



# PHASE 1 PROJECT UPDATE SUMMARY REPORT

Phase 1 research and engagement for the It's Time project



JANUARY 2018

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### INTRODUCTION

On October 25, 2017, the Mobility Pricing Independent Commission (the Commission) launched the *It's Time* project. This summary report outlines the research and engagement completed through Phase 1. The full report with appendices can be found on the *It's Time* website.

### About the project

It's Time is a multi-phased research and public engagement project exploring how decongestion charging could work in Metro Vancouver. Upcoming phases will include further research, analysis, and engagement with stakeholders, advisory groups, and the public on potential approaches to decongestion charging in the region.

As directed by the <u>Terms of Reference</u>, the Commission's work is focusing on these three objectives:



#### **Reduce traffic congestion**

on roads and bridges across the Metro Vancouver region so people and goods can keep moving, and businesses can thrive



#### **Promote fairness**

to address concerns around the previous approach to tolling some roads and bridges but not others, as well as providing affordable transportation choices



#### **Support transportation**

**investment** to improve the current transportation system in Metro Vancouver for all users

The Commission is tasked with making recommendations about decongestion charging and mobility pricing in Metro Vancouver to the Mayors' Council on Regional Transportation and the TransLink Board of Directors in spring 2018. If a decision is made to pursue decongestion charging, the next steps in the process will need to involve further research and public engagement to design and implement a system.

The *It's Time* project was initiated in support of the goals outlined in the Regional Transportation Strategy (2013) and the Mayors' Council 10-Year Vision for Metro Vancouver Transit and Transportation (2014).





#### **About the Commission**

The Commission is a group of 14 representatives from across Metro Vancouver appointed through an application and recruitment process to guide and deliver a transparent and independent research and engagement process.



Since its formation in summer 2017 the Commission has held three formal meetings:

#### Meeting #1 - July 28, 2017

The Commission reviewed the Terms of Reference, which define the background and aims of the project, and agreed to a high-level work plan for research and engagement activities. The Commission also explored some of the objectives and values of the project process.

#### Meeting #2 - September 6, 2017

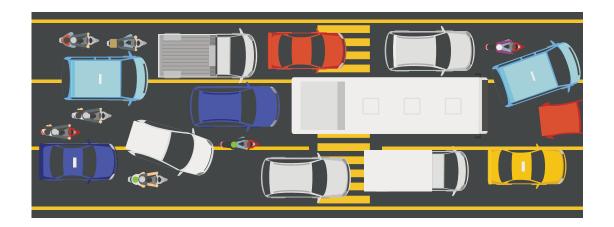
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The Commission reviewed more detailed plans related to the research and engagement processes. They were introduced to a structured evaluation process that will be used later in the project to help explore the trade-offs between different approaches to decongestion charging. Commission members were also asked to provide input on what information they will need in order to make their final recommendations in spring 2018.

#### **Meeting #3 - November 28, 2017**

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The Commission reviewed evidence emerging from the first phase of research on congestion, and information regarding the funding of the 10-Year Vision for Metro Vancouver Transit and Transportation. The Commission decided which possible policy approaches will be taken forward for further analysis in the next project phase. They also reviewed a draft of the evaluation framework, which will provide the necessary information for them to make their final recommendations in spring 2018. Preliminary results from the first phase of stakeholder and public engagement were also presented and discussed.



### PHASE 1 RECAP

What we LEARNED

What we

The Phase 1 communications and engagement stream of the *It's Time* project introduced mobility pricing and decongestion charging to Metro Vancouver residents and stakeholders, and established parameters for the project by exploring objectives and principles. The Phase 1 research and analysis stream laid the groundwork for upcoming phases by establishing a baseline of current conditions and expected future trends in Metro Vancouver, studying other cities' experiences with decongestion charging, and identifying possible approaches to decongestion charging in the region for further analysis.

#### 1. Phase 1 Activities: What we did

What we WILL STUDY

This section outlines the research, engagement, and communication activities completed in Phase 1, including key research and analysis, a series of stakeholder workshops, and an online public engagement program to garner broad regional feedback.

#### Starting on the right foot - Research activities

In Phase 1, the project team's research and analysis efforts aimed to answer these four questions:



#### Research on transportation in the region

With the launch of the *It's Time* project, the team developed a research report called 'Moving in Metro Vancouver: An exploration of the regional baseline, and implications for mobility pricing'.

- This report established a baseline for congestion issues and challenges in Metro
   Vancouver. The report identified population projections, traffic data, and overall research
   background that will be used for the *It's Time* project moving forward
- The report offered analysis of issues and opportunities for each of the Commission's three
  objectives: reducing congestion, promoting fairness, and supporting transportation investment
  in Metro Vancouver
- From traffic modelling and analysis, the report also presented a list of eight congestion hot spots in the region, which were brought to the public and stakeholders for feedback

The full research report can be found in the Phase 1 project update full report on the *It's Time* website.

What we

What we

What we WILL STUDY

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#### What we asked

#### Question 2:

What can we learn from others' experience with decongestion charging?



#### What we did



The project team collaborated with experts to:

- Better understand decongestion charging and how it works
- Explore **considerations for equity and fairness** through an analysis of the theory behind basic traits of fairness as they apply to decongestion charging
- · Study how public acceptance of decongestion charging has developed around the world
- · Gather lessons from international experiences of implementing decongestion charging

From this research the project team gained a deeper understanding of decongestion charging as a policy tool and of some key considerations for implementation.

The decongestion charging policy and global lessons learned report can be found in the Phase 1 project update full report on the *It's Time* website.

#### WHAT ARE POLICY TOOLS?

Policy tools are a general method or way of achieving a desired societal goal and do not go into detail about where, when, or how to use or implement that method.

In this case, a policy tool is a possible decongestion charging approach that is being considered to reduce congestion in Metro Vancouver.

# ?

#### What we asked

#### Question 3:

What are suitable approaches that could reduce congestion in Metro Vancouver?



#### What we did

### **Evaluation of policy tools for Metro Vancouver**

was mandated by the Commission's Terms of Reference.

Building upon the baseline research and policy analysis, the project team identified 10 decongestion charging policy tools that could be applied in different ways in Metro Vancouver. The project team only examined policy tools related to charging for road usage (as opposed to any and all tools that could be used to reduce congestion). The focus on road usage

What we LEARNED

What we HEARD

What we
WILL STUDY

The project team conducted a broad assessment called a coarse-level evaluation, analyzing each of the 10 policy tools identified using the following criteria and questions:

- · What are the strengths and weaknesses of the tool?
- Could the tool be applied in a way that could meet the Commission's three objectives: reduce congestion, promote fairness, and support transportation investment?
- · How complex would it be to implement and administer the tool?

Through this evaluation, the project team **narrowed the list of policy tools from 10 to four**. These four tools will be subject to further analysis to understand how they could be implemented in the Metro Vancouver context.

The coarse-level evaluation report, outlining the list of policy tools considered, the evaluation process, and the results, can be found in the Phase 1 project update full report on the *It's Time* website.

# ?

#### What we asked

#### Question 4:

How can we identify and assess the right approaches for Metro Vancouver?



#### What we did

#### **Development of decongestion charging approaches**

The project team is now developing models to explore **how the four decongestion charging policy tools could be applied in Metro Vancouver's unique context and geography**.

This exercise will apply the four policy tools to different congestion hot spots, times of day, and days of the week. The result of this exercise will be the development of *decongestion* charging approaches.

#### Development of an evaluation framework

The project team is also working on an evaluation framework to outline the methods and criteria that will be used to assess each of the decongestion charging approaches for use in Metro Vancouver.

The criteria will include issues of policy design (i.e. affordability and fairness) and implementation (i.e. cost, simplicity, privacy, and accountability). The evaluation framework will assess how each of the decongestion charging approaches could function in the region. Public and stakeholder input will inform the criteria.

Having a dialogue - Engagement activities

In Phase 1, the project team's engagement efforts aimed to hear from the public and stakeholders to help unpack and define the *It's Time* project objectives and principles.

What we LEARNED

#### WHAT ARE OBJECTIVES AND PRINCIPLES, AND WHY ARE THEY IMPORTANT?

What we HEARD **Objectives** are the goals set by the Commission's Terms of Reference. The three objectives set are: reduce congestion, promote fairness, and support transportation investment in the region. These objectives guide all research activities and will guide the development of the Commission's recommendations.

What we
WILL STUDY

**Principles** are values that will guide the Commission's final recommendations on how decongestion charging could be designed and implemented in Metro Vancouver's unique context. These include basic principles such as privacy, and guiding principles such as affordability considerations.

The objectives and principles form the backbone for evaluating suitable decongestion charging approaches in Metro Vancouver.

#### **HOW WE IDENTIFIED STAKEHOLDERS**

The first step was to establish advisory groups for the *It's Time* project, by reaching out and inviting appropriate stakeholders and organizations. The project advisory bodies will be involved from the start to the finish of the project, and include local stakeholders, regional stakeholders, the User Advisory Panel, and the Peer Advisory Panel.



#### **Stakeholders**

Regional and local stakeholders consisted of representatives from organizations across advocacy, social service, health, transportation, industry, business, environment, academic, and labour sectors. They are vested in and/or facing potential impacts from changes to transportation and decongestion charging. There was particular outreach to organizations supporting cultural, senior, and low-income communities. Individuals were also gathered through a nomination process identifying persons with community and/or committee involvement in relevant areas including transportation, urban design, and planning.

#### **Citizens**

A User Advisory Panel was established as a representative group of citizens who will provide ongoing guidance and advice to the Commission. A third-party recruiting firm enlisted members to ensure the group is representative of Metro Vancouver's diverse population. Representation considered age, ethnicity, gender, income, geography, and mode of transportation.

#### **Peer experts**

The project team also engaged a Peer Advisory Panel to seek independent perspectives and knowledge regarding key theoretical and practical considerations of examining decongestion charging in Metro Vancouver. Members of the Peer Advisory Panel will provide a peer review of the project research. The Peer Advisory Panel consists of three groups of experts:

- 1. People who have been involved in implementing decongestion charging in other cities around the globe, such as senior policy makers from London and Singapore
- 2. People who have studied decongestion charging in North American cities and states, for example in San Francisco, Washington and Oregon
- 3. Academics who have studied decongestion charging in a Canadian context

What we LEARNED

What we HEARD

What we WILL STUDY

#### **HOW WE ENGAGED STAKEHOLDERS**

#### Planners and technical experts

Phase 1 stakeholder engagement launched in mid-October with an interactive Open Space Technology workshop inviting municipal and regional planners, students, and technical experts from across Metro Vancouver. Participants raised 13 topics of interest related to the Commission's objectives as a starting point for discussion, and hosted interactive conversations to narrow the topics of conversation to those that were most important.

#### **Stakeholders**

To support the evaluation of suitable policy tools in Metro Vancouver, the project team sought input from a variety of stakeholders to explore and define the project's objectives and principles through the following questions:

### ?

#### What we asked

What do the three project objectives mean to you, in considering decongestion charging in the region?

Are there any other objectives we need to consider?

In addition to fair and equitable, what are other important principles when considering decongestion charging?



#### What we did

The project team gathered input through interactive, facilitated exercises at the following workshops held in late October and November:

- · Organizational stakeholders through one regional and six local stakeholder workshops
- · Municipal elected officials through two workshops
- · Provincial elected officials through three workshops
- · The User Advisory Panel through one workshop

The project team also hosted at-request meetings with a number of organizations, including the Greater Vancouver Urban Freight Council and the BC Trucking Association.

#### Government

In November and December, the Commission Chair, Vice-Chair, and members of the project team met with elected and administrative officials and policy experts across all levels of government. The Commission also met with the Union of BC Indian Chiefs, and sought guidance on engagement with each of Metro Vancouver's First Nations. Based upon these initial conversations, an in-person workshop will be held with Metro Vancouver-based First Nations later in the *It's Time* project.

Meetings with representatives of government and First Nations allowed the project team to share information, obtain insights from officials as representatives of their communities, and support the Commission's research and analysis objectives. The project team also hosted at-request meetings to share information on the *It's Time* project with various municipal councils, including the District of North Vancouver, the City of Coquitlam, and the City of Vancouver.

What we LEARNED

### HOW WE ENGAGED THE PUBLIC

#### **Public opinion polling**

Before launching the *It's Time* project, public opinion polling helped the project team ground its work in the views of residents. Polling pointed to serious challenges with congestion in the region:



What we HEARD

What we WILL STUDY



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



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



80% are frustrated with the unpredictability of travel times.



62% think it's a good idea to study ways to change mobility pricing in this region.

The public opinion polling results summary can be found in the Phase 1 project update full report on the *It's Time* website.

#### **Public online engagement**

The *It's Time* project team conducted its first round of public engagement online from November 6 to 26. Accessible from the *It's Time* website, the online platform invited input from residents and stakeholders on the Commission's three objectives:

- · Where and when does congestion affect you? Have we missed any congestion hot spots that are affecting you?
- · What does fairness mean to you? Have we missed any important ideas related to fairness?
- What are your priorities for transportation investment? Have we missed other ways we could spend money raised from decongestion charging?
- · How important are each of the Commission's objectives to you?

The project team used an online tool with built-in analytics that provided a real-time tally of voting results. These results reflected the percentage of all online participants who voted Agree or Totally Agree for a question, demonstrating the most agreed upon congestion hot spots, fairness statements, and priorities for transportation investment.

Participants could also elect to provide personal and user data through the online platform to inform the project team of the range of perspectives represented in the results.

#### **Accessibility**

Participants were able to select their preferred language to participate on the online engagement platform: English, Traditional Chinese, Simplified Chinese, and Punjabi. The languages included on the online platform were selected based on the demographics of Metro Vancouver's largest cultural communities.

The project team reached out to organizations across Metro Vancouver that support senior, cultural, and low-income communities, notifying them of the *It's Time* project, and offering support to encourage participation within their communities.

To minimize barriers to online participation, the project team created paper surveys mirroring the online engagement questions. Through outreach efforts, 400 paper surveys and translated materials were sent to 15 participating organizations.

### Who did we engage in Phase 1?

What we LEARNED

What we HEARD

What we WILL STUDY

#### **ENGAGING METRO VANCOUVER RESIDENTS:**

English platform - 5,704 participants

Punjabi platform - 11 participants

Simplified Chinese platform - 44 participants

Traditional Chinese platform - 55 participants

Paper surveys – **264** participants (out of **400** paper surveys distributed at **15** locations)





#### **ENGAGING STAKEHOLDERS:**

1 Open Space Technology workshop - 23 participants

Regional Stakeholder workshop - **22** participants

**6** Local Stakeholder workshops – **68** participants held at locations in Surrey, Richmond, Vancouver, North Vancouver, Coquitlam, and Maple Ridge

1 User Advisory Panel workshop - 15 participants





#### **ENGAGING GOVERNMENT:**

1 meeting with the Union of BC Indian Chiefs

workshops with Municipal Elected Officials - 23 participants

3 workshops with Provincial Elected Officials - BC NDP (7 MLAs), BC Liberals (17 MLAs), and BC Green Party (2 MLAs)

meeting with the Metro Vancouver Council of Councils

Information about the *It's Time* project was shared with Members of Parliament representing Metro Vancouver communities, with meetings to be scheduled in the next phase of engagement





What we LEARNED

What we HEARD

What we WILL STUDY

### **Driving the conversation - Communication activities**

The *It's Time* project focused its Phase 1 outreach efforts on developing public awareness about the Commission, the objectives of the *It's Time* project, and the concept of decongestion charging.

#### **Launching communication platforms**

A project website – <a href="www.itstimemv.ca">www.itstimemv.ca</a> – was launched on October 25, 2017. The website featured key project information, including clarification on decongestion charging, an explanation of the Commission and the project process, and published reports. The website also hosted links to the online engagement platforms, infographics and frequently asked questions, all available in English, Simplified Chinese, Traditional Chinese, and Punjabi. To stay informed, residents were able to sign up on the website for project email updates.



The *It's Time* Facebook, Twitter, Instagram, and Medium accounts provided interactive platforms to engage the public. These platforms were used to share an introductory video and project information, to promote online engagement, and to spur dialogue on key considerations related to decongestion charging and moving around Metro Vancouver. Through these accounts, 16,162,212 media impressions were achieved. 30,176 page views of the website were reached.



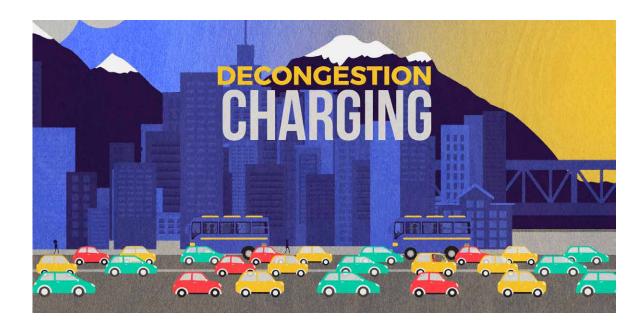
#### Promoting It's Time online engagement

Digital and print ads were circulated in key media outlets to raise awareness of the *It's Time* project and to drive participation in the online public engagement.



Print outlets varied from large distribution (including Vancouver Sun and The Globe and Mail) to local distribution newspapers (including 24 Hours, Metro News, and Megaphone Magazine). Translated print and digital ads were published in non-dominant language newspapers (including Sing Tao, Punjab Guardian, Ming Sheng Bao, Canada Punjab Times) and on social platforms. A reach of 5,346,668 was achieved through print outlets.

An infographic describing the overall reach from our communications efforts can be found in the Phase 1 project update full report on the *It's Time* website.



#### 2. Research Results: What we learned

What we LEARNED

This section **outlines the output and findings emerging from the project team's empirical research and analysis activities**, establishing an evidence-based foundation for further study of decongestion charging in Metro Vancouver.

What we HEARD

What we WILL STUDY



#### RESEARCH ON TRANSPORTATION IN METRO VANCOUVER

The initial research conducted and released at the launch of *It's Time* established a baseline on congestion in Metro Vancouver for the project team to shape and inform engagement with the public and stakeholders. The following key findings on traffic and population trends, as well as considerations for transportation planning have been excerpted from the full research report.

#### **TRAFFIC TRENDS**

#### When does congestion occur and how long does it last?

*It's Time* research shows that congestion hot spots are spread across the region and traffic tends to be worse in the afternoon rush compared to the morning rush. On average, vehicle speeds are lower during the evening rush hour than the morning rush hour, and the duration of these lower speeds is more prolonged in the evening.

#### Traffic hot spots are occurring throughout the region.

The following list shows some of the region's worst congestion problems in no particular order. It's also important to keep in mind that people are likely experiencing other congestion issues that are not included in this list.

What we

LEARNED

- What we
- What we WILL STUDY

- 1 Bridges and tunnels crossing the Fraser River
- 2 Bridges between Richmond, Vancouver International Airport and Vancouver
- Major arterials in Vancouver and western parts of Burnaby
- 4 Urban centres for example New Westminster, Metrotown, Surrey City Centre and Richmond City Centre
- 5 Various points across the North Shore
- 6 The northeast part of the region for example Coquitlam, Port Coquitlam and Port Moody
- 7 Regional highways for example Highway 1 and Highway 91
- 8 Metropolitan core of downtown Vancouver



#### **OUR REGION**

#### Metro Vancouver's population has grown rapidly, and is set to keep growing.

In 2016 there were approximately 2.5 million people living in Metro Vancouver. That's an increase of around half a million people since 2001. Forecasts for Metro Vancouver estimate the region's population will grow by more than 1 million new residents over the next 30 years. That's the equivalent of the population of the City of Calgary – or to put it another way, one packed city bus every day from now until 2045.

#### Multiple urban centres are shaping the region.

There is a continuing emergence of strong urban centres within Metro Vancouver. Although the City of Vancouver continues to grow in terms of population and employment, other areas such as Surrey, Burnaby and Richmond are absorbing more growth, creating multiple regional centres and a need for efficient linkages between them.

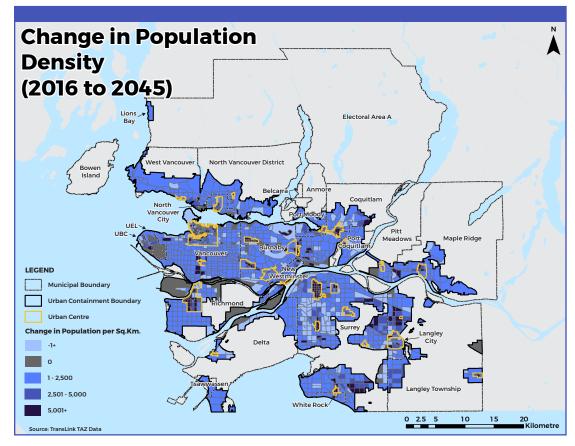
#### Growth will be accommodated by increasing density.

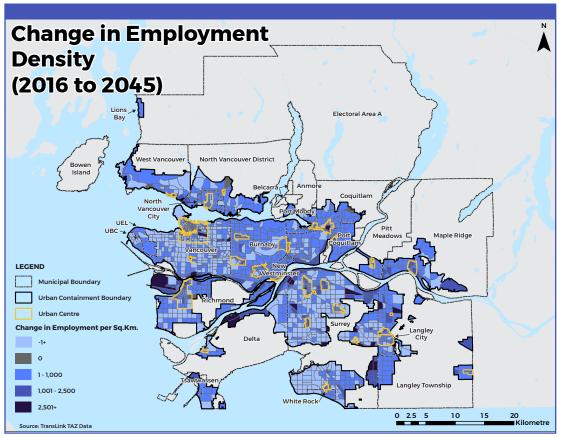
These charts show how the growth in population and employment density is expected to be distributed throughout the region by 2045:



What we HEARD

What we WILL STUDY





What we LEARNED

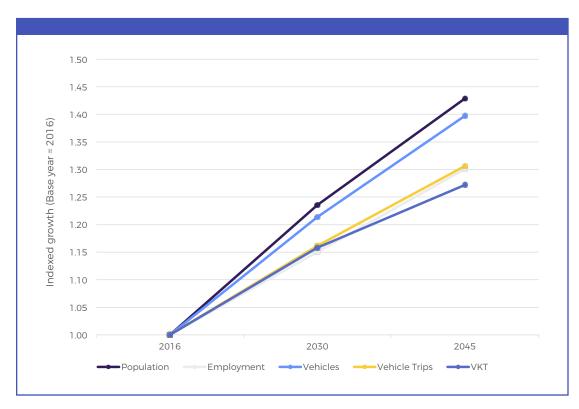
What we HEARD

What we WILL STUDY

#### Density brings benefits and challenges.

Increasing density enables people to live closer to jobs, schools and services. It also facilitates the exchange of ideas, goods and culture. But density also brings challenges, such as congestion and crowding on transportation systems due to high demand at certain times.

Here's how employment, the number of vehicles, vehicle trips, and vehicle kilometres traveled (VKT) are expected to grow alongside our population:



Source: Regional Transportation Model

#### PLANNING FOR THE FUTURE

# Even with significant transportation investments, congestion is set to get worse over the next 30 years.

Metro Vancouver is expected to welcome a million more people and more than 400,000 new jobs over the next 30 years. Most of this will be in dense mixed-use areas with good access to frequent transit. Significant investments are planned in new transit including the Broadway extension of the Millennium Line, new light rail transit (LRT) in Surrey, new B-line bus services across the region, a new SeaBus, and new SkyTrain cars, as well as ongoing reviews of transit services in response to demand. Reinvestments are also planned in the major road network, as well as ongoing revisions of traffic management and signals to improve traffic on municipal roads, and improvements for bus priority, walking and cycling. All of these changes will have an impact on congestion.

But while new transit and road improvements could contribute to reduced congestion in some locations and at certain times, an increasing population could lead to worsening congestion at other locations and times.

### What we LEARNED

What we HEARD

What we WILL STUDY

#### We are in a period of rapid technological change.

While population growth can be forecasted, developments in mobility could make it challenging to predict and plan for the future. Here are some of the key technology trends to consider:

- · Purchase prices for electric vehicles are dropping, making them more widespread
- Autonomous and semi-autonomous driving capabilities could have the potential to reduce collisions and congestion, as well as enable new infrastructure and on-demand mobility without the need for car ownership. They could equally have rebound effects such as increased vehicle dependency and competition for public transit
- The **sharing economy**, as well as taxi services and public transit, open up the possibility of mobility as a service reducing private vehicle ownership and use
- **Data analysis capabilities** are delivering new possibilities for parking management and urban congestion relief, as well as enhanced traveller information and incentives
- New technologies, like mobile apps, drones and even 3D printing, can affect freight and goods movement

The full research report can be found in the Phase 1 project update full report on the *It's Time* website. The research summary report can also be found on the *It's Time* website.

# ANALYSIS ON DECONGESTION CHARGING POLICY AND PUBLIC ACCEPTANCE AROUND THE WORLD

The project team engaged external experts at WSP in Sweden, with many years' experience in implementing and assessing decongestion charging, to summarize the available evidence on the following:

- · how decongestion charging works
- · how equity and fairness may be considered
- how decongestion charging has been received publicly when implemented in other parts of the world

The following section includes summarized excerpts of their key findings and lessons from other jurisdictions.

#### **UNDERSTANDING DECONGESTION CHARGING**

In severe congestion, the capacity of a road can drop well below its design capacity. This means that as more vehicles are trying to move past a given point, fewer vehicles are actually getting through. In this way, accepting congestion means accepting a lower level of performance of the road network. Decongestion charging aims to address this by charging more for road travel at times of day and in locations where the efficiency of the road network is affected by congestion.

When people make individual decisions about how and when to travel they take into account their own costs in the form of transit fares, fuel, and parking costs, as well as the time it will take, but not the costs imposed on other people. For travel by car these shared costs can be large and include things like congestion, emissions, safety, and wear and tear on roads and streets. Because the direct cost people pay to drive does not include all these so-called "external costs", it is possible to say that individuals are not paying the full costs of driving.

What we LEARNED

As the behaviour of some travellers shifts, demand for travel alternatives will increase and facilitating this may require investment in other modes of transportation such as transit and cycling infrastructure.

Decongestion charging is a way of including some of the external costs of driving - especially those

many people need to change their behavior in order to achieve substantial improvements in

relating to congestion - into the direct cost that people pay. This leads to behavioural responses from some travellers, including changing modes and travel departure times. However, most car drivers tend to stay and pay. Because the relationship between travel demand and travel time is non-linear, not

What we HEARD

**EQUITY AND FAIRNESS** 

travel times.

What we WILL STUDY

Equity and fairness considerations in decongestion charging can be assessed by how the costs and benefits of the charge are distributed over the population. Typically, the benefits of decongestion charging are not spread evenly over the population, as some people experience large improvements while others only see marginal or unappreciable gains, and some even worse-off than before the introduction of the charge. Needless to say, different individuals perceive fairness differently and rarely does everyone agree on which aspects or properties of a policy (like decongestion charging) make it fair or unfair.

Philosopher John Rawls's theory for the basic traits of fairness has been tested in previous research and found to be relevant to the public perception of fairness of different decongestion charging schemes. Based on his book A Theory of Justice (1971), Rawls' theory is based on three principles:

- **Principle 1:** A set of basic rights for everyone;
- Principle 2: Equal opportunities to change and adapt; and
- Principle 3: Inequalities should work in favour of the less advantaged

Rawls's first principle discusses the minimum rights of an individual – for example, the notion that everyone should be allowed the basic right to mobility. The affordability of decongestion charging is a fairness concern that reflects Rawls's first principle. In other words, it poses the question of whether or how the affordability of decongestion charging affects access to the basic right to mobility.

Rawls's second principle can be related to the need for everyone to be provided a reasonable opportunity to adapt to the circumstances surrounding decongestion charging. For instance, the sudden and unexpected implementation of a charging policy could be experienced as being more unfair than a longer-term phased approach giving people time to adapt.

Rawls's third principle suggests a policy will be regarded as unfair if it redistributes resources from the poor to the rich. In other words, how funds from decongestion charging are gathered and used will matter with respect to fairness.

### What we LEARNED

What we HEARD

What we WILL STUDY

#### WHAT WE KNOW ABOUT PUBLIC ACCEPTANCE FROM AROUND THE WORLD

Drawing from experience from cities where decongestion charging has been introduced, research shows that public acceptance is usually low before implementation and increases once charging is in place. Early in the process, when discussion is general and the effects of charging are described as abstract concepts, there typically isn't much formalized opposition from the public. However, as decongestion charging concepts become more concrete the public may begin to worry about the negative personal consequences associated with them. This tends to lead to lower acceptance levels as implementation nears close.

After implementation public acceptance typically increases, which can be attributed to a number of factors, including:

- Travel times improve more than motorists expected
- · Negative consequences (charges paid, mode shift) prove less problematic than anticipated
- · People adapt and accept a new status quo, no longer evaluating it as a "change"

#### LESSONS FROM INTERNATIONAL EXPERIENCE

Three main lessons emerge from examining international examples of decongestion charging:

- 1. All decongestion charging schemes implemented to date have been with the intention to reduce congestion and/or emissions
- 2. Most decongestion charging has also provided a positive revenue stream which is typically used to fund additional transportation options and services
- 3. No jurisdiction has implemented a version of decongestion charging that uses distance-based charging assessed for time of day and geography this type of system has been evaluated as complex and costly given the technology available at the time of implementation.

The full decongestion charging policy and global lessons learned report can be found in the Phase 1 project update full report on the *It's Time* website.

What we LEARNED



What we WILL STUDY

### 3. Engagement Results: What we heard from stakeholders

Through engagement efforts, the project team heard from 6,078 Metro Vancouver residents and stakeholders through the online engagement, and 177 stakeholder and User Advisory Panel members through in-person workshops.

Please refer to the Phase 1 project update full report on the *It's Time* website for the complete Phase 1 Engagement Report, which includes the stakeholder engagement findings, the participation breakdown, and summaries from in-person workshops.

This section summarizes the recurring themes gathered through in-person workshops with stakeholders, elected officials, and the User Advisory Panel.

#### What we heard about REDUCING CONGESTION

# STAKEHOLDER THEMES: What does reducing congestion mean to you?

From the workshops held with stakeholders, elected officials, and the User Advisory Panel, the following are highlights from participant input in exploring and defining the objective to reduce congestion:



- **More mode options** for those with fewer transportation services to incentivize and help reduce single occupancy vehicle use
- · Increased consistency, reliability, and predictability in journey times
- · Faster journey times
- Congestion reduction across all modes of transportation, not just cars
- Consideration for the unintended consequences of shifting behaviour and diverting traffic flows
- Promoting safety to reduce crashes and enhance the safety of travellers who are walking
  or cycling
- Considering shifting routes and schedules for trucks on major corridors and construction
- · Exploring **flexible work schedules** (when possible) to alleviate congested periods

#### STAKEHOLDER THEMES: Where does congestion affect you?

Stakeholders, elected officials, and the User Advisory Panel were all asked about congestion hot spots affecting them, and the project team received 1,173 public comments to the online question: "Have we missed any congestion hot spots that are affecting you?"

The resulting range of responses from all sources fell within the eight broad hot spots identified in the initial research report, with frequently specified areas including the Massey Tunnel (included in crossing the Fraser River), major arteries in the Coquitlam and New Westminster area and the Brunette Highway 1 interchange, and North Shore bridges.

What we

LEARNED

What we heard about PROMOTING FAIRNESS

STAKEHOLDER THEMES: What does promoting fairness mean to you?

Given the subjective nature of the term "fairness", and given that one of the project objectives is promoting fairness, the project team sought input from stakeholders, elected officials, and the User Advisory Panel on what fairness means. Additionally, the public online participants were asked: "Have we missed any important ideas related to fairness?" prompting 1,250 on the online platform on fairness.



What we

What we WILL STUDY Emerging themes included:

- Not burdening those with fewer transportation choices based on where they live and work
- Increasing transit service levels and scheduling options before implementing decongestion charging
- Acknowledging that fair decongestion charging will be interpreted differently by everyone
- Considering affordability and social equity impacts for different marginalized groups
- Considering using the revenues from decongestion charging to replace existing taxes and fees
- Using revenues from decongestion charging to improve the region's transportation system

#### STAKEHOLDER RESULTS: What does fairness mean to you?

At the various workshops held with 90 regional and local stakeholders, the project team conducted a benchmarking exercise to gain input on how much stakeholders agreed with six statements describing different decongestion charging approaches based on their own interpretation of fairness. These statements were also posed to the public through the online engagement platform – these results are displayed in the following section.

- Similar to the public engagement results, the statement "I think it should cost less to drive in areas that have fewer transit options" received the highest level of agreement out of all fairness statements from stakeholders
- Similar to the public engagement results, the statement "I think people should pay based on how many kilometres they drive" received the lowest level of agreement out of all fairness statements from stakeholders, with concerns and economic considerations expressed for professionals who drive for work purposes (i.e. contractors, emergency vehicles, trucks)

#### HOW DID WE COME UP WITH OUR STAKEHOLDER RESULTS?

The level of agreement is where each rating is assigned a percentage (Totally Disagree = 0, Disagree = 25, Don't Know = 50, Agree = 75, Totally Agree = 100) and the average is taken.

Note: These results are representative of the stakeholders in attendance at the in-person workshops.

These results are displayed in the following table:

What we LEARNED



What we WILL STUDY

Fairness Statement	Stakeholder Level of Agreement
I think it should cost less to drive in areas that have fewer transit options.	Medium high 74%
I think people with lower income should pay less.	Medium high 69%
I think people should pay more to drive in and out of downtown areas.	Medium high 63%
I think people should pay more to drive in congested areas.	Medium high 71%
I think people should pay more to drive at busy times of day.	Medium high 66%
I think people should pay based on how many kilometres they drive.	Medium high 60%

#### ELECTED OFFICIAL THEMES: What does fairness mean to you?

The project team gathered input from municipal and provincial elected officials on the Commission's objective of promoting fairness and the different ways in which decongestion charging could be applied. From these facilitated conversations, a number of recurring themes emerged:

- · Improving access, service levels, affordability, frequency, and capacity of transit options
- **Ensuring openness and transparency** in how revenues from decongestion charging are used and the resulting benefits
- Suggesting **different pricing models** based on type or size of vehicle, based on user-pay distance charging, and progressive pricing based on ability to pay
- Understanding the trade-offs people make between housing costs and transportation costs
- · Not burdening those with **fewer transportation choices** based on where they live and work
- Considering affordability and social equity impacts, especially for those groups that cannot
  afford to live close to where they work
- Reviewing all decongestion charging options as sources of funding, and ensuring people understand the options and their implications
- · Understanding the **regional distribution in how constituents pay and receive benefits**
- · Using revenues from decongestion charging to improve the region's transportation system
- · Considering the impacts of ride-sharing and car-sharing

At the two municipal workshops, there was general support for decongestion charging applications based on distance or geography, charging less for people with lower income and with fewer transit options, and adopting a consistent way to pay (i.e. tolling all bridges rather than some).

At the three provincial workshops, there was general support for decongestion charging applications for travelling in and out of downtown areas, and charging less for people with fewer transit options. There was less agreement for decongestion charging applications based on distance and charging less for people with lower income.

What we LEARNED



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#### USER ADVISORY PANEL THEMES: What does fairness mean to you?

The project team held facilitated conversations with the 15 members of the User Advisory Panel and heard a number of recurring themes about promoting fairness, including:

- · Improving access to transit across all municipalities in Metro Vancouver
- · Considering affordability concerns and the fees that people already pay
- · Considering different pricing based on level of income, vehicle type, and for tourists and visitors
- Considering **pricing mechanisms** including monthly passes (including an employer pass), and caps on costs
- Providing adequate information and multiple avenues to communicate with the public to inform and build understanding about decongestion charging
- · Implementing a consistent pricing approach, such as tolling all bridges rather than a few

There was general support for decongestion charging applications based on geography (hot spot charging), and charging less for people with lower income and fewer transit options.

# What we heard about SUPPORTING TRANSPORTATION INVESTMENT

# STAKEHOLDER THEMES: What does supporting transportation investment mean to you?

At the workshops held with stakeholders, municipal elected officials, and the User Advisory Panel, the project team heard some recurring themes when asked to explore and define the Commission's third objective, including:



- Improving public transit and other modes, offering more transportation options and shifting behaviour to reduce single occupancy vehicles
- **Integrating land use planning with transportation** to connect affordable housing with town centres and employment zones
- · Taking a strategic approach to building transportation infrastructure
- **Supporting transportation-related technology and innovation**, including ride sharing and parking apps, electrification of the vehicle fleet, and autonomous vehicles
- Dedicating and using revenue from decongestion charging into transportation, with priority investments directed to mode options
- · Demonstrating tangible benefits from investments in transportation
- Ensuring TransLink's accountability and transparency in using potential decongestion charging revenues

What we

LEARNED

What we heard about the It's Time project

STAKEHOLDER THEMES: Are there any other objectives we need to consider?

From our conversations with stakeholders a number of emerging objectives were suggested for the Commission's consideration, including:



- **Promoting environmental sustainability** by reducing GHG emissions and the overall carbon footprint from regional transportation
- **Ensuring economic viability** by assessing potential impacts to business profitability, transport time and logistics, and staffing, and by maintaining Metro Vancouver as an economic trade gateway

# STAKEHOLDER THEMES: What are important principles when considering decongestion charging?

The project team asked stakeholders, elected officials, and the User Advisory Panel about important principles they thought the *It's Time* project should consider, in addition to fairness and equity. Emerging suggestions included:

- Accessibility: minimizing physical and financial barriers to travel, as well as increasing choice, incentives, and availability of transportation options (particularly for marginalized communities and those living in areas far from urban centres)
- Integrated planning: considering a range of factors including the economy, social impacts, technology advancements (i.e. autonomous vehicles), political objectives and policies, and the need to minimize unintended consequences related to decongestion charging
- Transparency and accountability: in managing revenues collected from a decongestion charging system
- **Simplicity and efficiency:** in designing, implementing, and administering decongestion charging, including suggestions to integrate charges with existing fee collection processes
- Adaptability and scalability: in adjusting or transferring a decongestion charge to match with shifts in congestion, and to remain useful in combating congestion in the region or province
- **Public awareness:** to ensure everyone can participate and stay informed about the *It's Time* project, and understand the time and financial costs and benefits of choosing different ways to travel
- · Privacy and security: in the protection of data



What we WILL STUDY



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### 4. Engagement Results: What we heard from the public

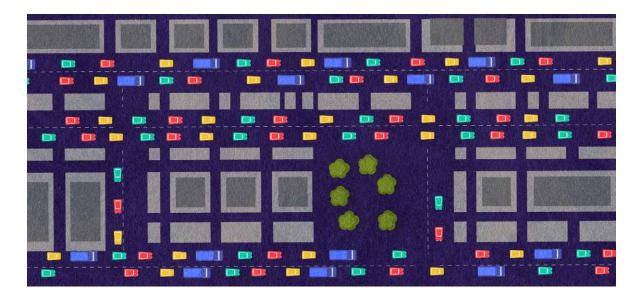
This section summarizes the recurring themes heard from the public through the online engagement platform.

Please refer to the Phase 1 project update full report on the *It's Time* website for the complete Phase 1 Engagement Report, which includes the public online findings, the participation breakdown, and public opinion polling results.

# PUBLIC ENGAGEMENT RESULTS: How important are each of the Commission's objectives to you?

To support the team's evaluation of suitable policy tools in Metro Vancouver, the project team wanted to understand how the public perceived the importance of the three objectives.

Through the online platform, the project team asked the public to assess the three objectives by rating them between 1 and 100 in terms of importance, where 100 was most important. From this, we heard reducing congestion had the highest level of importance (78/100), closely followed by supporting transportation investment (76/100), and then promoting fairness (65/100).





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#### HOW DID WE COME UP WITH OUR OVERALL PARTICIPANT RESULTS?

The online engagement platform asked the public to rate their level of agreement with a series of statements related to reducing congestion, promoting fairness, and supporting transportation investment. Participants responded to questions by selecting between:

Totally Disagree Don't Know Agree Totally Agree

### The project team wanted to explore the participants' level of agreement and consensus.

While taking the average level of agreement is a useful starting point, it does not accurately reflect the range of views provided by participants. In other words, it doesn't reflect the level of consensus (or disagreement) expressed by over 6,000 respondents.

#### Introducing the Overall Participant Result indicator.

The Overall Participant Result provides a more accurate representation of participant opinion as it combines the level of agreement and the level of consensus:

- Level of agreement is calculated as an average of all participant votes, where each vote
  was assigned a numerical value between 1 and 100 (Totally Disagree = 0, Disagree = 25,
  Don't Know = 50, Agree = 75, Totally Agree = 100).
- $\cdot$   $\,$  Level of consensus is calculated as a spread in the level of agreement between all
  - respondents. In other words, it reflects the level of consensus (or polarity) among respondents. A useful visual of how consensus spreads out when multiple individuals respond to the same question is included here:



The Overall Participant Results are ranked from a High to a Low score:

Legend	Result	Description
High	75% to 100%	Strong support:
Medium high	55% to 75%	Strong agreement and strong consensus
Medium	45% to 55%	
Medium low	20% to 45%	More contentious:
Low	0% to 20%	Low agreement and low consensus

Note: The *Overall Participant Result* is not fully representative of Metro Vancouver. It represents those members of the public who elected to participate and self-identify in the online engagement, with results skewed towards a Vancouver-based, higher income, and male perspective.

What we DID

**PUBLIC ENGAGEMENT RESULTS: Where and when does** congestion affect you?

What we heard about REDUCING CONGESTION

The public were asked to validate the eight congestion hot spots emerging from the research. Through the online platform, participants rated their level of agreement with how bad they considered congestion to be in each of the hot spots. There was general support for and validation of the hot spots identified, demonstrated by the Overall Participant Results found in the

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table below:

Where and when does congestion affect you?	Overall Participant Result
I think congestion is bad when travelling on regional highways during rush hour (like Highway 1 and Highway 91).	High (83%)
I think congestion is bad when travelling to, from, and around Downtown Vancouver.	High (80%)
I think congestion is bad when travelling to, from, and around the North Shore.	High (80%)
I think congestion is bad on and around bridges crossing the Fraser River.	High (76%)
I think congestion is bad on and around bridges between Richmond, the airport, and Vancouver.	Medium High (73%)
I think congestion is bad on major bus routes in Vancouver and Burnaby.	Medium High (72%)
I think congestion is bad when travelling to, from, and around urban centres (except Vancouver).	Medium high (71%)
I think congestion is bad travelling to and from Coquitlam, Port Coquitlam, and Port Moody.	Medium high (64%)

In response to the online question: "Have we missed any congestion hot spots that are affecting you?" the project team received 1,173 responses falling within the eight broad hot spots identified in the initial research report, with frequently specified areas including the Massey Tunnel (included in crossing the Fraser River), major arteries in the Coquitlam and New Westminster area and the Brunette Highway 1 interchange, and the North Shore bridges.

There were also a number of general online comments regarding reducing congestion, including divergent views on using the road more efficiently (including support and opposition for bike lanes versus vehicle use), support for improvements to all transportation mode options, suggestions to improve traffic light timing and directions, and general discontent with the idea of implementing an additional cost on top of current vehicle use charges.

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#### What we heard about PROMOTING FAIRNESS

# PUBLIC ENGAGEMENT RESULTS: What does fairness mean to you?

Through the online platform, the project team posed a variety of statements describing different decongestion charging approaches, and asked the participants to rate their level of agreement based on their own interpretation of fairness.



The following table summarizes the Overall Participant Results:

What does fairness mean to you?	Overall Participant Result
I think it should cost less to drive in areas that have fewer transit options.	Medium High 58%
I think people with lower income should pay less.	Medium Low 40%
I think people should pay more to drive in and out of downtown areas.	Medium Low 35%
I think people should pay more to drive in congested areas.	Medium Low 35%
I think people should pay more to drive at busy times of day.	Medium Low 34%
I think people should pay based on how many kilometres they drive.	Medium Low 32%

- The statement "I think it should cost less to drive in areas that have fewer transit options" received the highest Overall Participant Result out of all fairness statements from online engagement participants. This statement was worded in a slightly different way than the others, possibly contributing to it being interpreted differently
- The statement "I think people should pay based on how many kilometres they drive" received the lowest Overall Participant Result out of all fairness statements from online participants



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# What we heard about SUPPORTING TRANSPORTATION INVESTMENT

# PUBLIC ENGAGEMENT RESULTS: How could we use money generated from decongestion charging?

As decongestion charging could generate revenues, the project team presented six transportation areas through the online platform to seek public input on where the region could allocate and invest funds. The Overall Participant Results can be found in the table below:



What are your priorities for transportation investment?	Overall Participant Result
Improvements to transit should be a priority.	High 85%
Affordable transit fares should be a priority.	Medium High 71%
Improvements to roads and bridges should be a priority.	Medium High 68%
Addressing transportation pollution should be a priority.	Medium High 56%
Reducing driving costs (i.e. insurance, parking fees, fuel taxes) should be a priority.	Medium Low 44%
Better walking and cycling options should be a priority.	Medium Low 44%

- The statement "Improvements to transit should be a priority" received the strongest Overall Participant Result out of all online engagement questions. This is a common theme from Phase 1 engagement
- The statements "Better walking and cycling options should be a priority" and "Reducing driving costs (i.e. insurance, parking fees, fuel taxes) should be a priority" were the most contentious (i.e. had the lowest levels of consensus) based on participant votes, and therefore had the lowest Overall Participant Results

# PUBLIC ENGAGEMENT RESULTS: Have we missed other ways we could spend money from decongestion charging?

In addition to voting on the priority areas listed above, the project team asked the public for other suggested transportation priorities. A number of key themes emerged based on 821 participant comments gathered on the online platform, including:

- Improving public transit and other transportation modes: Reinforcing the participant votes displayed in the table above, almost 25% of all comments concerned transit, walking, and cycling improvements
- **Improving the existing road network:** Participant comments emphasized the need to support those residents who cannot or do not use transit and rely on private vehicle use
- · Dedicating and using revenue from decongestion charging into transportation
- · Divergent views on improving cycling infrastructure
- Expanding parking options by transit stations and hubs

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### 5. Next Steps: What we will study

As a research project, the *It's Time* team started off by reviewing and analyzing suitable decongestion charging policy tools for Metro Vancouver.

By studying what we are already paying in Metro Vancouver, and tools that have been implemented or studied in other parts of the world, the project team came up with a list of ten possible policy tools that could meet the Commission's objectives: reduce congestion, promote fairness, and support transportation investment. The full list of policy tools is described in the Phase 1 project update full report on the *It's Time* website.

The next phase of the team's research will focus on studying implementation, where the project team will work to better understand what might happen if we were to use these different policy tools in different ways in Metro Vancouver. This involves creating approaches to where, when, and how the policy tools could be used. To understand the various impacts of applying the policy tools in different ways, the project team will be using the Regional Transportation Model (a computer model of Metro Vancouver's transportation system) and a range of other analysis methods.

It takes considerable time and effort to develop and analyze these models and methods, and to make the adjustments needed to test these different approaches. For this reason, it was necessary to narrow down the number of possible policy tools that will be the most feasible and illuminating to study for Metro Vancouver.

To do this, the project team conducted an initial evaluation to narrow down to a smaller set of policy tools for further study. **This section describes the results of this "coarse-level" evaluation.**The full coarse-level evaluation report can be found in the Phase 1 project update full report on the *It's Time* website.

#### **REFRESHER: WHAT ARE POLICY TOOLS?**

Policy tools are a general method or a way of achieving a desired societal goal, and do not go into the detail about where, when, or how to use or implement that method.

### Possible policy approaches for Metro Vancouver

The evaluation identified the following list of policy tools that have the potential to be comprehensive long-term congestion management solutions for Metro Vancouver. The application of these tools to the Metro Vancouver context will be the focus of further analysis and upcoming engagement with stakeholders and the public:

- Congestion point charges, which is an umbrella term including system of point charges (which
  involves charging vehicles when passing a defined point or location, like a busy section of
  road, a bridge, or tunnel), and cordon charges (which involves charging vehicles when passing
  through entries and/or exits to and from a defined area)
- **Distance-based charges varying by time and location** (i.e. some locations and times could have a higher \$/km charge at busy times of day)

In addition, changes to the fuel tax, as well as the pricing of private paid parking (through the parking sales tax) and public parking will be studied as potential complementary tools to the above approaches. Parking pricing is a distinct but less comprehensive solution to reducing congestion, and it is expected to perform differently in terms of fairness and implementation ease. As the region has decades of experience with pricing private paid parking and public parking, as existing policy tools, the study will focus on other approaches that have greater potential for reducing congestion.

As a variation of cordon charges, area licensing could be explored. Area licensing involves charging a fee for using all roads within a given area, not just when passing a cordon.

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#### HOW DO THESE TOOLS SUPPORT THE COMMISSION'S OBJECTIVES?

The project will be studying these different approaches to reducing congestion and comparing their performance against each other and against baseline scenarios where decongestion charging is not implemented.

The actual potential for these policy tools to reduce congestion, promote fairness, and support transportation investment in the Metro Vancouver context will need to be better understood through analysis and modelling.

To support this, further engagement with the public and stakeholders will help the project team better understand impacts and considerations in moving forward with any of these approaches.

The evaluation also identified the following list of policy tools that could make sense as part of a portfolio and/or pathway to a long-term congestion management solution and could be considered at later stages in the project:

- Corridor charges (mandatory), which involves charging vehicles on a specific road to use any lane
- · Distance-based charge (i.e. flat fee on the number of kilometres traveled)
- **Vehicle Levy**, also known as vehicle registration fees, would involve an annual flat fee on all vehicles registered in Metro Vancouver

Mandatory corridor charges have high potential to address congestion at a single location, but need to be a component of a comprehensive congestion management system to avoid traffic diversion. Distance-based charges and vehicle levies are less effective at reducing congestion than the other tools identified above, but they still have some congestion benefits and could be effective ways of raising revenue to support the regional transportation system.

### Other policy tools

The evaluation also resulted in a list of policy tools to set aside as they are less effective at reducing congestion – a primary objective of the *It's Time* project:

- **Isolated point charges**, which involves charging vehicles when passing selected locations (i.e. a bridge toll)
- Corridor charges (voluntary), which provides vehicle users a choice to pay to use an identified express lane on a specific road (i.e. HOT lanes)
- **Distance-based vehicle insurance**, which involves converting car insurance charging from a flat annual basis to a per-kilometre basis (though it could form an initial platform upon which to implement distance-based charging varying by time and location)
- Parking levies, which involves charging a fee on all private non-residential units with parking facilities (e.g. parking fees applied on office buildings and/or retail store parking lots)

The full coarse-level evaluation report can be found in the Phase 1 project update full report on the *It's Time* website.

### STAY TUNED

This first phase of research and engagement laid a strong foundation for exploring decongestion charging in Metro Vancouver. We will come back with more information and engagement opportunities in the near future.

Here's how to stay engaged:



Learn more on our website: itstimemv.ca



Follow us on Twitter: @itstimemv



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It's Time, Metro Vancouver

#### **ABOUT THIS DOCUMENT**

# Reporting back on what we did and what we heard from the first phase of the *It's Time* project

This document summarizes the research, engagement, and communications activities conducted in Fall 2017 as part of the first phase of the *It's Time* project, including the resulting findings and emerging themes. This information will be used to continue studying how decongestion charging could help relieve congestion in Metro Vancouver.

To read the Phase 1 project update full report, please visit the About page at itstimemv.ca.

#### **About the Mobility Pricing Independent Commission**

The Commission is an initiative of the Mayors' Council on Regional Transportation and TransLink's Board of Directors. Comprised of 14 independent community leaders from across Metro Vancouver, the Commission has a mandate to engage with the diverse users of Metro Vancouver's road system in a fair, unbiased and transparent process, and provide recommendations on how to improve the way the region prices transportation – including roads and bridges – to reduce congestion for everyone.