

2022

Transit Service Performance Review





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TransLink respects the Indigenous Nations within Metro Vancouver and acknowledges all First Nations, Inuit, and Métis Peoples for their continued resilience, sustainable stewardship, and as active members of the community for generations to come. We recognize that in planning and managing the region's transportation system we have a role to play in supporting reconciliation with Indigenous Peoples.

A Message from TransLink's CEO



In 2022, TransLink maintained consistent and reliable service for our customers every day. Ridership recovered at an encouraging rate as pandemic restrictions eased and customers returned to transit. I'm proud that we continue to lead ridership recovery compared to peer transit agencies in Canada and the US, becoming the first to reach 80% ridership recovery in fall 2022.

Public transit continues to be an essential travel option for Metro Vancouverites to get around the region.

We saw a structural shift in transit use during 2022. Travel patterns have changed, with an increase in “from home” options leading to varying rates of ridership recovery across all transit modes.

Customers shifted their travel time away from typical peak demand to other times of day, while some customers reduced how often they take transit. Customers returned to transit more on weekends than weekdays, reflecting a trend of stronger return in transit trips made for leisure and errands. Still, transit was chosen for our customers' everyday travel, and we adapted to provide services that delivered on our customer needs by reallocating service to where it was needed most. Our ability to adjust service to meet customers' needs as they returned to transit was critical to our system's recovery in 2022.

In summary, this report illustrates that the high levels of ridership in 2022 underscore the need for ongoing investment in transit expansion to ensure that we're prepared to both maintain our current levels of service and expand critically needed services, as nearly 50,000 more people move to Metro Vancouver every year.

We're committed to offering excellent service as we continue to deliver safe and reliable transportation options for Metro Vancouverites, connecting our customers to the people and places that matter most.

Kevin Quinn,
Chief Executive Officer, TransLink



Executive Summary

Transit is fundamental to mobility in Metro Vancouver and 2022 represented a pivotal year for transit recovery from the COVID-19 pandemic across the region.

As people returned to their usual place of work, school and other activities on a more consistent basis, transit helped people move in a safe and reliable manner, just as it did prior to the pandemic.

TransLink's system-wide ridership recovery in fall of 2022 reached 80% of pre-COVID-19 pandemic levels from fall 2019. We moved upwards of 380,000 people per weekday in fall 2022 and some parts of our region – including the fast-growing Southeast and Pitt Meadows/Maple Ridge sub-regions – began to see ridership rates that exceeded those that were experienced before the onset of COVID-19. System-wide, we continued to exceed the average recovery rate across major Canadian and American transit agencies.

Growing ridership, however, is once again putting a strain on our system. In fall 2022, overcrowding conditions on our bus network began to approach pre-COVID-19 levels. To help avoid systemic overcrowding and to better match service to demand, we reallocated bus service hours throughout the region, putting service where it was needed most, and dispatched extra trips at key times to address acute overcrowding.

If current ridership trends continue in 2023, there is a risk that overcrowding conditions will become more prevalent on the system and it will become increasingly difficult to ensure the transit system can meet the needs of a growing regional population and economy. Our ability to reallocate service to address these needs without causing overcrowding elsewhere in the system will be more limited. This may lead to less reliable and comfortable conditions for customers until additional funding to increase service levels is available.

About this report

TransLink manages Metro Vancouver’s integrated regional transit network. Our annual Transit Service Performance Review (TSPR) is one of the ways we regularly share information about the network.

This report provides a general overview of how customers used the transit network in 2022 and how we adapted transit service in response to these patterns. This report is a shorter document than past years and summarizes regular reporting provided to the Mayors’ Council on Regional Transportation and the TransLink Board of Directors.

While we regularly monitor ridership across the system to inform network adjustments and provide updates to decision-makers, looking back at ridership over longer time horizons can be useful for predicting and identifying new or longer-term patterns. Using these patterns, we can proactively plan to support regional goals and objectives, including those outlined in Transport 2050, our regional transportation strategy. This is especially important today as usage on our transit network continues to recover from the COVID-19 pandemic and a “new normal” of how and why we move around the region begins to stabilize.

This report primarily looks at data from fall 2022 (September 5, 2022 to December 18, 2022). Historically, the fall represents the most stable and highest level of ridership across the network. We illustrate how ridership compared to pre-COVID-19 pandemic levels – referred to as “ridership recovery” – by comparing data to fall 2019. Analyzing ridership recovery allows us to gauge the extent to which people in the region have returned to pre-COVID-19 pandemic travel patterns and identify any new travel patterns that are beginning to stabilize.

Most ridership information provided in this report is based on boardings from Compass Card taps on buses and at fare gates. Boardings have been adjusted to account for lower tap rates on all-door boarding routes, cash users, and customers age 12 and under who travel for free. Passenger load and overcrowding data in this report is based on Automated Passenger Counter (APC) data.

For more detailed data and insight on ridership trends and patterns in 2022 by service type, route, and sub-region, please visit the interactive data dashboards at translink.ca/tspr.

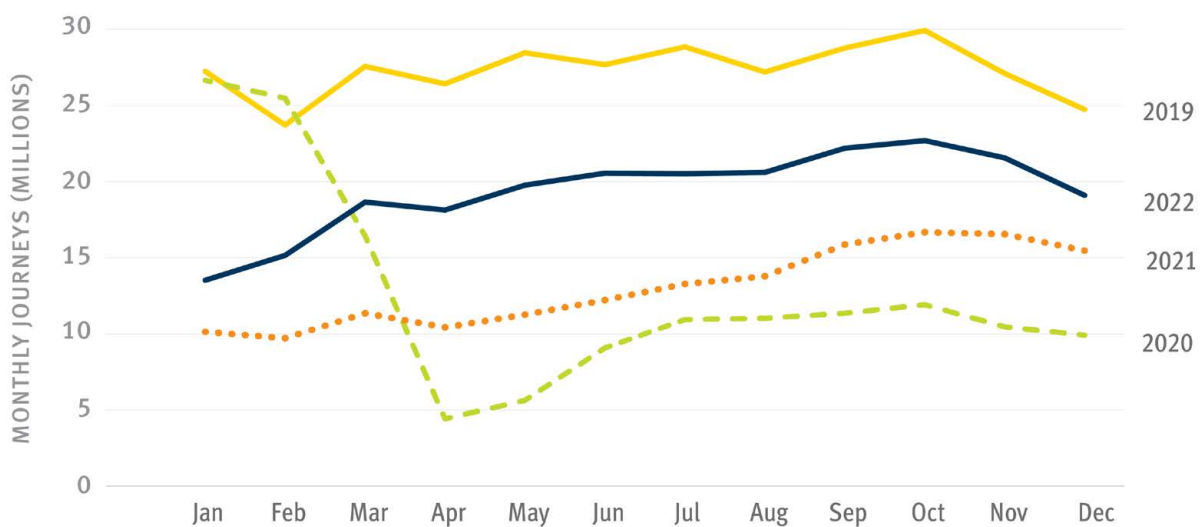
Ridership is measured by analyzing Compass products and single-use fare tickets. A **boarding** represents each time a customer enters a fare-paid zone; e.g., boarding a bus or tapping a fare gate. A **journey** is a complete transit trip, regardless of the number of boardings or transfers. For example, a customer starting their journey at Marine Drive Station, taking the Canada Line to Broadway-City Hall Station, and then boarding the 99 B-Line bus to end their trip at UBC is taking one journey with two boardings.

Summary of 2022 Trends

System-wide ridership recovery demonstrated that transit is fundamental to our mobility in Metro Vancouver as we entered a “new normal”.

Our transit system is once again playing a critical role in supporting the needs of a growing region. Relative to last year, 2022 saw a significant return of customers to transit across the region. Annual journeys across our system totalled 193.6 million in 2022, a 48% increase over 2021 and over 70% of levels in 2019. We estimate 2.8 million unique customers used the TransLink system at least once in fall 2022, which is equivalent to 98% of the Metro Vancouver population but includes visitors from outside our region.

Figure 1: System-Wide Monthly Journeys, 2019-2022



Note: Journeys are measured as a complete transit trip using Compass fare media or other proof of payment, regardless of the number of transfers

Ridership patterns throughout 2022 were influenced by numerous factors, ranging from population and employment growth to specific events or circumstances like pandemic-related public health regulations and restrictions.



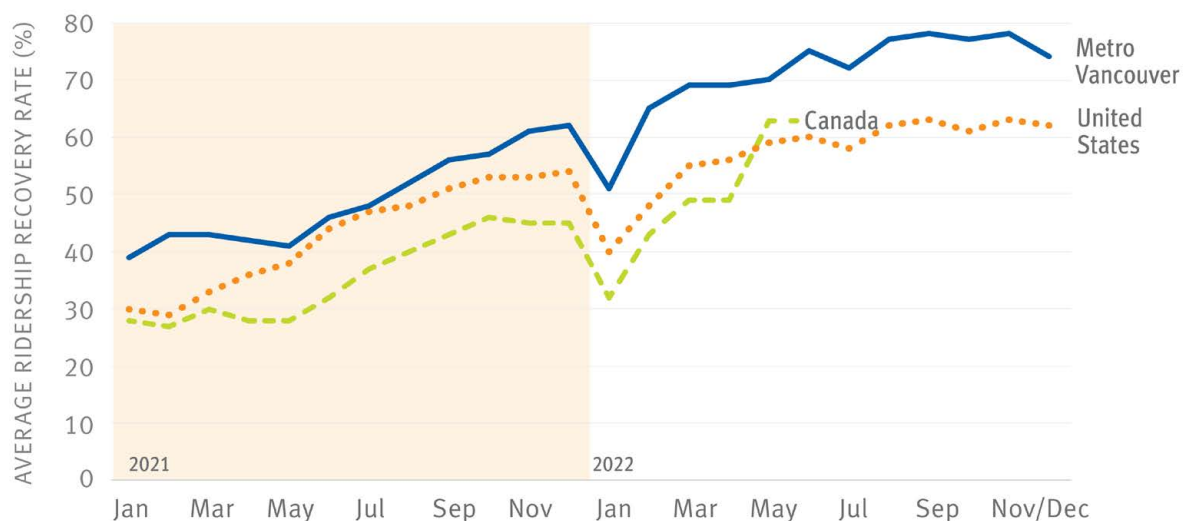
The year began with a short, yet severe, wave of the Omicron COVID-19 variant and a continuation of Province-wide health orders for masks, indoor capacity limits, proof-of-vaccination policies and cards, and isolating when sick introduced in 2021. By mid-February, provincial health orders restricting restaurants and nightclub capacity were rescinded. By March, masks on conventional transit were no longer required. During spring and summer, workplaces began opening back up and welcoming employees back in person, in many cases on a part-time basis. Schools and post-secondary institutions returned to full in-person learning in fall 2022. Record-breaking dry and sunny weather extended into October, but early snow and winter weather arrived in the region by December, followed by an extreme cold snap.

By fall 2022, TransLink had regained 88% of our pre-COVID-19 pandemic transit customers: meaning that the number of people who used the transit system at least once in a week reached 88% of fall 2019 levels. Average weekday journeys in fall 2022 reached a peak of 710,000 journeys per weekday, up 40% from 2021 and 78% of average weekday journeys in fall 2019.

TransLink’s ridership recovery continued to outpace most peer systems in Canada and the United States.

TransLink was the first major transit agency in Canada and the United States to reach 80% system-wide ridership recovery, which occurred in fall 2022. TransLink currently ranks 5th in Canada and the United States for total transit boardings (behind only New York, Los Angeles, Montreal, and Toronto), despite ranking 24th in North American metropolitan areas in terms of our region’s total population.

Figure 2: Average Transit Ridership Recovery for Major Metro Areas by Country



Note: Estimated based on data sourced from the International Association of Public Transport (UITP) and the Federal Transit Administration (FTA). Canada-wide average ridership recovery estimates provided by UITP stopped in July 2022.

Ridership recovery was driven by strong utilization on nearly all modes and all days of the week.








TransLink’s bus network ridership recovered to 80% of fall 2019 volumes in fall 2022 (an increase of 29% compared to fall 2021). Bus ridership continues to account for the largest share of boardings in our system; 63% of systemwide boardings are made on buses.

However, with the return of more people to their in-person workplaces in 2022, ridership recovery on other modes increased at greater rates in 2022 compared to 2021.

Ridership on the Expo and Millennium Lines increased by 39% from fall 2021 levels to reach 79% of pre-COVID-19 levels in fall 2022. Canada Line ridership increased to 74% of fall 2019 levels. Ridership on West Coast Express reached a monthly high of 43% in fall 2022, a 48% increase from the highest recovery month during the same period in 2021. The commuter-oriented nature of West Coast Express means this service’s ridership continued to be primarily influenced by work-from-home patterns and habits and so continued to fall behind system-wide ridership recovery levels.

Ridership on SeaBus increased by 40% from fall 2021 to reach 77% of pre-COVID-19 levels in fall 2022, with strong utilization on both weekdays and weekends, illustrating the importance of this connection for a diversity of trips.

Table 1: Ridership Recovery by Mode and Day of Week, Fall 2022

| Transit Mode |  System Wide |  Bus |  Expo & Millennium Lines |  Canada Line |  Seabus |  West Coast Express |  HandyDART |
|-----------------------------------|---|---|---|---|--|--|---|
| Ridership Recovery | 79% | 80% | 79% | 74% | 77% | 39% | 71% |
| Average Daily Boardings (Mon-Fri) | 1,130,000 | 713,000 | 288,000 | 112,000 | 13,000 | 4,000 | 4,000 |
| Average Daily Boardings (Sat) | 842,000 | 510,000 | 224,000 | 94,000 | 14,000 | - | 1,000 |
| Average Daily Boardings (Sun/Hol) | 651,000 | 401,000 | 164,000 | 77,000 | 10,000 | - | 1,000 |

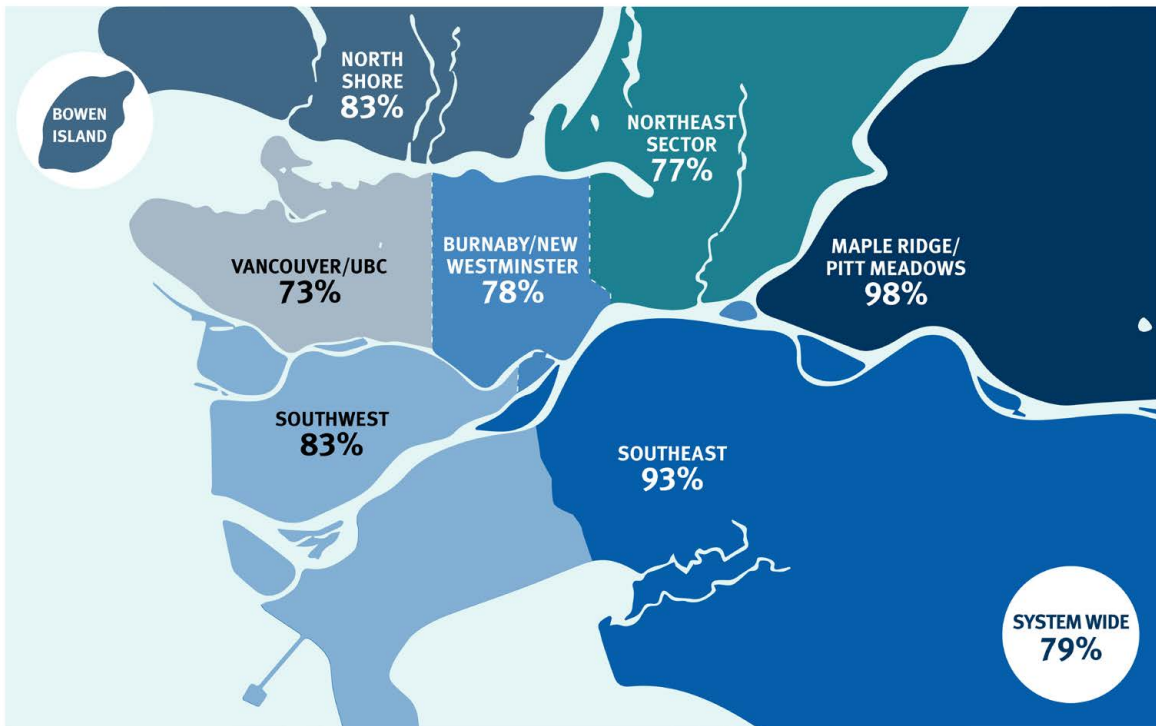
Note: Ridership recovery for all modes is total fall 2022 boardings as a percentage of total fall 2019 boardings. For the purposes of estimating ridership recovery, fall 2019 boardings have been adjusted to account for job action during this period. System-wide ridership totals may not exactly equate to the sum of each mode due to rounding. HandyDART ridership recovery shown here differs slightly from ridership recovery shown in the 2022 HandyDART Service Performance Review (HDSPR), which compares annual ridership recovery between 2022 and 2019 instead of just the fall period. A HandyDART boarding includes the number of customers and their companions or attendants transported by HandyDART.

System-wide ridership continued to return at a slightly higher rate on weekends (84% ridership recovery in journeys during fall 2022) compared to weekdays (76% ridership recovery in journeys during fall 2022). Nevertheless, absolute weekday ridership still heavily outweighed weekend ridership. Average weekday daily boardings during fall 2022 were around 1.1 million boardings system-wide, while average Saturday and Sunday daily boardings were 842,000 and 651,000, respectively.

Ridership is returning the most in fast growing areas of the region and places where we are adding service, but overall ridership remains highest in the busiest areas of Metro Vancouver.

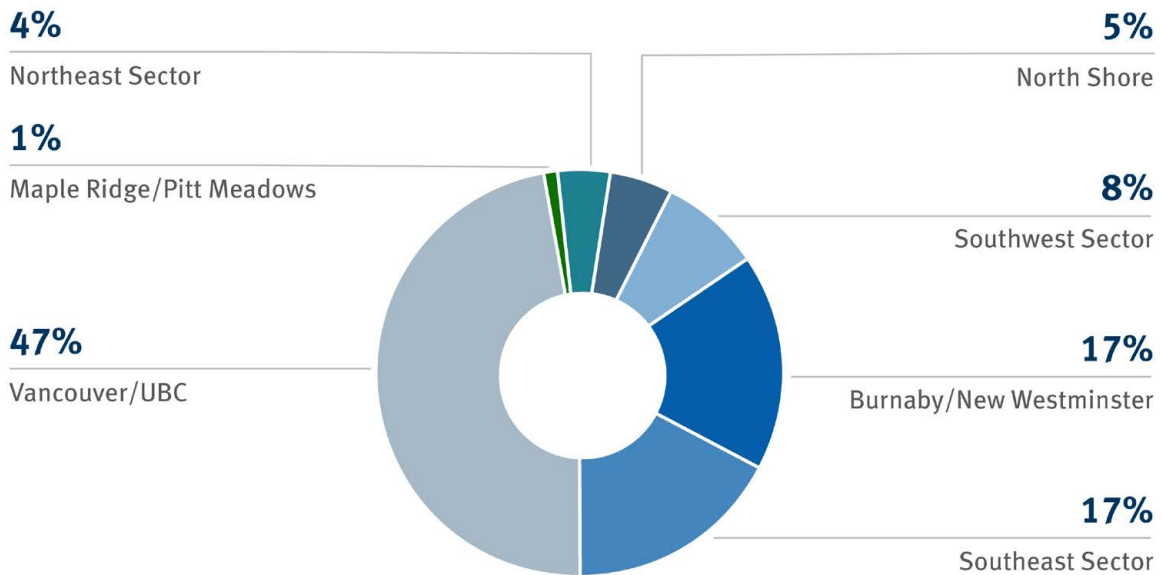
Strong population growth in the Southeast continues to drive ridership return in this area. Ridership growth in Maple Ridge/Pitt Meadows continues to be driven by strong utilization of new services like the R3 RapidBus.

Figure 3: Ridership Recovery by Sub-Region, Fall 2022



Note: Includes bus and SeaBus boardings and Expo-Millennium Line, Canada Line, and West Coast Express station entries. HandyDART boardings are not included as the HandyDART service has different sub-regional boundaries. Bowen Island is part of the North Shore sub-region.

Figure 4: Share of Ridership, by Sub-Region, Fall 2022



Note: Includes bus and SeaBus boardings and Expo-Millennium Line, Canada Line, and West Coast Express station entries. HandyDART boardings are not included as the HandyDART service has different sub-regional boundaries.

A lower ridership recovery rate (73%) seen in the Vancouver/UBC sub-region is likely attributable to part-time demand for travel to professional offices and workplaces that are generally concentrated in this part of the region. Outside of Downtown Vancouver, however, ridership recovery rates are generally equal to those from neighbouring sub-regions like Burnaby/New Westminster. Despite this, the Vancouver/UBC sub-region still had the highest number of unique customers using the transit network (47%), reflective of this area's high population levels and transit-oriented urban form.

The transit system is moving more people throughout the day than earlier in the pandemic when off-peak ridership returned more quickly than peak ridership.

System-wide weekday ridership during the morning and afternoon peak periods during fall 2022 recovered at similar rates to midday and early evening, reflecting a greater number of people returning to their place of work or school. In areas like the Southeast and Maple Ridge/Pitt Meadows, weekday ridership levels met or exceeded pre-COVID-19 levels during nearly all times of the day during this period.

Figure 5: Ridership Recovery by Time of Day

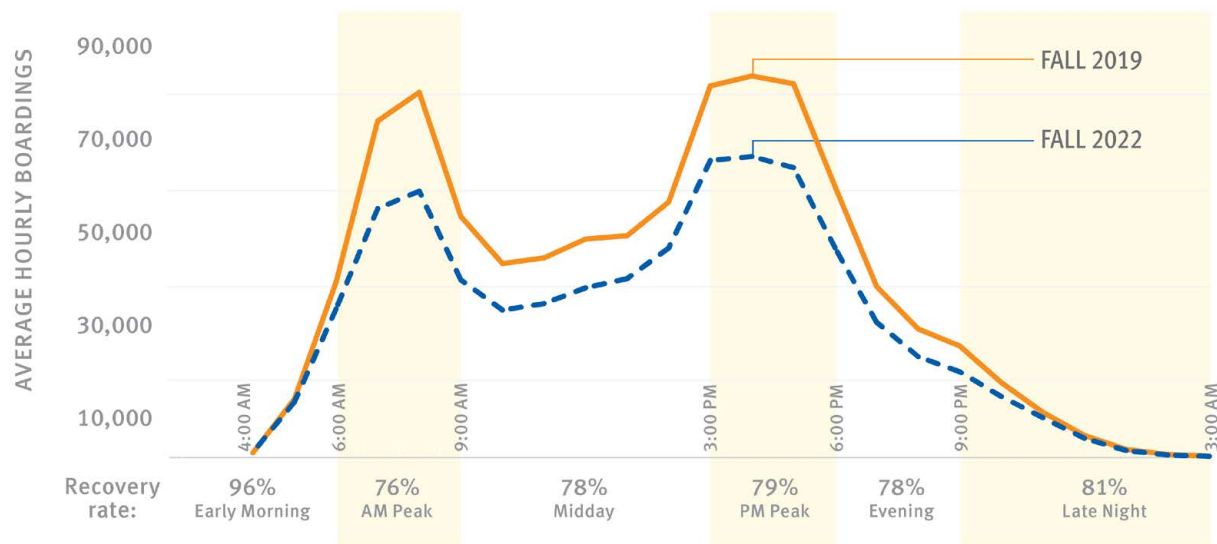


Table 2: Weekday Ridership Recovery by Time of Day and Sub-Region, Fall 2022

| Sub-Region | Early Morning | AM Peak | Midday | PM Peak | Evening/Late Night |
|--------------------------|---------------|---------|--------|---------|--------------------|
| Burnaby/New Westminster | 84% | 69% | 75% | 73% | 74% |
| Maple Ridge/Pitt Meadows | 113% | 99% | 108% | 105% | 106% |
| North Shore | 84% | 86% | 82% | 86% | 76% |
| Northeast Sector | 83% | 75% | 77% | 77% | 72% |
| Southeast | 108% | 94% | 96% | 96% | 102% |
| Southwest | 101% | 73% | 77% | 78% | 81% |
| Vancouver/UBC | 88% | 68% | 73% | 73% | 73% |

Note for Figure 5 and Table 2: HandyDART not included. Includes Monday to Friday, excluding holidays.



RapidBus services are becoming the backbone of the transit system.

These fast and frequent bus routes were introduced in 2020 and had some of the highest levels of ridership in the region in fall 2022. Most RapidBus routes are among the highest ridership routes in the sub-regions they serve. RapidBus has been successful due to high service levels and transit-supportive environments. Customers are attracted to fast, frequent service that they can depend on to get them to their destinations. Those higher levels of service are supported by characteristics like higher density, proximity to key destinations, and a diversity of land uses that generate trips throughout the day and week. In addition, bus priority measures improve travel time and reliability of transit service and enables TransLink to deliver more service at a lower cost to the region. TransLink provides funds to municipalities to deliver bus priority measures through the Bus Speed & Reliability Program. These investments complement the service expansions and future RapidBus and Bus Rapid Transit corridors identified in *Transport 2050: 10-Year Priorities Plan*. Detailed ridership information for all RapidBus routes and other services are available at translink.ca/tspr.

Strong ridership has resulted in more customers experiencing overcrowding.

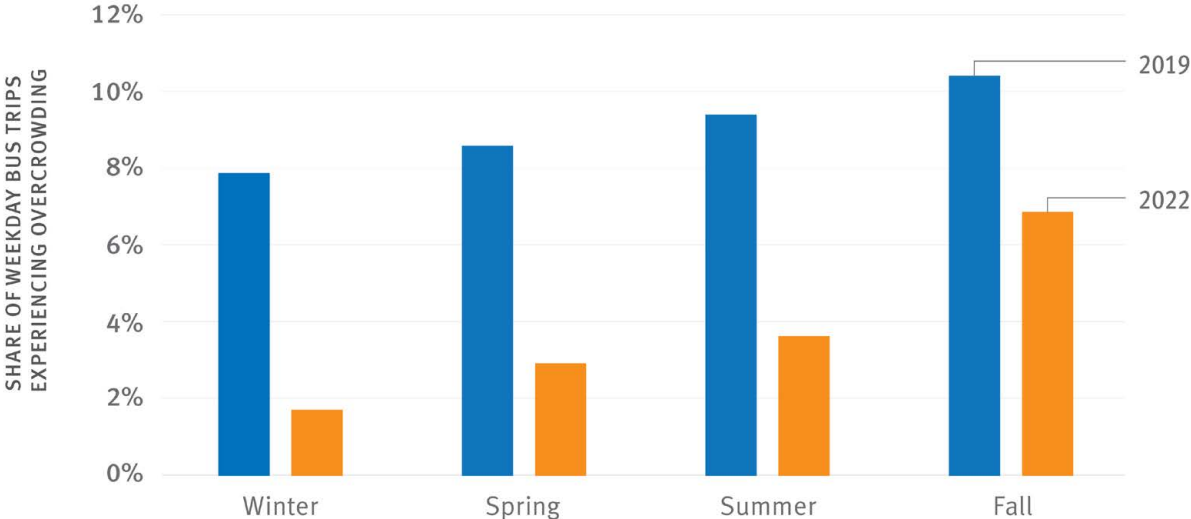
As customers began making more transit trips in 2022, overcrowding on the bus system started to increase.

During fall 2022, the share of weekday bus trips where overcrowding on board a vehicle occurred at any point during the trip began to approach pre-COVID-19 pandemic levels, reaching a high of 8.2% in October. Routes experiencing the most overcrowding were primarily located in the Southeast and the Vancouver/UBC sub-regions serving post-secondary institutions and other major destinations.

An **overcrowded trip** is when the number of passengers on a transit vehicle exceeds the vehicle target capacity at any point during the trip. On overcrowded trips, for at least part of the trip:

- all seats are full and standing space is occupied
- accessing the doors may be difficult for some passengers
- standing passengers need to step off vehicle to let others exist
- pass-ups are likely at some stops

Figure 6: Average Weekday Overcrowding on Bus, 2022 vs. 2019



Increases in overcrowding on the transit system in 2022 did not go unnoticed by our customers. In fall 2022, the average customer rating on whether they experienced a trip that was not overcrowded dropped from 7.5 to 7.0 out of 10 for bus trips.

Sustained levels of overcrowding were not observed on modes like Expo, Millennium, and Canada Lines throughout 2022, but we heard from customers that trips were generally feeling more crowded compared to previous years. The average customer rating on whether they experienced a trip that was not overcrowded on these modes dropped from 7.7 to 7.1 out of 10. Overcrowding on these modes was generally limited to special events or certain trips during busy periods like the weekday rush hour periods.

We responded to customers' changing travel patterns and other emerging conditions like overcrowding by continuing to adjust service.

By ensuring service was provided where it was needed most, our ability to adjust service to meet customers' needs as they returned to transit has been critical to our network's recovery in 2022.

To help avoid systemic overcrowding and to better match service to demand, we dispatched extra trips at key times to meet demand and reallocated bus service hours throughout the region. Reallocating is the process of reducing service on frequent routes that have available capacity and adding it to routes where overcrowding is occurring. In 2022, 8.6% of total bus service hours available through existing funding and resources were reallocated to respond to changing travel patterns.

We delivered other specific interventions in 2022 to ensure the transit system matched customer needs using available resources including the addition of seven additional train cars across busy West Coast Express trips, helping us provide 61% of pre-COVID-19 pandemic capacity on this service in fall 2022.

Looking ahead to 2023



Our ability to provide high-quality, reliable service across the region in 2023 will be critical to continue supporting the region’s mobility needs in the face of a growing population and economy.

However, we continue to experience major financial impacts due to the COVID-19 pandemic, which has required us to focus on achieving financial stability, maintaining the current transportation system in a state of good repair, and ensuring efficient use of resources. Any new or extended transit services will require additional funds, vehicles, and operators.

This means that if current ridership recovery trends from 2022 continue into 2023, there is a risk that rates of overcrowding on the system may continue to increase, and service won’t be able to keep pace with growing communities. Our ability to reallocate service with available funding and resources without impacting other existing and emerging customer needs will become more and more limited.

Reliable and efficient transit is crucial to Metro Vancouver’s residents, businesses, and economy. It’s important that we address the significant financial pressures that we are facing now and in the future. Although an Investment Plan was approved in May 2022, work has begun for the next Investment Plan, slated for 2024. Metro Vancouver is expected to grow substantially in the near future, which will bring increased pressures on our public transit system. TransLink will need sustainable and dependable funding to both maintain our current levels of service and prepare for critically needed expansion.