

Transportation & Climate Initiative

Overview

Metropolitan Washington Council
of Governments, Climate, Energy
and Environment Policy
Committee

Washington Auto Show

January 23, 2020

James Bradbury
Mitigation Program Director
Georgetown Climate Center

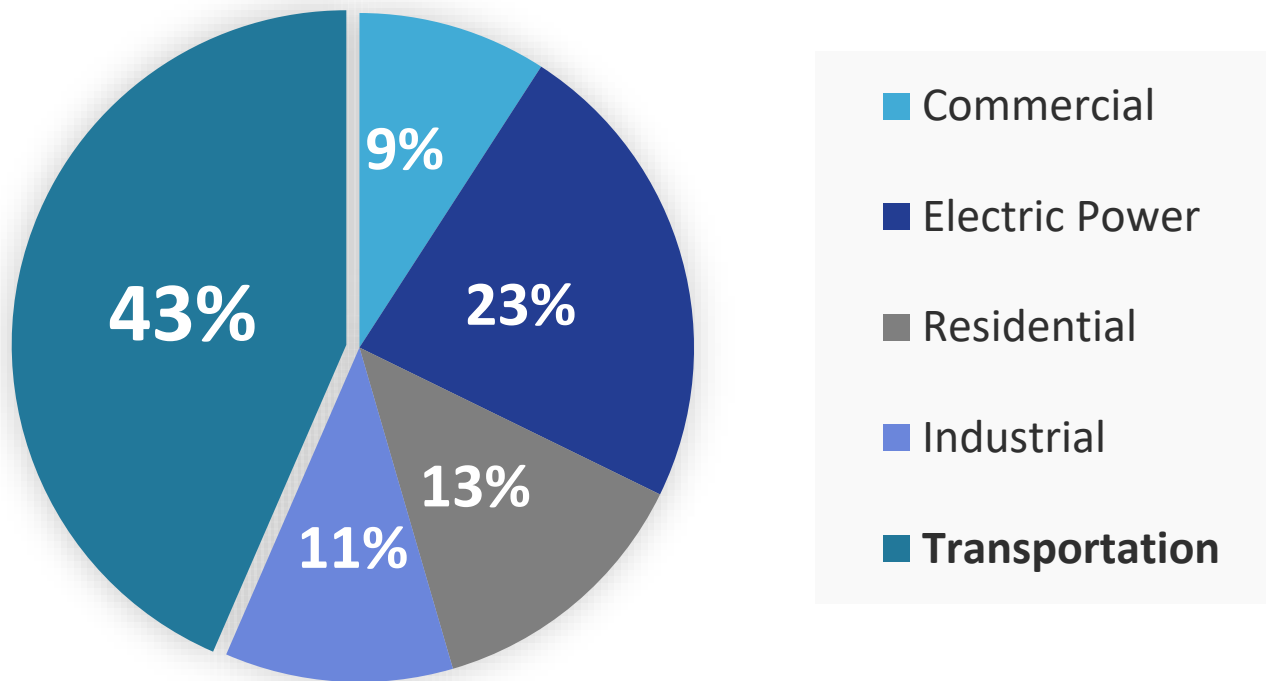
Georgetown Climate Center: A Resource for State and Federal Climate Policy

- Launched in 2009 as a resource to states
- Works at the nexus of federal-state policies
- Supports states through research, facilitation, and convening



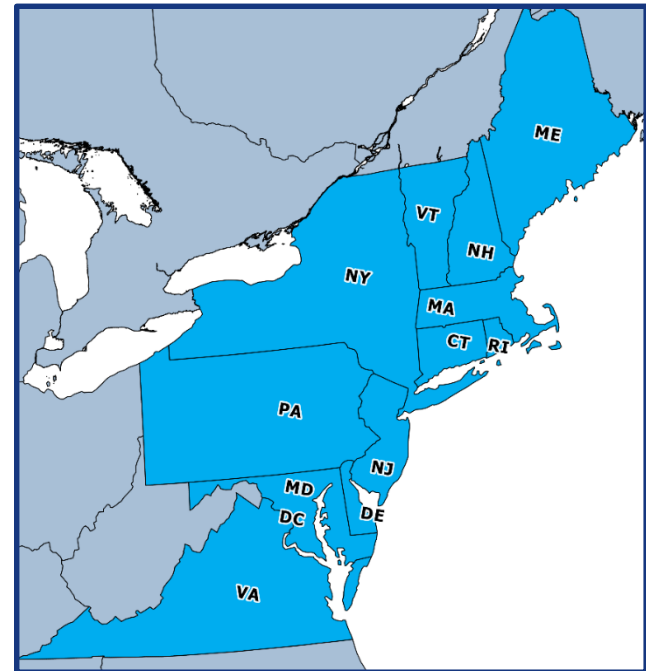
Transportation is the Largest Source of Carbon Pollution in the TCI Region

Sources of Carbon Dioxide Emissions in the TCI Region, 2017



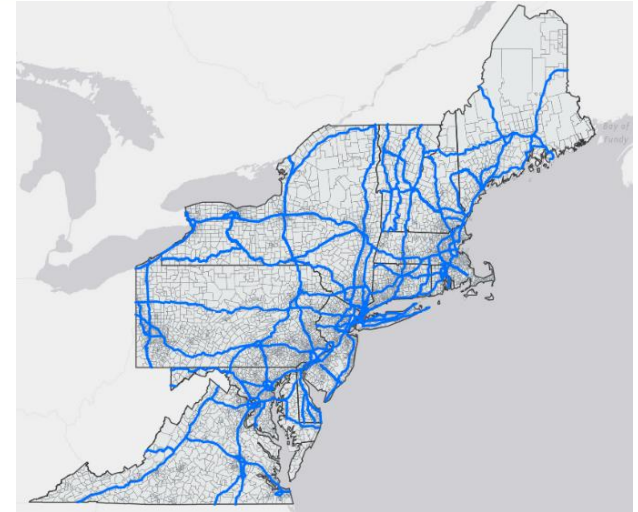
Transportation & Climate Initiative

- 12 northeast and mid-Atlantic states and the District of Columbia
- Transportation, energy and environmental agencies working together to reduce GHG emissions from transportation
- Georgetown Climate Center provides facilitation, conducts research, and supports the states

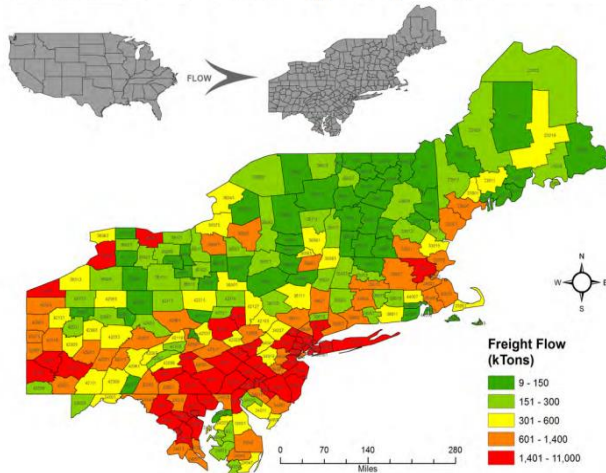


- **72 million people**
- **\$5.3 trillion in GDP**
- **52 million registered vehicles**

TCI States Have Worked Together Since 2010 on Clean Vehicles, Freight Analysis, and Sustainable Communities Policies



Freight Flow to Northeast Counties from U.S. States Outside of the Northeast Region, by Weight



J. Winebrake (2012)



2018 TCI Regional Policy Announcement

- Announcement by 10 jurisdictions in December 2018
- **“design a regional low-carbon transportation policy proposal that would cap and reduce carbon emissions from the combustion of transportation fuels... and allow each TCI jurisdiction to invest proceeds from the program into low-carbon and more resilient transportation infrastructure”**

- CT, DE, MD, MA, NJ, PA, RI, VT, VA, D.C.



TRANSPORTATION & CLIMATE INITIATIVE STATEMENT

December 18, 2018

The Northeast and Mid-Atlantic states are taking steps to develop cleaner transportation systems that reduce congestion, promote walking, bicycling and transit use, support innovation and economic growth, improve air quality, help communities become resilient to extreme weather events, and equitably share the benefits and burdens among users. Since 2010, we have collaborated through the Transportation and Climate Initiative (TCI), recognizing that our states and communities in this region and across the United States are already experiencing the serious impacts of climate change. Emissions from transportation account for the largest portion of the region's carbon pollution and a recent report by the Intergovernmental Panel on Climate Change found that ambitious reductions are needed within the next decade to avoid dangerous impacts to public health, infrastructure, and the environment. Advancing low-carbon transportation solutions presents an opportunity for our region to improve the way people and goods move from place to place while addressing the threats posed by carbon and other pollution.

TCI member jurisdictions recognize that a regional low-carbon transportation policy would enable us to cut carbon pollution in line with our emission reduction goals. In 2017, several TCI jurisdictions committed to engage with the public in a conversation about the "opportunities and challenges, the benefits we would all like to see in the transportation system of the future, and the policies that will enable us to realize this future together." Over the past year, dozens of TCI state officials facilitated regional listening sessions with 500 stakeholders to discuss low-carbon transportation goals, needs, and policy solutions. A diverse group of stakeholders in the region have expressed strong interest in the potential for establishing a market-based policy to reduce carbon pollution from the transportation sector. Public input and other expert policy analyses underscore the potential economic, environmental, and public health benefits of reinvesting the proceeds from such a program into more clean transportation options, such as public transit, transit-oriented development, zero-emission vehicles, innovative efficiency strategies, and other solutions that move people and goods more efficiently while generating less pollution, including in environmental justice communities.

Informed by input from hundreds of stakeholders and expert analysis, the participating TCI jurisdictions will design a regional low-carbon transportation policy proposal that would cap and reduce carbon emissions from the combustion of transportation fuels through a cap-and-invest program or other pricing mechanism, and allow each TCI jurisdiction to invest proceeds from the program into low-carbon and more resilient transportation infrastructure. This proposed program, when combined with existing programs and complementary policies, will be designed to achieve substantial reductions in transportation sector emissions and provide net economic and social benefits for participating states.

www.transportationandclimate.org

www.transportationandclimate.org/nine-states-and-dc-design-regional-approach-cap-greenhouse-gas-pollution-transportation

2019 - TCI States Further Engaged Communities and Stakeholders and Conducted Analysis



The screenshot displays the Transportation & Climate Initiative (TCI) website. The header includes the TCI logo and the text "TRANSPORTATION & CLIMATE INITIATIVE Of the Northeast and Mid-Atlantic States". A "STAFF LOGIN" button is visible in the top right. The navigation menu contains links for HOME, ABOUT, OUR WORK, NEWS, CONTACT US, and TCI'S REGIONAL POLICY DESIGN PROCESS 2019. The main content area is titled "TCI's Regional Policy Design Process 2019" and is dated "Updated June 19, 2019". A section titled "On this page:" lists links for "About the policy design process", "Public workshops", "Webinars", and "Submit your input". A sidebar on the right provides a "2019 TCI Regional Policy Design Overview" with four phases: Phase 1 (January-March 2019), Phase 2 (April-July 2019), Phase 3 (August-November 2019), and Phase 4 (December 2019). A "TCI Leadership and Workgroup Co-Chairs" section lists the "Leadership Team" with Chair Kathleen Theoharides.

TRANSPORTATION & CLIMATE INITIATIVE
Of the Northeast and Mid-Atlantic States

STAFF LOGIN

HOME ABOUT OUR WORK NEWS CONTACT US TCI'S REGIONAL POLICY DESIGN PROCESS 2019

Home

TCI's Regional Policy Design Process 2019

Updated June 19, 2019

On this page:

- [About the policy design process](#)
- [Public workshops](#)
- [Webinars](#)
- [Submit your input](#)

About TCI's regional low-carbon transportation policy design process

Transportation and Climate Initiative (TCI) states are developing a regional policy for low-carbon transportation following the December 18, 2018 [statement](#) by nine states and Washington DC committing to:

"...design a regional low-carbon transportation policy proposal that would cap and reduce carbon emissions from the combustion of transportation fuels through a cap-and-invest program or other pricing mechanism ... [and] ... to complete the policy development process within one year, after which each jurisdiction will decide whether to adopt and implement the policy."

TCI jurisdictions have designed a workplan with the goal of developing a policy that accelerates the transition to a low-carbon transportation future and delivers a better, cleaner, more resilient transportation system that benefits all our communities, particularly those underserved by current transportation options and disproportionately burdened by pollution, while making significant reductions in greenhouse gases and other harmful air pollution across the region. With ongoing facilitation support from the Georgetown Climate Center, TCI states are planning and beginning to implement a range of activities to ensure that the final proposed policy reflects further [input from stakeholders](#), rigorous technical analysis, and consultation with leading experts.

2019 TCI Regional Policy Design Overview

Phase 1 (January-March 2019)

- Identify milestones and finalize workplan schedule and processes

Phase 2 (April-July 2019)

- Conduct modeling and policy analysis
- Conduct further stakeholder engagement
- Coordinate activities to inform decision-making

Phase 3 (August-November 2019)

- TCI state leadership reviews input from stakeholders and expert analysis to develop specific regional policy options to share with the public, inviting feedback.

Phase 4 (December 2019)

- Public release of a finalized regional low-carbon transportation policy proposal.

TCI Leadership and Workgroup Co-Chairs

Leadership Team

Chair: Kathleen Theoharides, Secretary, Massachusetts Executive Office of Energy and Environmental Affairs

Stakeholder Engagement

Modeling and Analysis

State Working Groups

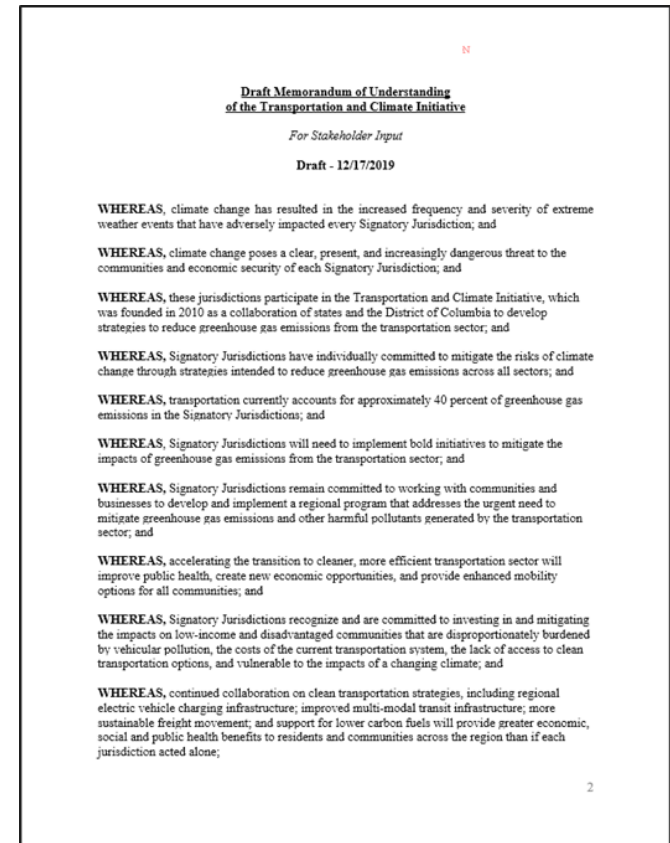
TCI States Engaged with People, Communities, and Businesses

- Three regional TCI workshops with participation of 1,000 people
- Over 1,200 submissions to TCI public input portal
- Community engagement by individual states



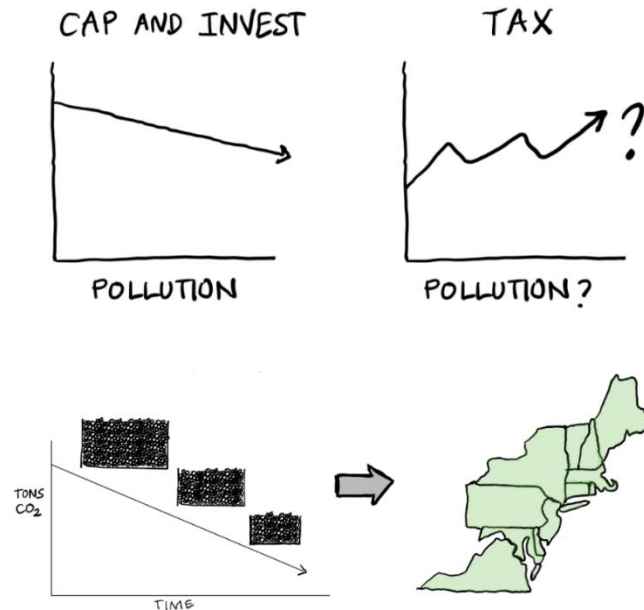
Draft Memorandum of Understanding

- Draft MOU Includes:
 - Program Goals & Schedule
 - Elements of a Model Rule
 - Investments & Equity
 - Regional Organization
 - Program Monitoring & Review
- Inviting Input through February 28, 2020
- Final MOU: Spring 2020



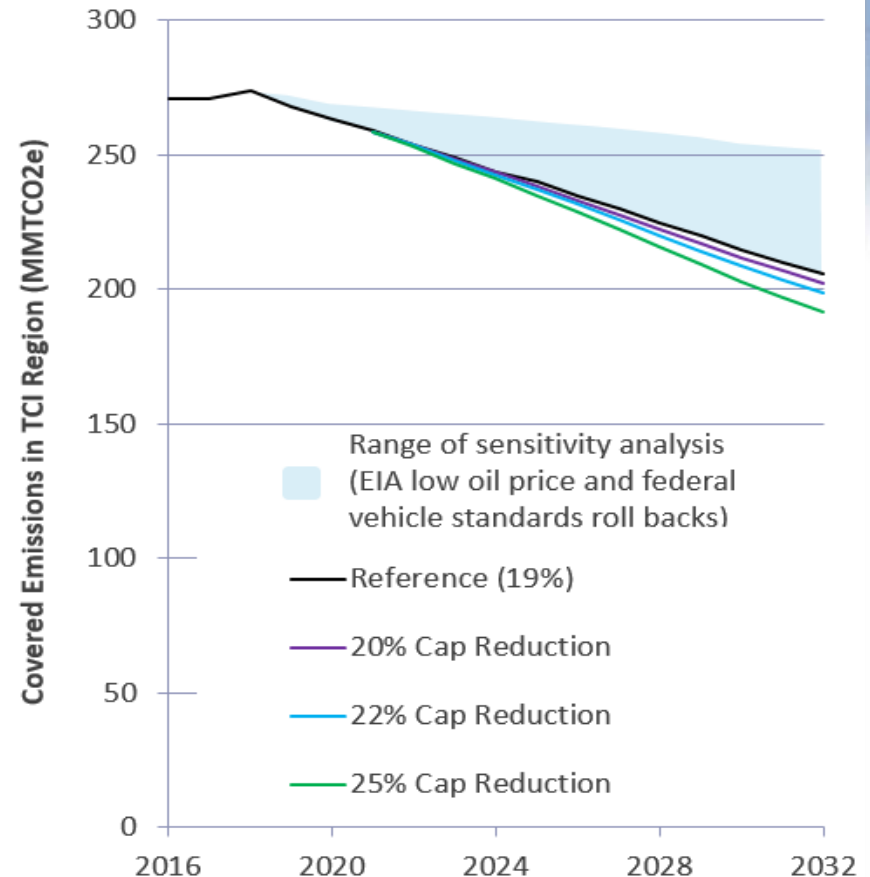
Features of Regional Cap & Invest Approach

- Guarantees Pollution Reduction
- Regional Consistency of Allowance Prices
- Offers Flexibility in Compliance
- Drives Innovation and Investments in Low Carbon Transportation Programs



Emissions Cap Scenarios Results: Projected Transportation CO₂ Emissions

- A declining emissions cap could lock in decreases in CO₂ emissions that are expected through 2032 and drive additional reductions.
- More stringent caps result in greater emissions cuts and more proceeds for investments.
- Initial annual proceeds range from \$1.4 billion at start in the 20% case up to \$5.6 billion in the 25% case.



Range of Clean Transportation Investments in Modeled TCI Scenarios

- Modeled annual clean transportation investments by strategy in 2032
- Combined \$1.84 billion to \$6.92 billion in modeled scenarios



\$554 million to \$2 billion

Electric cars, light trucks and vans



\$425 million to \$1.6 billion

Low & zero-emission buses and trucks



\$333 million to \$1.2 billion

Transit expansion and upkeep



\$259 million to \$970 million

Pedestrian and bike safety, ride sharing



\$148 million to \$554 million

System efficiency



\$148 million to \$554 million

Indirect/ Other

Reducing Pollution Delivers Multiple Benefits



Preliminary Public Health Benefits



- Fewer asthma symptoms
- Fewer premature deaths
- Fewer traffic-related injuries
- Total estimated public health benefits:
\$3 billion to \$10 billion

Conclusions from Macroeconomic Modeling

- Program has a positive impact on the economy.
- GDP, income, and jobs are projected to be greater than business as usual in 2032 and substantially net positive over the 2022-2040 timeframe.
- Significant progress towards achieving climate goals by reducing GHG and other pollution from transportation at modest cost and net benefit to the economy.

Economic Indicators in 2032	20% Cap Reduction	22% Cap Reduction	25% Cap Reduction
Increase in GDP growth, from Reference Case	\$0.7B (0.01%)	\$1.4B (0.03%)	\$2.9B (0.05%)
Increase in DPI growth, from Reference Case	\$0.5B (0.01%)	\$0.9B (0.02%)	\$1.9B (0.04%)
Increase in Jobs, from Reference Case	1,900 (0.004%)	3,982 (0.01%)	8,900 (0.02%)

TCI Program Development Timeline

- **January/February 2020** – Public input on Draft MOU
- **January through Spring 2020** -- Additional Modeling Analysis
- **Spring 2020** – Jurisdictions release a final Memorandum of Understanding. At this point, each jurisdiction will decide whether to sign the MOU and participate in the regional program.
- **Spring through Fall 2020** – Signatory jurisdictions develop a “model rule” and take any legislative steps that could be needed to implement the regional program.
- **2021** – Signatory Jurisdictions conduct rulemaking processes to adopt regulations.
- **As early as 2022** – Program implementation begins.

Next Steps

- TCI Leadership Team and workgroup meetings
- Continue modeling emissions, transportation system, macroeconomic, and health impacts of policy cases.
- State outreach and engagement in communities around the region.

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