



## **Metro Vancouver Mobility Pricing Independent Commission Minutes – Meeting 4 January 29, 2018**

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Minutes of the Metro Vancouver Mobility Pricing Independent Commission (MPIC) Meeting held Monday, January 29, 2018 at 12:00 p.m. in the Health Room, Doctors of BC, 1665 West Broadway, Vancouver, British Columbia.

### **PRESENT:**

Allan Seckel, Chair

Joy MacPhail, Vice-Chair

Iain Black

Jennifer Clarke

Harj Dhaliwal

Paul Landry

Graham McCargar

Lori MacDonald

Gavin McGarrigle (arrived at 12:18 pm)

Michael McKnight

Philip (Pip) Steele

Grace Wong

### **REGRETS:**

Elizabeth Model

Bruce Rozenhart

### **ALSO PRESENT:**

Daniel Firth, Executive Director, Mobility Pricing Independent Commission Staff Secretariat

Fearghal King, Mobility Pricing

Independent Commission Staff Secretariat

Raymond Kan, Mobility Pricing

Independent Commission Staff Secretariat

Ilan Elgar, TransLink

Lee Falling, Compass Resource Management

Sally Rudd, Compass Resource

Management

Lindsay Neufeld, Mobility Pricing

Independent Commission Staff Secretariat

Vincent Gonsalves, Mobility Pricing

Independent Commission Staff Secretariat

Adrian Lightstone, WSP Group

Hilary Farson, Context Research

Anna Lilly, FleishmanHillard

## **PREPARATION OF MINUTES:**

Roberta Pak, Recording Secretary, Raincoast Ventures Ltd.

### **1. Chair's Welcome**

Allan Seckel, Chair, called the meeting to order and welcomed attendees. Commission members were advised the focus of the meeting would be on gaining an understanding of the technical aspects of the modelling, in preparation for applying the knowledge to decision-making in future meetings. A summary of related meetings that have transpired since the November 3, 2017 MPIC meeting was provided.

Staff was introduced to Commission members.

### **2. Review of Previous Minutes**

#### **It was MOVED and SECONDED**

That the November 3, 2017 Mobility Pricing Independent Commission Minutes be approved as presented.

**CARRIED**

### **3. Decision-making Process**

Lindsay Neufeld, MPIC, presented an overview of the presentations to be provided during the meeting, key objectives for the next three months and the schedule of upcoming meetings:

- Round 1 Objectives – January 29, 2018
- Round 2 Objectives – February 14, 2018
- Round 3 Objectives – March 21, 2018
- Final Meeting Objectives – April 16, 2018

Daniel Firth, MPIC, noted that the final details of the submission of the Commission's report have not been finalized and may include a public announcement. Further details will be conveyed to Commissioners as they are finalized.

### **4. Review of Communications and Engagement Plan to Spring 2018**

Vincent Gonsalves, MPIC, offered a brief overview of the process for public engagement over the Spring 2018 period.

Hilary Farson, Context Research, detailed the communication planning for this period with a series of overhead slides:

- Humanize decongestion charging:
  - Profiles of characters to be used
- Details for each communication platform
- Stakeholder Workshops to determine tolerance testing and tradeoffs:
  - January 2018 events and a tentative closing event to thank stakeholders

- First Nations Workshop with representatives from local First Nations
- Municipal Workshops (February 28, 2018)
- Provincial Government Engagement – three meetings with party caucus representatives
- Federal Engagement – one meeting
- Online Public Engagement:
  - 15-20 minute survey incorporating videos
- User Advisory Panel meetings have been scheduled
- In-person engagement with targeted communities:
  - Richmond, Surrey, New Westminster, East Vancouver and Coquitlam plus paper surveys serving senior and cultural communities
- Further public meetings to be determined
- Public opinion polling with Ipsos Reid will be available for the April 16, 2018 meeting.

During the discussion, the following responses were offered to questions raised:

- There is a higher drop-off rate with the long surveys and a focused effort and tactics will be used to mitigate that outcome
- Editorial content to date, in the mainstream media, has not been negative toward MPIC
- There may be a need to breakdown misconceptions about mobility pricing and the role of MPIC as it relates to implementation
- Public meetings will be designed to attract the 45 to 65 year old audience
- Information packages will be distributed to potential influencers
- Data relating to affordability will be available in future meetings
- A live map will show the geographic representation of where online surveys are being completed
- The level of engagement on Facebook:
  - Staff is not directing the conversation to allow the development of increased public dialogue.

Commissioners confirmed their support for the program as presented.

## **5. Introduction to the Regional Transportation Model**

Ilan Elgar, TransLink, presented background on the Regional Transportation Model (RTM) and highlighted the strengths of incorporating this model into the decision-making process:

- The RTM will be used to analyze mobility pricing implications
- The tool was built for the region in the late 1980s, with the most recent update being a year ago:
  - These modelling tools are used worldwide

- The RTM includes the Metro Vancouver (MV) region and the Fraser Valley Regional District (FVRD) with the area dissected into 1,700 zones with a further 12 sub-regions
- RTM Inputs:
  - Networks
  - Land Use
  - Prices
  - Surveys
  - Counts
- Examples of the accuracy of forecasting as it applied to local scenarios
- Modelling issues and limitations plus wrong assumptions were identified as the main reasons for inaccurate forecasts

During the discussion, the following responses were offered to questions raised:

- The Compass card data provides data on 95% of transit trips
- Larger municipalities in the MV region use the information to build customized sub-sets
- RTM incorporates a side model to produce a similar model for goods movement
- Trucks are more sensitive to pricing than regular vehicles.

### **Recess**

The meeting recessed at 2:06 p.m. and reconvened at 2:23 p.m.

### **6. Structured Decision Making – Round 1**

Lee Failing, Compass Resource Management, provided an overview of the components to be utilized in the decision-making process:

- Theory of congestion pricing
- Different charging options
- Metrics and charting to visually represent modelling results
- Acceptable solutions may be a package or a pathway of options
- Iterative rounds of scenario evaluations
- Investment and gross revenue projections
- Environment i.e. greenhouse gas (GHG) emissions
- Health air contaminants and related wellness issues
- Consequences and possible trade-offs in a heat map table format:
  - Identifies the impact of various levers as they relate to different charging models.

Sally Rudd, Compass Resource Management, explained the technical aspects relating to the metrics:

- Research team selected the year 2030 as the baseline scenario for congestion metrics

- Includes the assumption that 10-Year Vision for Metro Vancouver Transit and Transportation (10-Year Vision) has been fully implemented
- Maps are less useful but provide more information
- The Origin Destination (OD) matrix represents congestion charging scenarios
- Metrics for congestion are based on the total travel time and the subset of total time of the trip spent in congestion.

Fearghal King, TransLink, introduced the optimum theory of Marginal Social Cost (MSC) pricing:

- Non-linear relationship between traffic volume and traffic time
- Empirical evidence shows the reduction in travel time is greater than the number of cars removed from the road
- Intention is for optimal economic efficiency
- Based on insights from other jurisdictions:
  - Often drivers stay in their cars and pay
  - Do not have to invest heavily in transit before introducing congestion charging because not all drivers switch to transit
- Economic theory dictates charging at the margin, known as the MSC, but the reality is MSC is not practical
- There are three key reasons why the MSC is worth modelling:
  - Protects against overcharging
  - Provides a benchmark for comparison purposes
  - Provides insight into the values considered by the Commission
- MSC pricing, as it applies to MV, depicts the majority of pairs modelling a change greater than 70%
- Vehicle kilometres travelled (VKT) is reduced by 9%
- Based on this model, there are 13 million minutes/day of total travel time savings and economic benefits of \$1.2 billion/year
- MSC can achieve significant decongestion benefits
- There is a strong alignment of travel time costs and benefits.

Ms. Rudd provided insight on basic congestion point charges their use to approximate the MSC:

- Point charge theory can aggregate the charges and implement it at a single point
- Three basic point charge scenarios will be presented:
  - Point charge system around a central business district
  - Two scenarios over 12 major bridges in the region at two different rates.

Discussion ensued on:

- Consideration of implementation costs and net revenue for the various models
- Reviewing highlights from modelling:
  - Forecasts if a point charge will create a traffic diversion

- The Bridge \$1 scenario does not show a significant reduction in congestion
- The Bridges \$5 scenario depicts a 50% reduction in congestion across the region
- Rates matter
- How modelling will highlight the impact of diversions
- Consideration of the reduction of fuel tax
- Perspective of fairness and how the point charge scenarios perform on fairness
- The Bridge \$5 proposal will see many trips being charged receiving travel time benefits, however some trips are benefitting from decongestion benefits without paying a charge
- Possibilities to address differentiation in user costs:
  - Caps and discounts for charges
  - Transit investments in the corridor
  - Adjusting rates and point charge locations.

Ms. Rudd identified further issues related to point charge scenarios that require consideration by Commissioners prior to the next meeting:

- Achievement of reduction in congestion
- Addressing congestion at the regional scale versus local scale
- Maximum trip charge
- Difference in charges across trips
- Alignment of charges with travel time benefits
- Whether the charging model is understandable and transparent
- Desire for a transparent charging model with subsidies and caps
- Tradeoffs required to make the charges palatable for residents
- Creating user profiles based on the level of transit available in their community
- Whether to limit transit investments if drivers are unwilling to shift to transit.

### **Recess**

The meeting recessed at 4:01 p.m. and resumed at 4:09 p.m.

Ms. Rudd provided highlights on the distance-based charging scenario:

- Congestion reduction is achieved, based on a flat 15 cents per kilometre across the region
- Either distance-based or point charging scenarios achieve regional scale reduction
- With a fairness metric, there would be a charge for all the internal trips within a zone
- Everyone is contributing:
  - 17% of the trips cross the bridges
- Technology is being developed to facilitate this scenario:
  - No other jurisdiction has implemented this scenario.

Ms. Rudd identified further issues related to the distance-based charging scenario that require consideration by Commissioners prior to the next meeting:

- Should congestion charges per trip be proportionate to travel/congestion time benefits?
- Should longer trips be charged more than shorter trips?
- Does it matter if some trips do not contribute revenue through a congestion pricing scheme?
- In areas with congestion, should the price should vary?
- Should there be a charge for areas without congestion?

Ms. Failing explained that the synthesis of the structured decision-making process would incorporate questions and value statements based on the following:

- What are the congestion benefits?
- Are total economic benefits important?
  - Economic benefits are potentially significant, depending on the scenario used
- How does revenue change across scenarios?
  - The efficiency of revenue collection will affect net revenue
- How important is revenue generation?
- How important is the efficiency of revenue generation?
- What is the impact on different income groups?
- Environment and health:
  - How important are GHG emissions and VKT?
- Exploration of consequences and trade-offs.

## 7. Closing and Other Business

Mr. Seckel suggested Commissioners digest the information presented and begin considering the principle value judgements necessary to for the next stage of decision-making, as the process moves forward.

***Action Item:** Staff was requested to distribute copies of the presentations to Commissioners.*

The January 29, 2018 meeting of the Mobility Pricing Independent Commission concluded at 4:55 p.m.

Certified Correct:

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Allan Seckel, Chair

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Roberta Pak, Recording Secretary

Raincoast Ventures Ltd.