



# 2020 Regional Road Performance Monitoring Report

## SUMMARY

## TransLink is more than transit.

In partnership with municipalities, we plan the region's Major Road Network (MRN). We also contribute funding for the operation, maintenance, and rehabilitation of the MRN and share the cost of road, cycling, and pedestrian improvement projects with municipal partners.

Healthy regional roads are essential to the livability and economic success of our region – they connect commuters and goods to the people and places that matter the most. As one of the most important trade corridors in Canada, the efficient movement of people and goods across Metro Vancouver is critical to the country's international competitiveness and economic recovery.

Our new Regional Road Performance Monitoring (RRPM) report and online dashboard collect and present important data on the health and safety of Metro Vancouver's Regional Road Network (RRN). It helps build an understanding of the location, scale, and complexity of our road network challenges.

The region's road network is the most mature part of our transportation system and has benefited from decades of consistent investment from all levels of government. Our new RRPM program will help make sure that further investment decisions are performance-based.

# Highlights

## Reliance on driving is decreasing over time

TransLink's Trip Diary shows how travel patterns changed between 2011 and 2017. The share of trips by motor vehicles decreased over time (down 2 per cent). However, with a growing population, the total number of motor vehicle trips grew by 14 per cent and overall trips per household grew by 9 per cent. We also know that:

- Approximately 72 per cent of all trips were taken using a motor vehicle, either as a driver or passenger
- Most driving trips are less than 10 kilometres

## Improving safety on our roads means reducing both the number and severity of collisions

From 2013 to 2017, there was an average of 63,180 collisions per year across the RRN. Additionally, delays caused by collisions are a source of unreliability on the road network and result in queuing and slow travel speeds. Focusing on locations with the highest severity has the highest potential to reduce the negative impact of roads on people's well-being.

## Most of the segments with the highest delay and lowest reliability are approaches to water crossings

Metro Vancouver's bridges and tunnels, and the roadways that approach them, are an important part of the RRN to support the movement of people and goods. The approaches to these crossings on the RRN experience moderate to high delay and low to moderate reliability in one or sometimes both directions during peak periods. To improve mobility, delays need to be reduced and reliability needs to be increased.

## Roughness and pavement condition can be aggregated to understand the overall condition of the road network

Every three years, we conduct a Pavement Condition Audit on the MRN. The data collected is used by municipalities to monitor road condition and identify maintenance and rehabilitation needs. Each section of the roadway is evaluated based on roughness, ride quality, cracking, and signs of pavement distress. The International Roughness Index (IRI) measures the roughness of a road and the Pavement Condition Index (PCI) measures the extent and severity of visible surface distresses. Most roadways have IRI values between 1 m/km and 5 m/km, where low values represent smoother roads and higher values represent bumpier roads. PCI varies from 0 to 100, where 100 represents pavement without any visible distress. Based on the survey conducted in 2017, the average IRI of the road network is 2.66 and the average PCI is 77.55.

TransLink provides funding to municipalities for the operations, maintenance, and rehabilitation of the MRN. From 2017 to 2019, we provided municipal partners with over \$148 million for this work to deliver on our commitments in the 10-Year Vision.

## **An exploration into ten unique regional roads provides insights into the complexity, safety, mobility, and asset condition of our road network**

These corridors represent a cross-section of the regional roads across Metro Vancouver. Geography, classification, and jurisdiction, among other factors, were considered in the selection process.

Examples of these corridor profiles include:

- Boundary Road from Grandview Highway to Marine Way (Burnaby) – This multi-jurisdictional, four-lane arterial road experiences moderate to high delays and reliability issues during AM and PM peaks.
- Lonsdale Avenue from 23rd Street to Esplanade Avenue (City of North Vancouver) – This corridor is part of the MRN, a truck route, and a frequent transit route. It intersects with areas that have medium to high population density and high pedestrian activity.
- 140 Street from 96 Avenue to 72 Avenue (Surrey) – This arterial road has predominantly one motor vehicle lane in each direction and a high collision severity compared to the regional average.

Future iterations of the RRPM report may explore different corridors.

## **Next steps**

### **We need more data, strong partnerships, and strategic investments to improve the RRN**

This is our first RRPM report. As we restart our economy from the pandemic and plan for our future, the data in subsequent iterations of this report can help TransLink and road authorities make informed, performance-based decisions. It also reinforces the need for strong partnerships and strategic investments across the region to help create a safer and more efficient road network.

We expect to introduce livability indicators in future iterations, such as data on transportation-related noise exposure and local air contaminant emissions.

## **Openness and transparency**

As part of our commitment to openness and transparency, we regularly report to the public on our operations, performance, and finances. We use this data to track our progress and make informed decisions.

The RRPM report expands TransLink's suite of performance monitoring tools, alongside our Transit Service Performance Review, Bus Speed and Reliability Report, State of Cycling Report, and the upcoming HandyDART Service Performance Review.

Learn more in the 2020 Regional Road Performance Monitoring Report and online dashboard at [translink.ca/rrpm](https://translink.ca/rrpm).