

Metro Vancouver Transportation Network
Companies & Sound Economic Conditions:
Consultation on Taxi and TNS Boundaries, Fleet Size and Rates

July 8, 2019

1. Introduction

The legislative basis for decision making on the provision of Transportation Network Services (TNSs), which is often called ride hailing or rideshare service, is provided by the Passenger Transportation Amendment Act (Act). Section 28 of the Act states that the Passenger Transportation Board (Board) may approve an application after considering whether:

- (a) there is a public need for the service the applicant proposes to provide;
- (b) the applicant is a fit and proper person to provide the service and is capable of providing the service;
- (c) the application if approved would promote sound economic conditions in the passenger transportation business in the province.

The Board's paper entitled Transportation Network Services Industry: Public Need in British Columbia documents the public need for TNS services (see [Board website](#)).

This document provides background for consultation with stakeholders about sound economic conditions in the passenger transportation business in BC. The key factors under the Board's mandate affecting sound economic conditions include the setting of operating areas or boundaries, fleet sizes and rates for TNSs. The results of this consultation will be factored into development of Board policies and form the basis for its decision making on TNS applications.

While the Board intends to move to evidence-based decision making, at this time it has no hard data to inform its decisions. The Ministry of Transportation and Infrastructure is in process of establishing a data warehouse which will enable the Board to review and assess key performance indicators affecting public need, the performance of the vehicle-for-hire

industry, monitor the impacts of its decisions and make adjustments to its decisions over time.

1.1 Proposed Principals for Setting Policy (For Consultation)

The Board proposes to use the following principles as the basis for developing policies on sound economic conditions in the taxi and TNS industries:

- The TNS business model is provided with the opportunity to be viable and meet public need for the service
- Negative impacts on taxi stakeholders associated with the introduction of TNSs should be minimized where possible
- Policies will be based on defensible research
- Meaningful consultation with those directly impacted will occur
- Certainty and transparency will be provided in the resulting policies on sound economic conditions
- The Board must move to better use of origin / destination and performance indicator data in making decisions and monitoring the impacts of decisions as soon as this data is available.

2. Taxi and TNS Operating Areas

2.1 Taxi Operating Areas in Metro Vancouver

2.1.1 BACKGROUND

The Select Standing Committee on Crown Corporations (SSCCC) in its report entitled *Transportation Network Services: Boundaries, Supply, Fares and Driver’s Licences*, March 2019 heard from 15 expert witnesses and received 47 written submissions from stakeholders. The SSCCC acknowledged that the Board has the exclusive authority to set boundaries as a term and condition of a TNS license. It recommended that no boundaries be set for TNS.

The discussion below is based on research in the report entitled *Approaches to Changes in Operating Areas for Taxis and Transportation Network Services in Metro Vancouver*, by Hara Associates, March 2019 (see [Board website](#)).

Dr. Hara noted that each taxi company in Metro Vancouver is licensed by the Board for a set number of taxi vehicles in a designated operating area. The terms and conditions of a taxi licence outline where a taxi may pick up passengers. These boundaries roughly correspond

to historical municipal boundaries and are small relative to operating areas in other major metropolitan areas in Canada. The impacts associated with the current Metro Vancouver boundaries include:

- shortages and long wait times at peak demand periods, such as at bar closure on weekends and during large public events¹;
- deadheading, when a taxi has dropped off a passenger outside of its operating area and cannot pick up passengers in the drop off area. The taxi returns to its operating area without passengers; and
- trip refusals. Complaints of trip refusals are the second most prevalent type of complaint about taxis received by Consumer Protection BC².

Another impact associated with the small taxi operating area boundaries in Metro Vancouver is differential licence-share values (sometimes called medallion or plate values) between the City of Vancouver and suburban Vancouver licenses. These values stem from the right to operate a taxi in an operating area and are a result of the scarcity of supply of taxi vehicles relative to public demand for taxis, and the size of the street hail relative to the dispatch markets. In Metro Vancouver, one taxi licence is typically used for a day shift and a night shift, resulting in 2 licence shares.

Recently, City of Vancouver licence-shares were reported as leasing for as much as \$5,000 per month. Suburban taxi licence-share values varied by municipality, up to a reported high of \$2,000 per month. If changes are made to operating areas, this will directly affect licence-share values. If suburban taxis are allowed to pick-up passengers in the City of Vancouver, their licence-share value would increase as a result of the increased number of potential passengers. The City of Vancouver taxi licence-share value would fall as a result of an erosion of market share.

The experience in other jurisdictions shows that taxis continue to operate after the introduction of TNSs into a market. Typically, when TNSs enter a market, street-hail business is reserved for taxis. The entry of TNSs into the market for vehicles-for-hire will significantly reduce licence- share values of taxis across Metro Vancouver as it has done in other jurisdictions. The anticipation of TNSs entering the market has already negatively affected license-share values. The extent to which licence share values will fall with the introduction of TNSs will be related to the composition and size of the street-hail versus

¹ Shortages and wait times are a significant concern for passengers requiring accessible taxis. The Passenger Transportation Amendment Act provides enabling authority to require new entrants to pay a fee to cover some portion of costs to fund accessible services.

² Information provided by the Registrar of Passenger Transportation.

dispatch market in an operating area, as well as the operating parameters imposed upon TNS companies by legislation and by the Board.

As Dr. Hara notes:

“Taxi industry stakeholders who hold licence-shares will continue to be concerned about changes in operating areas, or cross-boundary rules that erode their relative positions. City of Vancouver taxi companies will continue to resist changes that admit suburban taxis and erode their relatively better position with exclusive rights to the downtown street-hail market.” (p. 6)

2.1.2 LICENCE-SHARE VALUES & FINANCIAL IMPACTS ON THE TAXI INDUSTRY

The PT Board is required to consider sound economic conditions in the taxi industry. As the regulator of the taxi industry, the Board has a duty to ensure the operating environment under its control allows licensees to earn a just and reasonable rate of return on capital. The capital invested by taxi licensees refers to their investment in equipment and overhead for their operations. A just and reasonable rate of return is a rate of return similar to that earned from other investments with similar risks.

As Dr. Hara notes:

“... taxi licence-shares only begin to acquire value when the regulator restricts the number of vehicles to less than public demand supports... When a licence is available directly from the regulator, no one will pay more to get it from a private party... By definition, the existence of licence-share values indicates above normal rates of return, and the regulator’s duty to ensure the opportunity for adequate rates of return is more than met.” (p. 6)

It is important to note that the financial impacts from reduced licence-share values can create significant hardship for those who purchased a licence-share at high prices, borrowed money to finance the purchase, and now face significant financial losses.

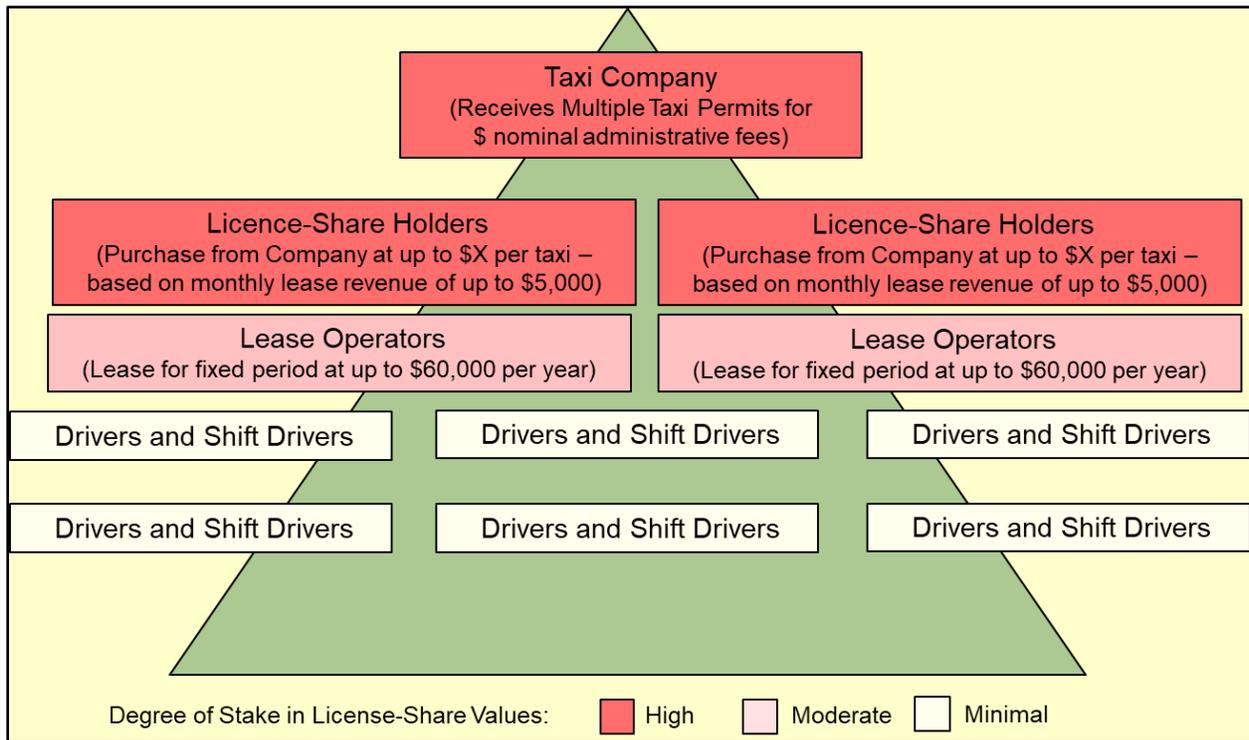
Changes in taxi licence-share value will have different effects on different stakeholders in the industry. A description of the different stakeholders and the impacts of changes in licence-share values is summarized as follows:

- Taxi companies have the authority to operate a number of taxis according to the terms and conditions of their licence issued by the Board. In areas where taxi supply is restricted, the companies offer licence-shares, which in these operating areas is often the right to operate a single taxi for either the day shift or the night

shift. These licence-shares are private sales and not endorsed or regulated by any public body. The licence-share generates fees for the use of the taxi to the holder of the licence-share (as noted above, recent past value of a licence-share was \$5,000 in lease revenue per month within the City of Vancouver, and lower in suburban areas). There is a private after-market for purchases and sales of these license-shares. The value of the licence-share will vary depending on the market conditions (e.g. demand for the shares, earning potential, potential competition in the passenger-for hire industry and general economic conditions). Owners of taxi companies or licence-shares may or may not be drivers. If a driver, they may fill unused shifts with other drivers, charging them a fee that includes the cost of a licence-share.

- As licence-share values change as a result of changing market conditions, such as the introduction of TNSs or changes to operating areas, the financial impact on taxi companies and licence-share holders is high.
- Lease operators are those who do not or cannot purchase a licence-share. They lease a licence-share from a licence holder, at a set rate for a set period of time. They will experience financial hardship for the terms of their lease, if licence-share values drop. The impact on them of falls in licence-share values is moderate as they can negotiate lower lease rates at the conclusion of their lease term.
- The majority of participants in the taxi industry are drivers. Dr. Hara notes, for example, that the City of Vancouver has more than four chauffer permits for every taxi vehicle. When taxi earnings fall, for example as a result of competition from TNSs, rates charged to drivers for the use of a taxi must decline or drivers will move to other employment. Employment opportunities for drivers in the TNS industry provide an alternate source of employment for taxi drivers as does a strong economy. Drivers face the least degree of financial hardship from licence-share value drops.

Dr. Hara has depicted this as follows:



Taxi Industry Stakeholders and Relative Exposure to Changes in Value of Licence-Share (Hara; p. 9)

Dr. Hara summaries the impact of changing licence-share values as follows:

“Taxi companies and licence-share holders bear the brunt of any decline in licence-share values. ... When taxi revenue falls, the holders of a licence-share must reduce the rates charged for the taxi licence by a similar amount. If they do not the driver will not have enough money at the end of the day and will seek employment elsewhere.” (p. 10)

2.1.3 ISSUES WITH CHANGING TAXI OPERATING AREAS

There are issues with the current operating areas for taxis in Metro Vancouver, such as deadheading, trip refusals and shortages at peak demand periods. Dr. Hara’s report provides some policy options to make changes to taxi boundaries to address these issues. These policy options include redrawing or merging operating areas, or changing the rules governing trip boundaries. These options for taxi boundary changes will not be considered at this time for the following reasons:

- Making changes to taxi operating areas will be very contentious. Changes to operating areas would require extensive consultation with the taxi industry as part of the Board's duty to administrative fairness;
- Trip data for taxis operating in Metro Vancouver are not available at this time. This means there is not accurate information on origin / destination patterns associated with taxi use across Metro Vancouver. Any decisions about redrawing or adjusting boundaries will be based on best guesses associated with the origin / destination patterns of taxis and could result in worsening the current issues;
- There are no performance measurement data available for the industry. Without data on the performance of taxis in different operating areas, there is not an accurate, complete information base on which to make decisions. The impact of any decisions that the Board might make also cannot be monitored without performance measurement data; and
- Some licensees in the taxi industry in Metro Vancouver are in the process of exploring new rules that could effectively result in some industry-based agreement on boundary solutions (e.g. an algorithm in an app that might change which taxi company can pick up passengers under different circumstances).

Last fall, the Board determined its future data requirements for decision making and monitoring the impacts of its decisions. The data requirements were communicated to the Ministry of Transportation and Infrastructure. The Ministry estimates this information will start to be available to the Board this fall. Better evidence-based decision making, monitoring and evaluation of Board decisions will be then be possible.

2.2 TNS Operating Areas in Metro Vancouver

The TNS business model is significantly different from the business model used by taxis. The TNS business model relies on a large number of potential drivers with vehicles to supply the service, a large number of consumers to purchase the service, the interaction of supply and demand to set fares, and excellent information flows among the parties, provided through the use of an app.

2.3 Options for TNS and Taxi Operating Areas (For Consultation)

Four options for TNS and taxi boundaries are provided below. With all the options, the following occurs:

- if flexible pricing is allowed for TNSs, peak period service will improve as increases in fare rates resulting from increased demand for service will spur more TNS drivers to offer their services;
- off peak periods will result in lower rates for a TNS and there will be some customers who will then use more of the service;
- the introduction of TNS service to Metro Vancouver offers more choice to consumers; and
- there will be more employment opportunities for drivers.

Option 1: Match TNS Operating Areas to Current Taxi Operating Areas

This option would set TNS operating areas roughly along municipal boundaries, matching the present taxi operating areas.

Pros:

- The public would experience faster and more reliable service, including at peak times.

Cons:

- Large reduction in licence-share values for taxi companies and licence-share holders. Some detrimental financial impact on lease operators. The relative difference between taxi licence-share values in different operating areas will be retained.
- Some trip refusals will remain and will affect both TNS and taxi users.
- Deadheading will continue for taxis and will occur for TNSs.
- Some municipalities in the Metro area unlikely to be served by TNSs.

Option 2. Assign One Metro Vancouver Operating Area to TNSs and Keep Current Taxi Operating Areas

In this option, TNSs will provide a regional service to Metro Vancouver and taxis operating areas will remain the same, approximately along historical municipal boundaries.

Pros:

- The public would experience faster and more reliable service, including at peak times. Service very likely better than under Option 1 as this will attract more TNS companies.
- Potential TNS service to smaller Metro Vancouver municipalities.

Cons:

- Large reduction in licence-share values for taxi companies and licence-share holders. Some detrimental financial impact on lease operators. The difference between taxi licence-share values in different operating areas will be retained.
- Some trip refusals will remain for taxi users.
- Deadheading continues for taxis.

Option 3. Assign Metro Vancouver as the Operating Area for both TNSs and Taxis

In this option, both the taxi industry and TNSs would have regional operating areas.

It is not clear that taxis would want this approach as they are free to launch their own TNS service and could also maintain the advantages of taxis that each has within their current operating area.

Pros:

- The public would experience faster and more reliable service, including at peak times. TNS and taxi service much better for City of Vancouver.
- Trip refusals by taxis and TNSs reduced.
- Deadheading reduced for taxis and TNSs.

Cons:

- Disproportionately larger loss for City of Vancouver licence-share holders. Suburban taxis will also experience large reduction in licence-share values for taxi companies and licence-share holders. Some detrimental financial impact on lease operators. Given the joint impact of TNS competition and changes in operating areas, the likely result is a decline of licence-share values to negligible levels.
- Taxi service likely reduced for suburban areas.

Option 4: Assign the province as an operating area for TNSs and keep current Metro Vancouver taxi operating areas

In this option taxi boundaries remain the same but TNSs would have the option of operating anywhere in the province.

Pros:

- The public would experience faster and more reliable service, including at peak times. Service may be better than under Option 2.
- Potential TNS service to smaller communities.

Cons:

- Large reduction in licence-share values for taxi companies and licence-share holders. Some detrimental financial impact on lease operators. The difference between taxi licence-share values in different operating areas will be retained.
- Some trip refusals will remain for taxi users.
- Deadheading continues for taxis.

3. Fleet Size and Rates

3.1 Taxi and TNS Business Models

The business model for taxis in BC is based on a regulated fleet size and regulated rates.

The business model for TNSs is very different. It is based on market information that is interpreted by an app used by the TNS company. As demand for TNS service falls, the rates for the service drop, and fewer drivers then want to provide the service. As demand for the service increases, price increases and more drivers are attracted to providing the service.

As Dr. Hara notes in his work on Approaches to Changes in Operating Areas for Taxis and Transportation Network Services in Metro Vancouver:

“If the Board decides to give the business model of TNSs a full chance to operate, this will likely mean a significant number of vehicles relative to the number of taxis. There is a minimum scale necessary to achieve reasonable service response time within a given area. If there are too few vehicles, then there is unlikely to be one available near a customer when they call.” (p. 24)

3.2 Cross-jurisdictional Review

A study entitled Cross Jurisdictional Scan – Limits on Transportation Network Service Fleet Size and Rates by Perrin, Thorau & Associates was completed for the Board. It reviewed TNS service in 29 jurisdictions, including 11 Canadian jurisdictions, 9 in the United States and 9 international jurisdictions. The review undertook more detailed investigation into 8 of these jurisdictions to determine whether there had been consideration on limits to fleet size and rates.

Only one jurisdiction, New York City, has imposed a limit on the number of TNS vehicles³. In 2018, New York City imposed a moratorium on new vehicles for hire while it undertook a study of the industry. In June 2019, the moratorium was extended, and will be reviewed every 6 months. It should be noted that the 2018 moratorium did not result in a reduction of TNS vehicles as new licences were issued for open applications at the time the moratorium was imposed. The study showed that ride hailing makes up nearly 30% of all traffic in Manhattan and, for 40% of total vehicle-for-hire operating time, vehicles are empty and cruising for passengers. New York City put in place a congestion tax and Driver Income Rules in April 2019.

The New York City study identified 4 objectives for the vehicle for hire industry: increasing operational efficiency, creating accountability for over-supply and underutilization of drivers in the core and reducing congestion from empty vehicles providing no passenger service. Extensive economic modelling was done by the city. It showed that the largest effect on vehicle-for-hire hours traveled is to cap the time cruising without a passenger below 31% of total driving time during peak hours. This would result in a 21% reduction in vehicle for hire hours travelled in the core. On the other hand, restricting the number of vehicle-for-hire licences would result in a less significant outcome.

Toronto also recently completed a study on TNSs⁴. It experienced a growth of 180% in TNS trips in 2 and a half years. The City anticipates this growth will be consistent and continual year after year. The first ride hailing trip in Toronto occurred in 2014. In 2018, ride hailing accounted for 5 to 8% of daily traffic in downtown neighbourhoods and 1.8% of daily traffic in the City overall.

³ New York Taxi and Limousine Commission and Department of Transportation; Improving Efficiency and Managing Growth in New York's For-Hire-Vehicles Sector; June 2019

⁴ City of Toronto Transportation Services and University of Toronto Research Institute; Research & Analysis The Transportation Impacts of Vehicle-For-Hire in the City of Toronto; June 2019

Toronto is in the early stages of TNS adoption relative to other North American cities. The Toronto market grew from 62,200 daily trips in September 2016 to 176,000 daily trips in March 2019. The study noted that Chicago is of comparable size to Toronto, has had ride hailing operating for 3 years longer than Toronto and has almost twice the number of daily TNS trips.

Hara Associates notes that the business model for TNSs requires a very large number of vehicles as many drivers only drive 10 to 20 hours a week and the turnover rate is very high among TNS drivers⁵. He notes that estimating and explaining an appropriate fleet size is very challenging.

In other jurisdictions, ramping up of the number of TNS vehicles occurs over years. This will be the case in BC as the requirement for a Class 4 driver's licence will create an obstacle for those want to be a TNS driver. If performance indicator data is available from the Ministry of Transportation and Infrastructure this fall, and the Board makes use of the data as soon as it is available, there is some time to monitor industry performance from the outset. Fleet sizes can be instituted as a terms and condition of TNS licence at a later date if data supports such regulation.

No jurisdiction imposes maximum price limits on TNSs. A number of places, however, require the TNS company's app to be transparent with the passenger on price to be charged. Three jurisdictions in Canada require minimum fares ranging from \$3.25 to \$3.75. These rates are set at the flag rate that taxi companies operate.

A congestion surcharge is levied on vehicles-for-hire in New York City. The City's economic modeling work showed that charging a minimum fare equal to the taxi flat rate would have a negligible effect on ride hailing hours traveled.

The cross-jurisdictional review indicated that flexible fleet sizes and flexible pricing are central to the business model for TNSs. Most jurisdictions surveyed felt that putting limits on supply is not the most effective way of dealing with the public policy questions that may be related to TNS growth, such as traffic congestion, emission levels, public transit ridership, drivers' incomes and employment standards. There are more effective tools available to address this such as per-trip fees, congestion pricing, capping the time cruised without a passenger, and incentives to promote shared trips.

⁵ Hara Associates; Discussion Paper Approaches to TNS Operating Areas Victoria Region and Other Regions of BC; June 29, 2019 (p.14).

Several jurisdictions emphasized the importance of data collection and analysis in order to regulate effectively and address the public policy issues.

3.3 Options for TNS Fleet Size and Rates (For Consultation)

Option 1: Set limits on fleet sizes

Pros:

- May limit some of the reduction in licence-share values of taxis.

Cons:

- Contrary to TNS business model.
- Impossible to set a defensible limit as there is no data or modelling to assist with this in BC. No precedent in other jurisdictions to learn from.
- May not meet public need for TNSs.

Option 2: Do not set limits on fleet size, but monitor performance

Pros:

- Provides some time to acquire data, assess the market for TNSs.

Cons:

- May not soften licence-share values drop

Option 3: Set a minimum rate for TNSs that is equal to the flag rate for taxis

Pros:

- May assist TNS drivers' incomes.

Cons:

- Provides some leveling of the playing field for taxis
- May result in fewer people using TNSs.

Option 4: Option 4. Do not set minimum rate for TNSs

Pros:

- Consistent with the TNS business model.

Cons:

- TNS drivers may not make minimum rates of pay

4. Consultation Topics

The results of the consultation and Board deliberations will result in Board policy governing the operation of TNSs and taxis. The Board will consult with TNSs operators and the taxi industry who are the key stakeholders affected by the Boards decisions on operating area boundaries, fleet sizes, and rates.

Proposed consultation topics include:

1. Comments on Principles for Setting Policies
2. Comments on Taxi and TNS Operating Areas in Metro Vancouver
3. Comments on TNS Fleet Sizes in Metro Vancouver
4. Comments on TNS Rates in Metro Vancouver
5. Other Concerns and Comments