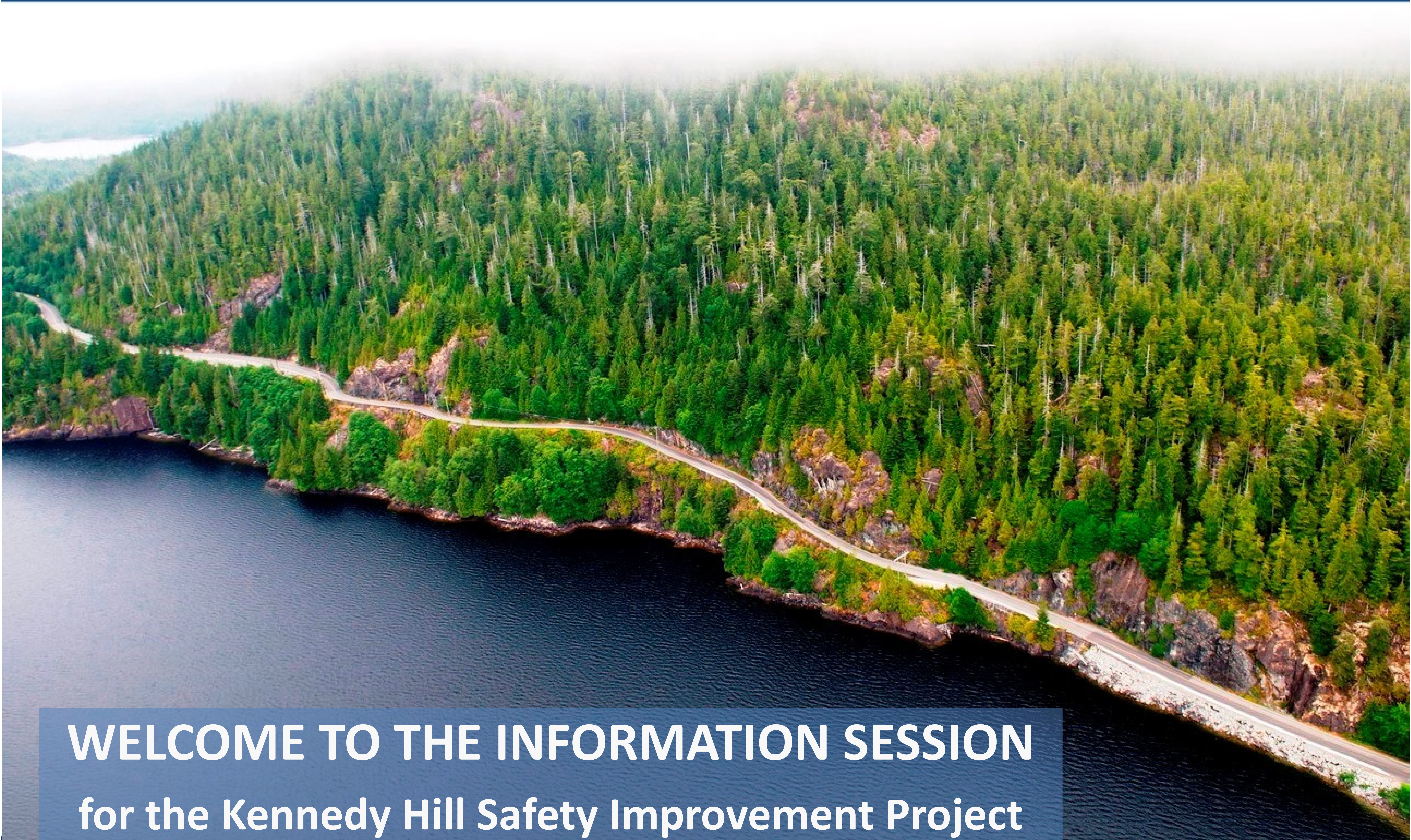


Highway 4 – Kennedy Hill Safety Improvements



WELCOME TO THE INFORMATION SESSION
for the Kennedy Hill Safety Improvement Project

PURPOSE OF THIS INFORMATION SESSION:

To share the project details including:

- **Location and Background Information**
- **Needs and Benefits**
- **Project Scope**
- **Traffic Stoppages and Construction Schedule**

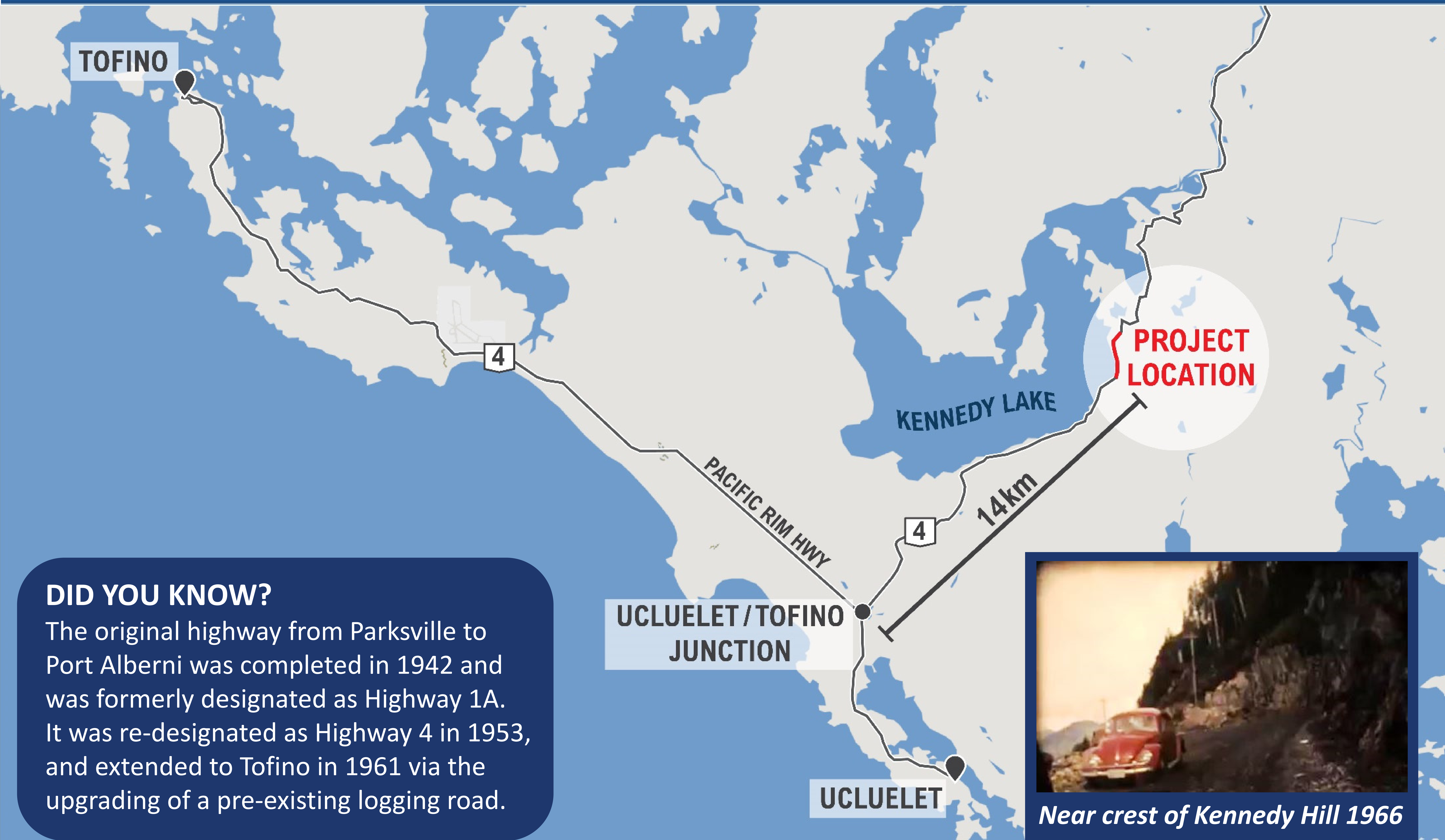
The Province and Canada are jointly investing \$30 Million (\$16.5M BC and \$13.5M Canada) to improve the safety and reliability of Highway 4 for local residents, tourists and commercial drivers.

Provide us with your feedback by:

- Completing a feedback form and leaving it with our team today
- Sending an email to KennedyHill@gov.bc.ca
- Visiting the project website at www.gov.bc.ca/highway4kennedyhill

Highway 4 – Kennedy Hill Safety Improvements

Project Location and Background Information



Highway 4 – Kennedy Hill Safety Improvements

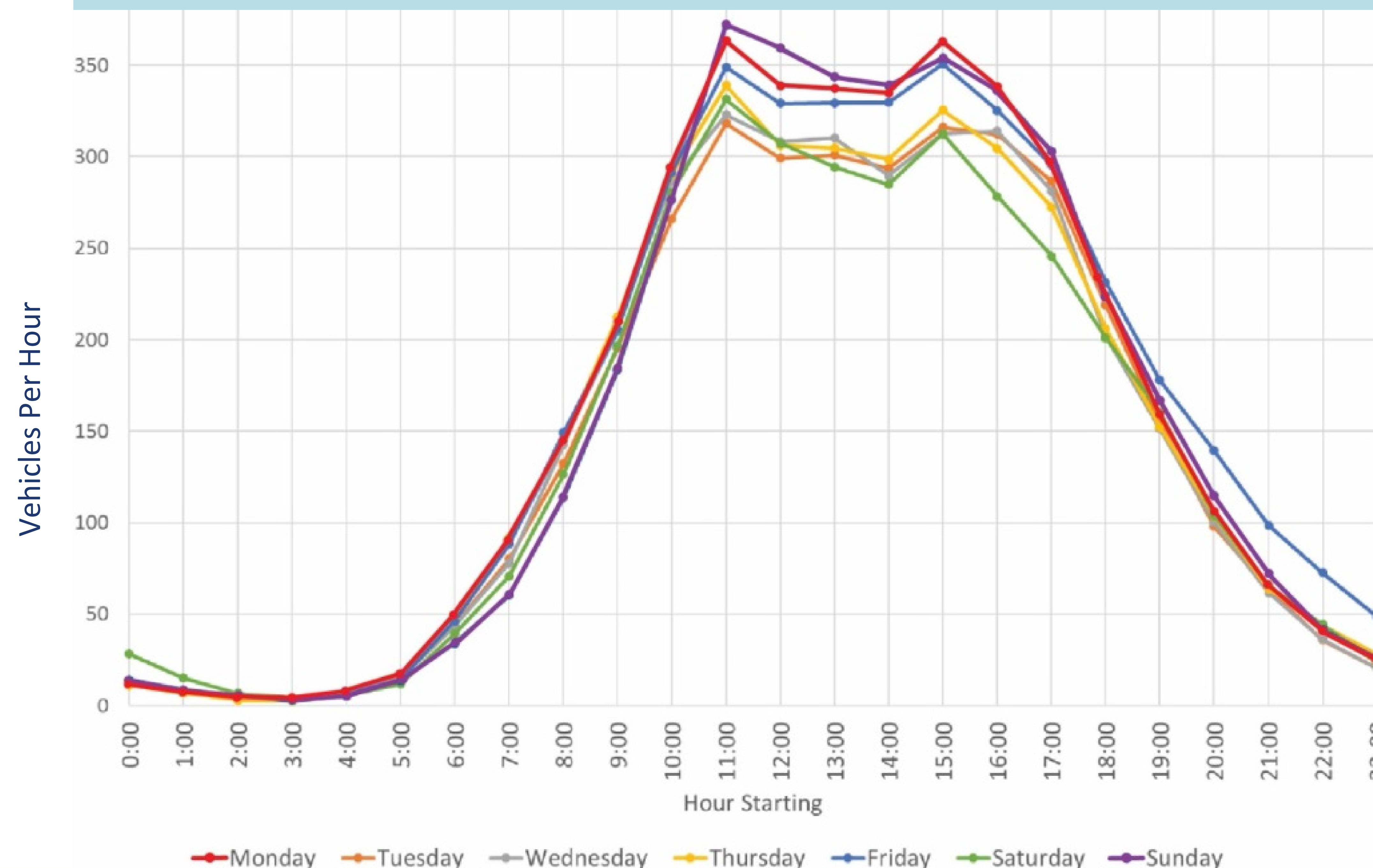
Project Location and Background Information



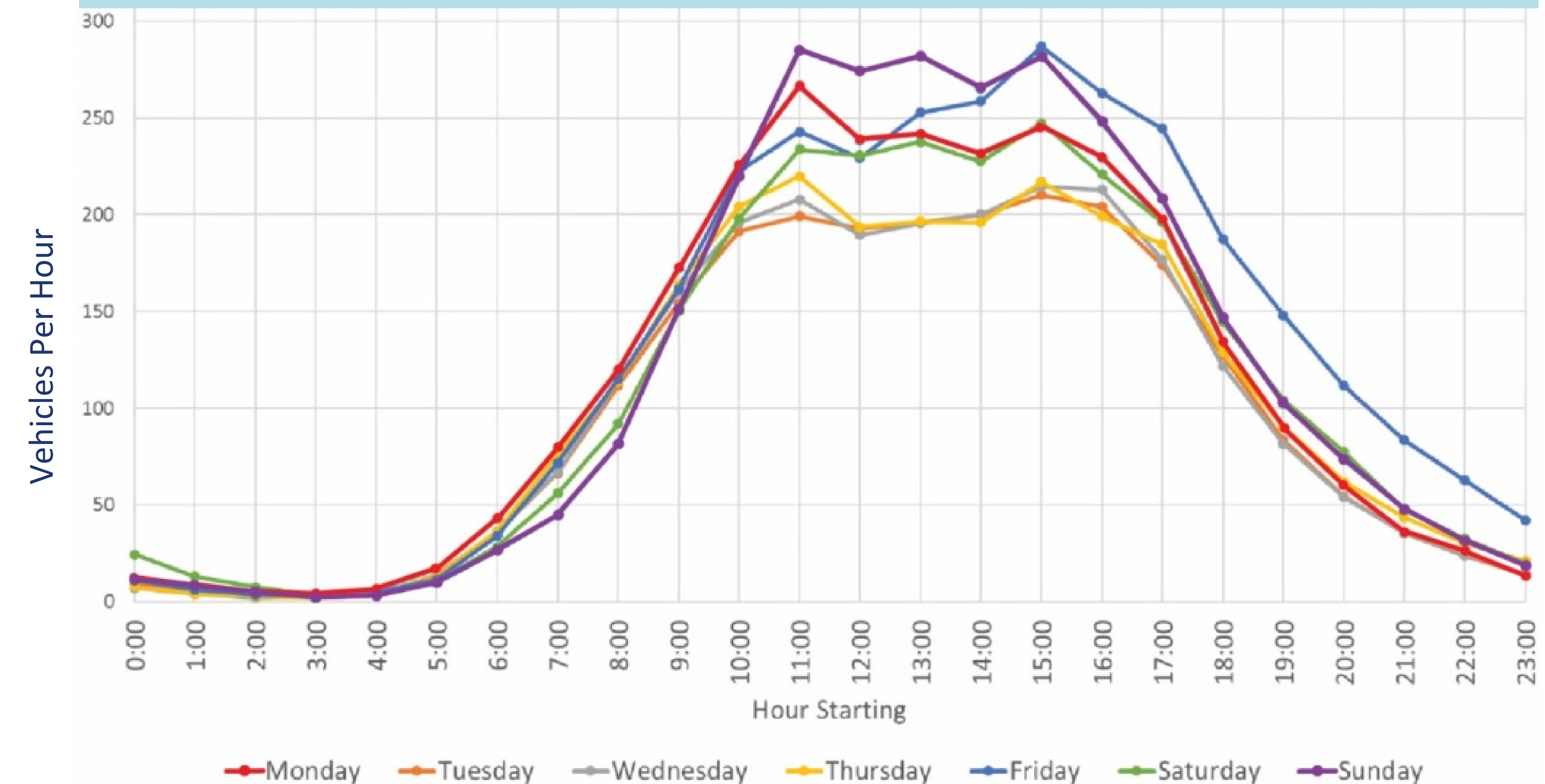
DAILY TRAFFIC VOLUMES:

- Count station data from past three years
- Average annual daily traffic volume is 2200 vehicles per day (VPD)
- Summer average daily volume is 3700 VPD
- Volumes vary significantly by season

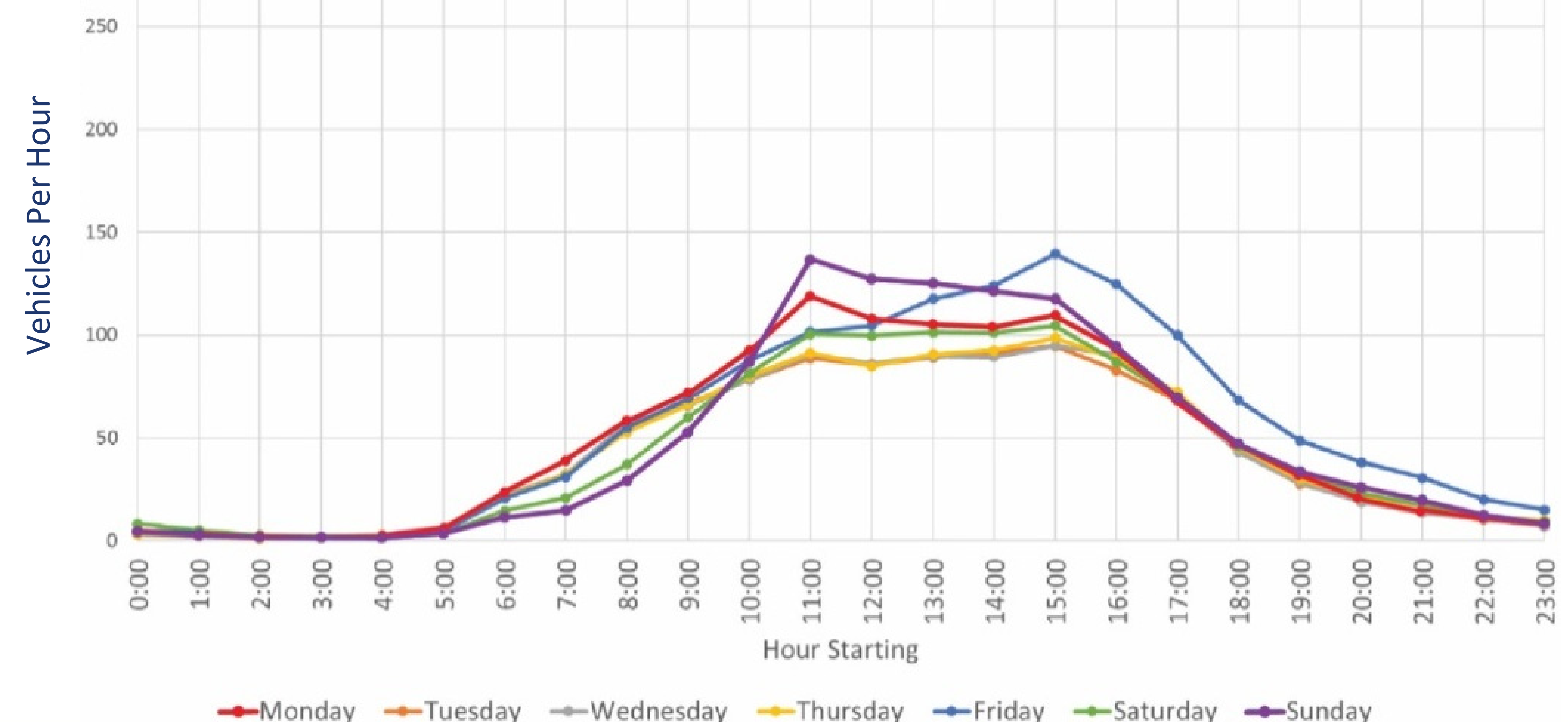
Peak Season - June 15 to September 15



Shoulder Season - March 1 to June 15, September 15 to December 1



Off-Peak Season - December 1 to March 1

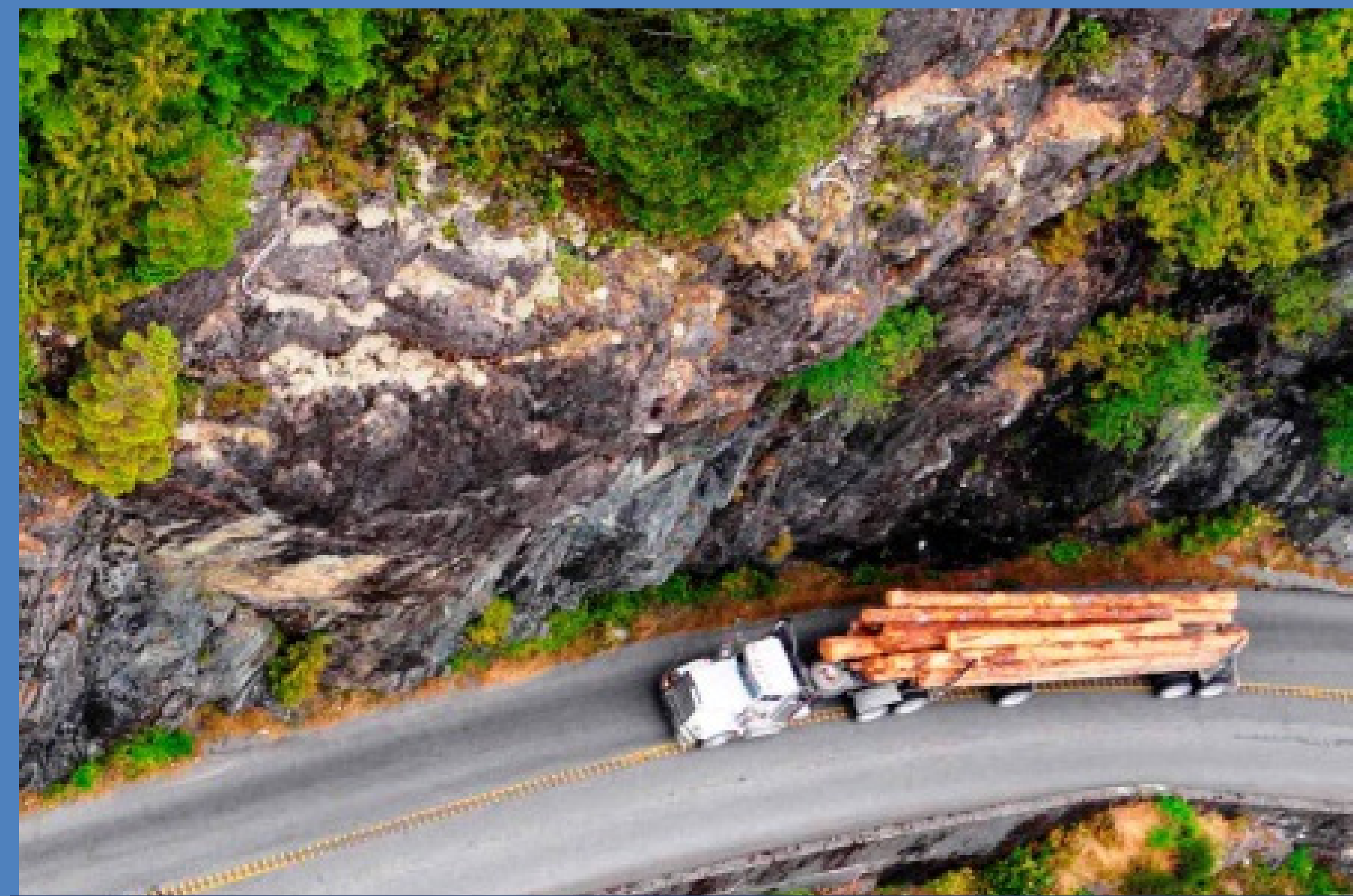


Highway 4 – Kennedy Hill Safety Improvements

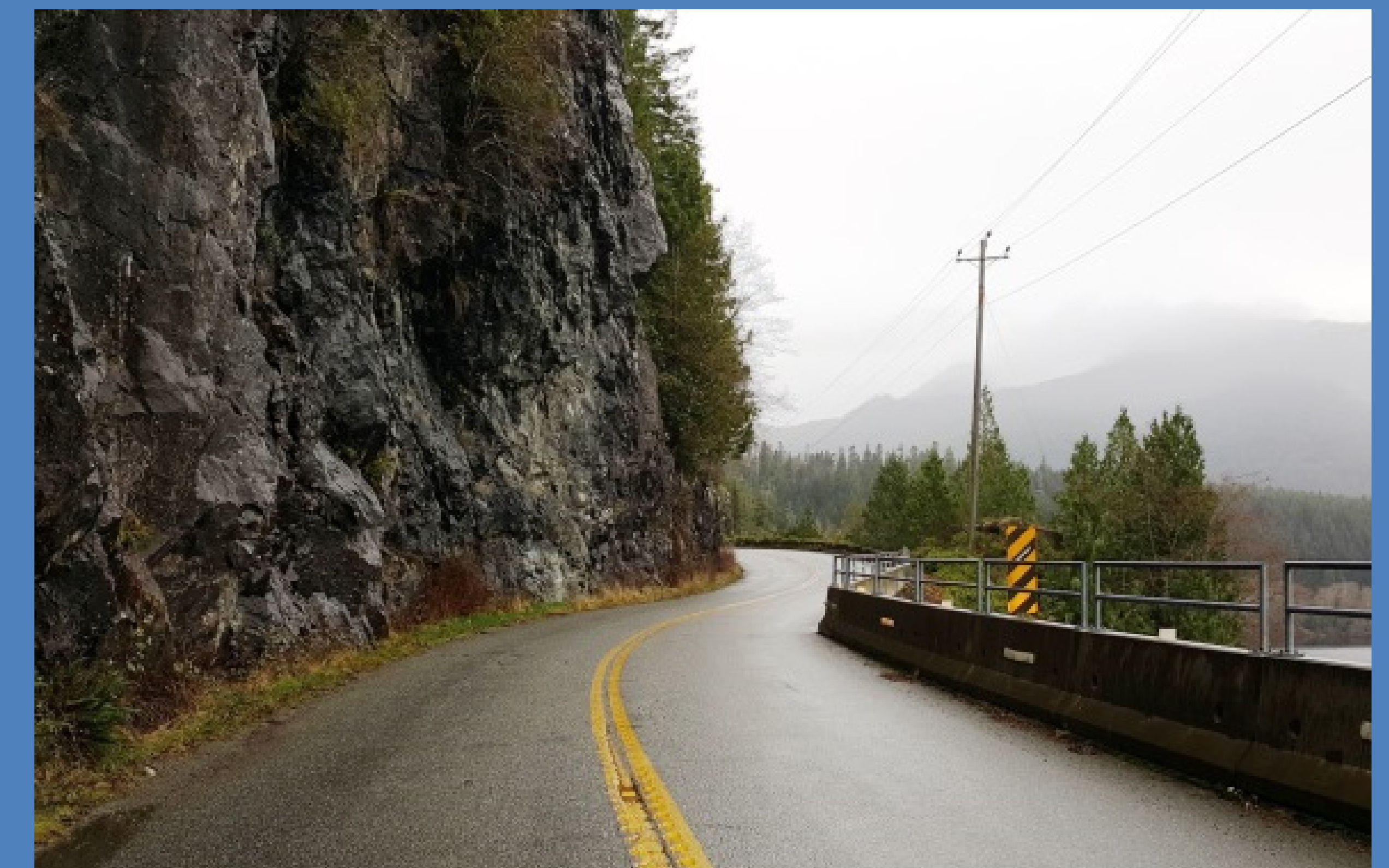
Project Needs and Benefits

PROJECT NEEDS AND BENEFITS:

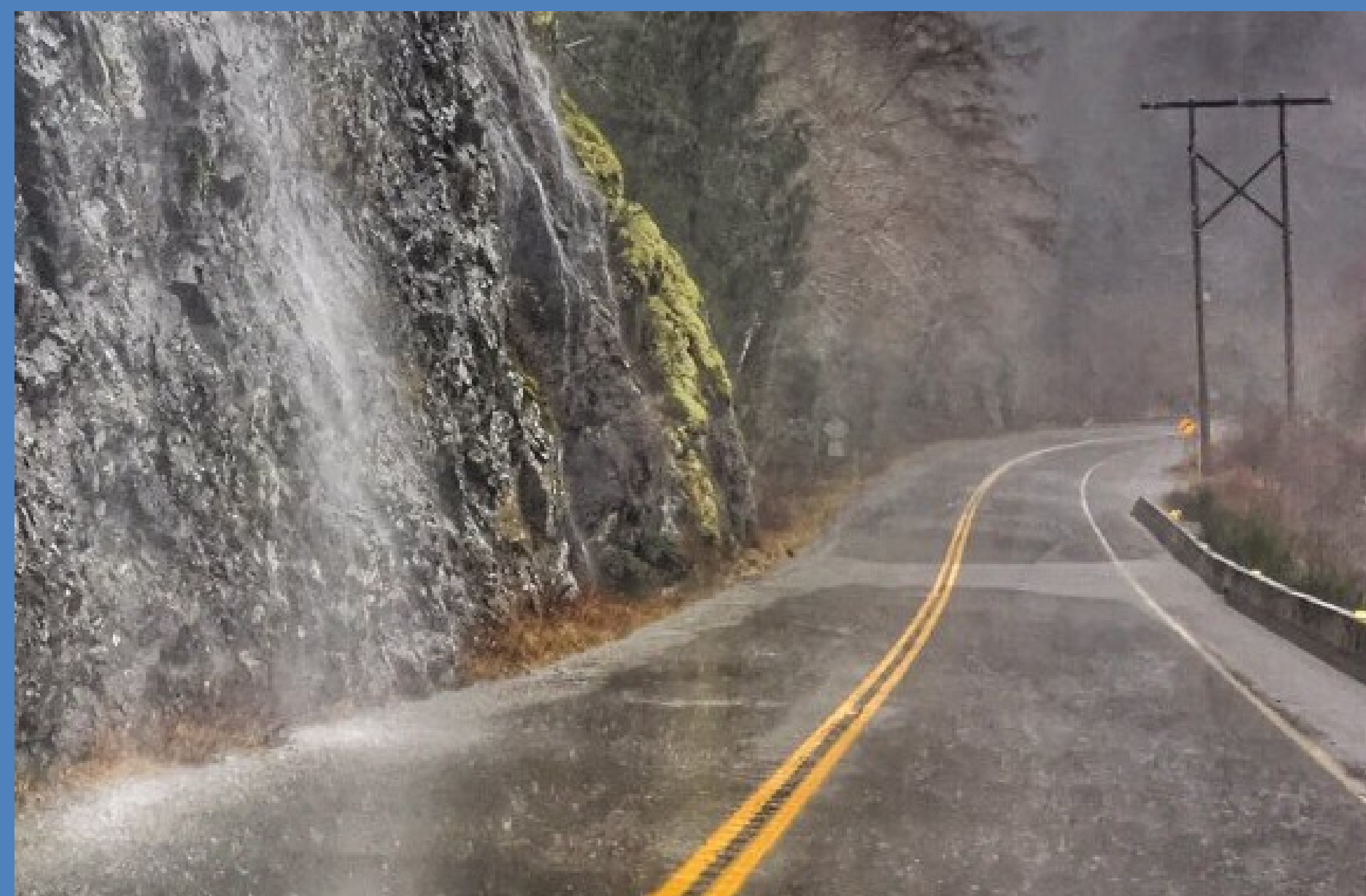
- The route is vital to regional tourism and economic development
- The project will improve safety and reliability



Eliminate
Over-tracking



Wider Lanes and
Shoulders



Improved Pavement
Condition and Drainage



Improved Alignment
and Sight Distance



Mitigating Rockfall
Hazards

SCOPE OF PROJECT

The length of the project is approximately 1.5 kilometres, and improvements include:



Widening the highway to accommodate two 3.6m lanes, 1.5m paved shoulders, and concrete roadside barrier between the lake and the highway.



Straightening of curvilinear alignment and improving the 30km/hr speed advisories to 60km/hr.



Flattening the 12% grade on the steep hill to 9% and achieve 4% grade or flatter elsewhere.

SCOPE OF PROJECT



Eliminating the overhanging rock through extensive blasting and excavation, and mitigating rock fall hazards through slope stabilization, and a wide rock catchment area and drainage ditch.



Providing a new rest area facility and view point utilizing a portion of the old highway, including a new intersection accessible by car, RV, bus, and commercial vehicles.



Relocating high voltage Hydro Transmission poles along the length of the project.

Highway 4 – Kennedy Hill Safety Improvements

Project Scope

MAJOR EARTH MOVING

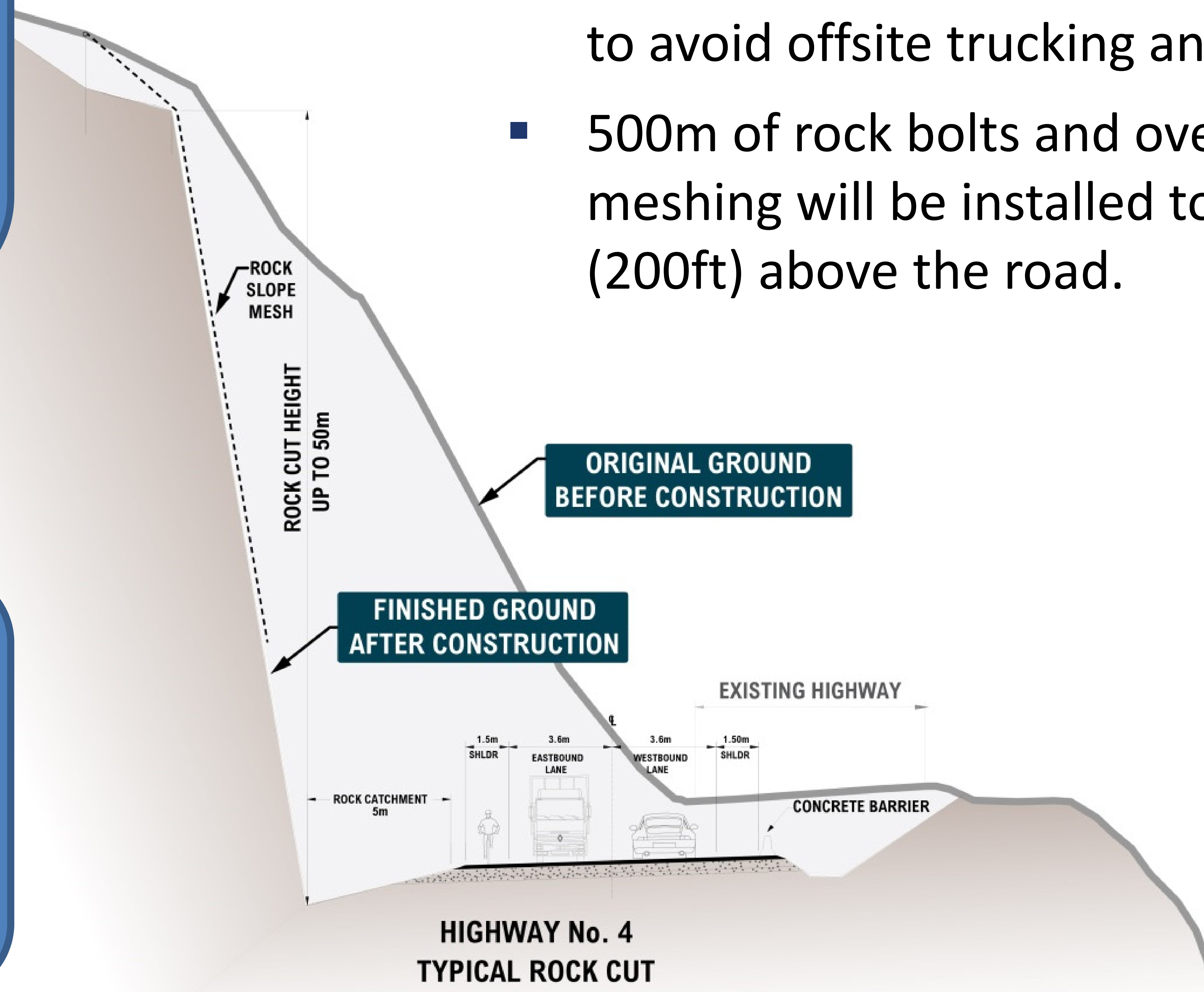


Equipment Operating
High Above Highway

- Project involves moving over 300,000m³ of earth (equivalent to 130 Olympic size swimming pools).
- Majority of earth to be moved is blasted bedrock.
- Night time rock blasting will occur in order to minimize the impact to highway users.
- All earth/rock will be used on site as embankment fill to avoid offsite trucking and to minimize costs.
- 500m of rock bolts and over 13,000m² of slope meshing will be installed to heights of up to 60m (200ft) above the road.

Compare Cut Heights

Malahat – 20m
Nanaimo Parkway – 30m
Sea to Sky – 60m
Kennedy Hill – 60m



Off Road Rock Buggies
carry up to 14m³ of rock

ENVIRONMENTAL AND ARCHAEOLOGICAL:

- A detailed environmental assessment has determined anticipated impacts will be minimal.
- A site specific construction environmental management plan following best management practices for protection of the environment will be created and be managed by an onsite environmental monitor throughout construction.
- A buffer will be maintained along the lake shoreline in order to retain existing vegetation, and over 1400 plantings are proposed to help re-establish vegetation.
- An archaeological overview and impact assessment did not identify areas of archaeological significance within the site.
- The project lies within the traditional territory of the Tla-o-qui-aht First Nations.



3D VIDEO RENDERING OF THE PROJECT:

- The adjacent video is on repeat, so keep watching to see any details over again.
- The locations of the relocated Hydro poles are approximate only.
- The new alignment leaves the old alignment between the rest area and the northeastern project limits. The old grade can be seen upslope of the new highway.
- Tall trees can be seen mid-slope on the lake side fill zones. These represent a planting terrace that will accommodate stable soils for planted vegetation to grow.
- Uphill of the rest area parking lot, the switchback trail to the view point lookout can be seen. This lookout is on the existing highway alignment at the summit of the hill.

Highway 4 – Kennedy Hill Safety Improvements

Planned Traffic Closures and Construction Schedule



TRAFFIC MANAGEMENT STRATEGIES:

A traffic management strategy is required to construct the new highway, balancing traffic flow and worker and public safety.

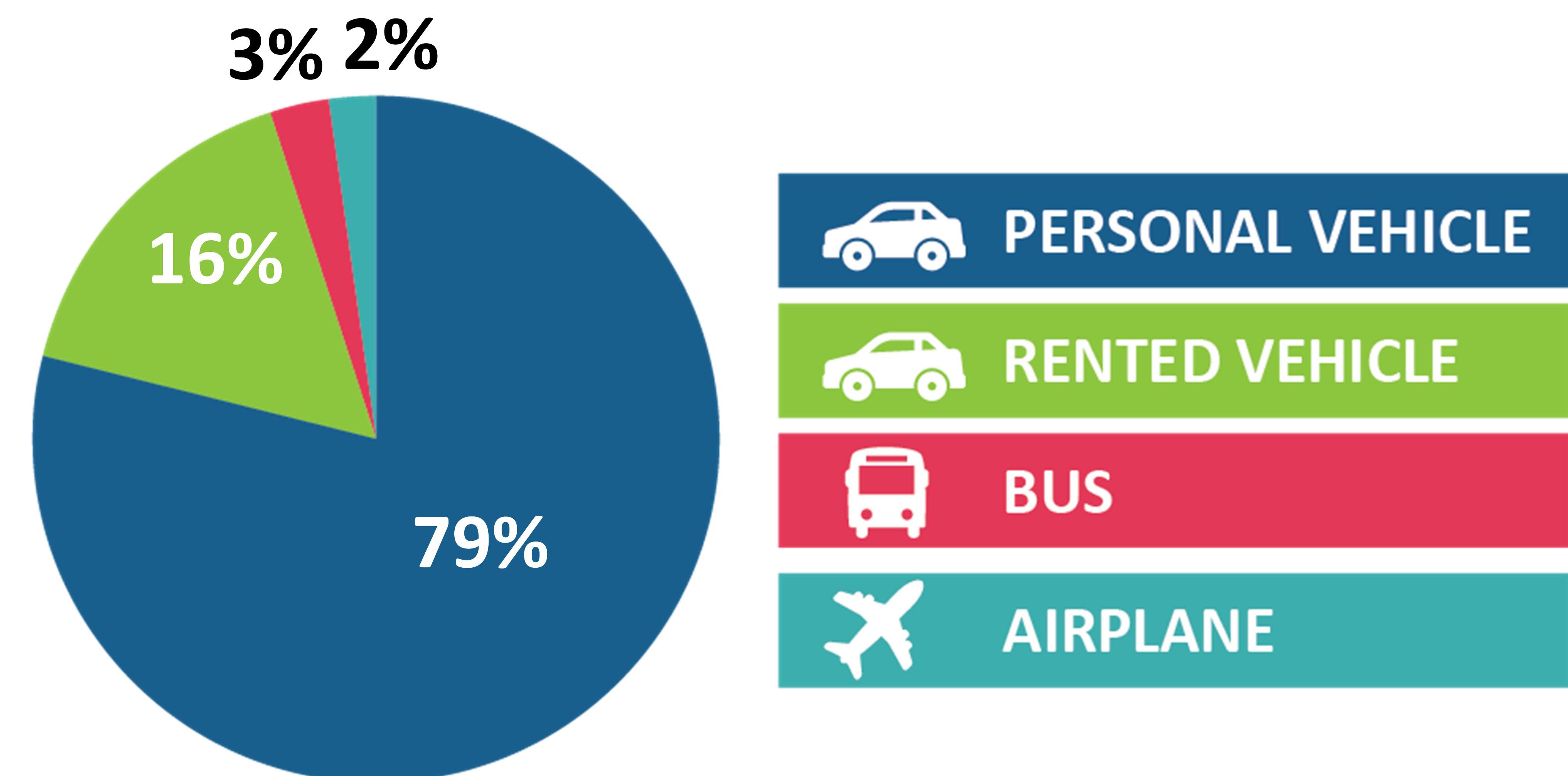
Constructability Considerations:

- Significant rock blasting and hauling
- Construction staging to minimize stoppages
- Need to maintain one travel lane during peak traffic periods
- Emergency vehicle access through the site

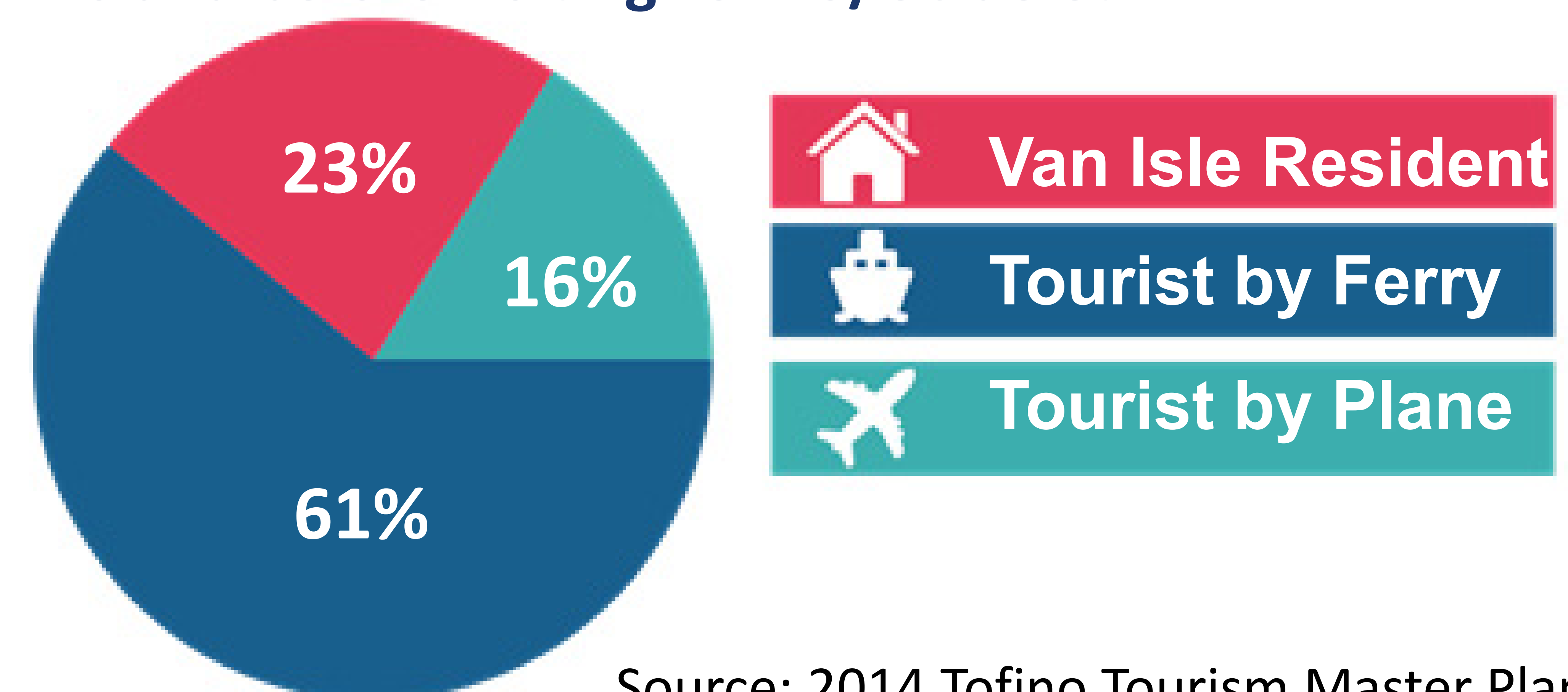
Tourism and Economic Considerations:

- Economic need to keep highway open
- Tourism and seasonal traffic influxes
- Ferry schedules
- Commercial vehicle shipping and deliveries for local restaurants and fish plants

Tourist Transportation to and from Tofino/Ucluelet



Tourist Transportation to Vancouver Island before visiting Tofino/Ucluelet



Source: 2014 Tofino Tourism Master Plan

Highway 4 – Kennedy Hill Safety Improvements

Planned Traffic Closures and Construction Schedule



TRAFFIC MANAGEMENT STRATEGIES:

- Majority of the rock blasting and traffic stoppages are planned during the night to minimize traffic disruptions, but some traffic stoppages are required for “daylight critical” activities like rock scaling.
- No traffic stoppages are permitted during long weekends, including the day before or after.
- Single Lane Alternating Traffic (SLAT) may result in up to 30min delays during peak traffic periods.

Seasons	Peak Season	Shoulder Season	Off-Peak Season
TIME	June 15 to September 15	March 1 to June 15 September 15 to December 1	December 1 to March 1
Midnight - 1am	Open (Single Lane Alternating)	Open (Single Lane Alternating)	Open (Single Lane Alternating)
1am - 2am	3 Hour Stoppage	3 Hour Stoppage	3 Hour Stoppage
2am - 3am			
3am - 4am			
4am - 5am	Open (Single Lane Alternating)	Open (Single Lane Alternating)	Open (Single Lane Alternating)
5am - 6am	2 Hour Stoppage	2 Hour Stoppage	3 Hour Stoppage
6am - 7am			
7am - 8am	Open (Single Lane Alternating)	Open (Single Lane Alternating)	Open (Single Lane Alternating)
8am - 9am			
9am - 10am			
10am - 11am		1 Hour Stoppage	1 Hour Stoppage
11am - Noon			
Noon - 1pm		Open (Single Lane Alternating)	Open (Single Lane Alternating)
1pm - 2pm		1 Hour Stoppage	1 Hour Stoppage
2pm - 3pm			
3pm - 4pm		Open (Single Lane Alternating)	Open (Single Lane Alternating)
4pm - 5pm			
5pm - 6pm	2 Hour Stoppage	3 Hour Stoppage	3 Hour Stoppage
6pm - 7pm			
7pm - 8pm			
8pm - 9pm			
9pm - 10pm			
10pm - 11pm			
11pm - Midnight			

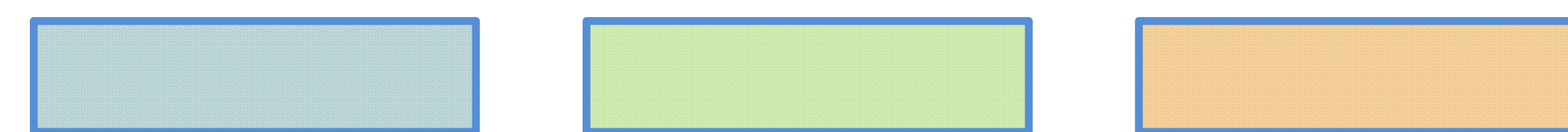
Highway 4 – Kennedy Hill Safety Improvements

Planned Traffic Closures and Construction Schedule

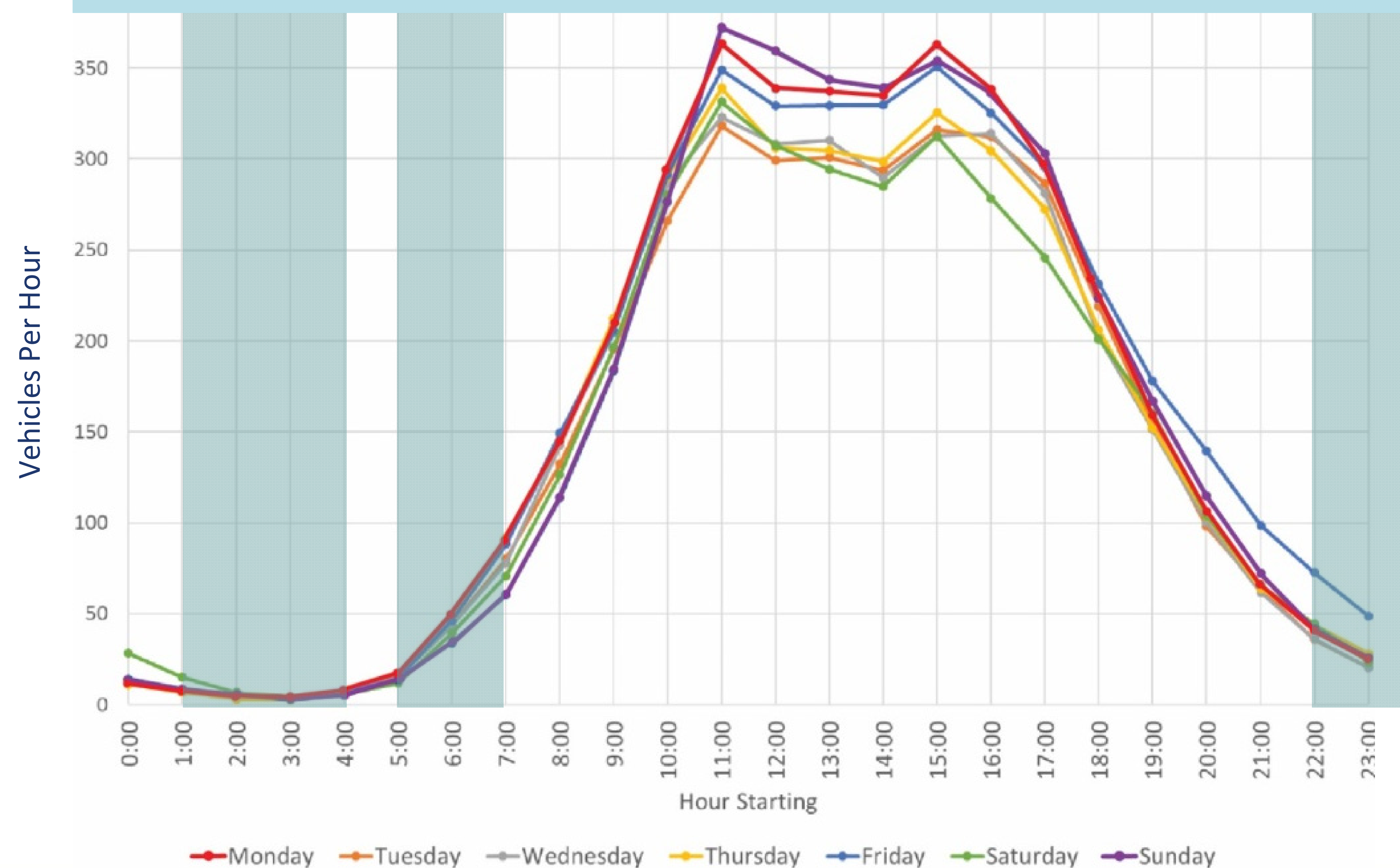


- Nightly traffic stoppages permitted year round
- Two midday stoppages allowed during shoulder and off-peak seasons, and seasonal SLAT permitted as follows:
 - Peak: 7am – 10pm
 - Shoulder: 7am – 9pm
 - Off-Peak: 8am – 9pm

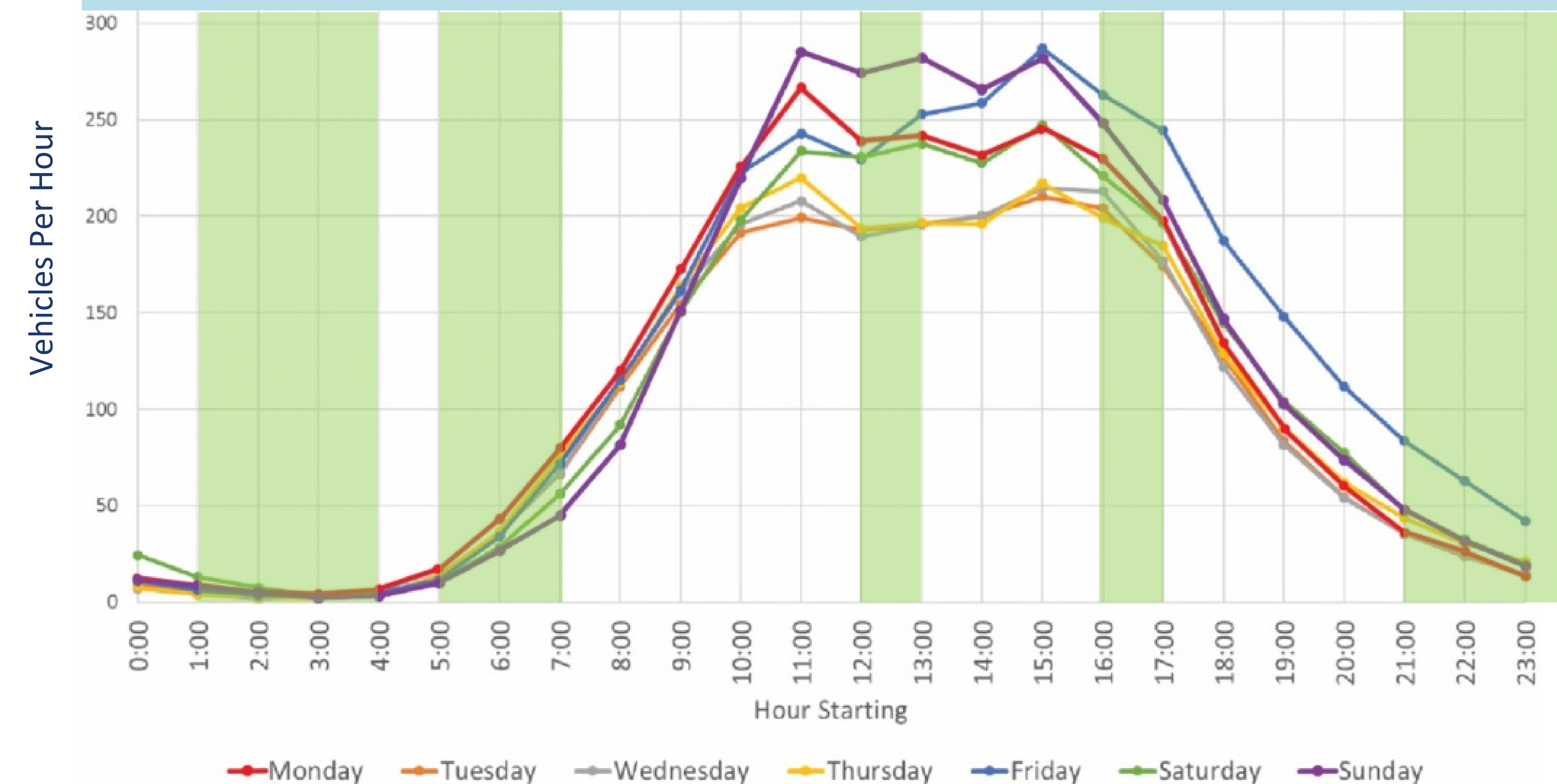
Highway Stoppages



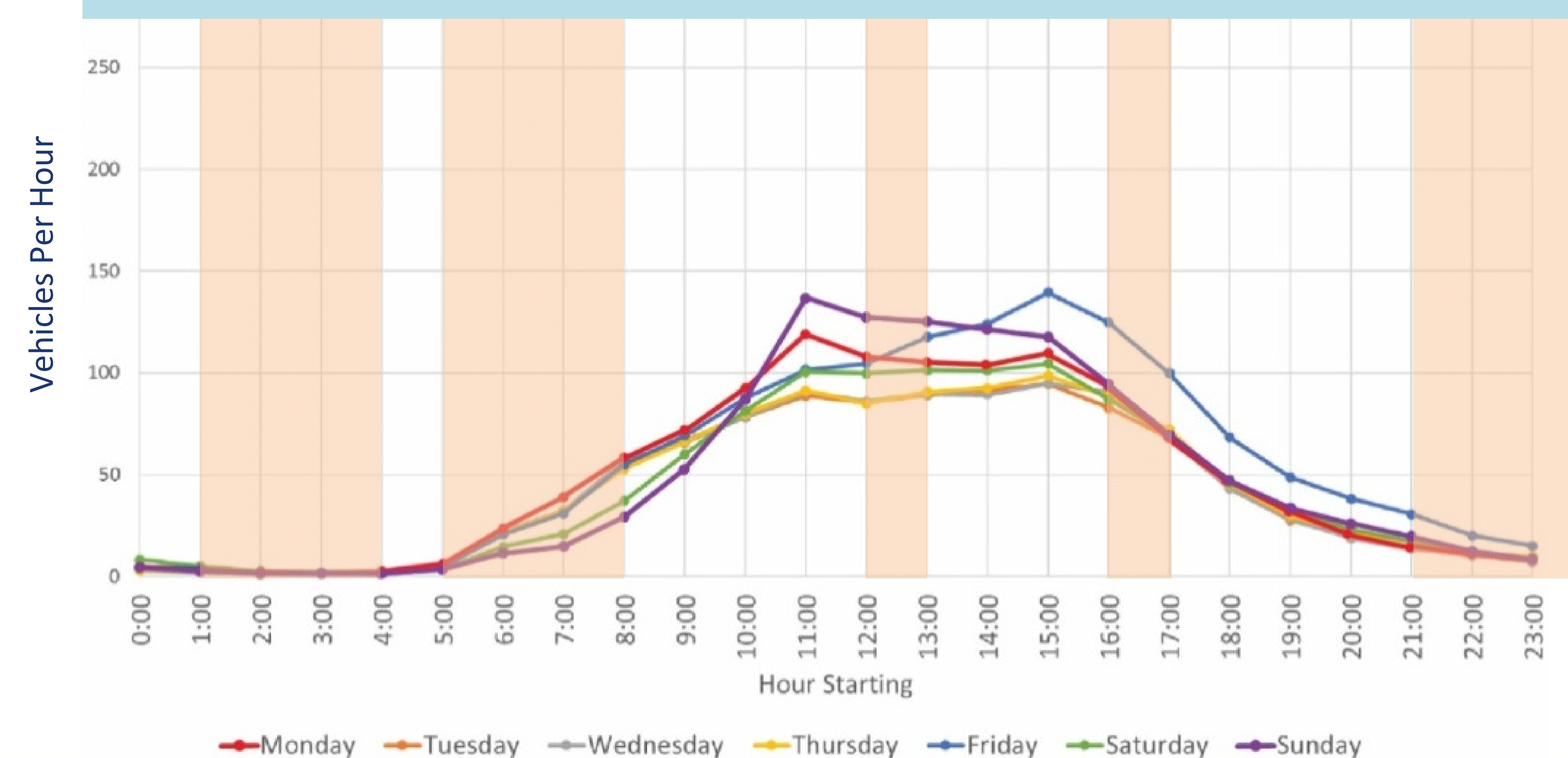
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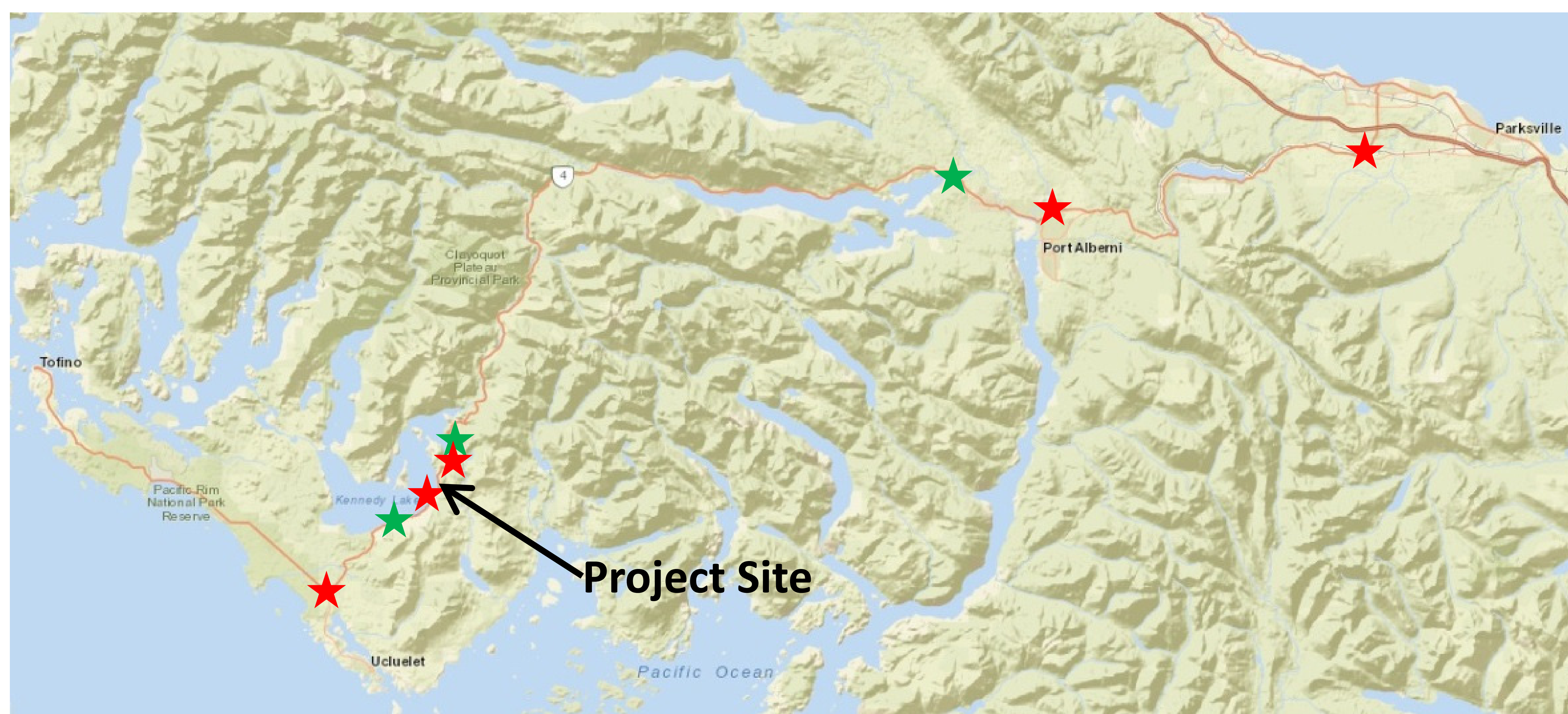


Highway 4 – Kennedy Hill Safety Improvements

Traveller Information During Construction:

Updated travel information will be available via the following:

- Toll free hot line travel advisory messaging updated daily
- Drive BC (www.drivebc.ca)
- Project Website (www.bc.ca/highway4kennedyhill)
- Twitter (@TranBC, @DriveBC) and Facebook (TranBC)
- Emailed updates to business and community stakeholders
- Traffic Advisory Releases given to media and radio
- Changeable Message Signs (CMS) along corridor



- ★ Existing Overhead CMS
- ★ Portable Construction CMS

Highway 4 – Kennedy Hill Safety Improvements

Planned Traffic Closures and Construction Schedule



NEXT STEPS:

- Award the construction contract in February 2018
- Start construction in March 2018
- Finish construction by the Summer of 2020

Announcement of
Federal and Provincial
Project Funding
March 2017

Detailed
Design
Complete
Winter 2017

Public Info
Sessions
January
2018

Tendering
and Award
February
2018

Construction
Start
March 2018

Construction
Complete by
Summer 2020

THANK YOU FOR COMING!

Please remember to provide us with your feedback by:

- Completing a feedback form and leaving it with our team today
- Sending an email to KennedyHill@gov.bc.ca
- Visiting the project website at www.gov.bc.ca/highway4kennedyhill
- If you would like to provide your comments after the meeting, please complete the comment form and return via email before **February 4, 2018**