

EXPLORING MOBILITY PRICING IN METRO VANCOUVER: WHAT WE LEARNED SO FAR

SUMMARY OF OUR FINDINGS AND RECOMMENDATIONS FOR AN EFFECTIVE, FARSIGHTED. AND FAIR MOBILITY PRICING POLICY

Prepared by: the Mobility Pricing Independent Commission

This summary shares what we heard and learned from this 10-month research and engagement project to recommend an effective, farsighted, and fair mobility pricing policy for the region.

The Mayors' Council and TransLink Board established the Mobility Pricing Independent Commission ('the Commission') to study how (not if) a mobility pricing system, including a decongestion charge, could be implemented in Metro Vancouver that would:







Reduce congestion

Promote fairness

Support investment

Thanks to everyone who shared concerns, support, and questions on the *It's Time* project exploring a decongestion charge in our region.

Part 1. Where we started



Growth is an opportunity - and the region needs to ensure everyone benefits from this growth.

Metro Vancouver is growing, and by 2040 another one million people will be living here. To accommodate this growth, we need an efficient, affordable, and sustainable transportation system for everyone, including children, seniors, and people with disabilities. We also need it to transport goods around the region.

Metro Vancouver's regional strategies for growth and transportation have laid out a plan for continued development of diverse and dense neighbourhoods that are walkable and connected by high-frequency transit, and where demand for car use is managed. A 30% increase in transit capacity will be delivered over the next ten years.

Congestion means not everyone can benefit from growth.

We all feel the impacts of congestion as we travel in Metro Vancouver. Not only is it a waste of our time, it also affects our health and safety – think of all the vehicle crashes we hear about on a daily basis. Maybe it stops us from taking a job if the journey there feels a bit too long or unpredictable. Congestion also negatively impacts our region's economy, contributing to the challenges we face with affordability. In September 2017, at the start of the project, an Ipsos Reid poll was conducted and showed how people feel about congestion...



89% are frustrated with traffic delays caused by high volumes.



80% are frustrated with the unpredictability of travel times.



81% say transportation delays cause them lost time every week.

Transportation is changing.

New forms of transportation like ride-hailing and car sharing services, and electric and automated vehicles will bring new and cheaper ways of getting around. The mobility sector is going to change, and as it does, the way public authorities manage and coordinate mobility to ensure equitable and sustainable outcomes for everyone will need to change along with it.

What is mobility pricing and how could it help our region's traffic woes?

In our region, we pay to get around in all kinds of ways: transit fares, parking charges, insurance, fuel taxes, and costs for things like taxis, and bike and car share. Mobility pricing means coordinating the ways we pay to get around, and also paying differently to make it easier for everyone to get around. This is done by using price signals in a way that can manage congestion and encourage the use of different modes of transportation. If done in the right way, it can be fairer and can raise money for investment in the transportation system.

A decongestion charge, also referred to as a road usage charge, is a mobility pricing tool that manages demand for road space.

Every road has a limit on its capacity. A road that can carry 1,500 cars per hour will work well when 1,400 cars are using it. But when that number climbs to 1,600, traffic will slow to a crawl. The congestion doesn't only affect the 200 cars that just joined, it affects everyone, and no one goes anywhere. In severe congestion, as more vehicles are

trying to move past a given point, fewer vehicles are actually getting through.

Did you know?

Just over 1/2 of the people travelling during the AM peak and just over 1/3 during the PM peak by all modes are going to or from work.

That means there are many other people on the road who could possibly shift their travel time to reduce the level of congestion during either the AM or PM peak hours.

A decongestion charge addresses this by charging more to drive at busy times of the day or in heavily congested areas. The charge is set so that it motivates just the right number of people to change the way they travel, by using another route, carpooling, taking alternate modes of transportation, or simply avoiding travelling during peak hours.

In cities around the world, decongestion charging has resulted in 10-35% less traffic and improved travel times. With fewer vehicles on the road and less idling in congestion, cities have seen a reduction in greenhouse gas emissions, and improvements in air quality and traffic safety. They have been able to use revenues to build better transit options.

Part 2. What we learned

This graphic pieces together our findings to show how they tell a story and form the foundation of our recommended principles in the next section.









Prices influence travel behaviour and reduce congestion...

....but people are very concerned about the costs and the impacts for equity.

The transportation sector is in a period of rapid change and innovation.



...but that means there are revenues available to offset some of the concerns about equity and affordability.



Public support for decongestion charging is low, but many are undecided. There are several measures that can increase acceptance.



HOW DID WE HEAR FROM YOU?

Over the course of eight months, the Commission heard from approximately 18,000 residents, stakeholders and elected officials through two rounds of engagement and outreach.

Throughout this process, information was shared through the *It's Time* project website and social channels, and engagement was promoted through newspaper ads and multilingual print and digital ads.



- Conducted 2 rounds of public opinion polling in September 2017 and March 2018 with 2,000 residents across the region
- Launched 2 multilingual public education campaigns on the Commission's work and mobility pricing in the region in 16 local distribution and 11 non-English newspapers and reaching 898,099 residents on Facebook and 65,752 website page-views



Conducted online public engagement and in-person workshops to inform the principles, hearing from 6,078 residents and 176 stakeholders and government officials in Phase 1 and hearing from 11,474 residents and 130 stakeholders in Phase 2



- Increased accessibility by translating the online platforms into Traditional Chinese, Simplified
 Chinese, and Punjabi (the region's largest non-dominant languages), receiving 310 completed
 paper surveys from over 16 regional community offices, and conducting outreach with social
 service organizations
- Convened a citizen-based User Advisory Panel of 15 members representative of Metro
 Vancouver (selected through an external recruitment firm) to advise and provide input at key
 stages of the project

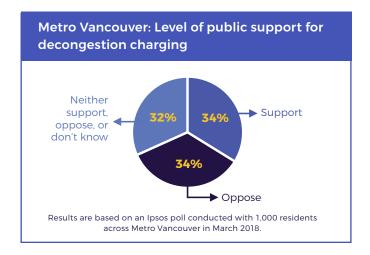
What is your impression of a decongestion charge?

Throughout the process, we heard that a decongestion charge may cause some of you concern and anxiety.

Decongestion charging is controversial and wherever it has been explored and implemented, people have had concerns about whether it will work and what it will cost. In many cases their concerns did not materialize, and there was a greater reduction in congestion than people anticipated.

In Metro Vancouver, we polled our residents and found that public opinion is evenly split.





decongestion charging before and after implementation		
City	Before	After
London	39%	54%
Bergen	19%	58%
Stockholm	21%	67%

Part 3. What we recommend



Principles based on what we learned and heard

We have heard residents' and stakeholders' top concerns about affordability, availability and accessibility of transportation options, equity, and the accountable management of revenues.

These concerns are understandable, and they can be addressed. We know from our analysis that it is possible to design a decongestion charge that is aligned with transit access and that respects privacy. A design is also possible that does not disadvantage those travelling longer distances, people with disabilities, seniors, or people with lower incomes.

Based on our research and engagement, we propose these principles to guide the design of the mobility pricing policy:

PRINCIPLES

An effective, farsighted, and fair regional mobility pricing policy for Metro Vancouver should:



CONGESTION

- A. Deliver meaningful reductions in traffic congestion
- B. Ensure everyone pays a fair share
- C. Coordinate all the ways we pay for mobility, including new and emerging services



FAIRNESS

- A. Be consistent and explainable
- **B.** Support equity
- C. Align prices for road use with access to transit



SUPPORT INVESTMENT

- A. Ensure accountability in the way revenues are used
- B. Not have raising revenue as its primary aim



OTHER CONSIDERATIONS

- A. Deliver positive economic benefits
- **B. Protect individual privacy**
- C. Be predictable, but adaptable
- D. Support goals for regional growth, climate change, and the environment
- E. Continue to be explored with the public and stakeholders

Illustrative concepts for a decongestion charge for further exploration

In the second phase of engagement, the public and stakeholders were shown several examples of decongestion charges: regional congestion point charges and distance-based charges.

Based on the traffic modelling, analysis, and input from residents and stakeholders, the Commission considers that these two illustrative concepts below best meet the principles.

More analysis and iterations will be needed before finalizing a decongestion charge that balances the many factors that need to be considered.

The numbers included here are based on the early analysis conducted by the Commission. They will need to be further developed and refined. Average household costs are an overestimate as many households will be able to reduce costs by changing the way they travel on some days. For the purpose of this study, the number of travel days was estimated at 335 days annually, which represents average household travel patterns.

The first illustrative concept is a regional congestion point charge that would cost the average paying household \$5-8 per day, and could reduce congestion by 20-25%.

That would work out at an estimated \$1800-2700 per household per year. There

may be caps on annual costs, exemptions for some drivers, reductions of other costs of driving, or support for people on low incomes.

This approach could have charge points on or close to 12 major bridges throughout the region. Because there is congestion in areas away from bridges, particularly within the Burrard Peninsula, these points should be complemented by further points at other strategic locations.

For the purposes of this analysis, charge points have been located along North Road (the boundary between Burnaby/New Westminster and Coquitlam/Port Moody). Alternative approaches that could be worth pursuing have also been explored. Further work will be required to find optimal locations for all charge points.

The second illustrative concept is a multi-zone distance-based charge that would cost the average paying household \$3-5 per day, and could reduce congestion by 20-25%. That would work out at an estimated \$1000-1700 per household per year. The 17 cents per litre fuel tax could be eliminated and there may be caps on annual costs, exemptions for some drivers, reductions of other costs of driving, or support for people on low incomes

The number and exact boundaries of zones for this approach are still to be determined and refined. Charges would vary by zone and time of day.

For the purpose of this analysis, eight zones with different distance-based charge rates have been developed, Alternative approaches that could be worth pursuing have also been explored. Further work will be required to identify the optimal number and locations of zones.

The Commission recommends that further work be carried out to look at how other costs of driving, transit fares, or other kinds of taxes could be reduced if a decongestion charge were to be introduced.

You can find more information about these illustrative concepts in the Commission report, including economic benefits, congestion impacts, revenue, household costs, environmental implications, charge levels, and examples of vehicle trip charges.

Part 4. Next Steps



These illustrative concepts will require more work, particularly to understand the costs for households and businesses; what should happen to the fuel tax, transit fares, and other taxes; whether there would need to be a cap on daily costs; and the need for exemptions for certain people or vehicles.

Decision

It will likely be several years before the region is ready to introduce a decongestion charge:

Feasibility study 1 yr

The Commission's report is the first phase of a feasibility study.

Further phases of a feasibility study are described at the end of Part 5.

Policy Development 1-2 yrs

Functional design
Concept of
operations
Business rules
Procurement
methodology
Legislation
Consultation

Implementation 2-3 yrs

Development of procurement materials

Procurement

Mobilization and material procurement
Installation and testing
Hiring staff
Handover of system
Standard operating
procedures

Public outreach and

Operation

Daily operations
System
maintenance
Evaluation and
potential
adjustment
Contract renewal

If all that is desired at this stage is a way to cover costs of transportation investment, then a coordinated system of mobility pricing that includes a decongestion charge is probably not the way forward. But if the region is willing to take on some complex discussions, then mobility pricing offers a way to manage congestion and raise revenues that could be transformative as part of a strategy to support efficient, affordable, and sustainable mobility for the people of Metro Vancouver.

It's Time to continue this conversation so our region and its residents can keep thriving!









You can find more information, reports, and the Commission's full findings and recommendations on the *It's Time* website at www.itstimemv.ca