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#### INTRODUCTION

## What is Congestion Pricing?

Congestion pricing typically establishes a fee for driving into or within specific areas during peak congestion. Congestion pricing has been implemented throughout the world and is being studied in major metro areas throughout the U.S., including Los Angeles, Seattle, Washington D.C., and San Francisco. New York City is in the process of implementing a congestion pricing program in lower Manhattan.

Congestion pricing can take different forms, including:

- Cordon pricing: Vehicles pay a fee when crossing a boundary into a specific zone.
- Area pricing: Vehicles pay a fee for driving *inside* a specific zone.
- Variable pricing of entire roadways: Instead of a fixed toll rate on toll road, toll rates are varied throughout the time of day.
- Express Lanes/High Occupancy Toll (HOT) lanes: Vehicles pay a fee or meet occupancy requirements to managed lanes on a highway corridor.
- Fleet pricing: Certain vehicle types, such as ride-hailing vehicles, pay a fee to drive in a specific zone.
- **VMT pricing:** Vehicles pay a fee based on the distance they travel (measured in vehicle miles traveled, or VMT) in a certain zone.

# What is the North Bayshore Congestion Pricing Feasibility Study?

Before the COVID-19 pandemic, traffic congestion in Mountain View's North Bayshore district (Figure 1) was an ongoing challenge, with thousands of vehicles clogging the three district gateways daily. To minimize congestion and enable district growth, the City of Mountain View set a target for a 45% single-occupancy vehicle (SOV) mode share and a vehicle trip cap for the district and its three gateways.

More and better travel options to North Bayshore are planned and efforts to encourage commutes by transit, biking, and walking have helped keep congestion from worsening. North Bayshore has not met its mode share or trip cap goals, however, and planned development threatens to exacerbate congestion problems.

The long-term impacts of COVID-19 remain unknown, but the City is planning for a return of congestion to a 'new normal.' To address the likely return of congestion, all potential tools for reducing congestion—including congestion pricing—need to be explored. The North Bayshore Congestion Pricing Feasibility Study will assess congestion pricing's potential role in reducing traffic in North Bayshore.

#### **Project Goals**

The City of Mountain View is balancing a potential congestion pricing program's goal of congestion reduction with other key district priorities. These goals will guide program development and evaluation of program options.

- Reduce congestion
- Support economic development
- Advance social equity
- Promote health and the environment

## What are the White Papers?

As part of the North Bayshore Congestion Pricing Feasibility Study, three white papers on key congestion pricing issues have been developed. Each white paper explores a key issue by examining peer approaches, assessing best practices, and identifying how those best practices could be applied to the successful implementation of congestion pricing in North Bayshore. The three white paper subject areas are:

- Equity
- Finances 101
- Technology and administration

Figure 1 North Bayshore Congestion Pricing Feasibility Study Area



#### **CONGESTION PRICING FINANCES**

This section summarizes the basic financial elements of a congestion pricing program, discussing typical arrangements and considerations related to:

- Costs and revenues
- Fee determination
- Revenue allocation

The remainder of the document examines peer approaches to these elements and discusses their relevance to a potential North Bayshore congestion pricing program.

## What are the costs and revenues of congestion pricing?

#### Costs

Like most transportation projects with physical infrastructure, there are two major categories of costs for congestion pricing programs:

- Startup and implementation costs
- Ongoing operational costs

**Startup costs** are those incurred prior to and during program implementation. These costs typically include:

- Planning and design: includes planning studies to assess the goals and purpose of a congestion pricing program, the type of program to be implemented, and the key business rules of a program. Design of the system includes any engineering needed to locate infrastructure such as gantries or poles, as well as specifications of software and hardware needed.
- Procurement of implementation vendor(s): includes development of procurement materials and initiation and completion of requests for proposals.
   This process can take several years depending on procurement regulations, methods, and other variables.
- Project initiation and procurement of materials: follows the awarding of implementation contracts in anticipation of pricing infrastructure installation and program testing.
- Installation and program testing/piloting: includes the construction (if needed) of pricing infrastructure and installation of software and accounting systems, as well as initiation of associated traffic management measures and initial complementary transit, bike, and pedestrian strategies.
- **Staffing:** includes determining staffing needs, hiring and training staff, and developing and refining standard operating procedures.
- Public outreach and communication: occurs throughout the startup process and includes production of materials and conducting public meetings.

**Operating costs** cover program administration on an ongoing basis. These costs are often expressed as annual figures and typically include:

- Program administration: includes staff salaries and wages, enforcement activities, system security, program monitoring, and program refinement. If the program is operated by a third-party contractor, these costs may include payments to the contractor.
- Infrastructure maintenance: includes maintenance of the physical pricing infrastructure, as well as software and accounting systems.

#### Revenues

Revenue generation in a congestion pricing program is like that of other common usage-fee-based transportation programs:

- Fees are initiated and/or collected when fee-eligible vehicles enter and/or travel within the charge zone.
- Penalties and fines are assessed to users who fail to pay in the required time frame. In some cases, interest charges are applied to late payments.

## How are fees determined?

How congestion pricing fees are set, to whom they are charged, and at what level are key elements of program design, determined by both policy and technical considerations.

## **Policy Determination**

Policy-wise, the fee should reflect the primary goal of congestion reduction, but also support other economic, environmental, and/or social goals. Like any user fee, however, a congestion charge is a potentially fraught political subject. Who pays and who benefits from such a program must be considered when developing fee structure and charge amount. Key policy considerations include:

- Residents of a congestion pricing zone may see the fee as unfair if they use a private vehicle, as they may not be able to avoid the fee.
- Some employers and commuters may see the charge as punitive, especially if employees live outside the pricing zone and if fees increase based on trip distance.
- Some businesses may oppose the fees on the grounds that they may discourage customers and/or impact business operations.
- Most congestion charges do not consider a user's ability to pay and are regressive taxes that disproportionately impact people with lower incomes.
- Policymakers and advocates may want pricing strategies to reflect equity goals, mitigate impacts to vulnerable populations, or help remediate existing inequities in the transportation system.

These policy considerations are the primary catalysts for discounts and exemptions. Exemptions and discounts are a double-edged sword. They provide relief for certain users and that relief may be in line with policy goals, or satisfy the concerns of certain stakeholder groups, but they also weaken the potential for traffic reduction and reduce the amount of revenue that could be invested in complementary programs. For these reasons, best practices dictate the need to limit exemptions to essential services only.<sup>1,2</sup>

#### **Technical Determinations**

Technical considerations must balance policy and political goals with the need to reduce congestion, generate revenue to pay for the program, and pay for transportation improvements. The technical fee-setting process relies on financial modelling of alternative scenarios of fee levels, penalties and fines, and exemptions and discounts. This process also considers existing and projected traffic conditions, as well as policy variables, to estimate revenue. One goal of the financial modelling process is to ensure the amount of revenue produced is sufficient to cover program start-up costs, ongoing operating and maintenance costs, and—crucially—the projects and programs defined in the revenue allocation strategy.

## **Revenue Allocation**

The primary objective of a congesting pricing program is typically traffic reduction and using price to incentivize use of other modes. Congestion pricing is also a revenue-generation tool for multimodal travel options upon which the choice to shift from driving is reliant. Without convenient and robust travel options, it will be difficult to generate mode shift or secure support for the program. As such, a congestion pricing program must generate net revenue to be effective and should generate it as quickly as possible to ensure alternative travel options can be provided to the public without delay.

#### **Revenue Distribution**

As a revenue-generating tool, congestion pricing has proven to be very successful. Because the program should cover its own capital and operating costs, true net revenue may take time to be fully realized, depending on the level of startup costs, financing approach, and how the revenue allocation strategy is prioritized. Programs may prioritize immediately directing revenue towards transportation investments over quickly repaying startup funding, so the full benefits of the program are quickly delivered to the public.

Once implemented, most programs generate revenues that far exceed operating expenses, allowing them to quickly allocate net revenue to transportation investments and

<sup>&</sup>lt;sup>1</sup> Eno Transportation. May 20, 2020. "Congestion Pricing in the United States: Principles for Developing a Viable Program to Advance Sustainability and Equity Goals". <a href="https://www.enotrans.org/wp-content/uploads/2020/05/Congestion-Pricing-in-the-United-States.pdf">https://www.enotrans.org/wp-content/uploads/2020/05/Congestion-Pricing-in-the-United-States.pdf</a>

<sup>&</sup>lt;sup>2</sup> Charles Komanoff. March 6, 2020. "KOMANOFF: Relinquishing Congestion Pricing Exemptions Fantasies," Streetsblog New York City. <a href="https://nyc.streetsblog.org/2020/03/06/komanoff-relinquishing-congestion-pricing-exemptions-fantasies/">https://nyc.streetsblog.org/2020/03/06/komanoff-relinquishing-congestion-pricing-exemptions-fantasies/</a>

complementary traffic reduction strategies. Reinvestment of revenue in the transportation system is one reason that pricing programs have proven popular over time in places where it has been implemented.

The distribution framework for allocating net revenue should be transparent, clearly defined, and relate directly to project program goals and objectives. For example, revenue distribution frameworks may include or consider one or more of the following:

- Multimodal system improvements: Most programs are designed to reinvest net revenue into transportation projects that further support the program's mission of congestion reduction. This could be transit improvements, reduced fare programs, bicycle and pedestrian network improvements, or other programs and policies.
- Equity-focused distributions: Under an equitable distribution framework, resources are distributed based on need, and could benefit groups that are identified by the program as particularly impacted by historic, existing, or potential future inequities.
- Environmental and public health improvements: Many programs have explicit environmental and health goals that can be addressed with distributions to strategies such as clean transit fleet procurement, investment in electric vehicle charging infrastructure, or shared mobility systems.

## Why should North Bayshore plan for net revenue?

North Bayshore has seen considerable growth in recent years, and the number of jobs and residents in the district is projected to approximately double in coming decades. To support that growth with an improved multimodal transportation network, the City of Mountain View is currently conducting a North Bayshore Circulation Study, and has also identified priority capital improvements in the North Bayshore Precise Plan<sup>3</sup> that could be realized with funding from congestion pricing revenues, including, but not limited to:

- Improved bicycle and pedestrian facilities
- Shoreline Boulevard transit-only roadway and protected bicycle lanes
- US-101/Shoreline Boulevard northbound off-ramp reconstruction
- A new pedestrian/bicycle bridge over US-101

Revenue generated from a congestion charge also has the potential to support ongoing and proposed transportation demand management (TDM) programs and initiatives in Mountain View and North Bayshore, such as shuttle buses, transit incentives, or services offered through public and/or private entities. As a potential funding partner, the City of Mountain View could have a seat at the table for decisions about how and where these programs operate, who is eligible to use them, and other key planning and operational decisions.

<sup>&</sup>lt;sup>3</sup> City of Mountain View. Last amended October 13, 2020. North Bayshore Precise Plan. pp. 169-174. <a href="https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=29702">https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=29702</a>>

#### PEER APPROACHES

This section summarizes peer approaches to the financial considerations of a congestion pricing program. The primary operational program examined is London's congestion charge zone. New York City's planned congestion pricing zone and San Francisco's Downtown Congestion Pricing Study are also reviewed, as they are the most robust domestic congestion pricing studies currently underway. New York City also currently operates a forhire vehicle (FHV) congestion surcharge program, which is discussed below. Appendix A and Figure 5 include a summary of peer financial policies.

## Planning, Fee Determination, and Financial Modeling

## London, England

In London, Transport for London (TfL) operates three zone-based pricing programs: the congestion charge (CC) zone, the low-emissions zone (LEZ), and the ultra-low emission zone (ULEZ), which are shown in Figure 2. The CC zone is the smallest and charges vehicles for entering the core of London. The ULEZ is a slightly larger area that charges vehicles to enter if they do not comply with ULEZ emissions standards. The LEZ is a larger zone that charges vehicles to enter if they do not comply with LEZ emissions standards.

London's congestion charge program has clearly tied their fee-setting process to their program goals. Because reducing greenhouse gas emissions and air pollution is an explicit policy goal of the London program, personal vehicles and large commercial



Figure 2 London Zone-Based Charging Programs

vehicles that do not comply with emissions measures are subject to much higher fees, while certain low-emissions and high-capacity vehicles are eligible for fee discounts or exempt altogether.

## New York City, New York

In New York City's existing FHV congestion surcharge program, fees are closely tied to program goals. Because the program aims to reduce the congestion impact of FHVs in lower Manhattan, the fees for unshared FHV trips are much higher than the fees for shared trips.

Likewise, New York's approach to its planned congestion pricing program will closely tie pricing decisions to program goals. The fees for New York City's upcoming Manhattan congestion charge have not yet been announced but by statute, revenue must be sufficient to bond \$15 billion for the 2020-2024 Metropolitan Transportation Authority (MTA) capital plan. This requirement means New York's congestion pricing program will set the fee to

achieve net revenue goals and not simply to achieve congestion reduction goals, although congestion reduction is an expected and likely outcome of the program. New York has pursued this goal and program design strategy to pay for improvements to its badly deteriorated mass transit system.

In the ongoing planning process for this congestion charge, discussion of discounts and exemptions has been controversial. Some argue that providing exemptions and discounts to anyone beyond the most essential road users (e.g., transit vehicles or vehicles transporting people with disabilities) would lead to a domino effect of other stakeholders demanding exemptions, which could undermine the congestion reduction effects and revenue production of the program. This has led many in New York to oppose any exemptions to the program.<sup>4</sup>

#### San Francisco, California

San Francisco's ongoing congestion pricing study is conducting a robust financial analysis of a potential future program. The San Francisco County Transportation Authority (SFCTA) has outlined a three-step conceptual modelling approach for assessing the feasibility of pricing scenarios<sup>5</sup>. The three-step approach includes:

- A financial performance analysis that considers projections of toll transactions, maximum potential revenues based on the number of toll transactions and fee levels, estimated revenues after adjustments for discounts and exemptions, estimated startup costs and ongoing expenses, and net revenues.
- A full cash flow model, based on scenarios with the best financial performance, that further develops estimates of costs, toll transactions, system revenues, discount programs, and inflation and bond financing over a 30-year analysis timeframe.
- A sensitivity/risk analysis that assesses the relative importance of key assumptions and policies, including fee structure and increase policies, demand risks associated with linear growth assumptions, and ongoing and future program costs.

## Revenue Allocation

## London, England

London's congestion charge program, although costly to implement, focused on investing net revenue into transportation alternatives immediately upon implementation. The program, which is operated by TfL, incurred about £162M in startup costs, including major expenditures for traffic management measures, communications and public information,

<sup>&</sup>lt;sup>4</sup> Editorial Board. April 22, 2019. "Congestion exemption? No breaks for anyone". *NY Daily News*. <a href="https://www.nydailynews.com/opinion/ny-edit-congestion-pricing-20190422-qw2ns4kznzazzllr75jcgiwdpi-story.html">https://www.nydailynews.com/opinion/ny-edit-congestion-pricing-20190422-qw2ns4kznzazzllr75jcgiwdpi-story.html</a>

<sup>&</sup>lt;sup>5</sup> San Francisco County Transportation Authority. May 2020. "San Francisco Downtown Congestion Pricing Study: Goals and Evaluation Metrics" <a href="https://www.sfcta.org/sites/default/files/2020-05/Downtown-Congestion-Pricing\_FINAL-Goals-and-Evaluation-Metrics\_2020-05-28.pdf">https://www.sfcta.org/sites/default/files/2020-05/Downtown-Congestion-Pricing\_FINAL-Goals-and-Evaluation-Metrics\_2020-05-28.pdf</a>

and systems set-up and management. Instead of dedicating the first one to two years of net program revenue to re-paying startup costs, TfL spread those costs over 10 years and instead invested most annual program net revenues in non-auto travel alternatives, such as improved bus service.<sup>6</sup>

The magnitude of the investment made possible by London's congestion charge program is significant: the charge was implemented in FY 2003/2004 and, since 2007, has generated over £100 million in net income annually, in 2017 pounds (Figure 3). The program generally allocates about 80% of its net revenue to public transit, 10% to road safety, surfaces, and bridges, and 5% to pedestrian and bicycle programs.

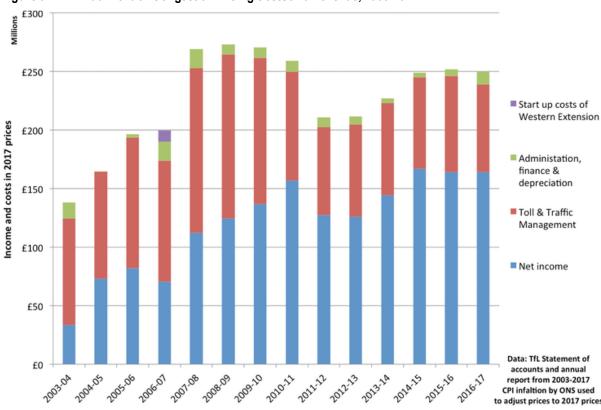


Figure 3 Annual London Congestion Pricing Costs and Revenue, 2003-2017

Source: Nicole Badstuber. March 2, 2018. "London congestion charge: what worked, what didn't, what next." *The Conversation*. <a href="https://theconversation.com/london-congestion-charge-what-worked-what-didnt-what-next-92478">https://theconversation.com/london-congestion-charge-what-worked-what-didnt-what-next-92478</a>

## New York City, New York

New York's planned congestion pricing program is required by its authorizing legislation to produce net revenue that will support public transportation in the New York City metropolitan area. This congestion pricing revenue allocation strategy is one of the world's most clear-cut and direct. All net revenue will be allocated to the MTA, and the revenue generated must be sufficient to bond \$15 billion in capital spending for the 2020–2024 MTA

<sup>&</sup>lt;sup>6</sup> Transport for London, "Central London Congestion Charging Impacts Monitoring Report, Fifth Edition" (July 2007, from http://content.tfl.gov.uk/fifth-annual-impacts-monitoring-report-2007-07-07.pdf)

capital plan. The program is projected to generate \$1.01-\$1.09 billion in annual net revenue, far outpacing the \$100 million allocated by the state for start-up costs.<sup>7</sup>

### Milan, Italy and Stockholm, Sweden

Congestion pricing programs in both Milan and Stockholm allocate net revenue to multiple transportation-related projects and programs. Although Stockholm invests some revenue in roadway improvements, Milan invests nearly all its net revenue in 'sustainable mobility' policies, which support the air pollution reduction goals of Milan's program.

## **Revenue Collection**

Congestion pricing programs collect revenue from congestion charges and from late fees or penalties that are assessed on accounts that fail to pay the initial congestion charge in a timely fashion. Most congestion pricing programs aim to collect the bulk of their revenue through congestion charges, and not late fees or penalties. Although most peer programs do have some form of late fee or interest on unpaid charges, this fee structure is generally designed to provide a disincentive for skipping payments.

This approach is practical but is also intentional, as it minimizes user frustration and disappointment with a congestion pricing program. If a congestion pricing program were to levy exorbitant late fees or overly punitive interest rates on missed payments, it may be able to collect large amounts of revenue but would likely frustrate and anger users, reducing public support for the program.

Pay to drive < Cancel TZI5 TZJ Select date and charges Today Sun Mon Tue Wed 15 17 16 Daily Congestion Charge £15.00 07:00-22:00, 7 days a week □ Daily ULEZ Charge compliant 24hrs, 7 days a week Total £15.00

Figure 4 Screenshot of Payment in TfL's
Pay to Drive in London App

Customers can typically pay congestion charges multiple ways. In London, customers can use TfL's online payments portal, pay by phone, or pay through the TfL Pay to Drive in London app (screenshot of app payment in Figure 4).

<sup>&</sup>lt;sup>7</sup> Regional Plan Association. September 2020. "Congestion Pricing in NYC: Getting it Right". <a href="https://rpa.org/work/reports/congestion-pricing-in-nyc">https://rpa.org/work/reports/congestion-pricing-in-nyc</a>

#### **APPLYING PEER APPROACHES**

The ways that peer congestion pricing programs approach financial considerations, such as fee determination, financial modeling, and revenue allocation, reveal some best practices for North Bayshore and its development of a pricing program.

# Application: Planning, Fee Determination, and Financial Modeling

Peer congestion pricing programs demonstrate the importance of closely tying a program's finances to its goals. To align with these best practices, the City of Mountain View should develop clear and specific goals and objectives for a potential future congestion pricing program, and the fee-setting process for a program should ensure revenues align with these goals and objectives. Examples of outcomes from this process could include:

- If Mountain View's congestion pricing program's primary objective is to reduce traffic congestion, the congestion charge should be set to achieve that goal. This may entail a time-of-day charge that is in effect during the most congested hours.
- If Mountain View's congestion pricing program is meant to raise revenue for transportation projects, that objective should be clearly articulated and the pricing should be set to achieve that goal. This approach may involve a charge that is higher than what is needed only to reduce traffic.

## Application: Revenue Allocation

Peer congestion pricing programs almost universally allocate revenue to public transit initiatives, due to the potential of transit to make substantial, measurable impacts on both traffic reduction and mode shift goals. Secondary revenue allocation goals tend to be related to the pedestrian and bicycle network (including public realm improvements), or to roadway safety and maintenance projects.

The City of Mountain View should allocate congestion pricing revenues to supporting non-auto alternative options for travel into and within North Bayshore, as this would support the goals of the program and align with peer best practices. To ensure net revenues are appropriately, transparently, and intentionally allocated to projects that support the pricing program's goals, it may also be valuable for the City to develop an expenditure plan prior to implementation. Ideally, this plan is closely tied to previous and ongoing congestion reduction work in North Bayshore, including work approved by the City of Mountain View City Council, such as elements of the North Bayshore Precise Plan, Circulation Plan, and other TDM efforts.

## **Application: Revenue Collection**

A potential future congestion pricing program in Mountain View should provide plentiful, convenient avenues for users to pay a congestion charge. Ideally, a payment system could allow for automatic payments at set intervals, or as needed. Easy fee payment is crucial to

minimizing the number of late fees or non-payment violations issued and ensuring that fines and penalties are only assessed to intentional offenders. It is critical that punitive measures not be perceived as revenue-focused, and should instead only be used to ensure compliance. This will help to avoid a collapse of trust and support for the program.

Revenue collection may also be best collected in a manner that is consistent with other regional tolling programs, such as San Mateo and Santa Clara County Express Lanes, Dumbarton Bridge tolls, or potential future San Francisco congestion pricing charges. Using a consistent payment portal or customer management system as these programs will minimize customer frustration and may also achieve more efficient operation for Mountain View through economies of scale. More detail on this subject is included in the Technology and Administration white paper.

Customers without access to bank accounts or electronic payments should also be able to easily pay any potential future congestion charges in North Bayshore. This may involve a physical system of cash payment locations. More detail on this subject is included in the Equity white paper.

## **KEY STUDY QUESTIONS FOR NORTH BAYSHORE**

In developing a congestion pricing program, the City of Mountain View will need to answer key questions to best set financial policies. The following study questions highlight some of these key implementation decision points but also should be revisited throughout a potential future program's operation.

- What are the primary policy objectives driving revenue collection?
- How much net revenue might be generated in different pricing scenarios and is it sufficient to fund necessary travel alternatives?
- How should net revenue be allocated to support program goals?
- How can people without access to electronic payments or bank accounts pay a congestion pricing charge?

City of Mountain View

# APPENDIX A: PEER CONGESTION PRICING PROGRAM FINANCIAL POLICIES

Figure 5 Peer Congestion Pricing Program Financial Policies

| Peer<br>Program                                     | Program<br>Overview   | Congestion Pricing<br>Fee  | Collection<br>Methods  | Non-Compliance<br>Penalty  | Exempt<br>Vehicles  | Discount-Eligible<br>Vehicles  | Revenue<br>Allocation  |
|---|---|--|--|--|---|--|--|
| London<br>Congestion<br>Charge Zone <sup>8</sup>    | Any non-exempt vehicle entering the cordon zone between 07:00-22:00, every day (except Christmas Day) is charged.   | <ul> <li>£15, same day or advance</li> <li>£17.50, up to three days after travel</li> </ul>                            | Autopay, online, mobile application, charging account, or phone.   | <ul> <li>£80 if paid within 14 days</li> <li>£160 if paid within 14-28 days</li> <li>£240 if paid after 28 days</li> </ul> | Emergency vehicles,<br>motorcycles and mopeds,<br>vehicles used by people<br>with disabilities, and<br>licensed taxis.  | Zone residents, breakdown vehicles, vehicles with nine or more seats, vehicles that meet "Clean" standards, motor tricycles, and roadside recovery vehicles. |  |
| London Ultra-<br>Low Emission<br>Zone (ULEZ)9       | All qualifying vehicles entering the ULEZ zone at any time (except Christmas Day), that do not meet ULEZ standards, are charged.  | <ul> <li>£12.50 for most vehicle<br/>types up to 3.5 tons</li> <li>£100 for heavier vehicles</li> </ul>                | Autopay, online, mobile application, charging account, or phone.   | Depending on vehicle type:  £80-£100 if paid within 14 days  £160-£1,000 if paid after 14 days                             | Vehicles that meet the ULEZ<br>Standard and vehicles<br>exempt from the Congestion<br>Charge.   | Zone residents, vehicles older than 40 years, showman's vehicles, minibuses used for community transport.  | ~80% allocated to transit<br>~10% allocated to road<br>safety, road surfaces, and<br>bridges<br>~5% allocated to<br>pedestrian and bicycle |
| London Low-<br>Emission Zone<br>(LEZ) <sup>10</sup> | All vehicles entering the LEZ zone at any time, that do not meet LEZ standards, are charged.  | £100-£300 for qualifying vans, heavy goods vehicles, lorries, buses, and specialist diesel and heavy vehicles, etc.    | Autopay, online, mobile application, charging account, or phone.   | Depending on vehicle type:  £250-£1,000 if paid within 14 days  £500-£2,000 if paid after 14 days                          | Vehicles meeting the LEZ<br>Standard, specialist vehicles<br>using roads for limited<br>purposes, vehicles built<br>before 1973, historic<br>vehicles, and Ministry of<br>Defence vehicles. | Showman's vehicles   | projects   |
| Stockholm <sup>11</sup>                             | <ul> <li>Any non-exempt vehicle entering the cordon zone between 06:00-18:29 are charged.</li> <li>Not applicable on days before and of public holidays or in the month of July.</li> </ul> | <ul> <li>11-35 SEK in the off-peak season (max 105/day)</li> <li>11-45 SEK in the peak season (max 135/day)</li> </ul> | Vehicles registered in<br>Sweden can pay by direct<br>debit, electronic invoice, or<br>monthly payment slip. All<br>other vehicles are managed<br>by a third-party vendor. | Fees not paid on time are<br>assessed an additional fee<br>of 500 SEK  | Motorcycles, emergency vehicles, public buses, and residents of an island that is only accessible through the zone.   | N/A  | Net revenues are invested in transit and roadway improvements.   |

<sup>&</sup>lt;sup>8</sup> Transport for London. "Congestion Charge". Retrieved April 8, 2021. <a href="https://www.tfl.gov.uk/modes/driving/congestion-charge">https://www.tfl.gov.uk/modes/driving/congestion-charge</a>

<sup>&</sup>lt;sup>9</sup> Transport for London. "Ultra-Low Emission Zone". Retrieved April 8, 2021. <a href="https://www.tfl.gov.uk/modes/driving/ultra-low-emission-zone">https://www.tfl.gov.uk/modes/driving/ultra-low-emission-zone</a>

<sup>&</sup>lt;sup>10</sup> Transport for London. "Low Emission Zone". Retrieved April 8, 2021. <a href="https://www.tfl.gov.uk/modes/driving/low-emission-zone">https://www.tfl.gov.uk/modes/driving/low-emission-zone</a>

<sup>11</sup> Transportstyrelsen. 2020. "Congestion tax in Stockholm". <a href="https://www.transportstyrelsen.se/en/road/road-tolls/Congestion-taxes-in-Stockholm-and-Goteborg/congestion-tax-in-stockholm/">https://www.transportstyrelsen.se/en/road/road-tolls/Congestion-taxes-in-Stockholm-and-Goteborg/congestion-tax-in-stockholm/>

#### NORTH BAYSHORE CONGESTION PRICING FEASIBILITY STUDY | FINANCES 101 (DRAFT)

City of Mountain View

| Peer<br>Program                           | Program<br>Overview  | Congestion Pricing<br>Fee   | Collection<br>Methods  | Non-Compliance<br>Penalty   | Exempt<br>Vehicles  | Discount-Eligible<br>Vehicles   | Revenue<br>Allocation  |
|---|--|---|--|---|---|---|--|
| Milan<br>Area C <sup>12</sup>             | <ul> <li>Any non-exempt vehicles that are allowed to enter the cordon zone between 10:00-18:29 are charged.</li> <li>Not applicable on weekends or public holidays.</li> </ul> | <ul> <li>€2 for zone residents</li> <li>€3 for vehicles parking in select garages and registered service vehicles</li> <li>€5-€100 for all other vehicles, depending on vehicle type</li> </ul> | Tickets can be purchased online, by phone, at automated teller machines, at parking meters, at authorized sellers, or by automatic debit through PayPal or Telepass. | €15 after seventh day of non-payment  | Motorcycles, emergency vehicles, vehicles used by people with disabilities, public transit vehides, electric vehides, taxis | Zone residents are not charged for their first 40 entrances of the calendar year, and receive a 20% discount from their 41st entrance on. | All revenues are invested in sustainable mobility and policies to reduce air pollution, including public transport, pedestrian and bike programs, and goods distribution systems. <sup>13</sup>                      |
| NYC FHV<br>Charge <sup>14</sup>           | Any non-exempt vehicles that carry people on a for-hire basis (e.g., taxis, TNCs, limousines) that enter the cordon zone at any time are charged.                              | <ul> <li>\$2.50 for non-shared trips in taxicabs</li> <li>\$2.75 for non-shared trips in for-hire vehicles</li> <li>\$0.75 for shared rides in any type of vehicle</li> </ul>                   | Vehicles must be registered with the New York State tax department, and are invoiced monthly. Payments are due within 20 days of invoice.                            | Late payments are assessed a fee of:  2x the invoice amount  7.5% interest for each day the payment is late | Vehicles related to funerals,<br>buses, vehicles provided by<br>or for school districts or the<br>MTA, ambulances           | N/A   | The first \$300m is allocated to the MTA Subway Action Plan, the next \$50m is allocated to MTA projects in the outer boroughs, and any remaining revenue can be used by the MTA for general purposes. <sup>15</sup> |
| NYC<br>Congestion<br>Charge <sup>16</sup> | Any non-exempt vehicle entering the cordon zone (details undetermined) is charged.   | Undetermined  | Will use license plate recognition and the existing E-ZP ass tolling system.   | Undetermined  | For-hire vehicles, emergency<br>vehicles, MTA vehicles,<br>vehicles used by people<br>with disabilities                     | Zone residents with annual incomes under \$60,000 will receive a tax credit equal to the amount paid in congestion charges.               | Revenue is allocated to public transit. Annual revenue must be sufficient to bond \$15 billion in capital spending for the 2020 – 2024 MTA capital plan.   |

<sup>&</sup>lt;sup>12</sup> Comune di Milano. 2021. "Area C". <a href="https://www.comune.milano.it/aree-tematiche/mobilita/area-c>"> thttps://www.comune.milano.it/aree-tematiche/mobilita/area-c>"> thttps://www.comune.milano.it/area-c>"> thttps://www.comune.mil

<sup>13</sup> Comune di Milano. March 27, 2013. "Area C. Istituita la congestion charge definitive". <a href="https://web.comune.milano.it/dseserver/webcity/comunicati.nsf/weball/02715EEE0A5B23ADC1257B3B0065658E">https://web.comune.milano.it/dseserver/webcity/comunicati.nsf/weball/02715EEE0A5B23ADC1257B3B0065658E>

<sup>&</sup>lt;sup>14</sup> New York State Department of Taxation and Finance. 2020. "Congestion surcharge," New York State. <a href="https://www.tax.ny.gov/bus/cs/csidx.htm">https://www.tax.ny.gov/bus/cs/csidx.htm</a>

<sup>15</sup> Office of the New York State Comptroller, "Financial Outlook for the Metropolitan Transportation Authority: Report 8-2019" (October 2018, from https://www.osc.state.ny.us/files/reports/osdc/pdf/report-8-2019.pdf)

<sup>&</sup>lt;sup>16</sup> Regional Plan Association. September 2020. "Congestion Pricing in NYC: Getting it Right". <a href="https://rpa.org/work/reports/congestion-pricing-in-nyc">https://rpa.org/work/reports/congestion-pricing-in-nyc</a>