

Ministry of Transportation and Infrastructure

Modernizing Taxi Regulation

June 8, 2018



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Modernizing Taxi Regulation

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Executive Summary

This study discusses measures for modernizing British Columbia's (BC) regulation of taxi service. It does so in the context of challenges posed by the growth of alternative services. Changes suggested for consideration are intended to allow the taxi industry to remain viable and compete on an equal footing should additional passenger directed vehicle services such as Transportation Network Companies (TNCs) be introduced in BC.

The reforms offered for consideration are relevant with or without the entry of alternative services to BC. They are directed towards achieving better service for British Columbia, while providing the taxi industry with a more efficient set of rules. Considerations include achieving taxi service that is timely and reliable, better coverage and safety in small and rural communities, and improved service to those who use wheelchairs and other mobility devices.

The study is based on a comprehensive consultation with the taxi industry, local governments, and consumer and business interest groups. The insights provided by each stakeholder group were combined with observed experience from other jurisdictions, and analysis by Hara Associates based on many years of work with taxi regulators.

Regulating Taxi Supply

At the heart of consumer and business concerns over BC taxi service is *supply*. Non-industry stakeholders stated clearly that they want more and better vehicle-for-hire service. Smaller communities and First Nations want their communities better served, especially where present service is spotty or non-existent. Large urban communities experience shortages during peak hours, especially on weekend nights or during special events. Shortages in urban areas are also evidenced by the development of private markets to exchange or lease scarce operating taxi licences for significant sums of money (traded as *licence-shares* in BC).

The success of TNCs in other jurisdictions demonstrates that providing timely and reliable vehicle-for-hire service evokes a large increase in sustained consumer demand. Consumers are more willing to go out for dinner, take transit to work, or even give up their car if they can rely on getting a vehicle-for-hire when they need one. This growth in demand could be shared by the taxi industry. However, the approach of most jurisdictions has been to leave taxi regulation unchanged, and give the whole of the unexploited market to TNCs. This leaves the taxi industry with the worst of both worlds — a decline in the value of their businesses while regulatory restrictions continue to limit the ability to compete with the new alternative services.

Although BC does not explicitly limit the number of taxis, the present *public convenience and necessity regime* contributes to shortages. The Passenger Transportation Board's present role is to consider individual applications for taxi licences, in a process where applicants must prove the need for their new service in advance, and in the face of opposing interventions by competitors. The provincial regulator is *not* charged with ensuring an adequate total supply of taxis, and the contested application process is a barrier to entry for new providers in both big cities and small communities.

It is suggested that BC consider replacing the present approach with a regulatory framework that is explicitly mindful of ensuring an adequate supply of taxis. These traditional and modern alternatives are examined:

- *Open Entry*. No restrictions on total numbers of taxis.
- *Explicit Limits on the Number of Taxis*. The most common approach.

- *Entry price-regulation through higher annual licence fees to new taxis.*
- *Entry price-regulation through a fee per trip charged to new taxis (without change to the meter rate paid by customers).*
- *Entry regulation through performance standards.*

Open entry is not suggested. The taxi industry has a unique vulnerability to excessive numbers of taxis during economic recessions. This is the historical reason why limits were imposed in most jurisdictions. In addition, there is the issue of the private value of taxi licences that has been allowed to accrue. Open entry will eliminate the artificial value of these rights, imposing financial hardship on those who bought them. This will include taxi drivers who bought into the industry at full price, perhaps mortgaging their homes, in order to own the right to drive their own taxi.

A managed taxi supply is suggested, where supply can be expanded to its potential at a pace that offers some protection to the historical investment by current taxi service providers.

Setting an explicit limit on the number of taxis in each area is also not suggested. This traditional system has led to the common experience of taxi shortages and the high private value of taxi licences observed in most large cities in North America. Regulators find it difficult to determine the right number of taxis – most techniques are based on maintaining the status quo according to a formula that includes population growth. For a variety of reasons, formulas may not be applied, resulting in taxi numbers staying fixed while demand grows, and private value of taxi licences grows.

It is suggested that *entry-price regulation through a fee per trip* be considered. New taxis added to the fleet must pay a fee per trip. The existing fleet is exempt, and meter rates remain the same for all. The fee per trip ensures that a new taxi does not enter the market unless growth in consumer demand is sufficient to make the new taxi profitable. The net result is that the industry is free to expand service to meet demand without regulatory delay, while providing a floor of protection for the profitability of existing providers.

Entry-price regulation also promotes innovation by allowing, if business conditions warrant, new competitors or the formation of new cooperatives by drivers. Revenue generated by per trip fees may be used for service improvements, such as better accessible taxi service for those using mobility devices. In the context of TNC entry into BC, the suggested approach includes the possibility of extending the per-trip fee to TNCs. This would continue the same floor of protection for the historical investments made by taxi industry stakeholders, shielding them from some of the financial losses experienced by the taxi industry elsewhere when TNC competition was introduced.

The fee per trip charged to manage entry could be the same for all areas of the province, or vary by the region in recognition of the different private values of taxi licence-shares today.

Accessible Taxi Service

It is a common policy principle that on-demand taxi service should be available to persons who use mobility devices at the same price and comparable response-time as other customers. Accessible service costs more to provide in vehicle costs, time and fuel. The present system resolves the funding problem implicitly by relying on the high private value of taxi licences that have accrued in urban areas. Taxi operators willingly pay the extra \$35 to \$50 thousand for an accessible taxi if comes with a taxi licence that is worth substantially more on the private market.

This model is found not to work well in smaller communities where taxi licences are not as valuable. It will also experience trouble if taxi licence values fall substantially, as happens in jurisdictions after TNCs enter.

It is suggested that BC consider beginning a program of financial support for accessible taxi service in smaller communities. Potential funding sources include revenues raised by the suggested alternative

regime for managing taxi supply. In the presence of TNCs, additional revenue is possible if the suggested fee per trip regime for new taxis is extended to TNCs.

Modernizing Other Taxi Regulation

A number of regulatory issues were raised by stakeholders or emerged during analysis. The following potential improvements are offered for consideration:

- **Establishing provincial authority to issue chauffeur permits for taxis**, especially in regions where municipalities do not issue them. This will close a jurisdictional gap where, at present, taxi drivers in small and rural communities may not be required to pass criminal record checks. The suggestion includes working with BC's established Criminal Record Review Program to provide a high standard check with reasonable turn-around time.
- **Replacing the requirement for a Class 4 commercial driver permit**. This addresses the existing shortage of taxi drivers that will become more acute if taxi service is expanded to improve service. Possible replacements include requiring completion of a mandated taxi driver training program, such as the TaxiHost Pro program required in the lower mainland, in combination with the Class 5 permit held by most BC drivers.
- **Allowing the licence for a given taxi to be filled by separate day and night shift vehicles**. This will eliminate taxi shortages during shift changes when drivers must take their taxis to a meeting point to switch drivers. It will also reduce illegal trip refusals for long trips and, at rush hour, when drivers fear that they may not complete the trip before a shift change.
- **Using kilometers driven as a basis for insuring part-time taxis**. This will replace the current system of taking out temporary permits for each weekend or other period of service. The use of kilometers driven for assessing premiums will lay the groundwork for transparency if comparing taxi premiums to insurance premiums charged alternative vehicle-for-hire services.
- **Allowing taxi companies to charge less than the meter-rate for requests made through apps**. This allows taxis to generate more revenue per hour during low demand periods, while offering consumers the benefit of lower prices. The suggestion is limited to apps because of their ability to generate an auditable transaction record easily, and the positive role taximeters play for street-hail fares.
- **Requiring taxi companies to report trip data electronically, with appropriate protection for personal privacy**. Sharing trip data is necessary for an auditable record permitting the suggested shift change policy, collection or payment of fees/subsidies per trip, and other modernizations. Municipalities, transportation planners, and public transit authorities requested this information to manage traffic and congestion. At present, some municipalities require this information on paper, in the form of daily trip records from each driver.
- **Regulatory Standards for Taxi Apps**. Considerations include how fares are displayed to customers, shielding of personal information, accommodation of hearing and vision impairment, and accommodation of service animals. The present efforts of the Passenger Transportation (PT) Board are acknowledged.

Industry Proposal for a Universal App

The taxi industry's proposal for a universal app is reviewed. The concept of taxi companies cooperating across the province to provide a shared app to customers is found to be good. It allows taxis from other areas to be assigned when local taxis are busy, improving service and reducing deadheading. It is likely to reduce illegal trip refusals for customers travelling between downtown areas and suburbs by improving the likelihood that the driver may obtain a return customer.

However, the monopoly aspects of the proposal are found to be risky and unnecessary. At the time of writing, there is also disagreement between industry associations on essential details. It is suggested that more than one cooperative app may emerge, with success depending on features and functionality offered to consumers and companies. It is also suggested that financial support be considered to one or more proposals, commensurate with the breadth of participation, by sponsoring taxi companies in a given proposal.

It is also suggested that an overlap in provincial and municipal jurisdiction is a regulatory barrier to regional cooperation between companies developing a shared app. For example, there is the question of authority to assign a taxi from another municipality a trip back to its home operating area. PT Board licences allow this, but municipal authority may also be required. Considerations to removing this barrier are incorporated in discussion of governance.

Governance

BC's present provincial and municipal roles are found to have virtues in making available a basic taxi licence regime available to the whole province. These allow smaller communities to opt out of the cost of maintaining their own licensing regime. At the same time, larger municipalities are free to make their own choices and set higher standards for driver training, and add vehicle requirements on top of the safety requirements required by provincial inspections.

However, the dual approach has overlaps and gaps between provincial and municipal jurisdictions. In particular, the ability of both municipalities and the province to limit the total number of taxis leaves responsibility for taxi supply in both provincial and municipal hands. This is confusing for the industry and has been a source of conflict in the past.

Consideration is suggested for an arrangement that preserves most of the current model, with the added possibility that the provincial regulator (presently the Passenger Transportation Board) be able to delegate to a regional municipal authority, on request of that authority. Where delegation has not been requested, taxis licensed by the provincial authority would be free to move across municipal borders according to their provincial licence, although vehicles and drivers would still have to meet the standards set by the relevant municipalities.

Consideration of these measures offers the opportunity to modernize British Columbia's regulation of taxis, improve and expand service to taxi users, and allow the taxi industry to remain viable and compete on an equal footing should additional passenger directed vehicle services such as Transportation Network Companies, be introduced in BC.

The full text of suggestions and considerations is provided in Chapter 6.

1 INTRODUCTION

This study reviews potential measures for the modernization of British Columbia’s regulation of taxi service in the context of the challenges posed by the growth of alternative services. The changes suggested for consideration are intended to allow the taxi industry to remain viable and compete on an equal footing should additional passenger directed vehicle services such as Transportation Network Companies, be introduced in BC. These changes are also intended to provide British Columbians with improved vehicle-for-hire service, service that will be timely and reliable at all hours of the day, in both small and large communities, and for all segments of the population.

The reforms offered for consideration are relevant with or without the entry of alternative services to BC. They are directed towards achieving better service for British Columbia, while providing the taxi industry with a more efficient set of rules. Considerations include achieving taxi service that is timely and reliable, better coverage and safety in small and rural communities, and improved service to those who use wheelchairs and other mobility devices.

1.1 METHODOLOGY AND APPROACH

The study is based on comprehensive consultation with the taxi industry, local governments, and consumer and business interest groups. The insights provided by each stakeholder group were combined with observed experience from other jurisdictions, and analysis by Hara Associates based on work in multiple taxi jurisdictions over more than 25 years.

The study team heard from the provincial taxi and driver associations of BC, as well as individual drivers and operators who reached out to the team. All municipalities were contacted through a system used by the Union of BC Municipalities, and offered the opportunity to attend workshops to discuss and exchange views, or to make a written submission. Police forces throughout the province were similarly contacted through their provincial police associations. In addition, the study team met with key municipalities and reached out to ensure a balance of municipalities of different sizes, and in different parts of the province, were included in consultation. Outreach also included Treaty First Nations; transit operators, airports, and port authorities; advocacy organizations and offices; convention and tourism associations; and the Insurance Corporation of British Columbia. As well, individuals wrote to the study team or to the Minister of Transportation and Infrastructure expressing their views.

1.2 ORGANIZATION OF REPORT

The balance of this introduction describes the challenges facing taxi regulation in the context of the significant success of TNCs in other jurisdictions. Chapter Two provides necessary background on TNC regulation. The resulting structure of the taxi industry in BC is explained, along with the interests of the various stakeholders, including drivers, companies, and individual taxi operators and lease operators. Chapter Three summarizes the input received from stakeholders. Chapter Four reviews alternate methods for modernizing regulations governing and limiting the supply of taxis – a crucial topic in modernization. A variety of paths forward is suggested. Choosing among them will depend on the appetite for innovation and the degree to which protection of the taxi industry’s historical investments is desired. Chapter Five addresses individual reforms and issues raised by stakeholders, as well as analyzing the question of which level(s) of government are best suited to regulate taxis in a modernized system.

1.3 WORLD CONTEXT

Taxis are marked and regulated vehicles offering fixed rate service, usually governed by a taximeter. Most jurisdictions set taximeter rates and limit the total number of taxis. Limits can be direct, as in a fixed number, or indirect through the licensing process. Regulating the supply of taxis is a longstanding function of governments. In times of economic downturn, there is a tendency for excessive numbers of personal vehicles to be converted to taxis, with consequences for public safety and service quality. The unique vulnerability of the industry during difficult times is the reason limits to taxi numbers are put in place. A full discussion is provided in Chapter 4.

The disadvantages of traditional taxi regulation are well known:

- **Failure to expand taxi numbers as demand grows leads to shortages.** For many reasons, it is common for jurisdictions to leave the numbers of taxis unadjusted for extended periods of time, even when there is a per capita or other formula in place.
- **A fixed number of vehicles is arbitrary.** More taxis are needed on Friday night than at 10 am on weekdays. The fixed number is usually somewhere in between.
- **The meter rate is also an arbitrary average.** It is too high for 10 am and too low for Friday night.

The result is that consumers are unhappy when they cannot get a taxi at peak times, while taxis and their drivers may spend a good portion of their time idle at 10 am. The system can be moderated by part-time weekend taxis and a surcharge or discounts on the meter at particular times. These rough adjustments cannot fully capture the issues throughout the day – such as a peak between 8 am and 9 am on a weekday when it is raining.

The traditional form of regulation was driven by practical enforcement considerations under the technology available at the time. In North America, most taxi regulatory regimes were established during the Great Depression of the 1930s. The simplest method of managing taxi supply was to license a fixed number, and require that they each bear a number and a distinctive paint job, so that illegal taxis could be recognized and policed.

Under today's technology, a modern taxi company has complete real time knowledge of where each taxi is, and whether or not it has customer. A number of regulatory alternatives, such as limiting the number of trips instead of the number of vehicles, are now practical that were formerly impractical in past decades.

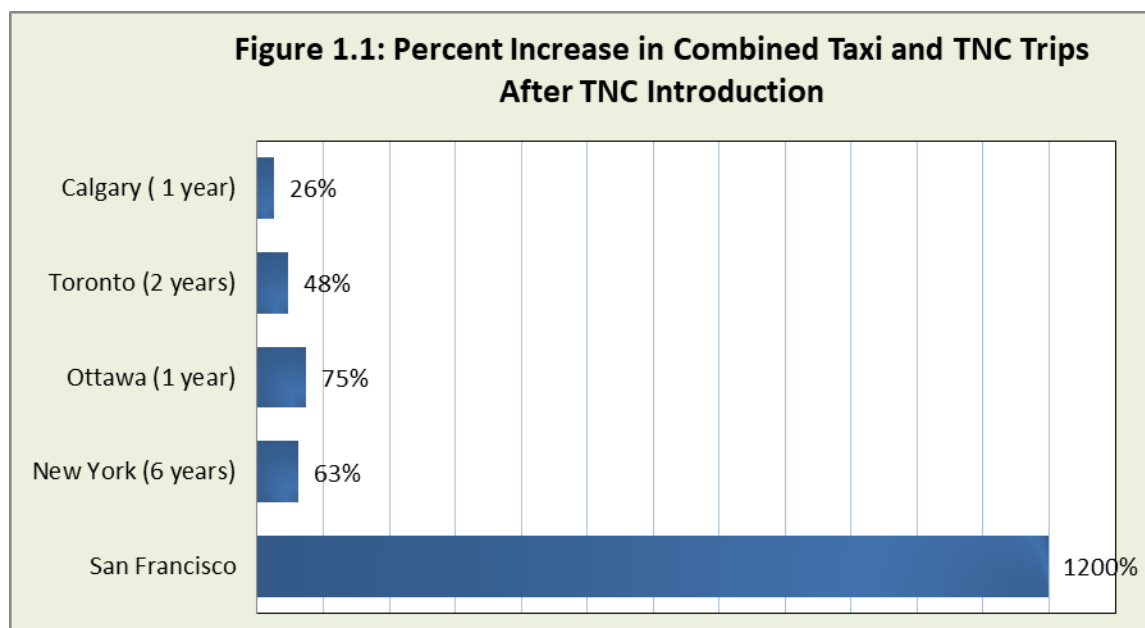
Similarly, fixed meter rates are based on the original use of mechanical taximeters that needed to be inspected, handset, and resealed with each change in meter rate. Today's electronic meters still replicate this approach, although they are now linked in real time to dispatch systems and can be made to operate more flexibly; this is how TNCs use smartphones to adjust the rates quoted to consumers. Smartphones themselves can also offer a cost-effective substitute for the traditional meter, although regulatory standards for the fair use of smartphones would be required.

What TNCs Have Shown Us

What we did not know previously was the *magnitude* of the suppressed demand that exists among today's consumers for timely and reliable vehicle-for-hire service. Where TNCs have entered urban markets, the trip volume of taxis has fallen – but not by so much as to cause taxis to withdraw from service. Important policy questions are: How much have the *combined* trips of taxis and TNCs increased? Are TNCs just taking trips away from taxis, or is the story one of increased supply evoking greater demand?

It is becoming clear that there is a large increase in combined trips as consumers respond to the increased supply. Modern taxi companies and TNCs both record trip volumes electronically, but typically do not make their records public. One jurisdiction that does require full public reporting is the City of Calgary. After one year¹ of licensed TNC operation, combined taxi and TNC trips increased 26%. Taxis ceded market share during this period as trips per taxi declined and the total number of taxis was held at its regulatory limit.

We can use the Calgary data to shed light on partial data releases by Ottawa and Toronto. For Toronto, assuming the same proportionate creation of net new trips as reported by Calgary, data suggests that combined trips increased by 48% between 2014 and 2016.² A similar calculation for Ottawa shows a 75% increase in combined trips (Figure 1.1) after one year of legal TNC operation.³



In the United States, the City of New York has full public data reporting. Between 2011 and 2017, combined trips of TNCs and taxis increased by 63%.⁴ New York is a unique case in that it already had unlimited dispatch vehicles, separate from the well-known yellow and green taxis. Some of the reported growth may have included capture of formerly unlicensed neighborhood vehicles that converted their operation to Uber. However, San Francisco, the origin city of Uber and Lyft, had a traditional taxi regime with a fixed limit on the number of taxis. Based on direct observation of the Uber and Lyft dispatch

¹ October 2016: 625,494 taxi trips. October 2017: 789,435 trips comprising 554,787 taxi trips and 234,648 TNC trips. Source: City of Calgary Livery Transport Advisory Committee (LTAC) Data Bulletins.

² In 2014, Toronto staff estimated taxis provided approximately 65,000 trips per day.² In 2016, Toronto staff reported an estimated 45,000 trips per day by TNCs. Sources: *The Taxicab Industry Review – Final Report*. Staff Report to Licensing and Standards Committee, Jan. 8 2014; *A New Vehicle-for-Hire Bylaw to Regulate Toronto’s Ground Transportation Industry*. Staff Report to Licensing and Standards Committee. March 31, 2016.

³ In the fall of 2017 Ottawa reported revenue of approximately \$450,000 from TNC payments of 7 cents per trip – implying 6.4 million TNC trips in the previous twelve months. Archival data held by Hara Associates suggests a previous taxi trip volume of approximately six million annually. Again, taxis remained in operation at their regulatory limit following the licensing of TNCs. Source: *Vehicle-for-Hire Bylaw – One Year Update*. Staff report to Community and Protective Services Committee, November 1, 2017.

⁴ Uber launched in New York in May 2011. In that month, taxi monthly volume was 15.3 million trips. In November 2017, combined monthly volume of taxis and TNCs was 25 million trips, of which the share of taxis (Yellow and the new Green class) had fallen to 10.3 million. Source:

http://www.nyc.gov/html/tlc/html/about/trip_record_data.shtml

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systems, San Francisco estimates that the current volume of TNC trips is a surprising *twelve times* the volume of taxi trips.⁵ San Francisco was known to be significantly under-supplied with taxis.

Many of the New Trips Could Be Taxi Trips

It would be premature to assign all the observed expansion in trip volumes to a consumer preference for TNCs. While the story is different for each jurisdiction and city, there is a common theme of holding taxis to their traditional supply constraints and regulations, while TNCs are left free to apply their new business models. Taxis share access to the same underlying dispatch technologies, including potential use of smartphone apps. While some TNC rides are uniquely the shared rides of TNCs, taxis also have unique advantages in higher levels of public supervision, marked cars, and the efficiencies of being able to accept street hails.

What the evidence clearly demonstrates is that there is a significant untapped demand for vehicle-for-hire service when supply becomes efficient and reliable at all hours. This means that taxis in large cities have been left in an irrational place. In the past, one would expect that an expansion in the supply of taxis would bring down the value of taxi licenses. *However, it is now apparent that taxi service could be expanded significantly without necessarily harming historical levels of profitability. Providing consumers with efficient and reliable service at any hour has been seen to evoke a corresponding increase in consumer demand.*

The challenge is to provide a regulatory framework that enables this result, while minimizing transitional pain for the industry. A modernized framework for taxis is needed, with or without the presence of TNCs.

1.4 TRANSFORMATIVE IMPLICATIONS FOR THE ECONOMY

At the observed scales of expansion, potential benefits go beyond vehicle-for-hire users and the taxi industry. With higher reliability and service volume, people no longer worry about being able to secure transportation home after enjoying a restaurant or a bar. A survey of San Francisco's residents taken prior to the growth of Uber and Lyft, found that 43% agreed or strongly agreed that they would go out for night entertainment more often if a taxi could be reliably had within 15 minutes. Of this number 23% strongly agreed.⁶

As households become more accustomed to plentiful vehicle-for-hire service, vehicle ownership choices also change. In the same San Francisco survey, 13% of residents agreed or strongly agreed they would consider giving up their vehicle if taxi service was reliably available within 15 minutes. More recently, a 2018 study of four United States cities found that the availability of TNCs was associated with a net reduction in vehicle ownership and an increase in public transit usage.⁷

The long-term impact of expanded vehicle-for-hire service on public transit is still playing out. However, there is the potential for significant net gains for households, the economy, and the environment.

Separately, greater availability of vehicles for hire also will enable more cost-effective provision of public transit under many circumstances. This includes the provision of accessible transportation, as well as transportation on low-volume routes and better service at route endpoints (the "last mile").

⁵ *TNCs today – Fact Sheet*. November 2017. San Francisco County Transportation Authority.

⁶ *Best Practices Studies of Taxi Regulation: Taxi User Surveys*. Hara Associates for the San Francisco Municipal Transportation Agency. March 31, 2013.

⁷ *Broadening Understanding of the Interplay Between Public Transit, Shared Mobility, and Personal Automobiles*. National Academies Press. 2018. (<http://nap.edu/24996>). The impact of vehicle ownership and delayed vehicle purchases was assessed net of the impact of purchases of vehicles to provide TNC service.

2 BC TAXI REGULATION AND INDUSTRY STRUCTURE

This chapter documents the British Columbia regulatory framework, and the resulting structure of the taxi industry. The distinct interests of taxi drivers, taxi companies, and taxi operators are explained, along with their relative stake in the licence values generated by the current regulatory system.

For clarity of language, this chapter will use *chauffeur permit* to refer to the license of an individual to drive a taxi, and *taxi licence* to refer to the licence to operate the *vehicles* that provides taxi service. Those unfamiliar with the industry, often assume that the taxi driver is the owner and operator of the taxi – but this is not always the case. In BC, as elsewhere, the licence for the *driver*, the *vehicle*, and the *company* are separate.⁸

2.1 DEFAULT PROVINCIAL REGIME

British Columbia is one of three Canadian provinces that regulate taxis at the provincial level. The others are Manitoba and Quebec. Manitoba is in the process of delegating regulatory responsibility to municipalities (e.g., Winnipeg).

In BC's case, the regulatory system leaves a number of areas open to municipal discretion. Municipalities may choose to exercise this discretion through their own bylaws, or leave the default provincial regime in place. In some cases, notably on the number of taxis permitted to operate, there is overlap in authority between municipalities and provincial agencies. Where the municipality does not establish its own regulatory regime, potential regulatory concerns such as taxi driver training standards and criminal record checks may not be fully addressed.

This section describes the default provincial regime. Potential municipal regimes, gaps, and conflicts, are discussed in Section 2.3.

2.1.1 Taxi Licences

Taxi Licences and the Passenger Transportation Board

At the centre of the provincial regulation is the Passenger Transportation Board (PT Board).⁹ The PT Board is an independent tribunal appointed by the province.¹⁰ The PT Board receives applications from individuals and corporations to operate taxis. After reviewing an application, the Board issues successful applicants with a licence to operate a fixed number of taxis in a specified operating area. The operating area may or may not coincide with municipal boundaries, and different company operating areas can and do overlap. The PT Board may also establish other conditions of license, such as time (weekend taxis), meter rates, and equipment.

PT Board licence applications are approved based on:

- public need for the service;
- the applicant being capable and “a fit and proper person”; and
- whether approval of the application would contribute to sound economic conditions in the industry.

⁸ Outside of BC, jurisdictions may also license separately *dispatch* operations, which may serve multiple companies, *fleet providers*, who may rent out appropriately equipped and marked taxis, and other elements of the industry.

⁹ Not to be confused with the Passenger Transportation *Branch*, part of the Ministry of Transportation and Infrastructure.

¹⁰ Under the *Passenger Transportation Act*.

During the application process, other parties may intervene in favour of or in opposition to the applicants. Existing and potential competitors can and do intervene, especially on the last point. Competitors may argue that there is sufficient taxi service in the region already, and that additional taxis are not needed.

The generic term for this kind of regime is a *public convenience and necessity* regime (PC&N). Although on the surface it appears to be a regime ruled by reason and based on public need for a new service, it places a significant barrier to new entrants as they must battle competitors in a quasi-judicial forum. In contrast, opening a restaurant requires one to meet many health and zoning requirements, but does not require battling other restaurants in the application process. The burden of proof is on the taxi applicant to establish they are needed in advance; with a restaurant, you simply open it and discover later if it is a success.

Historically, PC&N regimes are a common regulatory structure for transportation. They are in less use now than formerly following deregulation initiatives in the trucking and airline travel industries. Alternative regulatory structures for taxis are discussed in Chapter 4.

Meter Rates Set by Passenger Transportation Board

The PT Board also sets taximeter rates that may be applied in each region or operating area.

No Explicit Limit on the Aggregate Number of Taxis

Under the PT Board, each licence is limited to a fixed number of taxis, but there is no explicit limit to the number of licences or the aggregate number of taxis in an area. However, the barriers to entry of the PC&N regime have the effect of limiting supply – with the same result as regimes that have explicit limits on taxis. One result is the observed market value of taxi licence rights that accrues to varying degrees, depending on urban growth.

Individual Taxis Still Must Be Activated and Licensed Municipally

A PT Board licence is for a group of taxis (e.g., 125 or 300 taxis). Before beginning operation, the individual vehicles must be approved as meeting other legislative requirements such as insurance, and safety inspections. This process is administered by the *Registrar*, a separate office also established by the *Passenger Transportation Act*. The *Registrar* is a public servant under the Ministry of Transportation and Infrastructure who is also responsible for enforcement of PT Board licence conditions. The Registrar is accountable to the Minister, not to the PT Board. Among the vehicle requirements are:

- **Insurance and Registration.** The vehicle owner (usually the PT Board licensee) must provide proof of registration and insurance from the Insurance Corporation of British Columbia (ICBC).
- **Carrier Safety.** The PT Board licensee must obtain a safety certificate from the Director of Commercial Vehicle Safety (DCVS), part of the Ministry of Transportation and Infrastructure.¹¹ Requirements include the submission of drivers' records, vehicles' records, and a safety plan. Records must be maintained to keep the certificate. The certificate may be refused, suspended, or cancelled based on history or noncompliance.
- **Vehicle Safety.** The vehicle must have an Inspection Certificate from a garage or individual authorized by the DCVS. Safety and repair standards are prescribed by the Ministry's *Vehicle Inspection Manual*.

¹¹ Appointed under the *Motor Vehicle Act*.

2.1.2 Taxi Drivers

The Passenger Transportation Board does *not* license taxi drivers. However, the *Motor Vehicles Act* requires that to drive a taxi, a person must hold a Class 4 driver licence, or higher. This is a commercial driver licence. Most individuals hold a Class 5 driver licence that allows them to operate their personal vehicles. Requirements for Class 4 are more stringent, including a higher score on knowledge tests, on a road trip, and having a good driving record.

British Columbia consolidates insurance and driver licensing in the Insurance Corporation of British Columbia.

2.1.3 Definition of a Taxi

The definition of a taxi is somewhat different depending on the relevant *Act*. For example:

- The *Passenger Transportation Act* subsumes taxis under the category of “passenger directed vehicles,” generally meaning commercial vehicles that can seat no more than 12 persons (including the driver) and whose destination is determined by the passengers.¹² Thus, a taxi in this framework is defined by the application of the PT Board’s meter rates.
- The *Motor Vehicle Act* defines “taxi” as “a motor vehicle designed to carry not more than 10 persons that, with its driver, is operated for hire.”¹³
- The *Insurance (Vehicle) Regulations* define “taxi,” as “a vehicle, other than a bus, that is operated at any time on a highway by, for, or on behalf of any person who charges or collects compensation for the transportation of passengers in or on the vehicle, and that is available for hire, with driver, by the trip.”¹⁴
- The *Commercial Transport Act* simply includes taxis in its definition of “commercial vehicle.”¹⁵

2.2 MUNICIPAL REGULATORY REGIMES

Municipalities may also pass bylaws regulating taxis under powers granted by the *Community Charter*¹⁶ and the *Local Government Act*.¹⁷ Vancouver also has business and vehicle licensing powers under the *Vancouver Charter*.¹⁸

The *Local Government Act* provides a template for taxi regulation that municipalities may incorporate by reference, or they may adopt their own. Small and rural municipalities often choose to avoid the effort and expense of administering a taxi bylaw and rely on the default provincial regime. Of the estimated 120 municipalities where PT Board taxis licences operate, approximately 60% have not passed a bylaw. These municipalities rely on the provincial default regime.

This approach provides important regional flexibility for taxicab regulation. In general, municipalities vary in their degree of taxi regulation according to their size and extent of urbanization. Large urban municipalities have no difficulty attracting taxi service. Their concern is to have a high quality service that supports a civic image for hospitality, tourism, entertainment, and citizen satisfaction. These municipalities enact bylaws with training standards for drivers, vehicle standards that go beyond the safety requirements of the province to look at vehicle condition, and require regular inspection of

¹² PTA, s 1; PTR, s 3.

¹³ MVA, s 1.

¹⁴ IVR, s 1(1).

¹⁵ CTA, s 1.

¹⁶ SBC 2003, c 26.

¹⁷ RSBC 2015, c 1.

¹⁸ SBC 1953, c 55.

taximeter accuracy. Local police and bylaw officers may spend significant time implementing and enforcing these bylaws.

On the other hand, small and rural municipalities often struggle to find local providers of taxi service. Their principal concern is achieving adequate service, and minimizing administrative expense. Thus, the municipalities of Metropolitan Vancouver each require taxi drivers to complete a multi-day TaxiHost training program, while other municipalities do not have a bylaw and rely on the Class 4 requirements of the default provincial regime.

Where present, the typical municipal regime includes licensing of individual taxis, and the requirement for municipally issued *chauffeur permits*. Municipal driver permits typically include a requirement for a criminal record check and may set tests for geographic knowledge, language skills, and driving record.

Municipal taxi licence requirements include standards for identification, signage, display of driver permits, and vehicle conditions and types. An annual or twice annual inspection, in addition to the provincial requirement, is typical.

2.3 GAPS AND OVERLAPS IN PROVINCIAL AND MUNICIPAL JURISDICTION

Criminal Record Checks

Where municipalities do not have a bylaw, there is no requirement for a taxi driver other than possession of a Class 4 driver's licence.

This means no criminal record check is required for a taxi driver. Approximately 10% of taxis licensed in British Columbia are driven by drivers for whom no criminal record check is required. These taxis are concentrated in rural and small communities. Individual companies in these areas may still require criminal record checks themselves, but there is no explicit regulatory requirement. There is also a related issue of the time to obtain a criminal record check in some parts of BC. This creates a competitive disadvantage between taxis that operate from municipalities with a bylaw requirement, and taxis in neighboring municipalities where there is no such requirement.

Managing Taxi Supply

Municipalities have the power to regulate the total number of taxis in operation, the fares charged, and the routes permitted. For example, Section 637 of the *Local Government Act* stipulates that municipalities can regulate "carriers of persons or things," including setting minimum and maximum fares, establishing and altering routes, and limiting the number of a particular type of vehicle. Vancouver's charter contains similar provisions.

This authority overlaps with that of the PT Board. Some municipalities choose to use these powers in their bylaws, while others do not. For example, the city of Vancouver has chosen to include limits on taxi vehicle numbers in their bylaw, while the City of Victoria has not.

The net result is that to operate, a taxi company must obtain authority from both the PT Board and relevant municipalities. Although there has been a history of cooperation between authorities, there is the potential for conflict. Recently, the PT Board's attempt to license suburban taxi companies to operate in Vancouver during weekend periods was blocked by the City.

Municipal authority over specific routes and fares also raises issues regarding the regulation of taxi trips that cross municipal boundaries. The PT Board current licence conditions allow taxis to drop fares outside their home operating areas, and to return the same passenger back to the home operating area

when the return trip is pre-arranged. The return trip can potentially be prohibited by municipal regulation. The same overlap of municipal authority extends to more permissive rules on return trips that the PT Board may wish to consider in the future. In addition to the issue of efficiency in returning empty, the uncertain authority over return trips generates trip refusals that are a source of customer complaints, and are a regulatory barrier to providing smartphone apps that integrate cooperating taxi companies across multiple municipalities.

2.4 INDUSTRY STRUCTURE

The taxi industry consists of different stakeholder groups with different interests. Drivers, for example, are the largest industry group and have a very different stake in the value of taxi licences than other industry groups. This section identifies the principal stakeholder groups according to their relationship to the ownership and control of the right to operate a taxi.

The Licence-Share

Taxi companies apply to the Passenger Transportation Board, seeking the right to operate a fixed number of taxis in a given area. The cost of substantiating and defending the application from intervenors can be substantial. In urban locations, a legal team may be required to answer challenges from competitors who intervene against the application.

The successful taxi company is granted authority to operate a given number of taxis by the PT Board. A PT Board licence is a single licence for the fleet. In urban areas, where taxis are in short supply, the right to operate these taxis is a valuable commodity. It is common practice for BC taxi companies to offer *shares* in the PT Board licence. These are termed *licence-shares*. These are private sales, not on the public record and not endorsed by the PT Board or the municipality.

One licence-share may be the right to operate one taxi (through the taxi company that holds the PT Board licence). However, in markets like Vancouver where taxis are particularly profitable, the licence-share is the right to operate a single taxi in either the day shift or the night shift. Two licence-shares would be associated with one taxi.

The holder of the licence-share receives revenue. Taxi drivers pay fees by the shift, by the week, or by the month for use of the taxi. Fees vary depending on whether the driver provides their own vehicle, the fuel type of the vehicle if it is a company vehicle, the value of the shift (Friday night costs more to drive), etc. Bundled with the fees drivers pay, directly or indirectly, is a fee for the use of the taxi licence-share. The fees for the licence-share are paid to the licence-share holder who purchased that share.

The revenue paid to the licence-share holder varies by region and can be substantial. In interviews, industry stakeholders report that the right to operate a taxi leases for as much as \$5,000 per month in Vancouver, \$2,000 per month in larger municipalities surrounding Vancouver, and much less elsewhere.

After the initial sale of the licence-share by the taxi company, there is an ongoing after-market in which licence-shares may be bought and sold. These are also private sales, not on the public record. However, going rates of exchange will be commonly known in the industry. Day-shift licence-shares and night-shift licence-shares may have different prices.

Licence-share prices are influenced by uncertainty about the future. Given the expected entry of TNCs like Uber and Lyft into the market, the future revenue levels of taxis are uncertain. Thus, the present value of licence-shares has fallen substantially, even though the current fees paid to holders continue to flow. Like other investments, licence-share value is also influenced by prevailing interest rates and other general economic conditions.

Licence-shares are usually bundled with ownership in the taxi company, although not all equity holders in an incorporated taxi company necessarily hold licence-shares.

Categories of Taxi Drivers

Taxi drivers can be categorized according to variations of their arrangements with taxi companies and licence-share holders. We may describe three principal types drawing on terminology employed by WorkSafe BC for determining eligibility and premiums.

Owner-Operator

This is an active taxi driver who is also a licence-share holder. They do not pay a rent for a licence-share because they have their own. This driver may also provide his or her own vehicle. For shifts where they do not drive, they may use other drivers and collect a fee that incorporates the going rate for the use of the licence-share. Owner-operators may use the taxi company as their agent to manage the filling of shifts with other drivers.

Lease-Operator

This is a driver who wishes to control their vehicle like an owner-operator, but cannot afford or chooses not to purchase a licence-share. Instead, they lease a licence-share from the holder, usually paying a monthly fee on a lease of a year or more. Like the owner-operator, they may drive themselves, but fill unused shifts with other drivers.

Shift Driver

We will use the term *shift driver* to cover other drivers who do not hold or lease licence-shares.¹⁹ *These drivers are the majority of the industry.* For example, the City of Vancouver has more than four taxi chauffeur permits for every taxi. Since there cannot be more than two licence-share holders for a vehicle (day- and night-shift) and since many licence-share holders do not actively drive, the shift-drivers are the majority of people actually driving taxis.

For the shift driver, renting the use of a licence-share is part of the fixed cost paid for every shift. Like other drivers, the usual arrangement is that they receive money from passengers, pay their fixed costs and fuel, and keep the remaining balance.

Note that not all taxi drivers earn the same amount. A skilled driver who has learned the local market makes substantially more than a driver who spends most of their time sitting at a taxi stand. The skilled driver knows where and when to be to get the best fares during their shift.

Relative Risk of Industry Stakeholder from a Decline the Value of a Licence-share

Revenues per taxi fall for a number of reasons. For example, people may take fewer taxis in an economic recession. Two relevant possibilities for this study are:

- Revenues per taxi may fall if the taxi fleet is expanded faster than demand growth can absorb.
- Revenues per taxi may fall if an alternate service, such as TNCs, draws customers away.

If revenues per taxi decline, then taxi drivers will want to pay less for a taxi shift. The fees charged the driver for each shift must fall to keep enough drivers to fill all the taxi seats. There will be a time lag while shift fees adjust, but eventually competition to fill seats with drivers will cause shift fees to fall to reflect the loss of revenue.

¹⁹ In alternative usage, the term "shift driver" can refer more narrowly to drivers who rent vehicles by the shift on a walk-in basis, as opposed to those with commitments for a regular number of shifts per week.

If the fees per shift drop, the bulk of the reduction will fall on the rental fees paid to the owners of licence-shares. The cost of fuel, and other costs, are real costs that must be paid – so the difference is made up by a fall in revenue to the licence-share holder, with corresponding impact on the value of the licence-share.

The impact of a fall in licence-share value varies among different industry players, according to their relationship to the ownership of a licence-share. The holders of licence-shares are at greatest risk, while the majority of taxi drivers are at minimal risk, experiencing just a short-term loss in shift revenues until the fees they pay adjust to new conditions. Risk by each stakeholder group is summarized in Table 2.1.

Table 2.1 Taxi Industry Stakeholder Groups and Relative Risk Exposure		
Stakeholder	Role Description	Risk if Value of Taxi Licence-Share Declines
Taxi Company	Receives licence to operate a fixed number of taxis from the Passenger Transportation Board. Pays a nominal fee for the licence, plus the significant costs of the PT Board application process.	High. Although the taxi company may lay off the risk by selling licence-shares, these purchasers are usually owners of the company. Licence-shares can be pledged as collateral for bank loans.
Licence-Share Holder	These are investors who have purchased a share of the PTB right to operate a taxi from a taxi company. Multiple licence-shares may be held. Shares may be sold equal to one taxi, or one-half a taxi (e.g., rights to the day shift or the night shift). The licence-share holder need not drive. They may rent the use of the licence to shift- drivers (usually via the taxi company), or give over management to a lease driver. Holding a licence-share is often bundled with a share in the taxi company itself.	High. Licence-share declines when revenue per taxi declines. To retain drivers, licence-share holders must lower the lease rates they charge drivers. Thus, licence-share holders bear the cost in the form of reduced lease revenue, and consequent lower value of the sale of the licence-share.
Taxi Driver (Owner Operator*)	An active taxi driver who is also the holder of a licence-share.	High. The same as other licence-share holders, except that part of the decline in revenue per taxi is experienced directly from the lower revenue in the shifts the owner-operator actually drives.
Taxi Driver (Lease Operator*)	These drivers lease the right to operate a taxi from a licence-share holder — but are responsible for providing the vehicle, paying insurance and other costs, and making arrangements with drivers to take the unused balance of shifts they do not use.	Moderate to Minimal. The exposure of the lease operator depends on the length of the lease. After the lease expires, the lease operator is able to negotiate a lower lease rate based on the lower taxi revenue. In light of the likely entry of TNCs, most lease operators would have kept their leases short-term.
Taxi Driver (Shift Driver)	A driver who pays for the shift. The fee for renting the licence-share is usually bundled with vehicle rental and other services. The shift driver may be full-time or part-time. The arrangement is usually a fixed fee per shift, or a week or month of that shift.	Minimal. This driver can walk away if net revenue from driving is not enough. When revenue per taxi falls, there will be a short period while shift rental rates adjust, after which they will be in the same net revenue position as prevailed previously.

*Terms based on WorkSafe BC usage.

3 STAKEHOLDER VIEWPOINTS

This chapter outlines the views stakeholders expressed during interviews, meetings, workshops and in emails submitted during the consultation process. *The views reported are those of the stakeholders, not of Hara Associates, and even when based on incorrect information, they have not been corrected or disputed.*

Participants responded in the context of the announcement by the British Columbia government that commercial ridesharing would be implemented by the end of 2018. Input from both industry and non-industry participants addressed the prospect of Transportation Network Companies, as well as issues within current taxi regulation.

Non-taxi industry stakeholders reported concern with the availability of taxi service at peaks, in small and rural communities, in cross boundary trips between municipalities, in consistent provision of wheelchair accessible service, and in the ability of the industry to supply and integrate into the rise of web-based package tourism. TNCs were seen as a possible solution; however, this support could also be interpreted more generally as a demand for more and better service.

These concerns are recognized by the taxi industry. Suggestions by the industry included a number of regulatory changes to improve service. One of the two principal industry associations, the BC Taxi Association, suggested a one-time 10% to 15% increase in the number of taxis made available to existing operators in each area. The principal response by both the BC Taxi Association and the Vancouver Taxi Association was the One App proposal. This would be a single unified smartphone app that customers could access to obtain either a taxi or a TNC vehicle. The proposal resolves a number of customer and industry issues. However, details have yet to be resolved. A potentially controversial aspect of such an app is that it appears to preclude independent TNCs such as Uber, Lyft, or local TNC start-ups. Key points of the proposal are included below.

Comments below are divided into:

- Vehicle-for-hire industry stakeholders (taxi industry, limousines, TNCs);
- Non-industry stakeholders (municipalities, first nations, police, consumer and business interest groups and offices, public transit authorities);
- Service providers to the industry (insurance, driver training, and customer relations).

3.1 VEHICLE-FOR-HIRE INDUSTRY PARTICIPANTS

The industry is currently dominated by taxis, but that does not mean they hold a single coordinated point of view. Two associations represent most of the industry from the taxi company/broker point of view. The Vancouver Taxi Association (VTA) represents the four large firms operating in the City of Vancouver that have been joined recently by a number of companies in the suburban lower mainland. The BC Taxi Association (BCTA) represents the remaining taxi companies active in the province and expresses the perspectives of the remaining lower mainland companies, as well as those in Victoria and in smaller centres across the province.

The key point of difference between the two associations relates to licensed operating areas. The VTA is very protective of the geographic areas licensed by the PT Board and the resulting caps on the available licenses in each area. It argues that these regulations are required to ensure sufficient income for taxi drivers and sufficient returns for taxi operators (e.g. high enough rental or lease payments for use of a

taxi licence). Without a limit on the number of taxi licences, there would be too many taxis on the road, and insufficient return to each taxi driver to cover the lease payment (or loan payment if the driver is a taxi licence holder) and provide a sufficient net income to the taxi driver after covering expenses. The position with respect to geographic operating areas is similar. Without separate licensed areas, taxis from outside would siphon off business from the local taxis, reducing the return per taxi.

For its part, the BCTA points out that many airport and suburban taxis bring customers into downtown Vancouver, particularly to the entertainment district, but then must return empty. Service the other way is limited to the four Vancouver taxi companies. The imbalance is the reason for the service deficiency in the entertainment district. The airport has been able to resolve its shortages by accepting additional taxis not otherwise authorized to serve the airport. The BCTA wonders why the same approach cannot be used in Vancouver – and why there are conflicting approaches between the PT Board and the City of Vancouver. This duplication of authority should be resolved. The BCTA proposes that the municipal role should be eliminated with the province taking full responsibility.

Further, the BCTA proposes that the separation of operating areas in Metro Vancouver could be eliminated, enabling the market to distribute service as required. Alternatively, some additional pool of taxis could be authorized to operate in Vancouver, and suggests that airport taxis – with 60% of their trips now ending in Vancouver – would be a natural pool.

Both groups acknowledge that the significant service deficiency is bar closing hours on weekends. Throughout the evening, clients can choose from Skytrain, bus, or suburban taxi to get downtown, but can get back home only by using Vancouver cabs or diminished bus routes. “Clearing out” the entertainment district can take an hour after bar closing which can lead to conflicts on the street. The BCTA maintains that at times, Vancouver police have called suburban taxis for assistance clearing people out. Major events, such as cruise ship arrivals and large-scale sports events, can also result in shortages, but the VTA suggests wait times are generally less than 15 minutes at other times.

Until recently, all taxi companies in the lower mainland, outside Vancouver, belonged to the BCTA. The BCTA argued that some flexibility in the licensed operating areas is required to allow suburban taxis to serve Vancouver origin trips during peak periods. Recently five suburban companies based in Burnaby, Richmond, and North Vancouver have switched from the BCTA to the VTA, reflecting the evolution of their markets. They argue that separate operating areas are required to ensure service in each of the suburban communities, and it appears the work available in their communities is sufficient for their needs, although they have discussed with the Vancouver companies some loosening of the restrictions when all Vancouver taxis are busy. The change has also resulted in more discussion about loosening some of the geographic restrictions, generally around the concept that suburban cars might pick up in Vancouver when all Vancouver cabs in the area are engaged, but this concept has not been finalized nor approved by the PT Board.

Both taxi associations, and virtually all the member taxi companies, oppose the entry of TNCs to the market. They are concerned that TNC service will undercut the taxi licence limits, resulting in reduced revenues per taxi, with impacts on driver income and taxi licence lease rates and values. They note that there are substantial loans outstanding for which taxi licences are being used as collateral (reported by the VTA to exceed \$500 million), and that those loans would be threatened, along with taxi licence owner’s wealth, if taxi licence values declined substantially. The VTA indicated that taxi licences in the City of Vancouver have been worth as much as \$1,000,000 in the past, although values have declined significantly with the uncertainty created by anticipated entry of TNCs. VTA members suggested that some form of compensation, perhaps modeled on the Australian example, should be offered if changes that significantly affect taxi licence value are implemented.

The VTA, recognizing that many see competition as a virtue that assists consumers, emphasized the need to avoid “destructive competition” which would “not only financially destroy the existing taxi industry, but also generally make it impossible for anyone providing taxi services moving forward to earn a reasonable return for their work; leading to predatory pricing and a lack of regular service for certain groups of taxi users.” Destructive competition could result from removal of the geographic barriers separating operating areas, or from the introduction of TNC services.

Driver Views May Differ From Taxi Companies

It should be noted that not all taxi drivers see the issue the same way as the taxi companies. Some note that taxi licence lease or rental rates take a substantial portion of their earnings without adding value to their work, other than permission to conduct it. They point out that rates tend to increase whenever there are more than enough drivers available, and remain stable only when it is harder to attract drivers. Thus, drivers’ earnings are limited by taxi licence rentals as much as by the number of taxis on the road. In addition, they must meet taxi industry requirements to stay in the industry. That means working the shifts established by the industry, paying the taxi licence and dispatch rates established by the industry, and working within the operating areas set out by the PT Board (with the support of the companies). Permitting TNCs would give drivers options, and some think they may prefer the TNC model, or at least benefit from competition between the taxi companies and the TNCs for drivers. Some drivers also suggested that taxi licences should be issued to drivers, not to companies, to ensure that all economic benefits go to those providing the service.

Drivers suggested an independent complaint resolution process, to support improvements to customer service. Drivers in suburban Metro Vancouver would prefer that geographic restrictions be eliminated. Failing that, some want access to Vancouver, particularly in the evenings, and/or to be able to avoid deadheading after a downtown drop off. The ability to avoid deadheading will be especially important if TNCs are allowed to operate without the geographic area limitations that apply to taxis.

Some drivers also believe they should have the rights of employees rather than being treated as independent contractors. That would mean that they would have Work Safe coverage and earn at least the minimum wage, CPP and EI coverage, and potentially some benefits.

One area of agreement between drivers and companies is the need to reduce the requirement for one driver to hold multiple chauffeur permits from different cities. This occurs where the PT Board authority for airport taxis spans multiple municipalities. Airport drivers must be licensed in the municipalities they provide service to, especially if they wish to take return trips back to the airport. As a result, airport drivers are required to hold multiple chauffeur permits from various municipalities, in turn requiring multiple criminal record checks. All agree this system is wasteful and that a provincial or regional system would be preferable. The BCTA suggests a single, province wide, criminal record check system.

Although taxi companies generally support the PT Board imposed restrictions, (geographic operating areas and taxi licence limits), they find the approval process burdensome and lengthy, and the data requirements overly specific and focused, missing the bigger picture.

Smaller Community Industry Concerns

Some in smaller communities expressed frustration that they could not obtain approval for more taxis when they are clearly needed. One suggested that the PT Board authority be delegated to regional agencies that would be more responsive to local needs and conditions.

Taxi Concerns over TNC Safety

The taxi companies and associations share many concerns voiced by other stakeholders concerning TNC operation. Citing reports from other jurisdictions, they raise such issues as the lack of consistency and effectiveness of criminal record checks, the absence of a wheelchair accessible vehicle service, the inadequacy of insurance, the absence of driver training requirements, and lower vehicle standards.

Insurance

The insurance concern is significant. Taxi insurance in Vancouver now costs as much as \$32,000 a year (\$34,000 for a van) before the discount for safe driving (which often ranges from 40% to 60%). The current rate structure makes no allowance for part-time taxis. Part-time taxi operators are forced to take out temporary permits each weekend, or pay full-time insurance rates for part-time use.

Level Playing Field

Recognizing that TNC licensing appears to be coming, taxi companies have adopted two approaches.

The first theme was to suggest “a level playing field” – which they define as applying the same rules and standards to TNCs as are applied to taxis. That would mean that TNCs would have the same driver requirements (currently a Class 4 driver’s license and, depending on the jurisdiction, may include prescribed training, a criminal record check by the local police force, and municipal chauffeur licenses); the same vehicular requirements (commercial insurance, a twice-annual inspection by provincially certified garages and, depending on the jurisdiction, limits on the age of the vehicle, cameras, newer and environmentally friendly vehicles, additional municipal inspections, signage outside and inside the vehicle, etc.); and controls on fares. In addition, some argue there should be a PT Board approval for TNC service with limitations on the operating areas and numbers within those areas based on a PT Board review of the “necessity” for the service.

The general objective is to reduce the burden on taxis that would result where TNCs have lower or matching standards. For example, they would prefer that TNCs not have price flexibility but, if they do, some taxi industry participants think taxis should have the same option, at least for app-dispatched trips. Similarly, reduced and more flexible (e.g., online) training options would make it easier to recruit drivers.

“One App” Approach

The second theme of industry comments was to suggest a “One App” approach that would prevent destructive competition and ensure timely and safe taxi services. This approach was endorsed by both the VTA and the BCTA.

The One App proposal includes:

- A “Made in BC” solution, with the One App to be built by a BC software firm;
- All taxi companies in BC would be required to participate in the designated One App, which would be provided as a universal app to BC vehicle-for-hire users to download onto their smartphones;
- Taxi companies would continue to offer their own telephone dispatch;
- Users of the One App would input their desired trip destination, and have the choice of a taxi or a TNC vehicle;
- If a taxi is selected, and taxis licensed for the customer’s departure point are busy, the shared OneApp would assign the nearest taxi licensed from another municipality/operating area. (*This*

is a key feature in that it reduces the issue of suburban taxis having to make return trips empty from downtown Vancouver – and it addresses complaints by customers of not being able to get a return trip from the same dispatch service.);

- Drivers who wish to drive their personal vehicles as a TNC would register directly with the OneApp provider. The One App provider would call them up for shifts based on forecast demand (*effectively supplementing the taxi fleet so that enough vehicles are available in each area to serve peak demands on weekend nights*);
- Taxis would charge the meter rate or flat rates as approved by the PT Board. TNC vehicles would charge fixed rates, perhaps lower than taxi rates, but rates that stay the same regardless of time of day. The price variability used by Uber and Lyft would not be present. There would be no surge pricing at peak periods, and no discounting in off-peak;
- TNC drivers with the highest customer ratings would be offered more shifts;
- The OneApp would offer modern features including:
 - Informing users about estimated wait times and estimated trip cost,
 - Multiple stops,
 - Scheduled trips,
 - Convenient payment and tipping mechanisms, including the ability to divide the cost of the trip between the passengers,
 - Integration and coordination with public transit,
 - Customer feedback,
 - Special requests,
 - Lost and found,
 - Complaint resolution.

The One App is described as a “made-in-BC” solution, in that it replaces the role played by international TNC companies like Lyft and Uber.

The proposals by the VTA and the BCTA had common elements but vary on some points. Among them:

- A single app provider would be engaged. The VTA proposes the Monark Group, creator of the Kater app that currently dispatches drivers to individuals seeking a driver for their own car. This app includes payment and rating features. The BCTA suggests that Piccolo Software would also be capable of providing the One App, but did not offer a means of determining which firm should be chosen.
- The VTA suggests One App would be owned by Monark, the existing taxi industry, and potentially other app-based drivers. In discussion, the VTA and Monark had differing views on the issue of ownership control and the approach to decision-making. The BCTA referred to “options”, but seemed to suggest the app provider would be the majority owner.
- The OneApp would know the location and status of each vehicle, and assign a vehicle to respond to customer requests. The VTA and BCTA appear to have different views on the circumstances in which a taxi out of its home operating area would be assigned a trip. This is a crucial detail given the historic disputes between the organizations over access to the downtown Vancouver market.

Some VTA members argued that the One App concept would treat TNC drivers better than the TNCs do now by keeping rates up at the taxi fare level. However, under One App, drivers would not be able to work when they choose, only when they are called up by One App. Without price flexibility, they would not have a steady stream of customers while they are on a shift.

One App, Accessible Taxi Service, and Integration with Public Transit

The associations pointed out the challenges of providing a wheelchair accessible taxi service and the need to subsidize the service within the taxi system. The One App would continue to incentivize the operation of accessible taxis by giving them priority for trips, waiving some fees, and rewarding companies that provide the best service. The VTA suggested that a trip fee used to subsidize accessible taxi operations would not be sufficient, although that obviously would depend on the amount. One owner suggested a combination of a one-time capital contribution and a per trip fee.

One App would make it easier to coordinate with public transit to provide “the last mile” of transit trips.

The VTA proposed maintaining the geographic operating areas established by the PT Board. However it does suggest loosening the geographic barriers so that outside taxis would be able to pick up customers if local taxis cannot provide a “timely response” (timely was not defined) and the home jurisdiction of the out of area taxi is not fully engaged. The BCTA proposes looser rules.

BCTA Suggests One-time Increase of Fleets by 10% to 15% in Lower Mainland

The BCTA further asserted that there is an evident taxi shortage in the lower mainland, and proposed that all companies be given a one-time opportunity to increase the size of their fleet by 10% to 15% as part of addressing service deficiencies.

Solving Driver Shortages

Both associations spoke to the challenge of recruiting drivers. The BC economy is strong which reduces the pool of available drivers, and the progressive licencing system means that many immigrants cannot obtain a Class 4 license for three years. This excludes a traditional source of taxi drivers, both for the three-year period, and often permanently, as immigrants must find sources of income during the three-year period and often stick with those sources at the end of the three years. As a result, it has been difficult to get the 175 recently approved taxi licences in Vancouver on the road, finding drivers for the wheelchair accessible vehicles being the most difficult.

The industry subsidizes drivers who operate accessible taxis, offering shift leases for \$20 to \$30 less than sedan taxis, but that is not enough, particularly in the face of driver shortages. There is concern that introducing TNCs would exacerbate the driver shortage.

To address the shortage, the VTA proposes streamlining the requirements for obtaining a Class 4 licence, and waiving the Class 4 requirement for drivers over 25 with a clean driving record. All taxi drivers in the province should be subject to a criminal record check (using the more stringent vulnerable sector standard). A more streamlined training program is proposed for the TNC drivers. The duplication of requiring both a provincial Class 4 and a municipal chauffeur licence was also noted.

Insuring Part-Time Taxis

The industry proposed that taxi and TNC vehicles be subject to the same insurance requirements and that there be discounts for part-time usage. The VTA, however, wants the rates to be the same. The VTA suggested consideration be given to changing camera specifications to include front facing lenses. This measure would help resolve conflicts arising from accidents. It was suggested as well that ICBC payout rates are not adequate, offering only \$82.50 per shift while a vehicle is out of service and depreciating taxis too quickly when making payments for damaged or destroyed vehicles.

Separate Taxis for Day and Night Shifts; and Use of Bus Lanes

The VTA proposed the possibility of licensing day and night shift vehicles separately instead of having one licence on a single vehicle used by two drivers. This would remove the impact of the shift change on service levels. (See discussion in Chapter 5).

Taxi companies and drivers also suggested that allowing taxis to use bus lanes would permit quicker responses to calls.

Large TNC Operators Have a Different Perspective

International TNCs, (Uber and Lyft most prominently) support a regulatory approach similar to that adopted in most other North American jurisdictions as it allows their business model to function effectively.

The key elements of their business model are:

- Flexible arrangements to accommodate drivers providing service using their own vehicles and working when it suits them;
- Dynamic pricing to incentivize drivers to work when required, to increase or decrease demand to match the supply of available drivers, and to ensure quick service (one reported a target of 3-5 minutes in urban areas);
- Allowing an app-based interface that connects drivers and passengers, informs each about the other, tells passengers about expected costs and arrival times, handles payments, and provides a means for rating drivers, cars and passengers.

TNCs have heard and are sensitive to public and industry assertions that their safety and security systems are inadequate. They have established system wide “default” procedures to screen drivers and provide insurance during service delivery. Some jurisdictions have identified deficiencies or inadequacies in these procedures and TNCs have responded to enhanced requirements in such jurisdictions – provided the requirements are consistent with their basic business model.

They would support legislation that creates a new license category for TNCs that:

- Identifies requirements for TNC drivers, including a Class 5 driver’s license, a criminal record check, and an acceptable driving record;
- Requires equivalent insurance coverage while serving as TNC vehicles, with rates recognizing the risks involved and the part time nature of the service (generally based on kilometers travelled).
- Allows TNCs to establish their own minimum vehicle standards consistent with their service model, or sets a maximum age limit in the 10-year-old range.
- Requires annual vehicle inspections by licensed mechanics (they feel twice-annually not required anywhere else, and the vehicles tend to have low kilometers).
- Does not regulate pricing, and allows for a range of services (e.g. basic sedan service, upscale vehicle services, shared trip services, etc.).
- Provides province-wide licensing.
- Identifies required features of a TNC app.
- Limits TNC vehicles to app-dispatched trips, prohibiting use of taxi stands or street hails.

- Does not require them to provide wheelchair accessible service (they have agreed to a per trip contribution to support accessible service in other jurisdictions).
- Makes TNCs responsible to ensure drivers and vehicles meet the requirements, and makes TNCs subject to audit by regulators.

TNCs and Driver Recruitment

An over-riding concern for TNCs is that many drivers start driving with modest ambitions in terms of the hours they expect to work or the length of time they expect to work. Many plan to “try it out”. In this context, substantial barriers to entry will discourage driver participation.

The barriers to entry identified as a concern include expensive or time-consuming training, complex or time-consuming criminal record checks, commercial driver’s license requirements, and a requirement for taxi-like cameras (they argue the fact that as both driver and passenger are known, the trip is tracked and the trip details are recorded, it makes this less relevant).

TNCs tend to focus their training on drivers with lower ratings, offering feedback collected from customers, and training to drivers, before terminating access to the platform if performance does not improve. They note on-line training would be the only reasonable way to reach drivers in smaller communities. The taxi associations recognized the same issues in developing their One App proposal.

The TNCs also favour an insurance regime like the one Ontario and Alberta have applied. Drivers purchase their own individual insurance for regular private use. For commercial coverage, the TNCs obtain a group policy to cover all their drivers. The TNC insurance rates would be based on kilometers driven during periods the vehicle is used for service with the TNC rather than personal use.

Most TNCs do not provide wheelchair accessible service as very few potential drivers have vehicles adapted for this purpose, and the market for such trips is small given competition from public transit by services like HandyDart. Uber does provide a modest service in Toronto where the City has required it. There, Uber arranges for drivers to lease the appropriate vans and provides a subsidy to drivers for each trip they make. The vans carry able-bodied persons between accessible trip requests. Calls that cannot be serviced by Uber accessible vehicles are referred to an accessible taxi service (currently about two-thirds of the calls). This approach only works with the cooperation of a local taxi firm, which is not always available.

TNCs have also agreed to make per trip payments to support accessible service in lieu of providing the service directly. The TNCs prefer that approach to providing the service themselves, although they do argue for the lowest fees possible.

In some locales, TNCs provide some segregated services like Uber Assist, which uses trained drivers to provide extra assistance to such customers as the frail and elderly. However, most TNC drivers do not have training on how to serve persons with disabilities. TNCs do make their apps accessible to people with vision or hearing loss.

TNCs are willing to provide the data required by regulators and insurers to support audit requirements and police investigations. They also consent to its use or release for municipal planning purposes, subject to adequate privacy protection. The privacy concern is that detailed knowledge of the time and location of a customer’s trips could be used against them, which in turn could result in reluctance to use the system. Modifying the origins and destinations to represent a fixed area (e.g., first three digits of a postal code) rather than a street address may respond to this concern. TNCs are not keen to make their data public, as has been done in New York, as the data could be used by competitors.

To avoid uncertainty or criticism, TNCs have tended to disqualify as drivers anyone with an identified criminal record. Recognizing that this unnecessarily disqualifies many persons and affects some social groups more than others, one TNC suggested the regulator adopt a list of specific offense types that would disqualify applicants. For instance, a violent offense, a sexual offense, or a DUI, would be included on the list, while a marijuana possession offense might be acceptable if it occurred some time ago. (Police departments suggest that while a perfect list is impossible — there are too many factors to consider — such a list might be divided into three categories: prohibited, acceptable, and subject to review by a police officer).

The TNCs suggested that it is possible to tailor their apps and processes to provide notice of a regulator complaint management process, whether operated by the PT Board or by Consumer Protection BC. This would parallel the current Consumer Protection BC hotline provided for taxis. However, the TNCs would need access to the initial consumer complaints if they are to resolve them. Similarly, the Taxi Bill of Rights that must be displayed in taxis could be made available to customers on a TNC website. TNCs try to minimize the complexity of their apps, but a link from the app to a website might be possible on an appropriate screen.

The TNCs proposed that their licenses be administered by the Registrar of Passenger Transportation, rather than the PT Board. This would be consistent with licenses issued based on meeting conditions, rather than on an assessment of public convenience and necessity.

The international TNCs are quick to point out differences in the services they provide, the approaches they take, and the values they promote. They stress that competition among TNCs has worked to encourage further innovation. They noted that in many jurisdictions, they compete with local TNCs some of which serve niche markets, others of which compete on a total service basis. In addition, they noted that many taxi firms have their own apps, and that some taxi companies are providing TNC services once the legislative frameworks have been established.

Local TNCs

There are already a number of small local TNCs operating in BC despite the absence of a regulatory regime. Others have tried and given up in the absence of a way to operate within the law. Paralleling the apps of the international TNCs, local TNCs create or adapt apps that enable customers to call for rides, and that use smartphone GPS functions to track and charge for trips. Payment is usually automatic via credit card.

In BC, the local TNCs generally operate within specific ethnic communities where they are known and appreciated, and where regulators will find it difficult to conduct enforcement effectively. When a regulatory framework is provided, as in Alberta or Ontario, regional TNCs have emerged to compete for market share.

One local BC TNC agreed to meet with the study team. The local TNCs would like to see a regulatory regime adopted that will allow them to continue and expand their operations. While creating “an app” is simple enough with the right knowledge, the local TNCs do not have the resources that Uber and Lyft have deployed to continually upgrade their apps to respond to changing requirements and technologies. As well as sharing many of the concerns identified by the international TNCs, local providers seek a regulatory environment that would minimize detailed prescriptive requirements for the app used. They do not support the One App and may choose to continue their own operations and compete with One App, should the proposal be implemented.

BC Software Industry

The BC software industry includes a number of firms that specialize in developing apps, and some already operate TNC-like apps. Monark and Piccolo are two examples, but there are others that have developed apps used in the taxi industry or the local TNC market. All support changes in the passenger directed transportation industry that will encourage innovation, and build on the ever-expanding potential of IT systems and mobile apps. Most would prefer to see this happen using BC-based companies, although since most have operations or products that extend outside BC, they are reluctant to suggest that “home sourcing” is the best approach.

Monark sees its potential role as both a software developer and a system operator. They have worked closely with the VTA to develop the One App proposal and appear willing to work with any governance structure that may evolve, as long as their revenue stream is clear. They indicated they have been building the app according to taxi industry (VTA) direction. However, they acknowledge that reaching consensus within the industry is challenging, pointing out that some of the directions they were given, such as a fixed price, are suboptimal. However, they believe strongly that the One App concept will only work if it is the only app, that is, if it has a monopoly on service provision.

Other software firms, including Piccolo which has worked with the BCTA, either want the opportunity to become the developer of the One App, or oppose the One App outright. Their preference is to expand the use of their own apps and market them in competition with the international TNCs and other current app providers. For example, those with a presence in an ethnic community see the potential to grow were their apps and services legitimized.

One local software provider identified concerns with the “One App” solution, particularly:

- The creation of a monopoly that will be operated in the interests of the owner/controlling interest. If the controlling interest is from the taxi industry, it will work to the advantage of the industry. If the controlling interest is the software provider, it will seek to maximize its revenue. In neither case do the interests of the consumer dominate. If the “owner” is the government, it runs all the risks of software failure, and could still be strongly influenced by the industry.
- Reliance of the entire industry on a single software solution.
- The risks associated with identifying the right software provider.

The provider suggested some alternatives. One would be a requirement that all apps be obliged to list services from all participating vehicles (those who make their data available to the app on a real-time basis). Thus, there could be multiple competing apps, but each would be required to offer the services of all taxi and TNCs. This would remove control of the industry from any single owner, but could still prevent the traditional TNCs from serving BC. Another approach would be based on the direction Thailand has announced it will be taking, which permits providers to have their own apps, but also offers a common government sponsored app that providers can utilize. This concept has not yet been implemented.

Limousine Industry

The limousine industry has two major components: stretch limos and sedans. The stretch limousine segment does not compete with any of the other sectors and will be largely unaffected by the outcome of this process. The sedan limousine sector is often a taxi substitute that uses an upscale vehicle. The current definition of a luxury vehicle eligible to qualify as a limousine relies on the manufacturer’s categorization of the vehicle – and even downmarket manufacturers have a “luxury” vehicle, at least relative to their other offerings. This has further blurred the distinction between taxis and limos.

The sedan limos see the TNC concept as a threat to their current business. Limos are required to charge by the hour, with a minimum charge. The TNCs have often operated upscale services in other markets (e.g., Uber XL) and would not be burdened by the minimum rate required of limos. They want the minimum charge for limo services to be reduced, or to have regulations that are loose enough to accommodate the sedan limo industry.

Taxi Customers

The mandate of this study was to consult with the taxi industry, local governments, and with consumer and business interest groups. Surveying individual taxi (or potential) TNC customers was not included. However, consumer groups, convention and tourism authorities, and airport authority representatives, all spoke on behalf of their customers and the individuals consulted were themselves users of current taxi services. As well, individual users contacted the study team or the Minister to express their views. The major expectation of customers is that there be reliable, timely service. The major limitations on achieving these objectives occur in the lower mainland. There, service is undependable on rainy days, unavailable (or slow) in entertainment districts at night, challenging at the airport for some night flights and at the cruise ship terminal, and at major sport and concert events. It is also difficult to get a taxi from downtown Vancouver to distant points within Metro Vancouver. Customers who require accessible taxi service report inconsistency in response times, and those with service dogs have reported taxis that refused to take their dogs.

Visitors to BC, particularly to Vancouver, expect that a major city will have service from the same TNCs they use elsewhere, and are disappointed when their app reports there is no such service locally. Many BC residents who have travelled and used TNCs elsewhere want to see comparable innovation, service levels, and pricing at home. The taxi companies have implemented apps and adopted some of the innovative practices TNCs have pioneered, but the innovation continues, and the gap remains.

3.2 STAKEHOLDER GROUPS OUTSIDE THE INDUSTRY

There is a wide range of stakeholder groups with an interest in passenger directed transportation. This section describes their views. The order of presentation is not intended to reflect the importance of the groups or the significance of their views.

Municipalities

The municipalities that provided input generally are in favour of extending the range of passenger directed transportation services by introducing TNCs, but the larger centres are concerned about some of the possible ramifications.

The larger municipalities —and some smaller ones — adopt bylaws to regulate the provision of taxi services, and often require that drivers obtain chauffeur licences, undergo a criminal record check, and have a relatively clean driving record. In addition to the provincially required vehicle safety inspections. Some municipalities also set standards for the type of vehicles that may be used (age, condition), require vehicle inspections related to cleanliness, and test taximeters. Mid-sized cities tend to leave driver training to the taxi companies, but all the lower mainland municipalities have adopted the Taxi Host course offered by the Justice Institute of BC as a prerequisite to issuing a chauffeur licence. Municipalities usually establish fees to cover the cost of enforcement. As a result, raising revenue from licensing is not a motivator of municipal licensing.

For smaller municipalities, the prime interest is to have service available to residents. They discourage barriers to entry that could be onerous for service providers. Thus extensive training requirements,

commercial licenses, in-car cameras, or the time and expense of PT Board applications, are seen as potential impediments to achieving sufficient taxi service. While smaller municipalities recognize the value of criminal record checks and would like them to be required of taxi and TNC drivers, they would like to see obtaining record checks made easier.

BC has many communities with seasonal demands: peaks of summer residents and tourists, winter skiers; and lows with little or no demand during their off-season. The existing taxi regime does not provide the flexibility needed to respond to seasonal demands as it was designed with full time taxi operations in mind. Barriers to taxi operation in these communities include: the cumbersome criminal record checks through small RCMP detachments, vehicle inspections where there is no local designated mechanic, and an annual insurance system based on full-time operation. The TNC model using personal cars is sought as a flexible way to serve peak seasonal demands.

Municipalities encourage and support the provision of a wheelchair accessible vehicle taxi service (WAV), although smaller municipalities rarely have been able to achieve it. The larger cities make efforts to ensure the WAV vehicles are in service and respond to calls. Municipalities support steps to ensure WAV service is not diminished due to TNC operations.

The lower mainland municipalities have additional roles resulting from the amount of traffic between municipalities. Vancouver has acted to protect Vancouver taxis and taxi companies from the “suburban” taxis, both in terms of enforcing the requirement that only Vancouver taxis can initiate trips within the city (subject to some exceptions) and, in terms of regulation, by preventing some suburban taxis granted access to the Vancouver market by the PT Board from exercising that right. Victoria has similar issues with neighbouring municipalities and enforces its bylaw to prevent pick-ups by taxis not licensed in the city.

The suburban municipalities are generally accepting of having separate geographic operating areas for taxi companies, as they believe that geographic restrictions ensure that service will be available in their areas during peak demand periods rather than having all taxis serving downtown Vancouver (or Victoria). However, some suburban municipalities identified a significant problem with trip refusals *from* downtown Vancouver, a complaint that ranged from periodic to “epidemic”. White Rock and Anmore experience some of the extreme negative results from the PT Board’s system of separate geographic operating areas. They are not large enough to support a taxi industry themselves, and they are too far away from the downtown to get service from almost any taxi. They strongly support a TNC service licensed to serve the entire province, with appropriate controls to ensure public safety and security.

Even some mid-sized cities like Kelowna have not established a chauffeur licence requirement — which means no criminal record check is required — and even question the need for a Class 4 commercial license. Kelowna is interested in integrating a TNC service with transit and would like to have TNC data for planning purposes. It has large fluctuations in demand — a large summer influx of people and a sizable student population that make bar closings a significant demand period. Taxi service has not been able to respond to the demand fluctuation, and local taxi companies have not succeeded in getting enough taxi licences allocated. It would not want TNCs to be allowed to respond to street hails or use taxi stands.

Municipalities generally support the introduction of TNC service. While they want to ensure public safety, they see the potential benefit of alternative passenger directed transportation options that would improve service to the public. The very small municipalities see TNCs as an opportunity to provide a service that is lacking now or that exists only periodically. They anticipate that permitting people to use their own vehicle, to provide service part-time, possibly as an adjunct to other employment, and to

have the dispatch process managed automatically would effectively reduce the barriers of entry enough that more people would offer service in more communities.

Virtually all municipalities identified some service issues, either consistently too few cabs, or distinct service problems at specific times – bar closing, rush hours, major sporting or arts events. Larger cities have service deficiencies resulting from the limitation on the number of taxi licenses in each area. Smaller municipalities often have the opposite problem, a challenge attracting anyone to provide a taxi service, especially in the face of some of the barriers to entry. The ability of TNCs to respond to those service deficiencies, to reduce costs and to improve service levels generally, are all seen as positive. Recent improvements in taxi service, such as the introduction of taxi apps, is also seen as positive innovation engendered by TNCs, and continued innovation was identified by some as a positive expectation of having TNCs enter the market. For example, a small rural municipality expressed the hope that a TNC will emerge that specializes in providing service in small rural municipalities throughout BC.

Nonetheless, municipalities have some concerns with TNC entry. Many want to ensure they have access to trip data from TNCs, primarily to assist in the planning process. Many also worry that TNC vehicles could contribute significantly to traffic congestion, especially in the downtown core. As an exceptionally dense and transit oriented municipality, New York is an extreme example, but it reportedly experienced a 7% increase in traffic in some areas due to TNC vehicles. Vancouver in particular, with its difficulties around the bar closing period and major events (concerts and professional sports), took note of this phenomenon and suggested it would seek a municipal role in licensing TNCs, including setting a limit on the number of vehicles in service.

While some municipalities wished to continue a full role in licensing taxis (and TNCs if they are allowed) others questioned the value. Some municipalities suggested the Province could handle the entire process; others were skeptical of the Province's capacity and wished to retain the power to ensure that taxis are clean and well maintained.

Municipalities also suggested taxi apps should include driver rating capacity. One indicated they think municipalities be able to regulate apps through business licensing provisions.

First Nations

First Nations share many of the same concerns of smaller communities: the desire to see improved or expanded service, especially where there is no taxi service or bus service presently. If the TNCs can facilitate service provision in smaller communities, that would be appreciated. They also are concerned for safety and security, and would like to see criminal record checks be required of all passenger directed vehicle drivers.

Ability Advocacy Groups

Ability advocacy groups have worked with the taxi industry, particularly in the lower mainland, and with the PT Board, to achieve improvements in service levels. Requirements for accessible taxi service imposed by the PT Board, combined with municipal bylaws, have resulted in accessible taxi service being available in all the larger centres in the province.

Accessible taxi services need to be seen in the context of the HandyDart service offered as part of public transit. For example, HandyDart services registered users (covering all disability groups) using dedicated accessible vans and, in some circumstances, subcontracting to both sedan and wheelchair accessible taxis. HandyDart service is only available by prebooking, costs the same as public transit, and is seen as a parallel service to public transit. Ideally, it would be available on demand and offer the same range of

wait times as regular taxis. In addition, HandyDart users are eligible for TaxiSaver coupons that allow them to use accessible taxis or sedan taxis depending upon their needs with a 50% discount.

Advocacy groups report that taxi call response times can be longer than sedan taxi wait times. The factors contributing to poorer relative performance may result from the economic disincentives to purchasing and operating a wheelchair accessible taxi, which are often the last vehicles put into service, and to servicing a wheelchair bound passenger which requires more time, but provides the same compensation. As a result, some accessible taxi drivers sometimes appear to prefer able-bodied customers. Although advocacy groups want taxi service levels to be improved, they are even more concerned about the impact TNCs may have on service levels, as TNCs generally do not provide accessible service. This is seen as a human rights issue, and to the extent TNCs affect the economics of the taxi industry, they could make accessible taxi service even less available.

In Vancouver, there was confusion among accessibility groups over the PT Board decision to add only 20 of 78 accessible taxis that had been applied for, and then a subsequent decision to add 175 new taxis with only 26 of them for accessible vehicles. Vancouver groups report that callers to taxi dispatch are often advised that no accessible taxi is currently available. There are also trip refusals for requests to travel outside Vancouver proper for such outlying areas as North Vancouver or Surrey, and trips that interfere with a shift change.

Advocacy groups have also worked with the taxi industry, particularly in Vancouver, to develop training aids for drivers. They were involved, for example, in developing a video, *Ask, Listen, Act*, that shows how drivers should properly assist persons with various disabilities, covering topics such as guiding the blind or low vision passenger, proper folding and storage of wheelchairs, how to tie down wheelchairs in a WAV, communicating with deaf or low hearing passengers, and assisting the frail elderly. This film, often presented as part of a seminar offering opportunities for discussion and hands-on trial of techniques, has become a valued and standard training technique among the taxi companies throughout the lower mainland. Taxi drivers in Vancouver are now considered well trained in responding to the needs of disabled passengers, while those in the Metro Vancouver area are seen as OK, but not as consistently good.

One user of Uber in other locations found that while he had expected security to be raised as an issue, it emerged that a greater concern was that awareness of the needs of the disabled was poor. It was suggested that training be considered if TNCs come to BC. TNCs could also add an “accommodations” field to the user profile to indicate that a customer travels with a service dog or requires some other form of assistance. The human rights argument that needs should not have to be identified suggests that the field be optional, but it should not deny users the opportunity to identify their needs in the expectation they will be met more easily if disclosed. TNC and taxi apps should also be built to respond to accessibility needs, by being compatible with Voice Over on Apple phones for example, and with smart meters not controlled by the customer announcing fares verbally.

Advocacy groups also noted that wheelchair accessible service does not meet everyone’s needs. Many elderly or frail individuals find it difficult to enter accessible vans and prefer sedans. They also described features that would assist individuals with specific needs, such as “talking meters” (and talking apps), braille signage and/or larger type and more visible signage in taxis, as well as acceptance of service animals. One stakeholder indicated apps should be required to text users when the vehicle arrives and to announce the company and taxi number when the flag goes down. In-app payment it is also easier for the blind.

There have been refusals to accommodate service animals. The Taxi Bill of Rights posted in taxis does seem to have improved the situation. It is fairly well accepted that drivers with allergies should not be

required to accommodate service animals, but there needs to be a better system to document allergies (e.g., in company files or on apps), and clear requirements when drivers respond to a call and then refuse service based on being allergic. There is also concern about the suggestion of a religious reason to refuse trips involving service animals.

Some advocacy groups participate in service delivery, such as using volunteers to drive passengers to medical appointments or social events. There is concern that these services may violate current regulations, particularly if the volunteer accepts payment from the passenger or even from an agency to cover expenses. There are also commercial services that provide support most frequently to the frail elderly or those in early stages of dementia that may involve accompanying a customer to a medical appointment, to a grocery store, etc., in return for payment, most frequently calculated on an hourly basis. Where these services include driving the client to the appointment, there is concern that this may be viewed as a passenger directed transportation service requiring a taxi or limousine licence. It was suggested that any new regulations for passenger directed transportation services clearly exclude such services from regulation, or be flexible enough to accommodate them.

TNC Regulation as a Framework for Volunteers

The provincially appointed *Seniors Advocate* looked at TNC regulation as a potential opportunity to provide organized transport for individuals who require escort or need extra support. Volunteers are often used to provide this kind of transport. The Advocate expressed interest in the possibility that such a service could be organized effectively as a licensed and insured TNC.

Mothers against Drunk Driving (MADD)

MADD supports TNC licensing as a way to provide more alternatives to drunk driving. Low cost, readily available rides reduce the temptation to take a car when out for the evening, particularly among the young. This is especially true for suburban residents who have been refused taxi rides home in the past. TNCs would need adequate regulations to ensure safety. The Sober Girls service launched in Surrey illustrates the need.

Airports, Ports, and Tourism Associations

Airports, ports, and tourism associations have a common interest in enhancing “the visitor experience”, while ensuring safety and security. All three note that visitors to BC, particularly to the larger cities, expect to be able to call their favourite TNC as they do in cities across North America and around the world. Vancouver Airport reports that it receives hundreds of comments on this topic. Visitors wonder if Vancouver is really “a big city” if you can’t get a TNC. A purely BC based TNC would not fully respond to this concern as it would require downloading a new app, registering as a user, and gaining familiarity with the different app – not a process that is enticing as you are gathering luggage and rushing to a hotel or meeting. It would add an extra “friction point” in the deplaning process.

On the other hand, Tourism BC thinks the TaxiHost training is important and should be retained.

Bars and restaurants, particularly in downtown Vancouver, report difficulty getting enough taxi service, particularly for clients leaving at the end of the evening. Customers can use all the suburban taxis to get downtown, but can only use Vancouver cabs to go home, and they may face refusals if they live too far from Vancouver.

Tourists and convention attendees also face peak period taxi shortages for some flights at the Vancouver and Victoria airports, and deficiencies at peak periods in the downtown entertainment

district in Vancouver. TNCs are seen as a potential solution to some of these deficiencies. Shift changes can also cause service problems.

Many airports elsewhere have accommodated TNC service and BC's airports would benefit from the expanding service options to address current deficiencies. This is less true for the cruise ship terminals, where space is at a premium, and where buses are often used to move people away from the port as quickly as possible. In Victoria, the cruise terminal is adjacent to a residential neighbourhood that would likely respond volubly were traffic to increase as a result of TNCs "cruising" the area looking for potential hails. Vancouver notes that introducing TNCs would make more taxis available to serve cruise ship passengers. At times, no taxis are available, and a survey in Vancouver noted that only 20% of taxis return for a second trip.

The Vancouver airport requires that taxis picking up passengers be no more than six years old. Wheelchair accessible taxis are needed infrequently, but it is seen as important to be able to respond to these requests, and it can take quite a while to call one from the city (Victoria Airport can usually call one from Sidney quickly). They find the various licensing regimes in each city an aggravation and would prefer something simpler and more consistent. They noted the problems for drivers that result from having to acquire multiple chauffeur permits, but it is not a major issue for the airport itself.

Regional Airports and Growth of Package Travel Booking by Internet

BC's larger regional airports handle significant volumes of passengers because both of tourism and as alternate airports for international traffic to BC's large centres. In addition to reporting shortages of taxis at peak periods, these airports stressed the growing importance of offering international travellers packaged arrangements, including vehicular transportation from the airport to their destination. They believe traffic through their airports, as well as regional economic growth, depends on the growing trend of travellers to book packages over the internet. Package assemblers in turn need to have services that are internet and automatic booking friendly in order to assemble low cost reliable packages. Regional airports saw TNC service as a potential solution, particularly through established services such as Uber and Lyft.

Public Transit and Transportation Planners

Public transit providers, particularly TransLink, tend to be supportive of TNCs. They view the expansion of passenger directed transportation as helping reduce the rate of car ownership by making it easier to do more things without having to use one's own car. It is seen as a step towards the driverless car of the future, a step towards building the infrastructure that will be needed to organize that service, particularly with a model of "fleet" ownership rather than individual ownership – and the resulting requirements for multiple parking spaces (home, work, store, etc.) and large capital investment.

Public transit has also been seeking better ways to handle "the last mile" of trips. For residents living in lower density communities (and most do), public transit is not an efficient solution getting from home to a major transit route – or the reverse. A nearly empty bus rolling through a residential street is expensive, but also seen as necessary to make the rest of the transit system a viable alternative to car ownership. Although taxis play a role in meeting this need, the transit/taxi interface has not worked systematically, or well enough to allow transit to eliminate its underused services. With electronic dispatch, lower off-peak prices, and a reliable supply of vehicles at all hours, it is expected that TNCs can play this role more effectively.

At the same time, there is some concern that TNCs might compete with transit services in a way that undercuts the economics of transit, particularly if it evolves into the equivalent of "jitney" services, or small private bus services plying the busier routes. Transit authorities would therefore seek to retain the

right to limit the size of vehicle that may be employed for TNC service. It was suggested that a regional regulator might more appropriately regulate TNCs than municipalities given the regional nature of transportation.

Data Sharing & Future Congestion with Driverless Cars

Public transit agencies and municipal transportation planners all insist that trip data from both taxis and TNCs must be shared. Such data is needed not only for effective planning, but because of the increasing need to manage congestion, which is expected to become even more problematic in an era of driverless vehicles. For example, if driverless commercial vehicles become a reality, then it may become cheaper to keep a vehicle moving on the road rather than parking it. The roads could become collectively congested by driverless vehicles circulating while awaiting trip assignments. Any public policy to manage this kind of congestion will be dependent on data systems that record the location and time of vehicles.

Police Forces

Police forces are tasked with ensuring public safety. Where municipalities require chauffeur licences, it is the police force that provides criminal record checks (CRCs), and in some cases actually issues the chauffeur licences on behalf of the municipality. They are concerned that some municipalities require a CRC while some do not. There is also some inconsistency in the type of CRC required, particularly as to whether the additional checks required to serve the “Vulnerable Sector” (CRCVS) are included. Although there is some variation as to how CRCs and CRCVSs are conducted by different police forces, this should be resolved by adoption of the Model Policy Guidelines for Police Information Checks. This model is now shared by all police forces in British Columbia.

The police forces do not have a preference as to whether TNCs are permitted or not, but do have some concerns that would be aggravated were they approved. In particular they foresee the volume of CRCs (or CRCVSs) that would have to be processed, particularly at start up, as a potential problem. The Vancouver Police Department for example, has a special unit established to provide CRCVSs for taxi drivers and others, and is concerned it could not handle the volume. Police forces in the lower mainland cited the wasted effort involved for drivers who currently require separate CRCs so they can obtain chauffeur licences from each of the municipalities in which they operate.

It was suggested that a central CRC issuer in the lower mainland could provide a more efficient service, perhaps through the TransLink police force, which has jurisdiction throughout the area; however they expressed some concern that the online CRCVS offered by the Criminal Records Review Program (CRRP) may not be as comprehensive as those obtained from police departments. It is imperative, for example, to positively identify the person subject to the CRCVS, which the police do in person in conjunction with reviewing government issued IDs. They suggested, however, the Equifax identify verification system is an accepted alternative. The police forces charge for the CRCs, but this does not always cover the full cost, so losing the function would not be missed, as long as it is done well.

Some smaller forces and particularly smaller RCMP detachments in rural areas do not have a sufficient volume of CRC requests to provide a timely or efficient service. Although the situation reportedly is improving, some local taxi operators claim there have been delays of one to as long as five months. This has resulted in reluctance among taxi operators to obtain CRCs of their drivers, and reluctance from municipalities to require them. While all police forces think the CRCs are important, the process will require improvement if it is to become a province-wide requirement.

Large urban forces are also concerned about the ability or willingness of TNCs to assist in investigations, and particularly in live incidents. Taxi companies have good records of most trips that can be accessed in an investigation, when a perpetrator has taken a taxi to or from an incident for example. The origin,

destination, route, timeframe and often imagery from a taxi camera are all available. TNCs have all the same information (except the imagery), so the concern is to ensure that the information is available to aid investigations in a timely and efficient way. The same issue exists with respect to an incident in progress. Police know how to contact taxi dispatchers and can often obtain real time information. The question is whether it will be just as easy to obtain timely cooperation from “an app”.

Unions

The taxi industry is one of the service sectors that Canadian labour unions are hoping to organize. In British Columbia, to date, efforts have been focussed on inside workers at taxi companies (call takers and dispatch). But as some dispatch services and call taking have been outsourced overseas, the membership has been reduced. There is concern that it will be further reduced by TNCs which rely on apps rather than humans.

Working conditions are another union issue, specifically the treatment of drivers. The unions maintain that drivers should be treated as employees when it comes to requirements such as minimum wage, holidays, sick leave, and WorkSafe requirements. TNCs have deemed drivers to be independent contractors.

Business Groups

Business groups see the need for a provincial framework to regulate TNCs. They also want to see the regulatory burden on taxis reduced. As well, they want duplication between provincial and municipal regulations eliminated. The BC Chamber of Commerce suggested TNCs should be limited to trips arranged through an app, with flexible fares. It provided specific suggestions for TNC driver requirements, insurance, and app approaches, and proposed that cities be prevented from using business licensing or other approaches to create additional barriers to TNC operation. It also wants carpooling to be protected, so long as payment is limited to covering operating expenses.

With respect to taxis, the Chamber prefers that the province be the sole regulator, with some flexibility in geographic restrictions for return trips, reduced inspection requirements for vehicles based on usage, and a Class 5 license requirement for drivers (with a safe driving record). The Chamber pointed out that BC is the only jurisdiction that applies the terms of the National Safety Code (NSC) to the taxi industry. The NSC is designed to handle vehicles in full time use for commercial purposes, and the resulting twice-annual vehicle inspections may be suitable for taxis that operate 24/7 throughout the year, but are not appropriate for taxis in rural areas or for potential part-time TNC vehicles. It suggested an annual inspection for vehicles travelling less than 30,000 km and a reduced scope second inspection (focused on safety systems) for vehicles travelling 30,000 to 60,000 kms per year.

The Business Council of BC strongly emphasized the need for innovation and acceptance of disruptive technologies, as well as changes to business models, to remain competitive as a society and ensure needs of customers come first. The focus should be on ensuring that public interests, like safety, are adequately protected. How to manage change is the question. Public policy should favour a free market, but consumers have been ignored and the failure to issue sufficient taxi licences over time has contributed to their increased value. The Council felt there should be some compensation to the industry.

3.3 SERVICE PROVIDERS TO THE INDUSTRY

Insurance Corporation of British Columbia

The ICBC provides the basic, legally required, insurance for all vehicles in BC including the taxi industry. Insurance is provided for each vehicle, to the owner of the vehicle. Rates vary geographically, by fleet

size, and by claims record. For a given set of factors, the insurance rate is a fixed annual fee per vehicle. As noted earlier, this means the rate for a part-time taxi and a full-time taxi is fixed. The rate schedule is expressed as base rate, from which a percentage discount is applied based on the claims record. Most vehicle owners purchase more than the legally required amount of insurance, which is available from ICBC or any other source.

An issue that is outside the scope of this review is the *level* of insurance rates. However, this was a central concern expressed by stakeholders, including ICBC. ICBC quoted base rates lower than those quoted by the VTA, perhaps because the VTA rates may have included optional insurance. However, taxi owners find the rates onerous; after considering the discount, rates can be in the \$10,000 to \$16,000 per year range in the larger urban areas. (Rate comparisons with other jurisdictions is difficult as BC has no limit on the damages that can be awarded to a victim, while most other jurisdictions do.) However, ICBC indicates that taxi insurance is subsidized in that the relative rates of various vehicle classes in the province have not been adjusted for a number of years, and taxi rates would rise compared to other vehicle types based on their claims history.

ICBC has examined how other provinces, particularly Ontario and Alberta, have handled insurance for TNCs when they have been subject to regulation. Each has created a new type of insurance that charges per km that each TNC vehicle is operated in commercial service. The TNC is required to report all the kms vehicles travel in commercial service, and to pay the premium for each vehicle for the kms driven. The approach assumes the vehicle is also insured as a private vehicle for personal use, and that insurance is responsible when the TNC vehicle is not in commercial service.

ICBC suggests this could be a workable approach in BC, but would require changes in legislation and/or regulations that require the vehicle owner to purchase insurance (as opposed to the TNC purchasing supplemental insurance for private vehicle owners when operating commercially). It would also be conditional upon TNCs providing sufficient data so that their payments can be audited to ensure they accurately reflect all kms.

ICBC recognized the need for transparently fair pricing of TNC insurance. That would suggest that a taxi should also be able to purchase insurance by the km, an approach that could be very helpful to those in the taxi industry who have licences to operate only at peak times, or for those in smaller jurisdictions who drive relatively few kilometers, based on the local demand for services.

ICBC also noted that most vehicles in BC, including most of those likely to provide TNC services from time to time, have optional insurance on their vehicles, providing higher limits of coverage and/or insuring additional perils. Any TNC will need to consider purchasing additional coverage to ensure the optional insurance held by TNC drivers continues while they are providing commercial services.

ICBC indicated that the processes required to establish a new approach to insuring taxis and TNCs would require at least 6 to 12 months, including the regulatory approval process – assuming the process was completed subject to clear direction from the province.

Justice Institute of BC

The Justice Institute of BC (JIBC) provides the Taxi Host driver training required by lower mainland municipalities. The course, which costs about \$500, entails 30 hours of classroom time over five days. The topics covered are titled: Taxi Industry and Driver Safety, World Host and Serving Customers with Disabilities, and Collision Avoidance. There is an exam at the course's conclusion. If the Justice Institute has any concerns with the candidate's grasp of English, they are sent to the Vancouver Community

College for testing, and must score between levels 4 and 5 on the Canadian Benchmark. Basic geographic knowledge is tested before admission, but not taught in the course.

JIBC offers courses throughout the province and does some distance learning. The economics of further expanding services across the province or offering the course online or by video feed would require an analysis before implementation could occur.

Consumer Protection BC

Consumer Protection BC played a role in creating the Taxi Bill of Rights that must be posted in all BC taxis. The notice includes the phone number of the taxi's call centre. Consumer Protection BC fields complaints (or compliments) related to the Bill of Rights. The top complaints relate to driver behaviour and trip refusals, but there were only 218 calls in a one-year period. The organization believes the Taxi Bill of Rights may require some updating, but that it should apply to TNCs if licensed, and it is prepared to play a similar role with respect to TNC service. The appropriate way to notify users of the Bill of Rights and the complaint mechanism for TNCs will require some thought, but the principles are the same.

4 MODERNIZING TAXI SUPPLY

At the heart of consumer and business concerns over BC taxi service is *supply*. Non-industry stakeholders articulated clearly that they want more vehicle-for-hire service. Smaller communities and First Nations, where service may be spotty or nonexistent, want their communities served. Large urban centres experience shortages during peak hours.

The Province of British Columbia, like most taxi regulators, limits the number of taxis operating in a given area; the number permitted is the total of the number of taxis authorized for each taxi company by the by the Passenger Transportation Board.²⁰

This chapter:

- Provides background to the regulation of taxi supply and the impact of TNCs;
- Analyses the advantages and disadvantages of the current regulatory approach;
- Analyses the advantages and disadvantages of alternative approaches;
- Offers suggestions for immediate relief of taxi supply shortages.

4.1 BACKGROUND: TAXI LICENCE VALUES, REGULATION OF SUPPLY, AND TNCs

Regulating the supply of taxis has sound policy origins resulting from the unique vulnerability of the industry during economic downturns. During such periods, excessive numbers of personal vehicles tend to be converted to taxis, which has negative consequences for public safety and service quality (Text Box 4-1). However, after imposing limits, the failure of most jurisdictions to increase taxi supply to match subsequent demand growth often creates a situation that is difficult to reverse.

As taxi shortages arise, each taxi becomes busier, and it is common for taxi licences to acquire a market value on their own, separate from the costs of operation. In interviews, industry stakeholders report that the right to operate a taxi leases for as much as \$5,000 per month in Vancouver, \$2,000 per month in larger municipalities surrounding Vancouver, and much less elsewhere. This lease revenue supports a market in the purchase and sale of taxi licence rights (typically transferred as *licence-shares*, see Chapter 2). Prior to the uncertainty introduced by TNCs, a Vancouver taxi licence reportedly traded for as high as \$800,000.^{21 22} Current values are much reduced, but the underlying lease revenue remains.

Simply deregulating taxi supply and allowing unlimited taxis would eliminate the value of these rights. No one would pay large sums of money for a taxi licence if it could be obtained directly from the regulator by any qualified applicant. Historically, purchasers of taxi licence rights include taxi drivers who may have saved much of their life to own the right to drive their own taxi. At peak, a Vancouver taxi driver may have mortgaged their house to purchase a licence-share, the value of which declines to nil if supply limits are removed. The hardships involved, as well as legitimate public sympathy for such cases, pose significant challenges for readjusting taxi numbers.

The Choice Made By Most Jurisdictions

Given this complex situation, jurisdictions throughout North America have largely chosen to leave taxi regulation unchanged, and simply enabled the entry of TNCs. This can leave the taxi industry with the

²⁰ Subject to overlap with municipal jurisdictions (see Chapter 2).

²¹ Licence-shares are often transferred based on a two licence-shares for taxis, the day shift and the night shift. The quoted number is for a combined day and night shift (i.e., the right to operate one taxi).

²² Welcome to Taxiland. *The Dependent Magazine*. June 1, 2012.

worst of both worlds – a decline in the value of their businesses with a continued restriction of the number of taxis available to compete with the alternative services.

A preferable alternative for British Columbia may be to modernize the regulation of taxi supply so that taxi numbers can expand to compete, while minimizing negative impacts on individual taxi industry stakeholders. This requires addressing the reality of the historical values that have accrued to taxi licences in some municipalities.

Policy Origins of Regulatory Limits to the Number of Taxis

The taxi industry experiences economic recessions differently from other industries. In most industries, supply tends to contract along with demand during a recession. In the taxi industry, supply expands during a recession, even as demand for taxis shrinks. In the absence of regulation, the industry is easy to enter for anyone with a vehicle.

The result is a flood of entrants. Income for each taxi falls as more vehicles share less revenue. The following 1933 editorial from the Washington Post illustrates civic reaction to the increase in taxis caused by the great depression:

Cut throat competition in business of this kind always produces chaos. Drivers are working as long as sixteen hours per day, in their desperate attempt to eke out a living. Cabs are allowed to go unrepaired

Together with the rise in the accident rate, there has been a sharp decline in the financial responsibility of taxicab operators. Too frequently, the victims of taxicab accidents must bear the loss because the operator has no resources of his own and no liability insurance. There is no excuse for a city exposing its peoples to such dangers.

In an otherwise well regulated environment, the immediate threats to public safety described in the Washington Post editorial may not occur. However, a decline in service quality will be felt by customers, and there will be a sharp decrease in income for drivers. Taxi drivers usually collect their income as a residual of revenue minus their gas and fixed expenses. A 20% decline in gross revenue per taxi can mean an even larger decline in net personal income. Income pressure will cause drivers to drive longer hours—exacerbating the excess supply from new entrants. This misery will find representation before the regulator and before elected representatives—resulting in the caps on taxi numbers seen in most jurisdictions today.

This story has been repeated in recent times. Calgary, Edmonton, and Halifax have all adopted taxi plate limits in the last thirty years. Halifax was the most recent in 1994. In each case, there was an economic recession, and the City Council was faced with large numbers of taxi drivers protesting low incomes and excess numbers of taxis.

Text Box 4-1

Is Compensation Desirable or Feasible?

If a change in regulatory regime reduces or eliminates the value of taxi licences, the question arises as to whether those who bought into the present system in good faith should be compensated. For example, the Vancouver Taxi Association raised this question in the context of the anticipated major decline in value of their licences if TNCs are allowed into the market.

The question has a number of dimensions, both practical and ethical. On an ethical basis, should the public purse be held accountable for private business decisions? Creating taxi licence value was never an objective of the system, and the public purse never received the large payments for the purchase of taxi licences – these were exchanges between private parties after the licences were issued for a nominal fee. On the other hand, the system existed for an extended period of time, and many individual taxi drivers purchased licences at full price in the expectation that system would continue.

Occasionally, governments have sought a middle ground where some financial compensation was paid to holders of licences for one or two taxis, while large holders were expected to have understood the risks they were undertaking. The State of Victoria, in Australia, offered compensation for the first licence held by individuals, and half the level of compensation for the second licence. This compensation was funded through revenues raised from new taxi leases issued directly by the government as part of their regulatory reform (see entry-price regulation discussion below). Ireland removed its limits to taxis in 2000. Post reform, the Irish government established a committee that reviewed hard luck cases and paid *ex gratia* compensation to some, including drivers who had leased licences from licence holders for fixed terms.

On a practical basis, the expense of compensation is potentially in the hundreds of millions of dollars, especially in large BC municipalities where taxi licences had accrued significant private market value. Limiting compensation to small holders would not reduce the cost by much in BC, where ownership of taxi licences has been highly dispersed through the sale of licence-shares (see Chapter 2). There is also the question of how much to pay, and to whom. Past values of taxi licence-shares are not on the public record in BC; they are private sales. In addition, the purchaser of a taxi licence-share may have reduced the risk by leasing the rights to another taxi driver on a multi-year contract (thus the terms of compensation review in the Irish case).

Thus, paying compensation is an exception, rather than the rule. In the context of TNCs, as noted previously, other Canadian jurisdictions have not paid compensation, although the impact has been to reduce the value of taxi licences to a fraction of their previous worth. (Some value remains due to taxis retaining their exclusive right to pick up street hails and serve taxi stands). In the City of Ottawa, the taxi industry is suing the City for the results of having taken this approach.

Taxis vs. TNCs and the Importance of Street Hails

In choosing a method of regulating taxi supply, it is important to be aware that only taxis are permitted to pick up customers based on hails from the street or from taxi stands (collectively termed street hails). This is a key service offered exclusively by taxis. Providing a safe framework for safe street hails is one of the reasons that taxis are clearly numbered and painted to identify them as licensed vehicles. When TNCs are admitted to the market, the practice is to admit them only for service via their smartphone apps. They are not permitted to pick up street hails since this opens the door to predators in unmarked vehicles pretending to be TNC drivers. Taxis also have higher equipment standards to protect the driver, such as secure cameras and trouble buttons.

The continued exclusive right to serve street hails means that taxis can retain a portion of their historical licence values even when facing competition from unlimited TNCs. The level of value retention is low and only material in urbanized areas where street hail is a common method of obtaining a taxi.

However, competition by TNCs is different from competition among unlimited taxis. In the latter case, the historical values of taxi licences are eliminated entirely, rather than reduced. Thus, the regulation of taxi supply is a material question even in the context of TNCs.

The Public's Stake

The public has a significant stake in the modernization of taxi supply regulations. The success of TNCs in other jurisdictions has demonstrated that consumer demand may expand when reliable service is offered at any hour. In cities with both taxis and TNCs, the combined trips of taxis and TNCs rise significantly. As documented in the introductory chapter, trips taken in Canadian cities can expand from 26% to 75% in just a few years. In the case of San Francisco, the origin city for Uber and Lyft, TNCs trip volumes have been reported to be as much as twelve times the volume handled by the city's continuing taxi fleet. Within these totals, taxi trip volumes have declined as the numbers of taxis are held to the original regulatory limits.

Much of the potential demand could be filled equally by a modernized taxi service. Many consumers would prefer the traditional alternative of a well-marked taxi that is under a high degree of public supervision. A modernized taxi service that provides availability at all hours would be the first choice of many consumers.

The Form of Regulation Matters

As discussed in Chapter 1, regulating taxi supply may take forms other than rigidly fixing the number of taxis. Different numbers of taxis are required on Friday night than at 10 am. Setting a fixed number of taxis is inevitably a compromise, resulting in too few taxis on Friday night and too many at 10 am. Licensing part-time weekend taxis can improve the situation. However, there are many micro-peaks during the week that remain problematic, such as between 8 am and 9am on a rainy workday.

The traditional form of regulation was driven by practical enforcement considerations governed by the technology available at the time. In North America, most taxi regulatory regimes were established during the Great Depression of the 1930s. The simplest method of managing taxi supply was to license a fixed number, and require each taxi bear a number and a recognizable paint job, so that illegal taxis could be recognized and policed.

Modern taxi dispatch systems monitor taxi activity and position in real time and allow regulators other feasible alternatives. As discussed in this chapter, there exist other methods that allow regulators to avoid having to guess a needed number of taxis.

Regulation by Fleet rather than by Individual Taxi

A feature of BC's provincial regulation is that taxis are licensed by company fleet rather than issued one per taxi. The fleet orientation is worth preserving. As discussed in other sections of this report, there is a need for data sharing to support future congestion management and more sophisticated methods of managing the number of taxis. That data management capacity resides with taxi company dispatch rather than individual taxi operators.

4.2 DESIRABLE FEATURES IN APPROACH TO REGULATING TAXI SUPPLY

Given the above considerations, it is desirable to modernize the management of taxi supply, rather than simply remove supply limits entirely. The desirable features of a modernized approach are those that:

- **Allow expansion.** The volume of taxi service can expand to serve the higher customer demand that has been shown to exist, and to match potential competition by TNCs.
- **Protect investments.** Protects, to the degree possible, the value of historic investments made by the taxi industry.

- **Support variable supply to meet peak demand periods.** Allows the number of taxis to vary so that there is reliable availability and good response times at peak demand periods.
- **Generate revenue to support enforcement costs and service improvements.** In particular, there is the challenge of ensuring that accessible taxi service is equally available, while keeping the price the same as for all other users (discussed in Chapter 5).

The most common systems of regulating taxi supply, fixed numbers of taxis or public convenience and necessity processes, do not meet these criteria very well. Better approaches are known, but have had little application in the conservative world of taxi regulation. The best choices may require an appetite for innovation.

Alternative approaches are considered below.

4.2.1 COMPARING METHODS OF REGULATING SUPPLY

Conceptually, there are four broad approaches to managing taxi supply:

- **Case-by-case.** Applications to provide taxi service are considered on a case-by-case basis, as in BC's present public convenience and necessity regime.
- **Quantity based.** This includes setting a fixed limit on the number of taxis, perhaps adjusted periodically by a formula linked to population and other variables. When regulating at a provincial level, limits are set separately for each region.
- **Entry price based.** New entrants to the industry must pay a fee, either a licence fee or a per trip fee. The fee is set high enough to deter entry unless the industry is sufficiently profitable to justify the fee (e.g., current taxis are busy and there is a need for additional taxis). Pre-existing fleets may be exempt from these fees.
- **Performance monitoring based.** System performance — such as dispatch response time — is measured and reported. When service is too slow (e.g., a shortage is causing individuals to wait) more taxis are added to the system.

Five alternative regimes, representing at least one from each approach, are analysed below. For comparison, the set includes the present regime. The six are:

- A. Public Convenience and Necessity (the present regime).
- B. Fixed number of taxis using per capita or a more elaborate formula.
- C. Entry price regulation through annual licence fees.
- D. Entry price regulation through fees per trip.
- E. Entry regulation through performance standards.

4.2.2 The Present Regime: Public Convenience and Necessity (PC&N)

At any given time, the limit on the number of taxis for a given area is fixed by the licences issued to taxi companies by the PT Board. This limit is indirect, since anyone can apply to the PT Board for a new or additional fleet. However, as discussed in Chapter 2, the PT Board is an application based process where individual applicants must prove the need for their service in the face of objections from competitors.

The net result is a significant barrier to entry restricting taxi supply. For large municipalities, the legal process required for applications entails expensive and extensive exchanges of data and arguments by

the applicant and intervenors, and their legal representatives. This is very different from simply applying for a licence and showing you are qualified with respect to having financing and a clean record. For smaller municipalities, the process barrier may be daunting, especially for small firms, and may be as contested as in a larger community if there is another local firm already licensed for the area.

The advantages of the PC&N regime are:

- **Smaller analytic support requirements.** Although PT Board applications take time and resources, the Board does not need to develop its own estimates of the required taxi supply. Instead, it hears the arguments of the applicant and intervenors.
- **Rule of reason.** Without an explicit limit to the number of taxis, new applicants are free to make their case that their new service is needed.
- **Preserves current licence values.**

Disadvantages include:

- **Unintended barrier to entry and taxi shortages.** The contestable application process places too much of a burden on applicants, resulting in too few taxis. This is evidenced by current service complaints and the significant private lease rates for taxi licence rights in some parts of the province.
- **No mindful consideration of the needed total supply.** There is no requirement for the regulator to determine the number of taxis needed to serve the public interest. Instead, the PT Board acts as a referee and judge in a contest between applicants and competitors who oppose the application. This is *not* a negative comment on the PT Board – it is a function of the current legislative mandate.
- **Shortages at peaks.** Because the unit of control is the number of taxis, there will inevitably be shortages of taxis at peak times (unless the limit is set so high as to be irrelevant). This can be moderated by authorizing weekend taxis in some areas, as the PT Board has done. However, this leaves seasonal periods and smaller peak periods during the day unaddressed.

The net result of the present system is that supply has been constrained from expanding to meet the potential demand that has been shown to be present. This does preserve the status quo value of taxi licences, but leaves the public underserved and loses the economic and environmental benefits that a much more available vehicle-for-hire service would achieve.

In the context of TNC entry, keeping the present regime would preserve the portion of licence value represented by the exclusive rights of taxis to street hail. However, the industry would miss the potential revenue gains from any expansion of service, leaving the undeveloped market entirely to TNCs.

In addition, taxis would experience a technical disadvantage. The ability to provide quick service is partly a function of fleet *density*. The more vehicles in an area, the more likely that one is closer to a customer. At the higher densities offered by TNCs where they are successful, response times tend to fall to 5 minutes or less. If taxis are limited to their current fleet sizes, they will not be able to provide the corresponding improvements in response time even though taxi companies have access to the same dispatch and smartphone technologies as TNCs.

4.2.3 Explicit Limits on the Number of Taxis

The traditional alternative to PC&N regimes is to set a limit on the aggregate number of taxis operating in each area. The number may be updated from time to time based on a formula. The most common formula uses taxis per capita. More complex formulas may involve the age of the population, public transit requirements, and the impact of changes in the meter rate.

The advantages of fixed limits are:

- **An explicit public policy.** As compared to PC&N, there is explicit consideration of the number of taxis needed.
- **Easy to enforce.** The traditional system of marked and numbered taxis and registration of individual vehicles is well understood.

Disadvantages include:

- **No absolute basis for establishing number.** The initial number of taxis is usually based on the status quo at the time the limits are set (when there are usually too many taxis – see Text Box 4.1). Subsequent revisions are usually based on comparisons with other cities. However, the success of TNCs has shown that most large cities are grossly undersupplied with vehicles for hire.
- **Formulas not always maintained.** The presence of a formula in legislation or regulation does not mean it is automatically applied. There must still be a process to authorize and issue the licences, and to determine *who* receives them. Even a simple per capita formula must await lagged population estimates. More complex formulas require sophisticated staff to calculate and apply them correctly. It is not uncommon for formulas to remain on the books while actual taxi numbers go unadjusted for many years. This in turn creates shortages and high taxi licence values. The high licence values in turn create resistance to catching up by applying the formula.
- **Difficult to distribute new licences fairly.** When the formula indicates that more licences should be issued, who receives them? In jurisdictions where taxis are licensed individually, there are usually waiting lists, or driver seniority lists. Each of these is problematic. In the context of licensing by fleet – the question is more challenging.
- **Shortages at peaks.** As with the present PC&N regime, the unit of the number of taxis, there will inevitably be shortages of taxis at peak times (unless the limit is set so high as to be irrelevant). This can be moderated by authorizing weekend taxis in some areas, as the PT Board has done. However, this leaves seasonal periods and smaller peak periods during the day unaddressed.
- **No competition.** Under fixed limits, it is difficult to start a new taxi company. For example, someone with a new service idea would have to buy out an existing operator. Dissatisfied drivers could not organize their own cooperative without a similar buyout.

Replacing today's PC&N regime with a system of municipal or regional explicit limits would likely involve using the presently PT Board licensed taxis as a starting point. In the future, taxi numbers would be adjusted based on population growth.

This approach would protect current licence values and work reasonably, if the present number of taxis were adequate. However, the present public concerns, and the unfilled demand exposed by TNCs in other cities, suggest that the current number is far from what is needed and sustainable. While it is evident that more vehicles are needed, there is currently no method of determining the number of taxis appropriate to a given region. Further, too rapid an expansion would drive down licence values, even if

they ultimately recovered as demand increased. The formulas available for managing taxi numbers over time are *relative* formulas that require knowledge of a good starting point.

Replacing the present TNC regime with a system of fixed regional limits on taxi numbers would be an improvement in supply management because it would introduce explicit consideration for adjusting the number of taxis over time.

However, there would be a reduction in competition and innovation. Underserved areas would remain underserved. There is no current basis for estimating the number of taxis that is required in each area. The status quo is not a desirable starting point. There is evidence that a much higher volume of vehicle for hire service is sustainable and desired, but it is unknown how much of an increase is needed.

In the context of TNC entry, converting the present taxi licence numbers to the starting point of a fixed limit regime would offer continued protection to the portion of licence value represented by the street hail market. However, it is unlikely to provide the industry with the flexibility to expand fleet size to compete with TNCs. In Ontario and Alberta, fixed limit regimes are common in each municipality. The admission of TNCs to these markets, while leaving the fixed limits for taxis in place, has left the industry with both lower taxi licence values and an inability to expand to compete with the alternative services.

4.2.4 Entry Price Regulation by Annual Licence Fee

An alternative approach to entry management does *not* require the regulator to determine the desired number of taxis. Instead, conditions are set so that more taxis can enter the market if market conditions are profitable enough to warrant. This allows the industry to adjust its own numbers, while protecting the desired degree of profitability and guarding against the excessive entry during recessions, as noted in Text Box 4-1.

One form of this approach is to set an annual licence fee per vehicle for new entrants that differs from the fee for pre-existing operators. For example, if a taxi licence leases for \$50,000 annually in Vancouver, then the regulator could offer existing firms, or qualified new firms, any number of additional taxis provided they were willing to pay a \$50,000 annual fee for each taxi. Existing taxis would be exempt. The actual amount would vary according to the current actual lease fees for taxi licences in each municipality (much lower outside the City of Vancouver). Initial levels would likely be established in consultation with the industry.

The result would be that taxis would be able to plan and expand their fleets based on market conditions, without having to go through a PC&N application process. Although the \$50,000 example is a stiff fee, it matches present market conditions. The regulator could also choose to protect only a portion of the present profitability by offering a lower annual fee, such as \$30,000 in our example. This would effectively reduce the lease value of taxi licences, since no one would lease a privately held taxi licence for \$50,000 when one could be had directly from the regulator for \$30,000. Among the alternatives, the regulator could choose to reduce the level of the annual fee gradually over a number of years (with corresponding impact on private lease rates of licence-shares).

In the absence of TNCs, replacing PC&N with a licence fee based system would allow the industry to gradually expand to meet potential demand, while protecting the level of profitability that exists in each region (or the level of profitability selected for protection by the regulator). Since TNCs have demonstrated potential demand is likely much higher than that presently served, the industry can expand supply at a rate that comfortably evokes greater consumer demand, without the regulator setting an arbitrary or forced expansion.

An entry price based approach also allows for competition and innovation within the industry. If a new provider has a service they believe is better and will generate more revenue from consumers than existing providers, they are free to take out new licences from the regulator, rather than having to secure existing licences from unwilling competitors. Drivers who wish to form their own cooperative taxi companies may do similarly. New companies would also be free to discover that their ideas are not valid, and could withdraw the taxis and cease paying the annual fee. Competitors in small and rural communities can consider launching a taxi service knowing the cost of entry (much lower than in the large cities), and without the uncertainty of the PC&N application process.

This approach is innovative for the taxi industry, although similar approaches have been taken in other quota and licensing areas. One jurisdiction that has implemented this approach is the State of Victoria, Australia. After an extensive review of world practices, the State of Victoria removed its taxi limits, replacing them with high annual fees for new licences. Existing taxi licences were exempt.

The Australian move was not well supported by the taxi industry, because the regulator had intentionally chosen to set its own annual fee at a lower level than prevailing licence lease rates in the industry. However, revenue from the new taxis entering the market was used to fund service improvements and partial compensation to the existing licence holders. This example of was cited by the Vancouver Taxi Association in raising the issue of compensation.

A further possibility is to offer different lease rates for full-time and part-time taxis. Part-time taxis might be licensed for a fixed number of hours (e.g., 20 hours per week). This would leave the industry free to determine how many part-time taxis were in use, and each firm would decide *when* those hours were best used – creating greater flexibility in responding to peak demand periods. Lease rates for part-time licences would reflect that part-time taxis would be used in the busiest and most profitable periods of the day. The price difference between part-time and full-time might best be established in consultation with the industry.

In the absence of TNCs, this approach offers the opportunity for expanding service significantly, while protecting existing levels of industry profitability in each region.

However, in the presence of TNC competition the situation necessarily changes. Taxi profitability and licence lease rates will drop in the large municipalities due to competition from TNCs. To be effective, an entry fee regulated taxi system would have to reflect the reality of lower licence lease rates among existing providers. Since the taxi industry itself would have a positive interest in seeing the licence fee for new taxis set at the right price for their own expansion, rates might be determined in consultation with the industry.

In summary, entry-price regulation through licence fees offers these advantages:

- **Flexible supply.** The industry is free to increase the number of taxis at a rate that business justifies.
- **Protection of historic investment by industry.** The value of present taxi licences can be protected to the degree selected.
- **Permits competition and innovation.** New firms or driver cooperatives are free to enter the industry in their area.
- **Promotion of service in small communities.** The cost of entry is known to potential small firms wishing to enter, without the uncertainty and delay of a PC&N process, or waiting for new licences to be released under a fixed taxi numbers regime.

- **Revenue generation.** Revenues generated by new entrants can be used to fund compensation, pay regulatory costs, or fund service improvements such as accessible taxi service.

Disadvantages are:

- **Risk of innovation.** There is only one other known example of this type of regime to learn from. Implementation will be learning by doing.
- **Potential large up-front costs for new entrants.** Although the fee required of new taxis would be annual, fees comparable to current private lease fees for licence-shares might represent a barrier for a new taxi company (e.g. in the examples used \$30 to \$50 thousand per vehicle for the first year).

4.2.5 Entry Price Regulation by Fee per Trip

A similar innovative approach is to regulate supply by charging new entrants a fee per trip. Meter rates would remain unchanged, and existing providers would be exempt. However, additional taxis licensed under this regime would be required to pay an extra fee per trip. The fee would deter excess entry in recessions, and ensure that entry only occurred when taxi demand was sufficient to generate enough profit for new entrants to cover the fee.

A common fee per trip might be set for all areas of the province, or it could vary by area to reflect the historic profitability and taxi licence-share value in that area.

While the use of per trip fees for entry regulation is innovative, government collection of fees per taxi trip is not. For example, the State of New York has long levied a fee per trip on New York City taxis to fund public transit and transportation infrastructure. Using modern technology, the Washington DC Taxi Commission levies a fee of 25 cents per trip on all vehicles for hire (including TNCs). The fee is collected electronically as a net deduction from each driver's credit card receipts, and is used to cover the cost of the Commission. A side benefit of this system for drivers is that credit card receipts net of deductions are placed directly in each driver's bank account. To achieve this system, the Washington Commission required all taxis to have meters and equipment to accept credit card transactions that are processed centrally.

To function as an entry management tool, the per trip fees paid by new entrant taxis would have to be significantly higher than the 25 cents charged by the DC Commission. A fee that fully preserved the profitability of the existing industry would be obtained by taking the annual taxi licence fee currently prevailing, and dividing by the average number of trips made by a full-time taxi.

The advantages and disadvantages of this approach are the same as for entry price limitation by annual fees. However, there are additional advantages:

- **Better coverage of peak periods.** By charging per trip, new taxis are free to allocate themselves to any time of day or length of shift they desire, rather than filling fixed hours. Part-time taxis can be brought in for peak-periods only, when customer demand generates revenue to justify the fee per trip in combination with other operating costs.
- **Easier for new entrants.** Payment is remitted as revenue is generated rather than in an up-front annual fee.
- **May be integrated with modernized credit card processing.** The implementation of this regime can be combined with modernization of taxi credit handling, as in the Washington DC example. In this case, there may be capital costs of meeting new equipment standards, offset by subsequent savings in handling costs and reductions in the percent fees charged for credit card

payment processors. Drivers too may benefit from prompt payment of credit card fares, resulting in reductions in driver resistance to customer use of credit cards.

- **Potential extension to TNCs.** In the case of TNCs entering BC, the fee-per-trip fee for new taxis could also be extended to them. This would be consistent with the policy objectives of preserving a floor level of profitability for existing taxis, and reducing the risk of excess entry of new vehicles-for-hire during an economic recession. It would also increase the potential funding available for accessible taxis.

TNCs are challenged to provide wheelchair accessible service, since TNCs rely on private household vehicles and few households own such vehicles. The responsibility tends to continue to fall on taxis. As discussed in Chapter 3, Toronto is a limited exception, but the city still relies on taxis for the bulk of accessible service. TNCs have paid a fee per trip to some municipalities in consideration of this.

Note that there is a limit to the sustainable fee that TNCs can pay. The fees TNCs volunteer to pay to municipalities is pennies per trip. In Canada, the largest per trip fee for TNCs is in Quebec's pilot experiment, where a sliding scale of \$1.10 to \$1.26 per trip is paid. While the latter fee would be enough to protect historical profitability in most of BC, it would not fully protect historical levels of profitability in municipalities where licence-share value has been high, such as the City of Vancouver and some of the surrounding municipalities.

We note that the entry price regulation by annual licence fee, and entry price regulation by fee per trip, can be used in combination to achieve desired results that vary by region.

4.2.6 Entry Regulation through Performance Standards

Another way to regulate the supply of taxis is to link the release of licences for new taxis to performance standards. The principal candidate is dispatch response times. Modern taxi dispatch systems record the time of incoming calls to the time the taxi is at the location, or the meter is turned on. Taxi companies can use this information to monitor the quality of their own service.

When there are not enough taxis, customers must wait, and response times get longer. A regulator can use this information to determine when to expand the supply of taxis, especially when analysis is detailed as to the time of day or week. Although very few jurisdictions collect this information, the City of Calgary does. Calgary also uses a formula based on a demographic profile (age and population), and implementation of the formula is subject to consultation informed by the performance data. The performance data is also used to measure the dispatch response time of accessible taxis to see if they are achieving comparable service to broader taxi service. Los Angeles uses dispatch performance data to manage its taxi franchise system.

To manage taxi supply based on performance, the regulator would set a standard of service that it believes to be reasonable, such as 90% of calls served within 15 minutes. If service fell below this standard, proportionately more taxis would be authorized.

Advantages of this approach include:

- **Based on objective data.**
- **Maintains quality of customer service.**
- **Minor costs to industry.** The capacity to provide this data is built into modern dispatch systems.

Disadvantages of this approach are:

- **Appropriate standard not clear.** While, traditionally, dispatch of taxi service within 15 minutes was considered adequate, this level is falling in urban areas as vehicle density increases and smartphones further automate dispatch. It is not clear what the current standard should be. Standards would also vary considerably by size and density of the population area.
- **Response time data may be biased.** When demand for taxis peaks, call centres may slow down the rate at which they answer calls. This is done partly to protect customers, since committing to delivering a taxi as late as an hour from when a call is answered means that neither the customer nor the driver will be sure the other will still be there. However, it means that not all delays may be captured by the system. Telephone systems can capture the missing data, but the capability of classic telephone systems is not as universal as the capabilities of taxi dispatch systems.
- **Significant costs of data processing and analysis.** Although the data is easily collected and received, processing the data into a usable form, and interpreting it, requires significant effort by the regulator.

As with fixed limits of taxis, performance monitoring is best used as an incremental approach where the status quo is acceptable, and the desire is to maintain the same service quality over time. The approach appears less useful in the context of markets that may be significantly undersupplied at present, and where the benchmark of achievable good service is changing.

4.3 SUGGESTED APPROACH TO REGULATING TAXI SUPPLY

Suggested approaches to improving taxi supply management are divided into suggestions for immediate action under the present regime, and consideration of a different regime for managing taxi supply.

Increased Supply under the Present Regime

As a measure that can be implemented quickly, it is suggested that the BC Passenger Transportation Board consider ways to allow existing taxi licensees the one-time opportunity to expand their licensed number of taxis by up to 15%. The availability of this opportunity should have an expiry date, and require that new taxi licences be put into use (activated) within 90 days.

The figure of 15% is significant enough to have an impact on service quality, without having a major detrimental effect on licence values. In the absence of TNCs, plate lease values may decline briefly, but can be expected to recover in the large cities where taxis are undersupplied and taxi licence-share values are higher. Fifteen percent is well below the expanded vehicle-for-hire trip volumes that have been seen when TNCs enter the market. In the presence of TNCs, the additional vehicles will help the industry compete and defend its market.

We note that this proposal is consistent with the suggestion of the BC Taxi Association to offer current licensees a one-time increase of from 10% to 15%. We also note that the City of Vancouver taxi market seems to be absorbing the recent increase of 175 taxis (approximately a 25% increase).²³ The suggested offer would be voluntary, in that taxi companies would not be required to accept.

For smaller communities, the measure offers the opportunity for current services to expand without going through the cost of a full Passenger Transportation Board application process with contesting intervenors.

²³ With the exception of converting and activating the required percentage of wheelchair accessible taxis.

The granting of additional taxis to existing licensees also offers some potential compensation for an anticipated decline in taxi licence values with the entry of TNCs. To the extent that taxi licences retain value, taxi companies can use or sell the new licence-shares, distributing the proceeds among their participating current licence-share holders.

The degree to which taxi licence-shares retain their value will depend in part on the method chosen to manage taxi numbers in the future.

Suggested Future Regime for Managing Taxi Supply

The present regime of *public convenience and necessity*, places the Passenger Transportation Board in the position of being a passive receiver of applications for taxis, and judge and arbiter of such applications after considering interventions by those opposed. It does not call for the regulator to proactively consider the sufficiency of taxi supply. In addition, the PC&N framework has resulted in implicit barriers to entry that have limited new entrants serving small communities, and limited the aggregate supply of taxis in larger BC municipalities. This is evidenced by non-industry stakeholder calls for more service in communities of all sizes. This request was articulated during consultations as a desire for the plentiful service seen in jurisdictions where TNCs are operating. It is also evidenced in larger municipalities by the accrued value of taxi licence rights.

It is suggested that British Columbia consider replacing the public convenience and necessity rules presently governing BC taxi supply, with a system that places a responsibility for the adequacy of total supply on the regulator.

It is further suggested that, as a replacement regime, British Columbia consider Entry Priced Regulation by Fee per Trip, as described above.

Unlike traditional fixed limits on the number of taxis, management by regulating the *cost* of entry leaves the taxi industry free to expand at its own rate, while offering the most flexibility in protecting the historical investments made by existing taxi providers. In the context of competition from TNCs, the proposed approach is superior to the common practice elsewhere of admitting TNCs into service, while leaving the taxi industry constrained by its present regulatory limits on numbers of taxis. The latter approach leaves the taxi industry with the worst of both worlds: declining value of their businesses, and being prevented from fielding sufficient vehicles to compete with the alternative services.

Of the regulation by entry price approaches discussed in this chapter, the use of trip fees is preferred over higher annual licence fees. It offers the greatest flexibility for accommodating part-time taxis to cover peak demand period. Supply can be responsive to more than just extra shifts on a weekend night. It can also cover smaller periods, such as morning rush hours, by allowing taxis to overlap their shifts at key periods. This gives taxis the flexibility to compete with alternative services like TNCs, which have this flexibility themselves. The fee per trip approach also allows new firms to pay the cost as they earn revenue.

Both entry price management approaches promote innovation by allowing individual firms with new ideas to obtain taxi licences and compete. They also meet the basic objectives of deterring excess entry without requiring the regulator to estimate requirements in advance. The industry is free to expand at the rate that profitability and demand growth justifies.

Governance Implications

The choice of entry management regime may affect the choice of what level of government should manage taxi supply. Governance issues are discussed in the next chapter.

5 MODERNIZING OTHER TAXI REGULATIONS

This chapter examines individual regulatory issues that were raised by stakeholders or emerged during analysis. The topics covered are:

- Taxi driver licensing and criminal record checks
- Driver qualifications and driver shortages
- Accessible taxi service
- Making shift change more efficient
- Insurance
- Price flexibility
- Data sharing
- Regulation of apps
- Industry proposal for a universal app

Governance issues, including respective roles of provincial authorities, are discussed at the end of the chapter in light of the considerations above.

5.1 TAXI DRIVER LICENSING AND CRIMINAL RECORD CHECKS

British Columbia’s current provision of a default vehicle-for-hire regime for the entire province, while giving municipalities authority to enact their own bylaws, has significant advantages in that it allows communities to choose the standards they deem appropriate locally. As discussed in Chapter 2, large municipalities are able to afford more extensive and demanding regulations, while small centres are concerned primarily with encouraging the provision of service.

However, an important jurisdictional gap occurs when municipalities rely on the default provincial regime and do not require taxi drivers to have municipally issued chauffeur permits with criminal record checks (CRC). Since many BC municipalities do not have a bylaw governing taxis, taxis in some parts of BC do not require criminal record checks of their drivers. This is largely in small and rural communities.

There are approximately 110 BC municipalities where taxis licensed by the Passenger Transportation Board operate. A comprehensive review of individual municipal bylaws was outside the scope of this study. However, estimates based on available lists suggest that, apart from Metropolitan Vancouver, 25% of taxis operate where drivers are not required to have a criminal record check. Taxi companies may have their own policy of requiring them, but there is no regulatory requirement. Table 5.1 is based on matching PT Board licensed operating areas to municipal boundaries.

Region	Licensed Taxis	Chauffeur Permit Required	No Permit Required	Required%
Metro Vancouver	2,091	2,089	2	99.9%
CRD	329	263	33	79.9%
Rest of BC	1,068	784	205	73.4%
Total	3,488	3,136	240	89.9%

For public safety, it is preferable that all licensed taxis be driven by drivers who are required to pass a CRC.

There is another side of this issue for highly urbanized areas such as Metro Vancouver. A complaint raised by taxi driver representatives was that drivers operating out of Vancouver International Airport must obtain a separate chauffeur's permit from each municipality they serve. This requires considerable duplication of effort, including multiple criminal record checks for the same driver. For drivers it also means considerable expense and time spent visiting each municipal office or police force to renew their licences.

It is suggested that British Columbia consider adding a provincially issued chauffeur's permit to the default regime for the province, including the requirement for a criminal record check, consistent with the British Columbia Guideline for Police Information Checks. Consideration should include the following:

- *The provincially licensing of chauffeur permits should be complementary to municipal chauffeur permits, where the latter exist.*
- *A provincial chauffeur's permit could be used in place of municipal permits. For example, airport taxi drivers in the Vancouver region would be able to obtain and renew just one chauffeur permit, instead of the several municipal permits that are required now.*
- *To encourage the primary use of municipal chauffeur permits, provincial chauffeur permit fees should be nominally higher.*
- *Provincial permits should be issued on a regional basis, with training requirements matching or exceeding the highest municipal driver training standards in that region. For example, municipalities in Metro Vancouver share a common requirement of a multi-day taxi driver training program, TaxiHost Pro, delivered by the Justice Institute of British Columbia.*
- *In the longer term, the provincial authority issuing chauffeur permits should develop a distance-learning program to serve regions of BC where municipally mandated taxi driver training programs do not exist. The content and duration of such programs should be developed in consultation with municipalities of that region, and take into consideration the impact of excessive training requirements on the ability to attract local taxi companies and drivers to provide service.*

The *British Columbia Guideline for Police Information Checks* is a standard for the conduct of criminal record checks for employees and volunteers working with vulnerable sectors of the population. The province currently has a *Registrar of Passenger Transportation* who oversees compliance with PT Board licences, including the registration and activation of individual taxis. This office might offer a base for the administration of provincial taxi chauffeur permits. The Registrar is a statutory office separate from the Passenger Transportation Board and part of the Ministry of Transportation and Infrastructure.

Modernizing Criminal Record Checks

Industry stakeholders in smaller communities report frustration with the length of time needed to obtain criminal record checks. Given the shortage of taxi drivers (discussed further below), requiring CRCs in smaller BC communities is a significant issue for taxi companies and the communities they serve.

In the past, delays in CRCs were seen as a problem across Canada. In the worst cases, manual processes required mailing fingerprints to RCMP offices in Ottawa, and having the prints hand matched to records. A significant backlog developed. Processing time was measured in months. Today, fingerprints are matched electronically, and may not be necessary if there is no criminal record for anyone of that name, gender, and birthdate. Given police officers who have received the appropriate training and a centrally linked fingerprint machine, a person with no record can be cleared in as little as two days (although this is not a promised service standard). Where fingerprints are required, a personal visit to a police station is necessary, but the process is still shorter than it once was, measured in weeks instead of months. The elapsed time includes a review of records by the authorities, and some judgement guided by *the British*

Columbia Guideline for Police Information Checks. Not all criminal offences, or pending charges, automatically disqualify someone from driving a taxi. For example, a marijuana offence from 20 years ago may not be considered relevant.

Based on history and current circumstance in smaller communities, industry stakeholders are concerned that not all regional police services are equally capable of processing CRCs checks in a timely manner.

BC has an effective system of criminal record checks of volunteers wishing to work with children, and other vulnerable people. The Criminal Records Review Program (CRRP) is a statutory program established by the province's *Criminal Record Review Act*. The CRRP processes a large volume of applicants given the large number of volunteers in BC working with vulnerable sector populations. Initial application is online, followed by the provision of fingerprints in person if required. Where a criminal record or items of concern emerge, but the individual wishes to proceed nonetheless, the CRRP has review officers who make a determination. The CRRP also has a fee structure based on cost recovery. The net result is a rigorous and high capacity system that uses the available technology to speed processing time.

It is suggested that British Columbia consider building on the existing capacity of the CRRP as part of the suggested regime of provincially issued chauffeur permits, in order to ensure that delays from criminal record checks do not become an obstacle to rural and small community taxi service. Considerations should include:

- *Potential use of existing provisions of the Criminal Records Review Program to work for client organizations. For example, the authority assigned responsibility for issuing the suggested provincial chauffeur permits might establish capacity quickly by contracting the CRRP to perform all criminal record checks.*
- *Future development of the provincial authority to provide its own review officers so that they may specialize in the application of criminal record check standards to the vehicle-for-hire industry.*

The number of taxi drivers associated with B.C.'s approximately 3,500 taxis is large. However, the intention is that most drivers will be checked through municipally issued chauffeur permits. Additional CRRP staff would be needed, but their cost could be recovered from application fees. We also note that the volume of BC volunteers processed annually by the CRRP is much larger than the population of taxi drivers.

In the context of TNC entry into BC, the potential volume of TNC driver CRCs is much larger. TNC drivers have high turnover, and the part-time vehicles mean there is a larger population at any moment. Addressing that workload is outside the scope of this study. However, establishing the capacity to handle provincially issued chauffeur permits for taxis could lay the groundwork and initial capacity to address TNC requirements.

5.2 DRIVER QUALIFICATIONS AND DRIVER SHORTAGES

Industry stakeholders agree that it is hard to attract enough taxi drivers in BC's growing economy. Additionally, they pointed out that the two extra years required to obtain a commercial driver licence means that new immigrants, traditionally a source of taxi drivers, often find other work before being able to qualify.

While the reported driver shortage might be taken as a problem shared with many industries in a growing economy, it is of particular concern for taxi service given:

- The expectation that taxi service should expand to higher volumes of service (inclusive of the 25% increase in taxis recently licensed for Vancouver, and the suggestion for a global increase of up to 15% in the previous chapter);

- The additional difficulties that would follow were TNCs to enter the BC market. When TNCs have entered markets elsewhere, they have drawn in large measure on existing and potential taxi drivers, competing with taxi companies for the same people.

In short, expanding the number of taxis does not provide additional service if there is no one to drive them.

Most British Columbians hold a Class 5 driver licence as required to operate their personal vehicles. BC requires taxi drivers to hold a Class 4 (restricted) commercial licence. A Class 4R permits the driver to operate commercial vehicles designed to carry up to 10 persons including the driver. Examples are taxis, limousines, ambulances, and other vehicles for hire. The principal differences between a Class 4 and Class 5 are:

- Higher scores (on the same road tests as Class 5).
- Regular medical checks.
- Expected knowledge of commercial driving practices, such as inspection of the vehicle prior to each period or shift of service.
- A minimum of two years driving experience (e.g., as a Class 5).
- A minimum age of 19 years.
- No more than four penalty point incidents in the previous two years and no driving related convictions in the previous three years.

Other Canadian provinces also require a commercial driver licence except for Ontario. Ontario requires only a Class G licence – the same as that held by most Ontarians for driving their private vehicles and the equivalent of BC’s Class 5.

The Class 4 commercial licence is not specific to taxis. A relevant question is whether the differences between Class 4 and the regular Class 5 are significant enough to warrant the requirement for taxi drivers, especially where municipalities require specialized training before issuing the also required municipal chauffeur permit. The TaxiHost training program required by Metro Vancouver municipalities includes an initial assessment as part of the training program (language ability may require separate assessment), and five days of training with respect to the basics of the taxi industry, representing the region to tourists, serving persons with disabilities, culture and gender sensitivity, and a day on collision avoidance driving.

A Class 5 driver licence with a TaxiHost Pro certificate is arguably at least equally qualified as a Class 4 driver to drive a taxi. The TaxiHost program covers similar ground as the knowledge required for Class 5, but focuses specifically on the skills required of a taxi driver.

It is suggested that British Columbia set specific minimum driving requirements for taxis that allow some or all Class 5 driver licence holders to drive taxis. Possible alternatives include:

- *Allowing Class 5 plus possession of a chauffeur permit issued by the province or a municipality (which will include the taxi driver training and other requirements for that region or municipality).*
- *Allowing Class 5 and with an age requirement of 25 years or more. Twenty-five is a common insurance industry rule-of-thumb for vehicle insurance and associated risks.*
- *Allowing Class 5 without restriction (but rely on other regulations requiring a chauffeur permit to set additional conditions to drive taxis).*

5.3 PROVIDING ACCESSIBLE TAXI SERVICE

Accessible taxis (termed WAVs in public transit literature), are taxis that have been converted to accommodate wheelchairs and other mobility devices. They are used to respond to taxi requests by mobility device users.

Individuals and organizations representing mobility device users feel very strongly that they should have on-demand taxi service at the same price, and with the same reliability and response time, as anyone else. This position was communicated clearly in stakeholder interviews. As the population ages, the number of people impacted by this issue is increasing, along with the family members and others who support them. Public transit agencies also want a greater number of accessible taxis available to provide cost-effective and more flexible service by contracting accessible taxis (e.g., TransLink's HandyDART).

This community was also supportive of the gains made in providing accessible taxi service, particularly in the City of Vancouver where 20% of full-time taxis are required to be accessible and mobility device users must be given priority in dispatch.

As elsewhere in the world, accessible taxis join the general dispatch taxi fleet and accept regular fares. The percentage of the whole taxi fleet is required to be accessible so that when a request is received, an accessible taxi is likely to be nearby.

Reliance on Licence-Share Values to Provide Accessible Taxi Service

Unknown to most outside the taxi industry is that the provision of accessible taxis relies heavily on the existence of high licence-share values. Accessible taxis cost more upfront (around \$35,000 to \$50,000 to adapt a van). They also cost more to operate because they require more fuel and drivers must take the time to assist with boarding and to secure the passenger. When a taxi licence-share is worth hundreds of thousands of dollars, taxi companies have no difficulty absorbing the higher cost of these vehicles and can offer drivers concessions on their dispatch fees to offset the higher costs of operation. However, if licence values fall, or are already low, finding willing taxi companies and drivers becomes problematic.

The issue of funding accessible taxi service emerges in these ways:

- **Larger communities** that have successfully implemented accessible taxi service may find it difficult to continue service if licence-share values decline. Existing companies may find it difficult to continue good service – there may be empty driver seats as drivers cannot be offered acceptable terms to drive the vehicles, and companies are slow to replace them. Taxi companies may be unwilling to expand if the addition of new taxis bears with it the cost of acquiring a proportionate number of costly accessible taxis.
- **Smaller communities** where taxi licence-share values are currently low or nonexistent may find that it is difficult to attract or retain taxi services due to the extra cost of providing a matching proportion of accessible taxis.

Should TNCs be permitted, taxi licence-share values are expected to drop significantly. With or without TNCs, the future value of licence-shares also depends on the choice of regime for managing the number of taxi licences issued, as identified in the previous chapter.

Since a high value for taxi licence-shares is a sign that taxi numbers have been overly restricted, an alternative method of funding accessible taxi service is desirable.

It is suggested that British Columbia begin developing an alternative framework for funding accessible taxi service, beginning with providing financial incentives for accessible taxis in smaller communities where taxi licence-share values are low or nonexistent. Potential revenue sources include funds generated from new taxi licence fees. The forms of financial support could include:

- *Assistance with purchasing or replacing accessible taxi vehicles.*
- *Per trip subsidy for serving accessible taxi trips, where electronic trip data sharing arrangements with taxi companies support performance monitoring and audit.*

5.4 MAKING SHIFT CHANGE MORE EFFICIENT

Taxis in BC's larger municipalities are run 24 hours a day, with a day shift and a night shift. At shift change, the day and night drivers must meet at a common place to transfer control of the taxi. This interrupts taxi service availability. In addition to the inefficiency, it means that customers sometimes experience trip refusals if the driver believes the trip cannot be completed before the shift ends (including the return trip to meet the new shift driver). Trip refusals will be especially high for longer trips, such as customers returning to the suburbs from the city core or rush hour trips where the driver believes that heavy traffic may delay their return trip – a sore point with BC customers. In addition, shift changes happen at about the same time for all taxis, resulting in an aggregate reduction in taxi service during this period.

Given the real time monitoring capabilities of current taxi dispatch systems, it is feasible to allow a licence for an individual taxi to be served separately by two vehicles, one working day and the other working night.

It is suggested that the Passenger Transportation Board consider allowing the number of taxis licensed to be served by separate day and night vehicles. It is also suggested that taxis be permitted to complete trips when a customer is already in the vehicle (i.e., meter on).

The feasibility of this suggestion depends in part on the ability to audit and ensure compliance with licence limit restrictions, so that both taxis operating under one licence are not in operation at the same time, apart from completion of a trip in progress at the end of the shift. (See data sharing discussion further below).

This suggestion should result in fewer trip refusals and more consistent capacity available throughout the day. We note this proposal was included in discussions by the Vancouver Taxi Association.

5.5 INSURANCE

Insurance is a significant portion of taxi operating costs, and the focus of much concern by taxi industry stakeholders. The level of insurance costs in BC was *not* part of the scope of this study. However, the *method* by which insurance fees are determined is relevant in two ways:

- **Insurance for part-time taxis.** One of the recent innovations by the PT Board was to license part-time taxis in urban areas like Vancouver to cover weekends and other periods of peak demand (e.g. busy cruise ship days, festive seasons). The present insurance schedule is not suited to part-time taxis. A vehicle is either deemed a taxi, or it is not. If it is a taxi, the full annual rate for insurance must be paid, even if the vehicle is only operated part-time. A work-around used by taxi companies is to take out temporary taxi permits each weekend, which allows them to get insurance as a reduced prorated portion of the annual rate. This is a paper intensive process, and a potential barrier to greater use of part-time taxis to provide flexible taxi supply.
- **Risk-basis for assessing taxi insurance premiums.** Prorating from an annual fee to one based on hours is not necessarily the most accurate method of linking an insurance premium to the degree of risk. Other risk-bases, such as kilometers driven commercially, may be better (subject to the city of operation and the claims record of the operator).

In the context of competition with TNCs, this is more than a technical consideration. Taxi companies want to know they will be charged the same rates as TNCs for the same or

comparable risks. TNC insurance policies authorized by other jurisdictions typically use kilometers driven while logged into the TNC system as a basis for insurance premiums. Insuring taxis on the same basis of risk assessment as for TNCs would help taxi companies achieve *transparency and comparability*.

It is suggested that British Columbia consider moving taxi insurance from a simple annual premium (for a given claims record and area) to a policy that distributes risk assessment and premiums proportionate to kilometers driven commercially (given the same other factors). As a start, this framework could be applied to insurance for part-time taxis in the areas where they are currently licensed, eliminating the current inefficiency of taking out temporary permits for each weekend.

Consultations with ICBC suggest that using kilometers as a basis for insurance premiums is feasible within the present authority of ICBC's regulator, the Public Utilities Commission. It is also part of the anticipated framework for insuring TNCs. The above suggestion has the advantage of laying groundwork to allow transparent comparison of the rates charged to different types of vehicles-for-hire.

5.6 PRICE FLEXIBILITY FOR TAXIS

One reason for the success of TNCs in other jurisdictions, and their popularity, is flexible pricing. The TNC business model includes pricing that responds to customer demand and driver supply. Attention is often given to the higher prices during weekend nights, or on New Year's Eve. Equally important are the lower prices offered in off-peak periods to attract more users.

TNCs are able to offer these lower prices, because they attract customers that are willing to shift the time of their trips, or take trips they otherwise would not have taken. While the revenue per trip is lower than the taximeter rate, the revenue per hour earned by the TNC vehicle is sustainable because they stay busy making more trips.

In contrast, meter rates are fixed in classical taxi regulation. Since the rate is fixed at an average requirement for all times of day, there are times when the rate is too high. It is typical of taxis in an off-peak period to spend a deal of time idle, even if a city is experiencing shortages at other times of day.

Allowing taxis to vary their rates downwards during off-peaks would allow them to stay busier, and take advantage of the same strategy that TNCs have used. In the absence of TNCs, the potential result is more revenue for the taxis, and lower price for consumers during off-peaks. In the presence of TNCs, letting taxis have this flexibility is essential for taxis to compete effectively. Otherwise, customers will move to using TNCs for the lower price, causing taxis to be even idler during off-peaks.

However, price flexibility is problematic for some types of trips. For street-hails, the meter is an essential innovation from long ago to set a fair price when a customer walks up to a taxi. It avoids time wasted haggling, and difficult situations when there is only one taxi and one customer, and it is raining (putting the customer at a disadvantage). Having a set meter rate also prevents disorderly conduct and bidding in taxi stands. For telephone dispatch, there is a different problem. There is the possibility of a misunderstanding of discounts offered over the telephone, and potential disputes. Going back to audio-records to resolve disputes would be resource intensive to investigate and enforce. Having set rates, based on the meter, avoids these issues.

It is the smartphone app, with its meter-like properties, electronic record, and potential to generate and confirm quotes in advance, that makes flexible rates possible.

It is suggested that British Columbia allow taxi companies the ability to discount below the meter rate when dispatching calls through smart phone apps. In the absence of TNCs, this offers taxi companies the

potential for higher utilization and revenues in off-peak periods, while offering consumers the benefit of lower prices.

The above suggestion generates an additional need for standards on acceptable performance by taxi apps in communicating and confirming estimated costs to the consumer, and in measuring the actual time and distance of a trip.

5.7 DATA SHARING

Taxi regulators within and outside BC often require taxi drivers to submit a written record of their trips, including origin and destination addresses. The City of Vancouver has such a requirement. Trip records are typically collected by taxi companies after each shift, and held for a number of years subject to requests from the regulator or the police. Taxi company hallways are commonly crowded with boxes of trip records.

Modern taxi dispatch systems collect this information electronically. This includes street hail trips since the location of meter-on and meter-off is recorded for each taxi. Some cities, such as San Francisco, have formally moved to electronic trip record filing as a paper saving improvement.

Collecting taxi trip data in electronic form is required to implement new regulatory measures including some of the improved approaches for managing the supply of taxis, auditing compliance with arrangements to allow day and night shifts to be served by separate vehicles, subsidizing accessible taxi trips, levying per trip fees, and basing insurance rates on kilometers driven.

Public transit agencies and municipal transportation planners agree strongly that trip data from both taxis and TNCs needs to be shared. In addition to its importance for better planning, such data is needed if congestion management is to be effective. Congestion is only expected to get worse, and could become critical if driverless vehicles become widely used. For example, it may become cheaper to keep a vehicle moving on the road than to park it. The roads could become collectively congested by driverless vehicles-for-hire roaming around, waiting for trip assignments. Public policy to manage this kind of congestion requires a working data system that records the time and location of vehicles.

It is suggested that the Passenger Transportation Board consider making the provision of data on individual trips a condition of licensing for all taxis licensed by provincial authorities. Considerations include:

- *Implementation for new taxi licensees first.*
- *A phased implementation for existing licensees, beginning with larger companies in urbanized areas, and paced with the regulator's growth in ability to receive and utilize the data.*
- *Privacy protection standards for the use and sharing of the data. For example, data released to transportation planners and academics can be generalized to remove specific addresses and replace them with the geographic zones (e.g., the first three letters/digit of the postal code).*

5.8 REGULATORY STANDARDS FOR TAXI APPS

The use of smartphones has enabled TNC success. After some initial failures, taxi companies, taxi equipment providers, and software developers around the world have become increasingly successful at developing functional taxi apps to compete. The contest is ongoing, as TNCs continue to improve the functionality of their apps.

From a taxi regulatory perspective, the smartphone fills three roles:

- **Dispatch.** Includes confirming with the customer the estimated cost or basis of the charge.

- **Soft Meter.** The app can use the smartphone in place of the taximeter to measure travel time and distance and calculate the charge.
- **Payment Processor.** The smartphone app can directly charge the customer's credit card (usually pre-registered) to process payment and/or a tip for the driver.

Traditional taximeters have well developed standards for performance and testing. Taximeters are exempt from Canadian weights and measures as Canadian regulators rely on U.S. federal standards. However, standards for using smartphones as "soft meters" have not yet been fully developed.

The PT Board has begun developing a set of general standards for the form and content of the above three functions, notably in its November 2016 "BC Taxi Soft Meter Rule" governing taxi companies. The rule specified minimum requirements for disclosure of information to passengers about the trip, the accuracy of trip measurement if used in place of a taximeter, and information on the receipt. Also included were standards for a "fare announcer" to accommodate people with vision impairments.

It is suggested that the Passenger Transportation Board continue to develop a provincial standard for the use of smartphone apps in taxi dispatch. Consideration should include the following (portions of which are included in the recent PT Board Rule):

- *Disclosure of estimated fare in advance, with accuracy within defined tolerances.*
- *Option for the taxi company to commit to a fixed fare in advance, based on an approved rate structure (clarifies consumer understanding, especially if discounting in off-peak periods is allowed).*
- *Shielding of personal information. For example, if the app permits telephone contact between the driver and passenger to facilitate pick-up, the passenger's telephone number should not be revealed to the driver (or vice versa).*
- *Accommodation measures for those with disabilities. For example, in addition to the PT Board's voice announcer, the ability of a customer to request notification through the app of taxi arrival using common text message formats. The latter was an issue raised to the study team by multiple stakeholders. The text message format allows users with vision disabilities to use their own software to process or announce the information.*
- *Features that will better serve passengers with service animals. This controversial issue requires careful resolution. Possibilities include preregistering drivers with documented allergies, and allowing passengers to voluntarily self-identify if they have a service animal.*

5.9 REMOVING REGULATORY BARRIERS TO COOPERATION – THE INDUSTRY PROPOSAL FOR A UNIVERSAL TAXI APP

As detailed in Chapter 3, the taxi industry has proposed a universal app in which all taxi companies would participate. The proposal was developed with the advent of TNCs in mind. It includes individual TNC drivers and their vehicles, but implicitly excludes TNC companies such as Uber and Lyft, as well as local TNC services that exist or may develop. The concept is still in development and details of somewhat different proposals from BC's two major taxi associations have yet to be worked out. However, there is enough commonality to comment and suggest measures that would facilitate the valuable parts of the "One App" proposal.

The proposed app is built around a good idea: taxi companies cooperating to allow passengers to move more easily between municipalities (actually between licensed operating areas that often conform only roughly to municipal boundaries). The idea is to provide passengers across BC with a single app that can be downloaded to request taxis. Based on their point of origin, the app would assign a taxi licensed for that area to serve them. However, if such a taxi is not reasonably available, then an outside taxi that is

close to the customer would be assigned. The proposals differ in the rules suggested governing when an outside taxi would be assigned.

This functionality has these advantages:

- **Reduced deadheading and improved service.** For example, it reduces the number of suburban taxis and airport taking customers to downtown Vancouver, and then returning empty even when there are customers in Vancouver wanting to go back to the same municipality. Reducing deadheading will also mean that more capacity of the fleet is used to meet peak load demand, increasing availability and shortening wait times.
- **Reduced trip refusals.** One of the reasons taxi drivers refuse to take long trips across boundaries is the likelihood of having to deadhead back. It is a customer complaint that drivers do this, even though the Passenger Transportation Act, the Taxi Bill of Rights and some municipal bylaws require they accept the fare. If taxis from all regions are registered with the app, there is an increased likelihood that a driver will receive a return trip even if they leave their home operating area.

Absent TNCs, the proposal for a shared app offers improved service to customers. The reduction in trip refusals will be of benefit to all customers, whether or not they use the app themselves. In the presence of TNCs, a cooperative app and reduced deadheading will be necessary to compete effectively. This is particularly true if TNCs are licenced to operate on a regional or province-wide basis without the border restrictions placed on taxis. Even if TNCs are licensed to single municipal zones, the boundary rules will be difficult to enforce due to the unmarked nature of TNC vehicles.

A potential barrier to a cooperative app among companies is the overlap and potential conflict of municipal and provincial jurisdictions (see Chapter 2). The PT Board licence gives taxis the right to take return and reverse trips in specified circumstances. However, municipalities have the authority to govern trips originating in their jurisdictions, including forbidding Board approved return and reverse trips. Thus, it is in the power of the City of Vancouver to forbid any taxi service, including return trips by taxis licensed for service in other municipalities. Access of suburban taxis to Vancouver has long been an issue.

If a consortium is to invest in a shared taxi app, it would be important to provide assurance that the regulatory framework enables without question the key feature of allowing cross border trips by taxis in both directions.

To facilitate cooperation by taxi companies in offering consumers a shared taxi app, it is suggested that British Columbia consider ways to resolve the overlap in jurisdiction between the province and municipalities, at least to the extent that the right of taxis to accept return trips to their home operating areas is assured.

A Single Mandated App Not Suggested

The positive aspects of the One App proposal must be separated from the suggestion that the government commit all BC's consumers to using it —which would effectively commit the province to mandating a private monopoly. In addition to the issues of granting such a monopoly, there is also the risk of tying future service to the success of a single software provider. Software projects often fail.

Regulatory reform should remove barriers to regional or province wide cooperation among taxi companies. However, it is conceivable that more than one “universal” app might arise, offering wide regional coverage, and possibly overlapping in the participating taxi companies. The success and dominance of such apps will depend on their winning taxi companies and customers with effective features and service.

It is suggested that British Columbia consider financial support to consortiums of taxi companies proposing to develop or purchase a shared taxi app. Consideration should include:

- *Preference for proposal(s) with the largest participation of taxi companies and associated regional coverage.*
- *If wide cooperative agreement by the industry is not forthcoming, support should be given to two proposals, one from each of the principal British Columbia taxi company associations.*

5.10 GOVERNANCE CONSIDERATIONS

Which level of government is appropriate for regulating taxis — provincial, regional, or municipal? Does the answer differ depending on the matter subject to regulation, such as regulation of aggregate taxi supply, or driver training standards?

The following observations help define an approach:

- **Providing a default provincial regime is valuable.** BC's current provision of a default provincial regime ensures that new taxi services can be launched in any part of the province. At the same time, it saves considerable resources for smaller municipalities that decide to use the default regime and not maintain their own taxi licensing regime.

Taxi regulation is demanding in resources. In addition to normal licensing activities, effective regulation requires analytic support to set taxi supply and to keep up with technological innovation in dispatch, vehicle equipment, and related matters. Even large municipalities find it hard to maintain sufficient analytic capacity. If each BC municipality had just one analyst (apart from licence clerks, bylaw officers, and police time), that would translate to at least 110 analytic staff. Fewer resources can be used at a provincial level to obtain more effective results, especially for smaller communities.

- **Municipal choice is important.** As discussed in this report, the choice of how much to require of taxi drivers and vehicles, is a community choice that varies by preference and by the size of the municipality. The present regulatory structure allows municipalities this choice. Large municipalities, like Victoria, can choose to rely on the provincial framework for some things, while others, like Vancouver, can choose to make their own choices with respect to all regulatory functions.
- **Municipalities do a lot of work that should be preserved.** Where municipalities choose to have taxi bylaws, they invest quite a bit of resources in licensing and enforcement. While there may be only one manager or policy officer dedicated on a full-time basis, many person years are needed to conduct annual vehicle inspections, meter accuracy checks, licensing, complaints investigations, and appeals. All of these generate value for the community, or the municipalities would not undertake them. For example, taxi vehicle inspections by municipalities do not repeat the provincial safety requirements. Instead, they ensure presentable and quality vehicles that protect and promote the reputation of the community.
- **Clear authority is needed for the regulator mandated to determine the supply of taxis.** The present system in which taxis require permission from *both* municipal and provincial authorities leaves no one in charge of ensuring there are enough taxis in a region. The potential for conflicting rules between the municipal and provincial authorities over return trips is also problematic, as discussed above.
- **Regional authorities have advantages over single municipalities in integrated urban areas.** Areas like Metro Vancouver have a high degree of economic integration, and large numbers of taxi passengers who regularly move across municipal boundaries. The interdependence of municipal economies suggests that if the province delegates its present authority, it should be to regional authorities.
- **Regional authorities also face challenges in taxi regulation.** Regional regulation of taxis does not necessarily mean the integration of taxis into a single regional operating zone or set of

bylaws. A decision on integration will be contentious within the region. For example, in Metro Vancouver, merging Vancouver taxis with those from surrounding municipalities would mean substantial financial losses for Vancouver operators. Their business volume and corresponding licence-share values would fall to a pooled regional average. Suburban operator licence-share values would rise a corresponding amount. The difference in value of urban versus suburban taxis is a principal source of conflict in the industry, and for taxi regulation. On the other hand, if a regional authority does not merge taxi operating areas, then the separate jurisdictions are maintained. The result may be simply to put a duplicative layer of regional government over the existing municipal regimes.

- **Transit agencies relate better to the taxi industry as customers than as regulators.** There is more than one kind of regional authority. In addition to regional municipal authorities, there are British Columbia's transit authorities. On the surface, it appears logical to put all transportation modes under one roof. San Francisco has put taxi regulation under its transit authority with reasonable success. However, failure is also possible. There is an underlying culture clash between public transit and the taxi industry. Public transit tends towards a command and control culture in which transit vehicles adhere to schedules and routes. The taxi industry involves layers of independent contractors who are used to freedom of movement and choice. Calgary experimented with placing taxi regulation under its public transit authority, and ended the experiment after a few years.

Considering these points, along with the issue analyses in this chapter, it is suggested that British Columbia consider a governance arrangement along these lines:

- *The province continue to provide a default regime for licensing taxis, with the addition of closing the gap in criminal record checks for drivers by issuing a provincial chauffeur permit (supplemental to municipal chauffeur permits as suggested in this report).*
- *The provincial regulatory authority be mandated to delegate its authority to a regional municipal authority that request it do so.*
- *Where regional delegation has not been requested:*
 - *Provincially licensed taxis and drivers be allowed to move freely within their provincially mandated operating areas, including free movement across municipal boundaries. This addresses the regulatory barriers to regional cooperation, including the development of cooperative apps.*
 - *Provincially licensed taxi companies must still meet the vehicle standards and inspection requirements set by the principal municipality in which they operate.*
 - *Having a provincial operating authority and meeting municipal requirements for taxi vehicles and inspection shall be sufficient for carrying out all the functions of the provincial operating authority. Provincially licensed taxis shall not be subject to aggregate limits on the number of taxis set by the municipality.*
 - *A provincially licensed taxi that meets municipal bylaw requirements on vehicle and inspection standards shall be issued the relevant municipal operating licence(s). In setting vehicle and inspection requirements, municipal bylaws shall not make a distinction between provincially licensed taxis, and any other taxi licensed by municipality. (At present, there are no municipally licensed taxis other than those licensed by the PT Board. However, the possibility of a separate class of municipally licensed taxis may exist under municipal powers granted by the Local Government Act and the Vancouver Charter.)*

- *Municipalities retain their present powers to set vehicle and inspection requirements for taxis operating in their jurisdiction. They also retain any potential powers to issue additional licences for taxis operating within municipal borders. Municipalities retain the power to license taxi drivers, subject to recognition of the provincially issued licence for taxi drivers operating provincially licensed taxis. As suggested earlier, the expectation is that provincial chauffeur permits for a region would be supplemental to existing municipal chauffeur permits. The standard for the regional permit would match the highest standard applied by municipalities in that region, as established in consultation with the municipalities in each region.*

The above arrangement frees the provincial regulator to regulate the number of taxis in each region, and gives licensees the freedom to move independently of municipal restriction, while continuing to require compliance with municipal conditions on individual vehicles. Municipalities retain current powers other than this and, on a regional basis, may request complete delegation of provincial jurisdiction over taxis.

The intention of these suggestions is to strike a compromise between the need for a single authority to manage taxi supply on at least a regional basis, and the preservation of municipal powers to exercise community choice. Where regional delegation has not been requested, the provincial authority would be free to manage taxi supply, and to set operating areas and terms for licensees.

Historic municipal powers remain largely intact, including any potential ability to institute a separate class of municipally issued taxi licenses operating solely within the respective municipal borders. Should a municipality exercise this right, the municipally licensed taxis would constitute an additional supply that could potentially conflict with provincial policy objectives. To date, such municipal powers have not been exercised. Given good performance by the provincial authority, and the additional option of requesting regional delegation, there should be no reason for conflict in management of taxi supply to arise.

6 LIST OF SUGGESTIONS AND CONSIDERATIONS

This chapter provides a summary of the suggestions and considerations offered in the two analytic chapters of this study.

CHAPTER 4

Increased Supply under the Present Regime

As a measure that can be implemented quickly, it is suggested that the BC Passenger Transportation Board consider ways to allow existing taxi licensees the one-time opportunity to expand their licensed number of taxis by up to 15%. The availability of this opportunity should have an expiry date, and require that new taxi licences be put into use (activated) within 90 days.

Future Regime for Managing Taxi Supply

It is suggested that British Columbia consider replacing the public convenience and necessity rules presently governing BC taxi supply, with a system that places a responsibility for the adequacy of total supply on the regulator.

It is further suggested that, as a replacement regime, British Columbia consider Entry Priced Regulation by Fee per Trip, as described above. (Detailed in Chapter 4).

CHAPTER 5

Taxi Driver Licensing and Criminal Record Checks

It is suggested that British Columbia consider adding a provincially issued chauffeur's permit to the default regime for the province, including the requirement for a criminal record check, consistent with the British Columbia Guideline for Police Information Checks. Consideration should include the following:

- *The provincially licensing of chauffeur permits should be complementary to municipal chauffeur permits, where the latter exist.*
- *A provincial chauffeur's permit could be used in place of municipal permits. For example, airport taxi drivers in the Vancouver region would be able to obtain and renew just one chauffeur permit, instead of the several municipal permits that are required now.*
- *To encourage the primary use of municipal chauffeur permits, provincial chauffeur permit fees should be nominally higher.*
- *Provincial permits should be issued on a regional basis, with training requirements matching or exceeding the highest municipal driver training standards in that region. For example, municipalities in Metro Vancouver share a common requirement of a multi-day taxi driver training program, TaxiHost Pro, delivered by the Justice Institute of British Columbia.*
- *In the longer term, the provincial authority issuing chauffeur permits should develop a distance-learning program to serve regions of BC where municipally mandated taxi driver training programs do not exist. The content and duration of such programs should be developed in consultation with municipalities of that region, and take into consideration the impact of*

excessive training requirements on the ability to attract local taxi companies and drivers to provide service.

It is suggested that British Columbia consider building on the existing capacity of the CRRP as part of the suggested regime of provincially issued chauffeur permits, in order to ensure that delays from criminal record checks do not become an obstacle to rural and small community taxi service. Considerations should include:

- *Potential use of existing provisions of the Criminal Records Review Program to work for client organizations. For example, the authority assigned responsibility for issuing the suggested provincial chauffeur permits might establish capacity quickly by contracting the CRRP to perform all criminal record checks.*
- *Future development of the provincial authority to provide its own review officers so that they may specialize in the application of criminal record check standards to the vehicle-for-hire industry.*

Driver Qualifications and Driver Shortages

It is suggested that British Columbia set specific minimum driving requirements for taxis that allow some or all Class 5 driver licence holders to drive taxis. Possible alternatives include:

- *Allowing Class 5 plus possession of a chauffeur permit issued by the province or a municipality (which will include the taxi driver training and other requirements for that region or municipality).*
- *Allowing Class 5 and with an age requirement of 25 years or more. Twenty-five is a common insurance industry rule-of-thumb for vehicle insurance and associated risks.*
- *Allowing Class 5 without restriction (but rely on other regulations requiring a chauffeur permit to set additional conditions to drive taxis).*

Accessible Taxi Service

It is suggested that British Columbia begin developing an alternative framework for funding accessible taxi service, beginning with providing financial incentives for accessible taxis in smaller communities where taxi licence-share values are low or nonexistent. Potential revenue sources include funds generated from new taxi licence fees. The forms of financial support could include:

- *Assistance with purchasing or replacing accessible taxi vehicles.*
- *Per trip subsidy for serving accessible taxi trips, where electronic trip data sharing arrangements with taxi companies support performance monitoring and audit.*

Making Shift Change More Efficient

It is suggested that the Passenger Transportation Board consider allowing the number of taxis licensed to be served by separate day and night vehicles. It is also suggested that taxis be permitted to complete trips when a customer is already in the vehicle (i.e., meter on).

Insurance

It is suggested that British Columbia consider moving taxi insurance from a simple annual premium (for a given claims record and area) to a policy that distributes risk assessment and premiums proportionate to kilometers driven commercially (given the same other factors). As a start, this framework could be applied to insurance for part-time taxis in the areas where they are currently licensed, eliminating the current inefficiency of taking out temporary permits for each weekend.

Price Flexibility

It is suggested that British Columbia allow taxi companies the ability to discount below the meter rate when dispatching calls through smartphone apps. In the absence of TNCs, this offers taxi companies the potential for higher utilization and revenues in off-peak periods, while offering consumers the benefit of lower prices.

Data Sharing

It is suggested that the Passenger Transportation Board consider making the provision of data on individual trips a condition of licensing for all taxis licensed by provincial authorities. Considerations include:

- *Implementation for new taxi licensees first.*
- *A phased implementation for existing licensees, beginning with larger companies in urbanized areas, and paced with the regulator's growth in ability to receive and utilize the data.*
- *Privacy protection standards for the use and sharing of the data. For example, data released to transportation planners and academics can be generalized to remove specific addresses and replace them with the geographic zones (e.g., the first three letters/digit of the postal code).*

Regulatory Standards for Apps

It is suggested that the Passenger Transportation Board continue to develop a provincial standard for the use of smartphone apps in taxi dispatch. Consideration should include the following (portions of which are included in the recent PT Board Rule):

- *Disclosure of estimated fare in advance, with accuracy within defined tolerances.*
- *Option for the taxi company to commit to a fixed fare in advance, based on an approved rate structure (clarifies consumer understanding, especially if discounting in off-peak periods is allowed).*
- *Shielding of personal information. For example, if the app permits telephone contact between the driver and passenger to facilitate pick-up, the passenger's telephone number should not be revealed to the driver (or vice versa).*
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- *Features that will better serve passengers with service animals. This controversial issue requires careful resolution. Possibilities include preregistering drivers with documented allergies, and allowing passengers to voluntarily self-identify if they have a service animal.*

Industry Proposal for a Universal App

To facilitate cooperation by taxi companies in offering consumers a shared taxi app, it is suggested that British Columbia consider ways to resolve the overlap in jurisdiction between the province and municipalities, at least to the extent that the right of taxis to accept return trips to their home operating areas is assured.

It is suggested that British Columbia consider financial support to consortiums of taxi companies proposing to develop or purchase a shared taxi app. Consideration should include:

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Governance

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