

Mobility Pricing

Building shared understanding through dialogue across Metro Vancouver



MORRIS J. WOSK CENTRE FOR DIALOGUE

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About This Guide

Hello!

The team at Moving in a Livable Region and the SFU Morris J Wosk Centre for Dialogue would like to thank you for joining the 2022 Mobility Pricing Regional Summit being held on April 30 & May 1, 2022. Your time and participation in this discussion are immensely appreciated and help contribute to our understanding of regional values and priorities when shaping how we move and fund our mobility in the future. Throughout this guide we will be exploring various concepts, clarifying any gaps in understanding, and providing context for the information that exists out there on mobility pricing, with respect to Metro Vancouver.

The discussion that you will be taking part in comes at a critical time when regional and provincial decision makers will need to start making important decisions that will shape our mobility and land-use systems moving forward. Throughout the two day period, you will encounter a wealth of information and new concepts. While you might already be familiar with some of this information, this guide will support your understanding of concepts that are new.

We strongly recommend you read this guide, in order to best equip you for our two-day discussion.

As you read through, note that all information provided is done so without advocacy or intent towards a particular decision-making outcome or direction. Our goal is to provide you with the most complete information possible so that you are equipped to freely discuss your values and priorities on this matter.

If you have any questions about this guide, please do not hesitate to contact our team at jonas_pinzon_osorio@sfu.ca or cfd_mlr@sfu.ca.

We hope that you have an enlightening and enjoyable dialogue experience with us on April 30 & May 1!

What Is This dialogue?

On April 30 and May 1, 2022, Moving in a Livable Region (MLR) will be hosting a regional summit at the SFU Morris J Wosk Centre for Dialogue. This meeting of 120 residents from across Metro Vancouver follows six local community dialogues that took place across the region between February and March 2022.

The aim of this entire engagement process is to build the literacy of participants on issues of mobility pricing, as they relate to Metro Vancouver. Additionally, we are hosting this space to understand the fundamental values and priorities of different types of residents moving into the future. These values and priorities would be determined based on one's own life circumstances and needs.





Why Are We Doing This?

We are asking residents to deliberate on these priorities and values because they form the essential criteria individuals will use when they determine if they support future changes to regional mobility pricing. Instead of asking participants about support for a particular proposal, we want to give them the opportunity to shape any potential design process with this insight beforehand.

Currently, there are many interrelated issues affecting our region's mobility system that require us to examine how our present mobility pricing system can be shaped for future success. The issues of congestion, climate change, public transit funding, and fairness all require direct response. We will explore these concepts in further sections of this guide.

(who is)

At the

Table

While we are rooting our dialogue in facts and research, we want to remind participants that there are no right or wrong answers when talking about our present experiences and our ongoing priorities. In this dialogue, our challenge will be to honestly examine how we want to balance our own priorities with the need to address larger regional issues. When designing solutions for the future, this will be the challenge decision makers and experts will also face.

We will be hosting 120 residents from across Metro Vancouver for this two day dialogue. These residents are invited after an expression of interest in response to public and community ads about this event. The respondents were selected for invitation based on demographic diversity. We wanted to ensure that the participants represent a breadth of perspectives, experiences, and circumstances from across the region.

What Are We Talking About?

From time to time, you might see references in the news, on social media, or other networks about fees, tolls, levies, fares, etc. You might also hear experts or commentators introduce terms like 'mobility pricing', 'road pricing', 'user pricing', or 'transport pricing'.

We get it - this can be confusing, especially when people start using these terms interchangeably. So, before we dive further, let's make a few things clear.



(what is) Mobility Pricing

'Mobility Pricing' is a really broad term that's used to refer to different fees associated with mobility.

Generally, it refers to a system of taxes and user fees created to support our mobility services + infrastructure.



(what are the) Different Approaches to Mobility Pricing



These terms generally fall under the umbrella of mobility pricing and refer to all the ways a mobility user would pay when getting around.

Are there other examples you can think of? (use this space to list them)

Who's Paying?

We presently pay for our mobility system through a combination of mobility pricing approaches (like the examples mentioned above) and a suite of taxes. As we prepare for this dialogue, it is important for us to understand some fundamental concepts and how they relate to mobility.



User Pays

This is a principle within mobility pricing that relates to how we price transportation.

An individual (i.e. "user") pays for how much they use the mobility network.

This can be applied through a blunt mechanism (e.g. 3 zone transit fares, annual flat rate insurance, etc.) or on a proportional basis (e.g. distance based insurance, etc.).

(We wanted to point out a distinction between these two types because the fuel tax depends on mobility usage (i.e. driving), while the others don't. However, beyond our present discussion, this is <u>not</u> really an important difference.)

Taxes

The various taxes we pay to different levels of government make their way towards funding different parts of our mobility system. For the purposes of our discussion, we can categorize these taxes based on how they're collected:

Fuel Tax: This type of tax is paid when purchasing a certain quantity of fuel (i.e. gasoline or diesel). The funds from this tax are used to fund public transit. We will talk about this more in our next section about funding.

Other Taxes: These taxes are not attached to any mobility usage and are collected through unrelated means. They include property taxes, parking taxes, sales taxes, etc.

Public transit, roads and highways, ferries, and other mobility operations receive some level of tax funding support. Additionally, tax funding also helps to build new mobility projects like rapid transit, bridges, tunnels, etc.



Pricing + Behaviour

As users of transportation in the region, costs impact our choices. When we add up these individual choices on a large scale, we get significant changes in mobility behaviours region-wide.

While this concept may seem fairly obvious and common worldwide, we want to point it out because planners can (and do) use this principle to encourage choices that benefit society and discourage choices that don't.

When talking about a complete Mobility Pricing system, we can then discuss what mobility choices we want to be cheaper (incentivize) and what choices we don't want to be cheaper (disincentivize).

In some cases, by adjusting this system in a certain way, we <u>can</u> even shift choices without making overall living costs more expensive.

About Road Pricing

The basic concept to remember when understanding road pricing:

Charging vehicles a fee for using the road network.

With this concept in mind, let's try to understand how this may be applied across Metro Vancouver, or within a specific municipality:



Corridor Pricing

The system charges a fee for using a road, bridge, or tunnel to pay for that piece of infrastructure, to control traffic levels, etc.



Area / Cordon Pricing

The system charges a fee for driving into or within a defined geographic boundary for a variety of reasons including congestion.



Network Pricing

This system charges a fee for the use of roads over the entire road network, typically measured in terms of distance traveled.



Here's some breathing room. Use this space to write down your notes & thoughts.



Let's Look at Money

(how do we) Fund Our Transportation Infrastructure?

Metro Vancouver's transportation network is a complex system that includes many public and private mobility providers. The most visible mobility provider is TransLink, a public company. In the private sector, you have taxis, rideshare providers (e.g. Uber, Lyft), carshare providers (e.g. Evo, Modo), bikeshare providers (e.g. Mobi), car rentals, etc.

However, regardless of whether we're using transit, driving our own vehicles, or using private mobility services, we are using publicly funded transportation infrastructure to some degree.

Let's look at two major sectors of transportation infrastructure i.e. public transit and the road network.

Public Transit



The funding for our public mobility system can be broken down into four main categories:

Taxation Revenue from sources like 1 property taxes, parking taxes, fuel tax, etc. make up 44% of income.

Transit Revenue, including sources 2 like UPass BC and the BC Government bus pass make up 33%.

Government Transfers from the federal and provincial levels, including 3 revenue from the Federal Gas Tax, make up 19%.

Other investment income makes up 4%.

4

The Road Network

Roads and highways form an important backbone of our transportation infrastructure. Even if we pay to drive our own vehicles or use private mobility services, we still rely on publicly funded roads to ensure these services can be provided.

So, let's take a look at how we fund the construction and maintenance of our road network.

In 2020-21 operational spending, the BC Ministry of Transportation spent approximately \$677 million on highway operations. Additionally, the government also reported spending \$1.2 billion on transportation investments. These investments include highway corridor rehabilitation, side road improvements, Highway 1 to the Alberta border, the Pattullo Bridge replacement, the Broadway Subway, etc.

The tax revenue received by the BC Ministry of Transportation includes a 6.75 cents per litre motor fuel tax and a provincial sales tax on short term car rental of \$1.50 per day. However, it is important to note that the costs to finance this work exceeds the combined streams of revenue the Ministry receives.

We should also mention that in addition to all the tax money spent by the provincial government to maintain our road network, regions and municipalities share some financial responsibility for roads in their jurisdiction.



(how do) **Governments Work** with Each Other?

The various levels of government have different funding and work arrangements tied to mobility, based on different circumstances. These circumstances can be ongoing operations, individual major projects, one-time support, etc. Looking at the pie chart in the previous section, we can see that government transfers make up 19% of public transit revenue.

Canada Community Building Fund

The Gas Tax fund (renamed the Canada Community Building Fund in June 2021) is a significant source of this funding at the federal level.

Let's take a guick look at how this fund flows from the federal government to TransLink. It is important to note that the distribution of this fund is jointly managed by the federal government, the BC government, and the Union of BC Municipalities (UBCM).



In 2022-23, BC will receive over \$293 million from this fund. Around 50% of that money will be reserved for the Metro Vancouver region, of which TransLink will receive 95%. According to this breakdown from Infrastructure Canada, TransLink can expect to receive approximately \$139 million. The rest of the 5% is distributed to the municipal governments through an established formula.

These funds can be used for eligible projects including public transit, local roads and bridges, active transportation, wastewater, drinking water, tourism, recreation, etc.

Other Intergovernmental Collaboration

It's important to remember that this is not the only federal funding source that provides revenue to support our public transportation system.

The Permanent Transit Fund was established by the federal government in 2021. This fund would begin providing direct financial support of \$3 billion per year for transit agencies across Canada starting in 2026-27.

In parallel with the contributions made from the federal government towards public transit, the BC Ministry of Transportation expects to contribute approximately \$361 million per year towards public transit and coastal ferry services.

(breaking down the squeeze) **The Funding Gap**

As the region moves forward, TransLink is faced with a challenge in the form of a funding gap. In order to understand this gap and why it will only grow as the years go by, we need to first look at a few contributing factors.

Transit Ridership

In the previous section about TransLink's funding, we saw that transit fares contribute around 33% of the organization's revenues. For its 2022 Budget, TransLink plans on collecting \$619 million from transit revenues; this is a 46.9% increase from its 2021 Budget.

Prior to COVID-19, Metro Vancouver was seeing some of the most impressive growth in transit usage across North America. The pandemic temporarily reversed much of that progress. As we rebuild from COVID-19, we will have to examine how the ridership growth trend has been affected over multiple years.

Additionally, if we were to undertake any efforts to make transit fares cheaper or completely free, this would leave TransLink with a sizable revenue gap that would need to be replaced by some other funding source.



16 Let's Look At Money

The Fuel Tax

In Metro Vancouver, purchases of clear gasoline or clear diesel that's used in motor vehicles are subject to a dedicated tax of 18.5 cents per litre.

The funds from this tax are remitted to TransLink as part of its revenues. In the 2022 Budget, TransLink expects to collect \$395.7 million from fuel tax revenue. This will account for up to 20% of the organization's total revenues.

In June 2021, the federal government announced a mandatory target for all new light duty cars and passenger trucks sales to be zero-emission by 2035. It also set an interim 50% sales target for 2030. This means that in little more than a decade, there will be no gas powered vehicles sold in Canada. Zero Emission Vehicles (ZEVs) include battery electric vehicles, plug-in hybrids, and hydrogen fuel cell cars.

According to a 2018 study by the Automotive Industries Association of Canada, the average age of a light vehicle in Canada is 9.71 years. In other words, vehicle owners are holding onto their existing vehicles for a decade on average.

If we use this age estimate in combination with the ZEV mandate from the federal government, that means we could see almost no gas powered light vehicles on the road network a little while after 2045.

Currently, TransLink's fuel tax revenues assume that drivers in Metro Vancouver will consume around 2.14 billion litres of gasoline and diesel in 2022. As we start to see the switch to zero emission vehicles growing, fuel consumption will start to significantly decrease year by year. Over time, this will dramatically increase the funding gap for TransLink.



All Together

As we look at all these factors together, it is clear that we are heading towards a future where our public transportation operator will face a funding squeeze unless we take steps to address this.

Here's some breathing room. Use this space to write down your notes & thoughts.



Mobility + Climate Change

(how does our current) Mobility System Impact Climate?

Our mobility system has an impact on climate; we can think of this impact as a hidden cost of our transportation choices.

In Metro Vancouver, around 35% of regional greenhouse gas emissions (e.g. carbon dioxide) come from on-road transportation sources. Within this portion, light duty vehicles (i.e. cars, SUVs, passenger vans, etc.) make up 84.5% of the emissions from on-road vehicles.

TransLink estimates that 600,000 new cars will enter the region's road network by 2040 without any substantial changes to our mobility system. In addition to the impact on climate, this could affect individuals personally due to an increase in congestion.

Automakers are increasingly releasing zero emission vehicles (i.e. battery electric, plug in hybrid, and hydrogen fuel cell) instead of traditional gas powered options. As we mentioned previously, the federal government now requires that all new vehicle sales be 100% zero emission vehicles by 2035. While these are all steps towards reducing our regional emissions, they also do come with certain drawbacks:

We are not switching to zero emission vehicles fast enough to meet our climate targets and reduce emissions within the required timeframe.

2 Certain types of zero emission vehicles carry their own environmental costs i.e. manufacturing and disposal of batteries.

(what do we need to consider when) **Changing The System?**

Land-Use & Housing Access

The way we build out our region has a great effect on our mobility system. Additionally, housing access and affordability greatly affect how individuals get around the region. The more we use our land for low-density purposes over a wide area (i.e. "sprawl"), the more we will need to travel by personal vehicles and the more expensive that travel will become due to time and fuel. Sprawl also makes providing public transit more expensive because it leads to fewer riders traveling over larger distances. At the same time, as housing becomes more unaffordable, individuals and families are forced to move further away from work, school, or the main urban centres of the region. In order to afford housing, individuals are forced to commute longer distances regularly. This leads to more personal vehicles on the road network.

Public Transit Service Levels

Public transportation has many positive benefits when we think about acting on climate change. However, many individuals have real needs that are not being reasonably met by the current level of service provided by our public transportation system.

At the six local dialogues held across Metro Vancouver in early 2022, participants highlighted what transit service levels they needed to switch from personal vehicles:

- · Be more frequent in many areas,
- · Cover more times of day,
- · Cover more area, and
- Be efficient enough to be a real alternative to single occupancy vehicles.

It is also important to note that all of these improvements to service do have costs associated with them. In order to make these changes work for more residents, there will need to be a mechanism to fund them.

Time of Day

Congestion is a significant contributing factor to emissions from transportation. The longer time a vehicle is idling in traffic adds on to the emissions that are already produced when traveling.

In order to address congestion, many places around the world limit the types of vehicles that can use the road network during different times of day. When making our mobility system more sustainable, we could also consider separating personal vehicles and heavy commercial vehicles by time of day.



Public Policy + Future Trends

Laws and regulations are constantly changing with time. This remains the case when it comes to transportation. For example, we know that the federal government is requiring all new vehicle sales to be zero emissions by 2035. This will cause shifts in what types of cars we see on our roads. This will also shift what type of infrastructure we build to support these vehicles and their energy needs. This support will also have to come from non-emitting, renewable sources to properly reduce our climate impact.

However, this also does not address the problem of congestion or solve the equity issues experienced across the region.

It's important for us to think about how the decisions we make today will shape our society in a few years. As new laws and regulations are enacted in our mobility and land-use systems, our region will change dramatically. Therefore, we should also be careful to create solutions that provide long term benefits, instead of temporarily addressing an issue.



Here's some breathing room. Use this space to write down your notes & thoughts.



Congestion: Getting There Slowly

(how much) Does Congestion Affect Metro Van?

An annual traffic congestion study by TomTom found Metro Vancouver has the worst congestion in Canada, and the third worst in North America after Los Angeles and Mexico City – both cities more than four times its size.

The average commuter in Metro Vancouver lost 75 hours of time to traffic congestion in 2021 - and that's a decrease of 6% from 2019!



In a 2015 study of metro areas across the country by Canada's Ecofiscal Commission at McGill University, researchers found that in direct cost of the time lost in traffic, Metro Vancouver congestion cost \$1.4 billion in 2015, with another \$1.2 billion lost in hidden costs and missed employment opportunities. In combination with demographic estimates for how Metro Vancouver's population is supposed to grow, this paints a concerning picture for livability in the region. By 2050, the region is expected to grow from 2.6 million residents to almost 3.6 million, representing substantially more traffic congestion if the current rate of singleoccupancy car use persists.

(what does congestion look like) After COVID-19?

While both morning and evening rush hours have seen substantial percentage point drops since the baseline year of 2019 due to the impacts of the pandemic, Metro Vancouver residents saw an increase in congestion in 2021 (33%) compared to 2020 (30%).

This means that a 30 minute travel during noncongested hours took an additional 10 minutes to complete. This also means that the average travel time in the region was increased by 2 minutes per day.

As more of our activities shift to in-person, we could expect to see congestion increase once again.

Here's some breathing room. Use this space to write down your notes & thoughts.

Focusing on Fairness

With few exceptions, our current transportation system tends to treat users in the same way. That is, charges like bus fares, parking fees, carbon tax, etc. are standardized and applied to everyone <u>equally</u>.

However, residents across Metro Vancouver have different needs and personal circumstances around mobility and transportation. For instance, some users have longer commute times than others since they live in areas further away from their workplaces. Others, such as some health care workers, have to use their personal vehicles to commute home after a night shift, when some bus routes are limited.

In order to meet residents' needs around mobility and transportation, it is important to create & implement changes and accommodations, which would improve users' experience, transit ridership, and the overall economy & livability of the region.

(let's sort these out) Equality vs. Equity

In other words, structuring our transportation system on the premise that users need different tools to succeed and contribute to the overall economy of the region requires us to create a vision that prioritizes equity (giving people what they need to succeed) rather than equality (giving people the same tools hoping they succeed).



Geographic Equity

Where we live has an impact on the economic & cultural resources that we can access, the length of our commute times, and thereby our livability. It is also important to underline the existing imbalance of wealth between municipalities across Metro Vancouver, which can create and exacerbate economic & social disparities among some residents who have been historically racialized and marginalized.

Some land use practices and regional transportation infrastructure can worsen existing challenges faced by different communities. When thinking about our current transportation system, we can consider the way regional planning, the housing market, and other historical factors have marginalized certain communities.

If you had a map of Metro Vancouver, how would you ensure that the region is closely connected while prioritizing everyone's needs around mobility and transportation? Please consider issues such as increasing home prices, gas prices, and the ways communities residing in the outer areas of the region bring goods & services inward.

EXAMPLE

Kevin and Leela are friends. Kevin lives in Vancouver with his partner, while Leela lives in Coquitlam. How do you think their experiences with transportation might differ?

Now imagine that Leela has two children, and needs a larger space than what her apartment in Coquitlam can offer. To accommodate her family, she would need to move an affordable larger space further away from her workplace in Vancouver. What new challenges might Leela face with this move?

Socioeconomic Equity

How does the structure of our current public transportation system broaden the socioeconomic gap among our communities? Our current transportation system leaves unaddressed the socioeconomic disparity that some communities, historically marginalized and racialized, continue to face around access to mobility and transportation.

For instance, transit fares, parking fees, and carbon tax are largely standardized. They may not be representative of what our current household incomes can afford. Standardized fares disproportionately affect marginalized communities. This can impact the economy of the region, which is largely driven by these marginalized communities.

The concept of socioeconomic equity lends itself to thinking about two important questions:

- Who are we building transportation infrastructure for?
- How is this transportation infrastructure contributing to equity, and supporting our communities and economy?

In other words, socioeconomic equity invites us to consider how everyone in this region has different needs and that blanket policies can leave out the needs of sections of the population.



EXAMPLE

A one-zone transit fare is \$3.05. Shainaz earns \$110 per day and Tracy earns \$300 per day, and both pay the same \$3.05 fare. How do you think the fare will impact Shainaz compared to Tracy?

Accessibility + Inclusion

Is our current mobility system available & accessible to everyone in the region?

Various aspects of our mobility system are largely available, but they are not always accessible. Building a more inclusive public transportation infrastructure means that we make it both available and accessible for everyone.

Some communities in the region cannot afford to pay transit fares, increasing gas prices, and insurance premiums. Often individuals with physical disabilities and mobility challenges also do not have the same level of access as others. Parents and caregivers also face distinctive challenges in transporting young children.

(Re)centering our focus on improving accessibility means building transportation infrastructure and pricing that everyone can afford. It also means that our transportation infrastructure accommodates the transportation of young children, and the physical needs of all commuters. This would ensure that communities and networks across the region remain connected and the economy of the region remains resilient to economic and natural shocks.

So, how are we building our mobility system and pricing in a way that is accessible to everyone? It is also important to underline that availability of public transportation infrastructure in some remote areas remains a priority for some communities, which have to rely on other modes of transportation to deploy goods & services across the region.

In a nutshell, available does not always mean accessible and our current system exemplifies this. How do you envision a more accessible mobility system for Metro Vancouver residents? Here's some breathing room. Use this space to write down your notes & thoughts.



Who's Making The Call?

In Metro Vancouver there are various levels of government that have jurisdiction over different areas, services, functions, etc. These levels of government have to work with one another to ensure that our region's operations continue normally. While we're going to hold off talking about the federal government for now, here are the rest:

(the region's) Governing Bodies

Provincial Government

This level of government is in charge of all governance in BC. Almost all other governing bodies in BC derive their power and functions with authority from the provincial government. This level of government can grant or revoke a city government's authority in a number of areas as well.

Municipal Government

Also called 'city government', this level is in charge of maintaining services and decision making in a particular municipality (e.g. city, town, district, village, etc.). Normally, property taxes are collected by this level of government, but that authority (and all other taxation authority) only exists as long as the provincial law permits it.

The Mayors' Council

Officially known as the 'Mayors' Council on Regional Transportation' is a group of 23 elected representatives (21 mayors + Chief of the Tsawwassen First Nation + representative of Electoral Area A). This body is responsible for the regional decision making on public transit and transportation. They approve plans dealing with transit service levels, major projects, regional funding, and borrowing limits. They are a part of TransLink's governance structure.

Metro Vancouver (Regional Govt)

This regional governing body is a federation of the 23 local entities that delivers drinking water, wastewater treatment, and solid waste management. Metro Vancouver also regulates air quality, plans for urban growth, manages regional parks, and provides affordable housing.

(regional decision making) Changes To Mobility Pricing

Any implementation of new Mobility Pricing tools like road pricing cannot be done under the authority of an individual city government alone. Even on a regional level, a group of mayors cannot just hold a simple vote to implement road pricing.



In order for road pricing to be implemented in Metro Vancouver, the provincial government will need to get involved. It is important for us to mention that this is a politically charged topic. In May 2018, the Mobility Pricing Independent Commission (a body created by the Mayors' Council and TransLink to study how this could be implemented) released a report stating that support for this type of charge was low and many remained undecided. Given this lukewarm-at-best attitude towards road pricing, elected decision makers will have to carefully evaluate public preferences and priorities given the challenges the region's mobility system is/will be facing. That's why participating in processes like this can be important.

We remain unsure what the political process (if any) for implementing regional road pricing could look like, but it would likely involve having the Mayors' Council support it and having the provincial government work together with them (and any other governing body) to come up with a plan on how to implement it over time. Prior to the pandemic, the Mobility Pricing Independent Commission outlined a multi-year process of feasibility study (1 year), policy development (1-2 years), implementation (2-3 years), and operation with various decision making points throughout. If this still holds true, and all levels of government are aligned, this could take between 4-6 years to be fully deployed in Metro Vancouver.

It is important to remember that the information in this section is very speculative. Since this process relies on political decision making, it could look exactly as described, completely different, or somewhere in between.

Here's some breathing room. Use this space to write down your notes & thoughts.

What's Happening In Other Places?

Throughout this discussion, it is helpful for us to remember that we are not going through this process alone. There are many places around the world facing similar challenges that have tried different solutions with varying levels of success.

The list of places around the world tackling these issues is constantly changing. We've gone ahead and highlighted some of them below.

Portland, OR

Portland is exploring ways of implementing road pricing that would promote fairness and equity, while targeting the effects of congestion in the metropolitan area.

In Nov 2021, the Portland metropolitan region released its report after the congestion pricing study. The study looked at distance based charges, cordon pricing, corridor pricing, and parking charges. They measured these options against the goals of congestion, climate, and equity.



The analysis showed that:

1

All four types of pricing could help address congestion and climate priorities:

- All types reduce single driver rate, vehicle miles traveled, and greenhouse gas emissions.
- All types increase daily transit trips.

3 There are tradeoffs for implementing pricing scenarios:

• While all scenarios increase the cost of travel, some spread the costs while others concentrate them on fewer travelers.

Los Angeles, CA

Anyone familiar with Southern California knows that traffic congestion and LA go hand in hand. Adding more lanes to freeways didn't ease congestion issues.

So, LA Metro launched a study in 2019 to explore road pricing aimed at congestion, to reduce demand by charging people to drive in certain areas at certain times.

There can be disproportionate impacts on equity and effects based on geography.

Geographic distribution of

vary by scenario:

benefits, impacts, and costs

2



Here is an overview of the four main proposals:

1 The Santa Monica Mountains Corridor

> • This would add a charge to drive on freeways and roadways in the area called the Santa Monica Mountains. This would include the 401, 101, 5, and other roadways (generally north-south).

2 Downtown LA Freeways Corridor

10 Freeway Corridor

Monica.

Δ

• This would add a charge to all the freeways that pass through downtown Los Angeles. It would include the 110, 101, and 10 freeways.

This would add a charge for

downtown LA and Santa

driving on the 10 freeway and

other major roadways between

3

Downtown LA Cordon

 This option comes from Area/Cordon pricing and would charge drivers for entering the downtown LA geographical area.

As part of this study, LA Metro is examining the impact these proposals will have on low income residents who rely on their vehicles, and other equity concerns.

New York, NY

In 2019, New York state lawmakers approved a plan to implement congestion pricing for drivers entering the busiest parts of Manhattan. This is an example of Area/Cordon pricing (i.e. road pricing applied to a specific geographic area). The goal of this price is to discourage drivers and address the state of gridlock on the city's streets. The funds raised from this fee would be remitted to the MTA (transit authority) and would support the subway, buses, and commuter rail.



Presently, federal officials in the United States are implementing a review process that will host 10 public hearings over a 16 month period that will end in 2023. The review will examine how the pricing might affect low income communities and people of colour.

There are concerns being raised by residents based on income pressures, geographic fairness, and skepticism about congestion pricing's effectiveness. Supporters of congestion pricing argue that the need for implementation is urgent and that long term benefits will outweigh temporary cost increases.

It is important to note that, if implemented, New York will be the first jurisdiction in the United States to deploy road pricing on a significant scale.



Singapore

As a city state in Southeast Asia, Singapore faces unique geographic challenges that it needs to manage. Singapore is a bustling international destination made up of islands, and is bordered to the north by Malaysia. In the south, the city is surrounded by the waters of the Singapore strait in the South China Sea.



While some land reclamation projects have increased the available land area to 710 sq km since the country's founding, this isn't a continuously available strategy. This means that Singapore needs to manage the housing and movement of a large urban population of 5.45 million residents.

Singapore manages its road congestion using a road pricing scheme called Electronic Road Pricing (ERP). As a driver, you pay a fee when driving through an ERP gantry during operational hours. To avoid incurring this charge, motorists can avoid the area, travel outside peak hours, or take public transit. Effectively, Singapore uses an Area/Cordon system for its road pricing. The ERP rates are reviewed quarterly and adjusted in June and December. The rates are set in 30 minute periods, and are higher or lower based on the corresponding timeslot. These rates are adjusted to keep traffic moving at an optimal speed range of 20-30 kph on arterials and 45-65 kph on freeways.

The ERP charge you pay generally depends on the size of the vehicle (i.e. bigger vehicle = higher price) and the time you enter the ERP gantry.

This system is deployed by requiring all Singaporean vehicles to have a device (called 'IU') installed in-vehicle for approximately C\$144 (S\$155.80). You can pay the ERP fee through a stored value card inserted into the device. This card can be prepaid or be automatically topped up by having a credit/debit card on file.

Stockholm, SE

Stockholm and Gothenburg are Sweden's largest urban areas. They are home to 2.4 million and 1.1 million metro area residents respectively. The Swedish Transportation Agency implements congestion taxes in Stockholm and Gothenburg to improve traffic flow and reduce greenhouse gas emissions.



The charge is levied when a user drives past a control point during weekdays, with cost varying between C\$1.98 (15 SEK) to C\$4.63 (15 SEK) in Stockholm, depending on the time of day.

The maximum daily amount during peak season is C\$7.94 (60 SEK) in Gothenburg and C\$17.86 (135 SEK) in Stockholm. While there was initial opposition to the charge, it is now supported by the public.



London, UK

London implements a congestion charge of C\$24.63 (£15) per day to users driving within the Congestion Charge zone between 7 am and 6 pm on weekdays and noon to 6 pm on the weekend and public holidays. There is no charge between Christmas Day and New Year's Day.

This is an Area/Cordon pricing system that covers a 21 sq km area of London. The aim of this charge is to reduce traffic levels in central London and enable more journeys to be made by foot, bike, or bus. Vehicles are also assessed a Ultra Low Emission Zone (ULEZ) charge if their vehicle does not meet certain standards. This is set at C\$20.52 (£12.50) per day for most cars, motorcycles and vans. There is a reimbursement scheme for the Congestion Charge to ease the burden on healthcare workers, patients, local authority vehicles, charities, and care homes during the pandemic. This scheme also includes discounts for a variety of eligibility criteria through an application process. For example, there is a 90% discount for residents living within the zone.

Registered taxis are exempt from the Congestion Charge but ridesharing services (i.e. Uber, etc.) are not exempt. This charge also does not apply to motorbikes, emergency vehicles, and vehicles used by commuters with a disability.

First implemented in 2003, congestion fell 30% by 2006, while total trip numbers remained stable.

How Will This Information Be Used?

Moving in a Livable Region (MLR) began this public engagement process with six local dialogues taking place virtually across Metro Vancouver. The 2022 Mobility Pricing Regional summit taking place on April 30 and May 1 is the culmination of this entire process.

Combined with the data from the discussion and responses from those local dialogues, our team will be collecting the feedback from the discussions at this two day event. All of this data will be included in a comprehensive report that will be made public online, and directly sent to all participants throughout this process.

We will also ensure that relevant entities in the provincial government, every member of the Mayors' Council, every city government, and other governing bodies are directly sent a copy of that report.

Furthermore, in keeping with our civic literacy building, we are actively collecting all the questions from the six local dialogues and this two-day event, and will be hosting an FAQ section on the mobility pricing infosite that will be made available by the first week of June 2022.

While we cannot guarantee or predict one outcome or another with respect to regional decision making on mobility pricing, we can ensure that participants' voices are included in the region's various explorations that will support any future decisions on this matter.

Now, it's your turn. What are the questions we should be discussing?

Appendix: The 2021 Survey

In September & October 2021, Moving in a Livable Region (MLR) worked with Research Co. to conduct a survey of Metro Vancouver adult residents.

We have presented here a small sample of the data collected. We would be happy to provide further information from this survey upon written request.

Overview

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PREFERENCES

This survey collected responses from a total of 1600 participants in 23 local areas in Metro Van. The key question categories are described below.

RELATIONSHIP	SELF-ASSESSED	INITIAL
WITH MOBILITY	ISSUE LITERACY	ATTITUDES
PERCEPTION OF	DEMOGRAPHIC	RANKING OF
TRANSLINK	IDENTIFICATION	PRIORITIES
MOBILITY		

NOTE: The margin of error is +/- 2.5 percentage points, nineteen times out of twenty.

Result Highlights



"What form of transportation do you <u>predominantly</u> use during weekdays?"

NOTE: HandyDart was not selected by any respondent, even though 1% did use it (but <u>not predominantly</u>) during weekdays.

Carshare None 2% None 2% 2% Walking 19% Biking 5% Transit Driving 88% 62%

"What form of transportation do you <u>predominantly</u> use during weekends?"

NOTE: HandyDart was not selected by any respondent, even though 1% did use it (but <u>not predominantly</u>) during weekends.

62%

of Metro Vancouver residents strongly or moderately agree that congestion affects them personally.

36%

of residents strongly or moderately agree that more bike lanes and active transport would benefit them.

56%

of residents strongly or moderately agree that they would personally benefit from more transit service.

\$5134

Amount spent by car owners on finance, gas, maintenance, parking, and insurance in an average year.

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