

# New report examines benefits, costs of region-wide effort to reduce emissions from cars and trucks

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A report released today by the Center for State Policy Analysis (cSPA) at Tufts University's Tisch College describes the potential impact of the

Transportation Climate Initiative (TCI)—a proposal to curb emissions from gasoline and diesel fuel—in Massachusetts and other Northeastern states.

The report details how the TCI program would work, including information about the size of potential emissions reductions, the public health benefits, new state revenues and possible increases to average gasoline [prices](#).

In addition to Massachusetts, the jurisdictions where TCI is under consideration include Connecticut, Delaware, Maine, Maryland, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia and Washington, D.C. This analysis focuses on states in New England and the Mid-Atlantic.

The key themes and findings of the report include:

- TCI works by setting a limit on [carbon emissions](#) from motor vehicles and then creating an auction where fuel suppliers bid for the right to sell gasoline and diesel with a certain amount of carbon. Those auctions encourage fuel efficiency and raise money for green investments and climate justice initiatives.
- TCI's auctions would generate substantial revenue for participating states, amounting to billions of dollars each year across the region and hundreds of millions in Massachusetts.
- In addition to curbing carbon emissions, TCI would also improve public health by reducing pollutants that contribute to asthma and respiratory issues.
- TCI would almost certainly result in higher gas prices, and the size of the increase would depend on the stringency of the emissions target.
- Not all regions of Massachusetts would be similarly affected by TCI. More diverse urban areas currently have the worst pollution,

and therefore stand to gain the most from reduced tailpipe emissions. Meanwhile, less densely-populated suburban and [rural communities](#) in Central and Western Massachusetts spend the highest share of their income on gasoline, making them more vulnerable to price increases.

- cSPA's estimates of gas price increases and state revenue focus on two core scenarios. In one, which assumes moderate economic growth and a 22 percent emissions reduction target, cSPA finds that gas prices across the region would rise by 24 cents per gallon in 2022 and that Massachusetts would receive \$775 million in TCI revenue. In another, which assumes low economic growth and the same 22 percent reduction target, gas prices would rise by 13 cents per gallon in 2022 with \$406 million in revenue for Massachusetts. Upon request, cSPA can also provide information about revenues in other states to interested members of the media.
- TCI also includes a price ceiling, which would prevent auction prices and gas prices from rising beyond established limits. No decision has yet been made about where this ceiling will be set, but cSPA's scenarios could be above the price ceiling. In that case, gas price increases and state revenues would not rise as much as cSPA predicts. Instead, the emissions cap would be loosened, allowing higher emissions as a way to check prices.

"Climate change is an existential challenge for the entire world and also a very real threat to the well-being of communities here in the Northeast," said Evan Horowitz, executive director of cSPA. "Tailpipe pollutants have an especially severe impact on communities of color around Boston and other big cities, which is why it's so important to understand how programs like TCI might affect specific locales, in addition to how it could reduce overall emissions."

"Reducing carbon pollution in the transportation sector is extremely

important," said Gilbert Metcalf, professor of Economics in Tufts' School of Arts and Sciences, lead researcher on this cSPA report, and a nationally-recognized expert on environmental economics. "Our report illustrates that the impact of TCI depends critically on a number of assumptions, including future economic growth, the nature of the emissions cap, and the effectiveness of spending from TCI auctions."

"TCI is a major policy effort that hasn't yet gotten a lot of public attention," said Jeffrey Berry, professor of Political Science in Tufts' School of Arts and Sciences. "An independent study like this could really help advance the conversation, providing a clearer picture of the potential impact on emissions, public health, and economic equity."

**More information:** The report is available online:  
[tischcollege.tufts.edu/sites/d ... he Impact of TCI.pdf](https://tischcollege.tufts.edu/sites/default/files/2020-11/2020-11-11-TCI-Impact-of-TCI.pdf)

Provided by Tufts University

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