

Transportation Community Forum

January 17, 2017

RESORT MUNICIPALITY OF WHISTLER

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Tonight's Agenda

5:00–5:30pm	Walk-through displays
5:30pm	Welcome and Introductions
5:45pm	“Transportation Today” Presentations
6:45 pm	Introduction to 2017 Action Plan
6:50–7:55pm	“Transportation Tomorrow” Exercise
7:55pm	Closing Comments & Next Steps



Mayor Nancy Wilhelm-Morden

Chair, Transportation Advisory Group





Jordan Sturdy

MLA – West Vancouver – Sea-to-Sky

Tonight's Purpose

1. Share TAG's purpose, role
2. Share highlights of what's been learned from the evidence-based research
3. Gather your input on the proposed short-term (2017) actions

Tonight's Agenda

5:50 pm	Presentations: <i>Transportation Today</i>
6:45 pm	Proposed 2017 Action Plan
6:50 pm	Table discussions: <i>Transportation Tomorrow</i>
7:55 pm	Closing Comments & Next Steps
8:00 pm	End

Transportation Today Presenters

- Richard Drdul, Drdul Community Transportation Planning
- Matthew Boyd, BC Transit
- James Hallisey, RMOW
- Mike Furey, RMOW

Transportation Engineering 101

Presented by:

Richard Drdul, P.Eng.

Community Transportation Planner

What is Transportation?

- Movement

- ✓ of People

- Visitors (Regional, Destination)

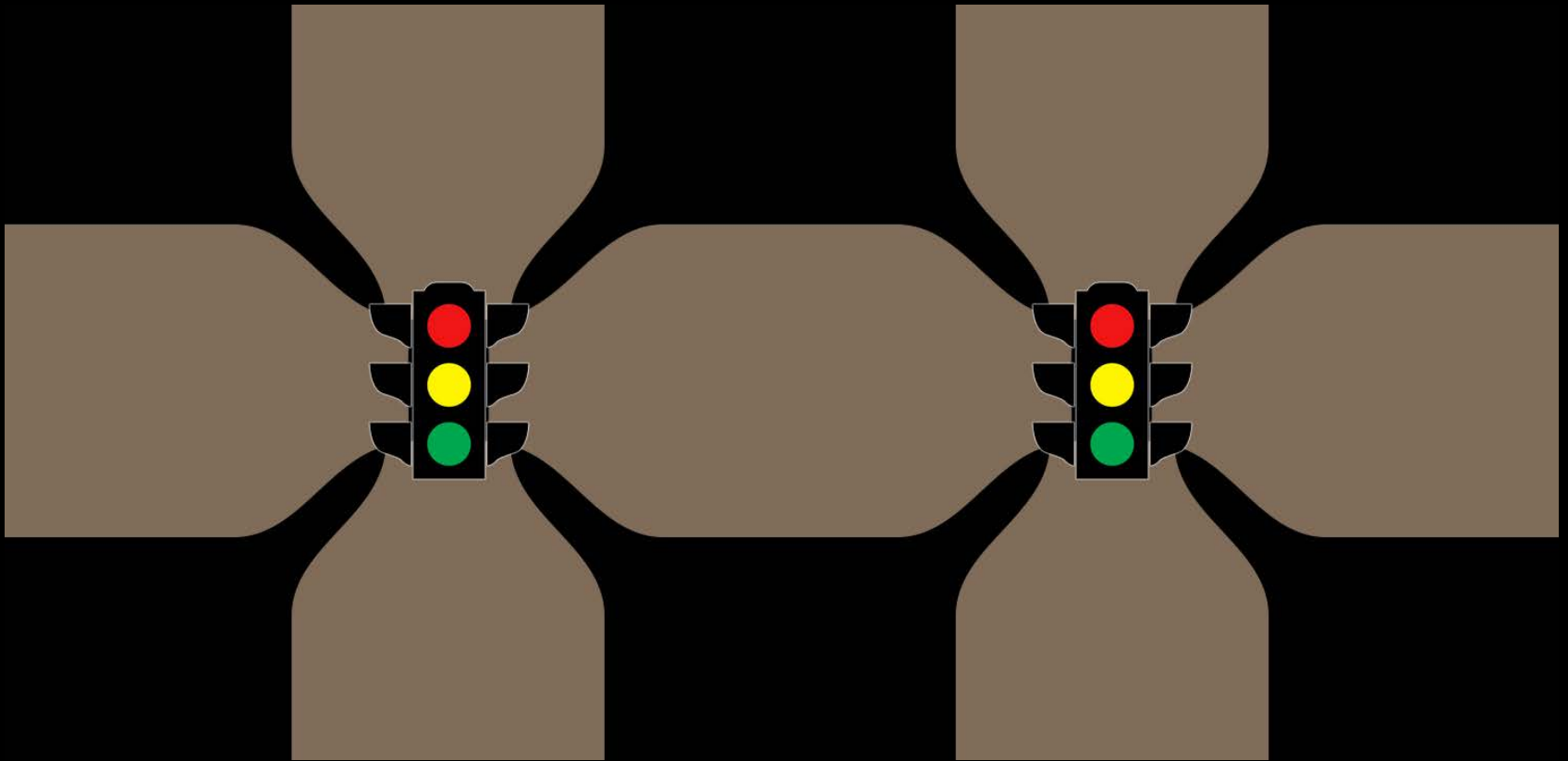
- Employees (Local, Commuting)

- Residents (Permanent, Part-Time, Seasonal)

- ✓ of Products

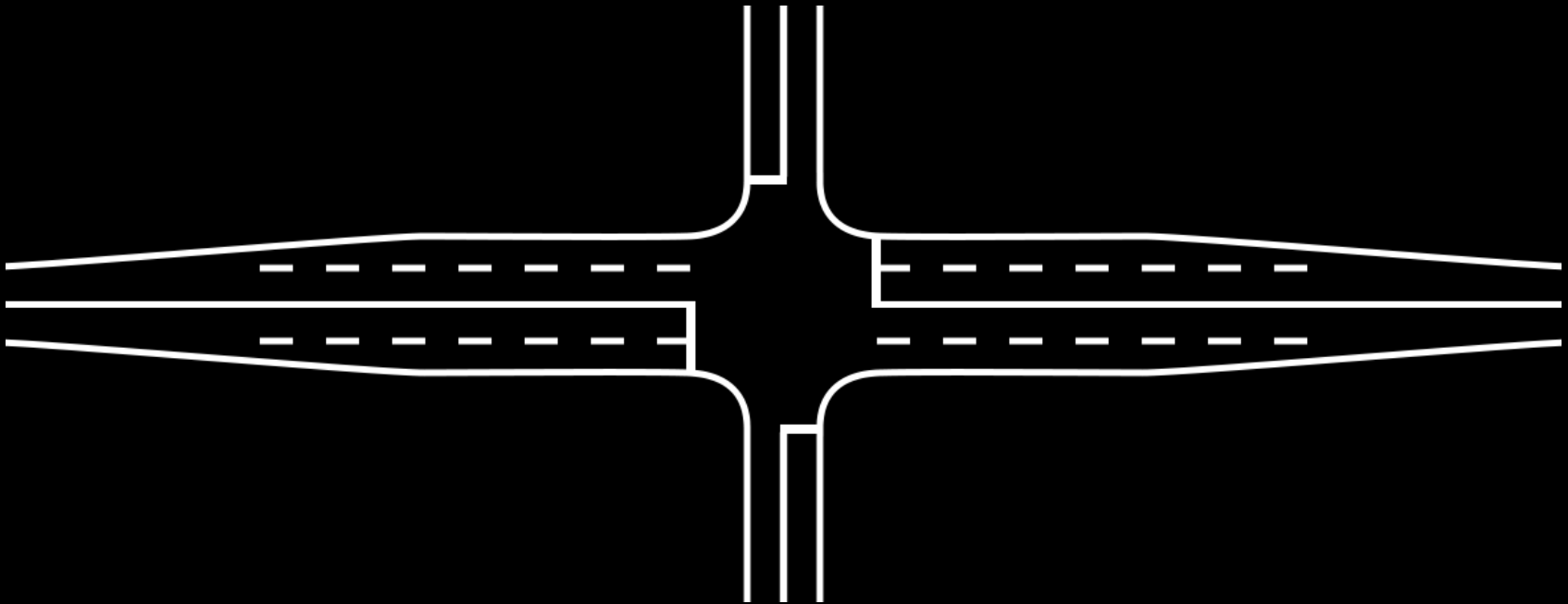
What is the capacity of a road?

Capacity is determined by intersections



What is the capacity of a road?

- Traffic lane:
 - Highway = up to 2000 vph
 - Signalized intersection = 500–1500 vph



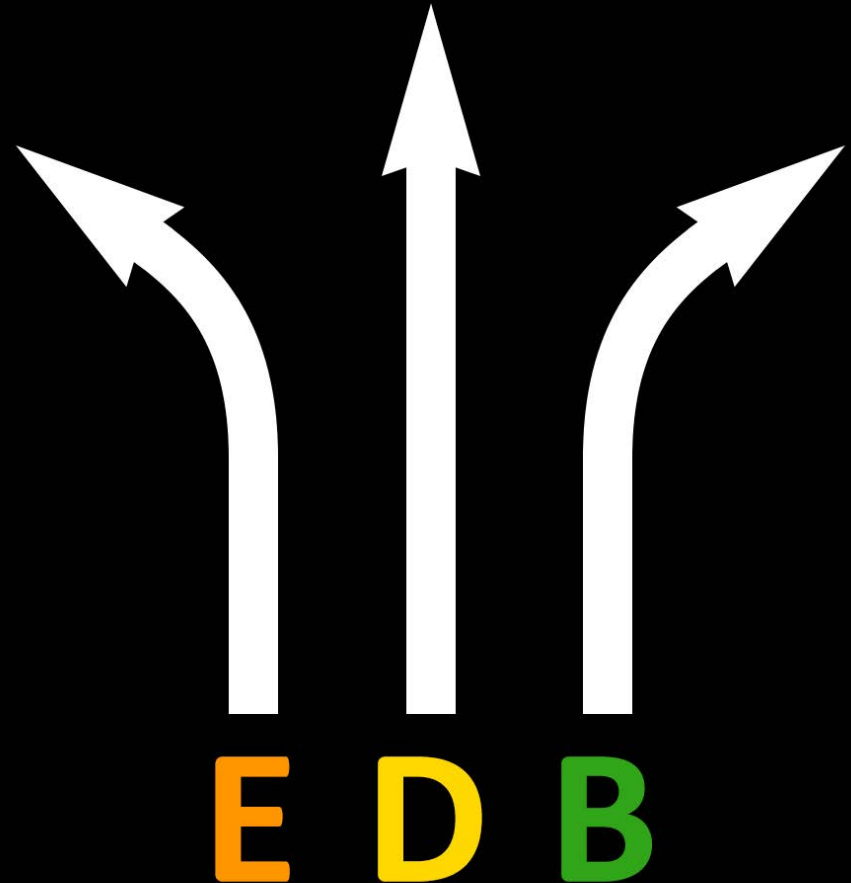
What is congestion?

- Measure congestion at intersections
- Delay = deceleration + stop + acceleration
- Calculate average delay by:
 - Time period (peak 15 mins, hour, 2 hours)
 - Movement, approach
 - Intersection

What is congestion?

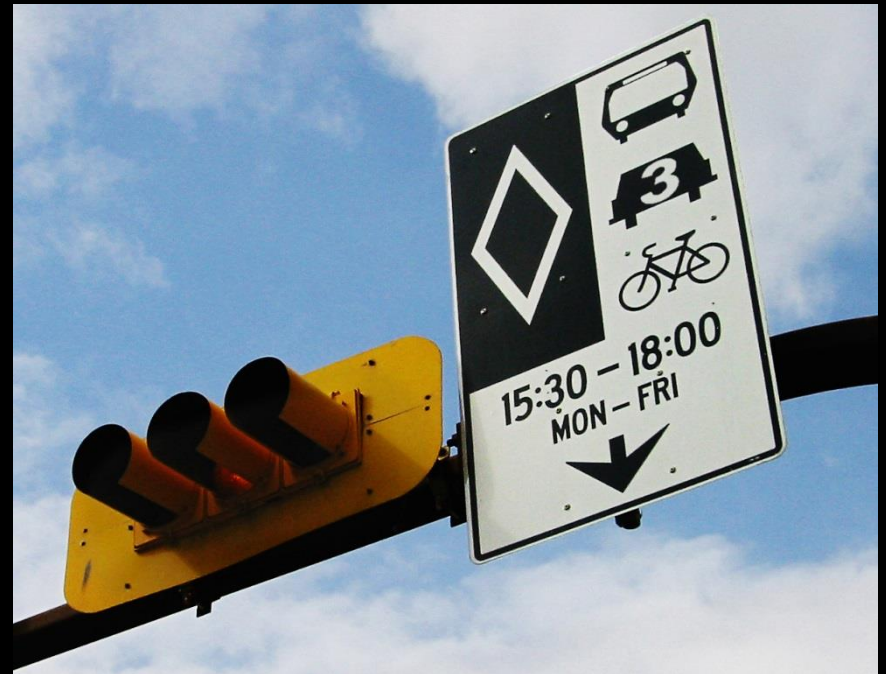
- Level of service

A	0–10 sec
B	10–20 sec
C	20–35 sec
D	35–55 sec
E	55–80 sec
F	80+ sec



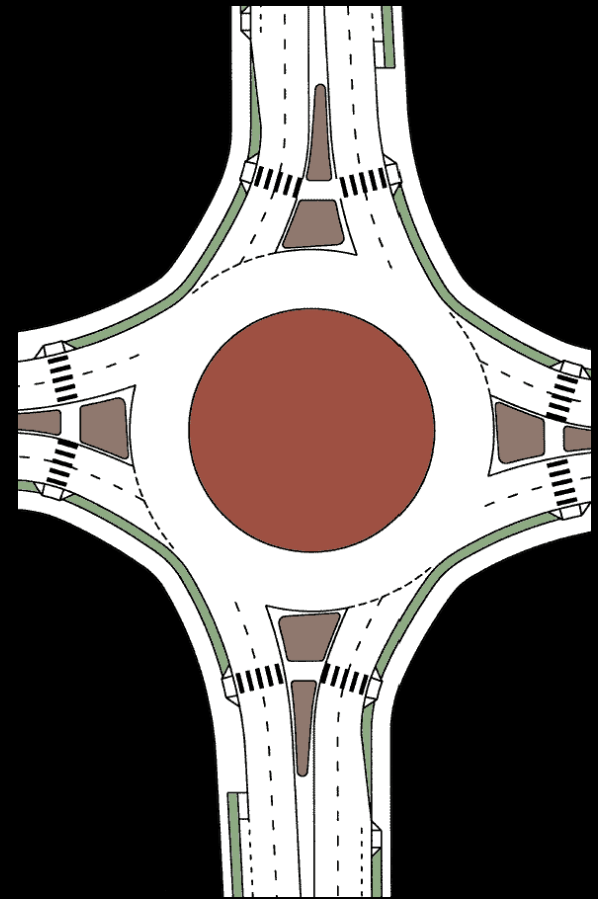
How can we reduce delay?

- Laning:
 - Additional through lanes
 - Turn lanes
 - Queue jumpers
- Signals:
 - Phases
 - Timing
 - Pedestrians



How can we reduce delay?

- Roundabouts:
 - Yield on entry if necessary
 - Splitter islands with crossings
- Applicability:
 - Low to moderate traffic volumes
 - Balanced volumes on 3 or more legs
 - Safety issues



How can we reduce delay?

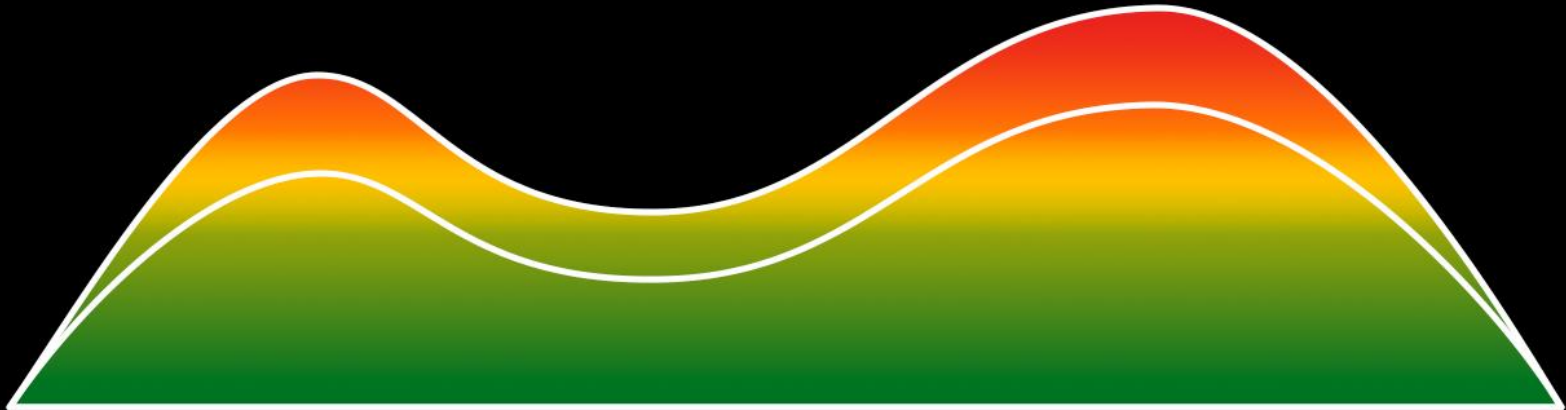
Caution:

- Consider entire corridor – aim for balance throughout corridor
- **Manage congestion** – don't expect to build your way out of congestion



How else can we mitigate congestion?

- Travel demand management – shift demand to other times, other modes
- Manage local trips – reduce number and length of trips on highway



How else can we mitigate congestion?

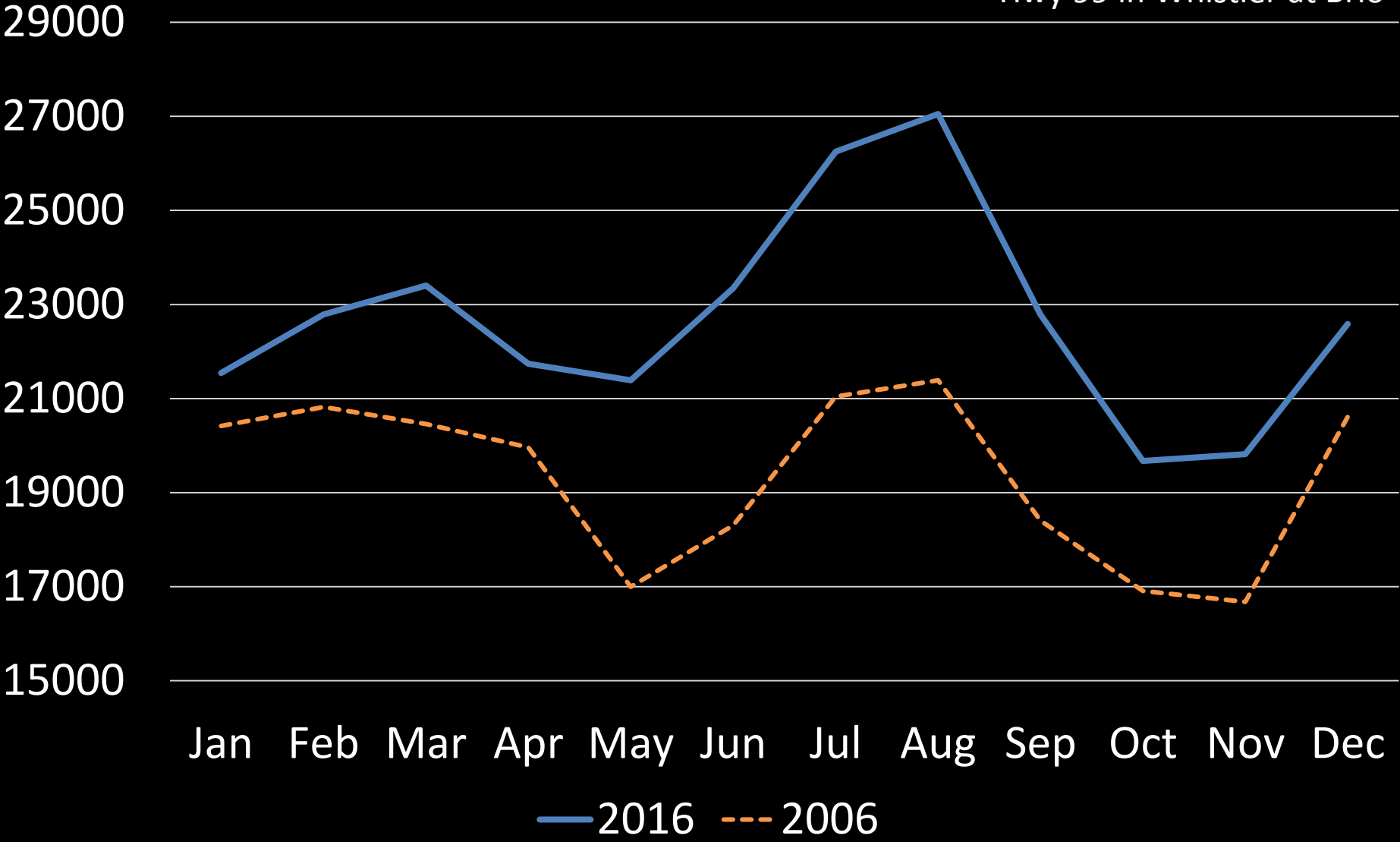
- Locally generated trips are a key factor on peak days:
 - Shift to non-peak times
 - Shift to other modes
 - Shorten or avoid trips
 - Inter-neighbourhood connections

What can we do now?

- Corridor traffic analysis of highway:
 - Analyze potential solutions
 - Compare infrastructure solutions to TDM solutions
 - Identify preferred solutions with partners
- Prioritize and implement solutions

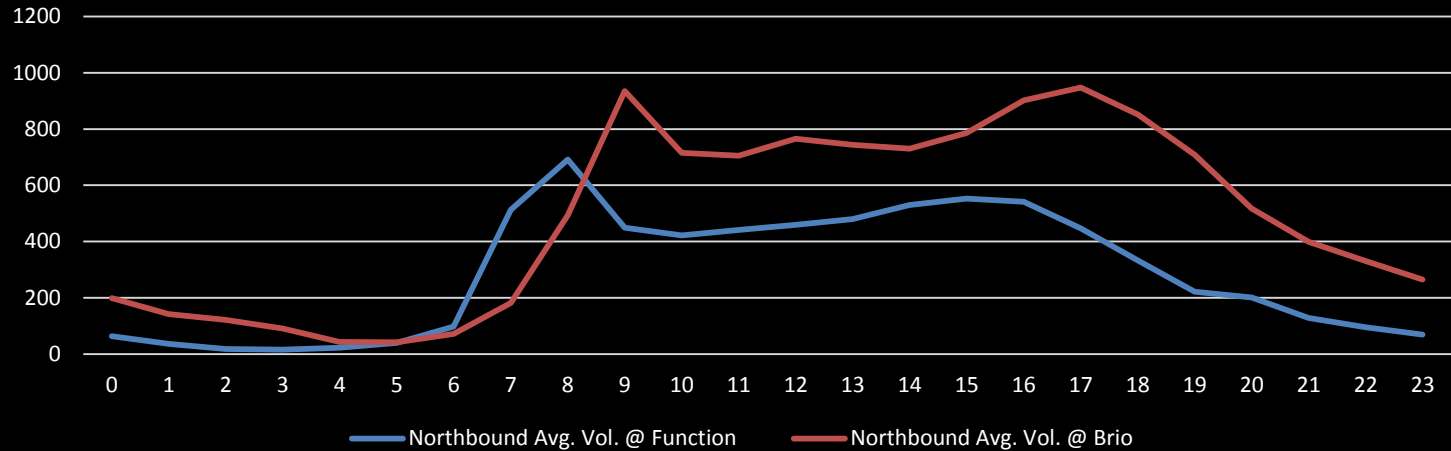
Annual Traffic Comparison

Hwy 99 in Whistler at Brio

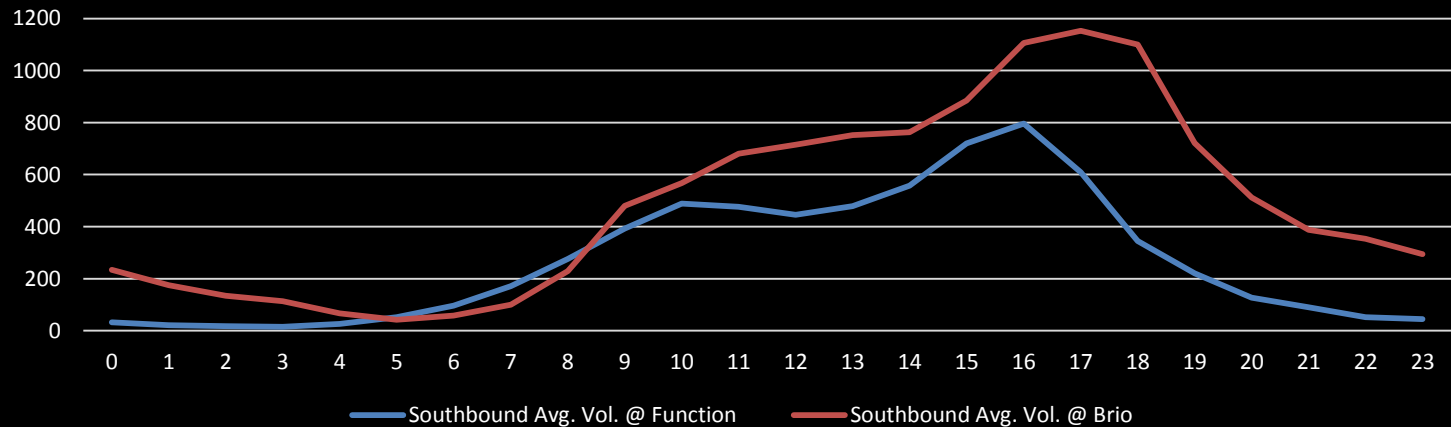


2016 Winter Traffic

Average of **February** Busiest Days
Northbound @ Brio Vs. Function Junction



Average of **February** Busiest Days
Southbound @ Brio Vs. Function Junction



2016 Winter Traffic

Example: Northbound at noon on Feb weekends:

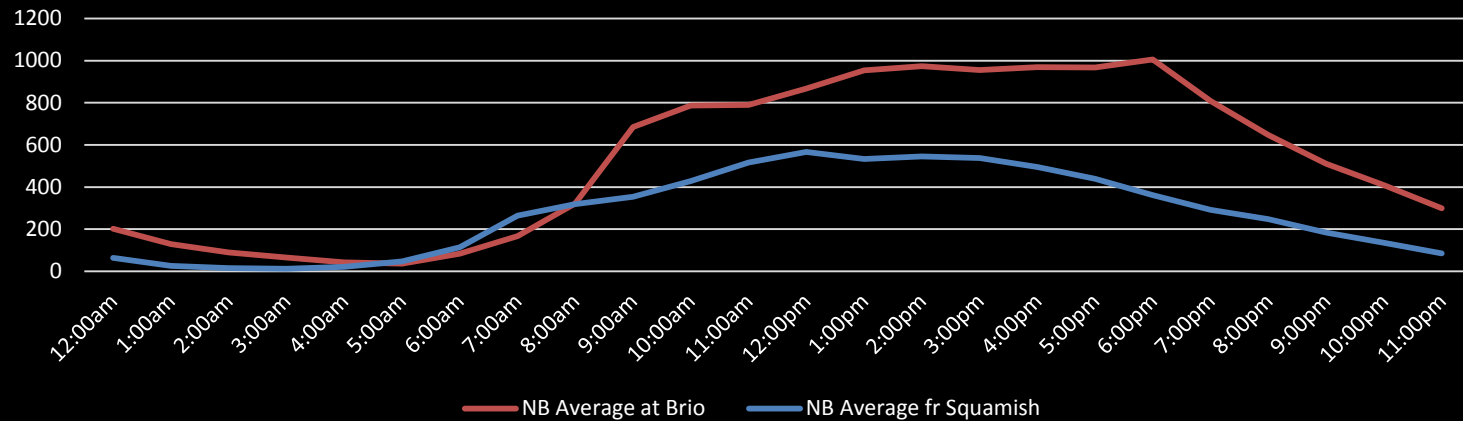
Location	Cars per hour
Brio – (Red Line)	800
South of Function Junction (Blue Line)	460

Traffic generated within Whistler: 340 cars/hour
= 40% of total

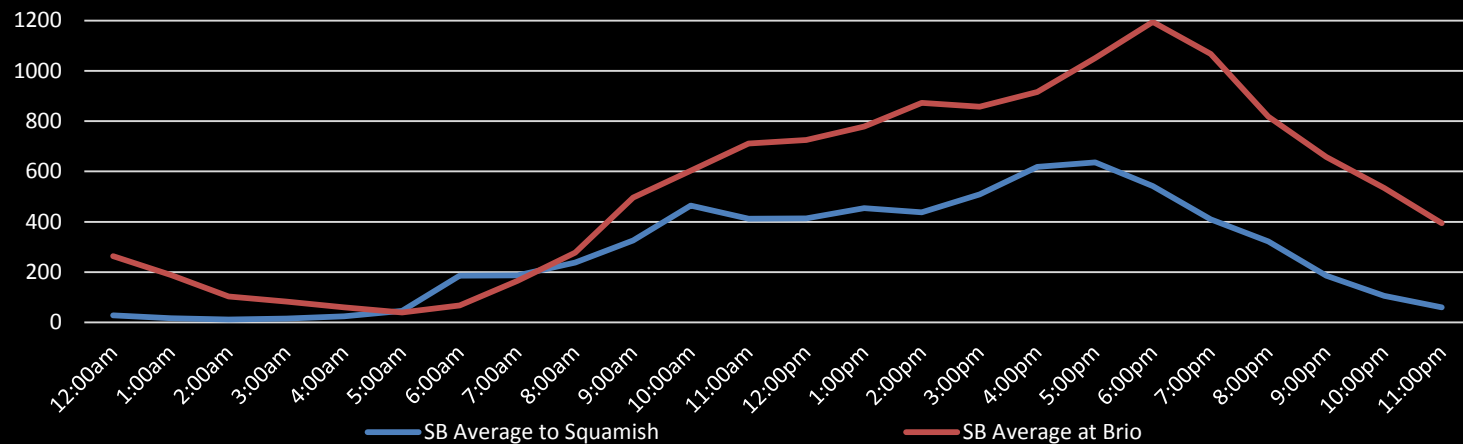
******Area between the Red line and Blue line on graph is traffic generated within Whistler.

2016 Summer Traffic

Average of July 2016 Northbound
@ Brio Vs. Function Junction



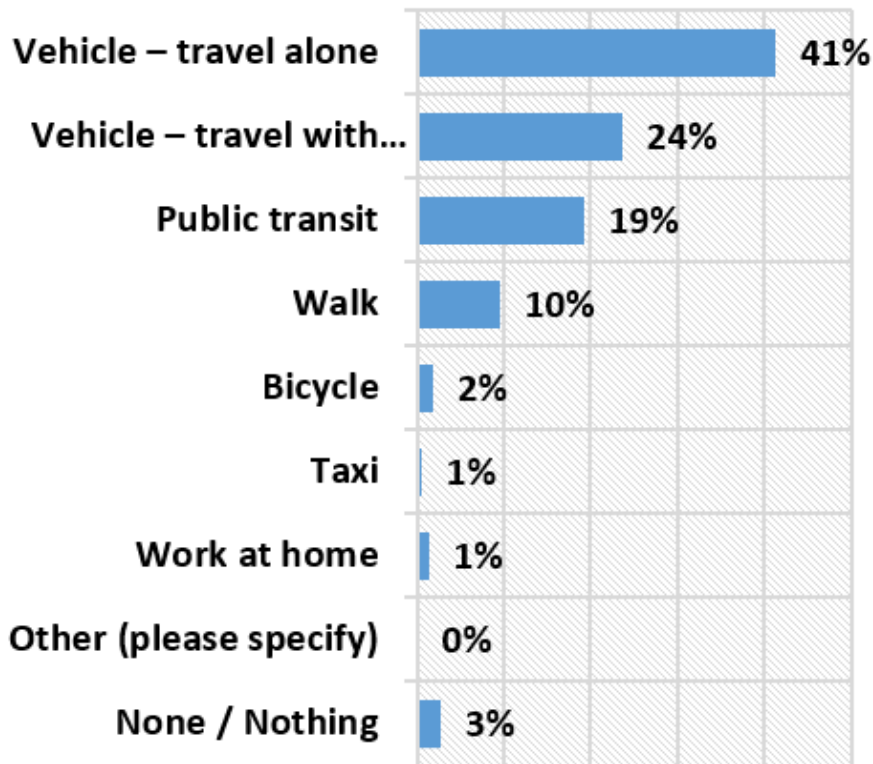
Average of July 2016 Southbound
@ Brio Vs. Function Junction



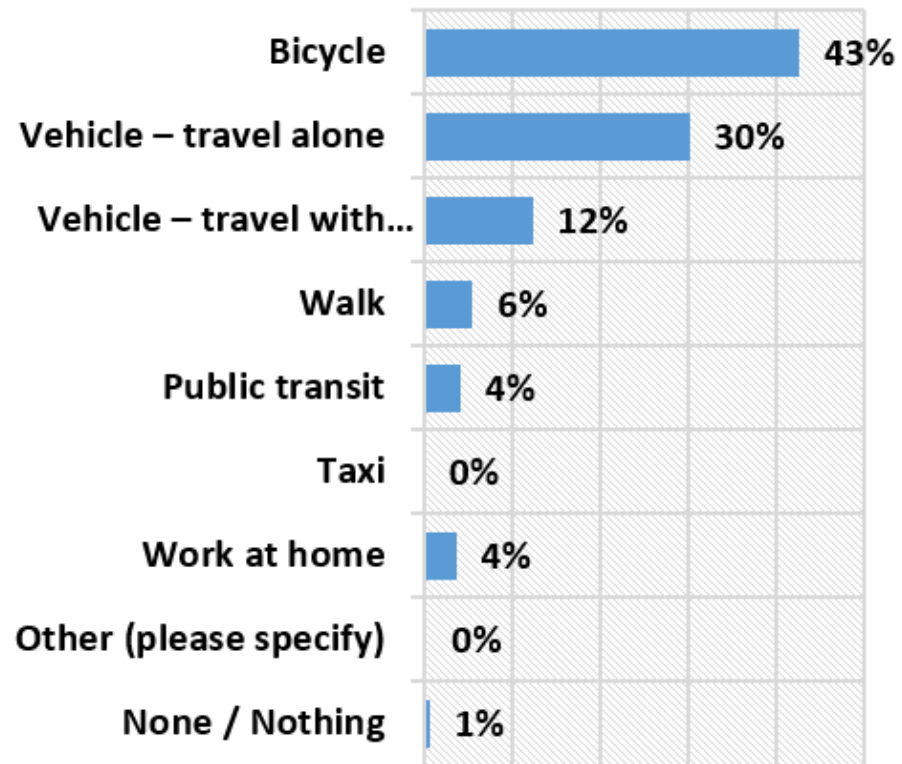
Travel Demand Management

How are people in Whistler travelling today?

Travelling to Work - Winter



Travelling to Work - Summer

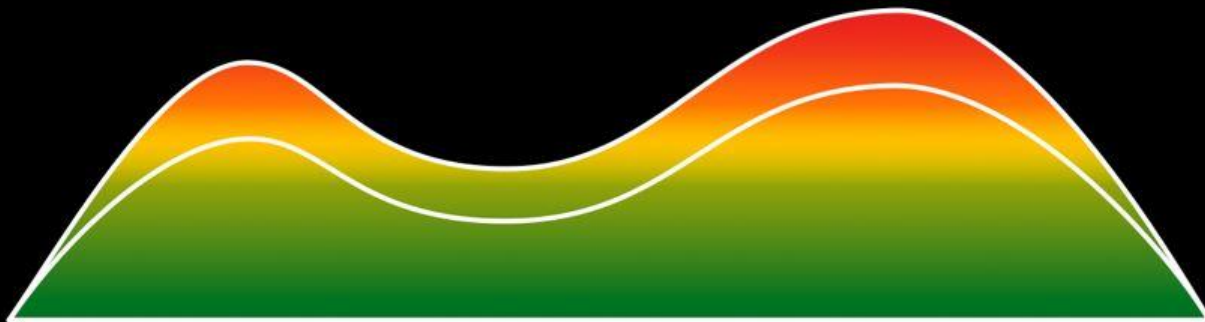


Travel Demand Management

Why is it important to know where the traffic comes from?

Travel demand management – shift demand to other times, other modes

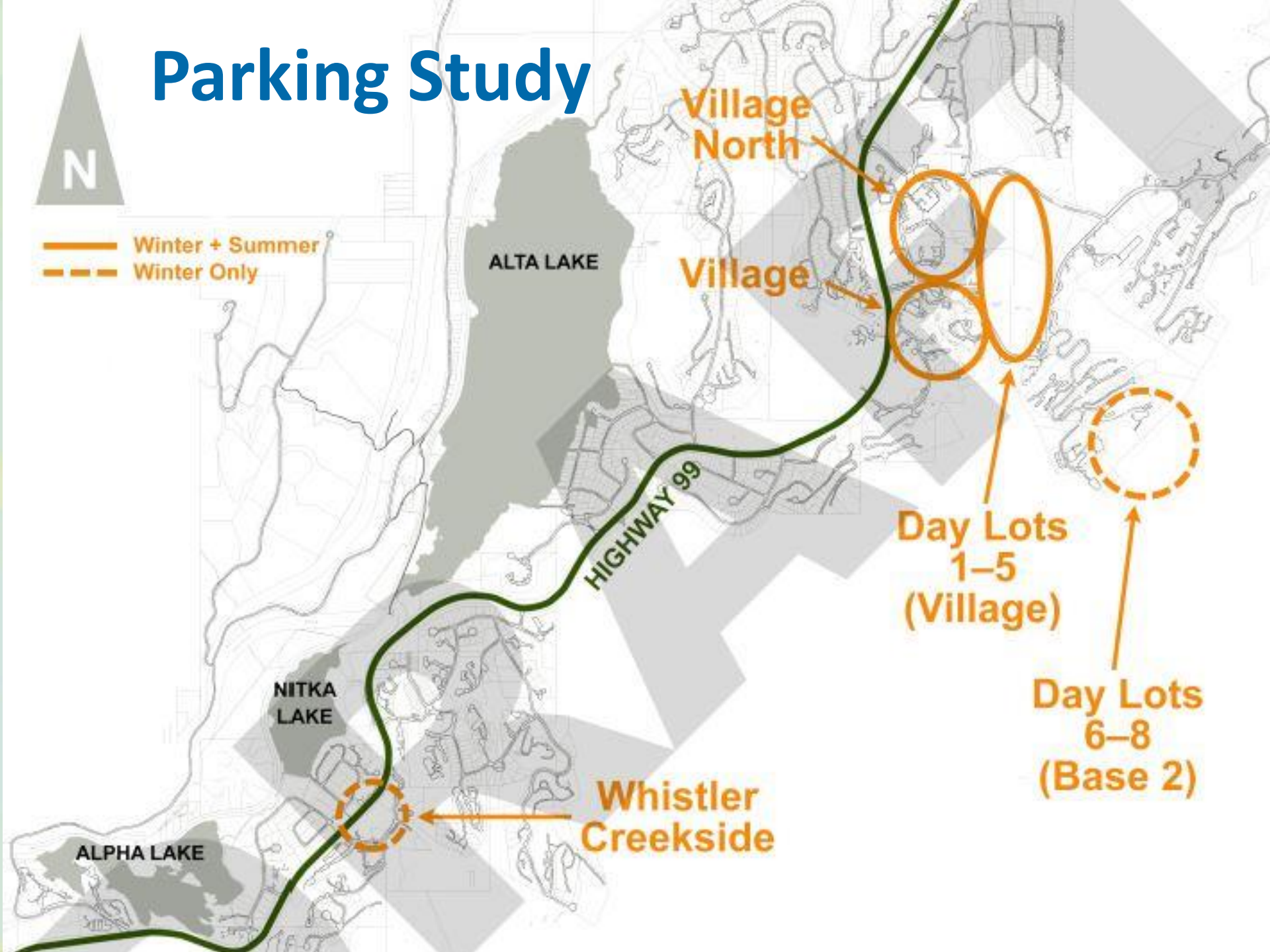
Manage local trips – reduce number and length of trips on highway



Parking Study



— Winter + Summer
- - - Winter Only



Village North

Village

ALTA LAKE

HIGHWAY 99

NITKA LAKE

ALPHA LAKE

Whistler Creekside

Day Lots
1-5
(Village)

Day Lots
6-8
(Base 2)

2016 Parking Study

Measure peak and near-peak parking demand:

- Winter
- Summer

Information for transportation planning

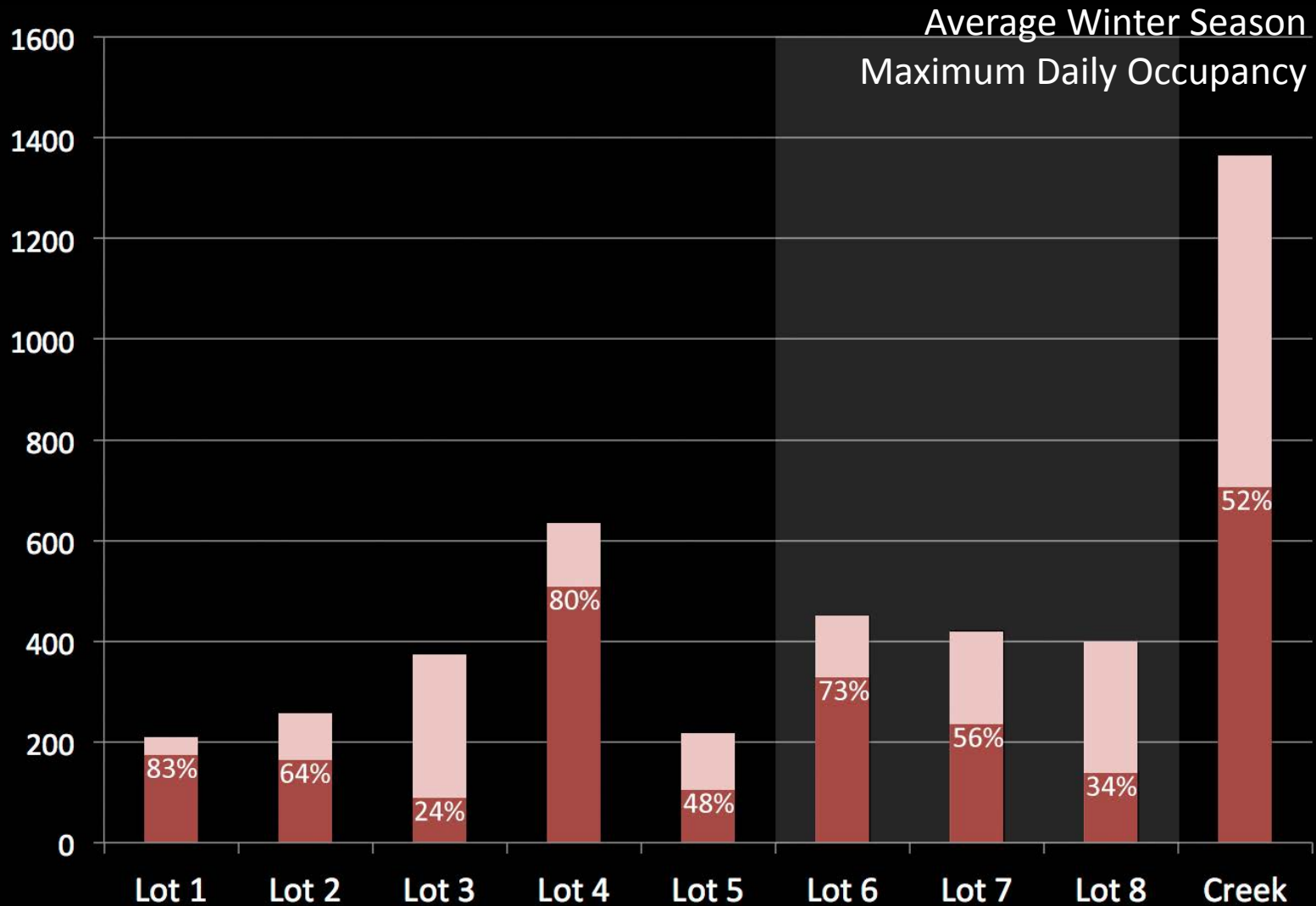
Program for future parking counts

Availability

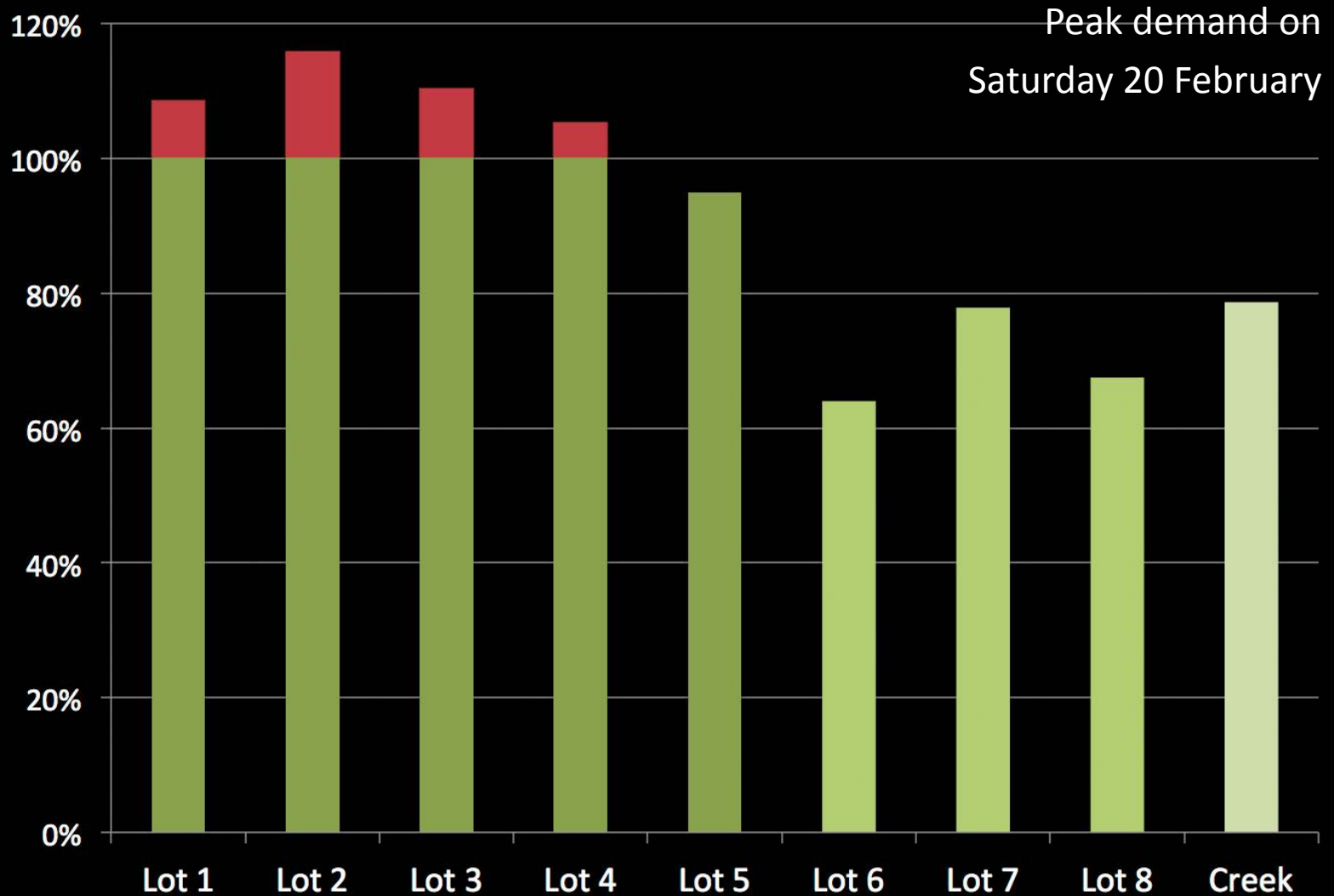
Primary objective in managing parking:

- Visitor/customer experience
- Congestion, frustration
- Village: 15% availability = 85% occupancy
- Day lots: 10% availability = 90% occupancy

Winter: Day Lots



Winter: Day Lots



Summer: Day Lots

Maximum Occupancies



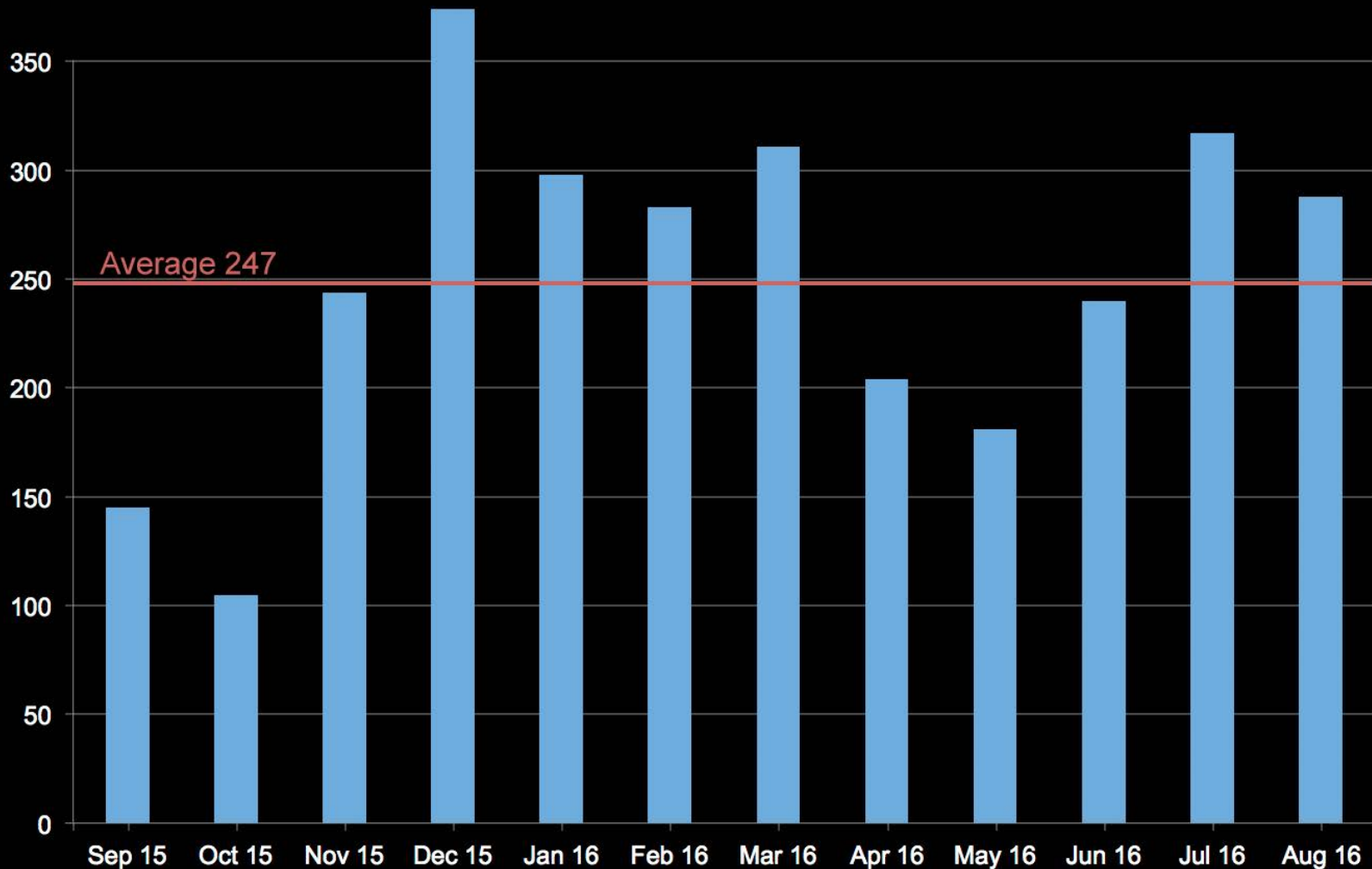
Summer: Day Lots

Average Times Day Lots Full
1 July – 5 September 2016

	Friday	Saturday	Sunday
Free Lots	10:39 am	9:52 am	9:54 am
Pay Lots	12:27 pm	12:18 pm	11:30 am

Summer: Day Lots

Monthly Parking Pass Purchases

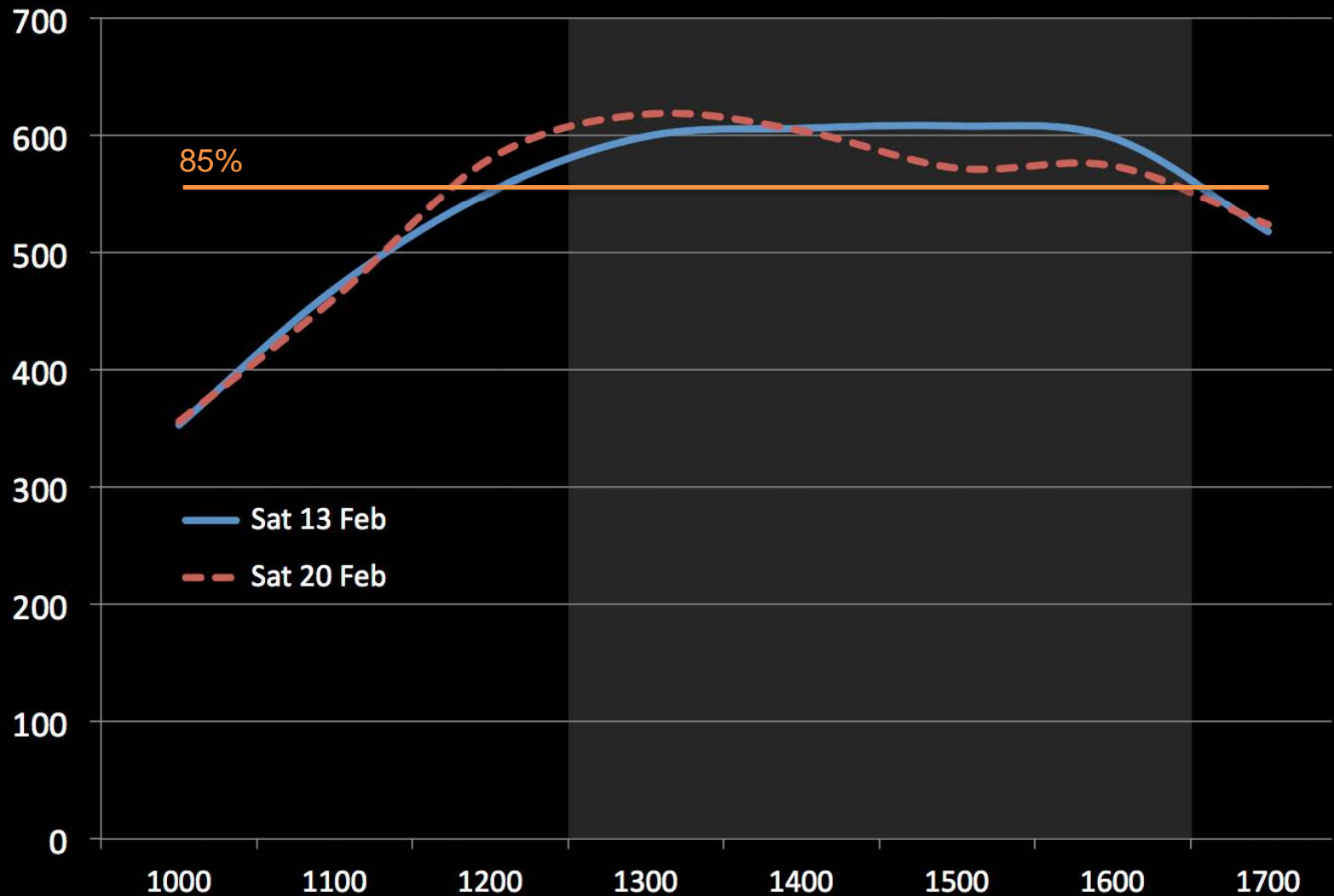


Summer: Day Lots

Overnight Parking

	Wednesday 24 August 4:00 am	Saturday 27 August 4:00 am	Sunday 28 August 4:00 am	Saturday 3 September 4:00 am
Lot 5	28	51	27	52
Lot 4	43	58	39	71
Lot 3	6	5	4	10
Lot 2	5	2	4	18
Lot 1	7	3	5	22
Totals	89	121	79	173

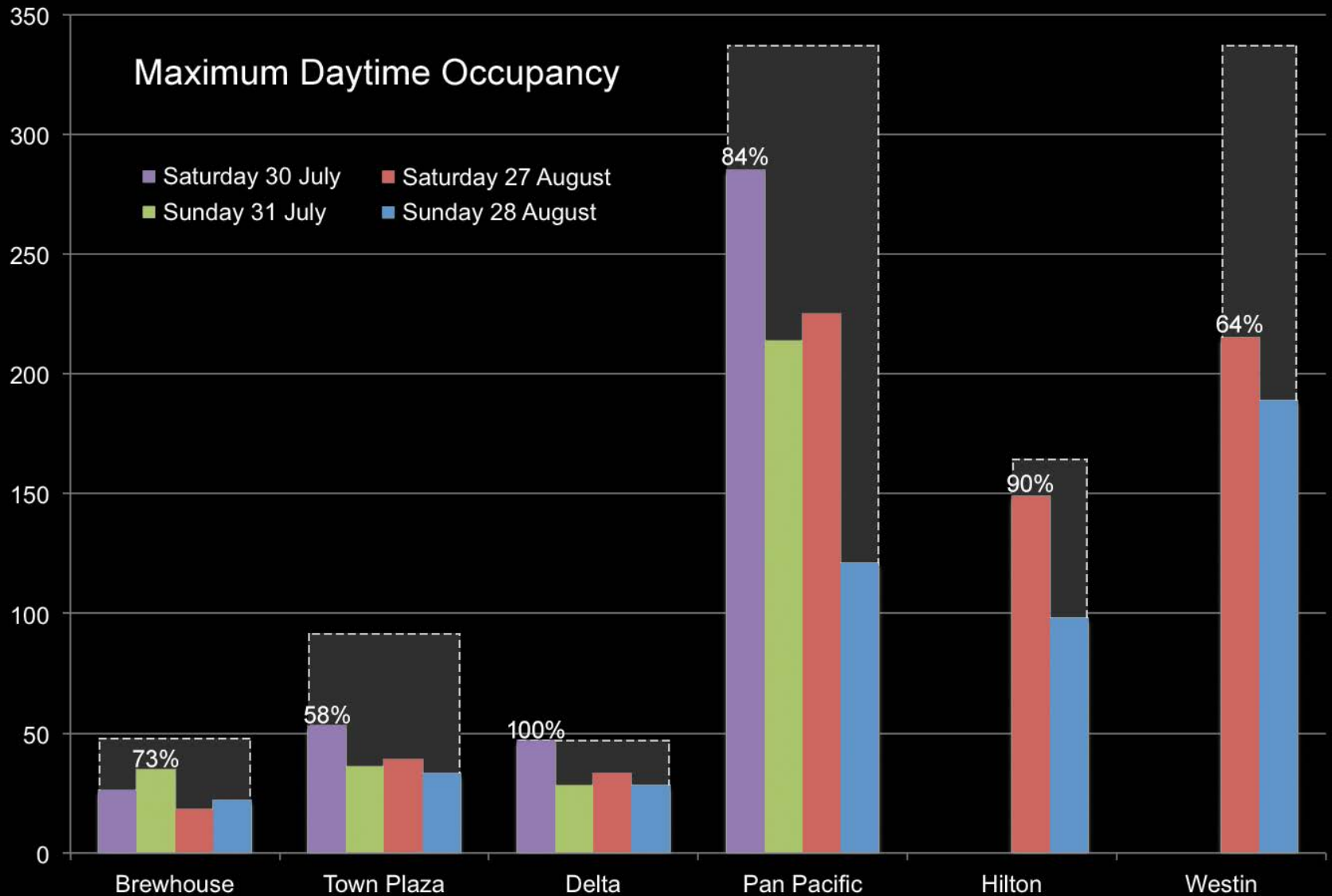
Winter: Village Parking



Summer: Village Parking

		Main Street	Conference Centre (Surface)
Capacity		81 veh	70 veh
Duration	Average	1 hr 17 min	1 hr 19 min
	Maximum	8.0+ hr	8.0+ hr
Occupancy	0–2 hr	49%	39%
	2.5–4 hr	20%	16%
	4.5+ hr	11%	10%
	Empty	21%	35%

Summer: Private Lots



Conclusion

Availability is not adequate:

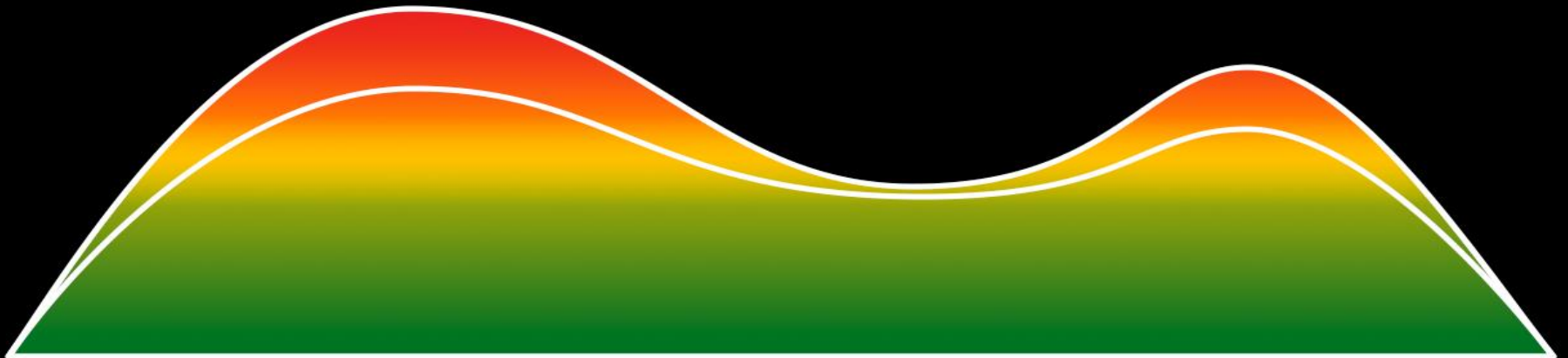
- In most Village municipal lots
- On peak and near-peak days
- In winter and summer

But, we don't need to build more parking.

Availability: Shift Parking

Shift:

- Longer-term parking from Village to day lots
- All-day parking from day lots to Creekside, Base 2
- More parking to private lots



Availability: Shift Parking

Techniques to shift parking:

- Reduce time
- Increase parking prices
- Price all day lots
- Raise monthly parking pass price
- Free transit
- Better identify private lots
- Employee parking
- Parking app

Availability: Manage Demand

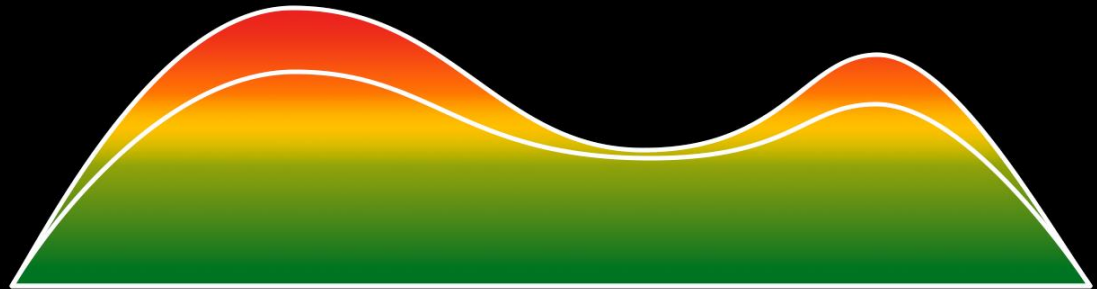
Enforcement:

- Patrols
- Technology
- Fines



Demand management:

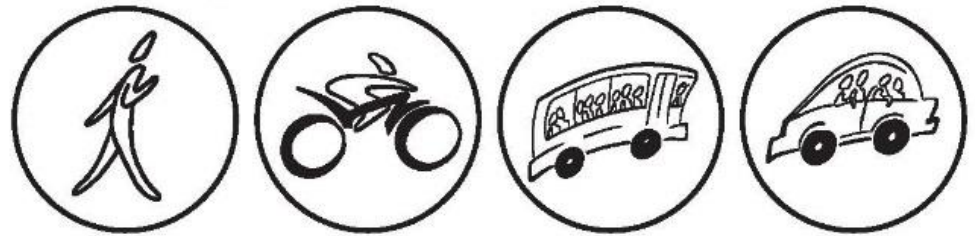
- Transit
- Carpools
- Walking, cycling



2016 Summer Pilot Project

Know and Then Go

On busy weekends consider:



Summer Saturdays (July 30 to September 3)
on the **Whistler Transit System**

- **FREE** on all routes until **8 p.m.**
- **Extra buses:** between **7 a.m. and 8 p.m.** from Cheakamus to Emerald **15 minute service** schedule at bctransit.com/whistler

Whistler
Transit



WHISTLER BLACKCOMB

BC Transit

WHISTLER

supported by:

Walk. Cycle. Bus. Pool

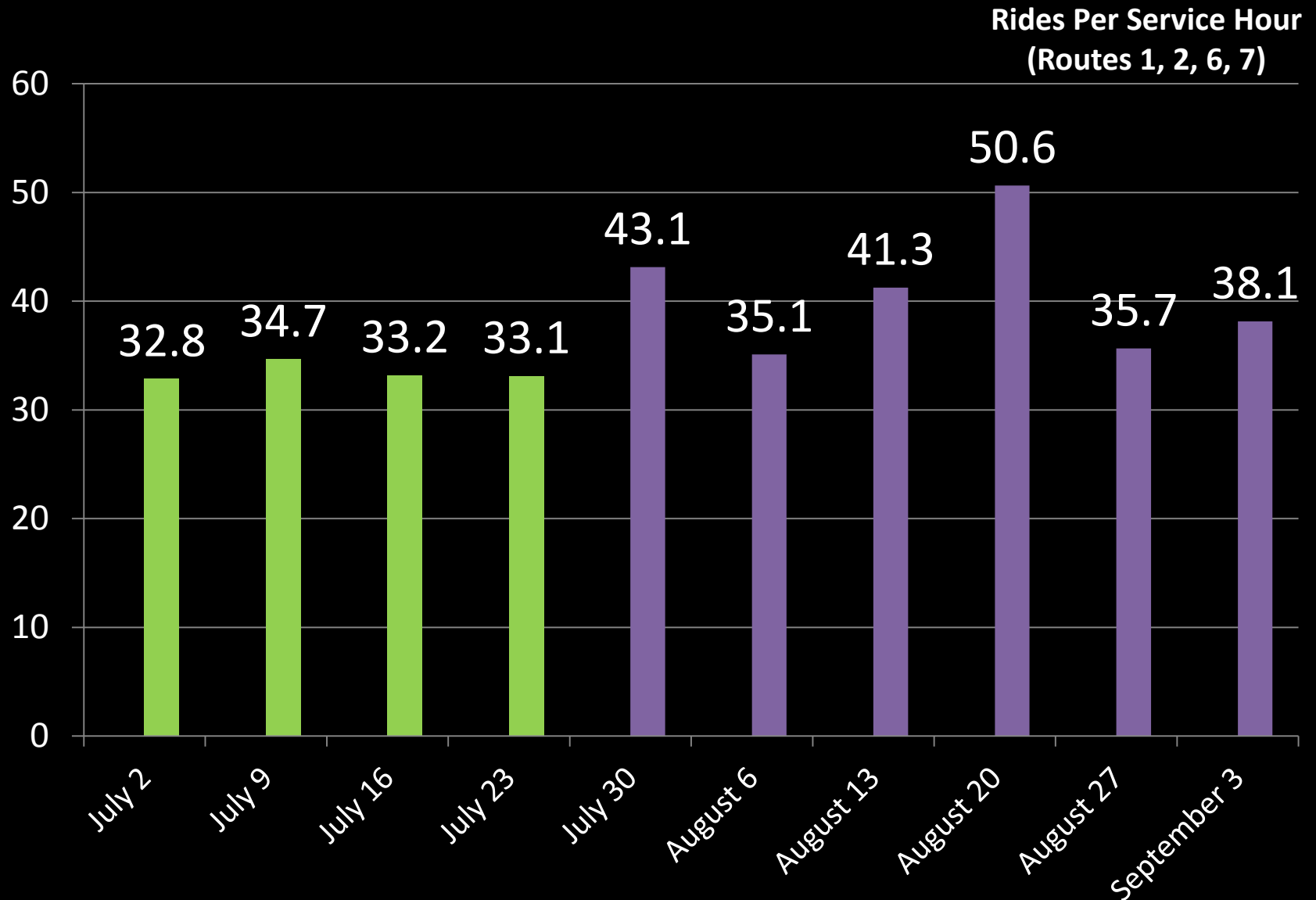
Before and After Ridership

- 1,600 – Average NEW rides per Saturday
- 52% increase

Number of Passengers by route & total

Route	1	2	6	7	Total
Before the Pilot Project	2,385	480	92	112	3,069
During the Pilot Project	3,654	671	156	196	4,677
% Increase	53%	40%	70%	75%	52%

Before and After Ridership



Post Project Findings

- over 200 survey responses
- Most who did take transit on the free Saturdays:
 - ✓ for social/recreational/shopping then work trips
 - ✓ 80% Long-term Residents that own a vehicle
 - ✓ didn't want the hassle of finding parking
- Popular requests
 - ✓ Saturdays and Sundays
 - ✓ Longer hours (beyond 8pm)
 - ✓ Better communication

Transit Update

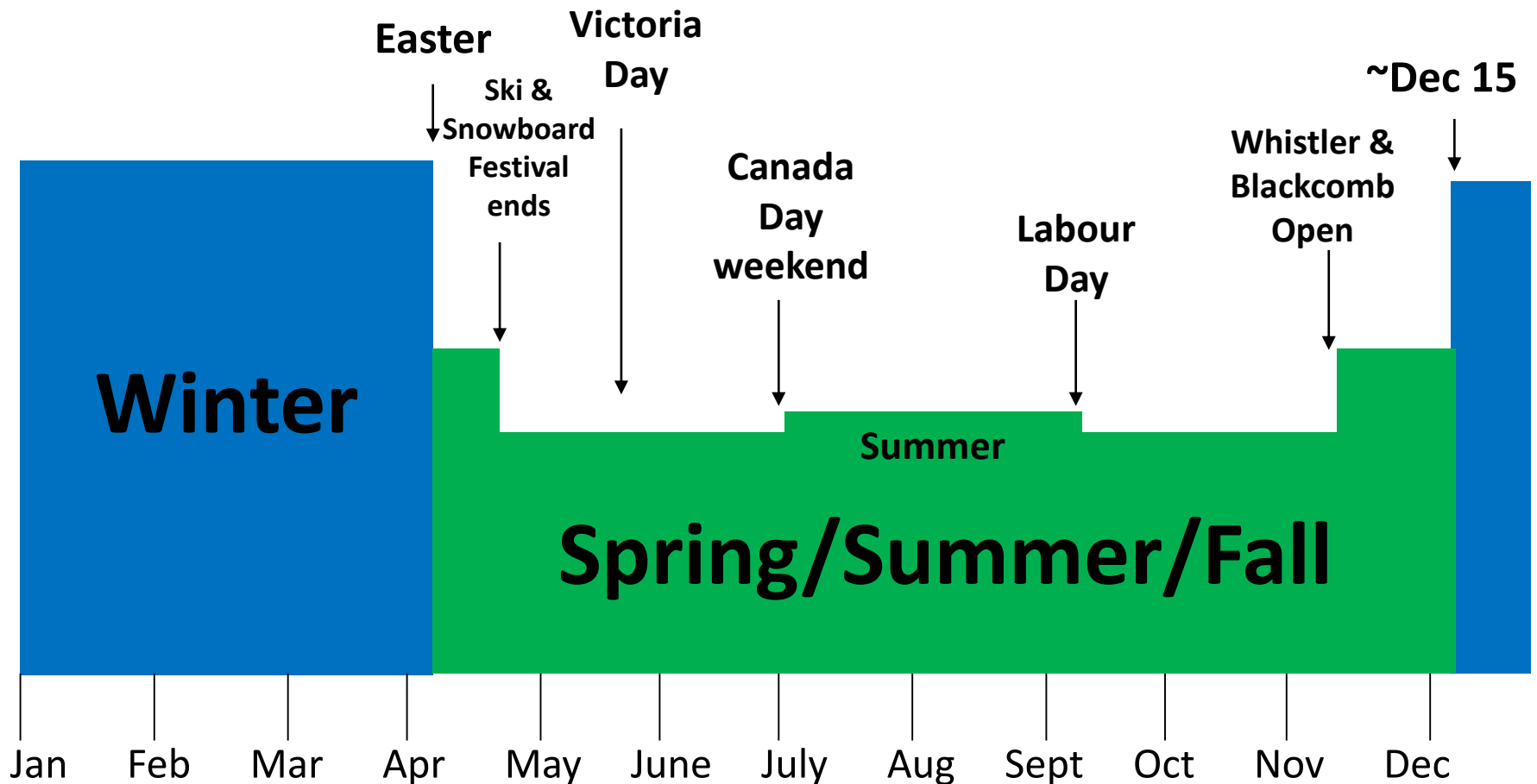
Presented by:

**Matthew Boyd, BC Transit
Senior Planner – Regional Work Lead**

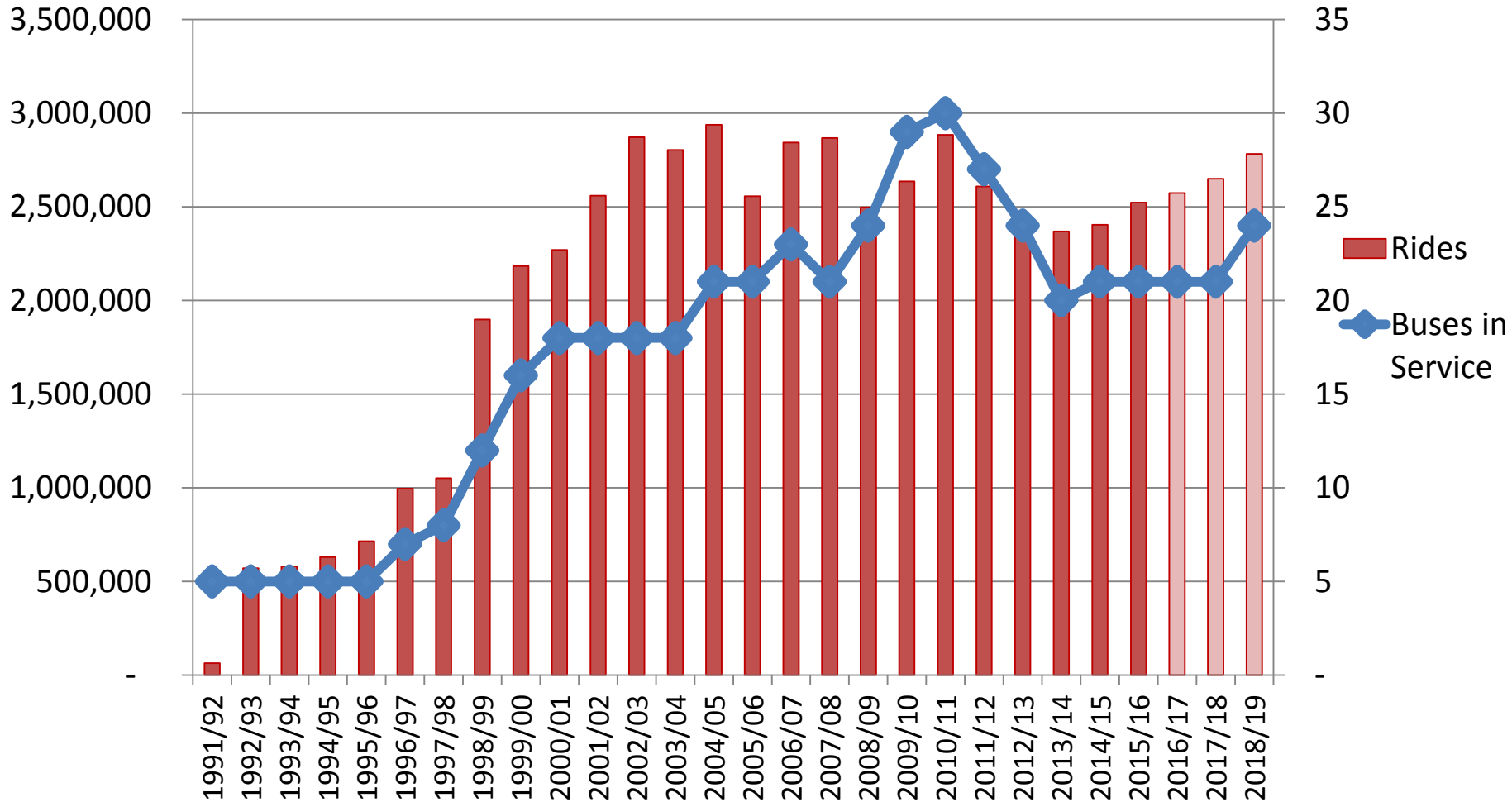


Whistler Transit System Service

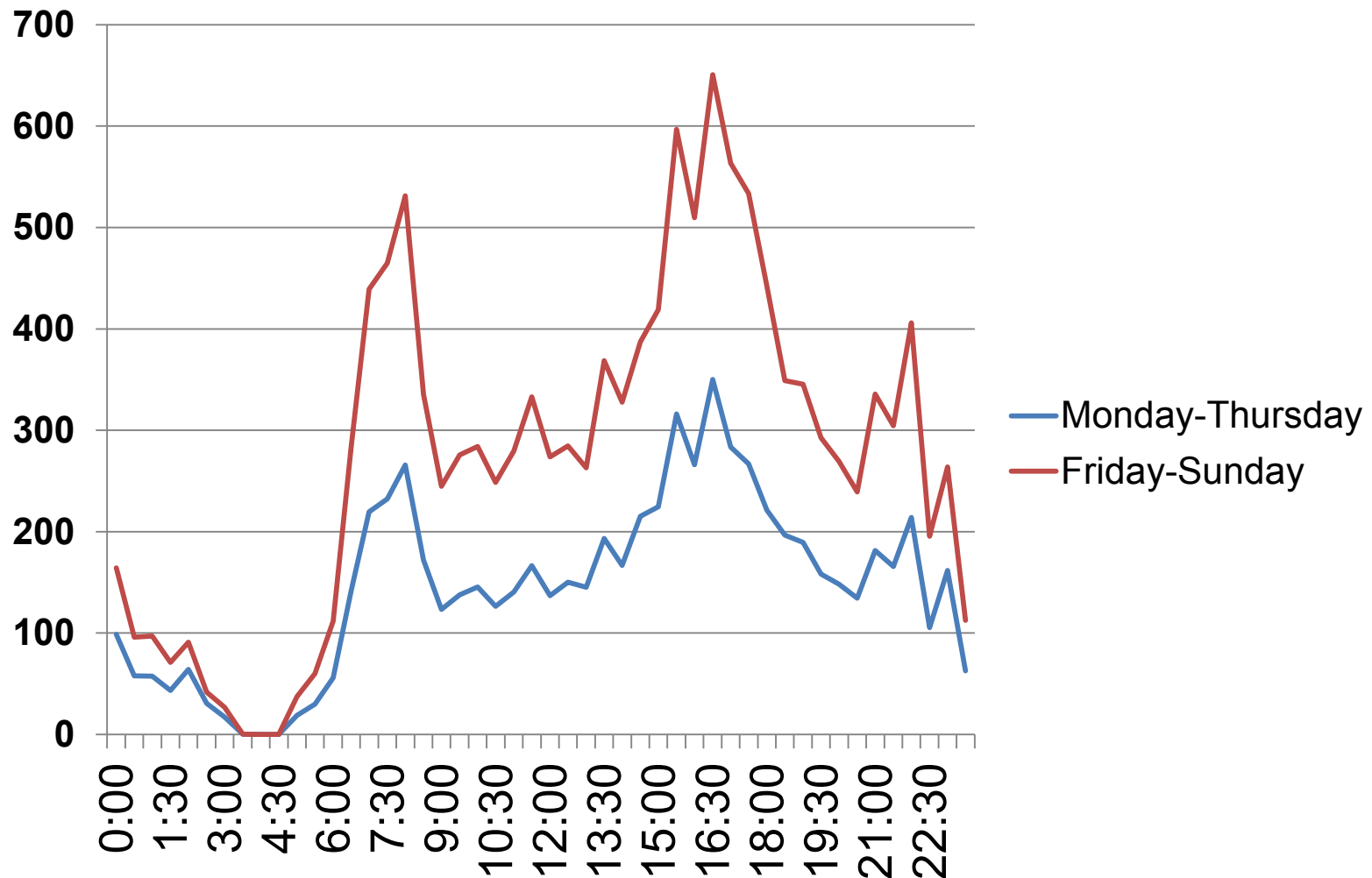
with additional buses for
Late Winter, Summer, and Early Winter



Whistler Transit System Rides



Whistler Transit Daily Rider Profile



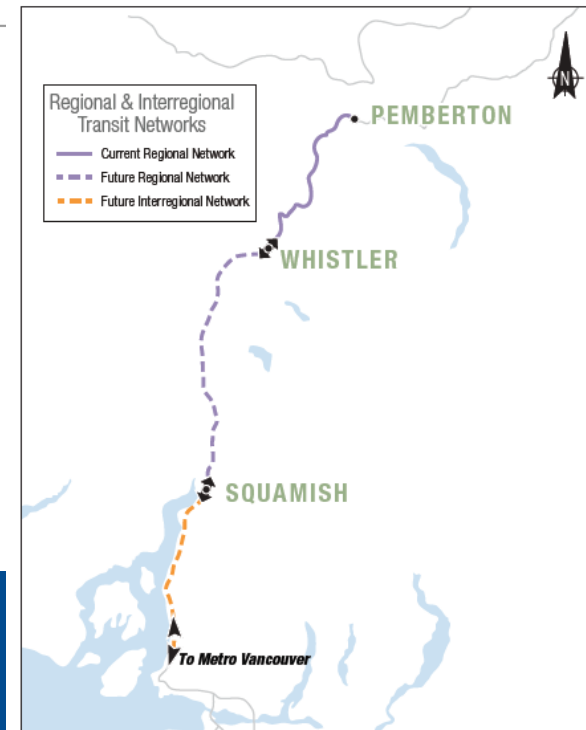
Whistler Future Local Transit Network Map



SEA TO SKY | 2015

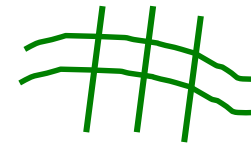


Sea to Sky Future Regional and Interregional Transit Network Map



What is a Transit Future Plan?

- Guides and prioritizes future investment in the transit system
- Sets ridership targets
- Identifies key transit corridors and the supporting local transit network
- Identifies the fleet, service hours and infrastructure needed to support the transit network



Regional Transit and Regional Coaches

Transit Future Plan

- ✓ Public Transit
- ✓ Whistler Transit System
- ✓ Sea to Sky Regional Transit



TRANSPORTATION STUDY



Connections to Vancouver YVR & downtown

- ✓ Private Transit
- ✓ From a guest perspective

Whistler Future Local Transit Network Map

Whistler Transit

Legend

Current Core Network

Future Core Network

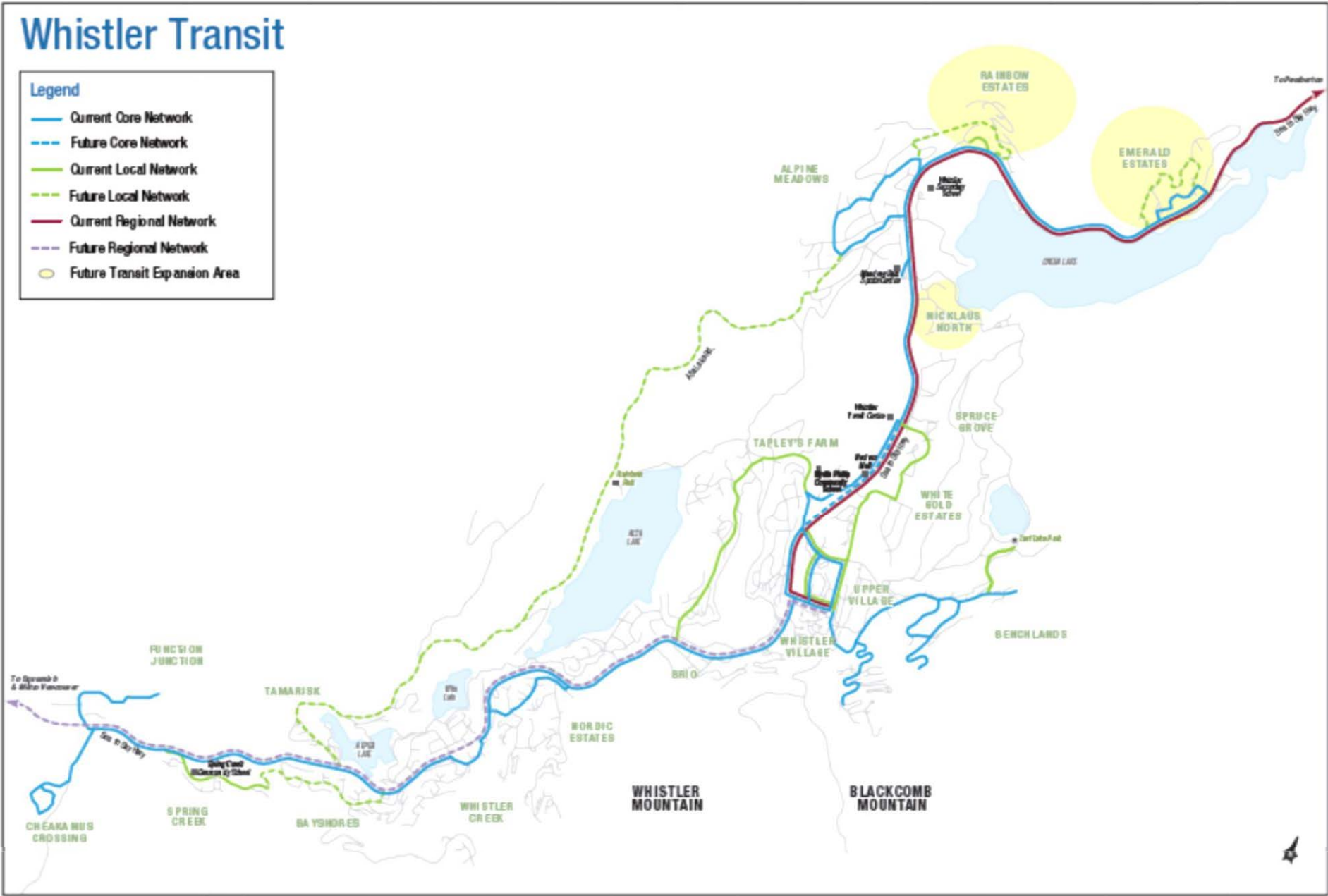
Current Local Network

Future Local Network

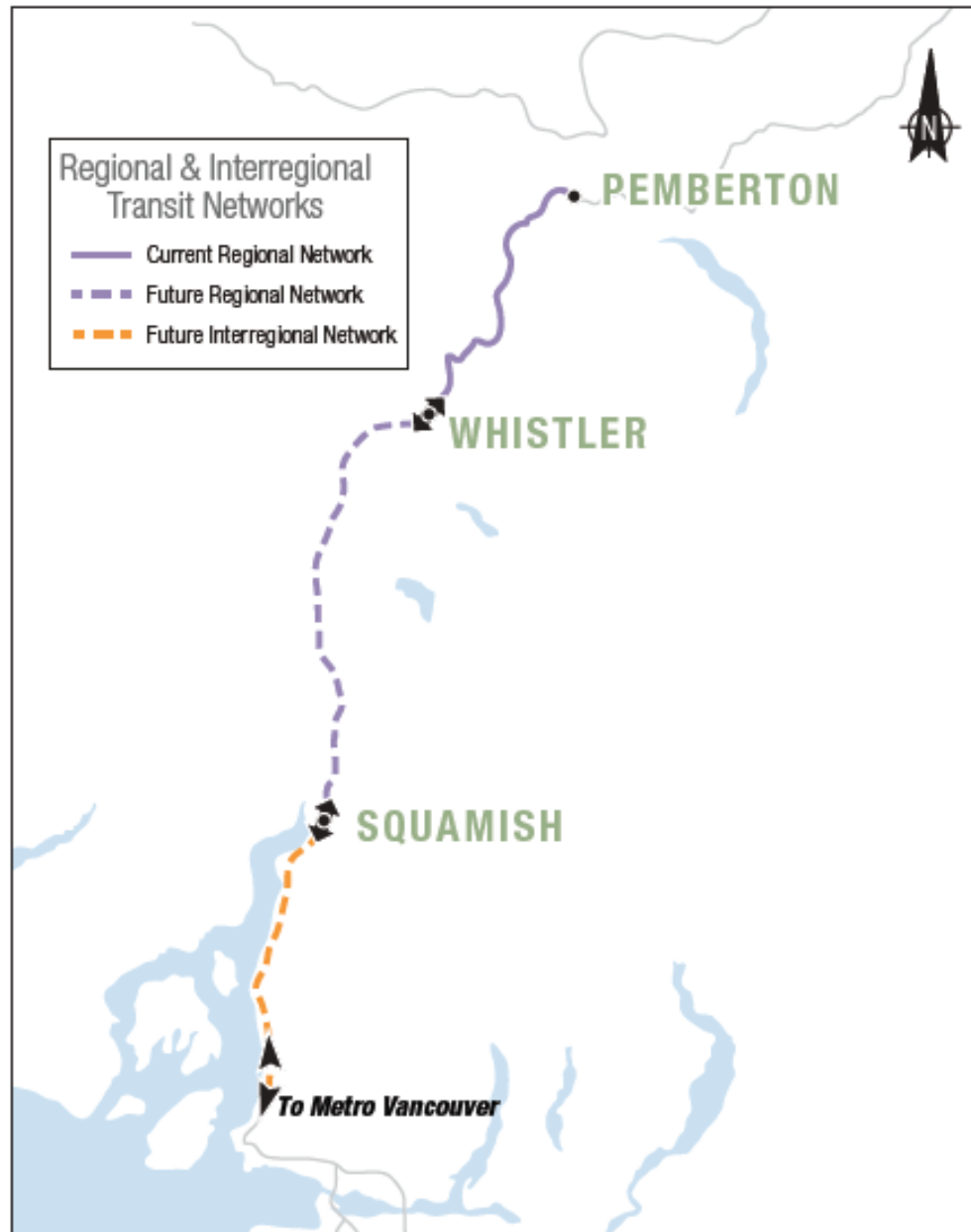
Current Regional Network

Future Regional Network

Future Transit Expansion Area



Sea to Sky Future Regional and Interregional Transit Network Map



Sea to Sky Three-Year Work Plan

2016/17:

- Initiate the Sea to Sky Transit Corridor Study and Governance Analysis
- Initiate and complete the review of the Route 1 Valley Connector and free Shuttles; and incorporate any TAG work
- Develop business case for future expansions in Whistler

2017/18:

- Review the fare structure for all of the Sea to Sky transit systems, in collaboration with any new or expanded regional and interregional service

2018/19:

- Conduct feasibility assessment around the introduction of Custom Transit in Whistler



Final Thoughts

1. Transit Service is an Ambassador for Whistler improving the visitor experience.
2. There's no such things as "Free".
3. Public transit is one of the key tools to improving an area's mobility.





James Hallisey, RMOW

General Manager, Infrastructure Services

Highway 99 Incident Investigation Study



The Resort Municipality of Whistler

Sea to Sky Highway - Road Closures Assessment
Request for Proposals

Issued:	October 14, 2016
Closing Time & Date:	November 15, 2016 at 4:00pm
Contact Person:	Norm McPhail
Submit to:	nmcphail@whistler.ca



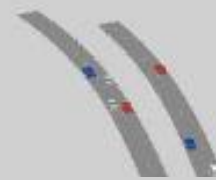
Highway 99 Traffic Modelling

PARSONS

Resort Municipality of Whistler Sea to Sky Highway 99 Existing and Future Base Model

September 22, 2016

Squamish – Cleveland Avenue



Whistler – Function

Whistler Creekside - London Lane



Summary

- Wrap up from Mike Furey, RMOW CAO

Discussion Tables – Your Turn!

What you'll be doing

1. Support for the 2017 actions
2. How to improve them
3. What might be missing

How you'll be doing it

- Choose your top 2 topics
- 25 minutes per table discussion
- Table hosts will guide you
- Note takers will capture your input
- Ground rules...

Ground Rules

- **Contribute your ideas!**
- **Identify solutions**, rather than dwelling on the problems
 - If you need to rant, visit the 'scrawl wall' at the back
- **Listen** to understand; challenge ideas, not each other
- **Be brief** and stay on topic – give others a chance
 - We only have 25 minutes per round

Discussion Table Topics

1. Transit Improvements
2. Highway 99 Efficiencies
3. Peak Day Operations Plan
4. Better Parking Management
5. Preferred Transportation Options
6. Other / Medium & Long-term Actions

Choose your top 2
Which 2 tables will you go to?

Table Discussion – Round 1

What you're doing...

1. What is your level of support for each action?
2. If low support,
 1. What's not supported about the action?
 2. How could it be made more acceptable/effective?
3. What might be missing from the 2017 actions to make the strategy/topic more effective?

Please go to your next table!

5 minutes to find your next table

1. Transit improvements
2. Highway 99
3. Peak Days
4. Better Parking Management
5. Alternative Transportation Modes
6. Other / Medium & Long-term Actions

Table Discussion – Round 2

What you're doing...

1. What is your level of support for each action?
2. If low support,
 1. What's not supported about the action?
 2. How could it be made more acceptable/effective?
3. What might be missing from the 2017 actions to make the strategy/topic more effective?



Closing Comments