



Government & Public Affairs Division

Policy Research Paper

Congestion Charging:

International Examples and How They Could Be Applied in America

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Congestion pricing, road pricing, road user charge, toll rings, zone pricing and cordon pricing are all ways of describing systems that require drivers to pay a fee to drive within a certain area, on a particular road, or during certain times. Where these systems have been developed, congestion, air pollution, and fuel use have decreased as a result of a change in driver habits and a reduction of engine idling. This article will examine successful international examples of congestion charging and explore how and where they might be applied to congested cities in America.

Introduction

Traffic congestion is at an all-time high around the world.¹ Population is on the rise, and people continue to move to metropolitan areas.² More and more people are driving cars rather than using transit resources. Frustratingly, at the same time that traffic congestion is increasing, funding for transportation solutions is not increasing at the same rate. This quandary has prompted new thinking about how to decrease congestion in city cores.

Innovative transportation planners and politicians are developing new ways to manage this modern dilemma. One approach that cities in Europe and Asia are pursuing is known as congestion charging. Congestion charging goes by several names, depending on the specific project. Congestion pricing, road pricing, road user charge, toll

rings, zone pricing and cordon pricing are all ways of describing systems that require drivers to pay a fee to drive within a certain area, on a particular road, or during certain times. Where these systems have been developed, congestion, air pollution, and fuel use have decreased as a result of a change in driver habits and a reduction of engine idling.

Congestion charges are collected in several ways, some of which integrate sophisticated surveillance technology. Several cities in Norway use cordon entry permits where drivers make payments at toll plazas. In London, digital cameras photograph license plates which trigger postal delivery of the toll bill to the driver. In other systems, drivers purchase and affix electronic tags to their

vehicles; payment is electronically deducted from the card's value when the detection system recognizes the tag within the tolling area.

Several of the larger cities in the United States are beginning to consider congestion charging as part of the solution to their congestion problems. This article will examine successful international examples of congestion charging and explore how and where they might be applied to congested cities in America.

Pros and Cons of Congestion Charging

A French transportation department report released in March 2007 examined the acceptability of urban road pricing (congestion charging),³ weighing the arguments for and against congestion charging. Their results follow:

Comments **FOR** congestion charging:

- It's the only way of getting non-taxpayers (outside the city boundaries) to pay for the transport system that they use.
- In an average car budget, the annual cost for road charging is very small and is not that great if motorists do not use their cars everyday.
- We need to find a solution to paying for transport systems.
- Congestion charging encourages the use of alternative modes of transport.
- Congestion charging improves quality of life, especially as the project will use revenue for this purpose.
- Improving the transport system is good for the economy.
- The system will encourage people to rationalize their movements.

Comments **AGAINST** road pricing:

- Users of private vehicles are taxpayers and have already paid for infrastructure.
- The motorist already pays a large part of costs relating to cars in private costs and taxes.
- The annual cost of a charging system is excessive, especially for those with limited means.

- Congestion charging restricts a person's freedom to move.
- There is no free alternative (perception).
- The public transport has to at the very least offer the same level of service as the car.
- Those who live far away are the poorest and they pay the most.
- It's the return of city tolls; you have to pay for sitting in traffic jams.
- The rules of the game are being changed; we're being encouraged to live farther out, and then we're made to pay for it.
- It will harm local businesses in favor of those on the outskirts.
- It's privatization of the city.
- Operational costs are very high.⁴

Many of these attitudes are prevalent in cities around the world. The way to combat the negative attitudes toward road pricing/congestion charges is to provide education. An informed public who understands both the weaknesses and the strengths of the system is more accepting of it, as real-world examples around the world have indicated.

Background: Congestion Charging in Europe

In Europe, several organizations have worked to promote congestion charges. The Coordination of Urban Road User Charging Organizational Issues (CURACAO) is a 2006 project, funded by the European Commission that coordinates research and monitors the results of road user charging in urban areas.⁵ One of the project's main objectives is to compare and contrast different approaches to urban road user charging such as tolling, distance-based pricing, and charges for infrastructure and parking. CURACAO also facilitates the exchange of information, raises awareness, and disseminates and promotes research results. CURACAO will build on previous rounds of research by the European Commission projects ProGRESS and CUPID.

Pricing Road use for Greater Responsibility, Efficiency and Sustainability in cities (PRoGRESS) ran from 2000 until 2004 and involved eight European cities that hosted demonstrations of road user charging systems. Participating cities included Bristol (UK), Copenhagen (Denmark), Edinburgh (Scotland, UK), Genoa (Italy), Gothenburg (Sweden), Helsinki (Finland), Rome (Italy), and Trondheim (Norway).⁶ The mission statement of PRoGRESS was “to demonstrate and evaluate the effectiveness and acceptance of integrated urban transport pricing schemes to achieve transport goals and raise revenue.”⁷ Several cities permanently implemented the demonstration projects after the PRoGRESS experiment had officially ended.

Co-ordinating Urban Pricing Integrated Demonstrations (CUPID), another project of the European Commission, promoted state-of-the-art knowledge on urban transport pricing programs. CUPID was made up of transportation consultancies and academic institutions that supported the work of PRoGRESS in Europe. The project assessed results of city demonstration projects and disseminated those results widely in order to produce robust policy recommendations. CUPID was an older version of CURACAO and ran from 2000 until 2004. The CUPID team served as the liaison to PRoGRESS’s demonstration cities and provided guidance to other cities that were considering pricing schemes.⁸

Pricing of Congestion Charging Schemes⁹

Below are examples of the costs and revenues involved in implementing congestion charging.

US Dollars	Capital costs	Operating costs (annual)	Revenues (annual)
London (2005)	\$180 M.	\$180 M.	\$360 M.
Stockholm (2006)	\$260 M.	\$26 M.	\$105 M.
Singapore (1998)	\$130 M.	\$9 M.	\$52 M

Cost Effectiveness of Congestion Charging¹⁰

Cost of Road Pricing	London Cordon (2005)	Stockholm Cordon (2006)	Singapore Cordon (1998)
Average Charge	€7.4/day (now €11.8)	€2.7/day	€0-2/trip
Operating Cost as % of Revenue	48%	25%	7%
Annual cost (including capital) as % of revenue	55%	40%	40%

Real-Life Examples of Congestion Charging Schemes

Singapore: The First and Longest Running Congestion Charging Scheme

The first and longest running cordon pricing scheme based on a congestion charge began in the small island city-state of Singapore in June 1975. The original pro-

gram was called the Area Licensing Scheme (ALS) and required drivers to purchase daily or monthly licenses to enter the Core Business District (CBD) during certain hours. The program’s main objective was to control car use and to increase use of public transportation. The program reduced rush-hour traffic by 45 percent, traffic speeds increased by 20 percent, and traffic accidents decreased by 25 percent.¹¹ Initially, the charge covered only the CBD, but, in the 1990s, the project incorporated three major expressways into the scheme.

In 1998, Singapore updated the ALS with the Electronic Road Pricing (ERP) scheme, a usage-based system that requires those who contribute more to congestion in the zone to pay more. ERP replaced the simplistic entry permit with a stored-value card. The card must be inserted into an in-car unit before starting a journey. Each time vehicles pass through a gantry when the system is in operation, the system automatically deducts ERP charges. If a vehicle doesn't have the required in-vehicle unit for the charge card, drivers may rent one. Drivers must pay all charges before leaving the city.

Due to high car ownership costs, congestion pricing, and an expanding rail network, public transportation has become a more popular way to travel around Singapore. Overall, congestion charging has not generated much opposition in Singapore. The system has been in place for so long that residents are familiar with it. It is also an equitable system: everyone pays the charge, even people driving foreign vehicles within the zone.

London: Current Large-Scale Example

In February 2003, Mayor Ken Livingston launched London's large-scale cordon charging program, a program now largely viewed as quite successful. The mayor spent his first 20 months in office consulting the public and experts about his proposal to create a congestion pricing system, his answer to the ills of London's congestion, as described on the Transport for London (TfL) website:

- London suffers the worst traffic congestion in the UK and amongst the worst in Europe.
- Drivers in central London spend 50% of their time in queues.
- Every weekday morning, the equivalent of 25 busy motorway lanes of traffic tries to enter central London.
- It has been estimated that London loses between £2–4 million every week in terms of lost time caused by congestion.¹²

According to the TfL webpage, "Congestion charging is a way of ensuring that those using valuable and congested road space make a financial contribution."¹³ Vehicles pay £8 for entering within a certain boundary that rings a portion of the city, so the zone is often called a toll

ring. Cameras monitor the zone, read license plates, and transmit that information for cross-referencing against a registry of cars whose fees have been paid. Drivers may pay the charge in advance or on the day of travel. Late payment results in a penalty charge of £100. Groups who are exempt from paying the charge or are eligible for discounts include people with disabilities, residents living within the zone, emergency services and breakdown recovery vehicles, taxis, and drivers of alternative fuel vehicles.

Congestion charging directly supports four of the Mayor's transport priorities, as set out in the Mayor's Transport Strategy:

- *to reduce congestion;*
- *to make radical improvements to bus services;*
- *to improve journey*
- *to make the distribution of goods and service more efficient.*

One component of the Mayor's Transport Strategy is to funnel revenue generated by the toll ring into public transportation. During 2004-2005, the congestion charge generated £97 million for public transportation.¹⁴ This strategy has made it possible for TfL, the city's public transportation agency, to bring in extra buses to the capital's streets, introduce more routes, and improve the frequency and reliability of other routes.

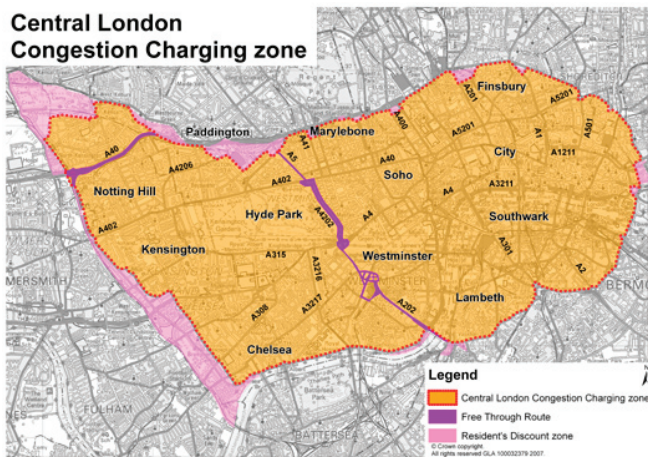
TfL's annual reporting shows that congestion charging continues to meet its objectives to decrease congestion and increase funding for public transportation. A February 2004 report stated that initially the congestion within the zone fell 30 percent and travel times across the zone decreased by an average of 14 percent. In 2006, there was a sharp increase in congestion inside the central London charging zone. However, this short spike was due to increased utility roadwork. All told, the congestion level was 8 percent lower in 2006.¹⁵ The scheme generated net revenues of £123 million in 2006/2007 and those returns funded improved bus services throughout London. Road traffic accidents and emissions have also decreased since the introduction of the toll ring.

Not all results from the London toll ring are positive,

however. Shortly after the congestion charging began, the London Chamber of Commerce surveyed 334 firms and found that 79 percent of shops reported a decrease in business, and 42 percent of those shops blamed the drop on the congestion charge. The January 2005 survey found 84 percent of shops reported a fall in business receipts, and 62 percent of businesses attributed this to the congestion charge.¹⁷ Residents of the zone are struggling with the scheme as well. A household survey indicated that 43 percent of zone residents believe that family and friends find it more difficult to visit them.¹⁸

At present, it appears that London's toll ring has satisfied many of its objectives, and the public is warming to the idea. The TfL continues to retool the program in response to the city's needs. The organization is currently considering a fee increase from £8 to £25 for older vehicles that pollute more than 225mg of carbon dioxide per kilometer and a fee reduction for those who drive "green" vehicles.

Central London Congestion Charging zone



Central London Congestion Charging zone

Source: www.tfl.gov.uk

Rome: Limited Access Zone in City Center

Rome, a partner in the CURACAO project, initially began using access control into the city center in 1989. However, the city did not enforce its congestion management restrictions until the cordon pricing scheme, known as the Limited Access Zone (LTZ), began in October 2001. Rome's population is 3.9 million, and the LTZ controls a small area in the city center measuring 4.8 square kilometers. Its hours of operation are between 6:30 AM and 6:00 PM weekdays and on Saturdays from 2:00 PM to

The LTZ does meet several important objectives:

- *Improve mobility*
- *Increase modal share to public transport*
- *Protect health (the historical center suffers from high pollution and potent health risks, especially for children who live in the zone)*
- *Preserve Rome's historical and architectural heritage.**

* Commission for Integrated Transport, "World Review of Road Pricing- Phase 2- Case Studies"

6:00 PM. Only authorized vehicles may enter, and each must have an annual permit that costs the equivalent of 12 months of public transport passes. An Automated Access Control System controls the zone with 22 electronic access gates that monitor vehicle traffic into and out of the zone. Currently, approximately 250,000 vehicles, or 12% of all Roman registered vehicles, have permits.¹⁹

The main goal of the LTZ is to encourage a shift from private vehicles to public transportation. When the system began, 40% of total trips in Rome were on public transportation and 60% were made by private transport. Since the establishment of the LTZ, traffic has decreased by 20 percent, even though combating congestion is not one of the main objectives of the zone. There has been a 10 percent increase in motor-bikes in the zone and a six percent increase in public transportation use since it started in 2001.²⁰

Stockholm: Tremendously Successful European Congestion Scheme

In response to an increase in traffic congestion, Stockholm, Sweden introduced a congestion charging trial in August 2005. Like many other cities instituting such programs, Stockholm had several objectives to address with this scheme:

- To reduce traffic volume by 10-15% on the most heavily used routes during morning and afternoon hours
- To improve accessibility for buses and cars in the inner city

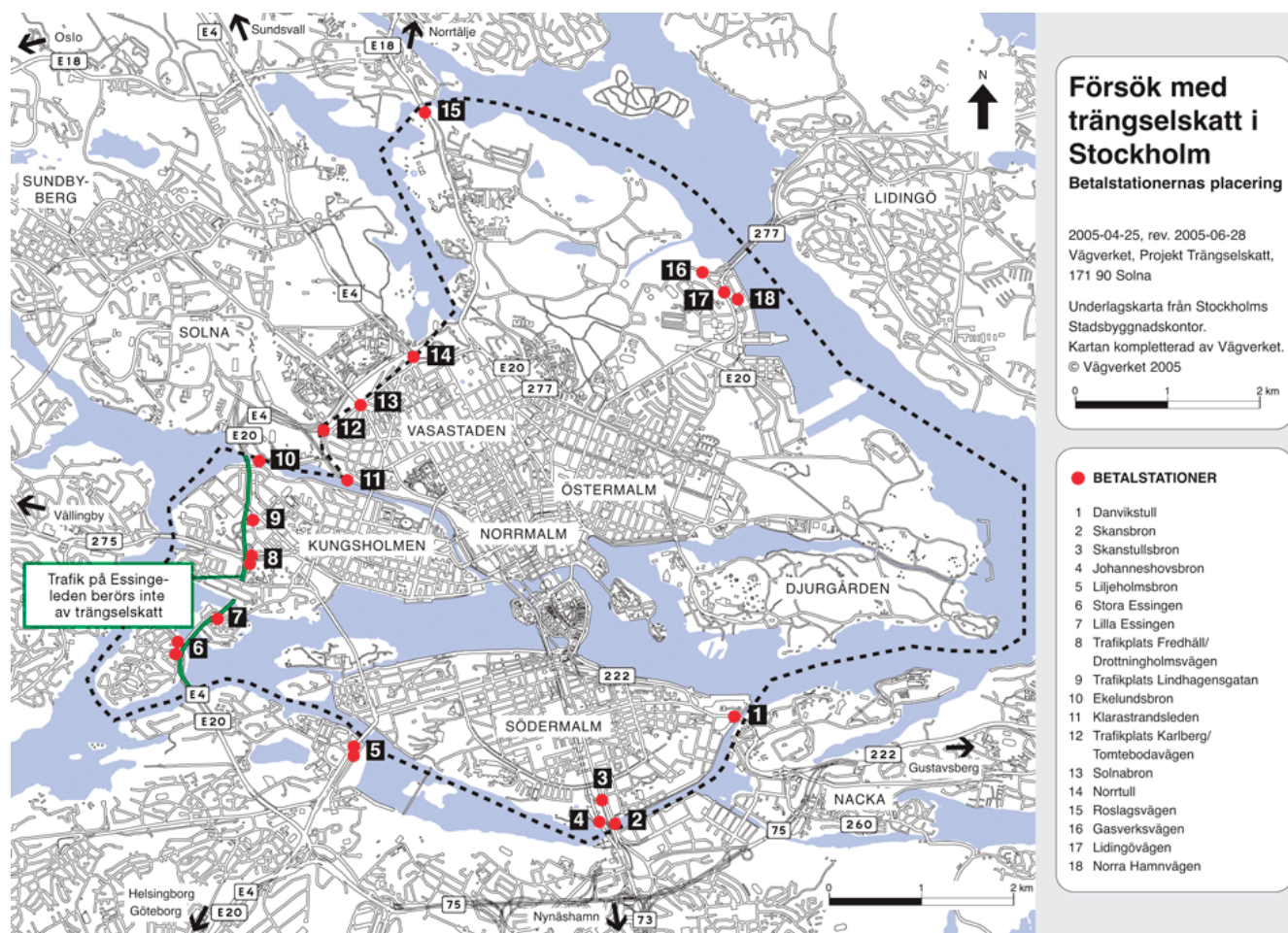
- To cut emissions of carbon dioxide, nitrogen oxides, and airborne particulates in the inner city
- To allow people in the inner city to experience an improved environment in the city at the street level.²¹

The first part of the trial was to extend public transportation for six months to encourage citizens to travel on transit. The full cost of the program was paid for by the national government at a cost of SEK 3.8 billion and included extra funds for public transportation. During the second part of the trial, which took place in the first half of 2006, the city introduced a cordon-based, variable pricing scheme to enter the city center. The congestion charge varied throughout the day and there was no charge at night. Eighteen control points around the cordon charged vehicles as they entered and left the area.

By all reports, the trial was a success. In September 2006, the city held a referendum to determine the future of

the project. Surprisingly, 51.3 % voted to continue the charging program; 45.5% voted against it,²² down from the 55% public opposition to the program before the trial began.²³ By the end of the trial period, traffic on weekdays in the city center had fallen by 22%, compared to the previous year. Public transportation had also improved. The influx of government funds for transit helped pay for 197 new buses and 12 new express buses, extended service on 18 bus routes, and enhanced commuter train service.

With revenue earned from the charging project, Stockholm will finance a planned orbital motorway bypass, valued at close to \$3 billion, instead of using revenue towards public transportation as other cities do. The new Prime Minister has said that the congestion charging scheme will only be in place until infrastructure investment is complete, meaning it will not be a way to fund general government coffers. If the scheme became permanent, it could yield an annual net revenue of about



Source: <http://www.stockholmsforsoket.se/upload/Trangselkarta1000x707.gif>

SEK760 million (£53 million), money that could fund public transportation and road network improvements.²⁴

Trondheim: Successful Congestion Charging in a Smaller City

Trondheim, Norway (population 162,000) belies the notion that only big cities have crippling congestion problems. In 1991, Trondheim became the third city in Norway to implement road user charging. The primary goal in this city was to raise revenue to pay for an urban transport investment package that would enable new road construction and improvements to pedestrian facilities.²⁵ A secondary goal was to encourage a shift in traffic from morning peak to off-peak periods in order to alleviate congestion. The first goal was quickly realized but the most positive outcome of the congestion charging scheme was the reduction in congestion, which initially was a secondary goal.

Initially the toll ring encompassed the city center and some residential areas as well as the airport road. By 1998, the ring had expanded to include many more areas of the city. The charging period runs from 6:00 AM to 6:00 PM on weekdays in the city and 24 hours per day on the airport road. When the program began, vehicles had to pass through in-bound gates to pay the toll, but now the system uses several screens around the city that charge both entry and exit to raise more revenue. Unlike in some cities where the amount of the charge is constant, in Trondheim the charge varies throughout the day. Charges are determined by the intensity of road use, though there is a cap on the maximum allowable charge during a certain time period. Charges are limited to a maximum of 1 crossing per hour and 60 crossings per month, and drivers receive discounts when buying more units up front.

Will This Work in the United States?

New York City: Moving Ahead to Implementation

In August 2007, the United States Department of Transportation announced that it would provide New York City with \$354.5 million to implement a congestion charging scheme in Manhattan. The funding is part of the Urban Partnership program that was launched in

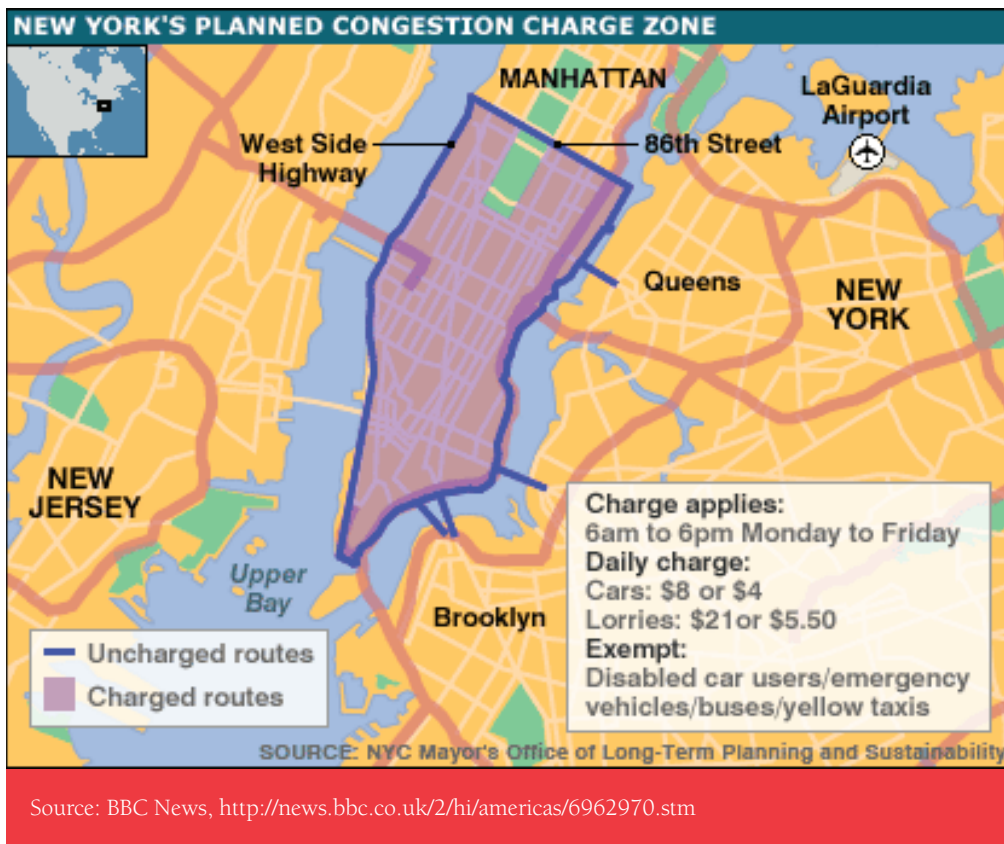
May 2006 to reduce traffic congestion using initiatives such as congestion pricing. Four other cities in the country received funding as well. In the announcement, U.S. Secretary of Transportation Mary Peters said, “These communities have committed to fighting congestion now. Our commitment was to allocate the federal contribution in a lump sum, not in bits and pieces over several years - an approach meant to get these projects off the drawing board and into action.”²⁶

The New York plan is the brainstorm of Mayor Michael Bloomberg. Monitored by the electronic E-Z Pass charging system already in place in New York for tolls, car drivers entering or leaving Manhattan below 86th Street, on weekdays from 6:00 AM until 6:00 PM, would pay \$8 and truck drivers would pay \$21. For vehicles moving only within the congestion zone, the fee would be \$4 per day for cars and \$5.50 for trucks. To charge those vehicles with no E-Z Pass, the city will use cameras to photograph vehicle license plates and give the driver two days to pay the fee by telephone, online, or at participating retail outlets.

The plan was part of a package of proposals known as PlaNYC, developed to address New York City’s future growth in an environmentally sensitive way. At an Earth Day event in April 2007, Mayor Bloomberg said, “As the city continues to grow, the costs of congestion – to our health, to our environment, and to our economy – are only going to get worse. The question is not whether we want to pay but how do we want to pay. With an increased asthma rate? With more greenhouse gases? Wasted time? Lost business? And higher prices? Or, do we charge a modest fee to encourage more people to take mass transit?”²⁷

The thought is that by decreasing congestion the air quality in lower Manhattan will improve. Idling cars produce higher emissions than freely moving traffic, so successful decongestion should help to reduce the vehicle-source emissions polluting New York’s air. The mayor’s staff has said that the congestion pricing will increase average speeds by 0.6 miles/hour within the charge zone and reduce traffic by 6.3%.²⁸ Fees generated from the plan, estimated to begin at \$380 million per year, increasing to \$900 million per year by 2030,²⁹ would be used to pay for large-scale transportation projects in New York.

There are compelling economic reasons to reduce New



York's congestion. According to the Partnership for New York City, an organization of New York City's top corporate, investment, and entrepreneurial firms, something must be done about New York traffic or the economy will suffer. The Partnership, whose mission is to maintain the city's position as a global center of commerce and innovation, has been investigating the economic impact of traffic congestion in Manhattan. In a report released in December 2006, the Partnership reported that New York City will likely grow by one million more residents and 750,000 new jobs over the next 25 years. During that same time period, Manhattan-bound traffic is projected to increase by at least 20 percent.³⁰ The cost of this congestion is projected to be \$13 billion annually, absorbed by businesses and consumers, billions in economic output, and tens of thousands of lost jobs that result from overcrowded streets in the region.

Kathryn Wylde, President and CEO of the Partnership for New York City, has been supportive of Mayor Bloomberg's proposed plan. In response to news that the federal government would be providing funds to implement the program, she said, "Federal funding provides the carrot that will help pay for new buses, faster subways, and

other measures required to incentivize people to get out of their cars and on to public transportation. This is a tremendous breakthrough in the struggle to achieve a more efficient, mobile city."³¹

However, the congestion zone has generated opposition as well. Citizens and politicians from the four other boroughs in NYC oppose the zone, saying it will punish the people who work in downtown Manhattan but live in other, cheaper areas. About 47% of workers in downtown New York commute from the surrounding suburbs.³² State Senator Carl Kruger of Brooklyn said the plan is

"basically putting a tax on those who can't afford it."³³ A WNBC/Marist citywide poll showed that 61% of New York residents opposed the idea.³⁴

Another powerful opponent was the New York State legislature. The legislature must approve any new tolls and taxes in New York City. Initially opposed to the congestion charge idea, the legislature reversed its position, and on July 25, 2007 it voted to establish a "New York City Traffic Congestion Mitigation Commission" to "undertake a review and study of plans to reduce traffic congestion within the City of New York...including but not limited to issues relating to the implementation of the traffic congestion mitigation plan to be developed by the Mayor..."³⁵ The bill requires the program to secure at least \$250 million in federal funding. The funding has now been confirmed by the U.S. Department of Transportation. The bill also stipulates that the Commission generate alternatives to area-wide congestion pricing and that any measures adopted must collectively produce at least a 6.3% reduction in average vehicles miles traveled.

On January 31, 2008, the 17-member Commission released their recommendations.³⁶ They propose to move the northern boundary of the zone from 86th Street to

60th Street which goes along the southern edge of Central Park, apply a \$1 surcharge on taxi trips within the charging zone, apply an entry-only charge (meaning no charge for vehicles leaving the zone), and increase street parking charges within the zone. If the plan moves forward, it must then go through review and approval by the City Council and Legislature by March 31, 2008.

Other Potential Locations?

With increasing congestion on American roadways, certain metropolitan areas in the United States could be fertile ground for congestion charging such as toll rings. Acceptance will be a challenge at this time but by examining the success in European cities and by watching the process unfold in New York City, Americans may ultimately accept this form of congestion management.

Some American metropolitan areas are familiar with other forms of congestion charging such as High Occupancy Toll (HOT) lanes. According to Alan Clark, director of transportation planning for the Houston-Galveston Area Council, the most relevant form of congestion charging for the Houston area is the development of managed lanes on the highway.³⁷ Houston is currently considering conversion of several HOV (high-occupancy vehicle) lanes into HOT (high-occupancy toll) lanes in the existing roadway system. However, the I-10 West/Katy Freeway, currently under reconstruction, will have true managed lanes from the beginning.

Another form of congestion charging Houston is examining is a surplus roadway auction, where the transit authority auctions off surplus capacity on roadway routes that are already designated for buses, vanpool, and 2-3 person carpools only. This plan would convert the transit-only lanes to HOT lanes that drivers would pay to use at rates that would alternate during the day, depending on traffic volumes.

While Houston is not examining toll rings at this time, one area that might benefit from a toll ring would be the Texas Medical Center area. This area is congested due to the medical center (with more than 73,000 employees), Rice University, and the museum district being located in the same vicinity. If a toll ring charge were implemented in this area, the congestion would possibly decrease and transit usage would increase.

There are also examples of congestion charging in California: SR91 and I-15 in San Diego. SR91 in Orange County has HOT lanes where the fares are variable and are collected electronically. Individuals may travel in their vehicles in HOT lanes but pay a premium price to avoid sitting in congested traffic, while three or more passengers in a car (HOV-3) may use the lane and are charged half-price. Motorcycles are also permitted to use the HOT lane and are charged 50% of the fare at that particular time.³⁸ In the same vein as the HOT lanes in Orange County, a portion of I-15 in San Diego contains HOT lanes that were converted from HOV lanes. The system includes two reversible lanes constructed near San Diego. The HOV lanes were not being used adequately in the mid-1990s and the San Diego Association of Governments suggested converting them to HOT lanes. The revised system has been considered successful and has even been extended.

What Would it Take to Implement Congestion Charging in American Cities?

American cities can take comfort in knowing that international cities have already been through the trials and tribulations associated with implementing a congestion charge. We can learn from their mistakes and their successes.

1. Congestion charging projects need political champions. Elected officials must support and shepherd a congestion charging project through the many channels for approval

- Successful examples: Mayor Livingston in London and Mayor Bloomberg in New York City.

2. Public acceptance is essential to the success of congestion charging. Transportation leaders must educate the public about why the system is desirable, how the charges are set, and what the revenues will be used for.³⁹

- Successful example: The Stockholm trial testing phase.

3. Technology is crucial to successful congestion charging projects. Electronic tags that collect tolls while a vehicle is moving instead of a toll booth system that requires vehicles to stop and pay at toll

booths has proven very important both to the systems themselves and in improved public acceptance. New technology allows drivers to pay in advance or visit specific locations such as convenience stores to pay the day of travel.

- Successful example: The London congestion charging scheme.

4. Big Picture Perspective. Transportation leaders need to show how the congestion charging project is part of the larger transportation system and how the reduction in congestion will benefit commuters and the traveling public.

- Successful example: Citizens in Singapore know that congestion charging results in reduced congestion and has led to an expanded rail network in the city-state.

5. Cities must improve their public transit systems in advance of toll rings so that drivers may opt to take public transportation instead of paying a congestion charge or paying the increased fuel costs associated with driving.

- Successful example: The increase in public transportation in Stockholm (extended routes, new buses, enhanced commuter train service).

6. Do the Math. One major perceived drawback of a toll ring project is that the initial capital start up costs are prohibitive. Leaders need to show that the potential return on these projects is much higher than the costs.

- Successful example: The average capital costs to implement the London, Stockholm and Singapore congestion charging schemes could be as high as \$190 million. The average annual operating cost for these three systems is US \$72 million. However the average annual revenue generated is US \$172 million and could go towards improving transit systems, building new highway capacity, and funding other infrastructure projects.

Conclusion: Are Toll Rings Part of America's Future?

The concept of congestion charging is now being examined within the borders of the United States. If New York City is able to successfully implement congestion charging in Manhattan, it could stand as an example for other cities in America, regardless of size. In March 2006, the Land Transport Authority in Singapore and the Transport for London signed a Memorandum of Cooperation to share valuable lessons and experiences in delivering innovative and integrated transport systems, such as toll rings that charge drivers to enter within a certain area.⁴⁰ New York City will also be able to share lessons and experiences as the first American city to dabble with this new model, but they will also be highly scrutinized. Congestion charging may be more appropriate for some cities than for others. However, where the concept has been tested in other parts of the world, the public is undeniably embracing it as a means to combat congestion and fund transportation improvements.

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