



# Cypress Village: Summary Information about Traffic

## Background

There are some important factors that need to be kept in mind when thinking about the possible traffic impacts of the new community in Cypress Village:

- Cypress Village will be developed over a 20 to 25 year period and any impacts will be gradual. The impact analysis looks at the effects of the development upon completion (in around the year 2043<sup>1</sup>) and compares this to the present to show the total change, but it is important to keep in mind that the changes will actually be gradual, incremental changes over time.
- Cypress Village will not be developed in isolation. During the two decades of development, other major changes will occur that will contribute to the amount of traffic that affects West Vancouver residents. These changes include increased residential development in the Sea to Sky Corridor (Squamish, Whistler, Pemberton), increased passenger volumes on BC Ferries, and development in other parts of the North Shore and the rest of the Metro Vancouver region.
- Most of the land in Cypress Village is currently zoned to allow development with single family dwellings. There would be additional traffic caused by development of the Cypress Village lands (and other Upper Lands planning areas) under the existing single family zoning and, while there will be more traffic with the proposed mixed-use village, the increment is not directly proportional to the increased number of households because:
  - First, most of the housing in Cypress Village will be multifamily units, which have smaller household size (people per unit), less vehicle ownership, and less automobile trips per household than single family homes.
  - Second, Cypress Village will have transit service that will commence at the start of development providing an alternative to driving, whereas a single family subdivision on these lands would not be transit supportive.
  - Third, Cypress Village will include a school, community centre, and neighbourhood shopping, allowing residents to access these facilities locally and reducing the need for trips outside of the community. A single family subdivision in this location would not have enough people to support these facilities, so would have higher automobile trip generation per unit.
- Vehicle trips out of the Cypress Village neighbourhood will be spread throughout the day (i.e. not all car trips are on the road at the same time) and will disperse across the region. Some will head east on Highway 1 to the Second Narrows bridge, some will head south over the Lions Gate Bridge, some will head east on Marine Drive into North Vancouver, and some will head west to Horseshoe Bay and the Sea-to-Sky Corridor.

<sup>1</sup> Cypress Village will be developed over a 20 to 25 year period. The transportation impact analysis uses 2043 as the approximate year in which the village will be completed.

## Traffic Impact Assessment

As part of the area development planning work and associated rezoning for Cypress Village, a Traffic Impact Assessment (TIA) was completed. The scope of the TIA was established within a Terms of Reference approved by the BC Ministry of Transportation and Infrastructure (MoTI) and the District of West Vancouver. MoTI has an interest in this assessment based on the proximity of the planned development to Highway 1 and Cypress Bowl Road which are under its jurisdiction. The TIA provides an overview of the transportation system proposed for Cypress Village and includes an assessment of travel by various modes of transportation, traffic operations and impacts, and associated infrastructure requirements.

Overall, the transportation strategy for Cypress Village seeks to:

- Provide safe, accessible, convenient, efficient, and reliable transportation options.
- Include transportation infrastructure to support all anticipated modes of travel in the Village.
- Reduce the dependence on private automobiles within and to/from Cypress Village through efficient land use planning and urban design, by providing sustainable transportation choices, and through the introduction and implementation of transportation demand management strategies.

While trips to/from Cypress Village will be spread throughout the day, the peak time period of greatest impact will be traffic leaving from the village during the morning peak hour and arriving back in the afternoon peak hour on weekdays.

The TIA focused on vehicle analysis to assess the impact on the existing road infrastructure local to Cypress Village.

The net new vehicle trips for the Village as estimated in the TIA is 1,330 two-way vehicle trips in the morning peak hour and 1,430 two-way vehicle trips in the afternoon peak hour.

The TIA reflects the required facilities for active transportation modes within the Village and included the following transportation network improvements:

- The Westmount Connector, which is a new two-way road connecting Cypress Bowl Road to the Westmount Interchange at Highway 1.
- Signalization at the Westmount Connector and Highway 1 westbound off-ramp.

- Signalization at the Westmount Road and Westridge Avenue intersection, plus laning improvements.
- Upgrades to Cypress Bowl Road, including two new intersections to the Village, signalization at the Cypress Bowl Lane intersection, and laning improvements and signal at the north side of the Cypress Interchange at Highway 1 and the Cypress Bowl Lane intersection.
- The implementation of Independent Transit Service (bus service to be provided by the developer, British Pacific Properties Limited) between the Village and Park Royal.

With these improvements, it was concluded that the future road network will operate well at the full build out of Cypress Village with all improved and existing intersections operating at or above acceptable levels of service.

## Broader Impact of the Additional Traffic

In addition to the TIA, a broader regional analysis was undertaken to better predict travel impacts throughout the region as a result of Cypress Village. This analysis is referred to as the Municipal Traffic Analysis. Between 2021 and 2043, when Cypress Village is expected to be completed, the total amount of traffic<sup>2</sup> on the North Shore major road system is expected to increase by 11% due to changes throughout the region. As of 2043, about 1% of the total amount of traffic<sup>2</sup> on the North Shore major road system will be related to Cypress Village<sup>3</sup>, which is a small share of future transportation demand on the North Shore.

Car traffic impacts can be measured in various ways. One way is to look at traffic volume as a ratio of traffic capacity to determine if any nearby intersections will see noticeable additional delays related to traffic volume from the village. The analysis found that no intersections will have noticeable delays related to traffic volumes from Cypress Village, in large part because the new Westmount Connector will provide options for drivers.

Another good indicator for expressing traffic impact is changes in travel times between points.

The table below compares the estimated travel times between selected points in the region at present, in 2043 if Cypress Village is not developed as a mixed-use village and is instead developed under the existing single family zoning, and in 2043 based on the concept for a mixed-use village with approximately 3,700 housing units plus commercial space and amenities.

<sup>2</sup> As measured by total daily vehicular kilometres travelled.

<sup>3</sup> Over and above the amount of traffic that would be related to development under the current single family zoning.

<b>Trip During Morning Peak</b>	<b>A Travel time today</b>	<b>B* Additional travel time in 2043 without mixed-use Cypress Village (assumes regional growth and that Cypress Village is developed under the existing single family zoning)</b>	<b>C** Additional travel time in 2043 with a mixed-use Cypress Village (i.e. in addition to B)</b>
Ambleside to Downtown Vancouver	8 to 17 minutes depending on conditions	Add 6 to 7 minutes	Add 1 to 2 minutes
Ambleside to Lonsdale in North Vancouver	7 to 15 minutes depending on conditions	Add 2 to 3 minutes	Add less than 1 minute
Ambleside to Brentwood in Burnaby	20 to 38 minutes depending on conditions	Add 7 to 8 minutes	Add 1 to 2 minutes

\* Estimated total travel time in 2043 without mixed-use Cypress Village is column A plus column B.

\*\* Estimated travel time in 2043 with mixed-use Cypress Village is column A plus column B plus column C.

Travel times throughout Metro Vancouver will increase over the next 20 years, which is why it is imperative that the region invest in transit. Whether Cypress Village is developed or not, West Vancouver residents will experience gradual increases in traffic, and longer trip times, because of regional growth (e.g. Sea to Sky, BC Ferries traffic, development in North Vancouver). Adding the proposed mixed-use Cypress Village has a relatively small impact, with most trips from West Vancouver to North Vancouver, Vancouver, or Burnaby increasing by under 2 minutes due to Cypress Village.

### Ongoing Regional Initiatives

Vehicle traffic on the Upper Levels Highway and throughout the North Shore is comprised of local demand (trips that begin and end within the North Shore) and regional demand (such as trips made through or to the North Shore to access the BC Ferries Horseshoe Bay terminal, Sea-to-Sky Highway, and recreational assets such as the ski hills on the North Shore). As acknowledged in the Ministry of Transportation and Infrastructure’s recent *Highway 1/99 North Shore Corridor Study: Lynn Valley Road to Horseshoe Bay* (October 2021), “without future improvements, congestion levels on Highways 1 and 99 will increase, negatively affecting the quality of life for North Shore residents and others who rely on the highway.”

Addressing traffic congestion on the North Shore and in West Vancouver will involve both local and regional efforts. Some recent initiatives include:

- The Ministry of Transportation and Infrastructure’s *Highway 1/99 North Shore Corridor Study: Lynn Valley Road to Horseshoe Bay* (October 2021) sets out a list of potential improvements to the highway corridor and at various intersections along the corridor to help improve the safety, efficiency, and accessibility of the Upper Levels Highway. The Study notes that these are potential improvements and work will be needed with Indigenous groups, local governments, regional governments, and other transportation agencies to explore the options in more detail, but that the goal is to work towards addressing traffic congestion challenges on the North Shore and building a more efficient and sustainable transportation network.
- TransLink’s new Regional Transportation Strategy (*Transport 2050*) commits to more reliable and expanded transit service throughout the region including moving forward with a fully separated rapid transit line between Metrotown and Park Royal. *Transport 2050 10-Year Priorities* also propose other near-term investments to make existing transit service on, to, and from the North Shore faster and more reliable, including more frequent Sea Bus service, new rapid bus connections, and significant investment in local bus service. Providing accessible, fast, convenient transit service can help to reduce vehicular traffic demand.



- North Shore Connects is a partnership of the District of West Vancouver, Skwxwú7mesh Úxwumixw (Squamish Nation), City of North Vancouver, District of North Vancouver and səlílwətaʔ (Tseil-Waututh Nation), who are working together to improve transportation on, to, and from the North Shore and to advocate for transportation investments. North Shore Connects will support TransLink, government agencies, and stakeholders to advance a suite of projects including those included in the new Mayors' Council 10-Year Regional Transit and Transportation Vision and Investment Plan.

These initiatives are aimed at helping to address traffic congestion on the North Shore at a broader scale than the land use planning, urban design, infrastructure upgrades, and transportation demand management strategies included in an individual development project such as Cypress Village.