

The Transportation Hub

Policy, Planning & Design Guidelines

A sub project of the Squamish Community Energy Plan

March 31, 2009



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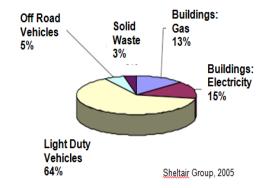
Executive Summary

Transportation is the greatest challenge in addressing energy and emissions in Squamish.

- 69% of Squamish's community carbon footprint results from transportation.
- One third of Squamish's workforce commutes either to Vancouver or Whistler.
- Squamish features predominantly auto-oriented urban design.

Squamish must develop more sustainable transportation options, both within the District and connecting to other communities.

In light of these priorities, the Downtown Squamish Concept Plan recommends the establishment of a transportation hub as part of broader efforts to encourage sustainable transportation.



Objectives

The transportation hub will support broader sustainable transport objectives in Squamish, including:

- Buffering communities from energy depletion and shocks
- Creating attractive, pedestrian oriented streets
- Reducing road injuries
- Diminishing social inclusion and breakdown in social exchange
- Addressing climate change
- Protecting citizens from increases to the cost of living, especially in the context of rising energy prices

Deliverables

This report:

- Identifies the current transportation patterns in Squamish
- Identifies five potential downtown hub locations and six satellite hub locations
- Identifies transportation options that should be provided
- Advises on design criteria for layout
- Identifies complementary land uses
- Provides policy recommendations to support the design
- Establishes measurable targets for walking, cycling, transit and auto use
- Recommends options for possible funding (government, developers, etc.)

Brief summary of analysis including, but may not be limited to:

- Benefits and limitations likely abbreviated
- Abbreviated challenges and opportunities
- II. Abbreviated action plan

1. Introduction

Vision

A multi modal transportation hub is in essence a gathering place for people to access local and regional destinations as well as providing a place for people to access local amenities and work opportunities.

The hub's location should reestablish Squamish's historical transportation connections, water and rail, refocus bus transit both local and regional, and integrate with walking and cycling activities so that people have a multi-layered choice on how they travel to undertake their day-to-day activities.

Equally important, it should be a catalyst for making Squamish a vibrant and exciting place to live and visit. Here is one vision.

"The year is 2041. Susie takes the regional bus from her job in Vancouver back to 'The Hub' in downtown Squamish. Located next to a grocery store, Susie runs in to get some supplies for dinner while she waits for Jack to finish his shift at Oceanfront Pocket -Yacht Industries and pick her up at The Hub kiss'n'ride in their electric car. Their high-school aged son Jimmy is also waiting for a ride at The Hub coffee shop following his after-school band rehearsal. Jack is late because the car was low on watts and he was charging it at The Hub AMP station. They drive back to the Republic of Brackendale, and honk their otherwise quiet electric car, waiving as they pass a couple of their municipal Councilors who are enjoying a casual cruise in the bike lane." (Source: Sabina Foofat District of Squamish)



This report supports the development of the multi modal transportations hub in downtown Squamish and the opportunities to develop a network of satellite hubs.

Background

A design workshop was held on April 9, 2008 in Squamish and was attended by a wide range of interested parties, including the District staff, Councilors, general public, activity groups and people from a wide range of professional backgrounds.

The workshop identified preferences on location, complementary uses and supporting measures to introduce of a central downtown hub. It also highlighted the constraints and enablers in its development and these are included in this report.

Squamish is essentially an auto dependent community with around 90% of all journeys undertaken by private automobile. Also, around one-third of trips out of Squamish go to Whistler and another third go to the lower mainland. These statistics provide incentives and opportunities to encourage more sustainable movement patterns.

The flexibility and convenience of the automobile is widely accepted; however, it has a number of consequential impacts on our lifestyle that are often overlooked or taken as an acceptable compromise:

- Road injuries
- Diminishes social inclusion
- Breakdown in social exchange
- Climate change
- Energy depletion
- Auto-orientated built form
- Cost of living (especially with increasing energy costs)

In dealing with auto dependency (amongst other goals), the District of Squamish endorsed 'Smart Growth in the Ground' in June 2003 within the Official Community Plan.

Central to this design approach is the integration of land use and transportation planning. In particular, it focuses on moving people around in a more sustainable manner through creating more compact mixed use land patterns that are supportive of pedestrian-orientated design and which are built around cycling and transit networks.

These principles were used to guide the Downtown Squamish Concept plan for the redevelopment of the peninsula, especially given the redevelopment plans in the pipeline (Westmana, Waterfront Landing, BC Rail Lands, Oceanfront, etc.). One of the key recommendations in the concept was to establish a central transportation hub in the downtown.

This report progresses this recommendation to the next level along with indentifying the potential for a network of satellite hubs throughout Squamish. It will have five clear steps:

- Understanding the base situation
- Articulate the need for change
- Draw ideas and opportunities from best practices in North America and Europe
- Developing broad principles for planning and design
- Identify potential locations for a central hub
- Establish a framework to reach the next level

Reference will be made to available sources of information and in particular with regard to:

- Existing travel behaviour patterns in Squamish and how these might change
- Existing and future transportation services and infrastructure
- Local policy and regulatory frameworks
- Best practice in North America and Europe
- Land opportunities for potential locations for a hub

To provide a framework for the next stage of the design process, this report will provide guidance on the following:

- Indentify site options for a central downtown hub and indicate possible satellite hub locations.
- Set out the range of transportation options that should be provided
- Advise on the design criteria for layout
- Identify complementary land uses
- Make policy recommendations to support the design
- Establish measurable targets for walking, cycling, transit and auto use.
- Recommend options for possible funding (government, developers, etc.)

The aim is to produce a set of design guidelines to progress the multi modal transportation hub to the implementation stage, and to establish a range of transportation and land use measures to make meaningful changes on how people in Squamish move around in a more socially engaging, sustainable and healthy manner.

2. Base Situation

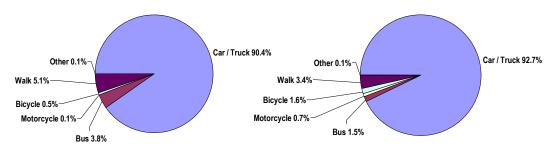
It is important to understand the base conditions in Squamish to highlight the challenges and opportunities in developing a central multi-modal transportation hub and connecting network. This section will therefore focus on:

- Travel Patterns
- Transit Connections
- Planning Policy
- Bylaw / design requirements

Travel Patterns

As part of the Squamish downtown transportation study (conducted by CTS), surveys were undertaken in August 2007 and January 2008 to determine the travel behaviour of residents in the downtown.

Results are presented below and they confirm that Squamish is essentially an auto dependent community accounting for around 90% to 93% of all trips. Walking is next at only 3.5% to 5.0%, while transit is third at 1.5% to 3.5%.



August 2007

January 2008

Squamish's auto use levels are indeed closer to the USA average than other parts of British Columbia. For example, in the lower mainland the auto use accounts for around 75% of all trips, while in downtown locations / more compact communities, the figure is significantly lower as demonstrated below.

- Downtown Maple Ridge: auto use 60%
- City of New Westminster: auto use 55%
- SFU / UniverCity Community: auto use 47%

This dependency is evident in the built form through spatially separated land uses, multilane streets, low densities, single use buildings (set back from street), large parking lots, etc. Indeed, these land use patterns reinforce auto dependency to the detriment of walking, cycling and transit.

Auto dependency's effect also has two wider issues, climate change and energy depletion.

One of the primary causes of climate change is greenhouse gas emissions and about 40% of these come from transportation. In smaller communities, like Squamish, the proportion is even higher at 60% to 65% given the dependency on the automobile.

Energy depletion (which is being observed through higher costs), is becoming a pressing issue. In a transportation context, 97% of all transportation modes use oil and 70% of all oil is used in transportation. As costs increase, there will be a need to reduce energy use and much this change will need to come from people moving around more by walking, cycling and using transit.

Transit Connections

Downtown Squamish is connected by road, rail, water and air. The following provides a brief overview of existing and potential future services

Bus

Squamish, including the downtown area, is connected by both local and regional services. Local services are operated by BC Transit, while Greyhound and Perimeter operate regional services.

For the local system, there is currently a fleet of 3 conventional buses and 2 custom transit vehicles, providing transit service to roughly 16,000 residents. In 2006, the system carried nearly 147,000 conventional transit passengers and 6,000 custom transit passengers. In addition, the seasonal commuter service between Squamish and Whistler carried about 25,000 passengers (annually).

A summary of the timetable of local services is presented below

Service	Route Description	Weekday Peak	Weekend
1	Downtown to Brakendale	Hourly	Hourly
2	Downtown to Garibaldi Highlands	Hourly	Hourly
3	Downtown to Valleycliffe	Hourly	Hourly
98	Squamish to Whistler	1 – 2 hours	1 – 2 hours

Frequency levels for the Squamish services are low and typical for communities of this size. However, the future success of the new hubs will be dependent on these service levels increasing.

Marine

Squamish's proximity to the water is one of the main reasons that lead to the town's development, and it therefore seems appropriate that its future development should take into consideration this natural advantage.

Mamquam Blind Channel presents the opportunity to provide Marine Transit in the form of a 'False Creek' type ferry service to serve the planned waterfront communities, including the downtown core and Oceanfront development areas.

The development of such a service is at the drawing board stage with the practicalities of funding and implementation still to be determined before any commitment is made.

As well, consideration is being given for a ferry service connecting with downtown Vancouver. One option is to have a passenger only ferry that would connect at around Vancouver Street in the downtown and another option would be to have a passenger / vehicle ferry connect with the Oceanfront lands.

Both these options are at the conceptual stage and no feasibility study has been prepared to date to further progress either of them.

Rail

CN operates the Vancouver to Prince Rupert rail corridor, which connects with Squamish and Whistler, and generally runs parallel with the Sea to Sky Highway. The rail corridor is essentially for the movement of goods with the only exception being to accommodate the Royal Hudson service, which operates occasionally during the summer months (but not this year) and the Whistler Mountaineer.

Studies on the potential for operating a passenger service have been undertaken on this corridor, but so far they have not shown such a service to be financially viable. However, these studies are somewhat dated and do not take into consideration current population trends, transportation priorities with climate change and growing energy costs, where the price of oil is expected to reach \$200 in 2010 (Source: CIBC World Markets).

Indeed, with the planned increase in population in Squamish (up to 25,000 people) and the further development of Whistler, the assessment parameters could turn positive for a passenger service. Rail therefore needs to a key ingredient in deciding the transportation hub's location.

Policy Background

The District of Squamish endorsed 'Smart Growth in the Ground' in June 2003 within the Official Community Plan. One of the main pillars for the new policy is to:

"Support a balance transportation system through land use and transportation planning that minimizes distances to destinations and fosters increased use of walking, cycling and transit."

Continuing on, the policy advises:

- "Build complete, compact communities that avoid sprawl
- Create walkable communities
- Promote development patterns that encourage the use of sustainable transportation.
- Foster distinctive, attractive, vibrant communities with a strong sense of place."

Also:

"The quality of pedestrian areas directly affects the overall image of a place, the quality of experience and the propensity for people to walk rather than drive. Recognizing this, efforts will be directed to such measures as:

- Reducing travel lane widths
- Reducing street crossing distances
- Separate sidewalks
- Provision of pedestrian scale lighting

New development should employ transit supportive land use planning and transit orientated design in cooperation with BC Transit to encourage

- Proposed residential densities that are adequate to meet public transit objectives
- A high proportion of housing that is within easy walking distance (400 metres or less) of a proposed bus; and,
- Commercial development that incorporate pedestrian and transit friendly site planning."

All in all, the key drivers for the policy objectives are to create a pedestrian, cycle and transit friendly environment, to reduce dependence on the private automobile, and more generally, create an environment that is social engaging, inclusive and healthy.

Bylaw / Design Guidance

Design / bylaw requirements are often inflexible and inherently support the auto dependent culture. Street design and parking are two particular areas where these challenges are most acute.

Conventional wisdom dictates that street design should be focused on meeting the maximum demand for the worst case scenario, manifesting in the over design and the necessary distortion of the urban environment. Some examples are set out below:

- construction of overly wide roads / highways (that are not pedestrian friendly) to meet projected (and sometimes inflated) traffic demands;
- Streets designed to accommodate the largest 'design' vehicle rather than typical vehicle sizes;
- the need to provide large parking lots which push buildings back from the street edge and reduce densities; and,
- discouraging mixed use buildings due to meeting sometimes excessive parking requirements.



In Squamish, the street design standards used and the parking bylaw have not been updated (some of which date back to the mid 1990's) since Smart Growth on the Ground was adopted and hence are out of sync with the paradigm in design. In the subsequent sections, the opportunities to refocus the bylaw requirements and design priorities are considered.

Summary

Squamish is an auto dependent community which is reinforced by the urban and transportation landscape and many people travel by car to Squamish and the lower Mainland for work

Transit options and services are typically limited for a small community, but there are significant opportunities to improve bus services and develop of rail and water borne transit, which can all be supported with the growing population in Squamish.

Smart Growth provides a good platform for the development of the transportation hub(s); however, bylaws / design guidance for parking and street design need to be updated.

3. Planning and Design

The purpose of this section is present planning and design options for the development a multi-modal transportation hub. This exercise is based specifically on the central downtown location, but it can be applied to other locations in Squamish.

The following pillars have been developed to guide the planning and design process:

- i. Vision
- ii. Objectives
- iii. Challenges
- iv. Guiding Design Principles
- v. Location Criteria for Transportation Hub Locations
- vi. Key Design Features
- vii. Complementary Land Use Options
- viii. Transportation Options
- ix. Transportation Planning Design

I. Vision

Key to any project is develop a vision on how the multi-modal transportation hub will look at the start, how it can be developed overtime and what it will ultimately look like once complete.



The following provides one view on how this may develop.

- At the start, use a section of street in the downtown to focus regional and local bus services, preferably located close to existing amenities and transit corridors.
- Acquire land adjacent to this focal point and in the short term use existing buildings or provide temporary structures for shelter and supporting amenities (tickets, kiosk, bike repair, etc.). Part of the site should be used for bus waiting areas and the remaining part could be used for parking, including the location of car sharing and rental vehicles.
- Overtime as new transit connections are developed, for example a ferry service
 or new bus services, ensure that they are coordinated with existing services at the
 hub and that integral improvements to the hub are developed, for example,
 adding real time information on transit services.
- The final stage should be the development of an iconic building (based on height, mass and materials) on the site to accommodate bus transit demands

and encompass a broad range of uses, including restaurants, grocery store, office and some form of community amenity (library, municipal services).

II. Objectives

Future travel demands in Squamish need to be accommodated in the most efficient manner given the population growth projections, circa 15,000 to 28,000 people, including potentially 12,000 in the downtown.

The following sets out the objectives for the planning and design process:

- Minimize new road construction / widening to reduce the cost burden on residents and local businesses.
- Reduce parking demand and hence supply requirements to encourage more sustainable and compact developments
- Encourage a more socially orientated & healthy environment
- Minimize environmental pollution, including GHG's
- Reduce fossil fuel consumption (in an environment of increasing costs)



These objectives should be revisited during and after the design process to ensure that they have been achieved.

III. Challenges

With any innovative project, significant challenges need to be overcome in order to achieve the desired goals. Generally these challenges can relate to cost, safety, land constraints / ownership, regulatory / design, etc. The following highlights those likely to arise with the central hub

- Can the station be developed in phases to reduce initial outlays, while be flexible to meet future demands;
- Produce an iconic and stimulating design rather than a purely functional one (to reduce costs);
- Maximize transportation and land use planning inertia through the highest densities possible;
- Ensure public safety within the realms of a shared use environment, where pedestrians, cyclists, transit, taxis and cars can freely mix;
- Address any noise or pollution issues;
- Minimize or remove the need for on-site visitor parking (use on-street or adjacent offstreet parking locations).



More generally, there will be need to consult a wide range of groups from transportation operators, emergency services, health and safety, Squamish's internal departments and the general public.

Each group is likely to have there own agenda and, as such, are unlikely to consider this project holistically, but merely from their own narrow (although important) perspective.

These groups need to be engaged early in the design process to buy into the principles and objectives; otherwise, the design could be watered down and consequently much of the 'grand' vision and enthusiasm could be lost.

IV. Guiding Principles

A set of guiding principles have been developed that are high level and should be inspirational to the design process. These are:

- Supportive of Smart Growth design.
- Bring together local and strategic transportation connections
- Scaleable so that it is reactive to changing demands and opportunities
- Iconic building that is a focal point / centre of activity in downtown Squamish
- A catalyst for changing travel behaviour and providing genuine choice
- Provides a seamless connection between transportation modes that is competitive with the private automobile
- Increases awareness of transit and other sustainable travel modes

V. Location Criteria and Functions

Location

Two forms of hub have identified:

- Central Hub (indicated with a star): a fully multi-modal site with an off-street waiting area for buses and a designated building
- Satellite Hubs (indicated with dots): a lower key on-street facility with complementary adjacent land uses and partly multi-modal

At this stage of the process, the central hub description is used for one location in downtown, although other locations could be considered, depending land use and transportation changes in Squamish.

In general, hubs should preferably close to:

- Regional transportation connections (Rail, Ferry, Regional bus services)
- Higher density residential & employment locations
- Commercial and retail uses
- High activity centres (hospital, university)



In the following section, location options for the central hub are considered in more detail

VI. Key Design Features

Transportation hubs should be iconic places where people want to be and feel safe. So often, conventional wisdom has engineered that such places be purely functional in design and layout, and with no consideration on how it integrates within the existing urban fabric.

Therefore as guidance, the following key features for the design have been proposed to develop the central hub.

- Public Plaza
- Waiting Area: weather protected / semienclosed concourse
- Local art features
- Retail / local services at street level and employment on upper levels
- Pre-purchase ticket facilities
- Minimize bus layover requirements at hub (local services terminate at satellite hubs)
- Decide on the level of enclosure for the waiting areas bearing in mind ventilation issues
- Information board / Way-finding signage / GPS
- Need to accommodate 3 to 6 buses
- Kiss & ride
- Taxi stand



VII. Complementary Uses

A new central hub represents the opportunity to create a focal point of higher intensity uses in the downtown through Smart Growth planning. It also creates the opportunity for synergies between related uses so that a person's day-to-day needs can be met as part of a trip with other activities. Set out below is range of options which should be considered in the design:

- Tourist Information
- Message board (highlighting all transportation options)
- Cafe / Restaurant
- Kiosk / Shops
- Bike Shop (repairs, rental)
- Employment / Office (to increase density)
- Focus higher intensity uses nearby
- Tourist Attractions
- Grocery Store



VIII. Transportation Planning and Design

A central hub should provide a range of transportation options for people to move about:

Walking

- Maximize population within 800metres (8-minute walk)
- Design for people first, i.e. accept lower Level of Services for vehicle movements and avoid designing for the largest vehicle
- Street design narrow travel lanes, shared streets, etc.
- Urban design street fronting, high activities, minimal surface parking, etc.

Cycling

- Connect with existing routes
- Provided ample and secure bike storage facilities
- Introduce a public bike scheme
- Bike rental shop with repair facility



Transit

- Bus: Connecting local (BC Transit) and regional services (Greyhound, Perimeter)
- Rail: convenient proximity to access future services
- Ferry: connect with possible future passenger / vehicle ferry services

Automobile

- Taxi waiting zone,
- Car rental vehicles available
- Kiss'n'ride pick up / drop-off
- Ride-sharing portal
- Car-sharing vehicles



IX. Supportive Transportation Measures

The future success of the transportation hub will be dependent on a number of supportive measures, including:

Land-use planning

- Allow higher FSR's within 800 metres of hub
- Develop flexible parking rates for developments within 800 metres

Transit Improvements

- Discuss with BC Transit the practicalities of introducing a 15-minute frequency 12-hours a day (Monday to Saturday) connecting all nodes.
- Continue to encourage improvements to transit connections with the lower mainland and Whistler, including bus, rail and ferry (lower mainland only).



Transit pass subsidies

- Work with BC Transit on incentives programs to subsidize transit. For examples, TransLink's has a 15% discount employee scheme for all companies with over 25 staff.
- Encourage car-sharing in new developments as members with the Cooperative Auto Network receive a 15% discount on transit passes
- Require residential developers to provide a financial contribution to cover the subsidy of a transit pass for the first two years of occupancy (example: Short Street, Saanich).

Travel Coordinator

- Select a champion for the cause to promote awareness of the benefits of walking, cycling and transit activities in the community.
- The person should be active in the local community and have a broad understanding of the challenges and opportunities.
- Their role will be to meet employers, developers, schools, community groups to further the opportunities for more sustainable ways of moving around in the community
- Their responsibilities should include having articles in the local paper, speaking to councilors, liaising with transit operators, and working closely with District's departments to advance infrastructure in support of walking, cycling and transit.

4. Case Study: Central Hub Location

Introduction

An often quoted phrase in the realtor profession is location, location, location. In context of the central hub, it confirms that location is singularly the most important design decision for the transportation hub, and it can indeed be the difference between success and failure.

A robust and measurable assessment therefore needs to be made in deciding on the optimal location for the hub. To aid the process, the following criteria have been identified:

- I. Are there land ownership issues
- II. Is the site size and access good / bad or indifferent
- III. Is there the potential to create a pedestrian-/cycle-friendly environment
- IV. Are there land use or street changes that may effect the location
- V. Is it convenient for regional transportation connections (Rail, Ferry, Regional bus services)
- VI. Does it integrate well with local connections (bus, cycle routes, water transit, et al)
- VII. How convenient is it for higher density residential & employment locations
- VIII. Is it close to community focused commercial and retail uses
- IX. Are high activity centres (hospital, university, tourist attractions) close-by
- X. Are there issues with proximity to sensitive locations, e.g. existing residential

Each of these criteria will assist in the decision making process, but in order to be objective and robust a weighing system needs to be developed. This should be developed as part of the design process.

Potential Locations

Five potential locations have been identified (as indicated A, B, C, D & E) in the downtown for a potential hub location and each one needs to be tested against the established criteria.

Location A - Pemberton / Loggers

- On vacant land (acres 1.0 acre)
- Generally square in shape.
- Access could potentially be from all four sides, but direct access from Cleveland
 Avenue could difficult given the proximity to the Pemberton and Bailey
 intersections, and more generally, that it is a busy street.

Location B - Buckley / Loggers

- On vacant land (acres 0.8 acres)
- Odd shape lot given the access road between Loggers Lane and Cleveland Avenue
- Access as Location A.

Location C - Cleveland / Buckley

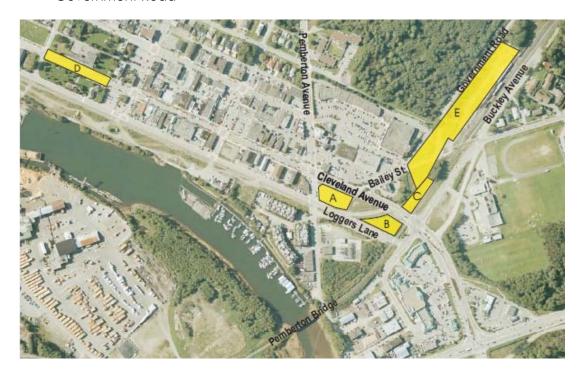
- On vacant land (acres 0.75 acres)
- Rectangular in shape
- Access limited from Buckley only

Location D - Cleveland / Victoria

- On-street but with available either side
- Square in shape
- Access from Cleveland or Victoria

Location E - Railway Land Adjacent to Government Road

- Land potentially available through BC Rail (12 acres)
- Rectangular in shape
- Access restricted from Cleveland and no direct access to north Squamish on Government Road



Analysis

The following table provides a sample of the analysis but this should be refined into a scoring system i.e. 1 to 5, with 5 being the highest score.

Criteria	Loc A	Loc B	Loc C	Loc D	Loc E
1. No Land ownership issues	Yes	Yes	Yes	No	Yes
2. Good site size and access	Yes	Yes	No	Yes	Yes
3. Pedestrian- / cycle-friendly	No	No	No	Yes	Yes
4. Location unaffected by land use or street	No	No	No	Yes	Yes
changes					
5. Close Regional transportation connections	Yes	Yes	Yes	No	Yes
6. Close local transit connections	Yes	Yes	Yes	Yes	Yes
7. Higher density residential & employment	No	No	No	Yes	No
location					
8. Community focused commercial and retail	Yes	Yes	Yes	Yes	No
uses					
9. Close proximity to high activity centres	No	No	No	Yes	No
10. No issues with sensitive uses e.g. existing residential	Yes	No	No	No	Yes

As well, sub categories can be developed, for example, local connections can be broken down into cycle, bus and marine transit.

Current walking, cycling and transit connections are shown in the context of the downtown at **Appendix A**.

5. Action Plan

An action plan is a high level step by step progress to move from the basic concept / ideas to a scheme that is scalable and deliverable, and meets the vision and goals set out.

One of the key initial steps is to establish of a multi-disciplinary steering group to guide the design process. It should include developers, architects, planners, transit operators, emergency services, engineers, general public, etc. This group will bring skills and experience to achieve a strong balance in the design and development process so that no one discipline dominates.

More specifically, the Steering Group's brief should include:

- Review the base conditions
- Indentify the optimal locations for the central and satellite hubs
- Produce guidelines for the hub design
- Develop supporting planning and transportation measures
- Seek sources of funding and development incentives

These work areas are expanded below

Review the Base Conditions

Rationale

 Gather all information relating to transportation and planning relevant to the design.

Tasks

- Identify bylaws, policy or design guidance as constraints or enablers for the design process
- Map out existing transportation connections and up-to-date development master plans (Westmana, Oceanfront, Waterfront Landing, et al)
- Overlay mapping of pedestrian, cycle and transit routes to inform and guide the design and location

Outcome

Provide the groundwork for identifying the hub location and developing their design

Identify Location for the Central and Satellite Hubs

Rationale

• Establish the optimal location for the downtown central hub and guidance on the satellites within the community.

Tasks

- Ascertain land ownership
- Understand access and circulation issues
- Identify constraints and opportunities with the site locations
- Review proximity to existing and new transit services
- Assess surrounding population densities and complementary land uses
- Investigate how best to integrate within the urban fabric

Outcome

 Identify the optimal location based on a measureable and transparent set of criteria

Guidelines Hub Design

Rationale

Develop a set of design guidelines that will inform the scale, orientation and mass
of the hub, and how these can be developed over time as money, land and
development opportunities become available.

Tasks

- Review best practice examples
- Develop circulation patterns that minimize the footprint of the bus waiting areas
- Show how the hub is scalable and can integrate with adjacent parcels and the transportation system
- Identify uses to support and complement the hub
- Assess the floor area required to accommodate the planned uses
- Develop pedestrian-orientated street design on the streets bounding the hub
- Review the potential number of bus movements to be accommodated, including any layover requirements

Outcome

 Create guidelines for an iconic building with a range of complementary uses, that has an intimate / human scale design where people feel comfortable and safe, and which is a magnet for activity

Develop Supporting Planning and Transportation Measures

Rationale

 Develop a framework that promotes walking, cycling and transit throughout Squamish based on good design, incentives, new services and supporting infrastructure.

Tasks

- Identify appropriate Transportation Demand Management measures
- Allow higher FSR's and reduced parking within 800 metres of a hub

- Advice on potential new transportation infrastructure to support the hub
- Liaise with operators to improve or introduce new services
- Promote the need for a travel coordinator

Outcome

• Set out a range of integral measures that will support the future success of the transportation hubs.

Review Funding Options

Rationale

• Investigate sources of funding for the transportation hubs and any other supporting transportation infrastructure.

Tasks

- Councilors to seek funding from Provisional and Federal Governments through for example the Showcase Fund
- Speak to developers on the opportunities of doing a joint venture to develop the hub with the benefits of density bonuses, reduced parking and flexible land use opportunities.
- Look at the potential for funding through DCC's bearing in mind the competing demands from other projects
- Investigate if a parking in-lieu payment system can be implemented for new developments to allow reduced parking in return for a cash payment (already operational in Maple Ridge, Vancouver, et al).
- See if there are opportunities to introduce charging for public parking (on-street and off-street) to provide a revenue stream

Outcome

 Develop a wide variety of funding options that can support the phased or complete development of the hub.