



Cypress Village: Summary of Findings from the Preliminary Transportation Impact Analysis

As part of the planning work in Phase 2 of *Planning the Upper Lands*, a preliminary analysis of potential transportation impacts has been completed. A final analysis will be completed in Phase 3, as part of the final plan preparation.

Context

Some important factors 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 2043¹) 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.
- The preliminary analysis assumed 3,500 residential units. The total number of housing units is being refined as part of the Phase 2 work and is currently proposed to be about 3,700 residential units. The final detailed transportation analysis will use the final total unit count.
- 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 rest of the Metro Vancouver region.
- Most of the land in Cypress Village is currently zoned to allow development with single family dwellings. Since 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, the traffic analysis asks: “how much more traffic would be generated by the proposed mixed-use village than

under existing single family zoning?” While there will be more traffic, 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.

The main conclusions from the preliminary transportation analysis are summarized below.

¹ 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.



Trip Generation

While trips to/from Cypress Village will be spread throughout the day, the time period of greatest impact will be traffic leaving from the village during the morning peak, which is 7:30am to 8:30am on weekdays.

The total estimated person trip volume during the morning peak (at full build-out of Cypress Village) is:

- A total of 1,400 person trips of all types (driving, transit, cycling, walking) originating in Cypress Village, compared to approximately 500 trips of all types that would occur if the lands were developed under the existing single family zoning.
- Of the 1,400 person trips of all types in the morning peak, about 55% (750 person trips) will be trips leaving Cypress Village by car (with some of these sharing rides, so the total number of cars is less), about 20% will be trips leaving Cypress Village by transit, and about 25% will be trips that stay within Cypress Village (e.g. trips to the school, community centre, or employment).
- The 750 person trips leaving Cypress Village by car will include some ride sharing, so the estimated number of cars leaving Cypress Village during the morning peak will be around 500 (at full build-out of Cypress Village in 2043). These 500 car trips are anticipated to distribute as follows:
 - About 100 cars over the Lions Gate Bridge.
 - About 70 cars over the Second Narrows Bridge.
 - About 330 cars distributed throughout the North Shore.

Impact of the Additional Traffic

Between 2021 and 2043, when Cypress Village is expected to be completed, the total amount of traffic² 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 traffic² on the North Shore major road system will be related to Cypress Village³, 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 about 3,500 housing units plus commercial space and amenities.

² As measured by total daily vehicular kilometres travelled.

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

Trip During Morning Peak	A Travel time today	B* Additional travel time in 2043 without mixed-use Cypress Village (assumes Cypress Village is developed under the existing single family zoning)	C** Additional travel time in 2043 with a mixed-use Cypress Village (i.e. in addition to 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 being increased by under 2 minutes due to Cypress Village.

Additional work is being done to try to reduce these impacts, such as:

- Detailed schedule planning for the Cypress Village transit system.
- Incentives for transit use.
- Programs to assist and encourage ride sharing.
- Trying to attract employment to Cypress Village to reduce commuter demand.