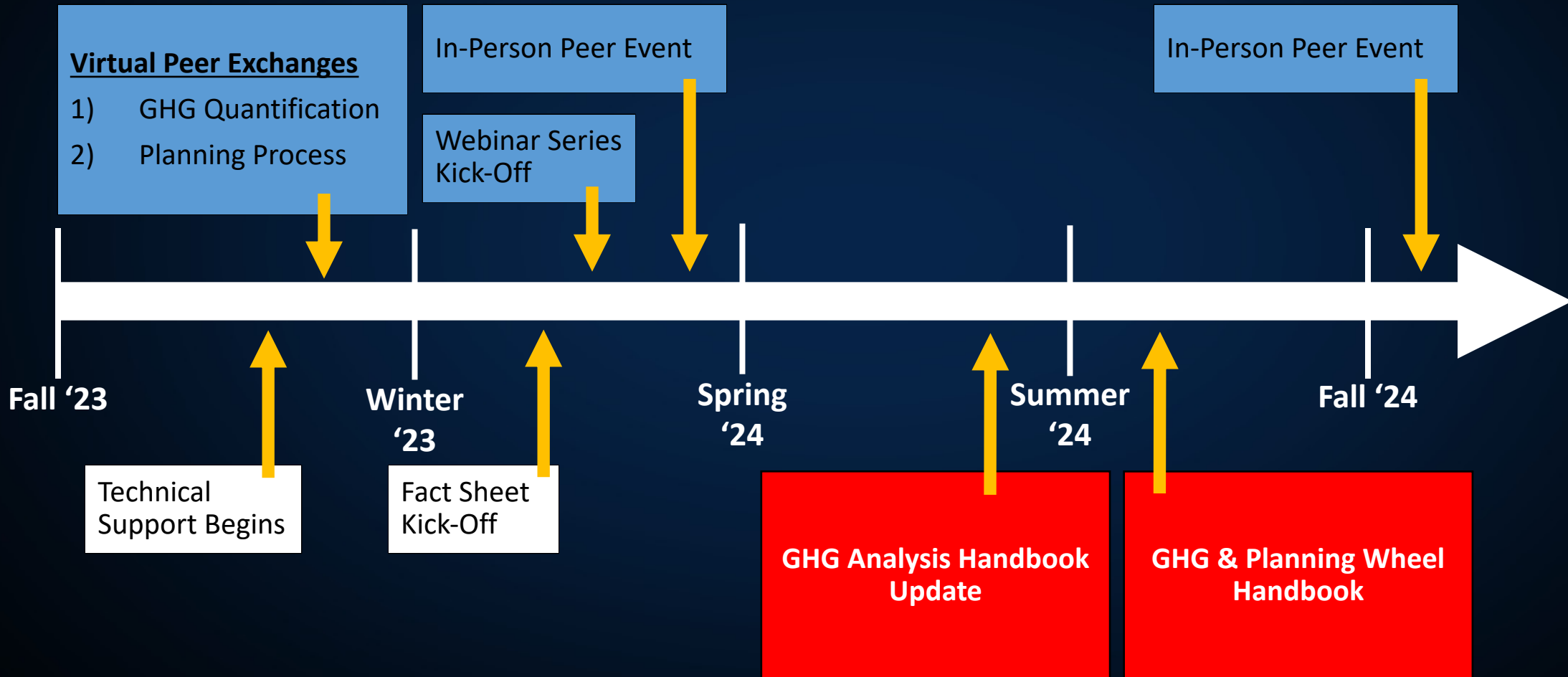
SME Pool /  
Community of  
Practice

Communication  
Strategies



Survey of State of  
Practice

Target Setting

# Upcoming Events and Timing



# Initiative Implementation Stages



Innovation Stage	What Does This Look Like?
<b>Institutionalized</b>	GHG considered in all phases of the planning wheel to support a comprehensive GHG program. Extensive involvement of senior officials and coordination with external partners.
<b>Assessment</b>	GHG included in many portions of the planning wheel; like goals/objectives, performance measures, project analysis.
<b>Demonstration</b>	GHG included some portions of the planning wheel. Formal roles and responsibilities established within the agency.
<b>Development</b>	Minimal inclusion of GHG in the planning wheel. Some coordination across agency functional areas.
<b>Not Implementing</b>	No inclusion of GHG in the planning process

JUMP (+2 levels)

WALK (+1 level)

STAND  
(+0 level)

Institutionalized

CO, MA

Assessment

Demonstration

DC, MN, NC,  
NY, VA, OR

Development

IL, NV, TX,  
UT, VT,  
Fed Lands

DE, IN, KY, MO,  
NJ, RI, WA, WI

CT, FL, ME,  
MI

Not Implemented

KS

IA, MT, NE

# GHG Transportation Performance Measures (TPM)- Final Rule

FHWA has issued a final rule that establishes a greenhouse gas (GHG) performance measure for State Departments of Transportation (State DOTs) and Metropolitan Planning Organizations (MPOs).

The measure is part of the National Highway Performance Program and assesses the percent change in carbon dioxide (CO<sub>2</sub>) emissions on the National Highway System relative to 2022 baseline levels (23 CFR 490.507(b)).



# GHG Transportation Performance Measures (TPM)- Final Rule

- Consistent with the framework of Transportation Performance Management (TPM), State DOTs will establish 2- and 4-year statewide emissions reduction targets, and MPOs will establish 4-year emissions reduction targets for their metropolitan planning areas (§ 490.105(e)-(f)).
- In addition, the rule requires certain MPOs serving UZAs with populations of 50,000 or more to establish additional joint targets. FHWA will soon be posting applicability tables to help identify MPOs that are required to set joint UZA targets.

# GHG Transportation Performance Measures (TPM)- Final Rule

State DOTs and MPOs have the flexibility to set targets that work for their respective climate change policies and other policy priorities, so long as they are declining. State DOTs and MPOs are also required to report on their progress in meeting the targets.

The final rule applies to the 50 States, the District of Columbia, and Puerto Rico. To realize the benefits of a GHG measure as soon as is practicable, State DOTs will first establish targets and report those targets by February 1, 2024. Subsequent targets will be established and reported no later than October 1, 2026, in line with other TPM measures (§490.107(b)-(d)).

# GHG Transportation Performance Measures (TPM)- Final Rule

The U.S. Department of Transportation Climate Change Center webpage lists a number of GHG analysis tools and resources that can be used to evaluate the impact of GHG reduction strategies and help set targets. CO2 emissions factors for use in State reporting in 2024 are available on the State Initial GHG Report form, which will be available through the docket of the final rule.



# Thank you

Contacts:

Kirk D. Fauver

[Kirk.fauver@dot.gov](mailto:Kirk.fauver@dot.gov)

Jose Campos

[Jose.campos@dot.gov](mailto:Jose.campos@dot.gov)



U.S. Department of Transportation  
**Federal Highway Administration**

