Intro

Vehicle traffic is a decades-old problem for major cities that is only projected to get worse over the next few decades. At the same time, many transit agencies are facing severe budget shortfalls, exacerbated by the COVID-19 pandemic, and failing public transit infrastructure in dire need of renewal, while traffic levels are nearly back to their pre-pandemic levels. The growing awareness of racial and environmental justice movements are also putting pressure on cities to expand public transit while reducing harmful vehicle emissions. The confluence of all of these factors has led to the proposal of the Central Business District Tolling Program in the City of New York, otherwise referred to as the congestion pricing plan. Having been approved by the state legislature in 2019, the plan will become the first congestion pricing plan to be implemented in the United States upon its projected rollout in 2023.

This paper will first describe the extent of the problems that the plan is intended to solve. It will give a brief overview of the people and entities involved in the formation of the plan, as well as previous attempts at congestion pricing plans in New York. It will explore the details of the current proposal, and provide comparisons to existing congestion pricing plans in other countries, with some analysis of the impacts of those plans. Finally, it will examine the next steps for the proposed plan and prospects for other similar proposals around the country, and address links to public administration principles.

Background

Just how bad is traffic congestion in the city? In 2016, New York City had the third-worst traffic in the world, with drivers spending an average of 89 hours sitting in traffic (Sacks 2017). According to a report released in 2006, 3.6 million people travel into the borough of Manhattan south of 60th St. encompassing Midtown and the financial district every weekday, contributing to significant traffic delays, and traffic levels have only grown since then. Beyond merely the frustrating inconvenience to drivers, the negative impact of congestion can be measured in lost time and productivity, wasted fuel and maintenance costs, reduced job creation, and losses in regional economic output (Partnership for New York City 2006). According to the same report, traffic congestion resulted in $5 - $6.5 billion in lost time and productivity, $2 billion in wasted fuel and car-related costs, and a net loss in regional economic output of $3.2 - $4 billion. The impact of congestion is also borne through the health impacts of those exposed to the air pollution generated by cars, and the adverse health and safety outcomes caused by ambulances and other first responders stuck in traffic.

But vehicle traffic and its impacts are just one of the problems that the plan is intended to address. A severe lack of funding for a crumbling public transportation system is the other major problem—with "crumbling" not a hyperbolic description of the city's transit infrastructure. Some of the city's tunnels date back to the 19th century, while signaling and other equipment is often over half a century old. 2017 was a notable year for the city due to the urgency of what was deemed a "transit crisis", with then-Governor Cuomo declaring a state of emergency for the MTA (Metropolitan Transportation Authority). Outdated and unreliable equipment, tunnels damaged by Hurricane Sandy, and decreasing levels of funding for maintenance resulted in frequent subway delays, overcrowding, and cancellations (Santora 2017). Later that year, a New

York Times report revealed that while daily subway ridership doubled over the previous two decades, the maintenance budget remained the same (when adjusted for inflation), while hundreds of mechanics positions had been cut. During the same period, governors diverted a combined $1.5 billion from funds intended for the agency. All of these factors contributed to the subway's system's title of having the worst on-time performance of any major rapid transit system in the world, with just 65% of weekday trains reaching their destinations on time (Rosenthal, Fitzsimmons, and LaForgia 2017). Additionally, incidents such as derailments, track fires, and riders trapped in stalled cars lent an air of urgency to the situation in the eyes of the public.

Both city and state leadership and the MTA have had a significant impact on past and current attempts to pass a congestion pricing plan. Contrary to what one might expect, the governor exerts significant control over the MTA, much more than the mayor of New York. The same year that the transit crisis was declared, the MTA embarked on a nearly $1 billion emergency plan to make urgent repairs to trains, signaling equipment, and tunnel infrastructure, in addition to its existing $32.5 Capital Improvement Plan. While the state provided $400 million in funding for the emergency plan, the city refused to contribute the same amount (Santora 2017). With much of the blame for the increasingly-dire transit crisis falling on Governor Cuomo's shoulders, and with a significant lack of funding for the needed repairs and investments, he proposed the current congestion pricing plan later that year, declaring that "Congestion pricing is an idea whose time has come" (Santora 2017).

As one might imagine, Mayor Bill De Blasio is another key stakeholder in the process. In the past, his support for the plan has been described as "latent"—however, his support has been more vocal as of late. In the past year, De Blasio has expressed

frustration with the 16-month long environmental review process, arguing that it is too long (Hicks and Meyer, 2021). The relationship between De Blasio and former governor Cuomo has often been rocky, but the available information suggests that both he and current governor Kathy Hochul are in alignment in their views on congestion pricing. For her part, Governor Hochul offered her full support for the plan within the first month of her governorship, and similar to Mayor De Blasio, has called for an accelerated environmental review process (Durkin, Gronewold, and Garcia 2021). By contrast, Governor Phil Murphy of New Jersey has been an expected source of opposition to the plan, given that the congestion charge would cost New Jersey commuters without providing benefits to the state.

The MTA itself, as the public transit agency in the NY Metro area, is a key entity in the process, as it is both the beneficiary of the potential revenue raised by the plan, as well the agency tasked with its creation. Given the extent of the 2017 transit crisis, the associated lack of funding, and the billions of dollars it expects to receive from the successful implementation of the plan, it has a significant interest in seeing the plan succeed. The MTA is responsible for conducting both a 16-month environmental review process which is currently underway, as well as a public outreach/input plan, mandated by the federal government. It is also responsible for appointing a Traffic Mobility Review Board, which would recommend the charge amount as well as any discounts or exceptions (Hu and Rubinstein 2021). These recommendations would then go to the MTA board for approval—and as the governor typically controls the board, they would hold significant power over the final details of the plan.

At the federal level, the Federal Highway Administration, under the US Department of Transportation, holds significant sway over the plan, as it is one of the

major entities that must grant approval for the plan to be enacted (the other two are the State Legislature and the Governor). Due to the proposed zone encompassing federal roads, the plan is required to obtain approval from the DOT before being implemented. Prior to 2021, the DOT effectively withheld approval under the leadership of Secretary Elaine Chao, but under Transportation Secretary Pete Buttigieg, approval was granted in February 2021 (Walker 2021). The DOT also has the authority to address the stated goals of the plan, which would allow it to shift the goals of the program to include addressing climate change and racial inequity.

Finally, there is Transcore—the contractor selected to physically implement the congestion pricing system. The company was selected in 2019 to "design, build, operate, and maintain" the plan's infrastructure for a period of seven years, being awarded $507 million to do so (McDonough 2019).

Various political players or interest groups have also loudly proclaimed their support or opposition, including NY state senators and assembly members, legislators from surrounding states, transit and justice advocacy groups, commerce groups representing businesses in and around the proposed zone, and unions. While state lawmakers passed a bill approving the plan in 2019, opposition to the plan continues. At least one state legislator from an outer NYC borough has opposed the plan or called for exemptions for New York residents, while a New Jersey Congress member recently introduced legislation that would block federal funding to New York if NJ drivers are not exempted from the congestion pricing charge (Smith 2021). On the other side, various advocacy groups have supported the plan on the grounds of improved transportation funding and access for underprivileged minority communities and averting negative health impacts from vehicle pollution. The Partnership for New York

City, a group of leaders representing the city's top corporate, investment, and entrepreneurial firms, released a report in 2006 in support of the congestion pricing plan, while an opposition group was also formed (Keep NYC Congestion Tax Free).

Policy Alternatives

Traffic has evidently been a problem in the city for some time. The city and state responses to it have been varied: Implementing bus and bicycle lanes, expansion and improvement of public transit, optimizing traffic signals, reducing or banning parking in certain areas, implementing tolling at strategic river crossings, and creating HOV (High-Occupancy Vehicle) lanes.

While the idea of congestion pricing has been around for decades, a full zone-congestion pricing plan had never before passed the proposal stage. The city had tried once. In 2007, Mayor Michael Bloomberg unveiled PlaNYC, a strategic plan for the city that included several transportation initiatives, including a proposed congestion pricing pilot program (PlaNYC 2007). Under this plan, drivers entering the section of Manhattan south of 86th St. (later changed to 60th St.) would be charged $8 per car ($21 for trucks), with buses, emergency vehicles, taxis, and cars with disabled plates being exempt. Perimeter roads within the zone, such as the West Side Highway, would be exempt from the charge, as would any bridges or tunnels leading to the zone, with drivers being charged the difference between any bridge/tunnel tolls and the congestion charge. The zone would have been in effect on weekdays from 6:00am to 6:00pm, with monitoring conducted by EZ-Pass transponders and an optical license-plate recognition

system. The program would have run for 3 years, after which its impacts would be studied.

The plan was unique in that, of the many other transportation initiatives in the city's strategic plan, it was the only one contingent on approval by the New York State Legislature, in addition to being reliant on state funding. Additionally, the city applied to join the US Department of Transportation's Urban Partnership Program, under which it was eventually awarded $354 million, contingent on legislative approval, to be used for the congestion pricing program amongst other investments in public transportation infrastructure (DOT 2006).

While funding from federal sources was tentatively in place, the program faced political headwinds at the state and local levels. A poll of over 1000 registered voters in the city found that a majority would support congesting pricing 60% to 37%, but only if they were first informed that the funds would be used to improve public transit in the city—otherwise, they opposed the plan 58% to 37% (Quinnipiac 2008). Predictably, opposition was higher in the outer boroughs of Queens, Brooklyn, the Bronx, and Staten Island; and yet, some of the loudest opposing voices came from within the proposed zone itself. State Assembly Speaker Sheldon Silver, representing the Financial District of Manhattan, opposed the plan on the grounds that it would increase congestion in neighborhoods just outside the zone, without reducing congestion in neighborhoods with high asthma rates. The Queens Chamber of Commerce released a document claiming the plan would cost the city billions of dollars per year in economic losses (NYTimes 2007). Outside the city itself, officials representing surrounding suburban areas were loath to support a plan that would cost their constituents, while funneling the profits away from them and towards urban public-transit goals (Confessore 2008).

While the proposed plan was approved by the City Council, and expected to be approved by the state Senate, it faced significant opposition in the state Assembly. Assembly members from outer boroughs, outnumbering those representing Manhattan, were able to block a vote on the bill, preventing its approval prior to a deadline for DOT's funding program. As a result, following the passing of the deadline, the bill died—and ultimately, the federal funds were reallocated to projects in Los Angeles and Chicago (Schaller 2010).

Roughly a decade passed between the failure of the bill and the 2017 transit crisis that precipitated the current proposal, and while the environment changed, many of the plan's details remained the same. All roads in Manhattan south of 60th St. would be included in the pricing zone, with the exception of perimeter roads. While pricing has yet to be determined, previous proposals have suggested pricing around $12-$14 per car, an increase from the proposed price of $8 in 2007 (Smith 2021). According to a fact sheet from the MTA, exceptions are also expected to be made for emergency vehicles, drivers with disabilities, and drivers from households making under $60,000 a year, though other exceptions may be added. Any car entering the zone would be charged once daily, with toll rates varying throughout the day and week according to set schedules. Charges would be assessed using existing E-ZPass (cashless tolling) transponders, or via the Toll by Mail system, with bills sent to the registered owner of the vehicle (MTA 2021). At one of the first public hearings conducted in September 2021, an MTA official revealed proposed prices of $9 to $23 for cars with E-ZPass, and $14 to $35 for cars paying by mail.

Following Governor Cuomo's public proposal and support of the new congestion pricing plan in 2017, a task force (Fix NYC) was convened by the state to study solutions

including congestion pricing, which ultimately made many of the recommendations in the final plan. The plan was ultimately passed as part of the state's budget in 2019, with planning and implementation responsibility given to the Triborough Bridge and Tunnel Authority (also known as MTA Bridges and Tunnels), under the authority of the MTA.

The stated goals of the plan have not changed significantly, with perhaps the exception of much more emphasis on the potential for regular funding for public transit. According to the MTA, the primary benefits of the plan are expected to be a reduction in traffic congestion, associated benefits such as improved air quality and reduced travel times, the creation of a regular source of funding for public transit improvements, and more equitable access to public transit (MTA 2021).

While the implementation of the plan would be a first in the United States, several other cities around the world have implemented and operated congestion pricing plans for some time; in particular, Singapore, Stockholm, and London. The London Congestion Charge in particular offers some useful comparisons and insight into potential benefits. First implemented in 2003, the current congestion charge of £15 is in effect every day from 7:00am to 10:00pm, for vehicles entering the charge zone. One important difference is that the system has historically had discounts for cars emitting lower levels of carbon dioxide and particulate matter, as well as for electric vehicles and plug-in hybrids. Additionally, an additional fee of £10 (known as a toxicity charge) was assessed for vehicles emitting significant amounts of pollution (Chapman 2019). Currently, there are no such provisions in New York's congestion pricing plan.

The impacts of London's congestion pricing plans, and those of Stockholm and Singapore, have been cited as evidence in support of New York's plan. The MTA has cited a report prepared for the Federal Highway Administration, which reported a 25%

reduction in traffic congestion in both Stockholm and London, and a 24% reduction in weekday traffic in Singapore. It also found increases in average speeds of 25% to 30% and decreases in carbon emissions of 10% to 20% in Stockholm and London (Bhatt and Higgins 2008). According to another 2008 study, researchers at King's College London found that absolute and relative reductions in nitrous oxide and particle emissions (both harmful to human health) were greatest within the Congestion Charging Zone, as well as finding a modest reduction in socioeconomic inequalities regarding exposure to pollution and mortality rates. Ultimately, it concluded that the impact of the program on pollution and life expectancy were measurable but modest (2008). Based on these results, it seems likely that New York may see some reductions in vehicle traffic and associated emissions and health impacts, but those impacts may be less publicized than the projected $1 billion in increased revenue brought in by the plan.

The Future

As of November 2021, the MTA is still undergoing a 16-month environmental review, required by the Federal Highway Administration. As part of the process, the MTA continues to conduct general public meetings as well as Environmental Justice Outreach meetings, to inform the public and solicit feedback (Bascome 2021). Yet to be formed is a Traffic Mobility Review Board, which would determine toll prices. Projected revenue is sure to be a key consideration for pricing, as the program is expected to generate $1 billion in annual revenue, allowing $15 billion to be secured for public transportation investments. Pandemic-related budget shortfalls, due to lower ridership,

continue to burden the MTA, putting pressure on public officials to implement the program for the sake of additional revenue.

While the changing federal administration appears to bode well for the plan's further implementation, the recent resignation of Gov. Cuomo initially cast some doubt on the process. His successor, Gov. Kathy Hochul, withheld her support from the plan for a short period of time, citing the need for further evaluation—however, in September of 2021, she offered her full support of the plan (Hu and Rubinstein 2021).

The successful implementation of the plan in the next two years would be the first ever zone-congestion pricing plan implemented in the United States. It would serve as a model for other highly-congested metropolitan areas in the country, particularly those with public transit systems facing budget issues. San Francisco, in particular, is the next-closest American city in terms of nearing approval and implementation of a congestion pricing plan. Similar to New York, San Francisco had first considered congestion charges in the mid 2000's as a way to relieve gridlock and reduce emissions (Cano 2021). With traffic congestion reaching a peak in 2019, the city is currently conducting one of several rounds of studies including soliciting public feedback for a proposed congestion pricing plan. The city also has yet to seek the requisite approval from the state legislature, meaning any potential plan is still several years away from implementation.

Further changing the landscape are social and environmental justice movements which seek to address the disparate impact of traffic and its associated particle pollution on low-income and minority populations in urban areas. Such movements may add additional momentum to congestion pricing proposals in other cities.

Should congestion pricing continue to be implemented in New York, and elsewhere in the country? Cash-strapped public transportation agencies in major metropolitan areas should take a long, hard look at the idea of congestion pricing. The growing awareness of the harms of vehicle traffic, combined with the potential for reductions in carbon emissions and the prospect of new dedicated revenue streams for public transit make the idea very attractive. Since the likelihood of future carbon regulations will increase with time, the idea presents an opportunity for cities to get ahead of the curve. The expected impacts of the policy also extend to reducing socioeconomic inequality within cities. Existing proposals would also do well to take advantage of a current federal administration that is friendly to the idea.

Link to Public Administration Principles

The many elements of the story of congestion pricing in New York serve to illustrate a number of public administration principles from class lectures and readings. Perhaps chief among them are the relationships between political executives, legislative bodies, bureaucracies, interest groups, media, and the public. In the context of the policy formation process, the relationship between the Department of Transportation (federal government) and the State of New York, responsible for the city's public transit, is an example of fiscal federalism. The previously mentioned Urban Partnership Program, under the DOT, provides funding for transportation initiatives at the city level, while the state also provides funding for the MTA. The historical attempts to pass congestion pricing illustrate the fragmented nature of American government - whereas the Mayor's 2007 proposal won approval at the city council level but faced

insurmountable opposition in the state Assembly, in 2017 it was the Governor who pushed the current proposal with less opposition at the city and state levels, finally winning approval with the legislative action of passing the year's budget, only to be delayed by inaction from the Federal Highway Administration.

The 2017 transit crisis illustrates the concept of a newly opened policy window. Public awareness of the transit system's failures grew significantly, as high-profile incidents like fires and riders trapped in stalled underground subway cars were widely reported on. Images of flooded tunnels from Hurricane Sandy were also still fresh in the public's memory. Mayor De Blasio was able to deflect much criticism away from himself and towards the Governor by highlighting his power over the MTA, resulting in significant pressure being placed on the Governor. It was in this environment that the congestion pricing plan was resurrected primarily as a means of funding the MTA, which garnered enough political support to be passed in the state legislature. Whether the same urgency will last over the next couple of years prior to implementation remains to be seen.

Conclusion

The story of New York's congestion pricing plan illustrates the multi-layered, complex, and fractious process of planning, approving, and implementing a policy at the city and regional levels, as well as opportunities afforded by a newly opened policy window.

Sources

A Cure Worse than the Disease? How London's "Congestion Pricing" System Could Hurt New York City's Economy. (2006). Queens Chamber of Commerce. https://www.nytimes.com/packages/pdf/nyregion/empire_zone/20070425_congestion.pdf

Badstuber, N. (n.d.). London congestion charge: What worked, what didn't, what next. The Conversation. Retrieved September 27, 2021, from http://theconversation.com/london-congestion-charge-what-worked-what-didnt-what-next-92478

Bhatt, K., Higgins, T., & Berg, J. (2008). Lessons Learned From International Experience in Congestion Pricing. K.T. Analytics, Inc. https://ops.fhwa.dot.gov/publications/fhwahop08047/intl_cplessons.pdf

Bloomberg, M. (2007). PlaNYC: Creating a Greener, Greater New York. City of New York. https://www.nyc.gov/html/planyc/downloads/pdf/publications/full_report_2007.pdf

Cano, R. (2021, July 24). S.F. is considering downtown 'congestion pricing.' Here's how much it would cost. San Francisco Chronicle. https://www.sfchronicle.com/sf/article/S-F-is-considering-downtown-congestion-16336449.php

Central business district tolling program. (n.d.). MTA. Retrieved December 6, 2021, from https://new.mta.info/project/CBDTP

Confessore, N. (2008, April 8). $8 traffic fee for manhattan gets nowhere. The New York Times. https://www.nytimes.com/2008/04/08/nyregion/08congest.html

de Palma, A., & Lindsey, R. (2011). Traffic congestion pricing methodologies and technologies. Transportation Research Part C: Emerging Technologies, 19(6), 1377–1399. https://doi.org/10.1016/j.trc.2011.02.010

Echols, S. (2007, October 29). U. S. Secretary of transportation names five communities to receive funding to help fight traffic congestion. https://web.archive.org/web/20071029183052/http://www.dot.gov/affairs/dot8507.htm

Eliasson, J., & Mattsson, L.-G. (2006). Equity effects of congestion pricing: Quantitative methodology and a case study for Stockholm. Transportation Research Part A: Policy and Practice, 40(7), 602–620. https://doi.org/10.1016/j.tra.2005.11.002

Growth or gridlock? The economic case for traffic relief and transit improvement for a greater new york. (2006). Partnership for New York City. https://www.pfnyc.org/reports/Growth%20or%20Gridlock.pdf

Harrington, W., Krupnick, A. J., & Alberini, A. (2001). Overcoming public aversion to congestion pricing. Transportation Research Part A: Policy and Practice, 35(2), 87–105. https://doi.org/10.1016/S0965-8564(99)00048-8

Hochul embraces congestion pricing—POLITICO. (n.d.). Retrieved December 6, 2021, from https://www.politico.com/newsletters/new-york-playbook/2021/09/09/hochul-embraces-congestion-pricing-494259

Hu, W., & Rubinstein, D. (2021, August 16). As cuomo exits, will congestion pricing still come to new york city? The New York Times. https://www.nytimes.com/2021/08/16/nyregion/new-york-congestion-pricing.html

Litman, T. (2005). London congestion pricing – implications for other cities. CESifo DICE Report, 03(3), 17–21. https://www.econstor.eu/handle/10419/166849

Keep NYC Congestion Tax Free, (2007) (testimony of Walter McCaffrey). https://www.dot.ny.gov/programs/repository/WestchesterTestimony.pdf

Mcdonough, A. (2019, October 22). Congestion pricing will look a lot like E-ZPass. City & State NY. https://www.cityandstateny.com/policy/2019/10/congestion-pricing-will-look-a-lot-like-e-zpass/176797/

NYC congestion pricing: MTA adds 3 more public meetings to solicit feedback. (2021, November 16). Silive. https://www.silive.com/news/2021/11/nyc-congestion-pricing-mta-adds-3-more-public-meetings-to-solicit-feedback.html

Nyc voters back congestion pricing, if it helps transit, quinnipiac university poll finds; strong opposition to east river bridge tolls | quinnipiac university poll. (n.d.). Retrieved December 6, 2021, from https://poll.qu.edu/Poll-Release-Legacy?releaseid=1132

Robbins, C. (2020, July 15). Congestion pricing's failure a "shining example" of government dysfunction. Gothamist. https://gothamist.com

Rosenthal, B. M., Fitzsimmons, E. G., & LaForgia, M. (2017, November 18). How politics and bad decisions starved new york's subways. The New York Times. https://www.nytimes.com/2017/11/18/nyregion/new-york-subway-system-failure-delays.html

Santora, M. (2017, August 13). Cuomo calls manhattan traffic plan an idea 'whose time has come.' The New York Times. https://www.nytimes.com/2017/08/13/nyregion/cuomo-rethinks-opposition-to-tolls-to-ease-manhattan-traffic.html

Schaller, B. (2010). New york city's congestion pricing experience and implications for road pricing acceptance in the united states. Transport Policy, 17, 266–273. https://www.nyc.gov/html/dot/downloads/pdf/schaller_paper_2010trb.pdf

Smith, R. H. (2021, September 15). How does congestion pricing work? What to know about the toll system taking manhattan. THE CITY. https://www.thecity.nyc/2021/9/15/22674371/how-does-congestion-pricing-work-toll-system-in-manhattan

This is what London's new emissions charge is – and how it will affect you. (2017, October 24). The Independent. https://www.independent.co.uk/news/business/news/tcharge-what-is-it-london-emissions-charge-how-affect-will-pay-congestion-car-diesel-a8014976.html

Times, T. N. Y. (2007, July 19). A deal, of sorts, on congestion pricing. City Room. https://cityroom.blogs.nytimes.com/2007/07/19/deal-at-hand-on-congestion-campaign-finance-bruno-says/

Tonne, C., Beevers, S., Armstrong, B., Kelly, F., & Wilkinson, P. (2008). Air pollution and mortality benefits of the London Congestion Charge: Spatial and socioeconomic inequalities. Occupational and Environmental Medicine, 65(9), 620–627. https://doi.org/10.1136/oem.2007.036533

Toward car-free cities: Why congestion charging failed in new york |. (2017, May 15). TheCityFix. https://thecityfix.com/blog/toward-car-free-cities-why-congestion-charging-failed-in-new-york-jacob-sacks/

WABC. (2021, September 23). MTA holds hearing on NYC congestion pricing, plans for $9-$23 toll. ABC7 New York. https://abc7ny.com/11040836/

Walker, A. (2021, February 23). Secretary pete is already coming through for new york city on congestion pricing. Curbed. https://www.curbed.com/2021/02/congestion-pricing-nyc-approval-pete-buttigieg.html