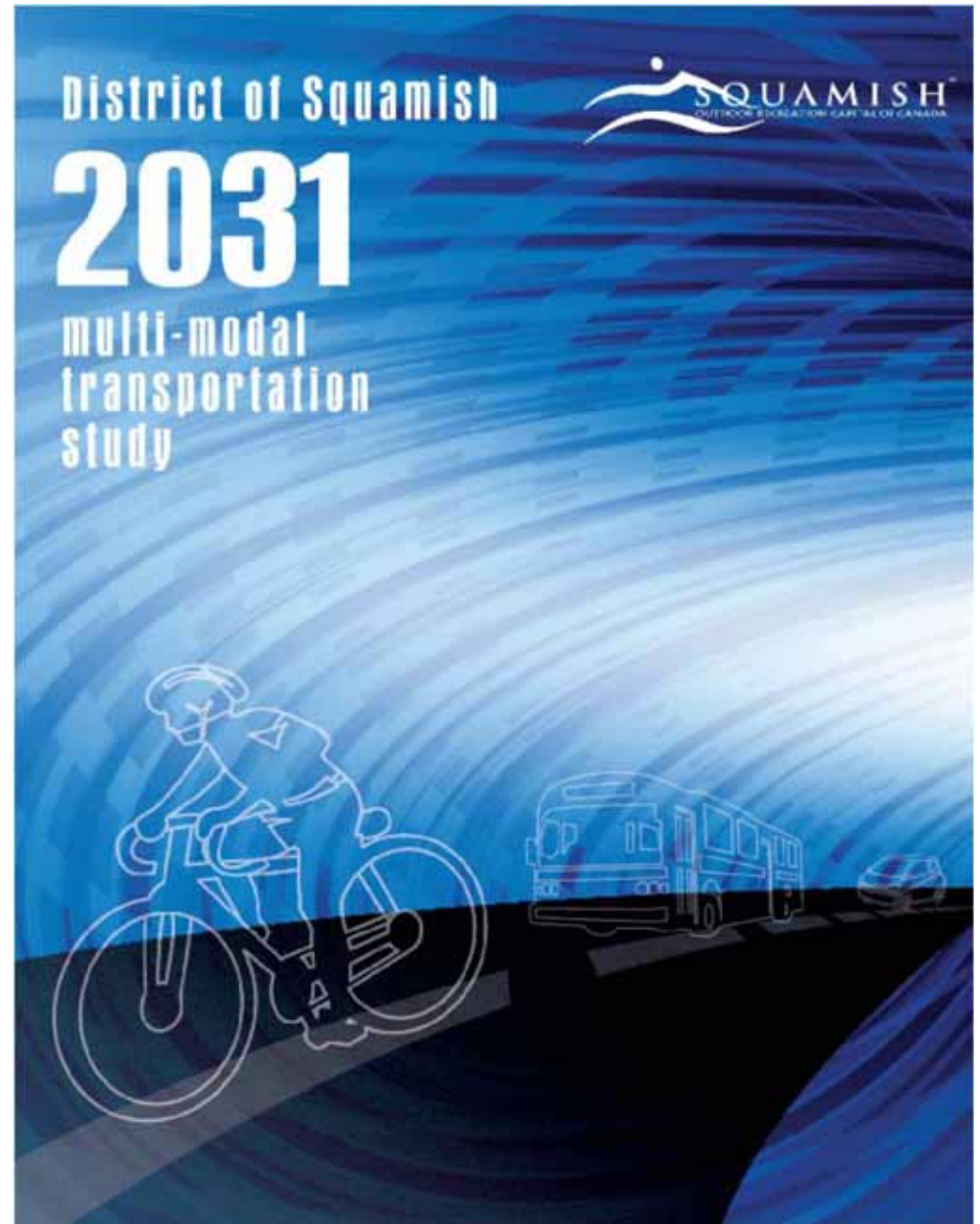


District of Squamish 2031 M-MTP

Phase 1 Findings

Public Information Meeting

January 27, 2011



Presentation Overview

1. Study Vision and Guiding Principles
2. Study Deliverables
3. Study Method
4. Summary of Existing Conditions
5. “Business as Usual” Scenario
6. Key Findings and Next Steps
7. Questions & Comments



Vision Statement & Guiding Principles



OCP AMENDMENT PROCESS

Squamish proudly enjoys a fully integrated transportation network that shows respect for its citizens by offering an array of safe travel options and by encouraging practical, healthful and sustainable travel choices.

The 9 GUIDING PRINCIPLES are on the display boards.

Study Deliverables

The 2031 Multi-Modal Transportation Plan
will deliver:

Three study areas covered:

1. Highway 99 Interfaces
2. Local networks
3. Regional Transportation

- ✓ 2031 Major Road Network
- ✓ 2031 Transit System
- ✓ 2031 Cycling and Pedestrian Network
- ✓ 2031 Truck Routes
- ✓ Policy Framework that drives change
- ✓ Recommended Strategies

Proceed with formal OCP Amendment

Study Method - 3 Phases

- Engage consulting team led by Opus International (July 2010)
- Identify stakeholders/ Establish a Study Focus Group (July 2010)

PHASE

I

- Conduct Surveys (August to October 2010)
- Develop Transportation Model (October to December 2010)
- Forecast 2031 demand (October to December 2010)
- Review existing conditions for all modes and identify issues
- **Present Findings to Council and Community (Public Info. Meeting #1) (January 2011)**

Study Method

PHASE II

- Develop Network Options for all Modes and Model Options (January to February 2011)
- Develop Draft Transportation Plan (February to March 2011)
- Present Draft Plan to Council and Community (Late March 2011)
- Finalize Plan (April 2011)

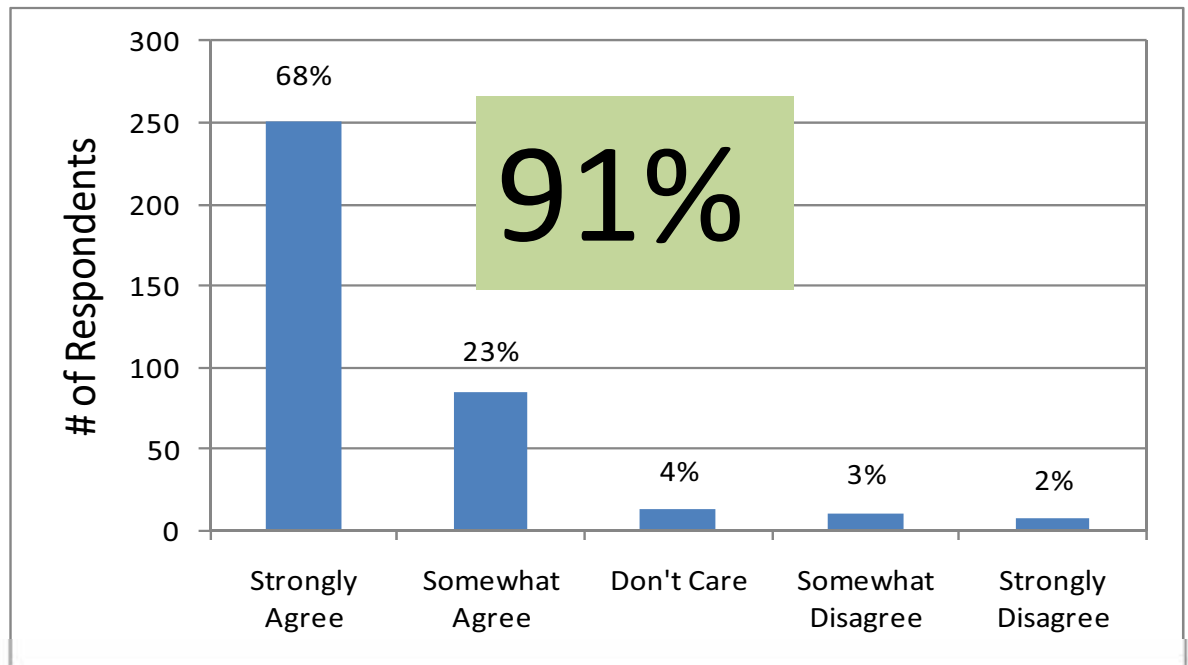
PHASE III

- Commence Formal OCP Amendment Process (April 2011)
- Adoption of OCP Amendment (June 2011)

Online Public Opinion Survey

367 Responses Collected from Sept. 10 to Sept. 30, 2010

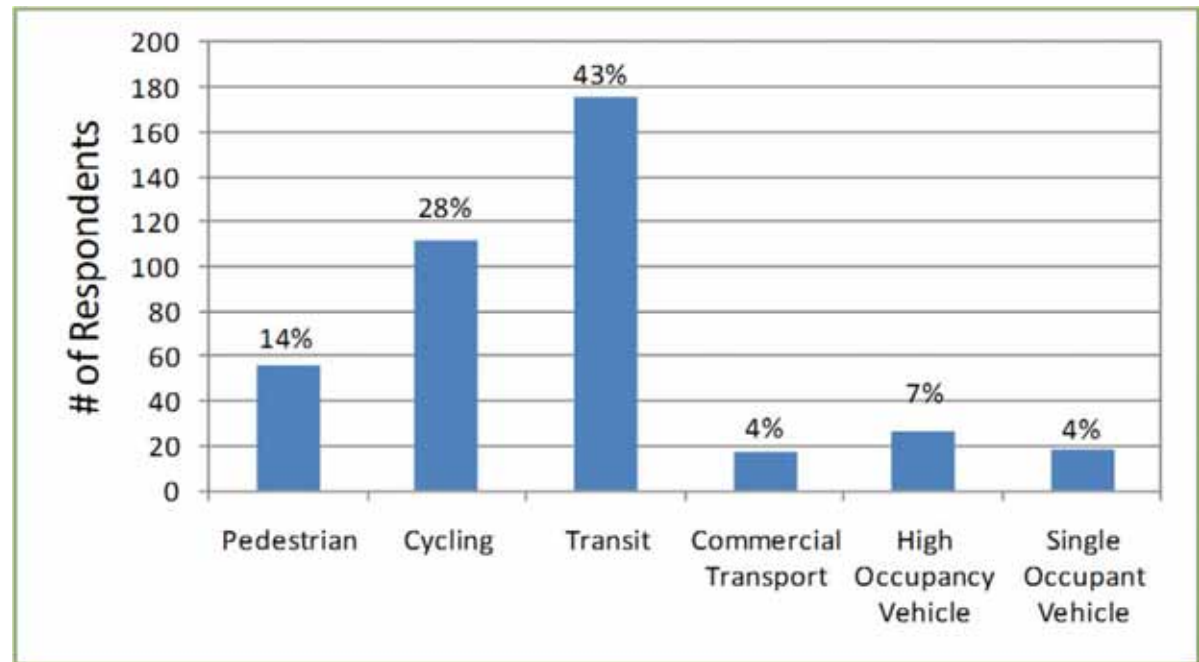
Squamish should take a leadership role among local governments in promoting alternatives to Single Occupancy Vehicle use in our transportation system:



Online Public Opinion Survey

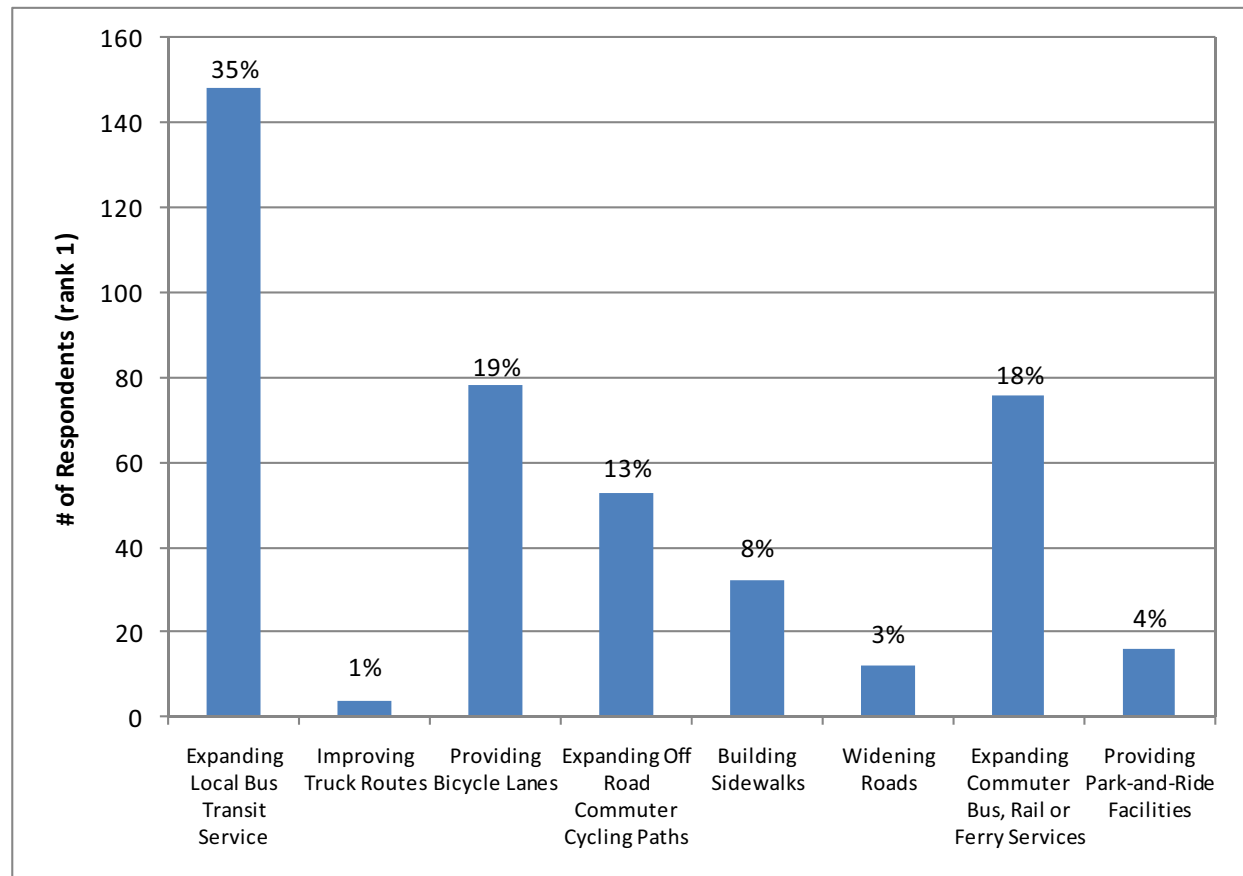
Strong interest shown in options to the Single Occupant Vehicle, led by transit.

Preference should be given to supporting the following types of transportation in Squamish:



Online Public Opinion Survey

The highest transportation priority in Squamish is:



Online Public Opinion Survey

Top Three Transportation Priorities

1. Expanding Local Transit
2. Providing Bicycle Lanes
3. Expanding Commuter Transit

- “More frequent transit service” indicated as having the greatest impact on mode shift.
- “Poor transit options” was a major factor when choosing travel mode.

Origin-Destination Phone Survey

- A total of **520** households representing 1,500 persons.
- Surveyed travel characteristics between 3 – 6 PM, Monday to Thursday.
- 1,777 trips taken during study period
- Average household owns 2.15 automobiles and **3.15** bicycles.

SURVEYED TRIP MODE:

- » Auto Driver – 61%
- » Auto Passenger - 20%
- » Walking – 11 %
- » School Bus – 3%
- » Bicycle – 3%
- » Commercial Vehicle – 1%
- » Transit – 1%
- » Other <1%



Origin-Destination Survey

- 55% of trips “personal” trips (shopping, appointments, entertainment, social, exercise-related, some of which could be discretionary)
 - **Almost 40% of personal trips were to and from destinations in the same general neighbourhood**
- 24% were trips directly to and from work
 - **Most people did not live and work in the same neighbourhood.**
 - **Work trips mostly started from Downtown Squamish and Metro Vancouver**
- 20% were pick-up/drop-off trips

Existing Conditions

- 1) Existing Traffic
- 2) Transit
- 3) Cycling
- 4) Walking

Existing Traffic



- 88% of trips to work by auto.
- August is the peak month along Highway 99, February is winter peak.
- Sundays and Fridays are the peak days.
- Weekend traffic patterns dictated by recreational traffic.

Existing Traffic

Weekday in September

- Overall level of service good.
- Industrial Way/ 99 intersection near capacity on through movements.
- Mamquam Road/ 99 westbound left turn near capacity.

Friday in August

- Delays at Industrial Way/ 99.
- Mamquam Road/ 99 left at capacity.
- Delays acceptable at all other intersections.

Existing Issues



- Highway 99 acts as both a provincial route and a local road.
- Seasonal peaking and heavy recreational traffic on Highway 99 on weekends and holidays.
- Few alternatives to the highway within the community.

Existing Traffic

Preliminary Recommendations

- Establish formal park-and-ride facilities.
- Address delays at key intersections.
- Provide ride-matching service for residents.
- Introduce traffic calming measures in key residential areas.

Existing Transit

The District partners with BC Transit to provide services to our community.



- Existing Transit Service includes:
 - 3 conventional routes
 - Squamish to Whistler commuter service
 - handyDART service
 - 7,000 service hours provided per year
- Annual ridership of 180,000 (600/ day)
- Ridership consists mainly of students (43%) and adults (45%)

Transit Opportunities

- Existing transit routes provide good coverage
- Captive student ridership
- Concentrated populations



Transit Issues



- Infrequent service throughout day; two buses serving three routes.
- No Sunday and holiday service; limited evening service.
- Indirect routing.
- Limited commuter service to Whistler; no service to Metro Vancouver.

Transit

Preliminary Recommendations

- Consider extending evening service.
- Consider Sunday and holiday service.
- Pursue commuter (bus or ferry) service to Metro Vancouver and increase bus service to Whistler.
- Consider secondary transit “hub” at Garibaldi Village.
- Investigate U-Pass system for post-secondary students.

Cycling



- Bicycle facilities in Squamish consist of:
 - Bike lanes
 - Shared-used bicycle lanes
 - Paved shoulders
 - Off-road paths
- On average, each household owns 3.15 bicycles.

Cycling Opportunities

- High existing bicycle ownership.
- Existing core of dedicated riders.
- Compact and flat downtown area.



Cycling Issues



- Lack of consistent road markings and/or signage designating bicycle routes.
- Steep hills throughout Squamish.
- Highway 99 acts as a barrier.
- No designated bicycle routes in the downtown.
- Unregulated parking.

Cycling

Preliminary Recommendations

- Adopt standard design guidelines and improve route signage and markings.
- Establish bicycle routes in the downtown.
- Provide more end-trip amenities.
- Incorporate bicycle requirements into development bylaws.
- Allocate budget for cycling improvements in the Capital Works Plan.

Walking



- Walking is most common alternative to auto travel; accounting for approximately 10% of trips during the afternoon peak.
- Only 33% sidewalk coverage on “Major Routes” in Squamish.

Walking Opportunities

- High land use density in the downtown.
- Pedestrian-friendly practices implemented in the downtown.



Walking Issues



- Lack of sidewalks
- Discontinuous sidewalks
- Lack of connectivity amongst sidewalk networks
- Lack of “clear zone” or “buffer zone” (e.g. landscaped boulevard) on sidewalks
- Physical barriers to walking – hilly terrain, distance between neighbourhoods, the highway.
- Lack of information on existing demand.

Walking

Preliminary Recommendations

- Establish pedestrian count requirements.
- Identify “Pedestrian Priority Zones”.
- Develop prioritization for sidewalk construction.
- Establish “Safe Routes to Schools”.
- Establish a car co-op program.

“Business as Usual” Scenario

The 2031 Base condition was examined for:

- 1) A weekday in September
- 2) A Friday in August



Implications of “Business as Usual”

2031
Base Weekday
in September

- Significant delays at Industrial Way/ 99.
- Left-turn movements off the highway exceed capacity at Cleveland Avenue and Mamquam Road intersections.
- All other intersections operate at acceptable levels of service.
- Volume to capacity ratios good on all links.



Implications of “Business as Usual”

2031
Base Friday
in August

- Widespread intersection delays along the highway between Garibaldi Way and Clarke Drive.
- Westbound left-turn movement at Buckley Avenue & Cleveland Avenue shows significant delays.
- All other intersections operate at acceptable levels of service.



Summary Key Findings

- Broad support for developing alternative transportation modes.
- #1 priority = improving local transit service.
- 80%+ trips by auto/ truck
- Transit = 1% of current trips.
- Cycling = 3% of trips.
- Walking = 11% of trips.
- 55% of trips (PM Peak) are “personal” trips.

These findings indicate that there is a real desire and opportunity to shift travel behaviour towards more sustainable choices if we make the right moves now.

Summary Key Findings

- Highway intersections are okay today with exception of Mamquam Road westbound left turn.
- If “Business as Usual”, by 2031 intersections at Clarke, Cleveland, Industrial, Mamquam and Garibaldi Way will fail many days of the year.
- If “Business as Usual”, by the time the community builds out (50,000+ people) the highway will no longer function.

**Business as Usual
will not work**

Next Steps

- Mode Shift targets (eg. SOV 80% -> 50% / Transit 1% -> 20%)
- Network Options (all modes)
- Develop Option Evaluation Process
- Model Options
- Evaluate Options
- Prepare Draft Transportation Plan
- Present Draft Plan to Council and Community



Questions?

To comment further or for more information you can reach us at transplan@squamish.ca. Study materials may be found on the District of Squamish website at www.squamish.ca.

Background reports can be found on District of Squamish extranet site at www.squamish.cc/extranet/ 2031 Trans Plan Study.

