Alternative Approaches to Traffic Congestion Mitigation in the Manhattan Central Business District

Keep NYC Congestion Tax Free
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Executive Summary

Keep NYC Congestion Tax Free proposes a cost-effective, efficient, fair and practical alternative plan that will address the problems posed by congestion in New York City and exceed the guidelines imposed by the Urban Partnership Agreement between the USDOT and New York City, New York State and the MTA. Key elements of this alternative plan include:

- Value pricing for curbside parking in the Manhattan CBD. Sharply reducing the number of "free" on-street parking spaces in commercial areas of Midtown and Lower Manhattan and increasing the price of on-street parking.

- Major reform of the City's system for issuing parking placards to City employees, and for regulating their use, in order to limit issuance of placards to those who need them for job-related purposes, end illegal parking by placard-holders, and encourage public employees to use mass transit.

- Greatly expanding the number of taxi stands in the Manhattan CBD, along with other measures to reduce the time cabbies spend cruising for passengers – a practice that by itself accounts for approximately 13 percent of all vehicle-miles traveled (VMT) in the CBD.

- Implementing variable pricing on existing tolled crossings serving the CBD and restoring two-way truck tolls on the Verrazano Bridge. Increasing MTA and Port Authority bridge and tunnel tolls, incorporating variations in pricing by crossing and by time of day; and removing the existing incentive for trucks heading to New Jersey from Long Island, Queens and Brooklyn to travel via the Manhattan CBD by restoring two-way tolls on the Verrazano Bridge.

- Increasing fines for the types of parking violations that contribute most to congestion in the Manhattan CBD (double-parking, parking in bus stops or loading/unloading zones, etc.), coupled with more aggressive enforcement and legislation that strengthens the City's ability to enforce existing rules against "blocking the box."

- Reducing congestion caused by "black cars" and non-yellow for-hire vehicles through a targeted campaign against parking and other violations these for-hire vehicles contribute to congestion; and exploring the feasibility of creating designated parking zones for these vehicles.

- Modernizing traffic signals in the Manhattan CBD, to enable NYCDOT to manage the flow of traffic more effectively through "real-time" adjustments in signal timing.

A look at the City's congestion pricing plan highlights how it fails the test of equity, efficiency and economic viability:

- The City's plan disproportionately hits the pockets of middle-class and working New Yorkers who live outside the proposed congestion zone.
- The City's plan shifts traffic and pollution to neighborhoods outside the congestion zone.
- The City's plan requires and depends on massive spending on infrastructure (they claim $233.6 million; London paid more for much less - $376 million).
- The City's highly inefficient plan loses 39 percent of all revenues raised to its cost of operation.
- The City's plan, if implemented, imposes substantial harm to New York City's economy.
    - Some $100 million annually in "compliance costs," the value of time motorists and businesses will have to spend paying congestion charges (or appealing fines for late payment, etc.).
    - As much as $690 million overall reduction in economic activity in the City, a loss of as many as 8,700 jobs, and tens of millions of dollars in lost State and City tax revenues.
- The City's plan fails to efficiently use its existing value-pricing system (existing bridge and tunnel toll infrastructure).

The primary flaw in the City's congestion pricing plan is that it indiscriminately taxes all vehicles whether or not they are a direct cause of congestion; it thus fails to focus on the root causes of congestion. These include:

- Unnecessary cruising by yellow-medallion cabs (accounts for 13% of total VMTs in the congestion zone).
- Undervaluing on-street parking (mid-day cruising for on-street parking accounted for 15% of all VMTs in West Midtown; 28% of those driving in Soho are looking for parking).
- An out-of-control and permissive placard and permit system (86% of all cars with placards around City Hall parked illegally; 88% of all cars with placards around Chinatown parked illegally).
- The 10,000 trucks that drive through Manhattan daily with no point of origin or destination in Manhattan.
- Undervaluing of parking and traffic fines and the lack of consistent, aggressive enforcement.
- Undervaluing of tunnel and bridge crossings during peak periods.
- The 30,000 "black cars" and other non-yellow for-hire vehicles that clog our streets in Midtown and Lower Manhattan.

I. Short- and Long-Term Options to Reduce Congestion and VMT

The Keep NYC Congestion Tax Free plan, unlike the city plan, focuses on the direct, root causes of congestion.

Options that reduce VMT, congestion or both (2008-2009)

- Value pricing for curbside parking in the Manhattan CBD.
- Reforming the issuance, use and enforcement of parking placards.
- Reducing cruising for fares by medallion cabs.
- Implementing variable pricing on existing tolled crossings serving the CBD and restoring two-way truck tolls on the Verrazano Bridge.
- Increasing fines and more aggressive enforcement of existing parking and traffic rules (including "block the box" legislation).
- Reducing congestion caused by black cars and non-yellow for hire vehicles.
- More effectively regulating the use of streets for construction projects.
- Modernizing traffic signal systems.
- Implementing 511 (A system to notify drivers of real time traffic conditions).
- Expanding express bus and ferry service.

Options for reducing congestion: beyond 2010

- Major transit system improvements.
- Bus Rapid Transit.
- Lower Manhattan bus depot.
- Incentives for off-peak delivery.
- Increased use of water transportation for movement of freight.
- Expanding the Lower Manhattan traffic management program to Midtown.
- Improving the distribution of information to motorists by state of the art technology.
- Encouraging greater use of bicycle transportation.

Alternative approaches to reducing congestion: Possible reductions in VMT

	Possible reductions in VMT, Manhattan below 86th Street
Options for 2008-09	
1) "Value-pricing" on-street parking	1.8 - 2.4%
2) Reduction in cabs cruising for fares	1.3 - 2.6%
3) Restructuring fares for cab rides in the CBD	1.2 - 1.8%
4) Reform of the placard system	1.2 - 1.5%
5) Higher tolls/variable tolls	1.0 - 1.5%
6) Higher parking fines/more aggressive enforcement	0.6 - 0.9%
7) Expanding express bus and ferry service	0.4 - 0.6%
8) Restoring two-way truck tolls on the Verrazano	0.1 - 0.2%
SUBTOTAL	**7.6 - 11.5%**
Long-term options (2010 and beyond)	
1) Major transit improvements	2.0 - 3.0%
TOTAL	**9.6 - 14.5%**

The report also notes additional options for reducing congestion that also merit further consideration. These include:

- Allocating more curb space in the busiest commercial areas for loading and unloading.
- Requiring adequate space for off-street loading and unloading in all large new commercial buildings in the Manhattan CBD.
- Requiring City agencies with offices in the Manhattan CBD to develop plans to facilitate telecommuting and creating incentives for private companies to do the same.
- Developing additional park-and-ride capacity outside the Manhattan CBD, and maintaining or replacing existing facilities in areas that are being redeveloped (such as Flushing).
- Raising the monthly cap on transit subsidies that employers are allowed to provide as a tax-free employee benefit.
- Exploring the feasibility of using double-decker buses in place of articulated buses, which take up more street space.
- Introducing MTA Minivans to cover routes where full bus service is not viable.

II. Revenue Potential from Alternative Approaches to Congestion Mitigation

While the primary purpose of the alternatives outlined above is to reduce congestion (and to meet or exceed the goal of a 6.3 percent reduction in vehicle-miles traveled within the proposed zone), several of them would also raise revenue. Like the net operating revenues from the proposed congestion pricing system, these funds could be used to help finance needed improvements in mass transit and other transportation systems, and to fund other congestion mitigation measures.

Revenue potential for alternative approaches to reducing congestion

Alternative approaches to reducing congestion	Revenue measures	Revenue potential
Implement variable pricing on existing tolls	$2 increase at MTA and Port Authority tunnels ($1 increase off-hours), and a $1 increase at Triborough and George Washington Bridges, and a $0.50 increase at Henry Hudson Bridge	$195 million
Value pricing for curbside parking	Metering 10,000 currently-free on-street spaces and increasing charges by an average of 100%	$80 - 100 million
Reform of the placard system	Increase in on-street parking and parking charges	$50 - 60 million
Higher parking fines/more aggressive enforcement	Increased fines for illegal parking	$75 - 150 million
"Block-the-box" legislation and enforcement	Issuing 300 to 500 additional tickets per weekday at $200 per ticket	$15-25 million
Verrazano two-way truck tolls	Recapture avoided tolls	$10 million
Stricter regulation of the use of street space by construction contractors	Increased revenue from fines for violating permit conditions (and increases in some fees)	$3 - 5 million
TOTAL		**$428 - 545 million**

The estimates presented in the table above are not intended as a definitive statement of the revenues that could be generated from alternative approaches to reducing congestion; they are intended rather to illustrate a range of possible revenue impacts. In some cases, more aggressive congestion mitigation measures could generate more revenue – if, for example, curbside parking were priced high enough to eliminate, rather than reduce, cruising for parking in the CBD. And while further refinement of these alternatives will allow us to develop more precise revenue estimates, it is already clear that these alternatives could potentially generate revenues approaching or even exceeding those projected for the City's plan.

The alternatives presented here could exceed the 6.3 percent VMT reduction target set by the Legislature and by the U.S. Department of Transportation; and they could do so without the need for massive spending on infrastructure.

- This plan, unlike the city plan, targets the specific root causes of congestion.
- This plan, unlike the city plan, minimizes any potential cost to the city economy.
- This plan, unlike the city plan, reduces congestion and pollution rather than shifting these problems elsewhere in the city.

- This plan, unlike the city plan, employs targeted value pricing rather than an indiscriminate congestion tax.
- This plan, unlike the city plan, imposes no new value pricing infrastructure and also uses the existing bridge and tunnel infrastructure.
- This plan, unlike the city plan, provides additional funding for mass transit without wasting money on the massive capital and annual operating costs of the city congestion pricing system. [See chart above]
- This plan, unlike the city plan, uses technology to strategically target congestion.
- This plan, unlike the city plan, employs no highly intrusive system of cameras that attacks the privacy of New Yorkers.
- This plan, unlike the city plan, recognizes how congestion results not solely from the number of vehicles on the road, but also from a lack of traffic management and planning.
- This plan, unlike the city plan, requires no environmental impact statement.

The question remains: why consider a controversial, regressive, exorbitant and complex congestion pricing scheme in the face of better alternatives? The alternatives outlined above and detailed in this report will more effectively meet the need to alleviate congestion – and will do so at a lower cost.

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Introduction

On April 22, 2007, in an Earth Day Address, New York City Mayor Michael Bloomberg proposed that the City establish a new system of congestion pricing that would apply to most private vehicles traveling below 86th Street in Manhattan on weekdays between 6:00 AM and 6:00 PM. By encouraging people who travel into the central business district (CBD) to shift from private autos to some form of mass transit (or to travel at other times), the Mayor argued that the proposed system would significantly reduce traffic congestion in the CBD. Moreover, the City estimates that it would generate several hundred million dollars annually that could be used to fund needed improvements in mass transit.

The Mayor's proposal, and the arguments for its adoption that he has so cogently and forcefully presented, have served a valuable purpose. They have called attention to the problem of traffic congestion and sparked widespread public discussion about how it might be addressed most effectively. And they have helped highlight the need for increased investment in the City's and the region's transit systems – and the need to find the revenues required to finance that investment.

That the Mayor was right to raise these issues is evident from the speed with which a consensus seems to have been reached about the need to confront them. Even the most vocal critics of the Mayor's proposal have agreed that the City needs to take action to reduce congestion and to generate more revenues for transit. The debate has for the most part been about how to do so most effectively.

This report – prepared by Keep NYC Congestion Tax Free, a coalition of groups that has opposed the City's congestion pricing plan – presents a series of alternatives that we believe would be more effective in reducing traffic congestion than the Mayor's plan, and could do so at lower cost. And while the report's primary focus is on reducing congestion rather than financing mass transit, the anti-congestion measures described in the report would also generate hundreds of millions of dollars annually in new revenues that could be used to fund investments in transit.

The debate on congestion pricing

Under the City's plan, most private autos entering or leaving the congestion pricing zone between 6:00 AM and 6:00 PM on weekdays would be charged $8.00; those traveling solely within the zone would be charged $4.00. Trucks entering or leaving the zone during the same hours would be charged $21.00; those traveling only within the zone would be charged $5.50. Vehicles traveling only on the West Side Highway or the FDR Drive would be exempt from the charge; and those paying tolls to enter the zone via MTA or Port Authority tunnels would have the amount paid in tolls credited against the congestion charge.

Several types of vehicles would be completely exempted from the charge – medallion taxis, some types of for-hire vehicles, and (as a result of a subsequent agreement between the City and the federal government) vehicles owned or operated by foreign governments and international organizations.

The City has estimated the initial set-up costs of the proposed system at approximately $240 million. In its first few years of operation, the City estimates that it would generate about $620 million annually in congestion-charge revenues; after covering an estimated $240 million in annual administrative and operating costs, the system would yield about $380 million each year to support improvements in mass transit.

Opponents of the City's proposal raised a number of objections, arguing that:

- Advocates of congestion pricing had seriously overstated the costs that traffic congestion imposes on New York City's economy.
- The proposed charge would be inequitable, constituting in effect an unfair tax on people and businesses in Upper Manhattan, Brooklyn, Queens, the Bronx and Staten Island who need to drive into the CBD. New Yorkers of modest means, who could least afford the added cost, would be among those hit hardest.
- As a result of the additional costs imposed on people living, working, doing business in or visiting New York City, the congestion charging system would have a significant adverse impact on the City's economy, leading to a loss of 7,700 to 8,700 jobs.
- The reductions in CBD congestion promised by advocates of congestion pricing would be achieved in part by shifting traffic (and pollution) to other, already-congested areas (such as the Cross-Bronx Expressway).
- Advocates' claims about the "success" of London's congestion charging system (on which the Mayor's proposal was modeled) were highly misleading. London's system is costly and inefficient. Local residents and business organizations have been sharply critical and most of the initial gains in mobility reported during the first year of implementation have since evaporated.
- With at least 39 percent of all revenues ($3.12 out of every $8.00 charge) going to cover administrative costs, the proposed congestion pricing system would be a particularly inefficient way to raise the revenues needed to finance mass transit improvements. Data on the cost of London's system, moreover, suggest that the City may be underestimating the costs involved in implementing and operating the proposed system – and thus may be overstating the net revenues it will generate.
- There are other options available (both for alleviating congestion and raising revenues for transit) that would be less costly, more efficient and equitable, and less damaging to New York's economy.

Acknowledging that many serious questions about the proposed system remained unanswered, the New York State Legislature declined to approve legislation authorizing the City to create and operate a congestion pricing system. Instead, the Legislature in July 2007, created a seventeen-member New York City Traffic Congestion Mitigation Commission. The Commission was charged with assessing the congestion pricing plan proposed by the City, as well as alternative approaches to reducing congestion. The statute specifies that any alternative approach recommended by the Commission must match or exceed the 6.3 percent reduction in vehicle-miles traveled (VMT) that the City claims its proposed congestion pricing system would achieve below 86th Street in Manhattan.

In August, the U.S. Department of Transportation (USDOT) announced a conditional award of $354 million to New York under the Department's Urban Partnership program, primarily for improvements in bus service that are intended to provide an alternative to driving into or within the Manhattan CBD. The award is predicated on legislative approval – no later than March 31, 2008 – of either the Mayor's congestion pricing proposal, or an alternative that is approved by USDOT and that also reduces VMT in the proposed pricing zone by at least 6.3 percent.

Alternatives to the City's proposal

Advocates for the congestion pricing system proposed by the City have argued that there is no realistic alternative that can produce either the reductions in traffic congestion or the increased revenues for transit that the City's proposed system would offer. But even a preliminary review of the available alternatives clearly shows that this is not the case. There are many realistic, readily-available approaches to achieving either of these objectives that the Commission, the City Council and the Legislature should consider before they think about approving a system as costly and as fraught with serious problems as that proposed by the Mayor.

Table 1: Alternative approaches to reducing congestion: Possible reductions in VMT

	Possible reductions in VMT, Manhattan below 86th Street
Options for 2008-09	
1) "Value-pricing" on-street parking	1.8 - 2.4%
2) Reduction in cabs cruising for fares	1.3 - 2.6%
3) Restructuring fares for cab rides in the CBD	1.2 - 1.8%
4) Reform of the placard system	1.2 - 1.5%
5) Higher tolls/variable tolls	1.0 - 1.5%
6) Higher parking fines/more aggressive enforcement	0.6 - 0.9%
7) Expanding express bus and ferry service	0.4 - 0.6%
8) Restoring two-way truck tolls on the Verrazano	0.1 - 0.2%
SUBTOTAL	**7.6 - 11.5%**
Long-term options (2010 and beyond)	
1) Major transit improvements	2.0 - 3.0%
TOTAL	**9.6 - 14.5%**

In order to assist the Commission, the Council and Legislature in assessing possible alternatives to the City's plan, Keep NYC Congestion Tax Free has begun to identify and evaluate a menu of initiatives that would reduce both VMT and congestion. This report offers a preliminary review of several of these initiatives.

- Part II of the report focuses on thirteen initiatives that could significantly reduce VMT, congestion or both – while in several cases also providing revenues that could be used to reduce mass transit – and that could be implemented during 2008 or 2009;

- Part III discusses several other initiatives that could also help reduce VMT, congestion or both, but would require additional time for planning and implementation.

In addition, the report includes a list of other congestion mitigation measures that have been proposed during the course of the debate over congestion pricing, which also deserve further study.

Although the review of alternatives described in this report is still preliminary, a number of important conclusions are already evident.

1) A 6.3 percent reduction in VMT can be achieved by other means.

It is clearly possible to achieve a reduction of 6.3 percent or more in VMT (and an even greater reduction in congestion) without resorting to a complex, expensive, inefficient and inequitable congestion pricing system. Several measures that could help achieve this reduction are listed in Table 1, and described in greater detail in the body of the report. Several of these approaches use some form of pricing to reduce congestion – but do so in ways that avoid the most glaring problems associated with the City's proposed congestion pricing plan.

The figures on possible reductions in VMT presented in the table are preliminary estimates, based on previous research on traffic in New York City conducted by a variety of experts. Further research and analysis will be needed to refine these estimates; but there is clearly sufficient evidence to show that if the City wants to reduce VMT in the Manhattan CBD by 6.3 percent, there are other (and better) ways to achieve that goal.

2) Reducing VMT should not be the primary measure of success.

Reduction in vehicle-miles traveled is not by itself an adequate criterion for assessing strategies for alleviating congestion in the CBD. Several of the measures described in this report could be very effective in reducing congestion, even though they would have little or no effect on VMT.

We recognize that in the near term the Legislature's charge to the Commission and the terms of the USDOT grant award effectively require that the Commission focus initially on VMT. In the long run, however, it makes far more sense to focus on measures of congestion and overall traffic mobility. As Professor John Falcocchio, Director of Polytechnic University's Transportation Research Institute, has suggested, the City's goal should be to maximize overall mobility.

3) Focus more directly on specific sources of congestion in the CBD.

The City's proposal implicitly assumes that congestion is largely a product of the aggregate number of private cars entering (or driving within) the CBD. With a few exceptions, the Mayor's plan does not focus directly on specific sources of congestion – such as taxi and "black car" traffic, under-pricing of on-street parking, abuse of parking placards issued to City employees, double-parking or parking in loading zones, etc.

(Indeed, the City's proposal specifically *exempts* taxis and for-hire vehicles other than black cars from congestion pricing. The Mayor's plan to accelerate conversion of New York's

medallion cabs to all hybrid vehicles over the next five years rightly recognizes that taxis are a significant source of air pollution and greenhouse gases – but his congestion pricing plan ignores their even greater contribution to the problem of congestion.)

To his credit, the Mayor has proposed a number of other initiatives that would deal directly with specific sources of congestion, such as enforcing more vigorously the prohibition on "blocking the box," which we also discuss in this report. And he has proposed improvements in bus and ferry service that would offer people who live in neighborhoods not now well served by transit an alternative to driving into Manhattan.

Nevertheless, the City's plan does not address some of the most significant sources of congestion. Sam Schwartz, one of New York's leading traffic experts (and a supporter of congestion pricing) has called for the City to start addressing these problems immediately. He specifically recommends that the City focus on taxis, black cars, trucks making through trips via the CBD and abuse of parking placards issued to City employees. Schwartz concludes that:

> *….we don't need to wage an all-or-nothing battle on congestion pricing to combat traffic. By targeting the four major culprit vehicles that are the root cause of most traffic, we can create a little breathing room on our streets.*

In contrast, the alternatives to the City's plan that are described in this report include several that would directly address specific sources of congestion; and there are no doubt other options that could do still more in this area.

4) Focus on those alternatives that produce the greatest benefit at the least cost – and that are clearly do-able.

While the alternatives presented in Part II of the report embody a variety of approaches to reducing congestion – value pricing, stricter enforcement, more effective use of technology, improving transit alternatives – they have several characteristics in common.

- They would generally speaking cost much less to implement (both initially and in terms of ongoing operations) than the proposed congestion pricing plan.
- They generally would not impose significant new costs on New York's economy. (Increased tunnel and bridge tolls might be an exception – but the need to generate additional revenue for mass transit probably makes higher tolls inevitable in any case.)
- With few exceptions, they involve actions that the City, the MTA, the Port Authority and other agencies are already authorized to undertake.
- They are clearly do-able. Some – such as increasing tolls, on-street parking charges or fines for illegal parking – are clearly-defined actions for which "we know the drill." Others – such as modernizing traffic signals – represent an extension or acceleration of initiatives already under way.

Additional analysis will be required to determine precisely which combination of alternatives, in what order, will deliver the greatest benefit at the least cost, and whether there might be others that should also be included. But we believe the thirteen initiatives suggested here represent a solid starting point for the Commission's, the Council's and the Legislature's deliberations.

5) Proceed incrementally – and stay flexible.

Rather than relying on a single, capital-intensive, technologically-complex – and ultimately inflexible – solution to the problem, the alternatives presented here represent an array of options that could be employed in different combinations, with varying degrees of intensity, while the City continues to monitor its progress in reducing congestion.

This incremental approach is more in tune with the reality that predictions about growth in population and traffic are uncertain at best. Various forms of mass transit have in recent years absorbed most of the growth in demand for travel into the CBD – and with planned improvements, they can continue to do so. Meanwhile, improvements in the management of traffic can be effected as needed, step by step.

Moving quickly to implement a more radical approach might be justified if the volume of traffic in the CBD, and the severity of congestion associated with it, were clearly getting worse. But the City has not presented any evidence that this is in fact the case. Indeed, data recently released by the New York Metropolitan Transportation Commission (NYMTC) show that in 2005 – even as the City's economic recovery was accelerating – the total number of autos, taxis and trucks entering the Manhattan CBD on a typical fall weekday declined by 2 percent.

A more cautious, incremental approach seems particularly appropriate at a time when a variety of economic warning signs are already visible. In his call for City agencies to tighten their belts, Mayor Bloomberg has already acknowledged that an economic slowdown – if not a more serious recession – is likely to occur in 2008. History suggests that as New York's economy slows down, the overall level of traffic in Manhattan will decline. This could give the City some breathing room in which to move ahead incrementally with less dramatic – but in the long run, less costly and potentially more effective – ways to manage congestion.

The City and the State should also keep in mind that several of the New York industries that tend to get hit first in times

of recession – such as retailing, restaurants, and Broadway theaters – are among the industries that could be most adversely affected by congestion pricing. The next eighteen months could thus be a particularly inopportune time to be treating the City's traffic problems with a new form of shock therapy.

6) Better ways to raise revenues

For some advocates of congestion pricing, the City's proposal has always been more about "pricing" than about "congestion" – more a politically-palatable, media-friendly way to raise more money for mass transit than a way to address the problem of congestion. But just as there are many ways to reduce congestion other than the proposed congestion pricing system, so are there more efficient ways to generate additional revenue to support improvements in mass transit.

For the past twenty-five years, New York has benefited greatly from the framework that was put in place in the early 1980's to fund the turn-around of what had been a rapidly deteriorating subway, bus and commuter rail network – a combination of farebox revenues, dedicated taxes, capital appropriations from all levels of government and subsidies from motorists. To sustain its transit system into the future, New York will probably have to seek additional funding from all of these sources.

In opposing the City's congestion pricing plan, Keep NYC Congestion Tax Free is *not* suggesting that motorists be exempted from having to bear a portion of the growing cost of maintaining New York's and the region's transit systems. But we *are* suggesting that any initiatives aimed at raising additional revenues for transit must do so as efficiently and as equitably as possible.

Several of the options described in this report – higher and variable bridge and tunnel tolls, higher charges for on-street parking in the CBD, reform of the placard system, higher fines (and more aggressive enforcement) for parking and traffic violations – could produce substantial new revenues, which could in part be dedicated to improving mass transit. And they could do so more efficiently and at significantly less risk to the City's economy.

Table 2: Estimated annual revenues from selected initiatives

Initiative	Annual revenues
Higher/variable tolls	$195 million
Value-pricing on-street parking	$80 - 100 million
Placard reform	$50 - 60 million
Higher fines/stronger enforcement	$75 - 150 million
"Block-the-box" enforcement	$15 - 25 million
Verrazano two-way truck tolls	$10 million
Strict regulation of construction contractors' use of street space	$3 - 5 million
TOTAL	**$428 - 545 million**

A summary of the alternatives

As noted above, this report explores two sets of options: those that would reduce vehicle-miles traveled, congestion or both and could be implemented by the end of 2009; and those that could achieve either of these objectives, but would require more time (2010 and beyond) for planning and implementation. Each of the options is identified below and discussed in greater detail in the remainder of the report.

Options that reduce VMT, congestion or both (2008-09)

1. Sharply reducing the number of "free" on-street parking spaces in commercial areas of Midtown and Lower Manhattan and increasing the price of on-street parking.

2. A major reform of the City's system for issuing parking placards to City employees, and for regulating their use, in order to limit issuance of placards to those who need them for job-related purposes; end illegal parking by placard-holders; and encourage public employees to use mass transit.

3. Greatly expanding the number of taxi stands in the Manhattan CBD, in order to reduce the time cabbies spend cruising for passengers – a practice that by itself accounts for approximately 13 percent of all vehicle-miles traveled in the CBD.

4. Changing the existing structure of taxi fares, to provide a significantly higher initial fare for trips originating or ending in the Manhattan CBD on weekdays between 7:00 AM and 7:00 PM, in order to encourage greater use of buses and subways (or walking) for relatively short trips.

5. An increase in MTA and Port Authority bridge and tunnel tolls, incorporating variations in pricing by crossing and by time of day.

6. Restoration of two-way tolls for trucks on the Verrazano Bridge to remove the existing incentive for trucks heading to New Jersey from Long Island, Queens and Brooklyn to travel via the Manhattan CBD.

7. Substantial increases in fines for the types of parking violations that contribute most to congestion in the Manhattan CBD (double-parking, parking in bus stops or loading/unloading zones, etc.), coupled with more aggressive enforcement.

8. Legislation that strengthens the City's ability to enforce existing rules against "blocking the box," coupled with more active enforcement.

9. A targeted campaign against parking and other violations by "black cars" and limousines that contribute to congestion and exploring the feasibility of creating designated parking zones for these vehicles.

10. More strictly regulating construction contractors' use of street space for purposes such as storage of materials and placement of equipment.

11. Modernizing traffic signals in the Manhattan CBD to enable NYCDOT to manage the flow of traffic more effectively through "real-time" adjustments in signal timing.

12. Deployment of the "511" travel information system (as currently planned by the New York State Department of Transportation), which will improve the availability of information on road conditions, congestion, construction, traffic accidents, events that will affect traffic, etc.

13. Expansion of express bus and ferry services in neighborhoods that are not now well-served by mass transit.

Longer-term options (2010 and beyond)

1. Major improvements in transit capacity that are expected to result in a significant reduction in vehicular traffic, including the East Side Access project, the new Trans-Hudson rail tunnel and the Second Avenue subway.

2. Expanding DOT's planned "Bus Rapid Transit" (BRT) pilot project on First and Second Avenues to other corridors in the Manhattan CBD.

3. Establishment of a commuter bus station and lay-over facility in Lower Manhattan, to reduce commuter bus traffic during peak periods and on-street parking of buses during the mid-day hours.

4. Providing incentives for businesses in the Manhattan CBD to schedule deliveries during off-peak periods.

5. Expanding the use of water transportation for local and regional movement of freight.

6. Expanding the Lower Manhattan traffic management program to Midtown.

7. Deployment of new technologies that will further enhance drivers' access to information on traffic conditions and suggested alternate routes – for example, the new system that Nissan will be piloting in Beijing in 2008.

8. Encouraging greater use of bicycle transportation, by constructing physically-separated bike lanes in key corridors, and by increasing the supply of bicycle parking in the Manhattan CBD.

Other possible initiatives

During the course of the debate on the Mayor's congestion pricing proposal, a variety of other measures have been suggested that might help to reduce congestion in the Manhattan CBD without incurring the costs that the City's proposed congestion pricing system would entail. Many of these suggestions merit further analysis. We cite just a few of them here:

- Creation of high-occupancy lanes, where feasible, on the crossings serving the CBD.

- Requiring City agencies with offices in the Manhattan CBD to develop plans to facilitate telecommuting and creating incentives for private employers to do the same.

- Creating new park-and-ride facilities in the boroughs outside Manhattan, while also protecting existing park-and-ride locations from development pressures.

- Requiring all new commercial buildings in the Manhattan CBD to provide adequate facilities for off-street loading and unloading.

Conclusion: There are better ways to reduce congestion

The alternatives presented here should not be seen as a definitive set of recommendations for how best to reduce congestion in the Manhattan CBD. More work is needed to refine our preliminary estimates (or develop estimates, where they are lacking) of the impact of various alternatives on VMT and congestion and to determine the costs associated with those alternatives.

Nevertheless, the information we have assembled here clearly demonstrates that (contrary to what supporters of the proposed congestion pricing plan have so frequently stated) there are real alternatives to the City's plan – alternatives that are in many respects superior.

During the next several months, Keep NYC Congestion Tax Free will continue to develop information and analyses to help the public, the Mayor, the Commission, the City Council, the Governor and the Legislature choose the course that is best for New York.

II. Options that reduce VMT, congestion or both (2008-09)

1) Value-pricing on-street parking in the Manhattan CBD

Research by some of the nation's leading traffic experts has found that free or low-cost on-street parking contributes to urban traffic congestion in several ways. It encourages drivers to cruise the streets looking for free or low-cost spaces. At the same time, it reduces the rate of turnover, thus ensuring that at any given time fewer spaces are available and encouraging double parking. In New York City, a 1995 study found that cruising for on-street parking accounted for 15 percent of all vehicle-miles traveled in West Midtown during the mid-day period; and the slow, stop-start nature of such cruising means that it undoubtedly accounts for an even larger share of congestion in the area. A survey of motorists conducted in Soho in 2000 found that 28 percent were looking for a place to park.

Despite enormous demand for parking in the Manhattan CBD, the majority of on-street spaces in the area (22,100 out of 29,000) are not metered. Moreover, the cost of metered on-street parking is only a fraction of the typical cost of parking in a garage; one recent study found that the average charge for parking in a metered space in the CBD was $1.73, while charges for parking in a garage averaged $24.42.

Elimination of un-metered on-street parking in the busiest commercial areas within the CBD, coupled with a significant increase in on-street parking charges, would have a significant impact on excess congestion in some parts of the CBD. It is proposed that the City begin metering up to 10,000 on-street spaces in which parking is now free and develop a more rational pricing structure for on-street parking in the CBD. Charges might vary locally within the CBD, but we assume for purposes of this analysis that charges should on average be doubled (with even higher increases in the busiest areas).

Estimated impact on VMT and congestion:

If cruising for a parking space accounts for 12 percent of vehicle miles traveled (VMT) in the CBD at mid-day (including traffic on the West Side Highway and the FDR), changes in the pricing and regulation of on-street parking sufficient to reduce cruising by 15 to 20 percent could effect a reduction of approximately 1.8 to 2.4 percent of total VMT – a significant contribution toward achievement of the City's goals for reducing congestion. (Further analysis will be required to determine the fee levels and structure that will be most effective in achieving reductions in this range.)

In addition to reducing cruising for parking, a sharp reduction in the supply of free on-street parking, combined with an increase in the cost of metered parking, would also encourage some drivers to shift to mass transit. This would lead to a further reduction in total VMT within the CBD.

Because drivers who are searching for a parking spot tend to slow the pace of traffic, the percentage reduction in congestion that results from reduction in cruising is likely to be greater than the reduction in VMT – perhaps on the order of 2.0 to 3.0 percent.

Revenue potential:

Metering 10,000 currently free on-street spaces and doubling the average charge would generate approximately $80 to $100 million annually in new revenues.

2) Reforming the issuance, use and enforcement of parking placards

For many years, placards have been issued to some City, State and federal employees that allow them to park on the street at no cost. In theory, most placards do not entitle these employees to park where it would otherwise be illegal. In practice, however, placard-holders routinely park illegally, and those who do so are almost never ticketed. A 2006 study conducted for Transportation Alternatives found that in the area around City Hall, 86 percent of all cars displaying placards were parked illegally. In Chinatown, 88 percent of all parked cars with placards were parked illegally.

Problems caused by abuse of legitimately issued placards are aggravated by placards issued – with no apparent basis in law – by several public employee unions. Recent reports, moreover, suggest part of the problem is caused by the printing and sale of fake placards.

Abuse of the placard system contributes to congestion – especially in Lower Manhattan – in several ways. It encourages government employees who might otherwise use mass transit to drive instead. Cars parked illegally in loading and unloading zones force trucks to double-park. And parking by placard-holders in metered spaces reduces the number of available spaces, thus encouraging other drivers to cruise for parking.

Commenting on the traffic problems caused by abuse of placards, Former NYCDOT Deputy Commissioner Sam Schwartz says he has "not seen conditions this bad in 25 years." Schwartz says that these "privileged parkers:"

….contribute about 8 percent of the traffic downtown, and add far more than that through their "piggish" behavior of blocking bus stops, bus lanes and even hydrants.

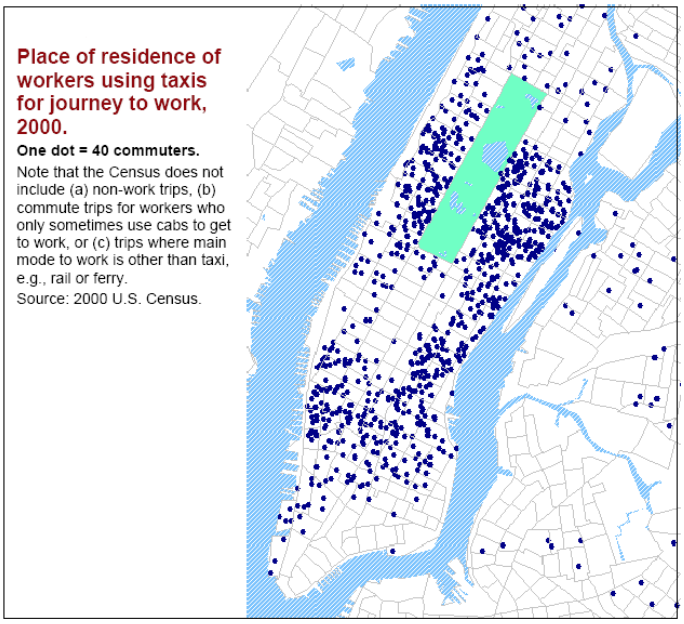
There may be legitimate reasons for the City to offer free parking to some groups of employees, such as police officers, firefighters and teachers. And there may be a legitimate need for placards among those City employees whose jobs require that they drive frequently within the City. But there is no valid reason – for any class of employees – to treat the right to park anywhere, any time with impunity as an entitlement of the job.

The City needs to undertake a thorough reform of the placard system:

- Issuance should be limited to employees who have a clearly documented, frequent need to use their own vehicles to travel within the City on official business or to whom the City is contractually obligated to provide free parking, and for whom it is unable to provide off-street parking.
- Except in very limited, strictly defined circumstances, drivers with placards should be entitled only to park without charge in what are normally metered spaces. A placard should not be a license to park in a loading zone, at a bus stop, at a hydrant, on the sidewalk, etc.
- To break down the existing culture of entitlement and non-enforcement that pervades the placard system, the City should consider shifting responsibility for enforcement to a new unit outside the Police Department.
- Enforcement agents should have access to a data base of all currently valid placards, so that they can more easily identify expired, unauthorized and fake placards. Illegally parked cars with invalid placards should be towed.
- Repeated violations by holders of valid placards should result in revocation.
- The City should consider coupling reform of the placard system with incentives for employees to shift to mass transit – for example, offering teachers either free parking or free monthly Metrocards.

Estimated impact on VMT and congestion:

In a report prepared in 2006 for Transportation Alternatives, Bruce Schaller concluded that "If government workers commuted by car at the same rate as FIRE [finance, insurance and real estate] and professional workers, there would be 14,000 fewer cars coming into the CBD each day." Assuming that each of these cars travels an average of 4 to 5 miles per day within the zone, such a decline in commuting by car would translate into a reduction of approximately 1.2 to 1.5 percent in total vehicle-miles traveled within the congestion pricing zone.



Map courtesy of the *2006 New York City Taxicab Fact Book* by Schaller Consulting.

Moreover, because illegal parking contributes disproportionately to congestion (especially in Lower Manhattan) we estimate that the reduction in congestion would be substantially greater – perhaps 2 to 3 percent.

Revenue potential:

Bruce Schaller has estimated that reducing by 14,000 the number of cars driven into the CBD each day by government employees would increase municipal parking revenues by approximately $33 million (as the City begins to collect revenues from metered spaces that had previously been occupied at no charge by cars with placards). Because we are also proposing an increase in on-street parking charges, we estimate that increase in revenues resulting from reform of the placard system could be as high as $50 to $60 million.

The City might also realize an increase in revenues from fines for parking violations.

3) Reduce cruising for fares by medallion cabs

Taxi service is closely tied to the Manhattan CBD.

- Bruce Schaller reports that 80 percent of all taxi trips begin or end (or both) within the Manhattan CBD.
- Manhattan residents account for 71 percent of all taxi trips in the City; residents of the other boroughs account for only 10 percent. (Non-City residents account for the

remainder.)

- Between 7 and 9 AM, people who are commuting to work by taxi account for 61 percent of all taxi trips. As the map on p. 18 shows, the overwhelming majority of those who take taxis to work in New York City are Manhattan residents.

Putting aside the important service taxis provide to business and leisure visitors to the City – and their role in providing access to the City's airports – it is not an exaggeration to say that the primary function of taxis in New York City is to provide Manhattan residents with a substitute for private automobiles. Manhattan residents use taxis the way that residents of other boroughs use their own cars.

Taxis account for approximately 33 percent of all vehicle-miles traveled in the proposed congestion pricing zone. In some of the most congested areas of Midtown, their share of VMT is at times significantly higher. According to data prepared by Bruce Schaller for the TLC, cruising for passengers accounted for approximately 39 percent of all vehicle-miles traveled by taxis in 2005 – a 15 percent increase since 2001 in VMT spent in cruising. We can estimate that cruising accounts for approximately 13 percent of total VMT in the congestion pricing zone. (To put this figure in perspective – the total of vehicle-miles traveled by taxis cruising for passengers is by itself double the total reduction in VMT that the City claims it can achieve through congestion pricing).

Taxi drivers, passengers and the City as a whole could all benefit from reduced reliance on cruising as a means of connecting drivers with passengers. There are several means by which the City could accomplish this objective:

- Increase the number of cab stands in Midtown and Lower Manhattan. Devoting more curb space to clearly-visible cab stands would make getting a cab easier and more predictable as well as reduce the need for cruising. By the end of 2010, the City should aim to create at least 50 additional active cab stands in Midtown and Lower Manhattan. Cab stands could also be made more attractive – for example, by providing shelters for passengers.
- On a pilot basis, allow group rides from designated cab stands at certain high-volume locations.
- Encourage informal ride-sharing through on-line services such as Hitchsters.com and RideAmigos.com, which allow users to arrange taxi-sharing for daily trips to work, for airport trips, etc.
- Explore the use of wireless phone and GPS technology to allow drivers to locate passengers looking for a cab.

Former City DOT Deputy Commissioner Sam Schwartz has suggested that with 13,000 taxi medallions now in use, the City has about 1,000 more than are needed to meet the demand for taxi service. Beyond an optimum number of 12,000, Schwartz argues that having more cabs on the street simply generates more traffic and adds to congestion. He recommends that the City start buying out 100 medallion owners per year for the next ten years. While this approach would be expensive, the City should consider it as an option for the future, if the need to reduce congestion increases.

Estimated impact on VMT and congestion:

The reduction of cruising by 10 to 20 percent would yield a reduction of 1.3 to 2.6 percent in total VMT in the congestion pricing zone. In the most congested areas of Midtown, the reduction could be significantly higher. Moreover, because on-street pick-up and drop-off of passengers is a significant source of congestion, the percentage reduction in congestion could be significantly greater than the reduction in VMT – perhaps 2.0 to 3.5 percent.

Revenue potential:

Installation of cab stand shelters could be franchised, as with bus shelters and other "street furniture." A major expansion of taxi stands, however, would probably require some reduction in the amount of curb space now devoted to metered parking – and would thus entail some modest loss of parking revenues.

4) Restructuring taxi fares

As noted previously, taxis (according to data published by the Mayor's office) account for approximately 33 percent of vehicle-miles traveled in the proposed congestion pricing zone. In some of the busiest parts of the CBD, they no doubt account for an even greater share of traffic. Given their contribution to the overall problem of congestion in the CBD, the fact that among Manhattan residents taxis function in large part as a substitute for private cars, and the fact that most people who live or work in Manhattan have relatively easy access to mass transit, the City should not exclude taxis from its overall strategy for reducing congestion.

As it seeks to use pricing to manage private auto traffic, the City should consider how it might use pricing to reduce the use of taxis in the CBD during peak periods. One option, for example, might be to impose a substantial surcharge – say, $3.00 – on trips starting or ending in the Manhattan CBD on weekdays between 7AM and 7PM. The goal of such an increase would be to discourage the use of taxis for relatively short trips (especially within the CBD) for which walking or use of buses or subways offer a readily-available alternative. This increase could be coupled with an adjustment in mileage charges so that for longer trips (say, six miles or more) there

would effectively be no increase in the total fare.

Estimated impact on VMT and congestion:

At current rates, a $3.00 surcharge, coupled with a reduction from 40 to 30 cents for each additional fifth of a mile, would increase the charge for a 1.2-mile taxi ride (about average for Manhattan) from $4.50 to $7.00 – an increase of approximately 56 percent. Research conducted by Bruce Schaller in the 1990's found that taxi fares had a "trip elasticity" of 0.22. That is, a 10 percent increase in taxi fares would reduce trips by 2.2 percent. (Conversely, a 10 percent erosion in the real cost of the fare due to inflation would have roughly the opposite effect – a 2.2 percent increase in taxi use.)

Based on this analysis, we can anticipate that if the average price of the average-length CBD taxi trip increases by 50 percent, utilization will decline by 11 percent. If trips taken between 7AM and 7PM account for two-thirds of taxi vehicle-miles traveled, we can estimate (after discounting for the percentage of time drivers spend cruising) that a $3.00 surcharge of the type described above would reduce total VMT in the Manhattan CBD by approximately 1.5 percent.

Because taxis' contribution to congestion is generally disproportionate to their share of VMT, a 1.5 percent reduction in taxi VMT should produce a larger reduction in congestion – perhaps on the order of 2.0 to 2.5 percent.

Revenue potential:

There would be no direct revenue impact, although the MTA would see some increase in revenues from greater use of transit for short trips within the CBD.

5) Higher tolls with variable pricing

Among the various means available for reducing congestion in the Manhattan CBD, higher tolls would not necessarily be among Keep NYC Congestion Tax Free's preferred options. The number of vehicles entering the CBD is not by itself the principle cause of congestion. In any case, as the recently released NYMTC data for 2005 show, that number is not increasing. In fact in 2005, the latest year for which data are available, the number of autos, taxis and trucks entering the CBD on a typical day declined by 2 percent. Given the upward trend in fuel prices, that number could decline further, even without any major intervention such as congestion pricing.

Nevertheless, given the financial challenges confronting the Metropolitan Transportation Authority, significant increases in MTA bridge and tunnel tolls – probably during 2008 – appear to be inevitable. While some motorists will respond by shifting to the City's toll-free bridges, experience suggests others will choose not to drive – thus resulting in a reduction in total VMT.

Although its financial position is stronger, it is likely that the Port Authority of New York and New Jersey will also be considering a toll increase during 2008 or 2009. Because there are no toll-free alternatives available to those driving into the CBD from the west side of the Hudson, a toll increase on the Port Authority's crossings would translate more directly into a decline in VMT.

Thus, while the primary purpose of the expected increases in tunnel and bridge tolls will be to raise revenues, they will result in reductions in VMT that should be counted against the 6.3 percent VMT reduction target defined in both the recently-enacted legislation and New York's agreement with USDOT.

Experience in New York and elsewhere shows that the effectiveness of a toll increase as a means to reduce CBD congestion can be enhanced if the new toll incorporates one or more elements of variable pricing. There are two approaches that the MTA and the Port Authority might consider.

Geographic variations – charging higher tolls on the crossings that feed traffic directly into the CBD (the Holland, Lincoln, Queens-Midtown and Brooklyn-Battery Tunnels) than on others (the Port Authority's three Staten Island bridges, the Whitestone Bridge, etc. This would have the dual effect of encouraging people traveling to destinations in the CBD to switch to other modes of transportation, and diverting some of those who are "just passing through" the CBD to other routes.

Time-of-day variations – charging higher tolls during the hours that are most congested. Detailed studies of the Port Authority's variable tolls, which were introduced in 2001, show that the program was particularly effective in encouraging drivers to shift their trips to the hours before the AM peak in order to avoid the higher toll.

The effects of a toll increase, in combination with variable pricing, would in some respects be similar to those of the City's proposed congestion pricing system – encouraging some drivers to switch to other modes of travel or to off-peak periods, and shifting some through traffic to routes outside the CBD. (This option also preserves the existing free crossings for those who choose to put up with a bit more congestion in order to avoid the toll.)

It is critically important to note, however, that unlike the proposed congestion pricing system, toll increases and variable tolls on the existing tolled facilities can achieve these results without having to spend $240 million in scarce City capital funds on an elaborate new infrastructure; and at virtually no additional operating cost, in contrast to the $240 million it will cost to operate the City's proposed congestion pricing system.

Estimated impact on VMT and congestion:

Based on analyses of the impact of previous toll increases, we estimate that a $2.00 increase in the two-way cost of CBD bridge and tunnel tolls, while tolls on other crossings are maintained at their current levels, would reduce vehicle-miles traveled in the CBD by approximately 1 to 1.5 percent.

Including a time-of-day variation would not have a major impact on VMT, but would shift private auto traffic out of peak periods. Based on the Port Authority's experience with implementation of its variable pricing program in 2001, we estimate that charging $1.00 more for entry into the CBD via the QMT and the BBT could shift about 5 percent of all peak-hour auto traffic to the pre- and post-peak periods.

Revenue potential:

Tolls can be adjusted to generate revenues needed to support the MTA's and the Port Authority's operating and capital needs, while at the same time shifting travel patterns in ways that help alleviate congestion. We estimate, for example, that a $2.00 increase in the two-way cost of entering and leaving the CBD via the two MTA and two Port Authority tunnels during peak and mid-day periods plus a one-dollar increase at other times, a $1.00 increase on the Triborough and George Washington Bridges, and a $0.50 increase on the Henry Hudson Bridge would generate approximately $195 million in additional revenues.

6) Two-way truck tolls on the Verrazano Bridge

The one-way toll on the Verrazano Bridge allows vehicles to move from Staten Island to Brooklyn at no charge but imposes a double toll on those traveling from Brooklyn to Staten Island. For truckers driving from Brooklyn, Queens and Long Island to New Jersey, this creates an incentive to avoid the toll by driving into Manhattan via the toll-free East River bridges (especially the Manhattan bridge), and then to New Jersey via the Holland or Lincoln tunnel (which collect tolls only from those driving eastbound, from New Jersey to New York).

A return to two-way truck tolls on the Verrazano would eliminate the incentive for trucks to make west-bound through trips via Manhattan.

Estimated impact on VMT and congestion:

Sam Schwartz, a former deputy commissioner at the New York City Department of Transportation, estimates that trucks currently make approximately 10,000 through trips each day via the CBD, with the one-way toll on the Verrazano accounting for a significant portion of this traffic. If we assume that restoration of two-way tolls on the Verrazano would cut that number by 2,500, we can estimate that total VMT in the CBD would decline by approximately 0.1 to 0.2 percent.

Revenue potential:

In addition to reducing the number of truck trips through the Manhattan CBD, eliminating the one-way toll for trucks on the Verrazano would generate additional revenue for the MTA. We estimate that shifting 2,500 through trucks each day from Manhattan to the Verrazano would generate approximately $10 million annually in new MTA toll revenues.

7) Increased fines, more aggressive enforcement

Various types of illegal parking – double-parking, parking in loading and unloading zones or at bus stops, violating posted time limits, etc. – are a significant source of congestion in the Manhattan CBD. Experience both in New York City and elsewhere suggests that for many drivers, deciding to park illegally is the product of a rough calculus: How much will it cost me (in time and money) to park legally, what is the probability of being ticketed (or towed) if I park illegally, and how much will I have to pay?

The City could alter that calculation – and thus reduce the incentive to park illegally – through more intensive, geographically-focused enforcement and by significantly increasing fines for parking violations. The table below lists current fines (for Manhattan below 96th Street) and some possible increases.

Rather than apply the higher fines to all of Manhattan below 96th Street, the City might want to consider applying these increases only to the most congested commercial areas.

Estimated impact on VMT and congestion:

The combination of higher fines and more aggressive

Table 3: Current fines and possible increased fines for parking violations

	Current fine	Possible increased fine
General no parking, exceeding time limit, expired meter, etc.	$65	$125
Double parking	$115	$200
Parking in a loading/unloading zone	$95	$250
Parking in a bus stop, bus lane, taxi stand, etc.	$115	$250

enforcement could help reduce vehicle-miles traveled in the CBD. By increasing turnover in legal on-street parking spaces, it would reduce slightly the time drivers spend cruising for parking. If the greater availability of legal parking were to result in a 5 percent reduction in cruising for parking spaces, it would reduce VMT by approximately 0.6 to 0.9 percent.

Higher fines and more aggressive enforcement, moreover, are likely to have a much greater effect on excess traffic congestion by removing impediments to the efficient flow of traffic in the CBD.

Revenue potential:

We estimate that increasing fines for illegal parking as described above would in the short term (depending on the violations and the areas within the CBD included; and driver response) increase revenues by $75 to $150 million annually. In the long run, if this initiative is successful, revenues would decline as the incidence of illegal parking in the CBD declines.

8) "Block-the-box" legislation and enforcement

"Blocking the box" has long been recognized as one of the forms of driver behavior that contributes to congestion. Drivers who block the box are rarely penalized, however. The law now classifies blocking the box as a moving violation. As a result, only police officers and a small number of traffic enforcement agents are authorized to cite drivers for blocking an intersection,, and they must write up the violation on the spot and issue a ticket directly to the driver – a time-consuming process that can slow traffic down even more.

A survey of 10 of Manhattan's busiest intersections conducted in 2006 by the Manhattan Borough President's Office counted a total of 3,044 vehicles blocking these intersections during a nine-hour period – an average of 34 block-the-box violations per intersection per hour. None were ticketed.

In 2007, Mayor Bloomberg proposed legislation that would allow all 2,800 traffic enforcement agents to issue tickets for blocking an intersection by entering the offending vehicle's plate number into their hand-held devices, with the ticket then being mailed to the owner (as is done now under the red-light camera program). The Mayor also proposed that the fine for blocking and intersection be increased from $90 to $115.

Consistent with our proposal for increasing fines for various forms of illegal parking that aggravate congestion, we propose that the fine instead be increased to $200.

Estimated impact on VMT and congestion:

More effective enforcement of rules against "blocking the box" is unlikely to have a significant impact on VMT. It will, however, help to ease the flow of traffic and reduce congestion. We have not yet quantified the impact of increased enforcement of block-the-box rules on traffic congestion; but given the frequency of violations, as documented by the Borough President's Office, the impact could be substantial.

Revenue potential:

Increasing the fine for blocking the box, coupled with more active enforcement, will result in increased revenue from fines. Issuing just 300 to 500 additional tickets per weekday at $200 per ticket would generate approximately $15 to $25 million in additional revenue. (As with other proposals to increase fines and intensify enforcement, however, it is important to note that the primary goal is not to increase revenues – it is to change drivers' behavior in ways that help reduce congestion.)

9) Reducing congestion caused by "black cars"

There are now approximately 10,000 "black cars" licensed to operate in New York City, most of which serve Manhattan businesses. Black cars contribute to congestion in the Manhattan CBD, not only because they represent a significant share of all vehicular traffic in the CBD, but also because of practices that impede the flow of traffic – double-parking, parking in loading zones, etc. Stopping for "street hails" (a service that livery cars are not legally authorized to provide) can also slow traffic.

In the most congested areas of Midtown and Lower Manhattan, the City could consider a number of measures aimed at reducing congestion caused by black cars:

- A targeted campaign of enforcement against double-parking and other parking violations – as well as illegal

street hails – by livery cars;

- Exploring the feasibility of requiring that livery cars waiting for passengers do so either off-street or in specially-designated on-street parking areas.

Estimated impact on VMT and congestion:

Due to the limited availability of data on traffic generated by for-hire vehicles, we have not yet developed an estimate of the impact on VMT and congestion.

Revenue potential:

The City could realize a modest increase in revenues from increased enforcement.

10) Regulating the use of streets for construction projects

In an area as densely-developed as the Manhattan CBD, staging construction projects can be a complex process. Allowing contractors to use portions of adjoining streets – for storage of materials and equipment, for placement of a lift or a construction trailer, etc. – is in many cases unavoidable.

Construction is essential to the City's economy – but as a consequence of this need to use the streets, a high level of construction activity often translates into higher levels of congestion. This may to some extent be inevitable. There is nevertheless some evidence that the use of City streets to support construction projects is not being managed as efficiently as it could be.

The Department of Transportation currently charges as little as $50 for three months' use of a traffic lane. In a City where it can cost $1,500 to park a single car for three months, a fee of $50 to park a construction trailer in the street for the same period seems absurdly low. Such under-pricing encourages contractors to occupy street space beyond what is truly needed. Recent press reports, moreover, suggest that contractors do not always comply with conditions set out in their permits.

In the near term, the City should focus on ensuring – especially with many large construction projects now under way or being planned – that contractors adhere to the terms and conditions of their permits.

Over time, the City should also consider increasing the fees it charges for use of its streets by contractors, to better reflect the value of the space and the duration of its use. Given the already high cost of construction in New York, the City needs to weigh carefully the trade-offs involved in seeking to reduce congestion by restricting (or significantly increasing the cost of) contractors' use of the streets.

Estimated impact on VMT and congestion:

Ensuring compliance with permit conditions (and possibly increasing fees as well) is not likely to have a significant impact on VMT. It could, however, have a significantly greater impact on congestion. Further research will be needed before we can estimate the impact of such changes on VMT.

Revenue potential:

To the extent that more rigorous enforcement of permit conditions leads to more frequent fines, the City could realize a modest increase in revenues. Higher fees for certain types of permits – for example, for placement of construction trailers on the street – could also generate additional revenue. Overall, revenue increases might be on the order of $3 to $5 million annually.

11) Modernizing traffic signal systems

Active management of traffic signal timing is an essential tool for managing congestion. The severity of congestion can vary greatly from place to place (and from street to street) within the CBD, and from hour to hour within the day. By adjusting signal timing, traffic managers can, for example, slow the movement of vehicles into a congested area, and speed the flow of traffic out of the area.

There are, however, two requirements for active management of traffic signals. First, the traffic lights themselves have to be equipped with advanced solid-state traffic controllers (ASTC's), rather than old-fashioned electro-mechanical controls. Second, they need an on-line, real-time connection to a traffic management center, where traffic conditions are monitored and adjustments can be made as needed.

Moreover – as the City noted in its application for federal funding under the Urban Partnership Program – ASTC's can also be used to time signal changes so that buses are given priority at busy intersections.

New York City DOT is currently in the midst of a long-term program for converting all of its 12,000 signalized intersections to ASTC's and bringing them on line. As of mid-2007, fewer than 2,000 of the 12,000 were equipped with ASTC's. Moreover, almost all of the new systems have to date

been installed in the boroughs other than Manhattan. As of mid-2007, only 20 intersections in the Manhattan CBD were equipped with ASTC's.

The City could significantly enhance its ability to manage congestion in the Manhattan CBD by accelerating the modernization of traffic signals at approximately 300 intersections.

Estimated impact on VMT and congestion:

Active management of signal timing will not by itself reduce vehicle-miles traveled in the Manhattan CBD, but it could have a significant impact on congestion.

By helping to make bus service quicker and more reliable, use of ASTC's to give priority to buses could help encourage some people to shift from taxis or private autos for trips into or within the CBD, and thus result in a slight reduction in VMT.

Revenue potential:

Traffic signal modernization would in itself generate no new revenue. To the extent that it helps induce a shift to buses, it might lead to a slight increase in MTA revenues.

12) Implementing 511

511 is a travel information service that delivers traffic, transit, and weather information directly to a telephone (and, in some cases, an electronic device, such as a mobile phone or computer). The system had its origins in 1999, when USDOT, with the support of 17 states and 32 transit agencies, petitioned the Federal Communications Commission (FCC) to designate a nationwide three-digit telephone number for travel information. In 2000, the FCC designated 511 as a national traveler information number, while leaving state and local agencies responsible for the implementation of the service.

Recognizing the need for a consistent approach to 511 planning and implementation, the American Association of State Highway and Transportation Officials (AASHTO) in 2001 spearheaded creation of the National 511 Deployment Coalition. Its goal is "the timely establishment of a national 511 traveler information service that is sustainable and provides value to users."

USDOT has provided federal funds to state and local governments to plan for deployment of 511. As of September 2007, 511 is active in all or part of 29 states. Most other states are moving toward implementation.

In July 2007, the New York State Department of Transportation issued a Request for Proposals for service providers to design, build, operate, host and maintain a statewide 511 service. Proposals were submitted in August; and DOT expects to select a contractor by late fall. The contract will be for a three-year period, with the potential for four additional six-month extensions. New York's service is expected to provide information on roadway conditions, congestion, travel speeds and time, work zones, and both planned events and unplanned incidents affecting traffic. There will be no charge to users of the system.

Estimated impact on VMT and congestion:

Deployment of 511 is not expected to have a significant impact on total vehicle-miles traveled in the Manhattan CBD, but it could help reduce congestion by encouraging drivers to shift to less congested routes or off-peak periods. In a survey conducted in South Florida after the system was deployed, 97 percent of all respondents said that they had changed their travel behavior at least once, based on information they obtained through 511. A similar survey in Virginia found that 93 percent had changed their behavior based on information from 511.

A survey of 511 users in Arizona focused more specifically on how users changed their behavior. The most common changes reported were changing routes to avoid congestion, and changing lanes to avoid incidents; smaller numbers left earlier or later as a result of information obtained through 511.

Revenue potential:

None; the service is provided at no charge.

13) Expanding express bus and ferry service

Developing new transit services, especially in areas not well-served by existing transit systems, can help reduce reliance on automobiles, and thus reduce vehicle-miles traveled in the CBD. In the short term, the quickest way to expand transit services is through expansion of express bus and ferry services.

New York City's proposal to the U.S. Department of Transportation for assistance in implementing congestion pricing included funding for expanding both express bus and ferry service.

- The City and the MTA are seeking to add 194 buses, both to increase service on existing express bus routes and to start service on several new routes, including routes serving northeastern Queens (e.g. College Point), the Northeast Bronx and Bay Ridge. Of the 194 buses, 136 would be used on routes within New York City, and 58 for service between the City and Nassau and Westchester counties.
- The City is also seeking to develop new ferry routes serving East River waterfront neighborhoods and Rockaway. Other areas that could benefit from the development of new ferry services include the South Shore of Staten Island, and several waterfront communities in New Jersey.

Estimated impact on VMT and congestion:

Not all the riders attracted to these new services would otherwise be commuting by automobile Some will be people who would otherwise be using less convenient forms of transit. Even a relatively modest shift, however, could have an impact on VMT. If by 2010 new express bus and ferry services lead 5,000 commuters each day to leave their cars at home, we estimate that total VMT in the proposed congestion pricing zone would decline by approximately 0.4 to 0.6 percent; and that congestion would decline by a similar amount.

Revenue potential:

Ongoing operating costs of new express bus and ferry services would be offset in part by farebox revenues.

III. Options for reducing congestion: 2010 and beyond

1) Major transit system improvements

In the long run, major transit and commuter rail system improvements now planned or under construction will enable the City and the region to continue the existing trend of having these systems absorb most of the growth in demand for travel into, out of and within the Manhattan CBD. If all are completed as planned, they may even reduce the total volume of automotive traffic below its current levels. Such projects include:

- The Long Island Rail Road's East Side Access project, providing direct LIRR service into Grand Central Terminal;
- The Second Avenue subway;
- The new trans-Hudson rail tunnel being developed by New Jersey Transit;
- Extension of the Number 7 train to the Hudson Yards area;
- Metro-North service into Penn Station;
- Greater use of the existing Metro-North and LIRR infrastructure to provide intra-City rail service; and
- The addition of a third track to the LIRR between Hicksville and Queens Village.

As shown below, estimated completion dates range from 2013 to 2018.

Estimated impact on VMT and congestion:

Environmental impact analyses that have been prepared on several of these projects suggest the scale of their potential impact on vehicular traffic. According to environmental impact reports, East Side Access, the Trans-Hudson Tunnel and the 2nd Avenue subway taken together will reduce the number of vehicular trips into the CBD by about 41,000 per day. We estimate that this will translate into a reduction in VMT of 2.0 to 3.0 percent. Other projects in the list above could add to this impact.

Table 4: Major transportation projects

Project	Cost estimate	Estimated completion date
East Side Access	$6.3 billion	2013
Second Avenue Subway	$3.8 billion (Phase 1) $3.4 billion (Phase 2)	2013 (Phase 1) 2018 (Phase 2)
THE Tunnel (Access to the Region's Core)	$7.4 billion	2016
7 Subway Line Extension	$2.1 billion	2017
Metro-North to Penn Station	$812 million	2013
LIRR Main Line Corridor Improvements	$770 million	2013

Source: PLANYC 2030

Revenue potential:

While all of these projects will generate some revenue from fares and other sources (such as advertising), none are expected to generate sufficient revenue to cover operating costs.

2) Bus rapid transit

Bus rapid transit (BRT) is a relatively new type of transportation service, which applies features found in traditional rail transit (such as a dedicated right-of-way) to bus service, thus making buses faster and more reliable. The MTA, the New York City Department of Transportation, and the New York State Department of Transportation have been working together to introduce BRT service in New York City.

BRT pilot projects will be implemented on five routes, one in each borough. Manhattan's BRT route, the First and Second Avenue – 125th Street Corridor, will span much of the East Side, extending approximately 8.5 miles from the Staten Island Ferry Terminal to 125th Street, then crossing 125th Street from First Avenue to Twelfth Avenue, adding an additional 3 miles to the route. This route will serve a number of heavily populated and dense neighborhoods including the Financial District, the Lower East Side/Chinatown, Midtown East, the Upper East Side and Harlem. The First and Second Avenue stretch of the route would replace the existing M15 limited service.

According to PLANYC, it is expected that BRT will operate in dedicated bus lanes with bright, distinctive signage. Stops will be placed every 10 to 15 blocks apart. The First and Second Avenue route is expected to draw 12,900 daily BRT riders.

While the pilot project's impact on VMT and overall levels of congestion in the CBD will be very small, a successful pilot project could lead to expansion of the service to other corridors, with the potential for greater impact.

Estimated impact on VMT and congestion:

According to the MTA's BRT study, the proposed BRT route would operate about 13 to 18 percent faster than existing bus service along First and Second Avenues. While most riders

might initially be drawn from conventional bus service, BRT may also have some potential to divert passengers from taxis or (to a lesser extent) private cars. As the system expands it could – in addition to improving bus service, which is its primary objective – have a modest impact on VMT and congestion.

Revenue potential:

Any impact on revenues will be modest since, as noted above, most riders will already be transit riders.

3) Lower Manhattan bus depot

The Lower Manhattan Development Corporation has estimated that approximately 450 buses enter Lower Manhattan on a typical weekday. Buses play a critical role in bringing workers to jobs in Lower Manhattan, but they can also contribute to traffic congestion. Because Lower Manhattan does not have a bus terminal, commuter buses must stop on the street to pick up and drop off passengers. And without a facility at which they can lay over between the morning and evening peak periods, some drivers simply park their buses on the street from early morning until late afternoon.

A proposal for construction of a downtown bus terminal was included in a plan for revitalizing Lower Manhattan in 1966, and the idea has been revived periodically ever since. While creation of such a facility offers some clear advantages, it would be difficult to site. This is so not only because of the scarcity of land in Lower Manhattan, but also because a reduction in on-street pick-up and drop-off inevitably means that for some passengers, the result would be a longer walk between the bus and their workplaces, and vice versa.

Most recently, a team retained by LMDC to plan the redevelopment of the lower Greenwich Street corridor in 2005 recommended development of a new, automated bus facility on the site now occupied by the Battery Garage.

Estimated impact on VMT and congestion:

While development of a new bus facility would not significantly affect total vehicle-miles traveled, it could ease the flow of traffic by reducing on-street pick-up and drop-off activity.

Revenue potential:

A facility serving commuter buses could generate some revenue; but the Port Authority's experience with the Midtown bus terminal suggests that it will not be sufficient to cover the facility's operating costs.

4) Incentives for off-peak delivery

While trucks account for only a relatively small share of total vehicle-miles traveled in the CBD during peak and mid-day hours, they contribute disproportionately to the problem of excess traffic congestion. Shifting deliveries to off-peak hours has often been cited as a way to reduce truck-related congestion.

Advocates of Mayor Bloomberg's congestion pricing proposal have suggested that by charging trucks $21.00 to enter the CBD on weekdays between 6:00 AM and 6:00 PM, it would provide a powerful incentive for companies to shift deliveries to the hours before or after the charging period. However, the Mayor's proposal ignores the reality that in the great majority of cases, neither shippers nor trucking companies determine delivery time. That decision is most often made by the receiving companies. Charging truckers $21.00 to enter the CBD provides no incentive for receiving companies to change delivery hours. As a result, the proposed charge is likely to have little or no effect on delivery traffic – and the congestion it generates – during the charging period.

The dilemma can be stated plainly – shifting to off-peak delivery reduces trucking costs, but it increases costs for the receiving company. Penalizing truckers for making deliveries in peak periods (e.g. through congestion pricing) raises their costs – but provides no incentive for the receiving companies to agree to off-peak delivery.

The most comprehensive study of off-peak delivery conducted to date in New York City (completed in 2006) concluded that the most effective way to encourage receiving businesses to shift deliveries to off-peak hours would be through tax incentives. Such incentives could be tailored to the needs of specific industries and property types.

- Restaurants, for example, may be more open to scheduling deliveries at night, since in many cases they will incur little or no additional cost. A relatively modest incentive – such as a tax credit worth up to $10,000 annually, depending on the size of the establishment – might be sufficient to induce significant numbers of restaurants to shift to off-peak deliveries.
- For large commercial office buildings, the City might explore the feasibility of providing tax incentives for lease provisions requiring that all routine shipments (for example, office supplies) go to central receiving facilities during off-peak hours, for subsequent delivery to tenants during the day.

Based on in-depth interviews with more than 500 Manhattan businesses, the study cited above found that it might be feasible to switch as many as 20 percent of all peak-period and mid-day deliveries to off-peak hours.

Engineering this kind of shift in Manhattan's business logistics is likely to be a long-term proposition. In order to understand more clearly the dynamics of the process (and how the program can most effectively be marketed) the City might consider starting with a large-scale, multi-year pilot project – covering, for example, Manhattan below Canal Street.

NYCDOT is already planning to undertake an off-peak delivery pilot project in Brooklyn. While this could no doubt prove to be a useful exercise, the need to encourage off-peak deliveries appears to be greatest in the Manhattan CBD. The City should therefore consider moving ahead at the same time with a pilot project in Manhattan.

For government offices and other public facilities within the CBD (such as colleges and hospitals) there is no reason why the City and State should not move ahead now to require off-peak deliveries.

Estimated impact on VMT and congestion:

Shifting deliveries to off-peak hours would by itself have little or no impact on total vehicle-miles traveled in the CBD. It would, however, reduce congestion by switching some of this traffic to less congested evening and early-morning hours. A 20 percent shift to off-peak delivery could significantly reduce peak and mid-day congestion in the proposed congestion pricing zone.

Revenue potential:

Incentives for off-peak delivery would not produce revenue.

5) Increased use of water transportation for the movement of freight

As the growth of the New York area's population and economy has continued to generate additional truck traffic, interest in finding alternative means for moving goods into, out of and within the region has increased. For a variety of reasons, however, cost-effective options for shifting freight movement away from trucks are limited.

Although the volume of regional and local freight that could be shifted from trucks to water transport is relatively small, such a shift could prove to be attractive in cost-benefit terms; and compared with other options would be relatively easy and inexpensive to initiate.

New York City has already begun to move in this direction, proposing a major increase in the use of water transport to move municipal waste out of the City. A recent study conducted for the Port Authority by researchers at New York University and Rutgers University targeted several other niche markets for which water transport could prove advantageous:

- Construction materials and equipment;
- Hazardous materials; and
- Overweight and over-sized cargoes.

(It is worth noting that with hazardous and over-sized cargoes – as with municipal waste – there may be environmental and safety reasons, over and above the need to reduce congestion, for moving these cargoes off the region's local roads, highways and bridges.)

Any significant increase in the use of water transport for local and regional movement of freight would require a number of steps by the relevant public agencies, including:

- Investing in local maritime transport facilities at appropriate locations throughout the City and the region;
- Preserving and if necessary expanding maintenance and operating facilities on the rapidly-developing waterfront for companies engaged in the water-borne movement of freight;
- Requiring use of water transport, where feasible and appropriate, for delivery of supplies and equipment, for delivery of construction materials and equipment on public construction projects; and
- Strictly regulating the movement of hazardous and oversized cargoes by truck, especially in densely-populated areas or on bridges with limited capacity.

Estimated impact on VMT and congestion:

Further study will be needed to determine potential for diversion of freight that would otherwise move by truck.

Revenue potential:

Use of water transportation to move local and regional freight would not generate significant revenues.

6) Expanding the Lower Manhattan traffic management program to Midtown

The City could make greater use of information technology to manage traffic and reduce congestion. In Lower Manhattan, it has already begun to do so. The Lower Manhattan Construction Coordination Center (LMCC) and the New York City Department of Transportation (NYCDOT) have developed a plan that involves use of 41 wireless cameras and a network of sensors to collect real-time information on traffic conditions between Canal Street and the Battery. The information is fed into a central location, where it can be used to guide immediate, short-term traffic management and enforcement actions, to advise the public about traffic conditions and in planning longer-term solutions in areas of chronic congestion.

Traffic congestion, like crime, is in many respects a highly localized, frequently shifting phenomenon. The program developed by LMCCC and DOT is in effect applying to the problem of traffic congestion the approach that the NYPD used so successfully with COMPSTAT – using information technology to identify emerging or recurring congestion "hot spots," to direct resources to those locations, and to take remedial actions tailored to specific local conditions.

The City should consider expanding the program developed by LMCCC and DOT to Midtown. Especially in areas where a large volume of new development is expected during the next decade – such as the west 30's – more effective use of information technology may prove to be the single most important contributor to more effective use of the streets.

Estimated impact on VMT and congestion:

The goal of the program is not to reduce vehicle-miles traveled, but to move traffic more efficiently, and address more directly localized conditions that cause or aggravate congestion.

Revenue potential:

None.

7) Improving the distribution of information to motorists

One of the most effective ways to manage congestion is by giving drivers the most current and most complete information about traffic conditions, thus enabling them to make informed choices about how to deal with those conditions. While the quantity, quantity and timeliness of information available to drivers has improved considerably during the past two decades, there is still room for improvement in this area.

Nissan, for example, recently announced that it will over the next year be installing its Star Wings navigation system in 600,000 of Beijing's estimated 3 million cars. The system will help drivers find the most efficient route to their destinations, based on current traffic conditions. The company claims it will be able to reduce Beijing's notoriously-bad traffic congestion by 20 percent.

Estimated impact on VMT and congestion:

Given the relatively high level of information already available to New York-area drivers (which will be enhanced with the deployment of 511), systems such as Nissan's are unlikely to have as dramatic an impact as that forecast for Beijing. Some further reduction in congestion might nevertheless be anticipated.

Revenue potential:

While 511 services will be provided at no charge, there may be some potential to charge drivers for more advanced services.

8) Encouraging greater use of bicycle transportation

Bicycles account for only a very small share of travel within New York City. In 2000, for exampled, only 0.3 percent of all employed New Yorkers used bikes as their principal means of getting to work. Nevertheless, the use of bicycles for travel into and within the Manhattan CBD is growing; New York City DOT reports that on a September weekday in 2006, 22,300 people biked into the Manhattan CBD between 7AM and 7PM – an increase of 74 percent over the number reported in a similar survey in 2000.

Bicycle transportation is from several perspectives an attractive option – it reduces energy consumption, improves air quality, is highly flexible, doesn't require much space, and contributes to better health. Research conducted in New York and elsewhere suggests, however, that there are number of common barriers to increased use of bicycles for routine travel within the City. Concern about safety – and in particular, about the mixing of bikes and other traffic – is one of these; lack of parking at riders' destinations is another.

To address these barriers, the City should:

- Consider greater use of physically separated bike lanes – as recently announced by NYCDOT for Ninth Avenue

in Manhattan – along corridors that have the greatest potential for increased bike use.

- Require commercial parking garages in the CBD to set aside a certain number spaces for bicycle parking (relative to the total number of auto parking spaces).
- Provide some modest incentives for owners of commercial properties to provide bicycle parking.
- Identify small parcels of publicly-owned land in the CBD that might be used to create more parking spaces for bicycles.
- Provide secure bicycle parking (e.g. bike lockers) at park-and-ride lots.

Estimated impact on VMT and congestion:

In the near term, the direct impact of increased bicycle travel on either VMT or congestion in the CBD is likely to be very small; but it could grow over time.

Revenue potential:

There could be some modest potential from charges for bike parking. The City might, however, choose to forego such revenue in order to encourage greater use of bicycles.

IV. Other possible initiatives

During the course of the past several months, members of Keep NYC Congestion Tax Free, as well as other participants in the debate over congestion pricing, have suggested a variety of other measures that might help to reduce congestion in the Manhattan CBD, without incurring the costs that the City's proposed congestion pricing system would entail.

Many of these suggestions merit further analysis. We list some of them here, simply to reinforce the point that there are many steps the City could take over the course of the next several years – and indeed, many steps that it could take today – to alleviate congestion.

- Create high-occupancy lanes on selected crossings into Manhattan (as the City has done recently on the Manhattan Bridge).
- Allocate more curb space in the busiest commercial areas to loading and unloading.
- Require adequate space for off-street loading and unloading in all large new commercial buildings in the Manhattan CBD.
- Require City agencies with offices in the Manhattan CBD to develop plans to facilitate telecommuting, and create incentives for private companies to do the same.
- Develop additional park-and-ride capacity outside the Manhattan CBD, and maintain or replace existing facilities in areas that are being redeveloped (such as Flushing).
- Raise the monthly cap on transit subsidies that employers are allowed to provide as a tax-free employee benefit.
- Explore the feasibility of using double-decker buses in place of articulated buses, which take up more street space.
- Expand use of minivans on routes where full-scale bus service does not appear to be feasible.
- Increase the supply of off-street parking in the CBD through changes in zoning requirements.

V. Conclusion

The alternatives to congestion pricing this report presents meet the tests of equity, efficiency and economic sense. Congestion pricing indiscriminately taxes all vehicles entering the Manhattan CBD whether or not they cause congestion. Our alternatives more effectively target congestion's root causes. The critical flaws in the City's proposal include its failure to focus on the key causes of congestion, such as:

- *Taxis cruising the streets of Manhattan;*
- *The proliferation of black cars;*
- *City issued placards to people who have no need for them who clog our streets and tie up our curbside space;*
- *The failure to strictly enforce traffic and parking laws; and*
- *The 10,000 trucks that have no point of origin or destination in Lower Manhattan that daily use our streets as a pass through, generating massive traffic jams.*

This report identifies these and other specific causes of congestion, and offers realistic solutions to these problems.

The alternatives outlined in this report emphasize value pricing and use of technology. These approaches satisfy the requirements to qualify for the federal anti-congestion funding, without the elaborate and expensive infrastructure required for the city's congestion pricing scheme.

This report incorporates the good ideas promoted by our Mayor with respect to traffic mitigation. It also adopts many solutions to the problems of traffic in the Manhattan CBD promoted by our most illustrious traffic experts such as Sam Schwartz, John Falcocchio, Donald Shoup, Bruce Schaller, Jose Holguin-Veras, and Charles Komanoff, and organizations such as NYU's Rudin Center for Transportation, Rutgers University's Voorhees Transportation Center, and Transportation Alternatives.

While congestion pricing will adversely affect the economy (resulting in $690 million in lost economic activity, tens of millions of dollars in lost State and City taxes and as many as 8,700 lost jobs) and will shift congestion and pollution to many locations in the outer boroughs (many of those locations already have more traffic congestion and pollution than Manhattan), our alternatives will reduce miles traveled in Manhattan by as much as double the amount as congestion pricing without punishing those who can least afford to pay this regressive tax, or harming the City's economic vitality and quality of life.

Unlike the congestion pricing plan which focuses solely on VMT, this alternative plan offers many additional traffic mitigating solutions that alleviate congestion beyond the rigid VMT criteria employed by congestion pricing proponents. Congestion is not solely a factor of the number of vehicles and VMT, but also is a function of inefficient traffic management. The alternatives outlined in this report focus on both reducing VMT and improved traffic management.

The mitigation alternatives identified in this report could generate approximately $428 to $545 million, without major capital investments or major increases in operating costs. (The proposed congestion pricing will require a minimum investment of $233.6 million and yearly operating costs will be $240 million. Approximately 40 cents out of every dollar charged for congestion pricing will be lost to overhead). In contrast to the massive infrastructure needed to sustain congestion pricing, the alternatives outlined in this report use currently existing infrastructure and resources.

The City's congestion pricing proposal follows a rigid all-or-nothing approach. This alternative plan incorporates a modular approach. The public, the Commission, and city and state legislators remain free to accept or reject any of the modules, and, each module has a range (providing the flexibility to fine tune each module. They can choose to implement any of the modules more or less aggressively).

Real and better alternatives exist to reduce traffic congestion more effectively and comprehensively without any need to implement a drastic plan which will disrupt and harm the lives of many residents, working people and small businesses in our City. This report conclusively establishes the City's ability to achieve a reduction well in excess of 6.3 percent in vehicle-miles traveled, and raise revenue for mass transit, without resorting to a complex, expensive, inefficient and inequitable congestion pricing scheme.

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Keep NYC Congestion Tax Free represents a diverse coalition of civic, business and labor organizations and businesses throughout New York City. We share a simple vision: to keep our city congestion tax free. Our members oppose the $8 fee ($21 for trucks) the Mayor proposes to impose on drivers entering Manhattan below 86th Street. Our members urge New Yorkers to deliver a simple message to our legislators: "Say no to the fee the Mayor wants to charge us to enter Manhattan." Many supporters and coalition members propose alternatives to the congestion tax that better address traffic issues in our entire city and provide new sources to support mass transit.

www.keepnycfree.com

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