Transportation GHG Emission Outcomes from Bipartisan Infrastructure Law in New Jersey

Webinar

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Overview

• Opportunity for NJ to further decarbonize transportation

• We estimate $16.7 billion in surface transportation funding for NJ in the Bipartisan Infrastructure Law (BIL)

• A range of emissions outcomes could result from investment scenarios modeled using GCC’s Transportation Investment Strategy Tool

• State policies and investment decisions will be critical to bend the curve down on transportation emissions
Transportation & Climate Leadership in New Jersey

• Transportation accounted for 39% of statewide GHG emissions in 2019
• Estimated 87% reduction in transportation emissions needed to meet NJ 80x50 climate goal
• NJ is a leader on EV regulations and investments
• BIL is an opportunity to leverage federal funding to further shift transportation away from fossil fuel-powered vehicles
Inputs: Two illustrative/potential investment scenarios over 5 years
BIL includes $599 billion for transportation - NJ share is ~ $16.7 billion
BIL Results for NJ: Potential to bend the curve down, but investment decisions matter

Projected Emissions by Scenario (MMT CO2)

- Baseline GHG
- L Scenario GHG
- H Scenario GHG

Baseline GHG

+1.9%
-1.0%

2017 2019 2021 2023 2025 2027 2029 2031 2033 2035 2037 2039

2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032
**BIL long-term**: Percentage of funding invested in highway expansion vs. other strategies is main driver of emissions outcomes

**High-Emission Scenario**

- Highway Expansion: +4.5 MMT CO₂
- LD EVs & EVSE
- MD/HD EVs
- Ped, Bike, & Misc.
- Freight & Operations
- Resurfacing
- Transit
- Net

**Low-Emission Scenario**

- Highway Expansion: -4.7 MMT CO₂
- LD EVs & EVSE
- MD/HD EVs
- Ped, Bike, & Misc.
- Freight & Operations
- Resurfacing
- Transit
- Net

Note: Charts show cumulative MMT of CO₂ emissions, relative to the GHG baseline, 2022 to 2040.
Very low-emission scenario: could potentially double long-term reductions

Investment Mix

- Transit: 40%
- Resurfacing: 20%
- LD EVs & EVSE: 2%
- MD/HD EVs: 9%
- Ped, Bike, & Misc.: 9%
- Freight & Operations: 4%
- Other: 16%

Potential Long-term Emission Reductions for NJ

Cumulative MMT of CO₂ emissions, relative to the GHG baseline, 2022 to 2040

-10.5 MMT CO₂
BIL Results for NJ: 5% range in emissions outcomes, in 2032

Projected Emissions by Scenario (MMT CO2)

- Baseline GHG
- VL Scenario GHG
- L Scenario GHG
- H Scenario GHG

Baseline GHG:
- 2017: 35
- 2023: 26
- 2029: 22
- 2035: 19
- 2041: 17

+1.9% growth
-1.0% decrease
-2.9% decrease
Policy Considerations

• Transportation investment decisions affect emissions outcomes.

• The BIL presents an opportunity to reduce emissions, particularly if the whole investment portfolio is aligned with climate goals.

• DOTs could start accounting for GHG emissions when making investment decisions.

• Climate-minded transportation project proposals could bring in additional federal funding through competitive federal grant programs.
Thank you!

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