# **Transportation Impact Assessment Summary**

### Anmore South Neighbourhood Plan

## **Purpose of the Study**

A detailed Transportation Impact Assessment was prepared by Bunt & Associates to assess traffic management, alternative transportation, and the capacity of the street network within Anmore South and its effect on the wider area.

#### Background

- The project study area is a 61.14-hectare (150.08-acre) property at the south end of the Village of Anmore, BC.
- Based on information provided by icona and Placemark Design, land use data from the "Preferred Plan" has been used as the basis for the study.
- The study area for intersection-specific analysis focused on intersections within Anmore, including site accesses and on-site intersections, as well as corridor-wide capacity for the two arterial corridors providing vehicle access to Anmore, namely loco Road and East Road.
- Traffic counts were completed around the Anmore South site during peak periods in summer and fall 2023 for the weekday AM, weekday PM, and Saturday PM. When comparing the 2023 counts, weekday AM and weekday PM traffic was highest during the summer, while Saturday PM traffic was highest during the fall. As such, these respective seasons were used for analysis.
- Given Anmore South's vision as an urban mixed-use neighbourhood with improved mobility options, industry standard information for these types of neighborhoods was used to project vehicle volumes.

# What we Learned

### **Existing Conditions**

- Anmore is accessed by two roads via Port Moody loco Road and East Road. These roads generally have rural cross-sections, with minimal sidewalk facilities and many driveway accesses connecting directly to these corridors.
- Transit service is provided in Anmore year-round at frequencies of 30 minutes on weekdays and 60 minutes on weekends, which connect to the regional SkyTrain rapid transit service. Additional bus service is provided in the peak summer period to accommodate increased visitors to regional parks in the area.

#### **Traffic Volumes**

• 2023 traffic counts throughout Anmore show a decrease in traffic volumes compared to 2017 due to post-Covid travel patterns like working from home and the introduction of parking reservations at Buntzen Lake and paid parking at Belcarra Regional Park.

#### **Capacity Analysis**

• Capacity analysis found that the intersections within the study area currently operate well within capacity, with no more than 15 seconds of delay per vehicle on average.

• Beyond the study area, East Road and loco Road have spare capacity but due to rolling terrain, curving road alignment, side friction from driveway intersections, and transit buses stopped for passenger loading/unloading their theoretical capacity is reduced.

### **Future Conditions with the Project**

Anmore South will fundamentally change Anmore from a transportation perspective. It will support viability of increased transit, improve connections for active modes, and introduce new commercial space that together will provide existing and future Anmore residents with new options within their community. The new neighbourhood will also substantially increase the number of vehicle trips to/from the village over the 20-year build out.

The anticipated vehicle trips from full build out of Anmore South coupled with an assumed 1% per year of background traffic growth (new traffic from development other than Anmore South) can be accommodated on roads within Anmore but would likely require transportation upgrades on the corridors and intersections leading to Anmore. The impact of development and densification in the study area and nearby, including Port Moody and industrial land west of Anmore, will have a significant influence on transportation decisions (like upgrades to roadways, intersections, public transit and active transportation) over the 20-year timeframe anticipated for the buildout of the Anmore South community.

#### **Traffic Volumes**

- Traffic is assumed to grow in Anmore by 1% annually whether or not the Anmore South neighbourhood development proceeds. The true background traffic growth will depend on which areas see development, and may be higher or lower than 1%. For example, there could be more background traffic growth if the loco Lands and Imperial Oil Industrial site were to redevelop, or post-covid parking pre booking for the regional parks may limit this growth during peak times, leading to growth below 1%.
- At full buildout, Anmore South is expected to add 750-850 new vehicle trips during peak hours to the regional corridors accessing Anmore (12-14 vehicles per minute).
- Including the assumed annual 1% increase in background traffic growth, phased analysis indicated that up to 40% of the proposed density at Anmore South can be constructed without the need for new road capacity. This is estimated to occur in year 8 assuming 110 new dwellings per year are built at Anmore South.

#### Intersections

- New intersections within and connecting to Anmore South, as well as internal neighbourhood roads were found to operate acceptably with stop signs only no traffic lights or roundabouts were found to be needed.
- Three existing intersections within Anmore were found to have operational constraints at full buildout of Anmore South and may require upgrades at some point prior to buildout:
  - East Road & Sunnyside Road either all-way stop or a new traffic light.
  - 1st Avenue/Bedwell Bay Road & Sunnyside Road roundabout.
  - 1st Avenue & loco Road to be determined based on the future of the loco Lands and industrial parcels nearby.
- Intersections outside of Anmore, particularly along the loco Road corridor, are expected to be at or overcapacity in 2045 with buildout of Anmore South and an assumed 1% increase in background traffic growth.

## **Key Takeaways**

- Anmore South will advance the Village's rural transportation network, by providing new multi-modal street connections to the existing network at Sunnyside Road, Crystal Creek Drive, and Fern Drive.
- Road and intersection capacity was calculated with increased traffic volumes that assumed the full buildout of Anmore South, along with an annual 1% increase in background traffic growth (from other development in the area).
- Roads and intersections within Anmore are expected to be able to accommodate this increase, subject to achievable upgrades at three identified intersections, such as roundabouts or signalization.
- Regional roads leading into Anmore (loco Road and East Road) and intersections along these corridors are expected to be overcapacity with this increase. Future improvements would involve discussions with TransLink, Metro Vancouver and neighbouring municipalities. Phased analysis estimates that without these future improvements, up to 40% of full buildout can be accommodated with the current regional road network.
- Several measures and improvements are recommended to reduce traffic and traffic impact.

#### Key Measures to Reduce Traffic Impacts

The Transportation Impact Assessment recommends the following Transportation Demand Management (TDM) measures to be implemented to offer people viable travel alternatives to their private vehicle. These measures include:

- Sidewalks on all streets, plus multi-use paths and trails for car-free walking and cycling routes to neighbourhood parks, community centre, and commercial stores.
- Reduced parking ratios in all phases of development, naturally catering to households with fewer vehicles.
- Car-share program (20 vehicles planned, including specialized vehicles).
- Neighbourhood shops and civic services to introduce the option to stay local for many trips.
- Funding and discussions with TransLink to enhance public transit and bus shelter facilities:
  - Phase 1: Extend bus route #181 from loco Road to loop into Anmore South with current frequencies to provide a more direct connection to Port Moody.
  - Full buildout: Frequent bus service (15-minute intervals all week), which could involve an express bus to Suter Brook/Newport and Port Moody rapid transit locations.

Ongoing monitoring is also recommended through updated Transportation Impact Assessments after each 300 new housing units, which helps account for the uncertainty in background traffic growth and reassess any impacts. This allows for the incremental development of the Anmore South lands within the means of the evolving transportation networks. These studies will determine if/when the following recommended upgrades should be built to reduce the effects of increased traffic:

- Small-scale upgrades to slightly increase capacity and reduce delay on the two existing access corridors to Anmore that presented operation constraints – East Road and loco Road. These could include adding left turn lanes to high-volume locations, designated bus pullout stops at high ridership locations, removing on-street parking where possible, and introducing or expanding traffic signals at high-volume locations.
- Intersection upgrades within Anmore at East Road & Sunnyside Road, 1st Avenue & loco Road, and 1<sup>st</sup> Avenue/Bedwell Bay Rd & Sunnyside Rd.
- Further collaboration with stakeholders, including TransLink, Metro Vancouver, and local municipalities, to discuss transit improvements and develop a coordinated approach to transportation planning on regional roads, including road capacity in Anmore/Belcarra/Port Moody.