



## **DRAFT MEMORANDUM**

**TO:** TPB Technical Committee  
**FROM:** Erin Morrow, TPB Transportation Engineer  
**SUBJECT:** Transportation and Climate Initiative (TCI): Recent Developments  
**DATE:** October 2, 2020

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The Transportation and Climate Initiative (TCI) is a regional collaboration of 12 Northeast and Mid-Atlantic states and the District of Columbia that seeks to improve transportation, develop the clean energy economy, and reduce carbon emissions from the transportation sector.<sup>1</sup> The TCI jurisdictions are: Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Virginia.

After hosting a series of public listening sessions in 2018, TCI jurisdictions released a statement, on December 18, 2018, announcing its intention to design a regional transportation policy proposal to reduce carbon emissions from the transportation sector through a cap-and-invest program or other pricing mechanism. TCI committed to completing the policy design process within a year, and on December 17, 2019, TCI released a draft Memorandum of Understanding (MOU)<sup>2</sup> outlining a proposal for a cap-and-invest program to cap carbon dioxide emissions from transportation fuels and invest revenue from the program into programs and policies to further reduce greenhouse gas emissions.

The final MOU was expected to be released in spring 2020; however, due to the coronavirus pandemic, that date has been pushed to late fall 2020. At that point, jurisdictions choosing to participate in the program (“participating jurisdictions”) will work to develop a “model rule” for the cap-and-invest program. Participating jurisdictions would then need to take any legislative and other steps necessary to participate in the program. The program could begin as early as January 2022.

This memo will provide an overview of the following topics and provide links to the TCI website for more information.

- What is TCI?
- What is cap-and-invest?
- What do the modeling results show?
- What is being done to ensure equity in the program?
- What are TPB staff doing?

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<sup>1</sup> [www.transportationandclimate.org](http://www.transportationandclimate.org)

<sup>2</sup> [https://www.transportationandclimate.org/sites/default/files/FINAL%20TCI\\_draft-MOU\\_20191217.pdf](https://www.transportationandclimate.org/sites/default/files/FINAL%20TCI_draft-MOU_20191217.pdf)

## WHAT IS THE TRANSPORTATION AND CLIMATE INITIATIVE (TCI)?

TCI is directed by state and district agencies located within the 13 TCI jurisdictions. Each agency is free to determine whether and how it will participate in individual projects and working groups. The initiative is facilitated by the Georgetown Climate Center with support from its funders, including the Barr Foundation, Energy Foundation, Hewlett Foundation, John D. and Catherine T. MacArthur Foundation, John Merck Fund, New York Community Trust, Town Creek Foundation, and its core funder, Rockefeller Brothers Fund.

The TCI jurisdictions have worked together since 2010 on clean vehicles, freight analysis, and sustainable communities policies.<sup>3</sup> The development of a cap-and-invest program is the largest undertaking of this group to date.

## WHAT IS CAP-AND-INVEST?

In the draft MOU, TCI proposes to develop a cap-and-invest program that will:

1. “Implement the regional cap to reduce carbon emissions, from on-road diesel and finished motor gasoline
2. Develop a process for auctioning emission allowances
3. Require regulated fuel suppliers to hold allowances to cover emissions from regulated fuels and report emissions to each applicable jurisdiction
4. Provide flexibility and ensure market stability, which may include a three-year compliance period, cost-containment and emissions-containment mechanisms, provisions to allow for the banking of allowances, and alternative compliance mechanisms such as offsets”

According to the draft MOU, each participating jurisdiction would be apportioned a percentage of the regional emissions budget, and those budgets would be revised if jurisdictions join or leave the program. Each participating jurisdiction will have the flexibility to invest the proceeds as chosen by that jurisdiction to achieve TCI program goals such as reduced carbon dioxide emissions, improved air quality, public health, resilience, and more affordable access to clean transportation alternatives.

TCI has a detailed presentation on how cap-and-invest programs work on its website.<sup>4</sup> A program such as the TCI’s proposed cap-and-invest program could be modeled after the Regional Greenhouse Gas Initiative (RGGI),<sup>5</sup> which is a mandatory, market-based program to cap and reduce carbon dioxide emissions from the power sector, and would be up to the individual states to decide whether to participate. Maryland currently participates in RGGI, and on January 1, 2021, Virginia will join.<sup>6</sup> The District of Columbia is not eligible to participate in RGGI because there are no power plants located in the city.

According to a recent TCI webinar, a regional cap-and-invest program has benefits over programs designed to simply price carbon.<sup>7</sup> A cap-and-invest program could guarantee a specific carbon

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<sup>3</sup> <https://www.transportationandclimate.org/content/about-us>

<sup>4</sup> <https://www.transportationandclimate.org/tci-video-cap-and-invest-101>

<sup>5</sup> <https://www.rggi.org/>

<sup>6</sup> [https://www.rggi.org/sites/default/files/Uploads/Press-Releases/2020\\_07\\_08\\_VA\\_Announcement\\_Release.pdf](https://www.rggi.org/sites/default/files/Uploads/Press-Releases/2020_07_08_VA_Announcement_Release.pdf)

<sup>7</sup> <https://vimeo.com/458802975> (17:09-20:00)

dioxide pollution reduction by setting a declining cap on carbon from transportation fuels. In contrast, a carbon tax would not guarantee that carbon dioxide pollution would decrease by a specific amount. A dynamic market would be created that would encourage fuel companies to diversify and innovate the portfolio of fuels as the cap declines and fewer emissions allowances become available over time. The potential for success for the program increases with the number of jurisdictions that participate as a larger market enables the most cost-effective emissions reductions. Consumers would benefit from additional lower cost, lower carbon transportation options.

## **WHAT DO THE MODELING RESULTS SHOW?**

According to TCI, the TCI region consists of 72 million people, \$5.3 trillion gross domestic product (GDP), and 52 million registered vehicles, which presents a significant opportunity for region-wide program. TCI has presented modeling results with the draft MOU in December 2019, and that work was recently updated to include additional policy cases, new modeling to inform program design, and sensitivity modeling of impacts of the coronavirus pandemic. The updated modeling results were presented at a webinar on September 16, 2020. The slides and a recording of the presentation are available on the TCI website along with detailed modeling information.<sup>8</sup>

TCI modeled a reference case, which is a future forecast with no cap-and-invest program. The reference case forecast shows a regional decline in carbon dioxide emissions of 19% from 2022 to 2032. TCI modeled three policy cases of 20%, 22%, and 25% cap reduction from 2022 to 2032.

The modeling results from these policy cases show an increase in GDP of \$0.7 billion - \$3 billion, and an increase of 2,000 - 9,000 jobs. TCI acknowledges that these are modest positive impacts over the reference case. The avoided costs due to climate damages range from \$249 million - \$892 million. Preliminary regional public health modeling found significant benefits to public health resulting from decreases in premature deaths, asthma symptoms, and traffic-related injuries. A county-scale public health analysis being developed by a team lead by the Harvard School of Public Health will be published on October 6.

The webinar delved into technical details of other modeling work that is informing the design of the cap-and-invest program, which can be accessed on the TCI website.

## **WHAT CONSIDERATIONS ARE BEING MADE TO ENSURE EQUITY IN THE PROGRAM?**

TCI has accepted public feedback throughout the regional policy development process.<sup>9</sup> One of the concerns raised in the public feedback is how will TCI ensure environmental justice and equity in the program for communities that have been traditionally overburdened by pollution and underserved by transportation. TCI has addressed equity during public workshops during the policy design process,

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<sup>8</sup> <https://www.transportationandclimate.org/modeling-methods-and-results>

<sup>9</sup> <https://www.transportationandclimate.org/main-menu/tci-regional-policy-design-stakeholder-input-form>

and on September 29, 2020, TCI held a webinar in which it put forth four proposed measures “intended to ensure the program fosters equity for overburdened and underserved communities.”<sup>10</sup>

1. Dedicated Investments: establish a minimum requirement of 35% of investments go towards serving overburdened and underserved communities
2. Equitable Processes: each participating jurisdiction would establish an equity advisory body comprised of diverse stakeholder groups to advise on decision-making and equitable outcomes for the TCI program
3. Transparency: annually review and report on program progress, including expenditures of proceeds with respect to equity
4. Complementary policies: invest in complimentary policies that advance goals of equity and environmental justice

During this webinar, a number of representatives from environmental justice and social equity organizations throughout the TCI region shared their concerns with the proposed program and the measures to address equity. These concerns appeared related to preserving a portion of the investments to address equity and preventing the cap-and-invest program from having a disproportionate negative impact on communities of color and lower income population. TCI is working to seek input on the matter and is expected to use the input to inform the development of the program. Given that both TPB and COG recently adopted equity statements,<sup>11 12</sup> it will be important to understand how equity considerations will be addressed in the final TCI program design.

## WHAT ARE TPB STAFF DOING?

TPB staff have been following the work of TCI since attending one of the listening sessions in 2018. Staff have prepared brief memos for TPB providing updates on TCI’s work that have been included in the Director’s Report.

TPB and COG staff are participating in a group of Councils of Governments and Metropolitan Planning Organizations in the TCI states. The group has met on conference calls and at two in-person convenings, the most recent hosted by COG on January 16, 2020. The purpose of the convenings was to learn more about TCI’s objectives and the policy development process from members of the TCI leadership team, discuss the proposal and accompanying analysis, consider how COGs and MPOs can engage with their membership, offer a thoughtful response to the proposal, and encourage a robust and equitable program design.

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<sup>10</sup> <https://transportationandclimate.org/main-menu/tcis-regional-policy-design-process-2019#webinars> (presentation slides and webinar not yet available)

<sup>11</sup> TPB R1- 2021: Draft Resolution to Establish Equity as a Fundamental Value and Integral Part of all Transportation Planning Board’s Work Activities. Washington, D.C.: National Capital Region Transportation Planning Board. July 22, 2020.

<https://www.mwcog.org/file.aspx?&A=DcKAuES%2fbSpJLgfn2ZZQkG%2f1nnpvpOMShDOXqimD%2fZY%3d>

<sup>12</sup> COG R26-2020: Resolution of the Board of Directors of the Metropolitan Washington Council of Governments Regarding Racial Equity as a Fundamental Value. Washington, D.C.: Metropolitan Washington Council of Governments Board of Directors. July 8, 2020

<https://www.mwcog.org/documents/2020/07/08/certified-resolution-r26-2020--racial-equity-as-a-fundamental-value-equity/>

Following the January 2020 convening, a subset of those COGs and MPOs in attendance sent a joint comment letter to TCI regarding the draft MOU. COG's Executive Director was a signatory. The COG Board established climate change as one of its focus areas for 2020. As part of this focus, at its February 2020 meeting, the COG Board endorsed a resolution commending the Governors of Maryland and Virginia, and the Mayor of the District of Columbia for their leadership in TCI and encouraged them to continue participating in developing a program that would set a cap on carbon dioxide emissions from cars and trucks. <sup>13</sup>

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<sup>13</sup> <https://www.mwcog.org/documents/2020/02/12/certified-resolution-r10-2020--transportation-and-climate-initiative-cog-board-cog-resolution-climate-change-greenhouse-gas/>