TRANSPORTATION

The Political Economy of Congestion Pricing

Many traffic-weary New Yorkers support the city's congestion pricing initiative.

BY PETER VAN DOREN AND DENNIS L. WEISMAN

On January 5, New York City began congestion pricing traffic in the Manhattan Central Business District (CBD), meaning that vehicles entering the area pay a toll that varies depending on the time of day. The initiative is the first of its kind in the United States, though Singapore began congestion pricing in 1975, London in 2003, and Stockholm in 2006.

The CBD initiative has several objectives. They include:

- reducing traffic in the city during peak travel periods through increased use of mass transit, carpooling, and shifting discretionary vehicle travel to off-peak periods;
- discouraging private vehicular travel that contributes to environmental pollution; and
- raising revenues to finance additional investment in the city's mass transit system.

A little over a month later, President Trump demanded the city end the initiative, directing his Transportation Department to revoke federal approval for it and, when the city got a court injunction permitting the tolling to continue, threatening to withhold transportation funds to New York. The Trump stance is controversial for many reasons, not the least of which is the city's workers have the longest commute (43 minutes) in the nation.

In this article, we review the basic elements of the CBD initiative and examine its economic and political attributes. Like any taxation proposal, there are elements of both efficiency and equity at play: Is the plan properly designed to achieve the stated objectives in an efficient manner without violating fundamental tenets of fairness?

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As we explain below, the congestion pricing initiative is on solid economic ground. Nonetheless, it has encountered political opposition, including from some Democrats. As this article goes to press, the congestion toll remains in effect, but the courts will ultimately resolve the dispute.

NEW YORK'S CONGESTION PRICING INITIATIVE

Under the New York plan, vehicles are assessed a toll if they enter the area of Manhattan south of and including 60th Street, excluding the FDR Drive, West Side Highway/Route 9A, and the Hugh L. Carey Tunnel connections to West Street. Drivers with an E-Z Pass toll collection device are assessed a peak-period toll ranging from $9 for passenger vehicles to $21.60 for large trucks and tour buses. The toll for those who default to the "tolls by mail" license-plate reader system ranges from $13.50 to $32.40.

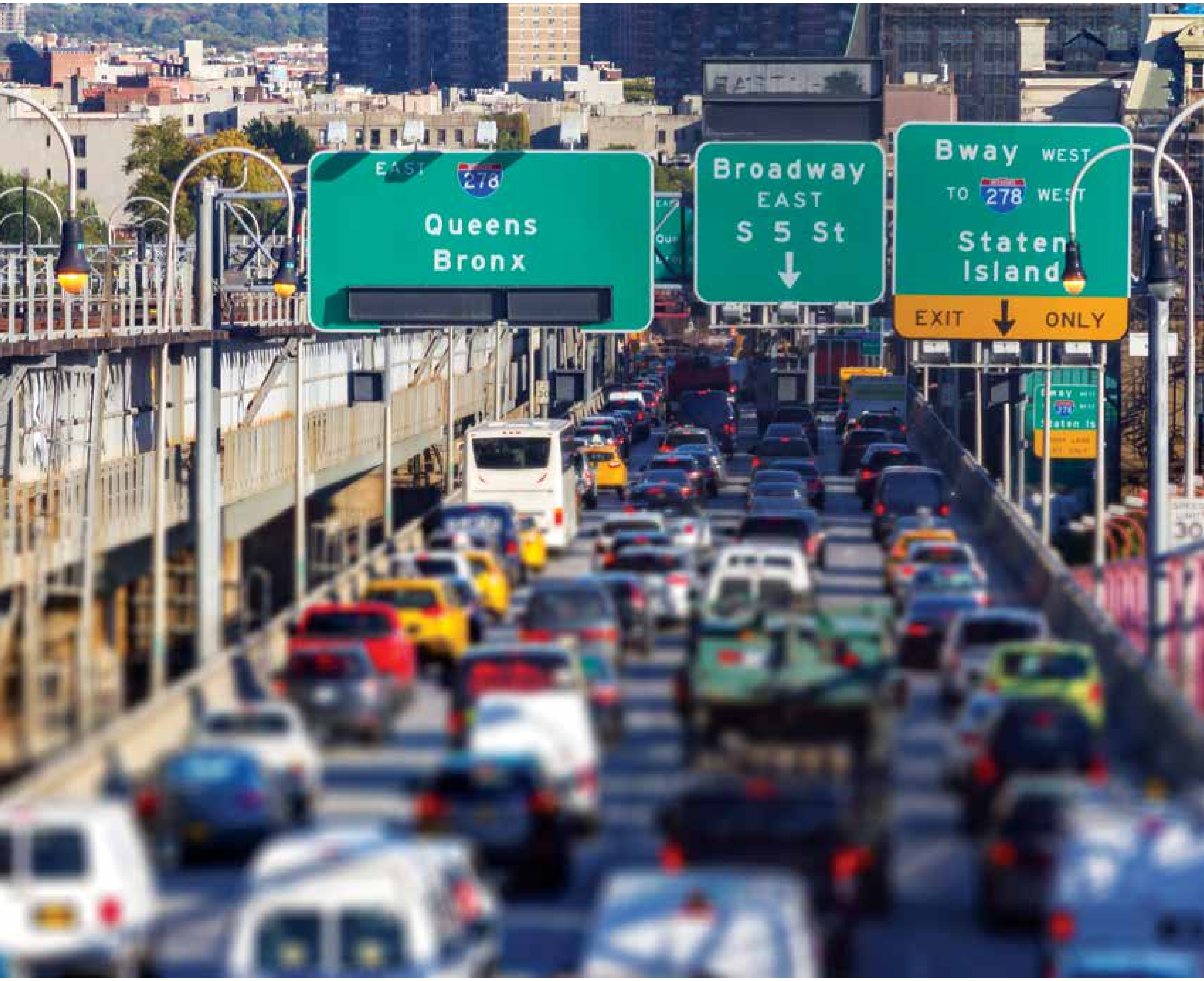
According to New York's Metropolitan Transit Authority (MTA), prior to congestion tolling, more than 700,000 vehicles entered the Manhattan CBD each weekday. Average travel speeds were a mere 7 mph and dropped to 4.9 mph in Midtown. The MTA calculates that New Yorkers lose an average of 117 hours annually sitting in traffic. It estimates the per-person opportunity cost of time lost from congestion is about $2,000 per year or $17.09 per hour. That valuation likely is low given that New York City's minimum wage is $16.50, and Manhattan vehicular commuters generally earn considerably more. This suggests that the MTA understates the benefits of congestion pricing.

The MTA estimates that the congestion pricing initiative will remove about 80,000 vehicles—more than 10 percent of previous traffic—from the congestion relief zone daily. The benefits touted by New York officials include faster and more reliable vehicle travel, cleaner air, and safer streets for drivers, cyclists, and pedestrians. Also, the revenues generated by the toll will go to improve mass transit infrastructure. This includes more accessible stations, modern signal systems, and hundreds of new electric buses.

ECONOMIC EFFECTS OF CONGESTION PRICES

A basic principle of microeconomics states that the efficient level of consumption is realized when prices reflect all costs that result from consumption. This is sometimes referred to as the *cost–causation principle*. If the price is higher than this level, there is too little consumption, and if the price is lower than this level, there is too much consumption. In the latter case, the resource costs that society incurs in producing this "excess consumption" exceed the value that society places on it, resulting in a net loss to society (i.e., a deadweight loss).

For example, when individuals drive vehicles in Manhattan, the costs they incur include fuel expenses, vehicle depreciation, usage-related repair costs, auto insurance premiums, registration fees and various vehicle taxes, and road degradation costs (collected indirectly through fuel surcharges). These types of costs are internal; they are paid by the driver (vehicle owner) directly or indirectly.



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In addition to those internal costs, there are at least two types of external costs. The first type consists of those associated with the harmful emissions that gasoline- and diesel-powered vehicles produce. Electric vehicles may also produce harmful pollutants depending on how the electricity to power them is generated.

The second type of external costs consists of the increased travel times that drivers impose on each other because of their decision to drive during peak periods. At the maximum carrying capacity of a traffic lane, the addition of an extra vehicle to traffic flow reduces the flow of existing vehicles that must travel at slightly slower speeds to accommodate the additional traffic (Parry 2008). These increased travel times carry an opportunity cost that is equivalent to the value of time for those using the street.

There is excess driving when the market does not provide a mechanism to internalize these two types of externalities to the driver. The congestion pricing initiative is designed to internalize the external cost (increased travel times) associated with driving during peak periods. It may also reduce environmental emissions. The ultimate question for New Yorkers is whether they prefer to pay a higher monetary price to drive (the congestion toll) or a higher non-monetary price to drive (increased travel times) if no congestion toll is levied. The higher price is unavoidable; the only question is the metric in which the price is denominated: dollars or time.

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ECONOMIC EFFICIENCY

Congestion pricing has a long academic history. Columbia University economist and Nobel laureate William Vickrey first proposed a version of it for subways in the early 1950s, and 10 years later he offered a version for automobiles (Vickrey 1963).

An efficient congestion charge would consider three types of information: traffic engineering estimates of a lane's carrying capacity, the value of time to those who use the streets, and the sensitivity of drivers' demand to price (i.e., the price elasticity). Economists have conducted such calculations, but they are directly applicable to pricing of lanes on urban interstates rather than prices for entering downtown congestion zones. Parry and Small 2009, for example, calculated that the marginal external cost of congestion during peak hours in Washington, DC, in 2002 was 28¢ cents per vehicle mile.

But the precision of that estimate is misleading. Neither the effect of price on demand nor the engineering estimates were known precisely. "Policymakers may therefore need to rely on trial-and-error approaches where tolls are initially set based on existing models, and then revised as models are updated in response to observed, policy-induced changes in travel patterns" (Parry 2008). For example, one could envision dynamic congestion toll pricing in which tolls adjust in real time to prevailing traffic patterns. This information could be transmitted to drivers via wireless phones or onboard navigation systems in the same way that drivers now receive traffic information. In other economic sectors like electricity, economists have long touted the efficiency gains from real-time pricing, but regulators have dragged their feet on implementation (Faruqui 2022).

The efficiency effect of the congestion toll has three components: congestion reduction, revenue generation, and revenue use. If driver demand for access to Manhattan is very price sensitive (what economists call "price elastic"), then a congestion toll will reduce congestion dramatically but raise little revenue. On the other hand, if driver demand is price inelastic, then a congestion toll will reduce congestion only slightly but raise considerable revenue. In the former case, the traffic efficiency effects dominate and the revenue-generation effects are secondary. In the latter case, the traffic efficiency effects of a congestion toll are secondary to the larger effects of the congestion "tax" as a revenue source. An evaluation of congestion pricing in the small city of Uppsala, Sweden, concluded that the congestion efficiency gains were small relative to the congestion zone revenues, which suggests inelastic demand (Asplund and Pyddoke 2021). If this is also true in New York, then the revenues generated and how they are used would be important for an efficiency evaluation.

The revenues could be used to reduce distortionary taxes on labor (i.e., the income tax). Metcalf and Weisbach 2009 describe the use of revenues in this way as a "double dividend." That is, the congestion toll improves both traffic congestion and tax efficiency. Moreover, to the extent that this revenue is used to "subsidize" mass transit, there is an additional benefit: greater use of mass transit further reduces congestion on the streets. In other words, the congestion toll "taxes" the negative externality of congestion, "subsidizes" the positive externality of reducing congestion, and raises revenue with a relatively efficient (non-distortionary) mechanism. A.C. Pigou (of Pigouvian tax and subsidy fame) and Frank Ramsey (of Ramsey optimal-taxation fame) would be proud.

New York does not intend to use congestion toll revenues to reduce other taxes. Instead, the money is a dedicated revenue stream to fund debt for mass transit improvements including modernization of subway signals, upgrading of stations, and purchase of new train cars and buses. That does not sit well with some people. The MTA is a government monopoly, and it is often criticized for inefficient and costly operations and spending on capital projects that routinely go over budget and are among the most expensive in the world (Rosenthal 2017). From a 2024 *New York Times* article:

> "We'd get a better return on investment lighting our money on fire than putting it into this black box of mismanagement here at the M.T.A.," Josh Gottheimer, a Democratic congressman from New Jersey, said at a recent news conference outside the M.T.A.'s office in Manhattan. He says the tolls will raise far more than required—more than $3 billion annually—and has demanded to see the M.T.A.'s calculations. (Hu 2024)

Reducing congestion increases efficiency. Raising revenue through a tax on inelastic demand for the CBD is more efficient than a tax on income that is more elastically supplied. But spending the revenues exclusively on MTA projects detracts from the first two efficiency gains.

DISTRIBUTIONAL EFFECTS

What about the distributional effects of congestion tolls? Who pays? Many opponents of Manhattan congestion pricing have emphasized its "tax" aspects on ordinary New Yorkers. The tax is trivial for a Manhattan investment banker, but it is significant for those working two or three jobs just to make ends meet and commute during peak periods. The regressivity of congestion pricing (the tax measured as a percentage of annual income) may generate public opposition despite the initiative's inclusion of some provisions for low-income assistance.

Is congestion pricing likely to have a disproportionate negative financial effect on those at the lower end of the income distribution? Demographic data suggest not: Of the 1.5 million people who drive to work in the Manhattan CBD, only 16,000 have household incomes under $50,000 (Traffic Mobility Review Board 2023). And the organized opposition to the congestion tolls comes predominantly from unionized public sector workers and those who live in the outer boroughs and suburbs rather than genuinely low-income people (Hu and Ley 2024; Ashford 2024).

But in its opposition to congestion pricing, the Trump administration has appealed to populist themes:

> In a letter to Gov. Kathy Hochul, US Transportation Secretary Sean Duffy said he'd be pulling federal approval of the deeply unpopular program, which he called "a slap in the face to working-class Americans and small business owners."
>
> "Every American should be able to access New York City regardless of their economic means. It shouldn't be reserved for an elite few," Duffy wrote. (Levine et al. 2025)

Yet, this populist appeal doesn't appear to have popular support. In the early days of the tolling, a poll found that about six in 10 New Yorkers surveyed hold a favorable view of congestion pricing and do not want the Trump administration to end it (Russo–Lennon 2025). Whether these poll numbers hold up as the initiative continues, especially if more Manhattan employers adopt return-to-office policies that would increase vehicular traffic, is uncertain. Public support for the Stockholm congestion pricing scheme increased over time, but it then decreased because the public perceived the revenue was used for public sector spending with low benefits (Börjesson 2018).

INITIAL EFFECTS OF CONGESTION TOLL

According to the *Wall Street Journal*, average travel times in the congestion zone this past January, the first month of congestion pricing, fell by 20–30 minutes and about 1.2 million fewer vehicles entered the zone. In addition, for every 1 billion passenger miles of automobile travel that are displaced, there are 7.28 fewer fatalities and 497 fewer injuries (Weisman and Van Doren 2020).

This decline in traffic wasn't as large as planners expected, while revenues were higher. Revenues were $48.6 million in January, a rate exceeding the $500 million projected for the program's first year (Chen and Hu 2025). About 44,000 fewer vehicles entered the CBD per day (a 6.3 percent reduction), which is only about half of what the MTA expected (Ley et al. 2025). The MTA would appear to believe that demand is more elastic than it is.

As of 2025, the US Internal Revenue Service allows a 70¢ per mile reimbursement rate for work-related travel. The average commute into Manhattan is estimated at 12.9 miles. Dividing the $9 congestion toll by 12.9, we obtain 69.77¢. Hence, the price per mile of driving increases by 99.57 percent (nearly doubling) with the addition of the congestion toll. To obtain a preliminary back-of-the-envelope estimate of the price elasticity, take the quotient of –6.3 and 99.7. This implies a price elasticity of demand of –0.063, which is inelastic.

We note parenthetically that this is not a pure measure of the price elasticity. The observed change in quantity demanded is the composite effect of the congestion toll that decreases quantity demanded and the increase in quality (faster commuting) that increases quantity demanded. Because the entirety of the observed change in quantity demanded has been attributed to the price effect, the measured price elasticity is biased downward. The actual (unobserved) price elasticity is likely more elastic (larger in absolute value) than the value reported here.

In terms of revenue generation, this price elasticity of –0.063 means that a 10 percent increase in the congestion toll would generate a 9.37 percent [(1 – 0.063) × 0.1] increase in revenues. Hence, the congestion toll's primary benefit is seemingly to raise revenue. From the perspective of pure efficiency, congestion tolls are advisable precisely because of the highly inelastic demand: The tax revenue is generated in a relatively non-distortionary manner. Traffic levels do not decrease significantly from what they were prior to the congestion toll.

This analysis suggests that the welfare gains from congestion pricing are due primarily to increases in revenue. The congestion toll provides the government with a mechanism to monetize the benefits of less crowded roadways and faster commutes. There are also gains in consumer surplus (i.e., consumers' maximum willingness to pay for commuting net of the requisite expenditures). One might inquire how consumer surplus can increase if the price increases, ceteris paribus. In general, it cannot. But in this case, raising the price coincides with an increase in the quality of the service (more rapid commuting). Hence, in addition to an increase in price, which corresponds to a movement along the demand curve, there is a shift outward of the demand curve from this increased quality. Commuters who place a high value on time could realize an increase in consumer surplus despite the congestion toll. For example, if the $9 congestion toll reduces the average commuting time by half (from 43 minutes to 21.5 minutes), the effective price for commuting would decrease for commuters with an opportunity cost of time that exceeds $25.12 per hour.

CONCLUSION

New York's congestion pricing initiative attempts to internalize the cost that drivers impose on each other when they drive during peak periods. Economists have recommended such a policy for over 60 years. The concept is straightforward in theory: Too much street use results from a monetary usage price of zero, but both the efficiency and equity effects are complicated in practice because they depend as much on how the revenue is used as who pays the toll.

The Trump administration has moved expeditiously to terminate the congestion pricing initiative perhaps, in part, because it may be viewed as a de facto tax increase. This action is likely to resonate with Trump's "common man" base even though the common man paying the Manhattan toll is not really poor. This issue does not break cleanly along party lines. Democratic New Jersey Gov. Phil Murphy has come out strongly against congestion pricing because his state's residents pay the toll when they commute into the city, but his state receives none of the revenues.

We shall see whether the efficiency benefits and distributional consequences of congestion pricing can generate sufficient political support both locally and nationally to survive. R

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