Potential Emissions Impacts of the Infrastructure Investment and Jobs Act (IIJA) & TCI-P Update

Presentation to the Mitigation Working Group of the Maryland Commission on Climate Change

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James Bradbury, Georgetown Climate Center
Presentation Outline

1. TCI-P Status Update

2. Potential GHG Impacts of the Infrastructure Investment and Jobs Act (IIJA), or Bipartisan Infrastructure Law
   • Methodology
   • Results
   • Key findings and policy considerations

3. Estimating GHG reductions by strategy
Georgetown Climate Center
A Resource for State and Federal Climate Policy

• Launched in 2009 as a resource to states

• Works at the nexus of federal-state policies

• Supports policymakers through research, facilitation, and convening
TCI-P Status: The Building Blocks for TCI-P are Complete

• The TCI-P Model Implementation Plan is a framework for each jurisdiction to detail how they plan to meet program goals and commitments

• The TCI-P Model Rule is a common framework for multi-state regulations of covered fuel suppliers

• The TCI-P Framework for Public Engagement outlines principles to help ensure meaningful public participation

• TCI Strategies for Regional Collaboration outlines plans to achieve other shared goals

Website: https://www.transportationandclimate.org/
Analysis of BIL & Results

https://www.georgetownclimate.org/
BIL Analysis Inputs: Two investment scenarios for $599 billion

**BIL High-Emission Scenario**
- Transit, Freight, & Operations: 34%
- Highway Expansion: 27%
- Highway State of Good Repair: 23%
- Ped., Bike, & Misc: 4%
- LD EVs: 1%
- MD/HD EVs: 1%
- Other: 10%

**BIL Low-Emission Scenario**
- Transit, Freight, & Operations: 39%
- Highway State of Good Repair: 38%
- Highway Expansion: 4%
- Ped., Bike, & Misc: 5%
- LD EVs: 2%
- MD/HD EVs: 3%
- Other: 9%
BIL Results: Potential to bend the curve down, but investment decisions matter

- Modest estimated emission reductions
  - but real potential to bend the curve, in the near-term

- Program design and implementation decisions could have significant impact on outcomes in near- and long-term
BIL long-term: Percentage of funding invested in highway expansion vs. other strategies is main driver of emissions outcomes

Note: Charts show cumulative MMT of CO₂ emissions, relative to the GHG baseline, 2022 to 2040.
Policy Considerations

• BIL includes flexibility but no requirements for highway spending to go toward emission-reducing investment strategies.

• For BIL to meaningfully bend the curve down on emissions, concerted efforts will be needed at all levels of government
  • Identify the barriers to shifting highway spending priorities away from expansion projects and toward maintenance and low-carbon strategies
  • Find federal, state and local partners who can help to address barriers and take advantage of flexible highway funding

• Still don’t have full picture of which programs the Administration will include in Justice 40 Initiative – or what this will mean for state implementation
Estimating GHG Reductions from Transportation Strategies
Estimating GHG reductions by strategy

Transportation Investment Strategy Tool – our approach

$ investment by strategy • By state • By area type*

Impact per $ • By strategy • By area type*

Impact • GHG • VMT • Delay • Costs • Safety • Air pollution • Phys. activity

*Area type = urban core, urban, suburban, rural
Opportunities and challenges of estimating the GHG impacts of specific transportation measures

• Many tools available for a variety of purposes
  • Climate action planning
  • Vehicle electrification
  • Transportation planning
  • Project prioritization

• Which tools are needed to help transportation investments support efforts to achieve GHG reduction goals?
Questions and Discussion

GCC Issue Brief summarizing modeling results & findings:
https://www.georgetownclimate.org/articles/federal-infrastructure-investment-analysis.html