2023 Update:
Economic Effects of Covid-19 on the BC Passenger Transportation Industry

Hara Associates

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Economic Effects of Covid-19 on the BC Passenger Transportation Industry

Prepared for:

Passenger Transportation Board

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Executive Summary

In the interest of the long-term well-being of the passenger transportation industry of British Columbia, and to fulfil the Passenger Transportation Board's mandate under the Act, the Board must ensure it has access to current economic data and analysis so that it may render sound, objective evidence-based decisions.

The Board recognizes the significant impact of the Covid-19 pandemic on British Columbia's economy, and the resulting challenges the province's passenger transportation industry faces. In 2021, the Board launched an investigation to better understand the new economic landscape as a result of Covid and its effects on the passenger transportation industry, pursuant to section 27 of the Passenger Transportation Act. The results were published in *Economic Effects of Covid-19 on the BC Passenger Transportation Industry* (termed the 2021 Study in the present document).[1]

This report is a follow-up to the 2021 Study and covers the current state of recovery from Covid for the passenger transportation industry in BC.[2]

This 2023 study investigates the impact of Covid on monthly trip volumes for taxis and Transportation Network Services (TNS). TNS is sometimes termed *rideshare* or *ride hailing.*[3] Prior to the advent of Covid, the Board had issued TNS licences to a number of companies. These included international companies (e.g., Uber, Lyft), BC companies (e.g., Kabu, Lucky to Go, Ripe Rides), and Canadian companies operating in other jurisdictions (e.g., Uride, TappCar).

Also investigated are the consequences for operating costs and market share for both types of licensees. Data was collected from participating licensees and combined with data already filed by companies with the Data Warehouse of the Ministry of Transportation and Infrastructure. Analysis includes Covid's impact on broader economic factors relevant to the passenger transportation industry. Among these are unemployment rates, airport passenger volumes, and hotel occupancy.

TRIP VOLUMES

BC Passenger Trips up 38% over Pre-Covid Levels

While Covid is still with us, the BC economy has largely recovered. Does this recovery include the passenger vehicle-for-hire industry? One indicator is whether passenger trips have recovered or exceeded pre-Covid volumes. This study investigated total trip volumes (taxis and TNS) in five regions of BC. Table E-1 summarizes the results.

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[1] *Economic Effects of Covid-19 on the BC Passenger Transportation Industry*. Hara Associates Incorporated (2021). https://www.ptboard.bc.ca/sites/default/files/2023-05/Economic_effects_of_Covid19_on_the_industry_Hara_2021.pdf

[2] For terms of reference see https://www.ptboard.bc.ca/news/2022-12/passenger-transportation-board-conduct-follow-investigation-current-state-covid-19. The follow-up is conducted under section 7 of the Act, meaning that no applications are directly affected by this study.

[3] The accuracy of these terms is subject to some debate in BC and elsewhere.

Table E-1 Estimated Passenger Trips per Month Pre and Post-Covid - Taxis and TNS Combined				
Region	**April 2019 (Pre-Covid)**	**Peak Impact of Covid (April 2020)**	**Post-Covid (April 2023)**	**%Change of Post Covid over Pre-Covid Covid/Pre-Covid**
1 Lower Mainland & Whistler	1,671,811	388,167	2,538,894	51.9%
2 Capital	177,045	46,265	226,610	28.0%
3 Vancouver Island excluding Capital Region	565,815	271,290	574,463	1.5%
4 Okanagan-Kootenay-Boundary-Cariboo				
5 BC North Central & Other Areas				
All BC*	**2,414,671**	**704,874**	**3,331,493**	**38.0%**

*** Regional numbers may not add to BC total due to a few small taxi companies licensed in more than one Region.**

The impact of Covid on trip volumes was severe. In the peak impact month of April 2020, shortly after the advent of Covid, trip volumes in BC had fallen to 704,874, less than one third of the 2.4 million in the previous April.

Since then, total passenger trips have more than recovered their pre-Covid levels of 2019. The volume of trips in April of 2023 was an estimated 3.3 million, up from 2.4 million in the comparable month prior to Covid of April 2019. That is a 38% increase over pre-Covid levels. The recovery has been driven by the general recovery in economic activity and a provincial population growth of 7% between 2019 and 2023.[4] Hotel occupancy, an important factor affecting vehicle-for-hire demand, has also recovered to pre-Covid levels in most communities. Additional growth has been generated through new demand by passengers for TNS service.

Largest Growth in Lower Mainland - Trips up 51.9% Led by TNS Growth

The recovery has varied by region. Most of the growth beyond pre-Covid levels comes from one region, the Lower Mainland and Whistler. Trips grew 51.9% over pre-Covid levels, largely driven by the expansion of services by two TNS companies, Uber and Lyft.

TNS companies are a recent arrival in BC. Amendments to the Passenger Transportation Act allowing TNS took place in the fall of 2019. Licensed operation began in January of 2020, just months before the advent of Covid.

While most BC TNS companies reduced activity or delayed their launch because of Covid, Uber and Lyft had sufficient scale and resources to continue their planned offerings of service. The two international companies were licensed only for Lower Mainland and Whistler.

[4] March 31, 2019 estimate of 5,048 thousand to March 31 2023 estimate of 5,437 thousand. Quarterly Population Estimates Table 17-10-0009-01, release date 2023-06-28.

TNS trips expanded rapidly in the Lower Mainland as the industry recovered, from 138,985 in April 2020 to 1,674,098 in April 2023 (yellow line in Figure E-1). Their volume is now roughly twice that of taxis, giving them a two-thirds share of the Lower Mainland market.

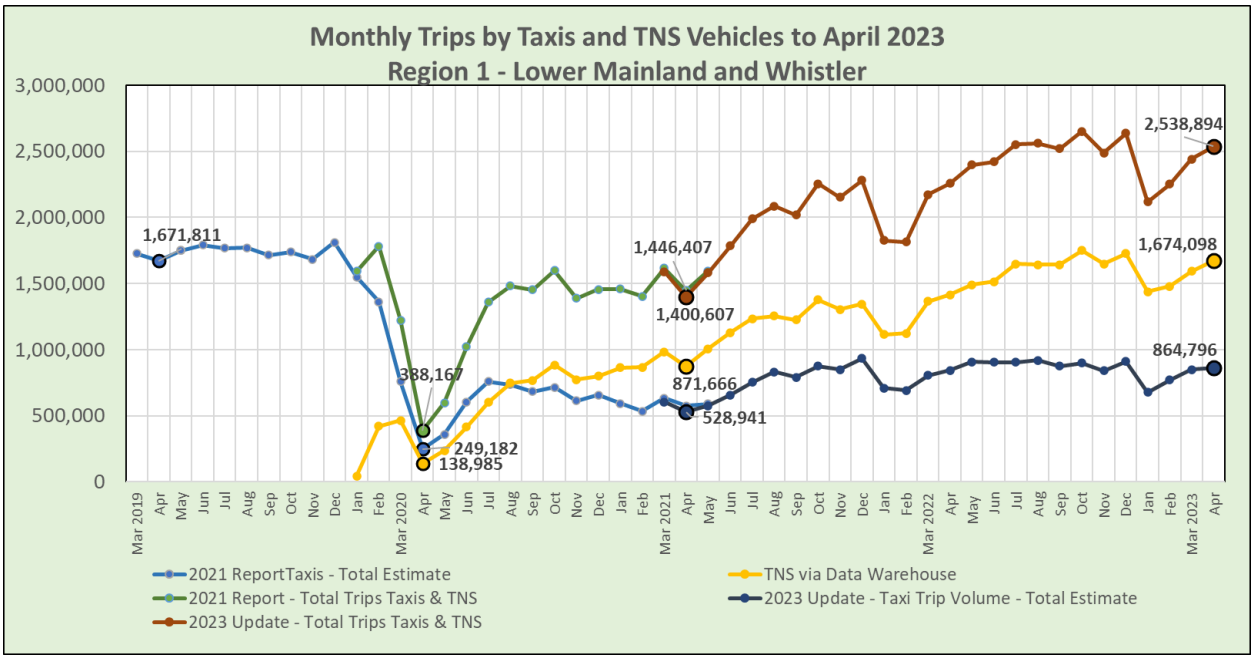

Figure E-1

Lower Mainland Taxis Lost Market Share – Now at Half Pre-Covid Levels

Figure E-1 shows combined trips of taxis and TNS to be an estimated 2.5 million in April 2023 in the Lower Mainland, up 51.9% over the pre-Covid volume of 1.6 million in April 2019.[5] Of the 2.5 million total trips, roughly 1.7 million are TNS trips. The remainder are taxi trips at an estimated 864,796. Taxi trips recovered from their Covid low of 249,182 trips, but remain at half their pre-Covid levels (1,671,811 trips in April 2019 vs. the 864,796 in April 2023). Thus, while total trips expanded significantly over pre-Covid levels, taxi company trips did not. Taxi market share fell from 100% before Covid and before TNS licensing, to about one-third of the market in 2023.

Capital Region Trips up 28%

Capital Region passenger trips rose 28% compared to pre-Covid, a good recovery but less than the 51.9% seen in the Lower Mainland. Unlike the Lower Mainland, there was no strong TNS alternative offered to passengers during the recovery. Virtually all of the gain represented growth in taxi trips. Total trips increased from an estimated 177,045 trips pre-Covid in April 2019 to 226,610 trips in April 2023.

The picture for Capital Region may be different in the future. Uber, a key player in the Lower Mainland's large trip growth, has acquired ReRyde, a licensed but inactive BC TNS. With that acquisition, Uber obtained the licence to operate in Capital Region and other regions of BC in

[5] 2023 estimates used a different sample of taxi companies than the 2021 Report, resulting in somewhat different estimates of total trips. The difference is shown in the gap between the red line (2023) and the green line (2021) Report in the overlapping month of April 2021.

addition to its current licence for the Lower Mainland and Whistler.[6] It is possible that Lyft may pursue a similar strategy, also acquiring a BC TNS firm that is underutilizing its licence for the other regions of BC.

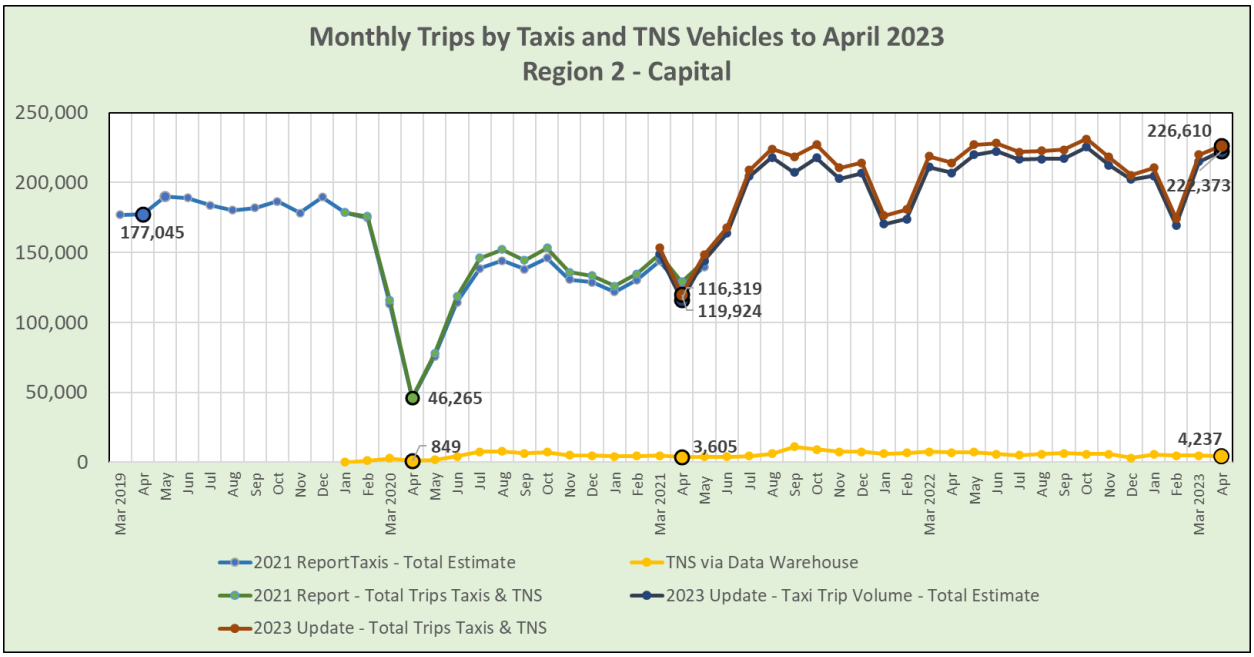

Figure E-2

Did TNS Companies Add to Total Trips?

Trips in the Lower Mainland grew by 52%, while trips in Capital Region grew 28%. The principal difference appears to be the vigorous TNS activity in the Lower Mainland where Uber and Lyft were licensed. Other factors were similar for both urbanized regions, including recovery in unemployment rates, hotel occupancy, and airport passenger volumes.

If we attribute the much higher growth in the Lower Mainland to passengers having a highly available TNS option, this report estimates that roughly one third of TNS trips were new trips, while the other two thirds would have taken place with taxis if the TNS option was not available to passengers. These new trips represent additional value to the passengers who chose to take them, along with related additional income for local eateries and entertainment etc., which were among the beneficiaries of these added trips.

It is helpful to remember that taxis and TNS are similar, but not the same. For example, taxis offer the option of fixed meter rates (no surprise on the return trip Saturday night), greater regulatory supervision, and marked vehicles. TNS offers greater reliability of supply at peak

[6] The transfer of an existing operating licence to a new owner requires the approval of the Passenger Transportation Board……However, the scope of the Board's discretion is more limited than is the case for a new licence application……As per paragraph 125 of the Board decision, under the legislation governing the Board "*The only consideration on a transfer application is whether the transferee is fit, proper, and capable of providing the service*." Other criteria that apply to a new license application do not apply to a transfer: *"…the Board is not to consider whether there is a public need for the service or whether the application, if granted, would promote sound economic conditions in the passenger transportation business in British Columbia*" The full text of the May 9 2023 decision allowing the licence transfer may be found at https://www.ptboard.bc.ca/decisions/2023/15824-22 .

times (provided you are willing to pay the peak TNS prices), and a different culture of interaction between drivers and passengers. The higher volume of trips is a result of offering passengers greater choice, not the inherent superiority of one service or the other.

Data for public transit's recovery for Covid is also reviewed. It is found to be similar for both the Capital Region and the Lower Mainland, indicating that the new trips generated by TNS availability in the Lower Mainland's did not come from passengers substituting TNS for public transit.

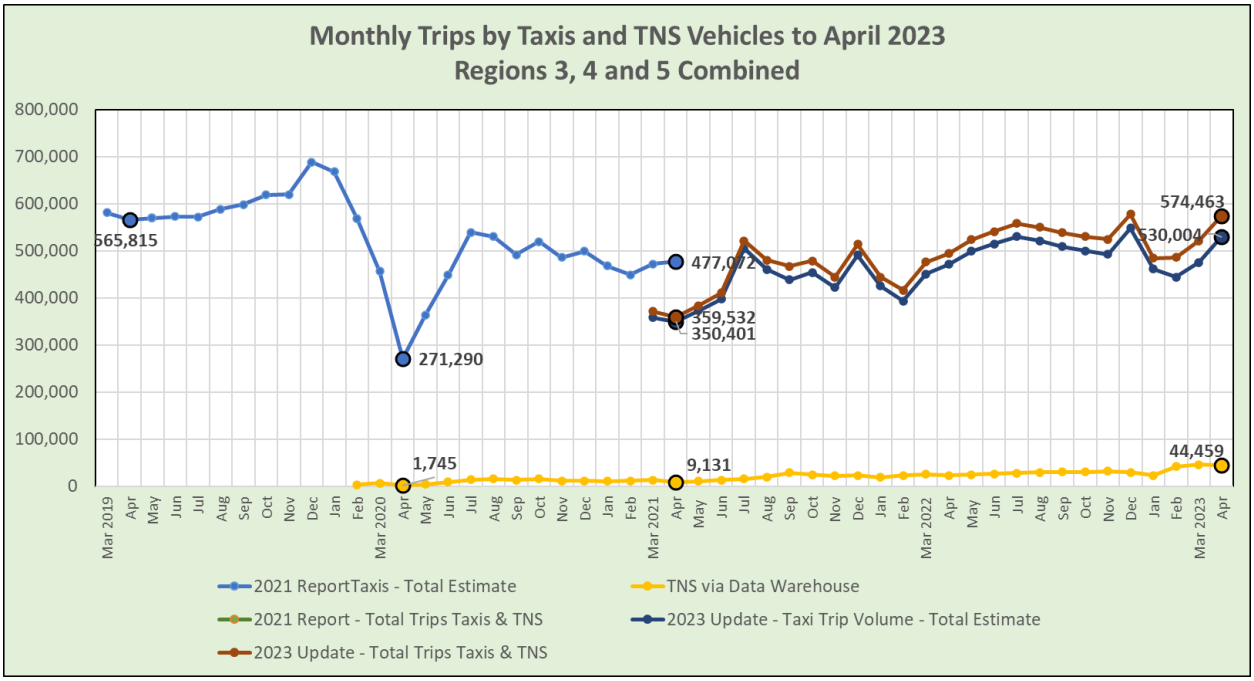

Figure E-3

Trip Volume Recovery Tepid in Other Regions of BC at 1.5%

Other regions of BC have largely recovered to pre-Covid levels of activity but not with much additional growth. Figure E-3 shows consolidated total trips for the three remaining regions analyzed for this 2023 study:

- Region 3: Vancouver Island excluding Capital Regional District
- Region 4: Okanagan-Kootenay-Boundary-Cariboo
- Region 5: BC North Central

The three regions are shown together in order to display TNS trip volumes. TNS trip counts are not currently available individually for regions 3, 4 and 5.[7] More detailed breakdowns of regions 3, 4, and 5 are provided in the main text and appendices.

[7] TNS companies may be licensed for more than one region, and only report their trips in aggregate to the Ministry's Data Warehouse. The Data Warehouse also collects GPS coordinates of individual trips, but the accuracy of this data has not yet been tested. We may identify which TNS companies are primarily active in Regions 3, 4, and 5 using their conditions of license, public press releases of the commencement of operations, and reviews of web site content and functionality.

The blue line shows the estimated total trips to April 2021 shown in the 2021 report. The red line shows total trips estimated for subsequent months in the 2023 update. Due to differences in the sample companies reporting in the 2021 study versus the 2023 study, the 2023 estimates (red-line) are more conservative – showing a lower number for the shared month of April 2021. Because of this conservatism, the recovery for these regions is likely more than shown. Looking at the 2023 sample by itself, trips for participating companies grew 59% between 2021 and 2023 (from 359,352 to 574,463, April to April).

Other TNS Companies Now Expanding in Regions 3, 4, and 5

Some TNS companies who had suspended or limited their operations because of Covid reactivated in the summers of 2021 and 2022.[8] These companies concentrated their reopening in the smaller urban areas of regions 3, 4, and 5.

As a result, TNS growth in these regions has been rapid, quadrupling from 9,131 trips in April 2021 to 44,459 in April of 2023. While still a modest 7.7% of trips in these regions, continued growth at this rate will result in larger numbers. Taxi companies in these regions are keenly aware of this competition, as well as the recent entry of Uber after its acquisition of ReRyde. Uber announced the launch of service in Kelowna and Chilliwack (Region 4) on June 6, 2023.[9] As an indication of future intentions, Uber's website now also lists Nanaimo (Region 3), and Prince George (Region 5) as service areas, although it appears that service has not actually commenced at time of writing of this study.[10]

Driver Shortages and Other Business Conditions

The recovery of trip volumes does not necessarily mean the recovery of profitability. The 2023 study surveyed taxi companies on business conditions.[11]

Taxi company respondents spoke to:

- **Significant driver shortages.** 71% of companies reported more or significantly more difficulty finding drivers in BC's tight labour market (Figure E-4). In the Lower Mainland, 100% of companies reported more difficulty.
- **Inability to field all their vehicles despite consumer demand.** Companies reported that they had to improve financial terms for drivers, and that licence holders had to drive more shifts themselves in the absence of drivers. Despite these efforts, some companies reported being unable to field licensed vehicles because of the driver shortage.

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[8] See for example: https://vancouverisland.ctvnews.ca/new-ride-sharing-company-uride-coming-to-nanaimo-1.6164696 and https://ckpgtoday.ca/2022/10/21/uride-launches-in-prince-george/

[9] https://www.cbc.ca/news/canada/british-columbia/uber-launch-victoria-kelowna-1.6866579#:~:text=22-,Ride%2Dhailing%20company%20Uber%20will%20begin%20operations%20in%20Victoria%2C%20Kelowna,protests%20from%20local%20taxi%20companies.

[10] The Board decision on the transfer of ReRyde's licence called for a three-month notice to the Board before service was offered outside Regions 2 and 4. The listing of Prince George (Region 5) and Nanaimo (Region 3) appears preliminary.

[11] Interviews were also conducted with selected TNS companies. However, TNS companies do not have a pre-Covid history in BC sufficient to comment on recovery of business conditions in the province.

- **Higher costs of vehicles and fuel.** The cost of vehicles, especially used vehicles, rose during Covid and have not yet come down. Fuel prices have risen as well.
- **Company net revenues down.** With the loss of market share to TNS companies, rising costs, and a lower take per taxi in order to retain drivers, net revenues are down. A few companies report they are running net losses.
- **Regulated meter rates not keeping up with costs.** (see below *Considerations Looking Forward* for Board's current measures on this question).

The impact of competition with TNS companies was also frequently cited, both in the Lower Mainland and in other regions.

Section 5 of this report provides paraphrased texts of taxi company survey responses that lend a sense of immediacy to the above.

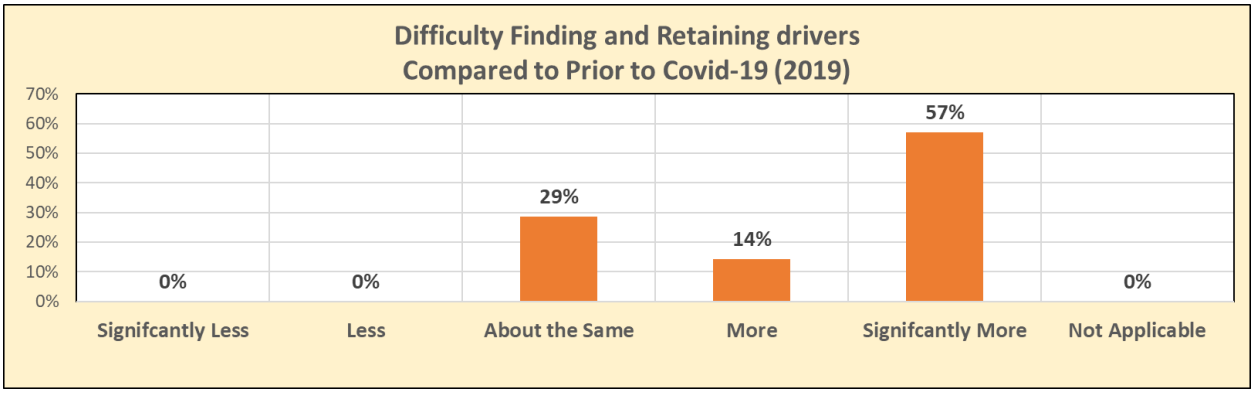

Figure E-4

Considerations Looking Forward

The study concludes with observations for consideration in future Board decisions. These include:

- **Moving Past Covid.** While Covid has not gone away, the health of the vehicle-for-hire industry now centres on emerging events, such as continued restructuring of the industry with the introduction of TNS, regional impacts of climate change (e.g., heat domes, fires), and the current struggle of the Bank of Canada to moderate inflation.
- **Driver Shortages, Rising Costs, and Meter Rate Regulation.** It is suggested the Board review its meter rate setting process to better relate adjustments to changes in the costs of operation, instead of the Consumer Price Index. It is noted *that the Board has already taken significant steps towards addressing this issue. First it has initiated a review under the current system to provide immediate meter rate relief to the industry in the context of recent high rate of general inflation, allowing taxi licensees to apply for up to 7.3% rate increase in 2023. For the future, the Board is undertaking to create "a custom Taxi Cost index that calculates custom inflationary and cost-of-living increases more applicable to the taxi sector."*[12]

[12] https://www.ptboard.bc.ca/news/2023-08/taxi-rates-cost-living-adjustment-2023

- **Rate Squeeze and Driver Shortages.** A particular risk when meter rates do not keep pace with operating costs is that taxi companies operating under fixed meter rates will lose drivers to TNS services which have flexible rates that respond to consumer demand. This was termed a *rate squeeze* in the 2021 report. Company survey responses suggest this might be happening now, especially in less urbanized parts of BC.
- **Impact of industry restructuring on accessible taxi service.** As taxis and TNS find their new competitive equilibrium, it is important to monitor the impact on service to persons with disabilities, especially to wheelchair users. Expectations for providing this service fall primarily on taxis which, unlike TNS, have the "duty to serve" embodied in practice, legislation, and municipal bylaws. The BC Provincial Government's recent announcement of funding assistance for accessible taxis through the new Passenger Transportation Accessibility Program (PTAP) is acknowledged as helpful with this issue.[13]

[13] https://news.gov.bc.ca/releases/2023MOTI0009-000119

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1 Introduction

In the interests of the industry's long-term well-being, and to fulfil the Board's mandate under the Act, the Board must ensure it has access to current economic data and analysis so that it may render sound, objective evidence-based decisions.

The Passenger Transportation Board recognizes the significant impact of the Covid-19 pandemic on British Columbia's economy, and the resulting challenges the province's passenger transportation industry continues to face. In 2021, the Board launched an investigation to better understand the new economic landscape as a result of Covid and its effects on the passenger transportation industry, pursuant to section 27 of the Passenger Transportation Act. Results were published in *Economic Effects of Covid-19 on the BC Passenger Transportation Industry* (termed the 2021 Study in the present document).[1]

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This study updates the investigation of the impact of Covid on monthly trip volumes for taxis and Transportation Network Services (TNS). TNS is commonly termed *rideshare* or *ride hailing.*[3] Prior to the advent of Covid, the Board had issued TNS licences to a number of companies. These included international companies (e.g., Uber, Lyft), BC companies (e.g., Kabu, Lucky to Go, Ripe Rides), and Canadian companies operating in other jurisdictions (e.g., Uride, TappCar).

Also investigated are the consequences for operating costs and market share for both types of licensees. Data was collected from participating licensees and combined with data already filed by companies with the Data Warehouse of the Ministry of Transportation and Infrastructure. Analysis also includes review of Covid's impact on broader economic factors relevant to the industry. These include unemployment rates, airport passenger volumes, and hotel occupancy.

This 2023 study was conducted by Hara Associates, who authored the 2021 Study. Comparable methodologies were employed in the update. Hara Associates is a firm of economists specializing in vehicle-for-hire regulation. The firm has advised regulators in Canada, the United

[1] *Economic Effects of Covid-19 on the BC Passenger Transportation Industry*. Hara Associates Incorporated (2021). https://www.ptboard.bc.ca/sites/default/files/2023-05/Economic_effects_of_Covid19_on_the_industry_Hara_2021.pdf

[2] https://www.ptboard.bc.ca/news/2022-12/passenger-transportation-board-conduct-follow-investigation-current-state-covid-19

[3] The accuracy of these terms is subject to some debate in BC and elsewhere.

States, and overseas for over 25 years. Past work in British Columbia includes *Modernizing Taxi Regulation* (2018) for the BC Ministry of Transportation and Infrastructure. This work preceded legislative reforms passed by the BC legislature that year.

Role of Data and Stakeholder Consultation

This report aims to provide what available data can tell us. It is intended as an input to Board's understanding of current economic conditions. Stakeholder consultations for this study were limited to the collection and interpretation of data. However, some companies and individual operators submitted comments. A selection of comments received is provided in the analysis of Covid effects on each region.

Regions

Analysis addresses five regions:

- **Region 1: Lower Mainland, Whistler.** Includes Metro Vancouver, Fraser Valley, and Squamish-Lillooet;
- **Region 2: Capital.** Includes Capital Regional District;
- **Region 3: Vancouver Island excluding Capital Regional District.** Includes Cowichan Valley, Nanaimo, Comox Valley, Alberni-Clayoquot, Strathcona, Mt. Waddington, and Qathet (Powell River);
- **Region 4: Okanagan-Kootenay-Boundary-Cariboo.** Includes Okanagan-Similkameen, Central Okanagan, North Okanagan, Kootenay Boundary, Shuswap Cariboo, Thompson-Nicola, and Columbia;
- **Region 5: BC North Central.** Includes Fraser-Fort George, Bulkley Nechako, Kitimat-Stikine, Peace River, Northern Rockies, North Coast, Island Trust, and Sunshine Coast.

2 Data Sources

There are two sources of data for taxi and TNS trip volumes: those reported regularly to the Ministry of Transportation and Infrastructure Data Warehouse, and responses to surveys issued for this study in 2021, and for this 2023 update.

Data Warehouse Coverage Improved Significantly in 2023

Following legislative reform in late 2018, taxi and TNS licensees have been required to provide a complete record of passenger trips taken. Details include dispatch wait time, trip duration, fare, type of call (dispatch, street hail, advance booking), whether an accessible vehicle is used, origin, destination and similar information. Data on each trip is to be submitted to the Data Warehouse of the Ministry of Transportation and Infrastructure.

This information is normally recorded in modern company dispatch systems. The legislation and regulations require that the information be shared to support decision making, assist provincial and municipal enforcement, protect customers, and respond to complaints.

Data Warehouse records began in September 2019, with a full month of records beginning in October 2019. Unfortunately, full implementation was disrupted by Covid in March 2020. As of the 2021 report, most Lower Mainland companies were reporting, but many companies in other regions had not yet begun. In addition, the quality of the data was an issue for some companies, notably with respect to fare amount and trip duration. Data quality issues are discussed where relevant in the 2021 report, and also in this 2023 update.

Table 1 shows the percentage of the taxi fleet making regular reports to the Data Warehouse consistently enough to be used to estimate changes in trip volumes over time. There has been a significant improvement in regional coverage in 2023, compared to 2021. For example, in Region 3 (Vancouver Island excluding Capital Region) the Data Warehouse was able to provide reports representing 53.5% of the licensed fleet in 2023, compared to zero in 2021. Regions outside the Lower Mainland experienced similar improvements.

Coverage in the Lower Mainland is very good in both 2021 and 2023. The somewhat lower 2023 percentage in Region 1 does not reflect fewer firms reporting to the Data Warehouse. Rather it reflects increased stringency applied in 2023 in screening reports for data quality and inclusion in the 2023 estimates. Some Region 1 firms had gaps in reporting after 2021 but had resumed reporting by 2023, possibly due to a change in dispatch systems or suppliers. Where gaps were too large, or reporting basis appeared to have changed, these firms were dropped from the sample. The remaining Region 1 sample, at 83.3% of that region's fleet, means that measurement of changes in trip volume in that region were still highly reliable.

Table 1 – Percent of Licensed Taxi Fleet Covered by Data Warehouse and Used in Quantitative Estimates

Data Source	Region					
	1	2	3	4	5	All BC
2021	91.3%	44.1%	0.0%	10.8%	0.0%	67.1%
2023	83.3%	87.3%	53.4%	39.6%	49.0%	75.2%

TNS Reporting to Data Warehouse Also Improved

In 2021, the vast majority of TNS trips were in Region 1, and were well captured by the Data Warehouse. Region 1 was where the known large international companies (Uber, Lyft) were licensed. Their reports were complete as were other reports from TNS companies in Region 1. However, TNS firms licensed for other regions were smaller, and had their launch plans disrupted by the advent of Covid. Activity by TNS firms in regions 2,3,4 and 5 was low and reports spotty. As noted in the 2021 report, some new TNS licensees had suspended operations.

This changed in 2022. As reported in this study, TNS firms in the other regions have increased their activity, including public announcements of the resumption of service. Data Warehouse reports by TNS in regions outside the Lower Mainland have increased correspondingly. In some

cases this includes backfiling of TNS activity reports for earlier months. These corrections to historical months have been incorporated in the historical TNS volumes reported in this 2023 study, including restatements of any TNS activity in months prior to the 2021 report.

Lower Response Rate to 2023 Survey Compared to 2021

The second source of data was taxi company responses to the survey circulated by the 2021 study and again by the 2023 update. The full text of the 2023 survey is provided in Appendix A.

In 2021, all licensed taxi companies were asked to provide their own estimates of trip volumes by month. This was necessary to have a baseline of the 12 months of activity prior to Covid (and prior to the Data Warehouse coming into operation). It was also necessary because of the gaps in regional coverage of the available sample of reporting taxi firms in the Data Warehouse at that time.

The 2021 survey was strongly supported by the principal taxi company associations, The British Columbia Taxi Association (BCTA) and the Vancouver Taxi Association (VTA). The chief means of circulation of the 2021 survey was by the associations to their members, along with a covering letter of their own recommending that the survey be filled and returned. Survey response rates were good.

Underlying the good support for the 2021 survey was the desire for the industry to tell its story about the impact of Covid on trip volumes, as well as a desire to ensure an accurate alternative to the early Data Warehouse reports.

The survey for the 2023 study had a much lower response rate, only 14 firms representing 23.4% of the licensed fleet in BC, compared to 62% of the fleet in 2021. (See Table 2). Reasons for the lower response rate are discussed further below.

Table 2 – Percent of Licensed Taxi Fleet Providing Survey Responses on Trip Volume

Data Source	Region					
	1	2	3	4	5	All BC
2021	72.7%	37.6%	36.2%	24.8%	64.4%	62.0%
2023	29.0%	0.0%	25.8%	18.6%	5.0%	23.4%

Combined 2023 Sample is Good

Table 3 reports the percentage of the licensed taxi fleet in each region included in the study sample for 2021, and for the 2023 update.

Overall, there were slightly more of the licensed fleet in the 2021 sample, at 79.8% versus 76.2%. However, the 2023 sample is stronger in its improved representation in regions outside the Lower Mainland, particularly regions 2, 3, and 4.

Table 3 – Combined Percent of Licensed Taxi Fleet in Study Sample						
Year of Study	**Region**					
	1	**2**	**3**	**4**	**5**	**All BC**
2021	92.6%	73.9%	36.2%	35.6%	64.4%	79.8%
2023	84.8%	87.3%	53.4%	39.6%	49.0%	76.2%

Interpretation of Charts: Percentage Growth Versus Total Trip Estimates

The sample is sufficient to give a strong measure of the percentage growth in trips each year, especially in the Lower Mainland, where the sample is close to the total fleet size.

In regions 2 to 5, the sample is also good for measuring the rate of growth, however it is less reliable for estimating the total number of trips. For example, if the trips in the sample grew by 15% in a period, it is a fair estimate that taxi trips for all companies in that region grew by a similar percent.

Interpretation of estimated total trips requires more care. The estimated number of trips is affected by which taxi companies are included in the sample. In the absence of reports from companies not in the sample, it assumes the reported number of trips per taxi is the same as the companies for which data has been provided. For example, if half the fleet is included in the sample, the estimated total number of trips would be twice the number reported by the sample. While this is reasonable in the absence of additional information, we know that not all taxi companies are the same, especially in less urban regions where there is a variable number of shifts run by each taxi, depending on the local degree of urbanization and customer density. Trips can also be longer (and fewer) in less urban regions.

This issue is visible in the charts in this study. The period from 2019 to 2021 is estimated from the sample companies used in the 2021 report. The 2023 update is based on a potentially different sample of companies, resulting in different estimates of total trips. To keep the result transparent, line graphs show *both* estimates for the months of March and April 2021. The gap between the two estimates of total trips for the same months indicates the degree of difference because of different companies having reported in 2021, than in the 2023 update.

In the Lower Mainland, where the sample is most complete in both the 2021 and 2023 studies, there is very little difference in the estimates. For other regions, larger differences are visible in the charts in the two overlapping months.

For determining whether trips have recovered to pre-Covid levels, the important question to ask is whether the percentage growth has been positive for both periods, and whether the combined growth reported brings us back to pre-Covid levels regardless of the differences between the sample used in 2021, and the sample used in 2023.

The impact of differences in the sample companies for the two time periods is addressed in analysis of each region in this report.

Taxi Companies Concern: Recovery in Trip Volumes Not the Same as Recovery in Profitability

While both taxi company associations endorsed the 2023 survey to their members, support was less than in 2021. The associations expressed concern that trip volume may have recovered from Covid, but that reporting on this alone would be misleading, as there are continuing pressures on costs of operation, some of which had their origin in the Covid period. Examples included driver shortages, the high cost of vehicles, high fuel costs, and delays in delivery of vehicles.

There was also the question of competitive pressure from TNS operations on taxi company profitability. This pressure is already present in the Lower Mainland, where Uber and Lyft are licensed and commenced activity shortly before the 2020 advent of Covid in BC. In addition, there is a strong fear by taxi companies in the Capital Region (Region 2), where Uber's recent acquisition of ReRyde would allow the TNS company to begin operations in the Capital in 2023.[4] ReRyde is licensed for all five regions, however the Capital is the biggest new BC market opened by Uber's acquisition of the company and the one where a launch of service is already beginning. Uber held its "grand opening" at Victoria International Airport on June 6, 2023 (just after the sample period reviewed by this study).[5]

The taxi company associations raise a very valid point. Changes in trip volumes are an incomplete measure of the health of the industry and recovery from the effects of Covid. While the volume of trips is an important indicator, other factors also affect the level of profitability for those trips.

Respecting this concern, the 2023 survey also asked taxi companies about changes in business conditions relevant to costs and net revenues from operation. The full text of the questionnaire is provided in Appendix A. Companies were asked how the following had changed relative to the year prior to Covid (2019):

- Difficulty finding and keeping drivers
- Concessions to contract clients
- Proportion of shifts driven by the licence or licence-share holder themselves
- Company fees charged to drivers who were not licence or licence share-holders

[4] The transfer of an existing operating licence to a new owner requires the approval of the Passenger Transportation Board.....However, the scope of the Board's discretion is more limited than is the case for a new licence application.....As per paragraph 125 of the Board decision, under the legislation governing the Board "*The only consideration on a transfer application is whether the transferee is fit, proper, and capable of providing the service*." Other criteria that apply to a new license application do not apply to a transfer: *"…the Board is not to consider whether there is a public need for the service or whether the application, if granted, would promote sound economic conditions in the passenger transportation business in British Columbia*" The full text of the May 9 2023 decision may be found at https://www.ptboard.bc.ca/decisions/2023/15824-22 .

[5] See, for example https://vancouverisland.ctvnews.ca/uber-hosts-grand-opening-at-victoria-international-airport-1.6429790

- Company fees charged to licence holders or licence share-holders

There were also open questions inviting companies to express how they would assess their company's current ability to operate and earn a reasonable rate of return for their effort and investment, and to name the most important current factors in their own view.

Taxi company responses to these questions are addressed in the analytic sections of this report.

3 Data Quality Issues

All taxi company reports from both data sources showed the same pattern of a strong decline in trip volume in March/April 2020 when Covid and associated government restrictions on movement and economic activity began. This was followed by a partial recovery to depressed levels in the months that followed and were reported in the 2021 report.

The period from 2021 to 2023 shows the same consistency in reports. Regions outside the Lower Mainland all showed a continuing recovery in trip volumes for the sample taxi firms. In the Lower Mainland, reports by each firm were also consistent, but differed from the other regions because of competition with the TNS firms. Although total trips by combined TNS and taxis grew beyond pre-Covid levels in Region 1, taxi firms reported tepid growth from 2021 to 2023 because they lost market share to TNS companies licensed to operate there.

The common pattern of reports in each region lends credibility to submissions by each company, and the net results recorded. The full story of TNS and taxi competition is reported in the analytic sections of this report.

Adjustment for "Rapid Meter"

While the number of firms reporting to the Data Warehouse has improved significantly since 2021, some of the data quality issues noted in the 2021 report remain. These issues may also affect trip volume estimates provided directly by companies to this update study.

There is an important distinction between all trips reported by the taximeter to the central system, and trips that actually involve a passenger and revenue. Taxi drivers will often have to reset their taximeters (similar to rebooting a computer), to cope with day-to-day hardware and software issues. The most common way to do this is to turn the meter on and off, effectively registering as a very short trip. One colloquial term for this is "rapid meter." The study requested monthly counts of taxi trips, such as those used by company management, that report real, or revenue, trips.

Trips reported to the Data Warehouse are in raw form and, depending on the company, may include rapid meter even among trips tagged as "completed" (as opposed to cancelled or no-show).

One approach to removing these non-revenue trips is to discard trips that show either zero revenue, or just the drop rate (no distance charge). Unfortunately, the fare reported to the Data Warehouse is often blank, either entirely, or for a great many of the trips taken. This may be related to the industry's historical reluctance to share revenue data, combined with the relationship that each company has with its individual taxi operators (who may hold their Board licence independently). Even the most compliant taxi companies are reporting fares for only some trips.

Another approach is to use trip duration in minutes. This is reported more consistently to the Data Warehouse. However, it is problematic in that a surprising portion of reported trips are very short, and not consistent with reported fares – which may be either blank, or much higher than could be earned for that duration. This data inconsistency was also noted in the 2021 study, along with potential causes.

After reviewing the data quality of individual companies, the study chose not to count trips that were reported cancelled or no shows, and any trip that lasted only one minute or less. This reduction was applied to both taxi and TNS trips. The approach eliminated the rapid meter issue, but also eliminated some trips that were likely real. Overall, counts of trips from the Data Warehouse files were reduced by 8.6% in the 2021 report, and 10.8% in this 2023 study. The increase suggests slightly lower data quality among the new firms reporting more recently to the Data Warehouse.

The net result of screening was to reduce the trip count in this study, by an average of 10.8%. These counts are understated to the extent that individual taxi drivers cancelled their meter and negotiated fares with customers. However, the reduction by month was approximately proportionate, meaning that the story told over time of the percent decline in trip volume from Covid remained the same before and after cleaning the data.

Choosing between Data Sources

In some cases, companies that were reporting through the Data Warehouse also provided their own history of trip counts by month directly to the study.

When both data sources were available for the 2023 update, this study used the numbers provided directly by the company. The story told by each data source was the same, but the revenue-trip counts provided directly by companies were judged likely to better capture the number of revenue trips.

Filling in Gaps in Reporting

Companies in the sample may not have reported data for all months due to changes in software or other issues. The following approach was used to fill in missing months:

- Short gaps of one or two months were filled by interpolating between the company's reported volume in the first full month before the gap, and the first full month after the gap. For example if May was reported at 80,000 trips, June data was missing, and July was 100,000 trips, then June was assigned an estimated 90,000 trips for that missing month.
- Longer gaps were filled by assuming the change in the monthly trips in the missing months were proportionate to the changes reported by other companies sharing that geographic area. This approach for longer gaps was needed to account for the seasonal variation in trip volumes. The first method of linear interpolation does not capture seasonal variation when the gap in months spans more than one season.
- Companies that had reported only a few months of data were not included in the sample.

Projecting Last Month and Earlier Months

One of the virtues of obtaining information from Data Warehouse is that it is available on demand, although there can be a slight delay due to the timing of reporting and data entry. For this report, the Data Warehouse had complete data up to March 2023, and mostly complete data for the April 2023 (the last month shown in the charts). Where a company had incomplete data for the final month, it was assumed that its growth in trips for that month was the same as other companies of its type (taxi or TNS) in that region.

Similarly, to estimate taxi trips for a company in the months prior to Data Warehouse reports, total trips were assumed to change proportionate to the monthly change in trips reported to the study in each region.

Projecting to Total Taxi Trips

To estimate total taxi trips in each region, the sum of trips by reporting companies was increased in proportion to the size of the nonreporting taxi fleet in each of the five regions.

This projection from the sample to the whole may understate the loss of business from Covid. It treats nonreporting companies as performing similarly to those that had reported. In reality, the nonreporting taxi companies include those that had ceased operation or downsized to the point of being unable to make reports. *Comments from a few of these are included in the qualitative information for each region.*

For greater transparency, graphs in this report show the estimated total taxi trips by month (solid lines), and the volumes reported by the sample (dashed lines).

Total TNS Trips

TNS trips reported to the Data Warehouse were taken as total trips for all TNS companies. As discussed under Data Sources above, TNS activity in regions outside the Lower Mainland had been negligible but experienced a resurgence in 2021 and 2022. The resurgence included TNS firms in those regions updating reports for historical months. TNS trip volumes reported for these regions were corrected to reflect the backfiling of historical data. For the period 2019 to 2021, TNS trip volumes reported in this 2023 study may be higher than reported in the 2021 report, although still a small proportion of trips outside the Lower Mainland.

TNS activity outside the Lower Mainland is discussed in the analytic sections of this study.

Assigning Region to Multi-Region Companies

The Board assigns each company its own operating authority with a potentially unique geographic area. In many cases that operating authority encompasses more than one of the five regions. For example, a number of companies headquartered on the Sunshine Coast (part of Region 5 on the mainland) also have authority to operate on neighbouring Vancouver Island (Region 3). This allows passengers arriving at a mainland airport to take a taxi via ferry to Vancouver Island.

Where a company had multiple operating areas, its website and company location were reviewed. Company websites that declared specialization in one region were assigned to that region for the purpose of counting trips. Companies having advertisements and/or locations that were clearly addressed to more than one region were used in the regional analysis for each region, but counted only once for the province as a whole.

Organization of Report

The remainder of this report is presented in five parts:

- Overview: Impact and Recovery for BC as a whole
- Changes in Business Conditions
- Recovery in Trip Volumes
- TNS Considerations
- Considerations Looking Ahead

4 Overview: Impact and Recovery for BC as a Whole

4.1 Economic Context

Overall, BC had more than recovered from the economic impact of Covid by the summer of 2022. Going into 2023, areas of the interior and the north experienced reduced economic activity driven by declines in forestry and manufacturing, and attempts by the Bank of Canada to cool the economy (which also began to have an impact in urban and coastal areas of BC as of April 2023). Key indicators are reviewed below.

Figures are provincewide where possible. Regional figures and additional detail are provided in the analysis of each region. The complete data series for the figures is provided in Appendix B.

Unemployment

Unemployment recovered in the summer of 2022, but is now worsening in some areas. As of March 2023, unemployment had fallen in urban areas and Vancouver Island (regions 1,2,3) to below pre-Covid levels. In April, the last month available at time of writing, there was slight increases in unemployment (more than seasonal) suggesting that some of the Bank of Canada's measures to cool the economy were having an effect.

Figure 1 shows the all-BC unemployment rate over time.[6] Covid hit British Columbia around March 2020, when the three-month moving average begins to rise to 6.2%, and then peaks in June as employers adjusted their workforce to Covid restrictions and the impact is captured in the three-month moving average. Unemployment reached a peak of 12.7% in June of 2020. During 2022 unemployment was back to pre-Covid levels and trending downwards beyond seasonal variation. The low of 4.0% occurred in December 2022, well below all of 2019, the year before Covid. Thus 2022 marks the recovery of BC unemployment from Covid, and subsequent rise to 5.0% in 2023 can be attributed to other factors, such as the tightening of interest rates by the Bank of Canada and related regional events.

[6] Statistics Canada Table: 14-10-0387-01, A three-month moving average is preferred as it is more stable than single-month estimates, especially at the level of the individual regions analyzed in this report.

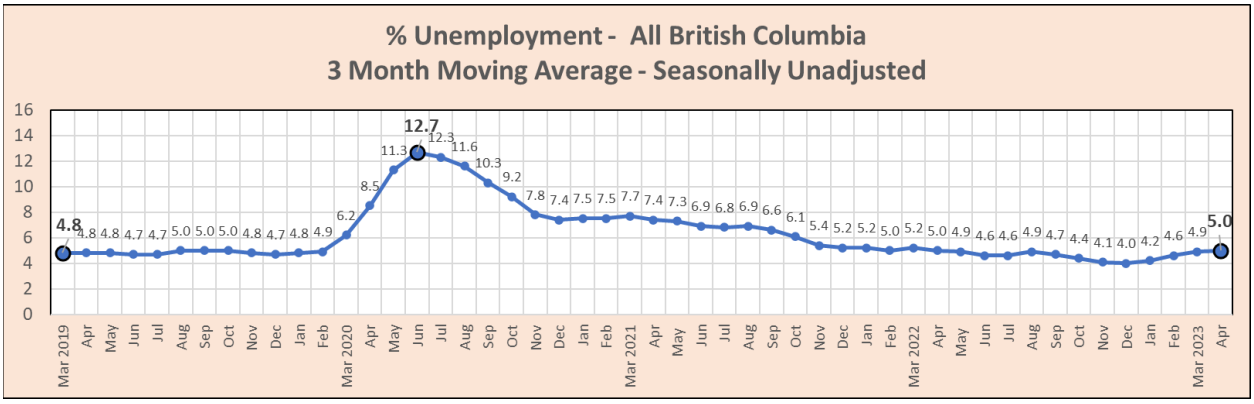

Figure 1

The provincial pattern is shared by the more urban regions of the Lower Mainland, Capital Region, and Vancouver Island excluding the Capital (regions 1, 2, 3). Region 4 (Okanagan, Kootenay-Boundary-Cariboo) also followed this full recovery pattern with the exception of Cariboo. Cariboo's unemployment rate had more than recovered by the summer of 2022, but has since been afflicted by layoffs in lumber mills and associated manufacturing, and knock-on effects on retail and municipal jobs. Region 5 has a similar recovery by summer of 2022 and then an upturn in unemployment into 2023. More detail is provided in the analysis of each region.

Hotel Occupancy

Hotel occupancy rates are an indicator of tourism volumes and business travel. Higher levels of both kinds of travel lead to more activity by vehicles-for-hire.

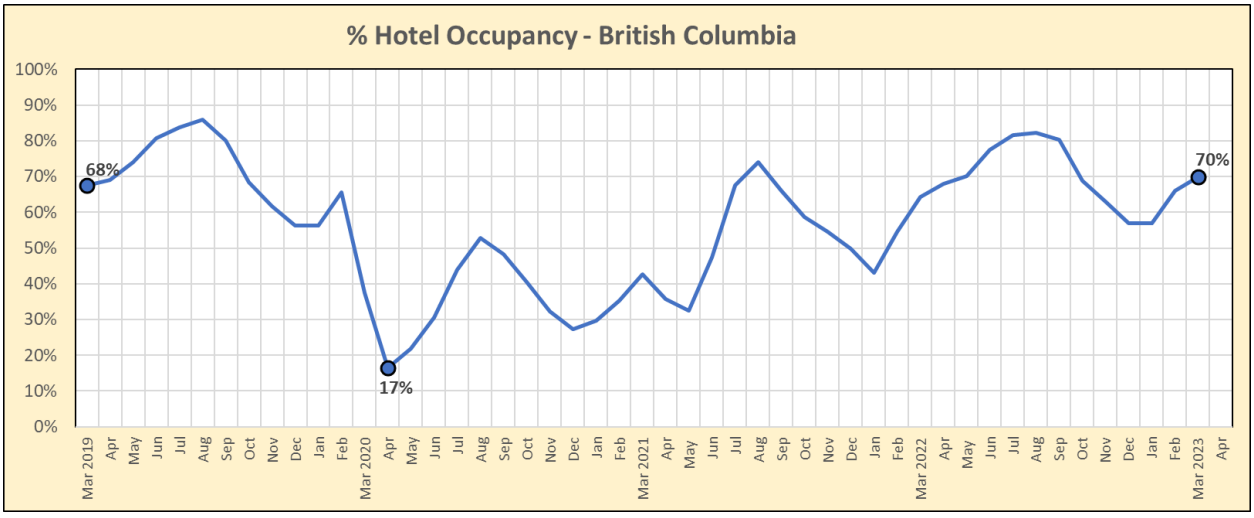

Figure 2

As illustrated in Figure 2, hotel occupancy has strong seasonal variation, with peaks in the summer months.[7] Comparing the same month in each year provides a clearer picture. The figure begins with a March 2019 occupancy of 68%, followed by a peak in August. With the

[7] Source: Courtesy of Destination BC.

advent of Covid occupancy fell to a low of 17% in April 2020. By the summer of 2022 occupancy had recovered to 2019 levels. The graph ends in March 2023, with occupancy at 70% – higher than the 68% reported in the same month in 2019.

There is some variation in hotel occupancy by region. The Lower Mainland reflects the general recovery, with the exception of the Whistler area which is experiencing softer numbers than the peaks experienced in 2019. Some of the softening is attributed to a slower recovery of international travel volumes, for which Whistler is more heavily affected. Similarly Victoria (Region 2) and the rest of Vancouver Island (Region 3) saw peaks representing full recovery in the summer of 2022, but are now experiencing a slight softening of hotel occupancy as of the beginning of 2023. Regions 4 and 5 hotel occupancy had also recovered in the summer of 2022 and, unlike other regions, have maintained strong levels going into the summer of 2023.

Airport Passenger Volumes

Airport passenger volumes are also strongly correlated with vehicle-for-hire use. In addition to travel by visitors to and from the airport, visitors also travel locally during their stay.

Figure 3

Figure 4

Figures 3 and 4 show enplaned and deplaned passengers at BC's two largest airports – Victoria International and Vancouver International.[8] Airport passenger volumes have recovered strongly since 2020, but have not yet matched their pre-Covid levels during the period studied. For example, Vancouver International had 1.9 million passengers in April of 2023, compared to almost 2.1 million in April of 2019. Similarly, at Victoria International there were 133,000 passengers in April of 2023, compared to 159,000 in the same month of 2019.

The decline in international travel volumes may be a long-term change in travel preferences, begun in Covid but reinforced by such other issues as increased security concerns about travel to foreign countries to specific tensions such as between the US and China. However new concerns, such as climate change and avoiding hot weather, may change preferences yet again.

It appears that airport passenger volumes are in a mature phase of recovery from Covid, although there may be a long-term shift in traveller preferences.

4.2 Implications of Economic Context for Health of Vehicle-for-Hire Industry

With the economy restored to full activity, conditions are right for a full recovery of demand by passengers for vehicle-for-hire trips. Future variations in demand will be driven by other factors.

However, there remains a shift in tastes towards greater domestic travel by tourists, sparked first by Covid and then fed by international tensions and challenges to airline capacities around the world. While domestic travelers arriving by air still require local transportation, the shift also means that more travelers stay closer to home and arrive with their own vehicles. This has a softening impact on growth of vehicle-for-hire trip volumes.

4.3 Higher Costs of Vehicle-for-Hire Operations

On the other hand, the economic recovery and persisting effects of supply chain disruptions have put significant upward pressure on vehicle-for-hire operating costs. Impacts that are identified by taxi companies include:

- **Difficulty retaining drivers.** With tight labour markets, wages are up and both taxis and TNS companies must offer higher net returns to attract and retain drivers. For taxis, this may mean lower shift rentals, lower stand rent, or similar incentives. For TNS companies, it may mean a lower net take of trip revenues collected for TNS trips.
- **Higher costs, and delivery delays, of vehicles.** The price of cars rose sharply during Covid due to the combined impact of computer chip shortages and supply chain disruptions. The high cost and associated delivery delays for new vehicles had a parallel impact on the price and availability of used cars. According to a special Statistics Canada report, the price of used cars rose an initial 8.4% in March 2021, the year after the advent of Covid, and a further 24.5% by March 2022 as the lower production of

[8] Destination BC Dashboard, supplemented by individual airport websites. https://www.destinationbc.ca/tourism-industry-dashboard/

new cars had an impact on the cumulative stock of used cars available.[9] Over both years the price of used cars increased more than 32.9%. Used car prices in Canada have not retreated significantly since then,[10] although they may eventually decline as supply issues for new cars resolve. Used cars are typically used by vehicle-for-hire operators, especially taxis.

- **Fuel costs.** Unleaded gas in Vancouver is reported as increasing 11% between May 2019 and May 2023.[11] However, the experience can differ substantially by region. In Kelowna, for the same months, regular retail gasoline was up 21%.[12] The price increase can seem larger in memory because fuel prices fell significantly in the months following the advent of Covid. Measured only from the trough in prices in 2020, the Vancouver price has risen 66%. From the perspective of vehicles-for-hire, the negative impact of Covid on trip volumes was offset to a small degree by the immediate decline in fuel costs – but this offset has disappeared as prices return to more normal levels and also rise with the general level of inflation. As a result, rising and recovering trip volumes for taxis and TNS do not necessarily reflect rising profitability and improved health of the industry. Rising costs also have an impact on the ability to earn fair and reasonable rates of return.

5 Changes in Business Conditions

Trip volumes are a useful but incomplete indicator of the health of the vehicle-for-hire industry. More trips do not necessarily mean profitable trips. When the price charged to customers is regulated, as with taxi meter rates, there is a right for the regulated business to expect the regulated rate will allow the opportunity to earn a fair and reasonable rate of return. This is not a guarantee. Actual profitability is the responsibility of each company. However regulated rates must ensure the opportunity is there for a well-run company to earn a fair and reasonable return.

This 2023 study surveyed taxi companies concerning broader business conditions, including the cost-related issues identified in the previous section. Responses were supplemented by interviews with larger TNS companies. Charts are presented on a provincewide basis for greater statistical reliability, and to protect the confidentiality of respondents. Regional variation is addressed in comments on each chart.

[9] https://www150.statcan.gc.ca/n1/pub/62f0014m/62f0014m2022008-eng.htm

[10] See for example: https://www.cbc.ca/news/politics/car-prices-high-evs-used-supply-chain-1.6797301 Used car prices are tracked privately in Canada by agencies such as the Canadian Black Book. Statistics Canada has recently introduced separate tracking into the Consumer Price Index (in addition to the price of new cars) as a result of the post-Covid divergence of new and used car price changes.

[11] Natural Resources Canada https://www2.nrcan.gc.ca/eneene/sources/pripri/prices_bycity_e.cfm?productID=1&locationID=6&locationID=2&frequency=M&priceYear=2019&Redisplay= Natural Resources Canada is consistent with Statistics Canada but has more regional detail.

[12] Ibid.

5.1 Survey Questions

Is there a driver shortage?

In response to the negative economic impacts of Covid, Canadian governments undertook large income support and spending programs. These appear to have been successful in supporting the economy during the advent of Covid, and continue to have an ongoing stimulus effect on the economy. At present the Bank of Canada is raising interest rates to cool the economy and reduce the accompanying inflation. The impact of the stimulus can be seen in the low unemployment rates illustrated earlier, along with a recent uptick in unemployment as Bank of Canada policies begin to have an effect.

With a tight labour market, there are many opportunities for work, and it is reasonable to expect taxi and TNS companies to offer improved conditions to attract and retain drivers. While most drivers are not paid a wage, the fees they are charged per trip or per shift affect how much is left after expenses for them to take home.

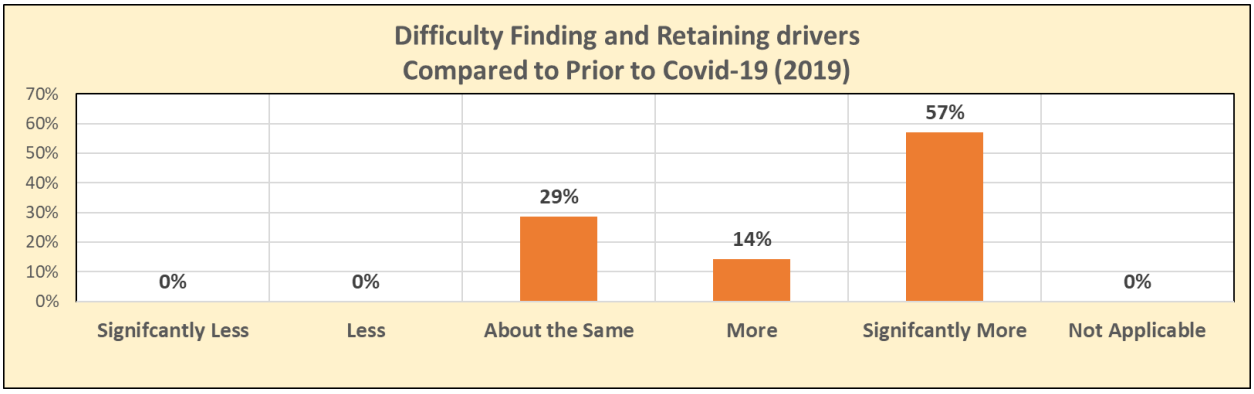

Figure 5

Taxi companies were asked to compare the difficulty of finding and retaining drivers at present, compared to 2019, prior to Covid. Results are illustrated in Figure 5.

Seventy-one percent of taxi companies reported more or significantly more difficulty finding and retaining drivers than in the year prior to Covid. The difficulty is highest in BC's more urbanized regions. *All* respondents in the Lower Mainland reported more or significantly more difficulty. For the less urbanized areas (regions 3, 4, and 5) responses were split. Half the companies in these regions reported about the same while the other half identified more or significantly more difficulty finding and retaining drivers.

TNS companies interviewed did not stress a particular difficulty finding drivers, and it was difficult for them to comment about the years prior to Covid in BC, since they were not licensed to operate then. However, they did identify BC's requirement for drivers to have a Class 4 commercial driver's licence as a barrier to being able to supply more service to the market. The requirement for TNS drivers to have a commercial driver's licence is less common in other North American jurisdictions, although other restrictions may apply.

The regional divergence between responses suggests that taxi companies in highly urban areas face not only a tighter labour market, but significant competition from TNS companies for

drivers. This has implications for setting meter rates, discussed under *Considerations Looking Forward* at the end of this report.

Proportion of Taxi Shifts Driven by Licence Holders or Licence-Share Holders Themselves

The Board issues licences to operate taxis. This is a licence for vehicle operation, not a licence to be a taxi driver. A holder of a Board licence (or share of a licence[13]) has the right to operate a taxi themselves, if qualified as a driver, or to hire a taxi driver.

When the holder of Board licence chooses to drive more taxi shifts themselves, rather than hire a driver or lease the taxi to a driver, it indicates a driver shortage and related cost pressures. Figure 6 reports taxi company responses on whether licence holders were driving more shifts themselves.

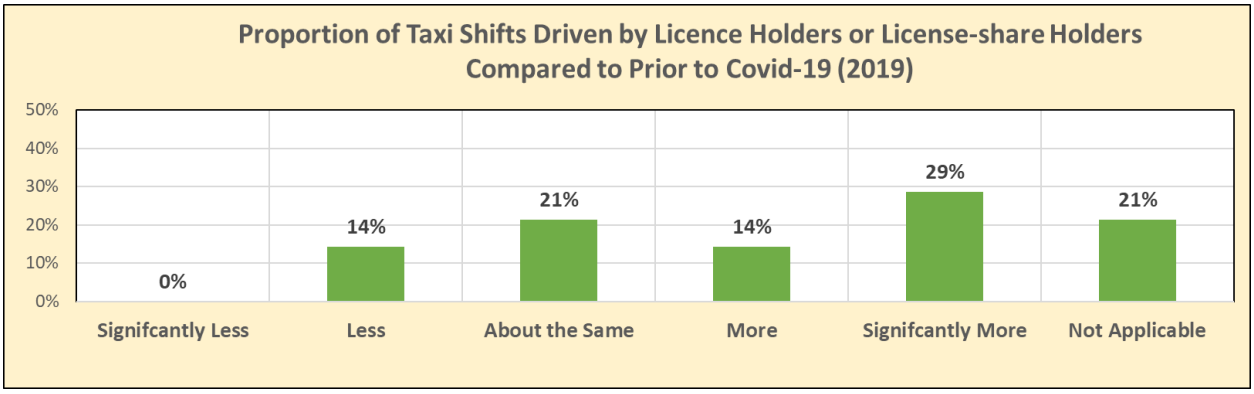

Figure 6

Consistent with difficulty finding drivers, the majority of companies reported that taxi licence holders are driving more shifts themselves. Forty-three percent declared more or significantly more shifts, while 33% declared the same or less. Twenty-one percent found the question not applicable to the structure or circumstances of their company. In the Lower Mainland the percentage responding significantly more rose to 50%. When looking at just the larger companies in the Lower Mainland, those responding significantly more was 100%.

In conclusion, while the tight labour market has affected all regions to some degree, it has had the biggest impact on companies operating in highly urbanized areas. With more taxis operating both day and night shifts, these companies are more reliant on retaining additional drivers who are not the themselves holders of a taxi licence or a licence share.

Company Fee Revenue

Taxis earn their income through the taxi meter plus tips. Taxi companies receive income through the fees charged directly to drivers, or collected indirectly through fees charged to licence-share holders who in turn charge lease or shift fees to the driver.

[13] The Board issues licences to both individuals and companies. A company may hold a licence to operate a number of taxis. In BC it is common for companies to divide up the rights and issue a *licence share* for the operation of a single taxi, or even a shift of a taxi, under that company's Board licence. The operator who purchases that share is called a *licence-share* holder.

Another indicator of rising labour costs is having to improve the financial terms offered drivers. For wage earners, this would mean a higher wage. For taxi drivers this means lower fees (e.g., shift fees, lease fees, stand rents, administrative fees, etc.), so that the share of revenue they take home after paying these fees is higher.

Figure 7 shows that 28% of taxi companies reported lower or significantly lower fees charged to drivers compared to pre-Covid, with 36% charging about the same, and 36% finding the question not applicable to their company. Zero were charging more fees than pre-Covid. Even zero change represents a reduction in light of the general rate of inflation between 2019 and this 2023 survey. The proportion of companies charging less or significantly less fees was higher in the Lower Mainland, at 66% of respondents.

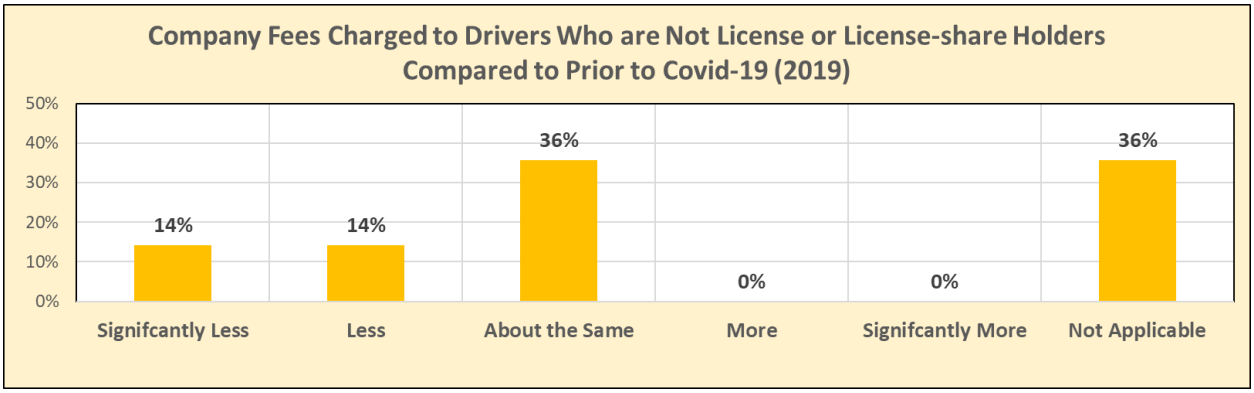

Figure 7

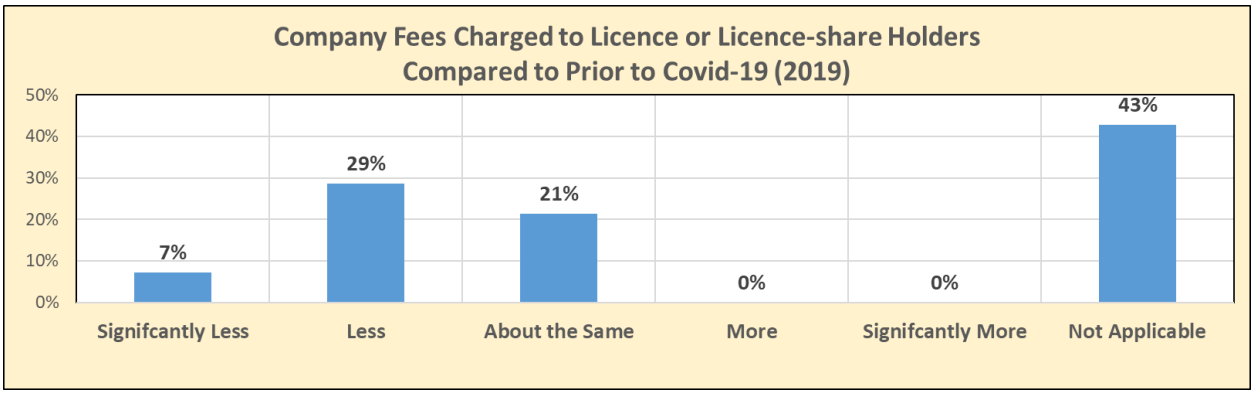

Figure 8

With respect to fees charged to licence holders or licence-share holders, Figure 8 shows 36% of responding companies charging less or significantly less, 21% about the same, and 43% not applicable to their company. Zero said that fees were higher than pre-Covid. Again, reductions were higher in the Lower Mainland, with 67% of those companies reporting less or significantly less fees to licence holders.

Change in Contract Concessions

While meter rates are regulated, taxi companies also engage in bulk service contracts that can involve concessions to clients. Concessions can take the form of voucher systems that effectively yield a cost less than the meter rate, other forms of indirect rebate or extra services

included. This indicator can be read more than one way. On one hand, competitive pressure can result in increased concessions to win or retain contracts. On the other hand, reduced profitability and thinner margins may mean there is less room for discounts, causing concessions to reduce or disappear.

Figure 9 shows that 51% of taxi companies make more or significantly more concessions, while 21% make less or significantly less concessions to contract clients. Discounts are higher in the less urbanized regions (3,4,5) where 75% of companies reported more concessions and none reported less. The mixed story in the Lower Mainland may mean that taxi companies are more highly motivated to make concessions owing to competition from TNS and reduced trip volumes, but are also more constrained in making concessions due to lower margins in the face of this competition.

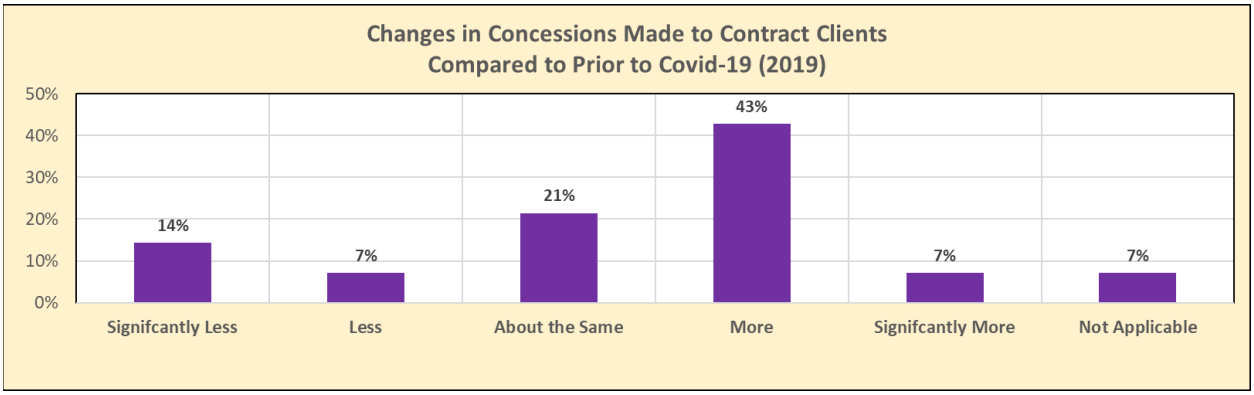

Figure 9

Other Indicators Suggested by Taxi Companies. The survey also asked companies to suggest their own additional indicators of business conditions. Suggestions received included:

- **Insurance Fees** (reported down)
- **Airport Fees** (reported significantly up)
- **Population** (reported up)

5.2 Company Assessments of Current Ability to Earn a Reasonable Rate of Return

The survey asked taxi companies a more general, open-ended question: "*How would you assess your company's current ability to operate and earn a reasonable rate of return for your effort and investment? What are the most important current factors?* A representative selection of responses is cited below. The comments have been edited to protect confidentiality and paraphrased for clarity.

For the **Lower Mainland**, the focus of comments was competition from TNS companies, driver shortages, and cost pressures. Impacts included not being able to field all the vehicles licensed. For example:

- *Market share has gone down considerably and it is still difficult to find drivers. Our company still is not able to field the entire allocated number of licences as business is still not at level of pre-covid.*

- *Rideshare competition has affected the business a lot, especially during Covid. There is a 50% decrease in business. Right now the business is operating; not doing great but not going under.*
- *We have had to reduce rates on some contracts significantly in order keep our business volume.*
- *Airport fees have gone up drastically. In 2019 our company paid $1.75 per trip. This year we are paying $4.00 per trip.*
- *The arrival of rideshare has had a significant impact on our ability to operate our taxi company profitably. We have seen a significant decline in our operators' revenue and customer base. We are constantly looking for ways to adapt and compete with Uber in order to regain our customer base and earn a reasonable rate of return. However, it is clear that the competitive landscape for traditional taxi companies has been forever changed by the arrival of Uber and other ride-sharing services.*

The comments received from Region 2 were limited to a high degree of dissatisfaction with Uber being able to use the multi-region operating licence acquired when Uber purchased ReRyde, and its consequent entry into the Victoria market.[14] The impact of this event is discussed in other sections of this report.

In regions 3, 4, and 5, respondents stressed driver shortages, meter rates not keeping up with rising costs, and the impact of growing TNS competition from Uber, URide, and others. This is evident from the comments below:

- *The catch is that passenger rates will remain the same while Uber and ReRyde are now permitted to compete with us, lowering our trip volume and the total revenue needed to support our company.*
- *"Our gross margin on trips is 12% before accounting for vehicle accident costs and other factors. Fuel costs have increased by 65 cents per litre compared to pre-Covid times. Our fleet is mostly made up of SUVs, but our only current option for replacement is to buy a 20-year-old Prius to save costs. That will not benefit the public. Electric Vehicles are not an option because of the poor public availability of rapid EV chargers. Passing costs on to drivers like a TNS company would not be ethical. On average our fleet cost is $55,000 per vehicle, which is not a smart business but you have to offer something to compete with ridesharing. We have run our company in deficit for the past three years, just to stay in business.*
- *We hired an advertising company during the fall of 2022 to help find drivers. How many resumes have we replied to?... hundreds! How many have we followed up with? ... hundreds! How many want to actually work? ZERO! Our ability to obtain drivers in this current labor market is almost impossible.*
- *We have problems finding drivers. Business has increased some over the last year.*

[14] See footnote 4 on Board decision and role in licence transfer.

- *I would assess the company's current ability to operate and earn a reasonable rate of return as good, but at times difficult due to lack of drivers.*
- *Minimum wages and gas prices are increasing but meter rates are not aligned to inflation.*
- *Our business was recovering, but just when we thought we could do better Uber is now starting in our area. We feel we need more vehicles to serve the community that trusts us, particularly those in wheelchairs.*
- *Our company's current ability to operate and earn a reasonable rate of return is good. There is strong demand from local residents and the booming industrial sector. What does hinder the rate of return is the high costs for fuel, vehicle maintenance, and the cost of operation expenses in general.*
- *The BC passenger transportation industry continues to face a lot of Post-Covid challenges:*
    - *Shortage of drivers*
    - *Rising cost of taxi parts and repair*
    - *Rising fuel costs*
    - *Rising operational costs including minimum wages going up, and higher salaries, rent, and tax*
    - *Fewer tourists after Covid*
    - *Rising cost of living means people think less about using a taxi*
    - *Post Covid rise in online shopping instead of taking taxis to shop in person*
    - *People suffering from unemployment, mental and other health issues also have a significant impact on taxi industry*
- *The effort and investment that has been put into this company to keep it from becoming insolvent cannot be put into words. If it wasn't for the love of the industry, the people we work with, and our belief in supporting of small businesses we might as well close our doors.*

Some comments applied across regions. These included:

- A negative comment on the perceived requirement of taxi companies to take out a TNS licence if they wanted to have an app that takes payment in advance as TNS companies do. Negative comments included reference to additional fees paid for such taxi trips under the TNS rate and fee structure.
- A negative comment on the idea of a rate band or peak charges in place of fixed meter rate. “One of the key considerations for customers and operators is predictability in pricing. By ensuring that rates are metered at consistent rates, our customers can be confident in how much a taxi ride will cost to get them to their destination.”
- One negative comment on perceived differences in criminal record requirements for taxis being more stringent than for TNS.
- Two comments on the increased costs arising from filing trip reports with the Data Warehouse.

There was one positive comment on ICBC insurance fee changes:

- Insurance costs have been reduced due to changes made by ICBC since May 2020 to provide a level playing field with the ride hailing companies.

6 Recovery in Trip Volumes

This section reviews the impact of Covid on trip volumes of taxis and TNS, along with their subsequent recovery. An overview is provided, along with analysis by region.

6.1 BC Overview

Figure 10 shows the recovery of trip volumes from Covid for the province as a whole. Selected numbers are shown in the graph. A full table is provided in Appendix B.

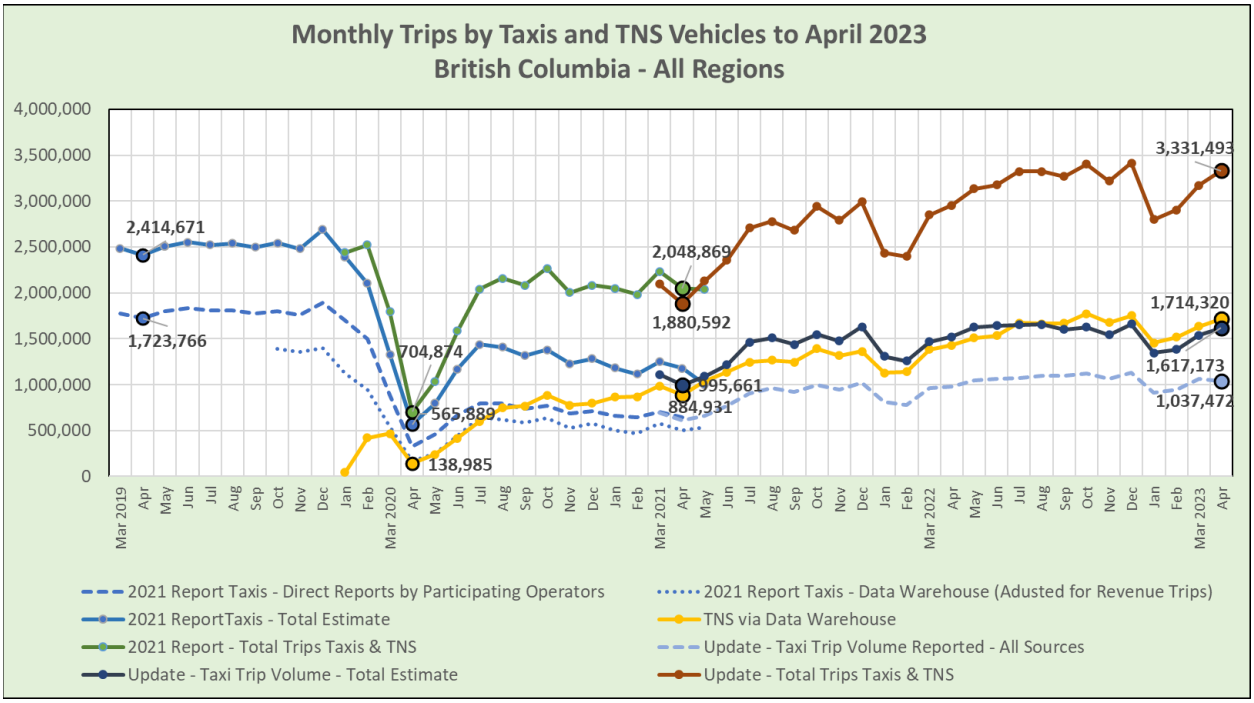

Figure 10

Estimated total monthly passenger trips was at 2.4 million in March 2019, indicated by the light blue line. At this time, only taxis were licensed. In January 2020, licensed TNS operation began, and total trips for taxis and TNS is indicated by the solid green line. Covid had its peak impact on trips in April of 2020, when combined trips for taxis and TNS fell to an estimated 704,874, a decline of more than 70% compared to the 2.4 million for taxis alone in April of the previous year.

Trip volumes then began to recover. By the end of the period covered by the 2021 study (April 2021), total trips had partially recovered to a 2,048,869 trips million trips.

For the months from March 2021 to present, the red line provides the total estimated based on the sample of firms reporting for this 2023 study.[15]

[15] The green line starts in Dec. 2019 as there were no licensed TNS operating before then. Prior to that, total trips are represented by taxi volumes alone (the solid blue line).

The different samples from 2021 and 2023 mean that estimates of total trips are also different. For transparency, both estimates are shown for April 2021. At 2,048,869 trips, the older sample provides a higher estimate than the newer sample estimate of 1,880,592 for that month. The more recent sample estimate is about 8.9% lower – making the newer estimate (red line) more conservative than the older sample estimate.

Despite being a more conservative estimate, the growth in total trips by April 2023 shows that passenger trips have more than recovered from Covid, rising from 2.4 million in April of 2019 to 3.3 million in April 2023, an increase of 38% over pre-covid volumes. The month of April is used for both years to avoid complications from the seasonal variation of trip volumes. Trip volumes tend to rise as the summer months approach.

However, the recovery in passenger trips has largely gone to TNS companies, indicated by the rising yellow line. By April 2023, TNS companies were reporting 1.7 million trips, more than the 1.6 million trips estimated for taxi companies. The taxi companies' 1.6 million trips remained below their 2.4 million in the comparable pre-covid month of April 2019, a reduction of roughly 32%.

Table 4
Estimated Passenger Trips per Month Pre and Post-Covid - Taxis and TNS Combined

Region	April 2019 (Pre-Covid)	Peak Impact of Covid (April 2020)	Post-Covid (April 2023)	%Change of Post Covid over Pre-Covid Covid/Pre-Covid
1 Lower Mainland & Whistler	1,671,811	388,167	2,538,894	51.9%
2 Capital	177,045	46,265	226,610	28.0%
3 Vancouver Island excluding Capital Region	565,815	271,290	574,463	1.5%
4 Okanagan-Kootenay-Boundary-Cariboo				
5 BC North Central & Other Areas				
All BC*	**2,414,671**	**704,874**	**3,331,493**	**38.0%**

*** Regional numbers may not add to BC total due to a few small taxi companies licensed in more than one Region.**

Looking at all of BC, taxi companies have lost market share to TNS as the market has recovered, so that total trips are up by 33% over pre-Covid levels, but taxi trips by themselves are down 32%. The growth of market share of TNS, and whether the TNS option added trips by expanding customer choice, or merely displaced taxis, is discussed in sections further below, concluding in Section 7, TNS Considerations.

Before examining TNS questions, it is important to note that Figure 5 provides only an average for BC as a whole. Recovery varied greatly between regions, as shown in Table 4.

6.2 Region 1 Analysis: Lower Mainland and Whistler

Most of the growth beyond pre-Covid levels comes from one region, the Lower Mainland and Whistler. Trips grew 51.9% over pre-Covid levels, largely driven by the expansion of services by two TNS companies, Uber and Lyft.

As noted above, TNS companies were a recent arrival in BC. Amendments to the Passenger Transportation Act allowing TNS took place in the fall of 2019. Licensed operation began in January of 2020, just months before the advent of Covid.

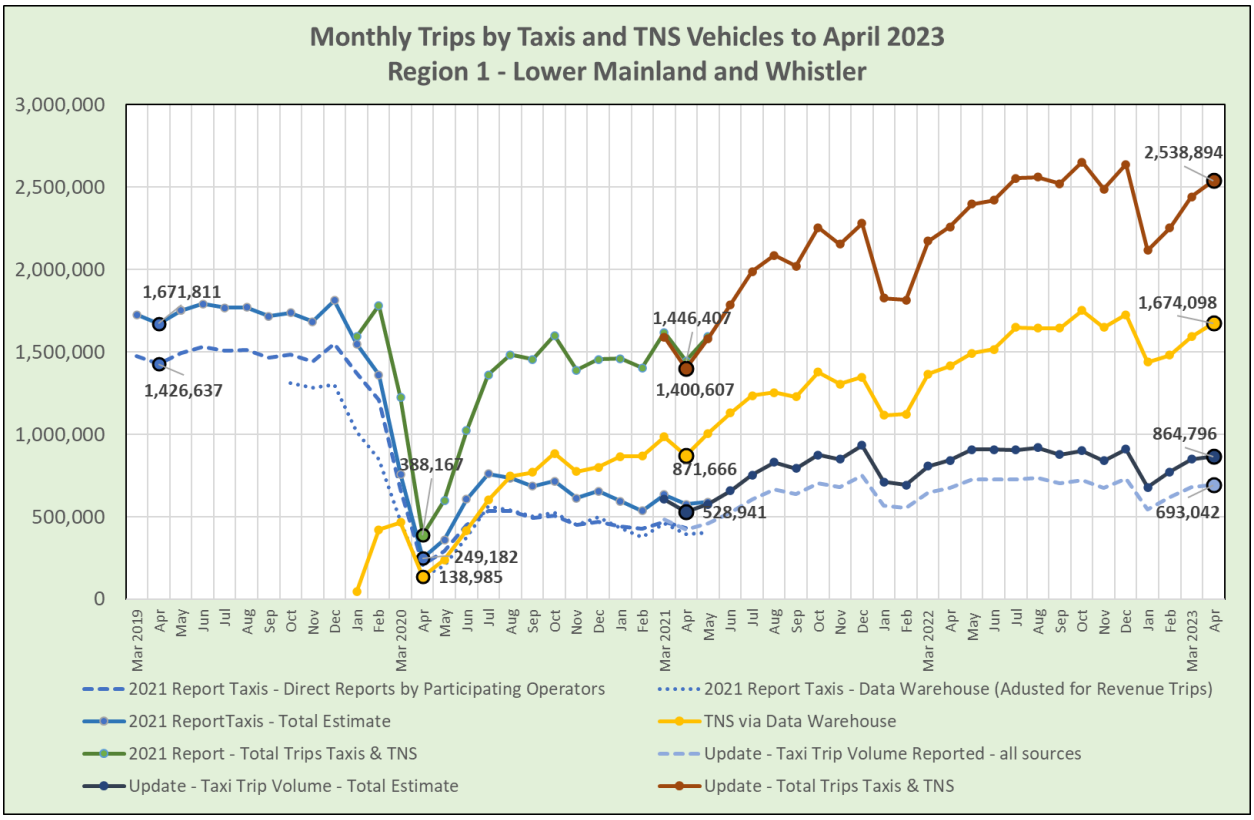

Figure 11

While most BC TNS companies reduced activity or delayed their launch, Uber and Lyft had sufficient scale and resources to continue their planned offerings of service. The two international companies were licensed only for Lower Mainland and Whistler.

In this region, a strong expansion in TNS trips happened at the same time as the passenger transportation industry was recovering from Covid. Taxis lost market share as many passengers chose to use the new services.

Lower Mainland Taxis Lost Market Share – Now at Half Pre-Covid Levels

Figure 11 shows combined trips of taxis and TNS in the Lower Mainland to be an estimated 2.5 million in April 2023, up 51.9% over the pre-Covid volume of 1.6 million in April 2019.[16]

Whereas all of the pre-Covid estimate are taxi trips, 1.7 million of the post-covid 2.5 million are TNS. The remainder are by taxi at an estimated 864,796. Taxi trips recovered from their Covid low of 249,182 trips, but remain at half their pre-Covid levels (1,671,811 trips in April 2019 vs. the 864,796 in April 2023). Thus, while total trips expanded significantly, taxi company trips did

[16] 2023 estimates used a different sample of taxi companies than the 2021 Report, resulting in somewhat different estimates of total trips. The difference is shown in the gap between the red line (2023) and the green line (2021) Report in the overlapping month of April 2021.

not. Taxi market share fell from 100% before Covid and before TNS licensing, to about one-third of the market in 2023.

The significantly higher growth in Region 1 than elsewhere in BC reflects the availability of a vigorous TNS service option for passengers that is not yet available to passengers in other regions. The traditional indicators for trip growth show only modest recovery, consistent with that of other BC regions. Region 1 unemployment (Figure 12)[17] tracked the broader provincial average closely, with slightly higher levels at peak Covid (13.2%) and slightly higher unemployment in April 2023 as the anti-inflationary policies of the Bank of Canada begun to take hold.

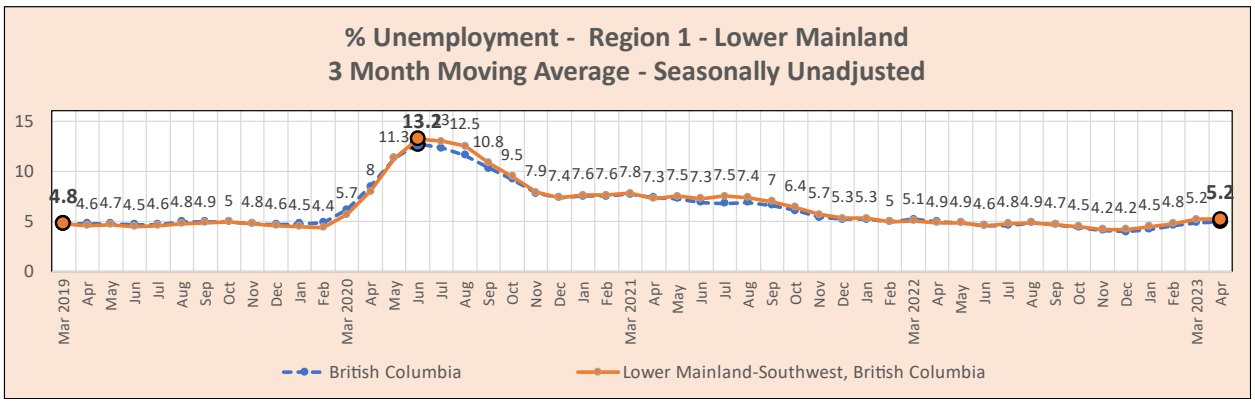

Figure 12

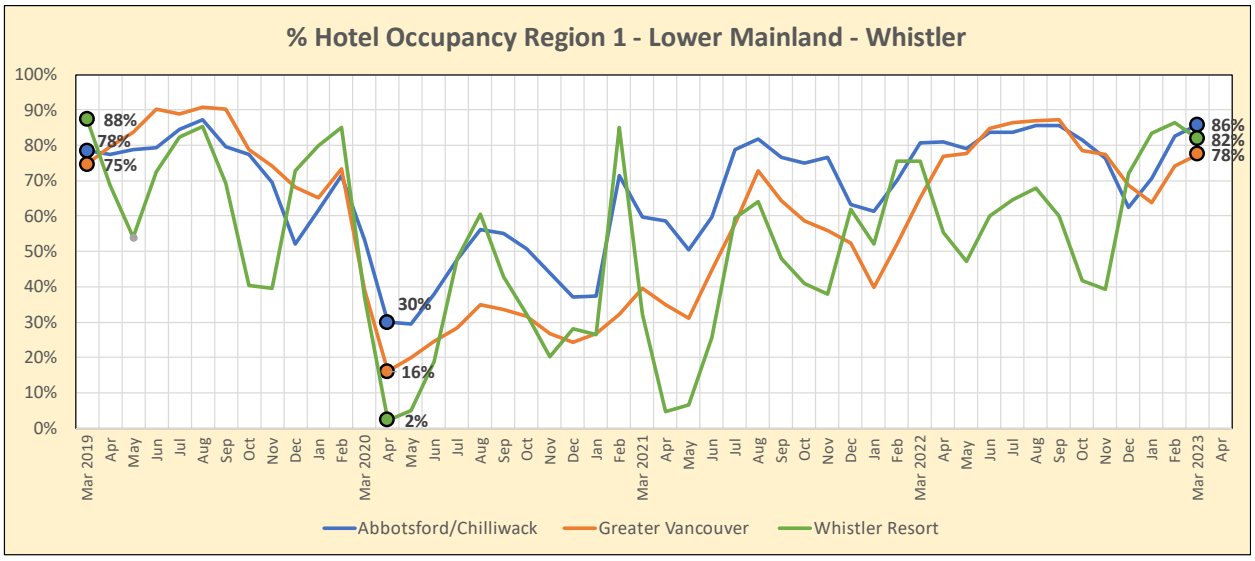

Figure 13

Hotel occupancy recovery is shown in Figure 13 for three parts of Region 1[18]: Abbotsford/Chiliwack, Greater Vancouver, and Whistler. Greater Vancouver's occupancy rate of 78% in April 2023 was higher than its pre-Covid 75% rate in April 2019, representing a full recovery from the

[17] Statistics Canada Table: 14-10-0387-01
[18] Courtesy of Destination BC.

effects of Covid. Abbotsford/Chilliwack shows the same recovery, at 86% in 2023 versus 78% for the same month in 2019. Only Whistler shows some softness, at 82% in 2023 versus 88% in 2019. This is likely due to Whistler's higher reliance on international tourism. As Covid has receded, there has thus far been a shift in tourist preferences towards domestic and local travel, which is being reinforced by current international tensions (see discussion of Economic Context in Section 4 of this report).

Airport passenger volumes for the two largest airports in Region 1 are reported in Figures 14 and 15.[19] Vancouver International Airport's passenger volumes may be said to have recovered, except for the longer-term shift away from international travel around the world, as previously noted. Passenger volumes have not yet reached their record peaks of 2019. Comparing April 2019 to April 2023, volume remains lower at 1,905,000 compared to 2,078,000.

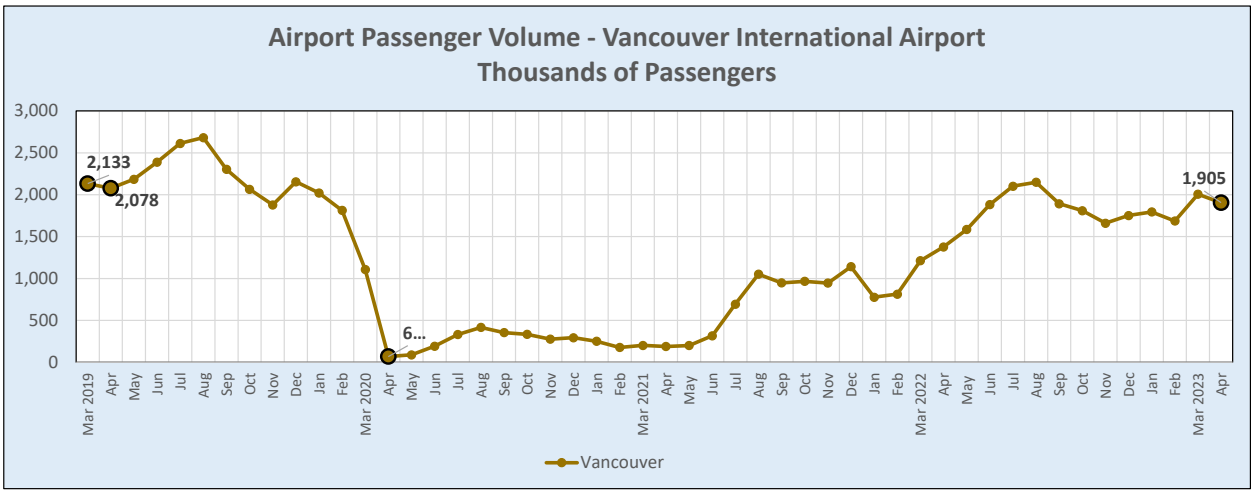

Figure 14

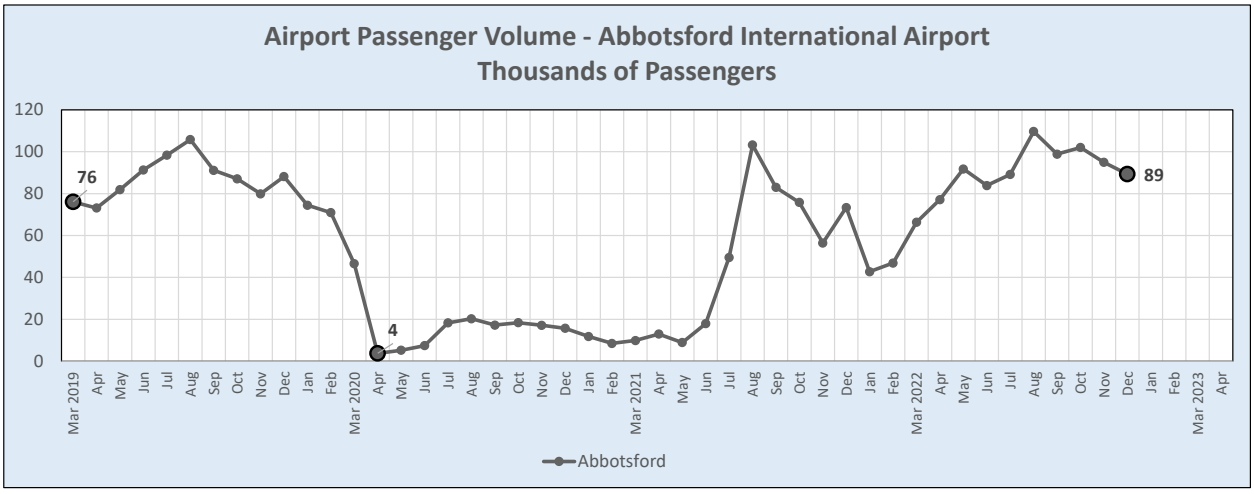

Figure 15

On the other hand, Abbotsford International Airport has more than recovered at 89,000 in December 2023 (the last month reported at time of writing) compared to 76,000 in March 2019. Abbotsford Airport's twitter account reports a more recent 117,000 passengers for May

[19] Destination BC Dashboard https://www.destinationbc.ca/tourism-industry-dashboard/

2023, definitely exceeding 2019 levels.[20] Abbotsford Airport's passenger volume is less dependant on foreign visitors.

In summary, Region 1 vehicle-for-hire trips have more than recovered from Covid, with growth at 52% over pre-Covid levels. This is a much higher recovery than other regions. While there has been a parallel recovery in indicators such as employment, hotel occupancy, and airline volumes, the main driver of the additional growth relative to other regions has been making effective TNS service an option available to passengers. The result is the large increase in total TNS trips, while taxis' market share and passengers remain well below pre-Covid levels.

6.3 Region 2: Capital Regional District

Capital Region passenger trips rose 28% compared to pre-Covid, a good recovery but less than the 51.9% seen in the Lower Mainland. Figure 16 on the next page shows Capital Region taxi and TNS monthly trip volumes. Total vehicle-for-hire trips in this region have more than recovered from Covid, from an estimated 177,045 trips in April 2019 to 226,610 trips in April 2023.

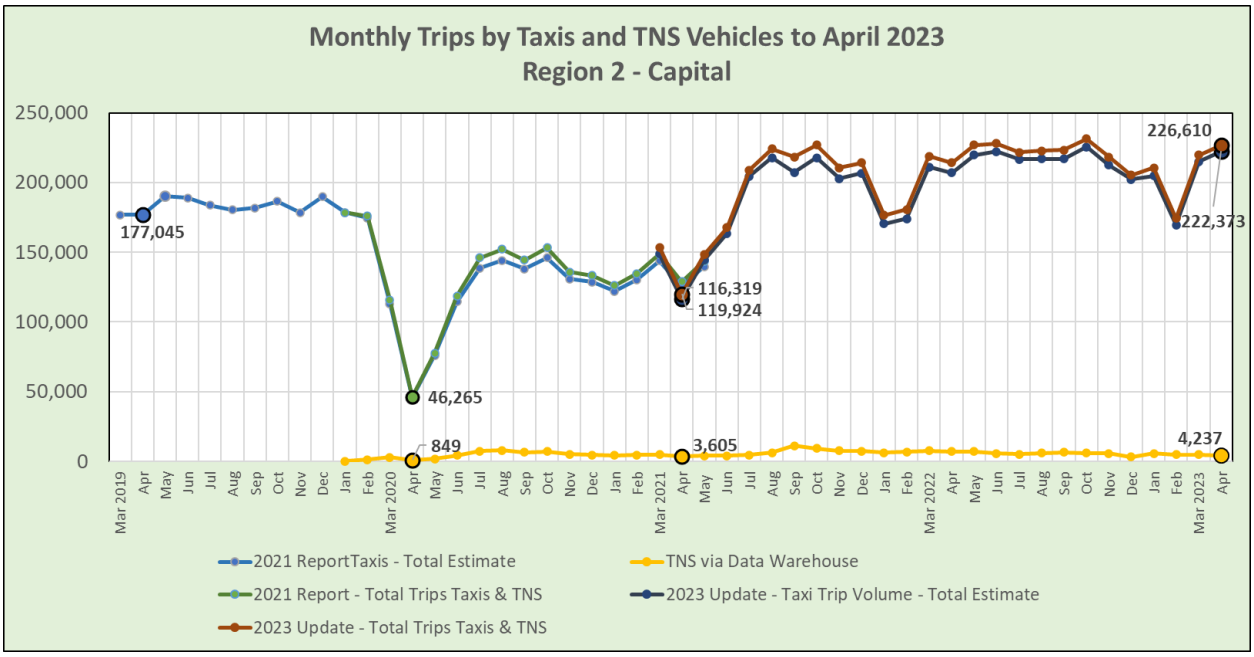

Figure 16

Unlike the Lower Mainland, there was no strong TNS option offered passengers during the recovery. The increase here went almost entirely to taxis. The principal competitors in Region 1, Uber and Lyft, were not licensed to operate in Capital Region during the period under study. The 28% increase in trips is also lower than the 52% estimated for Region 1.

The recovery from Covid and subsequent growth of trips in Region 2 is driven by the usual factors: a recovering and expanding economy and BC's population growth of 7.0% over this

[20] https://twitter.com/yxxairport?lang=en

period.[21] This is reflected in the individual indicators of unemployment, hotel occupancy, and airline passenger volumes for this region.

Figure 17 shows unemployment rates over time in the Capital Region.[22] Unemployment was 3.7% in March 2019, prior to Covid. It rose to 11.8% with the advent of Covid, and then fell to 3.6% by March 2023. The slight rise to 4.1% in April is likely more than seasonal, reflecting the higher interest rate policies of the Bank of Canada beginning to take effect.

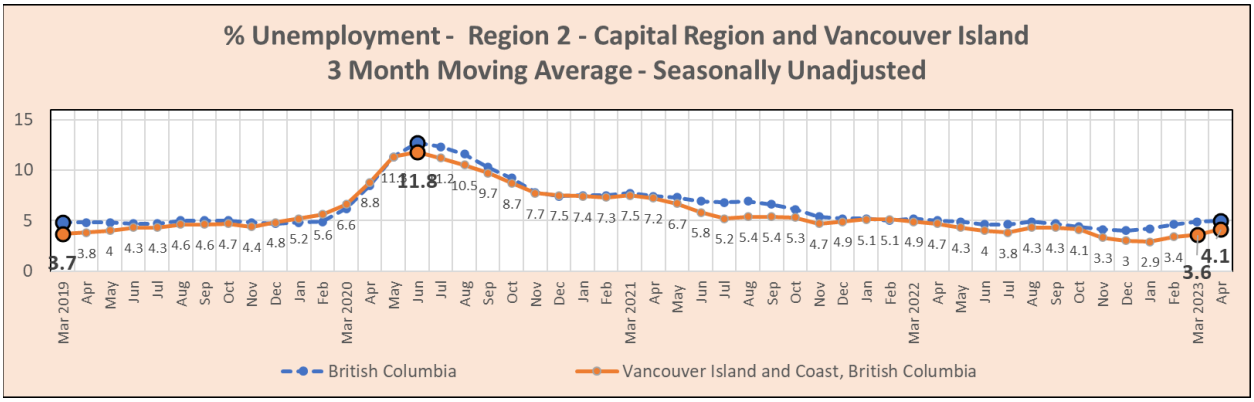

Figure 17

Hotel occupancy in Region 2 has not quite recovered to pre-Covid levels, perhaps reflecting the shift in post-Covid consumer preferences towards local tourism and less international travel. Figure 18 shows a pre-Covid occupancy rate of 71% in March 2019, and a post-Covid rate of 69% in March 2023.[23]

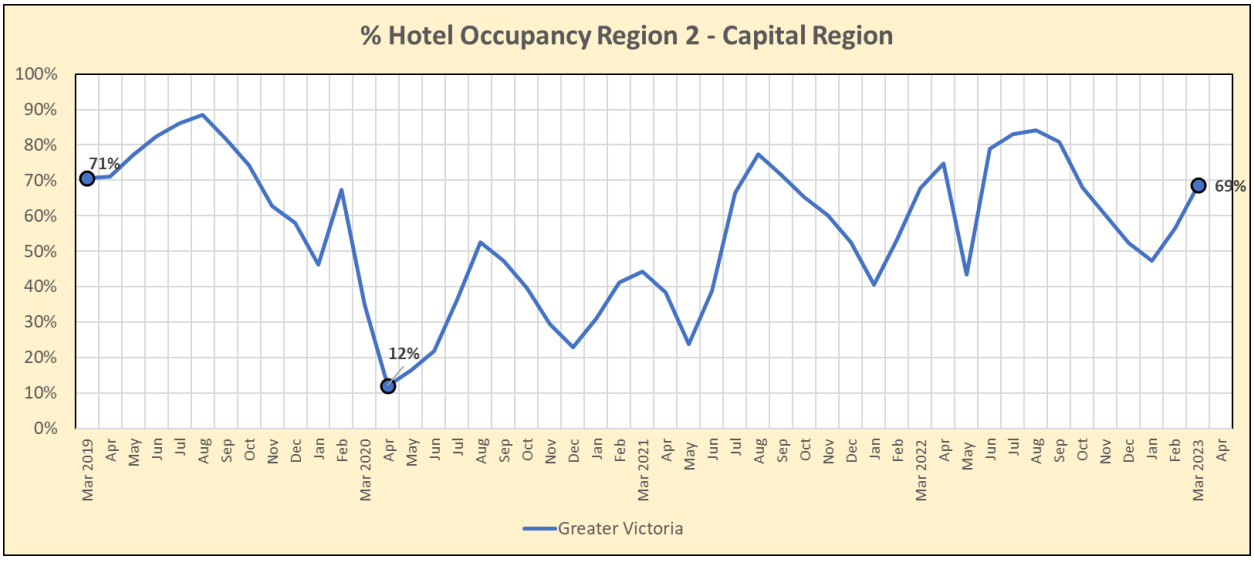

Figure 18

[21] March 31, 2019 estimate of 5,048 thousand to March 31 2023 estimate of 5,437 thousand. Quarterly Population Estimates Table 17-10-0009-01, release date 2023-06-28.
[22] Statistics Canada Table: 14-10-0387-01
[23] Courtesy of Destination BC.

Similarly, the passenger volumes at Victoria International Airport have not quite recovered their 2019 peaks given the lower volume of international passengers. Figure 19 shows passenger volume at 159,000 in April 2019, compared to 133,000 in 2024.[24] This drop parallels the recovered but lower passenger volumes at Vancouver International Airport in Region 1.

In summary, the Capital Region vehicle-for-hire industry has recovered from Covid with an estimated 28% increase in trips over pre-Covid levels. The increase is driven by an active economy, and BC's population growth over the period. However, the volume of international visitors appears somewhat lower post-Covid, as indicated by the softer hotel occupancy and airport passenger volumes as of March and April 2023.

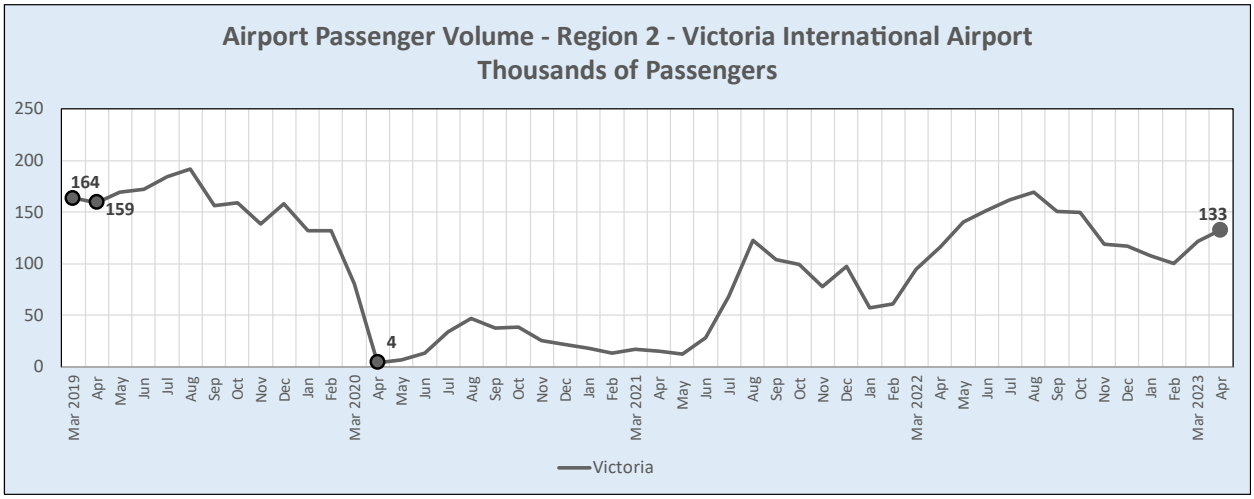

Figure 19

While recovery from Covid is complete, Region 2 will be challenged in the next few years by structural change in the vehicle-for-hire industry. Uber, a key player in the Lower Mainland's large trip growth, has acquired ReRyde, a licensed but inactive BC TNS. With that acquisition, Uber obtained the right to operate in Capital Region and other regions of BC in addition to its current licence for the Lower Mainland and Whistler.[25] Uber announced the launch of service in Victoria as of June 2023.

It is possible that Lyft may pursue a similar strategy, also acquiring a BC TNS firm that is underutilizing its licence for the other regions of BC.

[24] Destination BC Dashboard, supplemented by individual airport websites. https://www.destinationbc.ca/tourism-industry-dashboard/

[25] The transfer of an existing operating licence to a new owner requires the approval of the Passenger Transportation Board.....However, the scope of the Board's discretion is more limited than is the case for a new licence application.....As per paragraph 125 of the Board decision, under the legislation governing the Board "*The only consideration on a transfer application is whether the transferee is fit, proper, and capable of providing the service*." Other criteria that apply to a new license application do not apply to a transfer: *"…the Board is not to consider whether there is a public need for the service or whether the application, if granted, would promote sound economic conditions in the passenger transportation business in British Columbia*" The full text of the May 9 2023 decision may be found at https://www.ptboard.bc.ca/decisions/2023/15824-22 .

Whether the addition of international TNS to the Capital Region results in the increased total trip volume and reduced market share of taxis witnessed in Region 1, remains to be seen.

6.4 Regions 3, 4, and 5 – Tepid Recovery of 1.5% over Pre-Covid

Overview

Part of the analysis of regions 3, 4, and 5 is best done jointly. They share common characteristics, such as having smaller population centres than the Lower Mainland and Capital Region and being served primarily by regional airports. Regional airports' recovery from Covid has been more constrained than larger airports as airlines struggle to rebuild capacity and restore more flights to smaller communities.

Joint analysis is also necessary to assess the impact of TNS firms. TNS licensees such as Uride launched or relaunched activity in regions 3, 4 and 5 as the recovery from Covid progressed.

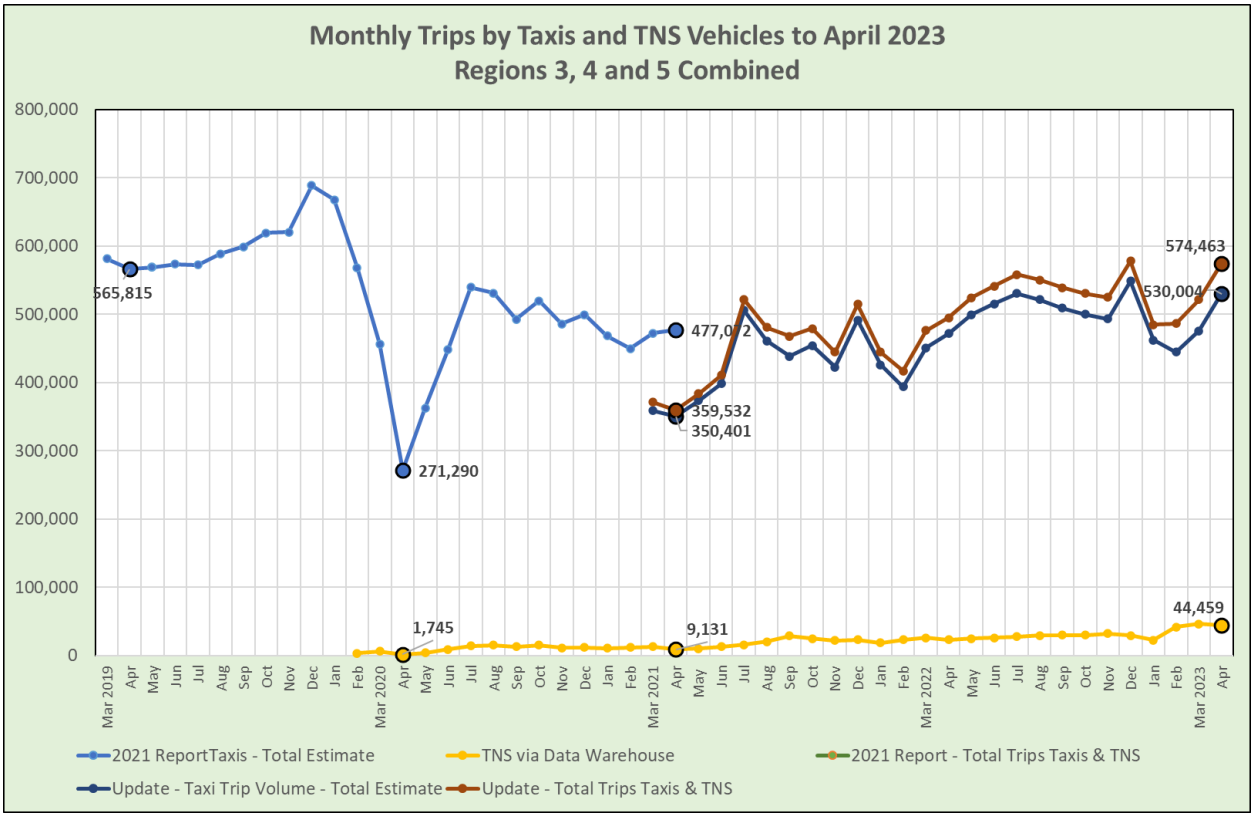

Figure 20

It is not currently possible to report TNS trips separately for regions 3, 4, and 5. The relevant TNS companies are licensed for all three areas and report their combined total numbers each month. Possibly in the future, the GPS data included in TNS trip reports can be used to divide trips according to their region of origin. However, the quality of the GPS data has not yet been tested.

We can, however, identify the principal TNS companies active in the three regions combined. This was done through their service areas licensed by the Board, TNS media releases, and posted service areas on their websites. Uber and Lyft were not licensed for regions 3, 4, or 5 during the study period, and most other TNS companies adopted a strategy of first building

service in less urbanized regions, largely staying out of Capital Region and the Lower Mainland. With this information, and Data Warehouse filings, we can estimate the combined total of TNS trips for regions 3, 4, and 5. This is compared with combined taxi trip totals for all three regions in Figure 20.

Total trips for TNS and taxis combined for all three regions was 574,463 in April 2023, exceeding the pre-Covid estimate of 565,815 for April 2019.

The post-Covid growth estimate is conservative, in that the 2023 sample of responding firms produces a lower estimate than the 2021 study sample.[26] The difference in measurement is shown in the figure for the shared month of April 2021. The 2021 study t estimated total trips of 477,072, while estimate based on the 2023 sample of firms for this update is a lower 359,532.

The difference comes from the participation of different taxi companies in the 2023 sample versus the 2021 sample. If one looks at the 2023 estimate by itself, growth in trip volume for the 2023 sample was from 359,532 in April 2021, rising to 574,463 in April 2023, a very strong recovery of 59.7% growth in trip volume.

The yellow line at the bottom of Figure 20 shows TNS trips. Their scale is much lower than taxi trips, however their growth has been rapid. As of April 2023, TNS trips accounted for 7.7% of the total. This represents a quadrupling of TNS trip volume in these regions since April 2021. Uride, for example, has announced TNS service that includes Nanaimo, Prince George, and Kelowna.[27]

As reported in the survey responses cited earlier in the Section 5 of this study, taxi companies are highly aware of the growing competition from local TNS companies, as well as future competition from Uber.

With trip volumes only barely returning to pre-Covid levels, taxi companies are also experiencing other pressures. Drawing from survey comments (see Section 5 of this study) taxi companies in regions 3, 4, and 5 report experiencing:

- Meter rates not keeping up with rising costs
- Driver shortages
- Increasing competition from TNS companies such as Uride, with additional concern about Uber's potential entry after its acquisition of ReRyde. (Uber announced the launch of service in Kelowna and Chilliwack (Region 4) on June 6, 2023. As an indication of future intentions, Uber's website now also lists Nanaimo (Region 3), and Prince George (Region 5) as service areas, although it appears that service has not actually commenced at time of writing of this study). [28]

[26] For background, see Section 3 Data Quality

[27] See for example: https://vancouverisland.ctvnews.ca/new-ride-sharing-company-uride-coming-to-nanaimo-1.6164696 and https://ckpgtoday.ca/2022/10/21/uride-launches-in-prince-george/

[28] The Board decision on the transfer of ReRyde's licence called for a 3 month notice to the Board before service was offered outside Regions 2 and 4.....The listing of Prince George (Region 5) and Nanaimo (Region 3) seems premature at the time of writing of this report.

The balance of this section provides a profile of the individual regions, providing details on the recovery of taxi trip volumes and regional differences in unemployment, hotel occupancy, airline passenger volumes.

Profile of Region 3: Vancouver Island Excluding Capital Region

Figure 21 illustrates taxi trip volumes in Region 3. Taxi trip volume has recovered to pre-Covid levels, but only barely. As of April 2023, there were 151,410 estimated trips compared to 150,534 pre-Covid in April 2019.

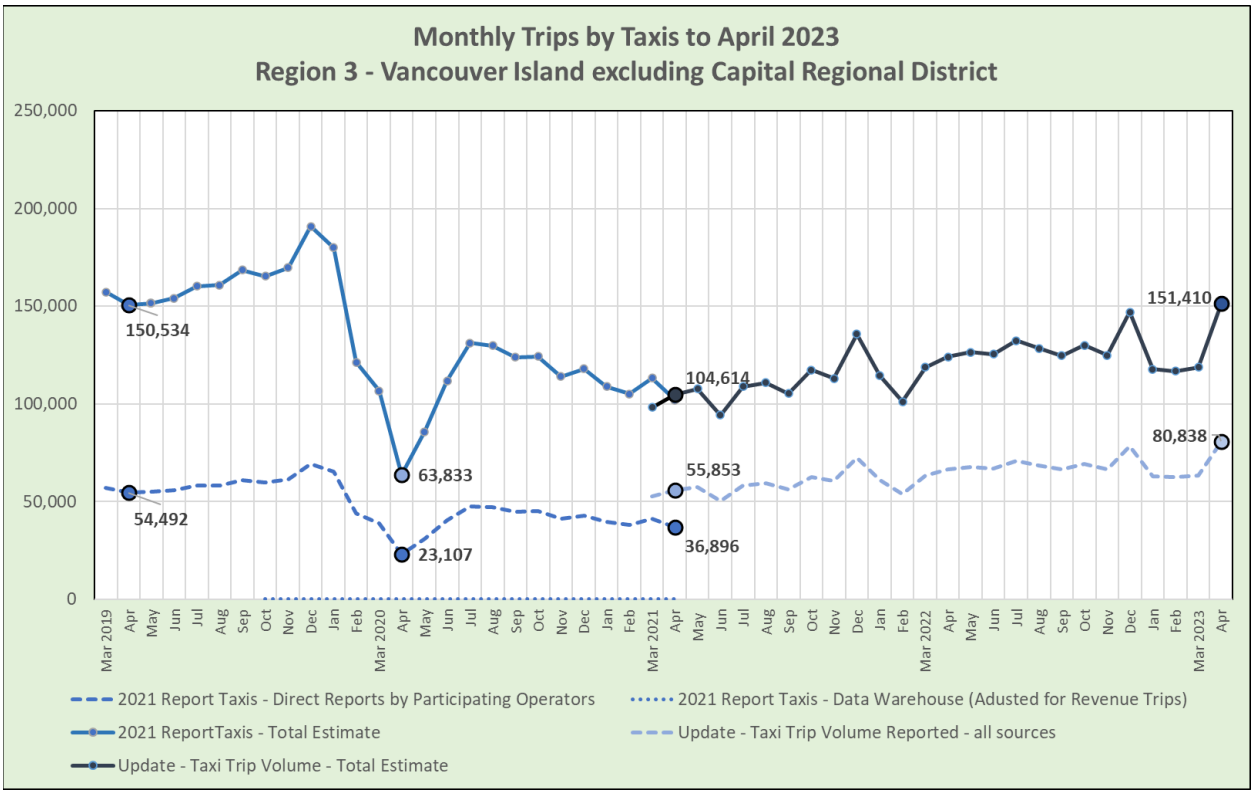

Figure 21

Other factors also indicate a tepid recovery from Covid in Region 3.

- Unemployment was down to 3.6% in March 2023, comparable to 3.7% in pre-Covid March 2019.[29] The uptick to 4.1% in April 2023 is more than seasonal, and may represent the beginning of impacts from the Bank of Canada's tighter interest rate policy (Figure 22).
- Hotel occupancy had recovered to pre-Covid levels for most communities by April 2023 (Figure 23).[30] An exception is Nanaimo where occupancy was 62% in March 2023, compared to 73% in March 2019.
- Airline passenger volume at regional airports has *not* recovered to pre-Covid levels, although recovery has been remarkable compared to the extreme lows of Covid-

[29] Statistics Canada Table: 14-10-0387-01
[30] Courtesy of Destination BC.

affected April 2020. Figure 24 shows volumes that are significantly lower in April 2023 than pre-Covid in April 2019 for the airports in Nanaimo, Campbell River, and Comox.[31] A possible factor in the slower recovery is the limited ability of airlines to expand connections and frequency of flights owing to the shortage of pilots and staff following Covid related layoffs.[32]

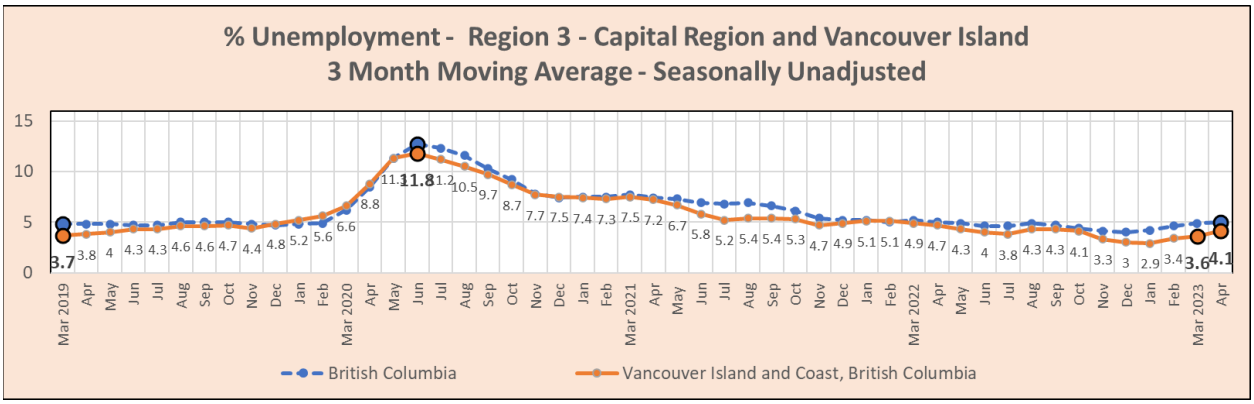

Figure 22

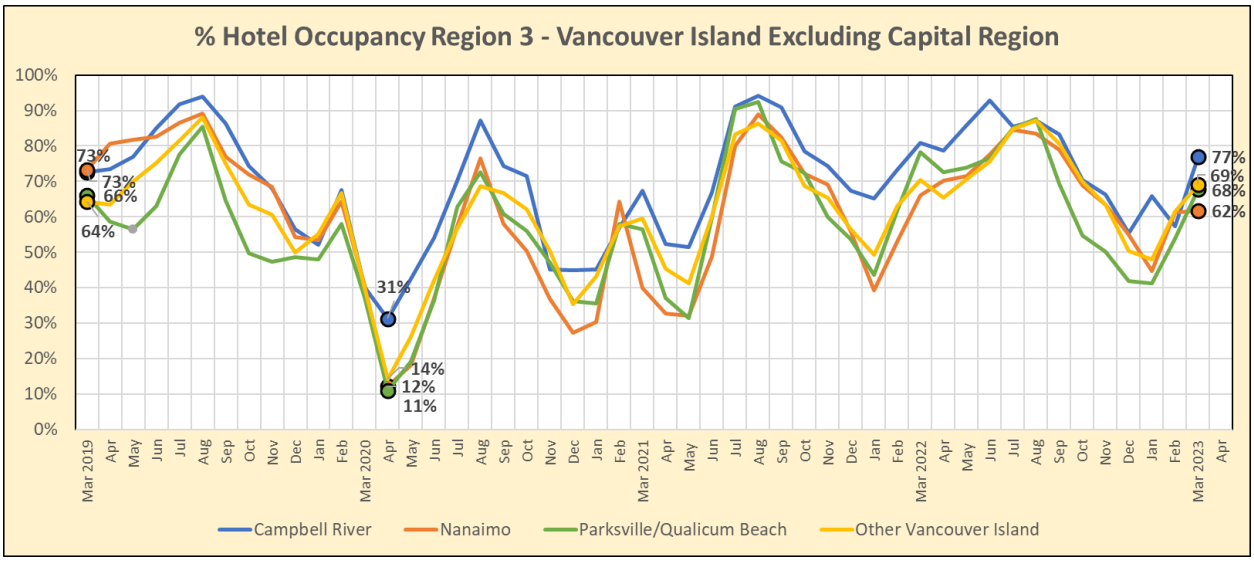

Figure 23

In summary, Region 3 vehicle-for-hire trips have recovered from Covid, but only barely. Hotel occupancy has experienced a similarly tepid recovery, with particular softness in Nanaimo. Airport traffic volumes remain reduced as the national and international airline system is still rebuilding capacity. Region 3, along with regions 4 and 5, is also beginning to experience structural change as small but rapidly growing competition from TNS companies continues. As noted earlier, TNS volumes from Canadian based companies such as Uride had achieved volumes averaging 7.7% of total trips in the 3 regions.

[31] Destination BC Dashboard, supplemented by individual airport websites. https://www.destinationbc.ca/tourism-industry-dashboard/

[32] For example, see https://www.cbc.ca/news/business/air-canada-flights-july-august-reductions-1.6506451

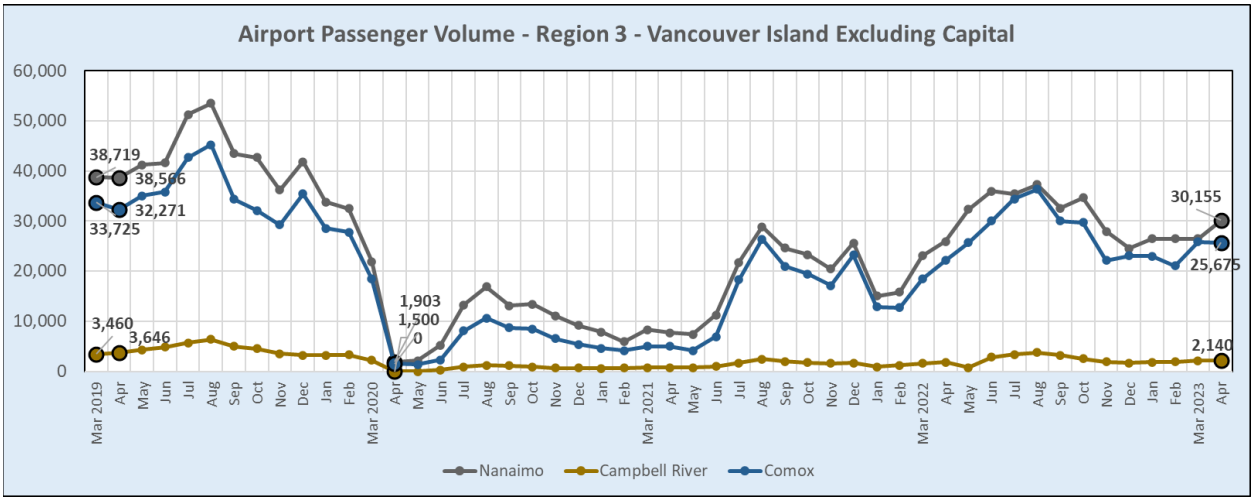

Figure 24

Profile of Region 4: Okanagan-Kootenay-Boundary-Cariboo

Vehicle-for-hire taxi trips have recovered from Covid in Region 4. Total trips have grown from an estimated 259,527 in April 2019 to a post-Covid 285,442 in April 2023 (Figure 25). That is an increase of 10% over pre-Covid levels.

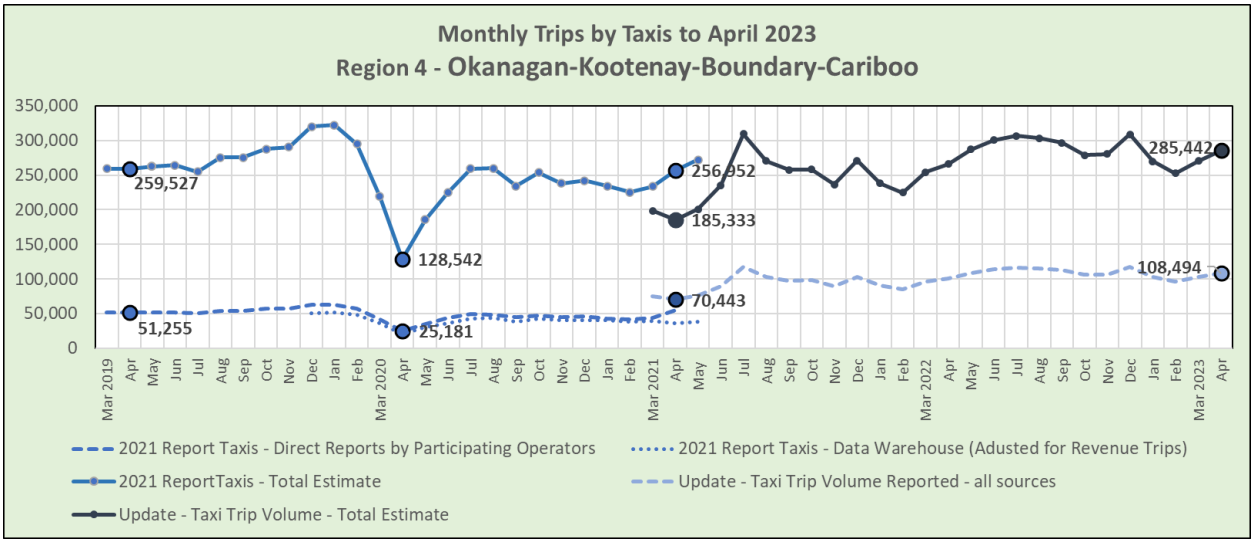

Figure 25

As discussed at the beginning of this section, the estimate is conservative because the sample taxi firms for this 2023 study are different from the sample firms available for the 2021 study. The 2023 sample produces lower estimates, as shown by the overlapping month of April 2021. Looking at the 2023 sample by itself, there was a strong recovery between April 2021 and April 2023 (the dashed light blue line), with a percentage of growth greater than 50%.

Looking at broader economic conditions in Region 4:

- Unemployment has fallen to pre-Covid levels in the region, except for Cariboo (Figure 26).[33] Cariboo's unemployment rate had more than recovered by the summer of 2022, but has since been afflicted by layoffs in lumber mills and associated manufacturing, and knock-on effects on retail and municipal jobs.
- Hotel occupancy is the same or higher, comparing pre-Covid levels in March 2019 to March 2023 (Figure 27).[34]
- Airport Passenger volume has *not* recovered in Region 4, similar to Region 3 (Figure 28).[35] Since hotel occupancy *has* recovered, it is likely that more visitors are reaching Region 4 by other means. Possible contributing factors are the challenges for airlines in re-establishing capacity after reducing the number of pilots and other staff during Covid, and the long-term change in traveller tastes leading to less international travel.

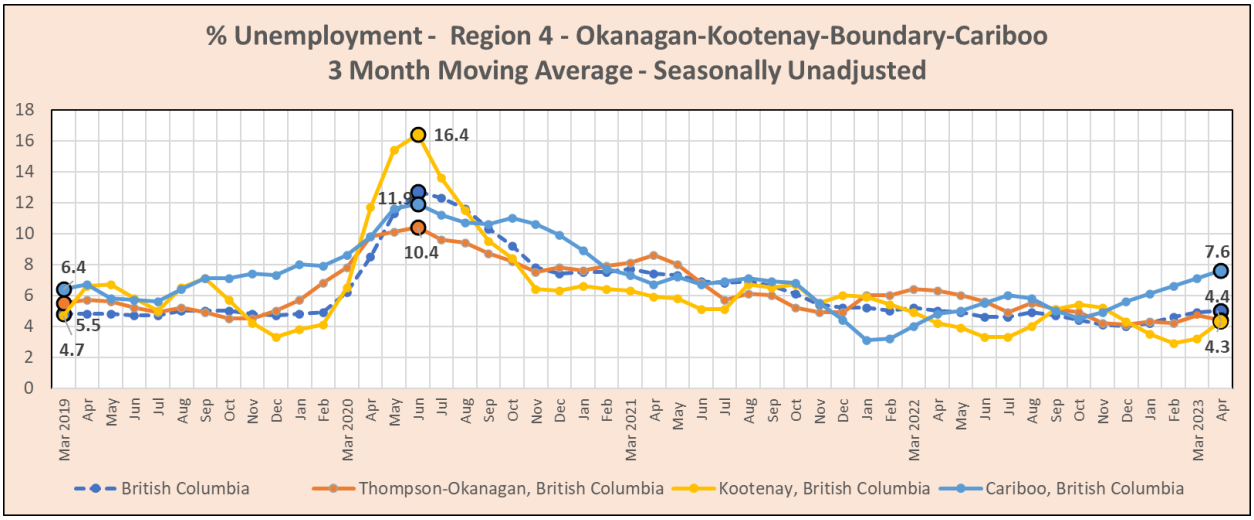

Figure 26

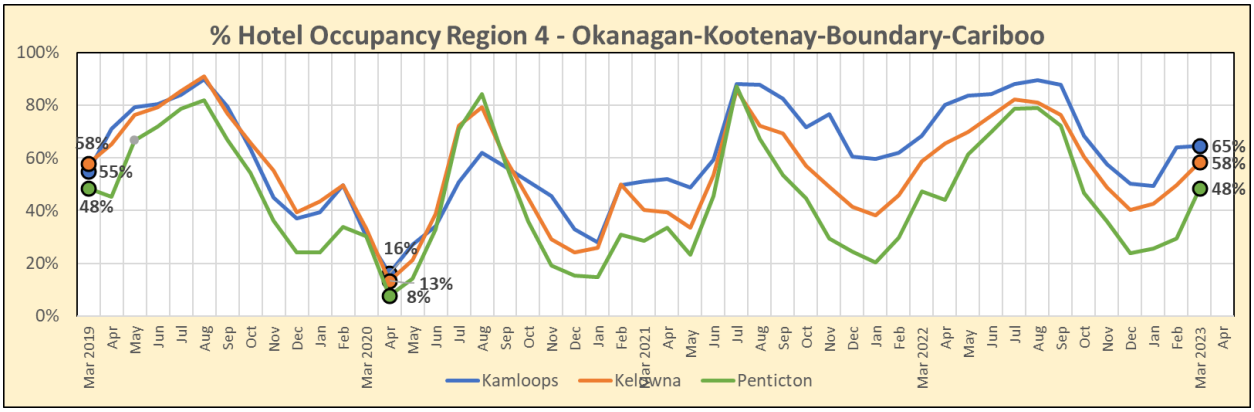

Figure 27

[33] Statistics Canada Table: 14-10-0387-01

[34] Courtesy of Destination BC.

[35] Destination BC Dashboard, supplemented by individual airport websites. https://www.destinationbc.ca/tourism-industry-dashboard/

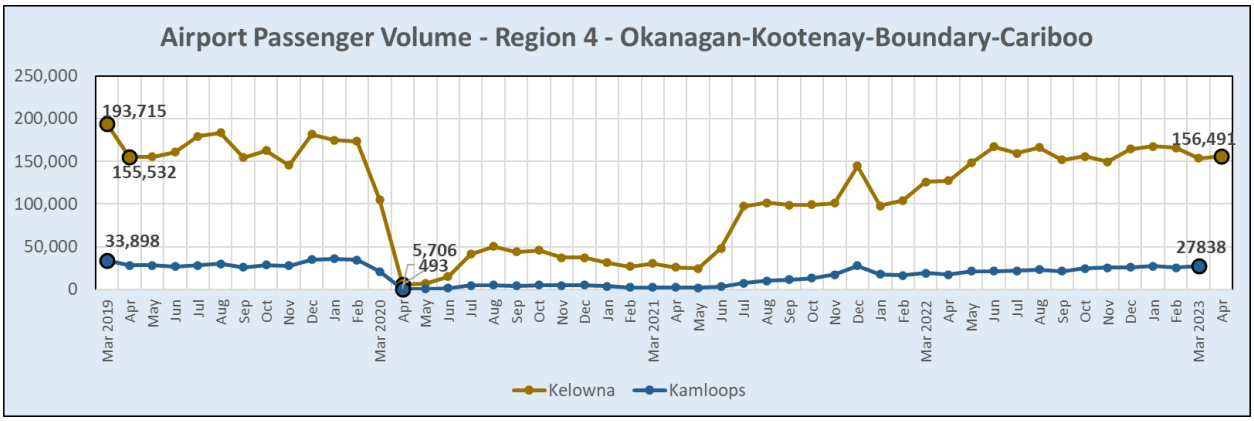

Figure 28

In summary, Region 4 taxi trip volumes have recovered from Covid, but the industry remains in a period of structural change as competition between taxis and TNS heats up. Canadian based TNS companies add a further 7.7% of trips (average over regions 3, 4 and 5). Regional airport volumes and associated travel are still recovering from Covid's impact on the airline sector's capacity.

Profile of Region 5: BC North Central and Other Areas

Estimated total taxi trips for Region 5 is shown in Figure 29. Interpretation of this figure is challenging due to the small sample of firms for which data was available, and differences between the sample firms available for the 2021 report and this 2023 study.[36]

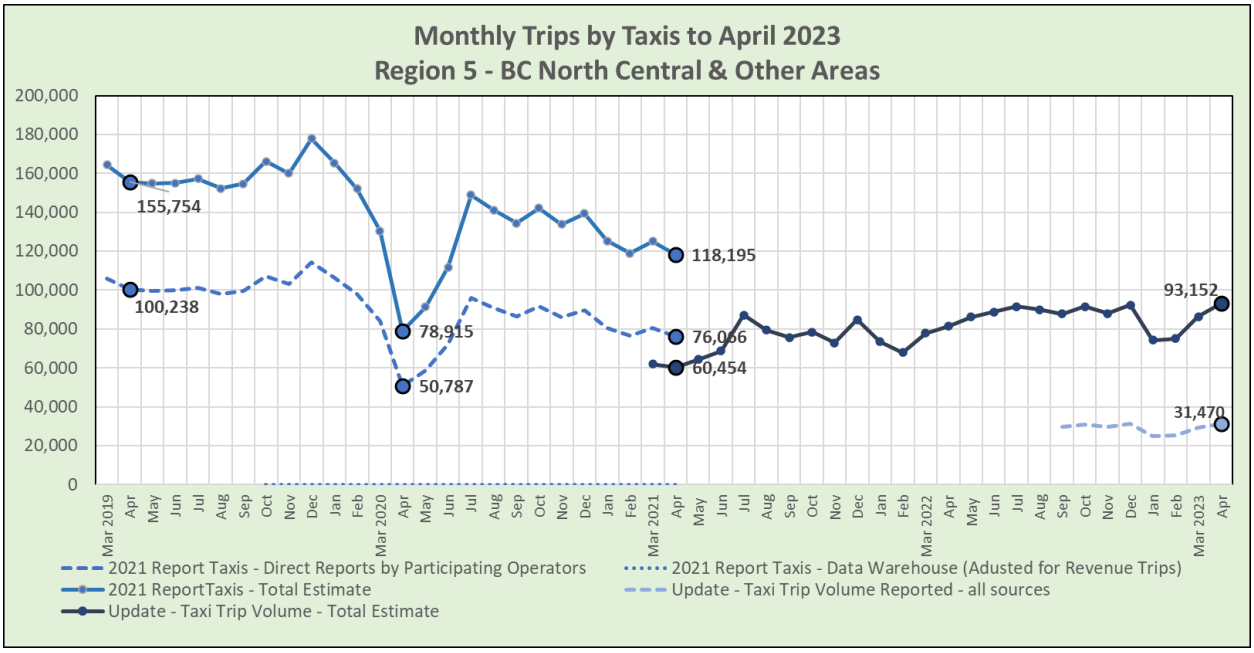

Figure 29

The problem is illustrated in the estimates for April 2021 (the middle of the graph). The 2021 report estimated 118,195 trips for that month. For the same month, but using a different set of

[36] For a full discussion, see Section 3, Data Quality Issues and Corrections.

reporting taxi companies, the estimate of total trips was about half that, at 60,454 trips. Thus the 2023 sample produces much smaller and more conservative estimates. Nevertheless, the 2023 sample shows a 53.4 % growth in taxi trips between March 2021 and March 2023 (from 60,454 to 93,152 trips).

Interpretation was less of a problem for the other regions, because the more conservative estimates from the 2023 sample still resulted in trip numbers that were higher than pre-Covid levels. As Figure 33 shows, that is not the case for Region 5. The April 2023 estimate of 93,152 trips is less than the 155,754 trips in April 2019, but the newer estimate is based on a different sample and is visibly more conservative.

If we assume that taxi firms in both samples experienced similar conditions over time, then we can apply the 53.4% growth rate from the new sample, to the estimate in March 2021 for the old sample. A 53.4% growth rate from 118,195 trips would result in 181,000 trips in April 2023 – more than the 155,754 pre-covid trips in 2019.

From this, it appears likely that Region 5 total taxi trips have at least recovered their pre-Covid levels. Better estimates will be possible in the future once more companies in Region 5 begin providing the required monthly reports to the Data Warehouse.

As well, there are the additional trips generated by the rapidly growing TNS services, estimated earlier at an average 7.7% of trips in regions 3, 4, and 5.

Looking at broader economic conditions in Region 5:

- Unemployment is a mixed picture in Region 5 (Figure 30).[37] Northeast BC has returned to better than pre-Covid levels, at 6.3% in April 2023, compared to 8.8% in April 2019. Part of the Northeast timeline is suppressed by Statistics Canada to preserve confidentiality.[38] In the case of the North Coast and Nechako, unemployment had risen to 6.0% in April 2023 from a pre-Covid 4.2%. However, it should be noted that the North Coast's unemployment rate had returned to pre-Covid levels through the fall of 2022, so that the sudden rise in 2023 is more likely attributable to local events.
- Hotel occupancy has more than recovered, at least as indicated by available data from Prince George (Figure 31).[39] Hotel occupancy was at 70.5% in March 2023, compared to 61.5% in April 2019 pre-Covid.
- Airport Passenger volume has *not* recovered in Region 5 (Figure 32), following a pattern similar to regions 3 and 4.[40] Since hotel occupancy has recovered, it is likely that more visitors are reaching Region 5 by other means. Possible contributing factors are the challenges still being experienced by airlines in re-establishing capacity after laying off pilots and other staff during Covid, and long-term change in traveller tastes leading to a preference for local over international travel.

[37] Statistics Canada Table: 14-10-0387-01
[38] Data may be suppressed to protect confidentiality if the sample size is small, so that the information in question can be combined with other information to identify individuals.
[39] Courtesy of Destination BC.
[40] Destination BC Dashboard https://www.destinationbc.ca/tourism-industry-dashboard/

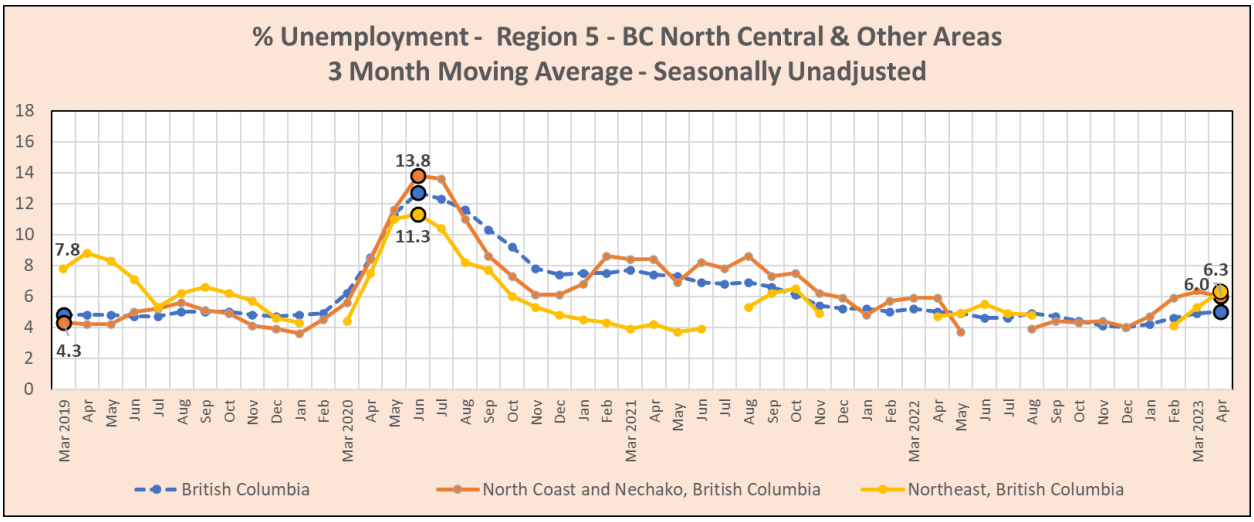

Figure 30

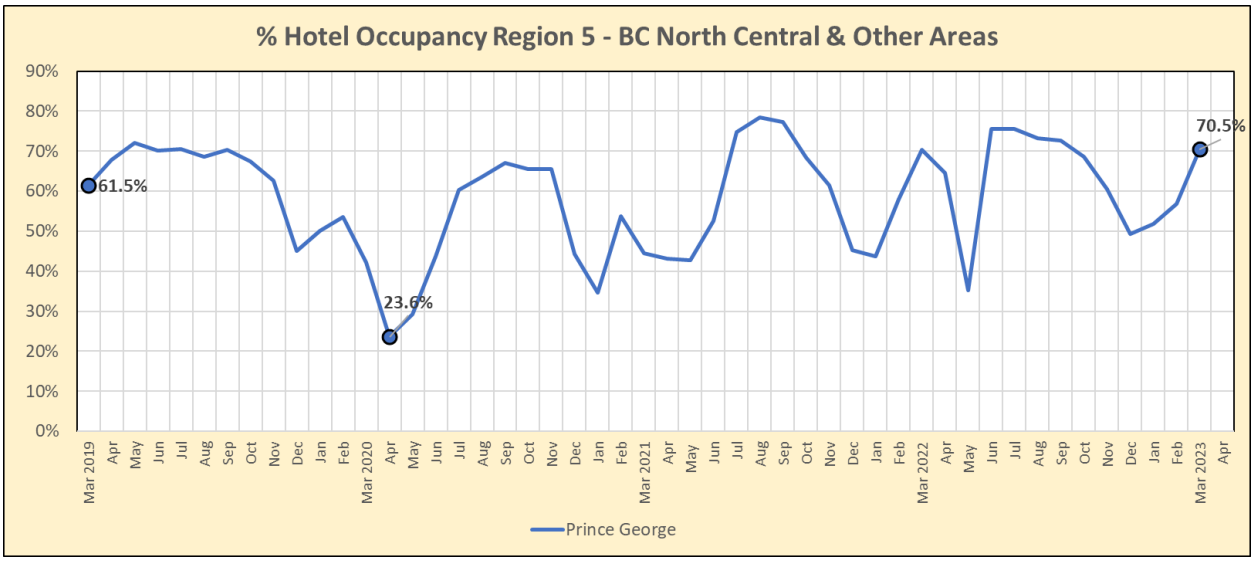

Figure 31

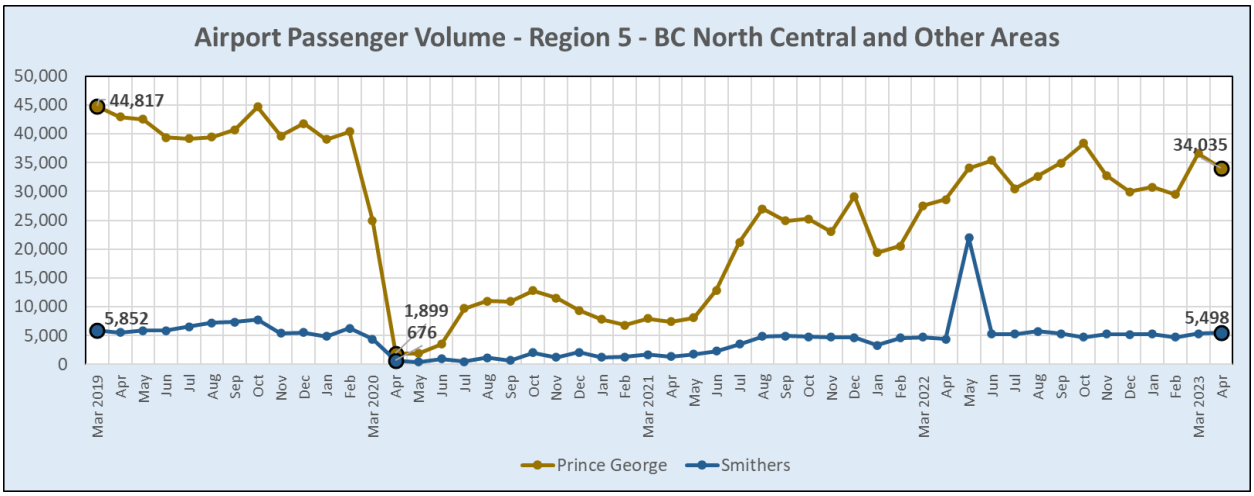

Figure 32

While trip volumes in Region 5 may have recovered, taxi companies are not necessarily in a good place. As evident in the comments collected by the survey for this study (see Section 5 for quotes), taxi companies in regions 3, 4, and 5 report experiencing:

- Meter rates not keeping up with rising costs
- Driver shortages
- Increasing competition from TNS companies, with additional concerns about Uber's potential entry after its acquisition of ReRyde.

In summary, Region 5 vehicle-for-hire trip volumes have likely recovered from Covid, but the industry remains in a period of structural change as competition between taxis and TNS heats up. In addition to Canadian companies such as Uride, Uber anticipated future entry into Prince George, as indicated by the preliminary listing of the city listing on Uber's website. Regional airport volumes and associated travel are still recovering from Covid's impacts on the airline sector's capacity, and the reduced volumes of international travel.

7 TNS Considerations

7.1 Sources of TNS Growth in BC

Overall, it appears TNS companies began operation in BC just prior to the advent of Covid, suffered an immediate setback, and then went on to and capture half the markets for trips.

However, this story is only true for Region 1, Lower Mainland and Whistler. As of April 2023, 97.7% of BC TNS Trips were in Region 1, led by the international companies Uber and Lyft. Uber and Lyft's licences from the Board restricted them to Region 1 during this period.

Figure 33 illustrates the difference in magnitude of the growth in TNS trips. Region 1, the Lower Mainland and Whistler, dominates the numbers of TNS trips. While the advent of Covid is apparent in the initial dip in April 2020, growth quickly recovered and accelerated in Region 1.

TNS Growth Now Rapid in Less Urbanized Regions

Figure 34 shows what happened in regions outside the Lower Mainland in more detail. A different scale is necessary to better illustrate what may not be apparent in the previous figure. At this scale, we can see that Region 2, Capital Region, remains fairly low through to the month of April 2023, the last month of our observations. In contrast, TNS activity in regions 3,4, and 5 picked up strongly in the summer of 2021, and experienced another spurt of growth at the beginning of the summer of 2022.[41]

[41] TNS numbers for Regions 3, 4, and 5 include corrections to historical numbers covered in the 2021 Report as the more active TNS companies in those regions began to report to the Data Warehouse, including backfiling previously unreported months. The 2021 Report covered the period to March/April 2021.

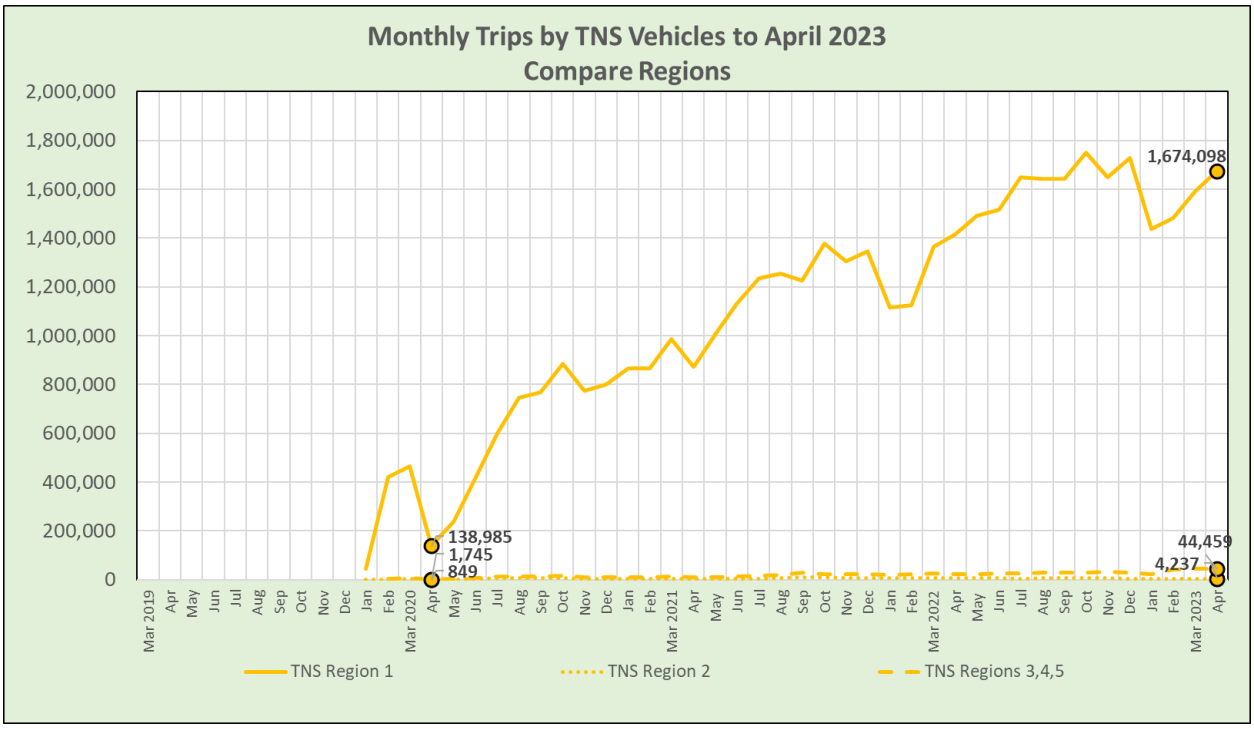

Figure 33

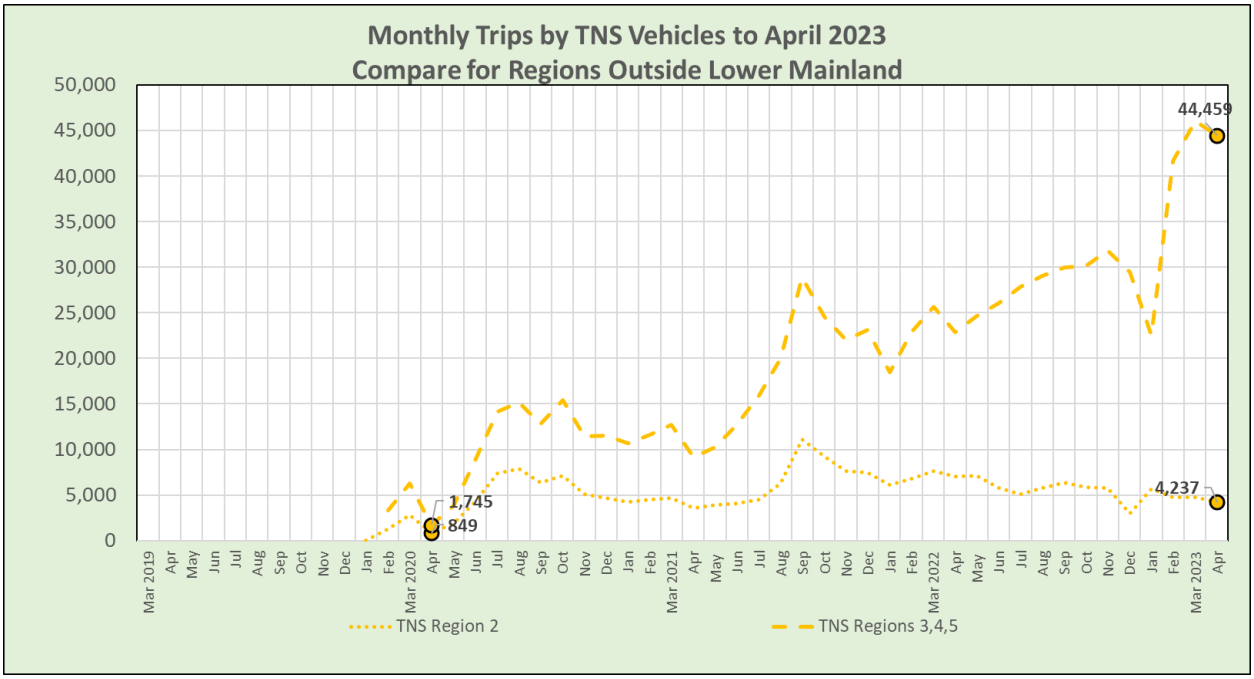

Figure 34

More Rapid Recovery of TNS in the Lower Mainland Attributable to Presence of Uber and Lyft

Thus Covid had the effect of delaying the launch of new TNS services in regions outside the Lower Mainland. The quicker recovery and growth of TNS in the Lower Mainland is attributable to the licensed presence of Uber and Lyft.

As analyzed in the 2021 report, an effective vehicle-for-hire operation needs to enter new markets at scale. Having just a few vehicles to cover a large area means customers must wait a long time for a car to arrive, and will quickly return to using their former favourite companies. In addition, operating costs per trip rise because, with fewer vehicles, the likelihood of one being near a customer when they call is lower. More time driving to pick up a passenger raises the cost and displaces revenue time with the passenger in the car.

The requirement to enter at a large enough scale imposes natural entry barriers to new TNS companies. Not only must they have enough drivers and vehicles from the beginning to cover the area efficiently, they also must advertise and gain market share quickly to give their drivers enough business.

Covid added to this barrier. The decline in customers meant lower passenger volume, especially at peak weekend times when restaurant and entertainment travel would normally produce a shortage of taxis and an opportunity for new TNS entrants. There is also a shortage of drivers, at first because of the risks, and later also because of the general shortage of labour in service occupations as the economy began to revive.[42] BC's requirement for a Class 4 commercial level driver's licence also adds to the difficulties, since upgrading one's BC driver licence requires an in-person driver test. Covid meant cancelled tests, a large backlog, and long waiting time.[43]

It is apparent from the data that international companies with good access to long-term capital were able to overcome the additional cost and scale barriers imposed by Covid and launch their services, while smaller companies were not. The TNS growth to date is driven by Uber and Lyft in Region 1 when their licences were restricted to Region 1.

Other licensees who employ the TNS/app-based business model restricted their offering and entry. Some, such as Uride, delayed expansion until announcing (re)entry in summer of 2021 and/or 2022.[44] Others, like TappCar, chose to end their BC operations.[45]

Implications of Uber Acquisition of ReRyde

When the Board began TNS licensing, ReRyde was one of the Canadian TNS companies licensed for operation in all five regions. Its launch was disrupted by the advent of Covid and the company remained largely inactive. In 2023, Uber acquired ReRyde and effectively expanded its right to operate from just the Lower Mainland and Whistler, to all five BC regions.[46] Uber held

[42] See for example: https://globalnews.ca/news/8008835/salaries-labour-shortages-canada/ https://www.bnnbloomberg.ca/canada-is-desperate-for-service-workers-as-provinces-reopen-1.1612180 and https://www.cbc.ca/news/canada/sudbury/demand-taxi-rideshare-drivers-needed-1.6083510

[43] See https://www.cbc.ca/news/canada/british-columbia/icbc-backlog-covid-1.6017718

[44] See for example: https://vancouverisland.ctvnews.ca/new-ride-sharing-company-uride-coming-to-nanaimo-1.6164696 and https://ckpgtoday.ca/2022/10/21/uride-launches-in-prince-george/

[45] See reference to 2021 shutdown in BC in https://winnipeg.ctvnews.ca/tappcar-shutting-down-in-winnipeg-exploring-female-only-ride-share-service-1.5965094#:~:text=TappCar%20CEO%20Noel%20Bernier%20said,Canadian%20cities%20in%20early%202021.

[46] The transfer of an existing operating licence to a new owner requires the approval of the Passenger Transportation Board. However, the scope of the Board's discretion is more limited than is the case for a new

its "grand opening" at Victoria International Airport on June 6, 2023 (just after the sample period reviewed by this study).[47] Uber announced the launch of service in Kelowna and Chilliwack (Region 4) on June 6, 2023.[48] As an indication of future intentions, Uber's website now also lists Nanaimo (Region 3), and Prince George (Region 5) as service areas, although it appears that service has not actually commenced at time of writing of this study.[49]

It is likely that Uber will repeat its expansion in the Capital Region (Region 2) given the similar urban density of that market to the Lower Mainland. If the experience of the Lower Mainland is replicated, this would mean a higher total volume of trips taken by passengers, but a lower market share for taxis unless new ways of competing and attracting passengers are found. In addition, Lyft may follow the same strategy of acquiring ownership of a smaller TNS company licensed to operate in the Capital and in other regions.

It is not a foregone conclusion, however, that TNS growth will play out the same way in the less urbanized parts of Vancouver Island (Region 3), or in the interior (Region 4), or the north (Region 5). The US state of Massachusetts is one of the few jurisdictions comparable to BC and for which data is published annually. Like BC, Massachusetts has state-wide jurisdiction for TNS companies, and has mountains separating its smaller interior communities from coastal cities like Boston.

Massachusetts began state-wide licensing of TNS companies in 2016, approximately four years earlier than BC. Despite the head start, TNS trip volumes in the interior took a long time to develop. As of 2019, the year prior to Covid, TNS trips per capita had grown at interior population centres, such as Springfield and Amherst, but were still much lower than in the larger coastal cities. Trips in years subsequent have not yet recovered to 2019 levels. Figure 35 is reproduced from the 2019 Data Report by the state.[50] Unfortunately, comparable data for taxi trip volumes are not available.

It is also not a forgone conclusion that the international companies of Uber and Lyft will be the dominant TNS in the other regions. Their size and established position helped them survive the challenges of Covid and obtain a head start in the Lower Mainland. That size and international

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licence application. As per paragraph 125 of the Board decision, under the legislation governing the Board "*The only consideration on a transfer application is whether the transferee is fit, proper, and capable of providing the service*." Other criteria that apply to a new license application do not apply to a transfer: *"…the Board is not to consider whether there is a public need for the service or whether the application, if granted, would promote sound economic conditions in the passenger transportation business in British Columbia*" The full text of the May 9 2023 decision may be found at https://www.ptboard.bc.ca/decisions/2023/15824-22 .

[47] See, for example https://vancouverisland.ctvnews.ca/uber-hosts-grand-opening-at-victoria-international-airport-1.6429790

[48] https://www.cbc.ca/news/canada/british-columbia/uber-launch-victoria-kelowna-1.6866579#:~:text=22-,Ride%2Dhailing%20company%20Uber%20will%20begin%20operations%20in%20Victoria%2C%20Kelowna,protests%20from%20local%20taxi%20companies.

[49] The Board decision on the transfer of ReRyde's licence called for a three-month notice to the Board before service was offered outside Regions 2 and 4. The listing of Prince George (Region 5) and Nanaimo (Region 3) appears preliminary.

[50] https://tnc.sites.digital.mass.gov/

presence still confers advantages, but a viable market niche for TNS exists for whichever company is able and willing to make an effort. The efforts of BC and Canadian TNS in the last two years have given the more local alternatives a head-start in regions 3, 4, and 5. Whether more local TNS firms are able to retain their foothold in these regions remains to be seen.

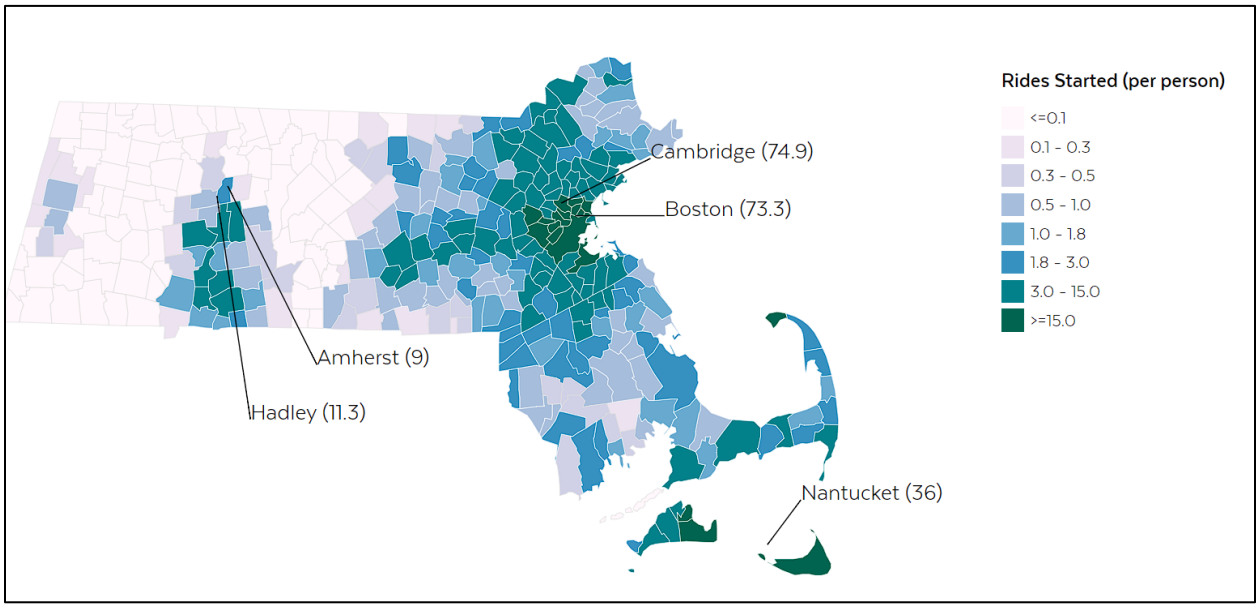

Figure 35 – TNS Rides Per Capita for the State of Massachusetts in 2019. Reproduced from Data Report 2019, State of MA.

7.2 Have TNS Operators Added to Passenger Trip Volume, or Just Replaced Taxi Service?

An interesting question is whether the growth in TNS trip volumes came solely at the expense of taxi companies, or added to the total volume of trip demand by passengers.

Although providing the same point-to-point transportation, taxis and TNS offer different kinds of services to customers. Taxis are more highly regulated and equipped to enable them to safely pick up customers hailing them from the street. The TNS business model is based on private vehicles driven by qualified drivers and, allegedly, provides a different feel as a "shared ride."

Passenger choice drives the numbers. Even in the absence of a net increase in passenger trips, passengers who choose TNS likely see it as having a higher value. The different service approach by TNS is also alleged to attract a greater number of passengers that would result in more combined taxi and TNS trips than were generated by taxis alone.

Growth in Total Trips is Consistent with Experience of Other Jurisdictions

Although the 51.9% growth in passenger trips for the Lower Mainland is large, it is also consistent with the experience of other jurisdictions in the first few years that followed the

introduction of TNS service. Figure 36 below compares growth in the Lower Mainland after the 2020 introduction of TNS to other jurisdictions where data is available.[51]

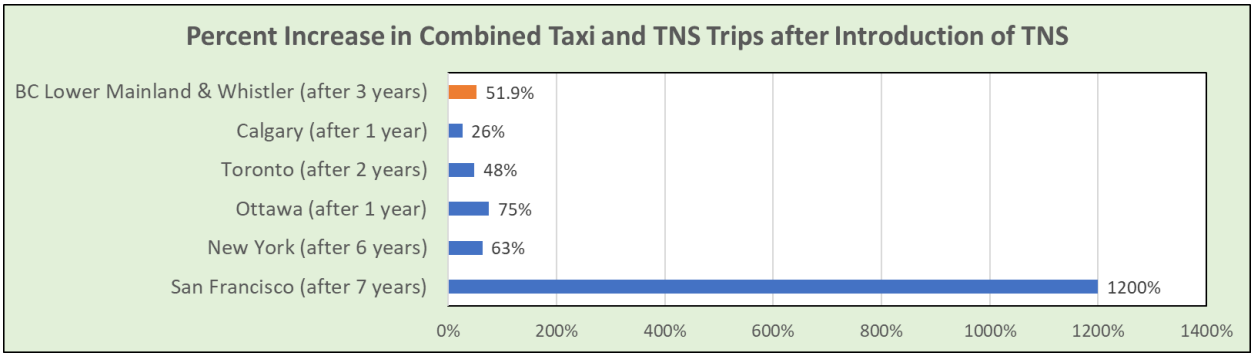

Figure 36

Note that San Francisco's 1200% increase is an outlier.[52] San Francisco was known to be significantly under-supplied with taxis and was the first city where Uber began operations.

BC's introduction of TNS service came later than most other large jurisdictions in North America, and occurred at the same time as the advent of Covid. It remains to be seen whether the market has reached a mature stage, or whether further significant growth in trip volumes is still to come.

Comparing Trip Growth in Capital Region to the Lower Mainland

When TNS service was introduced to BC, qualified TNS licensees were authorized in all regions of BC. As noted previously, the TNS licensees in regions other than the Lower Mainland, curtailed or postponed the launch of their services. This provides an opportunity to compare the impact of introducing active TNS service among different regions under the same jurisdiction.

The impact of a fully developed TNS service is evident when comparing Region 1 (Lower Mainland and Whistler) to Region 2 (Capital) where TNS companies were not active. Regions 1 and 2 are otherwise comparable as the two most urbanized of the five regions measured. Recovery in employment, hotel occupancy and airline passenger volumes are also similar.

Where the two regions differ is in the growth of trips. Capital Region passenger trips have grown 28.0% over pre-Covid levels, while the Lower Mainland trips have grown much more, at 51.9%, a difference of 23.9 percentage points.

Some of the shared growth in both regions is driven by shared factors, such as recovering employment and population growth. The strong increase in both regions was driven not only by

[51] Sources and methodology: *Modernizing Taxi Regulation. Hara Associates* (2018), British Columbia Ministry of Transportation and Infrastructure. Section 1.3. The data for the Lower Mainland and Whistler has been added using data from this 2023 study updating the impact of Covid.
[52] Estimate by San Francisco's taxicab regulator: *TNCs today – Fact Sheet*. November 2017. San Francisco County Transportation Authority.

recovery from Covid, but the full employment economy driven by Covid-related government stimulus spending and traditional factors such as population growth. However, population growth in the Capital Region from 2019 to 2022 was 3.3%, similar to the Lower Mainland at 4.8% - a difference of 1.5%.[53] [54] Population growth is a traditional indicator of increases in demand for vehicles-for-hire. Since vehicle-for-hire demand tends to grow proportionate to population, a 1.5% difference population growth accounts for very little of the difference in trip growth of 23.9 percentage points.

Given the similarities between the two regions, it is clear from the analysis of regions 1 and 2 that the driving force of the Lower Mainland's higher growth in passenger trips was the presence of the TNS option offered at full-scale by Uber and Lyft. Passengers are now choosing the TNS option for two thirds of trips in the Lower Mainland.

An Estimated One-Third of TNS trips are New Trips

The difference between the Lower Mainland's 51.9% trip growth, and the lower 28% in Capital Region, is 23.9 percentage points. If we assume that, in the absence of offering TNS service to passengers, the Lower Mainland passenger growth would have been approximately the same as the Capital region, then it appears that adding TNS service added 23.9% of the current level of trips to the Lower Mainland, or roughly 500,000 additional trips per month that would not otherwise have occurred. This suggests that, of the 1.6 million trips TNS trips in the Lower Mainland as of April 2023, 500,000 were new trips. Put another way, one-third of TNS trips represented new trips by passengers, and the other two-thirds were re-directed from taxis to TNS by passengers who preferred the TNS option.

Both types of TNS growth represent an increase in the health of the vehicle-for-hire industry. The passenger choice of TNS means that, for those making that choice, the service delivered equal or better value. The additional trips generated represent better service to the economy, and include additional trips to restaurants, theaters, etc. that in turn generate further local activity for these industries, and other business and leisure trips that seem worth making in the eyes of these passengers.

While recovery of the vehicle-for-hire industry from Covid can be said to be over, it is not clear whether the industry restructuring and expansion from the introduction of the TNS option is yet complete. As discussed later in this report, industry supply is currently constrained by the difficulty of finding and retaining drivers and other cost pressures. *When these supply constraints are relieved, there may be further growth in passenger volumes for both taxis and TNS.*

[53] Statistics Canada. Demographic Analysis Section, BC Stats, via Ministry of Citizens Services, Government of British Columbia. Growth for the Lower Mainland is for Mainland/Southwest in the available table. Population growth was stronger in BC outside both regions averaging 7% for the province.

[54] Population growth was stronger for other regions of the Province. The province as a whole averaged 7% growth over a similar period: March 31, 2019 estimate of 5,048,000 to March 31 2023 estimate of 5,437,000. Source: Quarterly Population Estimates Table 17-10-0009-01, release date 2023-06-28.

What about Public Transit?

An alternative hypothesis might be that the large TNS growth occurred at the expense of public transit trips. Across North America, public transit agencies experienced significant drops in 2020 from the advent of Covid. Passengers changed their transportation habits to reduce exposure to potential infection during Covid, and commuter volume dropped as more people worked from home. Transit agencies have been struggling to recover ridership numbers in the years since then.

In the case of BC's Lower Mainland, was the trip growth in TNS and taxis a result of passengers switching away from public transit?

Here, it is again valuable to compare Capital Region, without significant TNS service, to the Lower Mainland, with very available TNS service. For the Lower Mainland, TransLink reports in its 2022 Transit Performance Review[55] that "annual journeys totalled 193.6 million in 2022 . . . over 70% of levels in 2019". In addition, the agency reports "TransLink was the first transit agency in Canada and the United States to reach 80% ridership recovery (in fall 2022)". Victoria Regional Transit Commission reports very similar growth, at 81% between the fiscal year 2019/20 (ending March 30) and fiscal year 2022/23.[56] The 81% for Victoria would be reduced to below 80%, consistent with TransLink's statement, after adjusting for Victoria's report by fiscal year. The fiscal year includes one month of Covid in the base 2019/20 fiscal report, and three more months of recovery in the 2022/23 report.

Thus, the recovery of the Lower Mainland's TransLink passenger volume was slightly better than Capital region, despite the Lower Mainland having the vigorous TNS alternative introduced. This suggests that the expansion of TNS trips did not come at the expense of public transit.

It may also be helpful to compare TransLink's post-Covid recovery in passenger volume, to the Toronto Transit Commission (TTC). The TTC includes Toronto's subway and might be viewed as more comparable to the Lower Mainland in terms of urban density and rail transit. TNS Service in Toronto was well established in the years prior to Covid (licensing began in 2012 – 8 years previous to Covid's arrival in 2020). In comparing rates of recovery between the Lower Mainland and Toronto, we would expect the Lower Mainland to show less well if the introduction of TNS took substantive trips away from TransLink during the recovery. However, the TTC's recovery has been slower than TransLink. The TTC reports 2019 calendar year passenger boardings at 987 million, while 2022 was 576 million, a recover of approximately

[55] https://www.translink.ca/plans-and-projects/strategies-plans-and-guidelines/managing-the-transit-network#:~:text=2019%20Transit%20Service%20Performance%20Review,grew%203.6%20per%20cent%20system wide.

[56] Conventional ridership is reported as 27,163,000 for fiscal year 2019/20 and 22,117,000 in 2022/23, a recovery of 81% of 2019/20. Note that the fiscal year ends March 30, so that one month of severe Covid impact is included in the base year. Sources: *#5 – Financialand Performance Report" Period ending June 20, 2022 – Victoria Reginal Transit Commission,* BC Transit (https://www.bctransit.com/documents/1529718912102); *#4 Financial and Performance report, Period Ending March 31, 2023 -Victoria Regional Transit Commission.* BC Transit (https://www.bctransit.com/documents/1529722679869).

58% of pre-Covid levels. TransLink reports a 70% recovery for all of 2022 (rising to 80% in the last quarter of 2022).

Taxis & TNS a Complement to Public Transit, not Necessarily a Substitute

For a single trip, an individual may take public transit, or a taxi, or TNS vehicle. In this sense taxis or TNS are a competing substitutes for public transit. However, we should recall that taxis and TNS are also *complementary* goods to public transit. The services go together as an alternative to owning a private vehicle (or a second vehicle). Those who choose not to own a private vehicle will use a package of *both* public transit and vehicles-for-hire like taxis or TNS. For example, a person without a private vehicle may take public transit to work, and take a vehicle-for-hire to go out on the weekend. In the longer run, we would expect private vehicle ownership to decline as public transit, taxis, and TNS service jointly improve and expand their ridership.

8 Considerations Looking Forward

This section offers some observations that may assist the Board in making future decisions related to issues raised in this 2023 study.

8.1 Moving Past Covid

While Covid has not gone away, the vehicle-for-hire industry and the economy as a whole have largely recovered. There are some long-term differences in consumer consumption patterns, including more online rather than in-person shopping, and a greater preference for local over international travel. Air transportation has not yet rebuilt capacity to meet the re-expanded demand for air travel. The lack of capacity may have disproportionately held back the recovery of airline passenger volumes at smaller regional airports in BC.

Nonetheless, the factors affecting the health and future of vehicle-for-hire now centres on emerging events, such as the regional impacts of climate change (e.g., heat domes, fires) and the current struggle of the Bank of Canada to moderate inflation.

There is also the ongoing restructuring of the industry as TNS service and taxis find their new equilibrium market shares. In this context, service to persons with disabilities is an important issue. Expectations for providing this service fall primarily on taxis which, unlike TNS, have the "duty to serve" embodied in practice, legislation, and municipal bylaws. The BC Provincial Government's recent announcement of funding assistance for accessible taxis through the new Passenger Transportation Accessibility Program (PTAP) is helpful in this area.[57]

8.2 Driver Shortages, Rising Costs, and Regulation of Meter Rates

The BC Passenger Transportation Board regulates meter rates. At present, it is guided by a taxi cost index (called the TLCI) that is largely tied to the Consumer Price Index, rather than industry costs.

[57] https://news.gov.bc.ca/releases/2023MOTI0009-000119

The Consumer Price Index (CPI) is measured by the rise in prices of consumer goods, weighted in proportion to the amounts normally purchased by the consumer. Raising meter rates in proportion to changes in the CPI keeps the real cost of taxis stable from the point of view of passengers, but runs into trouble when costs more specific to the industry itself rise more quickly than the CPI.

The most obvious example is fuel. Fuel is a larger portion of the cost of operating a taxi than it is of the average consumer's budget. When fuel prices jump, there is often talk of a need to adjust meter rates.

Less obvious, but of larger impact, is the cost of labour. The cost of the driver is a significant part of the cost of keeping a taxi on the road, but is not part of the CPI. Most taxi drivers are not paid a wage. Instead, it is the driver who pays for access to a vehicle and a taxi licence, covers their own fuel and other expenses, and then keeps the money paid by passengers. The difference between the expenses and the money from passengers is what the driver gets to take home, and constitutes their income. Arrangements vary if, for example, the driver provides their own vehicle, but the structure of the arrangement remains similar.

As a result, the meter rate must leave enough money after expenses to enable taxi companies to attract and retain drivers. Labour costs rise in a tight labour market. The meter rate may not keep up with the rising costs of keeping a taxi driver if it is based just on the average consumer basket of purchases.

The lack of connection between meter rates and cost of operations, is the substance of some complaints expressed by taxi companies and reported in Section 5 of this report. Even when meter rates are adjusted on a timely basis, the adjustments may not be enough to cover increased costs, and begin to threaten the ability of companies to earn a fair and reasonable rate of return on their efforts and investment. The net returns they can offer a taxi driver under the meter rate may not attract enough drivers. This may cause companies not to field all the taxis they have, even though there is customer demand for them. From the customer side, this means higher waiting times for the remaining taxis, or not being able to find a taxi at all during peak demand periods.

A review of the meter rate setting process to better link it to changes in the cost of taxi operation would likely meet some of the concerns of taxi companies. It might also help ensure the Board meets its obligation to permit fair and reasonable rates of return, and allow taxi companies to attract and retain sufficient drivers and use all of their licensed capacity to serve passengers.

The immediate importance of this issue is strongest in regions 3, 4, and 5. Taxi companies in these regions did not begin, pre-Covid and pre-TNS, with the cushion of profitability that may have existed for companies in more urbanized areas (represented by the higher value of taxi licence shares in larger cities at that time). Regions 3, 4, and 5 are where this 2023 study heard the strongest concerns about meter rates not keeping up with costs.

We note the Board has already taken significant steps towards addressing this issue. First it has initiated a review under the current system to provide immediate meter rate relief to the industry in the context of recent high rate of general inflation, allowing taxi licensees to apply for up to 7.3% rate increase in 2023. For the future, the Board is undertaking to create "a custom Taxi Cost index that calculates custom inflationary and cost-of-living increases more applicable to the taxi sector."[58]

8.3 Rate Squeeze and Driver Shortages

The 2021 Study identified a potential problem with lagged meter rate adjustments in the context of a driver shortage, under the title "Regulatory Risks of Fare Regulation During a Driver Shortage". The term used for this risk was *rate squeeze*. There is now a possibility that rate squeeze becoming a material problem in parts of BC.

The Risk

A feature of a driver shortage is that one of the advantages of the TNS business model over the taxi business model can turn into an unfair advantage.

Within boundaries, the TNS business model allows flexible fares. Fares rise when there is a shortage of vehicles and drivers, attracting more drivers and deterring some customers who will wait for a less busy time. This is an advantage for customers in that it allows reliable supply in peak period, at least for those willing to pay. It is also a disadvantage to customers in that the rate is not fixed, and those wishing to return home on a Saturday night may face a higher fare than they planned for. For those who prefer fixed rate fares, taxis are the alternative offered by the system.

Both approaches have virtues and can be offered jointly in a regulatory system that permits diversity of services and customer choice.

However, in the face of an ongoing driver shortage, taxis can be put under a rate-squeeze. During a driver shortage (and therefore a shortage of available vehicles), passenger demand can exceed supply. This will drive up TNS rates, a mixed blessing since the higher rates mean fewer customers, but the higher rates also retain drivers and attract more of them. Since taxi companies have fixed meter rates, their ability to raise returns to drivers is more limited. During a shortage, taxis will be busier. However, at a given meter rate there is a limit to how many fares can be carried and to the amount that can earned at a fixed meter rate.

In normal conditions an equilibrium will be reached. But, during an ongoing driver shortage, it is possible that taxi company margins will be squeezed by fixed meter rates to the point where they cannot retain drivers even though taxi demand justifies it. The drivers will then tend to move to TNS where the net hourly earnings are higher because of the higher average rates and the high customer demand.

[58] https://www.ptboard.bc.ca/news/2023-08/taxi-rates-cost-living-adjustment-2023

Rate squeeze may be happening or about to happen in less urbanized Regions of BC

Consider these comments drawn from taxi companies, selected from Section 4 of this report.

- *The catch now is that passenger rates will remain the same while Uber and ReRyde are permitted to compete with us, lowering our trip volume and the total revenue needed to support our company.*
- *Market share has gone down considerably and it is still difficult to find drivers. Our company is still not able to field the entire allocated number of licences as business is still not at the level of pre-covid.*
- *We hired an advertising company during the fall of 2022 to help find drivers. How many resumes have we replied to?... hundreds! How many have we followed up with? ... hundreds! How many to actually want work? ZERO! Our ability to obtain drivers in this current labor market is almost impossible.*
- *We have problems finding drivers. Business has increased some over the last year*
- *I would assess the company's current ability to operate and earn a reasonable rate of return as good, but at times difficult due to the lack of drivers.*
- *Minimum wages and gas prices are increasing but meter rates are not aligned to inflation.*

To attract drivers in a tight labour market, one normally would raise the net income being offered the driver. The above remarks are consistent with taxi companies which are facing adequate or good demand from customers, but cannot offer better terms to drivers to maintain capacity and meet demand. The inability to offer better terms may be linked to meter rates being fixed too low for present circumstances.

All but one of the above comments were from regions 3, 4, and 5. As noted above, taxi companies in less urbanized areas did not have as much flexibility to begin with because their cushion of profitability pre-Covid and pre-TNS was not as high as companies in large cities.

As detailed previously, the Board has already taken significant steps towards addressing this issue by allowing licensees to apply for up to 7.3% rate meter rate increase in 2023, and is undertaking to create "a custom Taxi Cost index that calculates custom inflationary and cost-of-living increases more applicable to the taxi sector."[59]

[59] https://www.ptboard.bc.ca/news/2023-08/taxi-rates-cost-living-adjustment-2023

Appendix A

Sample Letter and Survey Requesting Data

Hara Associates

May 17, 2023

Dear Taxi Licensee

Re: Request for Assistance – BC Passenger Transportation Board
Update on the State of BC's Vehicle-for-hire Industry

The BC Passenger Transportation Board has retained Hara Associates to document the current economic landscape for the BC passenger transportation industry, including the taxi industry

We would like to document the volume of taxi trips since before Covid to present. In addition, we would appreciate hearing about present factors that may be affecting your ability to operate and earn a reasonable profit. For example, current labour market conditions may be affecting your company's ability to obtain drivers.

We send this letter to ask for your assistance. Our first source of data will be the company reports many of you have already made to the Data Warehouse of the Ministry of Transportation & Infrastructure. However, some licensees have begun reporting to the Data Warehouse only recently, or may not yet have started to report. Companies may also prefer to report their own trip volumes as recorded in their own records.

Attached is a fillable form in PDF asking for monthly taxi trip volumes of your company from March 2019 to present. We ask that you e-mail the completed form to BC.Update.2023@Haraassociates.com . The form also asks your own assessment of factors affecting your company's viability and profitability today. Public reports will not reveal individual company data. A reply by Friday *May 26, 2023* would be appreciated.

To minimize the work associated with this request, participants in Hara Associates' 2021 study may choose to provide only the additional months of trip volumes, from Feb 2021 to present. We will use the earlier data you provided to cover the previous months.

Your cooperation is essential to providing the Board with a true picture of the state of the industry.

Any questions or concerns may be sent to BC.Update.2023@Haraassociates.com. We will endeavor to answer as soon as possible. Background to this request is also provided at https://www.ptboard.bc.ca/documents/2022-12-14-ia-Board-Follow-up-Investigation-on-COVID-19.pdf .

Sincerely,

Dr. Dan Hara
Hara Associates Incorporated

166 Glebe Avenue
Ottawa, Ontario
Canada K1S 2C5
613-482-4901 (fax)
hara@haraassociates.com

Data Request
Impact of Covid-19 on BC Passenger Transportation Industry
2023 Update

Thank you for completing this confidential form and returning by e-mail before Friday, May 26, 2023 to BC.Update.2023@haraassociates.com. The data is requested on behalf of the BC Passenger Transportation Board. Background is provided in the letter sent along with this form, and at https://www.ptboard.bc.ca/documents/2022-12-14-ia-Board-Follow-up-Investigation-on-COVID-19.pdf .

The questions below ask for your views on current business conditions for your taxi company, and for the monthly volume of taxi trips since March 2019 (the year prior to Covid-19 events). Companies who provided monthly volumes for the previous 2019 report need only provide monthly volumes since February 2021. Public reports will not reveal individual company data. *When saving filled-in form, please ensure it is saved "with changes".*

Questions or concerns may be sent to BC.Update.2023@haraassociates.com and we will endeavor to respond as quickly as possible.

COMPANY NAME AND CONTACT INFORMATION

Please enter Company and Contact Information below

1 - Company Name	
2 - Trade Names/Colours included in trip data	
3 – Company Contact in case of questions	
Name:	
Phone:	
e-mail:	

MONTHLY TRIP VOLUMES

4. Monthly Trip Volumes. Please complete the table on the following page to the degree that your company has records. There is a space at the end for explanatory notes. We suggest you use monthly trip reports that your company may have generated for its own use and retained in your records. Reflecting what your firm has shared among management is more important than slight differences in definition between companies.

If there is a choice, we suggest counting only trips where revenue was generated (e.g. not just turning the meter on and off to clear it), and counting the trip in the month when pickup occurred. For example if an accessible taxi trip was booked in April for a date in May, count the trip in May.

Please include all revenue trips including dispatch, hail, contract and accessible taxi.

Please select ONE of the options below:

- ○ We are providing estimated monthly trip volumes from March 2019 to present; **OR**
- ○ Our company already provided trip data for the 2019 study on the Impact of Covid-19. We are providing updated data from February 2021 to present only.

Company Taxi Trip Volumes by Month			
Year	**Month**	**Number of Taxi Trips**	**Explanatory Note if Desired**
2019	March		
	April		
	May		
	June		
	July		
	August		
	September		
	October		
	November		
	December		
2020	January		
	February		
	March		
	April		
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2021	January		
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	November		
	December		
2022	January		
	February		
	March		
	April		
	May		
	June		
	July		
	August		
	September		
	October		
	November		
	December		
2023	January		
	February		
	March		

BUSINESS CONDITIONS

5. Business volume is not the only indicator of business health. Relative to the year before Covid – 19 (i.e. prior to March 2020) how have the following business conditions changed for your company today?

	Significantly Less	Less	About the same	More	Significantly More	Not Applicable
Concessions to contract clients for whom the company provides taxis?	◯	◯	◯	◯	◯	◯
Difficulty in finding and/or keeping drivers?	◯	◯	◯	◯	◯	◯
Proportion of taxi shifts driven by the license-share holder or PTB license holder themselves?	◯	◯	◯	◯	◯	◯
Company fees charged to drivers who are not license-share or license holders?	◯	◯	◯	◯	◯	◯
Company fees charged to license-share holders (Shift/Daily/monthly/annual)?	◯	◯	◯	◯	◯	◯
Other Indicator:	◯	◯	◯	◯	◯	◯
Other Indicator:	◯	◯	◯	◯	◯	◯

6. How would you assess your company's current ability to operate and earn a reasonable rate of return for your effort and investment? What are the most important current factors? (If more space is needed, please add additional comments in e-mail returning this form.)

Thank you for your participation.

Appendix B

Data Tables

Appendix B – Data Tables

Trip Volume - All BC								
Month	2021 Report Taxis - Direct Reports by Participating Operators	2021 Report Taxis - Data Warehouse (Adjusted for Revenue Trips)	2021 Report Taxis - Total Estimate	TNS via Data Warehouse	2021 Report Total Trips Taxis & TNS	2023 Update Taxi Trip Volume Reported - All Sources	2023 Update Taxi Trip Volume - Total Estimate	2023 Update Total Trips Taxis & TNS
Mar 2019	1,778,518		2,484,713					
Apr	1,723,766		2,414,671					
May	1,797,052		2,508,442					
Jun	1,833,722		2,553,918					
Jul	1,811,940		2,522,960					
Aug	1,813,423		2,538,439					
Sep	1,772,973		2,496,723					
Oct	1,802,834	1,394,499	2,543,826					
Nov	1,757,534	1,361,073	2,482,373					
Dec	1,896,172	1,402,142	2,691,077					
Jan	1,698,741	1,119,138	2,395,488	44,637	2,440,125			
Feb	1,497,654	945,464	2,105,095	420,245	2,525,340			
Mar 2020	885,085	544,736	1,328,148	465,541	1,793,689			
Apr	328,877	171,195	565,889	138,985	704,874			
May	456,481	254,151	798,232	238,993	1,037,225			
Jun	668,784	444,059	1,168,516	416,022	1,584,538			
Jul	799,880	645,812	1,438,219	602,124	2,040,343			
Aug	798,222	621,538	1,410,628	748,824	2,159,452			
Sep	740,923	584,164	1,315,348	769,899	2,085,247			
Oct	767,078	634,019	1,381,182	885,942	2,267,124			
Nov	689,407	527,921	1,230,295	775,308	2,005,603			
Dec	713,270	576,740	1,284,046	799,879	2,083,925			
Jan	665,466	505,820	1,183,859	864,829	2,048,688			
Feb	644,685	466,218	1,115,885	867,581	1,983,466			
Mar 2021	699,525	580,425	1,249,011	984,593	2,233,604	699,297	1,112,257	2,096,850
Apr	641,914	505,777	1,177,076	884,931	2,048,869	612,386	995,661	1,880,592
May		536,447	1,001,007	1,035,745	2,036,752	661,686	1,092,546	2,128,291
Jun				1,138,677		770,762	1,218,553	2,357,230
Jul				1,246,223		907,038	1,463,368	2,709,591
Aug				1,267,912		959,421	1,509,673	2,777,585
Sep				1,244,668		917,784	1,438,604	2,683,272
Oct				1,393,470		994,065	1,547,495	2,940,965
Nov				1,318,669		947,478	1,474,667	2,793,336
Dec				1,362,208		1,023,429	1,631,353	2,993,561
Jan				1,127,608		813,679	1,306,738	2,434,346
Feb				1,139,281		781,902	1,259,221	2,398,502
Mar 2022				1,383,472		965,842	1,468,417	2,851,889
Apr				1,431,881		979,154	1,521,710	2,953,591
May				1,509,063		1,048,383	1,626,028	3,135,091
Jun				1,534,957		1,064,970	1,643,706	3,178,663
Jul				1,671,338		1,074,559	1,651,488	3,322,826
Aug				1,666,558		1,099,009	1,656,764	3,323,322
Sep				1,667,070		1,097,835	1,602,659	3,269,729
Oct				1,775,534		1,125,086	1,625,761	3,401,295
Nov				1,675,569		1,061,936	1,545,078	3,220,647
Dec				1,753,595		1,131,223	1,661,364	3,414,959
Jan				1,455,659		910,013	1,345,666	2,801,325
Feb				1,517,390		950,261	1,385,794	2,903,184
Mar 2023				1,634,122		1,065,249	1,540,472	3,174,594
Apr				1,714,320		1,037,472	1,617,173	3,331,493

Trip Volume - Region 1								
Month	**2021 Report Taxis - Direct Reports by Participating Operators**	**2021 Report Taxis - Data Warehouse (Adjusted for Revenue Trips)**	**2021 Report Taxis - Total Estimate**	**TNS via Data Warehouse**	**2021 Report Total Trips Taxis & TNS**	**2023 Update Taxi Trip Volume Reported - All Sources**	**2023 Update Taxi Trip Volume - Total Estimate**	**2023 Update Total Trips Taxis & TNS**
Mar 2019	1,473,491		1,726,717					
Apr	1,426,637		1,671,811					
May	1,492,904		1,749,466					
Jun	1,528,632		1,791,334					
Jul	1,507,906		1,767,047					
Aug	1,509,996		1,769,496					
Sep	1,464,335		1,715,988					
Oct	1,483,185	1,311,986	1,738,077					
Nov	1,441,966	1,281,032	1,683,651					
Dec	1,551,677	1,301,214	1,812,474					
Jan	1,372,658	1,017,921	1,548,979	44,637	1,593,616			
Feb	1,208,626	849,520	1,362,131	420,245	1,782,376			
Mar 2020	663,564	475,466	758,600	465,541	1,224,141			
Apr	206,235	137,451	249,182	138,985	388,167			
May	290,433	203,837	359,460	238,993	598,453			
Jun	451,137	377,241	605,533	416,017	1,021,550			
Jul	534,600	564,242	760,169	600,624	1,360,793			
Aug	536,323	538,214	735,632	746,876	1,482,508			
Sep	493,523	501,373	685,023	768,571	1,453,594			
Oct	507,439	525,553	715,033	885,137	1,600,170			
Nov	450,545	449,087	613,539	774,967	1,388,506			
Dec	470,050	498,790	655,889	799,666	1,455,555			
Jan	441,915	431,013	593,868	864,649	1,458,517			
Feb	427,929	374,964	536,074	867,420	1,403,494			
Mar 2021	468,544	459,264	633,160	984,414	1,617,574	484,809	604,957	1,589,371
Apr	430,215	395,655	574,741	871,666	1,446,407	423,890	528,941	1,400,607
May		405,697	589,328	1,006,214	1,595,542	460,917	575,144	1,581,358
Jun				1,130,068		526,441	656,907	1,786,975
Jul				1,234,792		603,871	753,526	1,988,318
Aug				1,254,173		665,952	830,992	2,085,165
Sep				1,226,904		635,301	792,745	2,019,649
Oct				1,378,147		701,662	875,552	2,253,699
Nov				1,304,331		680,806	849,528	2,153,859
Dec				1,346,529		748,024	933,404	2,279,933
Jan				1,115,275		569,366	710,470	1,825,745
Feb				1,123,197		554,082	691,398	1,814,595
Mar 2022				1,365,460		646,325	806,501	2,171,961
Apr				1,415,996		675,464	842,861	2,258,857
May				1,491,565		726,633	906,711	2,398,276
Jun				1,514,643		726,377	906,392	2,421,035
Jul				1,648,642		724,857	904,495	2,553,137
Aug				1,643,323		735,979	918,374	2,561,697
Sep				1,643,506		702,545	876,654	2,520,160
Oct				1,751,263		721,496	900,302	2,651,565
Nov				1,649,480		672,941	839,713	2,489,193
Dec				1,727,129		729,652	910,479	2,637,608
Jan				1,438,797		544,002	678,820	2,117,617
Feb				1,480,527		618,406	771,663	2,252,190
Mar 2023				1,592,834		681,049	849,831	2,442,665
Apr				1,674,098		693,042	864,796	2,538,894

Trip Volume - Region 2								
Month	**2021 Report Taxis - Direct Reports by Participating Operators**	**2021 Report Taxis - Data Warehouse (Adjusted for Revenue Trips)**	**2021 Report Taxis - Total Estimate**	**TNS via Data Warehouse**	**2021 Report Total Trips Taxis & TNS**	**2023 Update Taxi Trip Volume Reported - All Sources**	**2023 Update Taxi Trip Volume - Total Estimate**	**2023 Update Total Trips Taxis & TNS**
Mar 2019	91,057		176,876					
Apr	91,144		177,045					
May	97,928		190,223					
Jun	97,318		189,038					
Jul	94,550		183,661					
Aug	92,804		180,270					
Sep	93,628		181,870					
Oct	95,986	47,133	186,450					
Nov	93,749	43,372	178,361					
Dec	97,717	50,099	189,663					
Jan	91,828	48,936	178,468	0	178,468			
Feb	90,273	47,805	174,579	1,281	175,860			
Mar 2020	57,191	32,866	113,041	2,792	115,833			
Apr	23,567	13,139	45,416	849	46,265			
May	40,755	19,605	75,883	1,862	77,745			
Jun	61,353	30,539	114,396	4,266	118,662			
Jul	72,812	38,310	138,503	7,422	145,925			
Aug	75,621	39,244	144,222	7,888	152,110			
Sep	71,530	37,504	137,947	6,344	144,291			
Oct	75,579	39,864	146,166	7,151	153,317			
Nov	66,844	37,429	130,705	5,082	135,787			
Dec	64,956	37,527	128,592	4,679	133,271			
Jan	60,982	34,006	121,825	4,270	126,095			
Feb	60,540	43,609	130,241	4,498	134,739			
Mar 2021	65,885	49,681	143,796	4,699	148,495	118,515	148,748	153,447
Apr	57,327	43,483	125,263	3,605	128,868	92,677	116,319	119,924
May		48,463	139,609	3,940	143,549	114,928	144,246	148,186
Jun				4,078		130,359	163,614	167,692
Jul				4,468		162,806	204,338	208,806
Aug				6,258		173,581	217,862	224,120
Sep				11,142		165,099	207,216	218,358
Oct				9,213		173,438	217,682	226,895
Nov				7,673		161,602	202,827	210,500
Dec				7,437		164,653	206,656	214,093
Jan				6,107		135,716	170,337	176,444
Feb				6,765		138,641	174,009	180,774
Mar 2022				7,664		168,205	211,114	218,778
Apr				7,015		164,955	207,035	214,050
May				7,136		175,122	219,796	226,932
Jun				5,778		177,125	222,310	228,088
Jul				5,134		172,519	216,529	221,663
Aug				5,808		172,835	216,926	222,734
Sep				6,405		172,910	217,020	223,425
Oct				5,856		179,567	225,375	231,231
Nov				5,776		169,235	212,407	218,183
Dec				3,026		161,220	202,348	205,374
Jan				5,692		163,151	204,771	210,463
Feb				4,771		135,130	169,602	174,373
Mar 2023				4,794		171,333	215,040	219,834
Apr				4,237		177,175	222,373	226,610

Trip Volume - Region 3								
Month	**2021 Report Taxis - Direct Reports by Participating Operators**	**2021 Report Taxis - Data Warehouse (Adjusted for Revenue Trips)**	**2021 Report Taxis - Total Estimate**	**TNS via Data Warehouse**	**2021 Report Total Trips Taxis & TNS**	**2023 Update Taxi Trip Volume Reported - All Sources**	**2023 Update Taxi Trip Volume - Total Estimate**	**2023 Update Total Trips Taxis & TNS**
Mar 2019	56,933		157,277	(See Combined Regions 3,4,5)				
Apr	54,492		150,534					
May	54,852		151,529					
Jun	55,748		154,004					
Jul	58,003		160,233					
Aug	58,188		160,744					
Sep	61,029		168,593					
Oct	59,845	0	165,322					
Nov	61,419	0	169,670					
Dec	69,076	0	190,822					
Jan	65,176	0	180,049		180,049			
Feb	43,889	0	121,243		121,243			
Mar 2020	38,612	0	106,666		106,666			
Apr	23,107	0	63,833		63,833			
May	31,040	0	85,748		85,748			
Jun	40,436	0	111,704		111,709			
Jul	47,501	0	131,222		131,242			
Aug	46,995	0	129,824		129,875			
Sep	44,805	0	123,774		123,805			
Oct	44,963	0	124,210		124,254			
Nov	41,287	0	114,055		114,086			
Dec	42,713	0	117,995		118,020			
Jan	39,406	0	108,859		108,891			
Feb	38,042	0	105,091		105,119			
Mar 2021	40,997	0	113,254		113,312	52,464	98,266	98,324
Apr	36,896	0	101,925		101,982	55,853	104,614	104,671
May		0	0		0	57,514	107,724	107,781
Jun						50,296	94,206	94,206
Jul						58,081	108,788	108,788
Aug						59,187	110,859	110,859
Sep						56,220	105,302	105,302
Oct						62,675	117,392	117,392
Nov						60,345	113,028	113,028
Dec						72,449	135,698	135,698
Jan						61,030	114,309	114,309
Feb						54,001	101,145	101,145
Mar 2022						63,381	118,714	118,714
Apr						66,275	124,135	124,135
May						67,479	126,389	126,389
Jun						67,014	125,518	125,518
Jul						70,697	132,416	132,416
Aug						68,507	128,315	128,315
Sep						66,554	124,657	124,657
Oct						69,381	129,952	129,952
Nov						66,645	124,827	124,827
Dec						78,452	146,942	146,942
Jan						62,895	117,803	117,803
Feb						62,331	116,747	116,747
Mar 2023						63,398	118,745	118,745
Apr						80,838	151,410	151,410

Trip Volume - Region 4								
Month	**2021 Report Taxis - Direct Reports by Participating Operators**	**2021 Report Taxis - Data Warehouse (Adjusted for Revenue Trips)**	**2021 Report Taxis - Total Estimate**	**TNS via Data Warehouse**	**2021 Report Total Trips Taxis & TNS**	**2023 Update Taxi Trip Volume Reported - All Sources**	**2023 Update Taxi Trip Volume - Total Estimate**	**2023 Update Total Trips Taxis & TNS**
Mar 2019	51,240		259,451	(See Combined Regions 3,4,5)				
Apr	51,255		259,527					
May	51,864		262,610					
Jun	52,234		264,484					
Jul	50,331		254,848					
Aug	54,442		275,664					
Sep	54,425		275,578					
Oct	56,824	0	287,725					
Nov	57,401	0	290,646					
Dec	63,254	50,829	320,283					
Jan	62,614	52,281	322,562		322,562			
Feb	56,920	48,139	294,948		294,948			
Mar 2020	41,718	36,402	219,318		219,318			
Apr	25,181	20,605	128,542		128,542			
May	35,476	30,709	185,811		185,811			
Jun	43,877	36,279	225,034		225,034			
Jul	49,153	43,260	259,445		259,445			
Aug	48,479	44,080	259,855		259,855			
Sep	44,588	38,844	234,231		234,231			
Oct	47,602	42,730	253,603		253,603			
Nov	44,571	40,245	238,117		238,117			
Dec	45,836	40,423	242,168		242,168			
Jan	42,584	40,801	234,100		234,100			
Feb	41,643	38,701	225,562		225,562			
Mar 2021	43,562	39,666	233,659		233,659	75,419	198,425	198,425
Apr	55,033	36,492	256,952		256,952	70,443	185,333	185,333
May		38,639	272,070		272,070	76,418	201,051	201,051
Jun						89,380	235,155	235,155
Jul						117,639	309,503	309,503
Aug						102,798	270,456	270,456
Sep						97,935	257,663	257,663
Oct						98,252	258,496	258,496
Nov						89,862	236,423	236,423
Dec						102,941	270,832	270,832
Jan						90,514	238,137	238,137
Feb						85,416	224,725	224,725
Mar 2022						96,661	254,311	254,311
Apr						101,210	266,278	266,278
May						109,067	286,951	286,951
Jun						114,268	300,633	300,633
Jul						116,508	306,528	306,528
Aug						115,237	303,182	303,182
Sep						112,702	296,515	296,515
Oct						105,906	278,633	278,633
Nov						106,521	280,251	280,251
Dec						117,526	309,206	309,206
Jan						102,643	270,050	270,050
Feb						96,026	252,639	252,639
Mar 2023						102,831	270,545	270,545
Apr						108,494	285,442	285,442

Trip Volume - Region 5								
Month	**2021 Report Taxis - Direct Reports by Participating Operators**	**2021 Report Taxis - Data Warehouse (Adjusted for Revenue Trips)**	**2021 Report Taxis - Total Estimate**	**TNS via Data Warehouse**	**2021 Report Total Trips Taxis & TNS**	**2023 Update Taxi Trip Volume Reported - All Sources**	**2023 Update Taxi Trip Volume - Total Estimate**	**2023 Update Total Trips Taxis & TNS**
Mar 2019	105,797		164,392	(See Combined Regions 3,4,5)				
Apr	100,238		155,754					
May	99,504		154,614					
Jun	99,790		155,058					
Jul	101,150		157,172					
Aug	97,993		152,266					
Sep	99,556		154,695					
Oct	106,994	0	166,252					
Nov	102,999	0	160,045					
Dec	114,448	0	177,835					
Jan	106,465	0	165,430		165,430			
Feb	97,946	0	152,193		152,193			
Mar 2020	84,000	0	130,523		130,523			
Apr	50,787	0	78,915		78,915			
May	58,777	0	91,330		91,330			
Jun	71,981	0	111,847		111,852			
Jul	95,814	0	148,880		148,900			
Aug	90,804	0	141,095		141,146			
Sep	86,477	0	134,372		134,403			
Oct	91,495	0	142,169		142,213			
Nov	86,160	0	133,879		133,910			
Dec	89,715	0	139,403		139,428			
Jan	80,579	0	125,207		125,239			
Feb	76,531	0	118,917		118,945			
Mar 2021	80,537	0	125,142		125,200		61,860	61,918
Apr	76,066	0	118,195		118,252		60,454	60,511
May							64,380	64,437
Jun							68,672	68,672
Jul							87,214	87,214
Aug							79,504	79,504
Sep							75,678	75,678
Oct							78,373	78,373
Nov							72,861	72,861
Dec							84,762	84,762
Jan							73,485	73,485
Feb							67,944	67,944
Mar 2022							77,776	77,776
Apr							81,401	81,401
May							86,181	86,181
Jun							88,853	88,853
Jul							91,520	91,520
Aug							89,967	89,967
Sep						29,667	87,814	87,814
Oct						30,912	91,500	91,500
Nov						29,689	87,879	87,879
Dec						31,213	92,390	92,390
Jan						25,075	74,222	74,222
Feb						25,386	75,143	75,143
Mar 2023						29,159	86,311	86,311
Apr						31,470	93,152	93,152

Trip Volume - Regions 3, 4, 5 Combined Totals								
Month	**2021 Report Taxis - Direct Reports by Participating Operators**	**2021 Report Taxis - Data Warehouse (Adjusted for Revenue Trips)**	**2021 Report Taxis - Total Estimate**	**TNS via Data Warehouse (*Numbers prior to Apr 2021 were backfiled and do not appear in 2021 Report)**	**2021 Report Total Trips Taxis & TNS**	**2023 Update Taxi Trip Volume Reported - All Sources**	**2023 Update Taxi Trip Volume - Total Estimate**	**2023 Update Total Trips Taxis & TNS**
Mar 2019	See individual tables for regions 3, 4, and 5.		581,120		See individual tables for regions 3, 4, and 5.			
Apr			565,815					
May			568,753					
Jun			573,546					
Jul			572,253					
Aug			588,674					
Sep			598,865					
Oct			619,299					
Nov			620,361					
Dec			688,940					
Jan			668,041					
Feb			568,385	3,357				
Mar 2020			456,507	6,246				
Apr			271,290	1,745				
May			362,890	3,810				
Jun			448,586	8,814				
Jul			539,547	14,185				
Aug			530,774	15,176				
Sep			492,377	12,790				
Oct			519,982	15,443				
Nov			486,052	11,410				
Dec			499,566	11,538				
Jan			468,166	10,676				
Feb			449,570	11,595				
Mar 2021			472,055	12,725			358,551	371,276
Apr			477,072	9,131			350,401	359,532
May				10,234			373,156	383,390
Jun				12,687			398,032	410,719
Jul				15,899			505,504	521,403
Aug				19,997			460,819	480,816
Sep				28,906			438,643	467,549
Oct				24,536			454,261	478,797
Nov				22,011			422,312	444,323
Dec				23,116			491,293	514,409
Jan				18,440			425,931	444,371
Feb				22,849			393,815	416,664
Mar 2022				25,676			450,801	476,477
Apr				22,900			471,814	494,714
May				24,634			499,521	524,155
Jun				26,092			515,004	541,096
Jul				27,830			530,464	558,294
Aug				29,043			521,464	550,507
Sep				29,969			508,986	538,955
Oct				30,127			500,085	530,212
Nov				31,865			492,957	524,822
Dec				29,492			548,538	578,030
Jan				22,554			462,075	484,629
Feb				41,634			444,529	486,163
Mar 2023				46,082			475,601	521,683
Apr				44,459			530,004	574,463

Hotel Occupancy by Community [1]													
TNS Region	**Municipality**	**Mar 19**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
1	Abbotsford/Chilliwack	78%	77%	79%	79%	85%	87%	80%	78%	70%	52%	62%	72%
1	Downtown Vancouver	72%	80%	85%	92%	91%	93%	91%	77%	75%	69%	63%	72%
1	Greater Vancouver	75%	80%	84%	90%	89%	91%	90%	79%	74%	68%	65%	73%
1	Langley/Surrey	74%	76%	81%	86%	83%	85%	84%	75%	70%	57%	59%	67%
1	Other Vancouver	76%	80%	83%	89%	88%	90%	89%	80%	71%	67%	66%	79%
1	Richmond	79%	81%	82%	88%	87%	89%	91%	84%	78%	73%	73%	75%
1	Whistler Resort	88%	69%	54%	73%	82%	85%	69%	41%	40%	73%	80%	85%
2	Greater Victoria	71%	71%	77%	83%	86%	89%	82%	74%	63%	58%	46%	67%
3	Campbell River	73%	74%	77%	85%	92%	94%	86%	74%	68%	56%	52%	68%
3	Nanaimo	73%	81%	82%	83%	87%	89%	77%	72%	68%	54%	53%	64%
3	Other Van. Island	64%	63%	70%	75%	82%	88%	75%	64%	61%	50%	55%	67%
3	Parksville/Qualicum	66%	59%	57%	63%	78%	85%	65%	50%	47%	49%	48%	58%
4	Kamloops	55%	71%	79%	81%	84%	90%	79%	64%	45%	37%	40%	50%
4	Kelowna	58%	65%	76%	79%	85%	91%	77%	66%	55%	39%	43%	50%
4	Penticton	48%	45%	67%	72%	79%	82%	67%	54%	36%	24%	24%	34%
5	Prince George	62%	68%	72%	70%	71%	69%	70%	67%	63%	45%	50%	54%
6	Other BC Comm.	52%	48%	57%	66%	74%	75%	65%	55%	46%	40%	46%	53%
7	BC Overall	68%	69%	74%	81%	84%	86%	80%	69%	62%	56%	56%	66%
TNS Region	**Municipality**	**Mar 20**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
1	Abbotsford/Chilliwack	53%	30%	30%	38%	48%	56%	55%	51%	44%	37%	37%	72%
1	Downtown Vancouver	32%	5%	8%	14%	19%	28%	26%	23%	18%	17%	17%	22%
1	Greater Vancouver	39%	16%	20%	25%	28%	35%	34%	32%	27%	24%	27%	32%
1	Langley/Surrey	43%	23%	27%	31%	41%	50%	53%	48%	44%	37%	42%	49%
1	Other Vancouver	48%	24%	28%	31%	37%	45%	44%	45%	39%	33%	37%	42%
1	Richmond	48%	26%	32%	41%	38%	37%	35%	35%	33%	30%	37%	42%
1	Whistler Resort	37%	2%	5%	19%	48%	61%	43%	32%	20%	28%	27%	85%
2	Greater Victoria	35%	12%	16%	22%	36%	53%	47%	40%	30%	23%	31%	41%
3	Campbell River	40%	31%	43%	54%	70%	87%	74%	72%	45%	45%	45%	57%
3	Nanaimo	41%	12%	18%	37%	57%	76%	58%	50%	37%	27%	30%	64%
3	Other Van. Island	40%	14%	26%	42%	57%	69%	67%	62%	50%	35%	43%	57%
3	Parksville/Qualicum	37%	11%	19%	36%	63%	73%	61%	56%	47%	36%	36%	58%
4	Kamloops	30%	16%	27%	34%	51%	62%	57%	51%	46%	33%	28%	50%
4	Kelowna	33%	13%	21%	39%	72%	79%	60%	45%	29%	24%	26%	50%
4	Penticton	30%	8%	14%	33%	71%	84%	59%	36%	19%	15%	15%	31%
5	Prince George	42%	24%	29%	44%	60%	64%	67%	66%	66%	44%	35%	54%
6	Other BC Comm.	35%	20%	26%	40%	58%	67%	66%	47%	37%	30%	35%	53%
7	BC Overall	37%	17%	22%	31%	44%	53%	48%	40%	32%	27%	30%	35%
TNS Region	**Municipality**	**Mar 21**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
1	Abbotsford/Chilliwack	60%	59%	51%	60%	79%	82%	77%	75%	77%	63%	61%	70%
1	Downtown Vancouver	25%	22%	20%	31%	50%	70%	64%	57%	53%	50%	30%	46%
1	Greater Vancouver	40%	35%	31%	45%	58%	73%	64%	59%	56%	52%	40%	52%
1	Langley/Surrey	54%	48%	46%	57%	71%	83%	74%	68%	67%	54%	49%	65%
1	Other Vancouver	47%	42%	37%	48%	65%	78%	68%	64%	60%	54%	46%	57%
1	Richmond	62%	53%	48%	68%	64%	71%	59%	54%	56%	56%	54%	57%
1	Whistler Resort	32%	5%	7%	26%	59%	64%	48%	41%	38%	62%	52%	76%
2	Greater Victoria	44%	38%	24%	39%	67%	77%	71%	65%	60%	53%	41%	54%
3	Campbell River	67%	52%	52%	67%	91%	94%	91%	79%	74%	67%	65%	73%
3	Nanaimo	40%	33%	32%	49%	80%	89%	83%	72%	69%	56%	39%	53%
3	Other Van. Island	60%	45%	41%	60%	83%	86%	82%	69%	65%	56%	49%	63%
3	Parksville/Qualicum	56%	37%	32%	60%	91%	92%	76%	72%	60%	54%	44%	62%
4	Kamloops	51%	52%	49%	59%	88%	88%	82%	72%	77%	60%	60%	62%
4	Kelowna	40%	39%	34%	53%	86%	72%	69%	57%	49%	41%	38%	46%
4	Penticton	29%	34%	23%	45%	87%	67%	54%	45%	29%	25%	20%	30%
5	Prince George	45%	43%	43%	53%	75%	79%	77%	68%	61%	45%	44%	58%
6	Other BC Comm.	46%	36%	37%	52%	71%	71%	63%	53%	47%	40%	45%	54%
7	BC Overall	43%	36%	33%	47%	68%	74%	66%	59%	55%	50%	43%	55%

[1] Courtesy of Destination BC

Hotel Occupancy by Community [2]													
TNS Region	**Municipality**	**Mar 22**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**
1	Abbotsford/Chilliwack	81%	81%	79%	84%	84%	86%	86%	82%	76%	62%	71%	83%
1	Downtown Vancouver	62%	77%	78%	85%	87%	87%	89%	80%	79%	67%	61%	71%
1	Greater Vancouver	65%	77%	78%	85%	87%	87%	87%	79%	77%	69%	64%	74%
1	Langley/Surrey	77%	77%	80%	86%	85%	88%	85%	75%	73%	59%	64%	75%
1	Other Vancouver	66%	73%	74%	82%	85%	88%	84%	77%	74%	65%	62%	74%
1	Richmond	67%	79%	80%	86%	87%	86%	87%	79%	79%	79%	72%	82%
1	Whistler Resort	76%	55%	47%	60%	65%	68%	60%	42%	39%	72%	84%	87%
2	Greater Victoria	68%	75%	43%	79%	83%	84%	81%	68%	60%	52%	47%	57%
3	Campbell River	81%	79%	86%	93%	85%	87%	83%	70%	66%	55%	66%	57%
3	Nanaimo	66%	70%	71%	78%	85%	83%	79%	69%	63%	55%	45%	61%
3	Other Van. Island	71%	66%	71%	76%	85%	87%	81%	70%	64%	50%	48%	62%
3	Parksville/Qualicum	78%	73%	74%	77%	85%	88%	69%	55%	50%	42%	41%	54%
4	Kamloops	68%	80%	84%	84%	88%	89%	88%	68%	58%	50%	49%	64%
4	Kelowna	59%	66%	70%	76%	82%	81%	76%	60%	49%	40%	43%	50%
4	Penticton	47%	44%	61%	70%	79%	79%	72%	47%	36%	24%	26%	30%
5	Prince George	70%	65%	35%	76%	76%	73%	73%	69%	61%	49%	52%	57%
6	Other BC Comm.	55%	50%	56%	66%	74%	75%	72%	60%	48%	43%	51%	58%
7	BC Overall	64%	68%	70%	78%	82%	82%	80%	69%	63%	57%	57%	66%
TNS Region	**Municipality**	**Mar 23**											
1	Abbotsford/Chilliwack	86%											
1	Downtown Vancouver	74%											
1	Greater Vancouver	78%											
1	Langley/Surrey	79%											
1	Other Vancouver	76%											
1	Richmond	86%											
1	Whistler Resort	82%											
2	Greater Victoria	69%											
3	Campbell River	77%											
3	Nanaimo	62%											
3	Other Van. Island	69%											
3	Parksville/Qualicum	68%											
4	Kamloops	65%											
4	Kelowna	58%											
4	Penticton	48%											
5	Prince George	71%											
6	Other BC Comm.	58%											
7	BC Overall	70%											

[2] Courtesy of Destination BC

Airport Enplaned and Deplaned Passengers[3]											
Region	**1**		**2**	**3**			**4**		**5**		
Month	**Abbotsford**	**Vancouver**	**Victoria**	**Nanaimo**	**Campbell River**	**Comox**	**Kelowna**	**Kamloops**	**Prince George**	**Smithers**	**Fort St. John**
Mar '19	76,107	2,132,943	163,795	38,719	3,460	33,725	193,715	33,898	44,817	5,852	24,250
Apr	73,127	2,077,843	159,441	38,566	3,646	32,271	155,532	28,299	42,911	5,554	23,859
May	81,917	2,184,854	169,825	41,177	4,265	34,994	155,259	28,256	42,537	5,883	23,873
Jun	91,337	2,389,024	171,848	41,598	4,850	35,799	160,894	26,705	39,368	5,904	23,198
Jul	98,347	2,612,363	184,561	51,255	5,692	42,656	179,263	28,369	39,146	6,525	23,311
Aug	105,819	2,681,698	191,436	53,486	6,363	45,206	183,191	30,217	39,400	7,198	23,028
Sep	91,112	2,303,396	156,363	43,471	4,949	34,327	154,396	26,162	40,697	7,341	22,644
Oct	87,065	2,064,711	159,369	42,641	4,504	32,088	162,597	28,753	44,674	7,764	24,587
Nov	79,884	1,878,207	138,895	36,172	3,548	29,205	145,266	27,975	39,633	5,401	28,873
Dec	88,157	2,155,151	158,450	41,815	3,213	35,447	181,799	34,884	41,810	5,519	23,261
Jan	74,493	2,021,682	132,279	33,814	3,213	28,516	174,824	35,859	39,015	4,869	21,752
Feb	70,956	1,812,964	132,432	32,516	3,254	27,774	173,517	34,701	40,353	6,296	22,751
Mar '20	46,554	1,107,135	81,105	21,918	2,220	18,432	104,948	21,123	24,964	4,371	14,626
Apr	3,787	68,853	4,261	1,903	0	1,500	5,706	493	1,899	676	1,196
May	5,232	88,798	6,635	2,098	0	1,363	6,805	589	1,910	441	1,296
Jun	7,436	193,102	13,437	5,252	306	2,269	15,335	1,407	3,505	960	3,405
Jul	18,281	331,695	34,055	13,234	855	8,059	41,515	4,675	9,707	521	8,558
Aug	20,285	417,445	46,889	16,856	1,165	10,618	50,514	5,293	11,006	1,176	10,896
Sep	17,266	355,353	37,661	13,096	1,091	8,728	43,983	4,265	10,902	672	9,526
Oct	18,399	333,694	38,463	13,384	910	8,496	45,842	5,311	12,835	2,016	10,628
Nov	17,164	276,041	25,495	11,066	683	6,534	37,351	4,779	11,519	1,267	10,236
Dec	15,725	293,525	22,162	9,135	658	5,344	37,107	5,180	9,379	2,126	7,493
Jan	11,808	251,676	18,396	7,836	615	4,568	31,417	3,997	7,831	1,214	6,545
Feb	8,504	177,806	13,388	5,903	641	4,153	26,892	2,503	6,834	1,289	5,967
Mar '21	9,902	202,133	16,900	8,320	711	4,949	30,339	2,690	7,939	1,740	7,473
Apr	12,955	189,686	15,698	7,725	733	4,971	26,146	2,506	7,427	1,407	6,873
May	8,931	200,491	12,746	7,347	733	4,141	24,633	2,053	8,124	1,746	6,434
Jun	17,916	317,293	28,332	11,249	965	6,951	48,035	3,373	12,870	2,291	8,672
Jul	49,498	693,774	68,292	21,770	1,663	18,293	97,335	7,310	21,176	3,520	12,839
Aug	103,245	1,051,652	123,024	28,853	2,454	26,365	101,653	10,104	26,989	4,862	14,272
Sep	83,008	948,217	104,378	24,614	1,969	20,960	98,685	11,359	24,909	4,948	12,782
Oct	75,815	967,176	99,127	23,278	1,748	19,421	99,199	13,230	25,249	4,796	13,045
Nov	56,433	945,603	77,826	20,453	1,578	17,074	101,107	17,475	23,040	4,759	11,910
Dec	73,376	1,141,095	97,641	25,589	1,682	23,218	144,363	27,785	29,118	4,667	14,324
Jan	42,712	776,628	57,181	15,049	882	12,864	97,789	17,862	19,370	3,349	10,655
Feb	46,874	813,356	61,004	15,767	1,186	12,697	104,127	16,498	20,559	4,625	11,303
Mar '22	66,352	1,212,940	94,642	23,031	1,552	18,457	126,193	19,330	27,503	4,730	14,751
Apr	77,128	1,377,263	116,422	25,897	1,801	22,159	127,141	17,348	28,621	4,419	15,884
May	91,765	1,586,007	140,444	32,297	769	25,661	148,192	21,342	34,084	21,964	18,538
Jun	83,881	1,882,240	151,895	35,980	2,831	30,035	167,294	21,624	35,365	5,289	19,836
Jul	89,132	2,101,609	162,002	35,382	3,363	34,391	159,517	21,846	30,510	5,282	*
Aug	109,654	2,149,340	169,326	37,233	3,730	36,340	166,242	23,185	32,644	5,765	*
Sep	98,881	1,892,073	151,005	32,525	3,202	30,011	151,868	21,666	34,897	5,334	*
Oct	102,057	1,809,540	149,659	34,674	2,504	29,726	155,891	24,835	38,341	4,721	*
Nov	94,951	1,659,890	119,296	27,954	1,900	22,119	149,366	25,770	32,789	5,280	*
Dec	89,325	1,752,530	117,163	24,536	1,702	23,063	164,439	26,068	29,980	5,173	*
Jan	*	1,794,415	107,694	26,435	1,833	22,994	167,687	27,264	30,757	5,267	*
Feb	*	1,686,753	100,046	26,435	1,877	21,068	165,653	25,765	29,449	4,750	*
Mar'23	*	2,006,242	122,135	26,435	2,135	25,861	153,507	27,838	36,572	5,311	*
Apr		1,905,101	132,685	30,155	2,140	25,675	156,491		34,035	5,498	*

[3] Destination BC Dashboard, supplemented by individual airport websites.....https://www.destinationbc.ca/tourism-industry-dashboard/