

## VECTORS UNITE!

*A vector is an array of influences or forces capable of causing change in course or direction.*

*Vectors imply movement, directionality, velocity, quantity, and magnitude.*

*It is with vectors that we can define Squamish: A confluence of human, natural, social, environmental, and spiritual vectors and forces.*

*While there is a great deal of movement, velocity, quantity, and magnitude at play within Squamish region, the vectors of change are not working in concert.*

*Opportunities are being lost.*

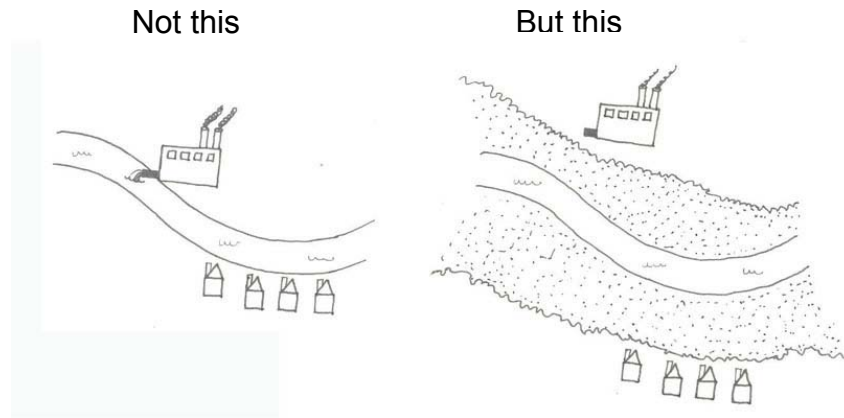
*However opportunities to move in the right direction still exist.*

*The following principles, policies, and design guidelines outline ways that we can harness and unify the disparate vectors, in Squamish, give them form, and shape the direction of change, such that we can move forward with confidence, purpose, and optimism.*

1. **Vectors** are connected and channelled through a fine-grained network of conduits, shaped by geography. Movement patterns will be shaped by the physical landscape and will influence and form the place.
2. Orient human **vectors** towards the public realm. People will move in ways that create vibrant public spaces.
3. Town and neighbourhood centres should be created at the intersections of main **vector** paths to harness and channel energy flows.
4. Ecological flows and human **vectors** are connected and layered into both the physical and social infrastructure.
5. Existing and historical transportation infrastructure should be built upon to move materials, resources, and people and improve connectivity between Squamish and the region.

Principle 1: Vectors are connected and channelled through a fine-grained network of conduits, shaped by geography.

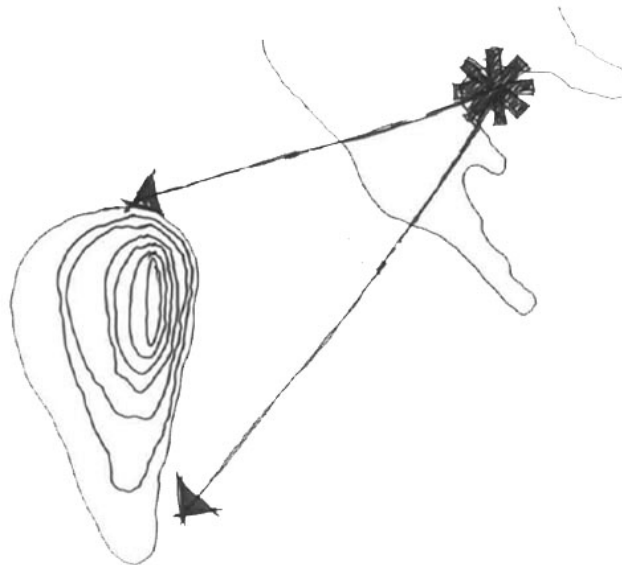
## Environment & Open Space



Create continuous riparian corridors.

Current development slices and interrupts the hydrological system. Development and open space will be integrated into the corridor system, and no development will occur in the buffer zone.

## Places



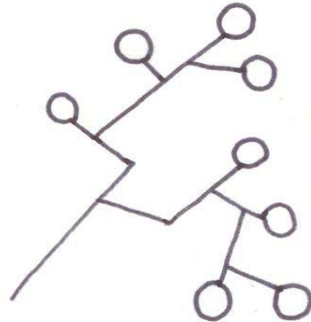
Preserve view cones or corridors to distinctive natural features.

Visual corridors from the waterfront to the Chief create a strong sense of place for Squamish. Height restrictions and other regulatory actions should be used to preserve visual access to one of Squamish's most impressive and identifiable landmarks.

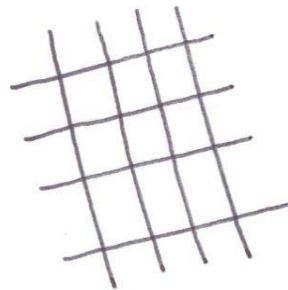
Principle 1: Vectors are connected and channelled through a fine-grained network of conduits, shaped by geography.

## Homes & Streets

Not this



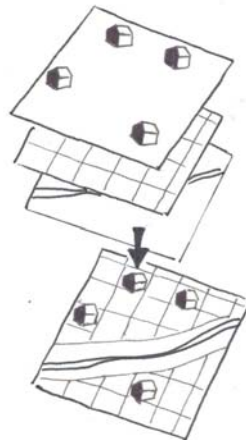
But this



Develop interconnected grid-style street patterns.

Traditional suburban cul-de-sacs and disconnected grids provide for poor access and limited route choice. The use of highly connected grid patterns increases walkability and may provide more opportunities for interaction.

## Homes & Streets

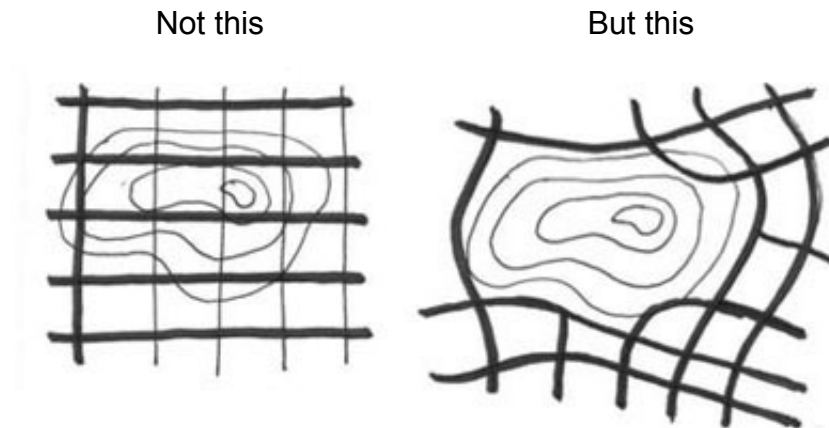


Ensure that housing and streets are complimentary to the natural ecological systems of the site.

Housing has been developed with little regard to natural systems or consideration of a local vernacular. Layering housing and streets in line with ecological features will protect housing stock from natural dangers such as flooding, and preserve the natural features as well. The use of locally sourced materials will reinforce Squamish vernacular.

Principle 1: Vectors are connected and channelled through a fine-grained network of conduits, shaped by geography.

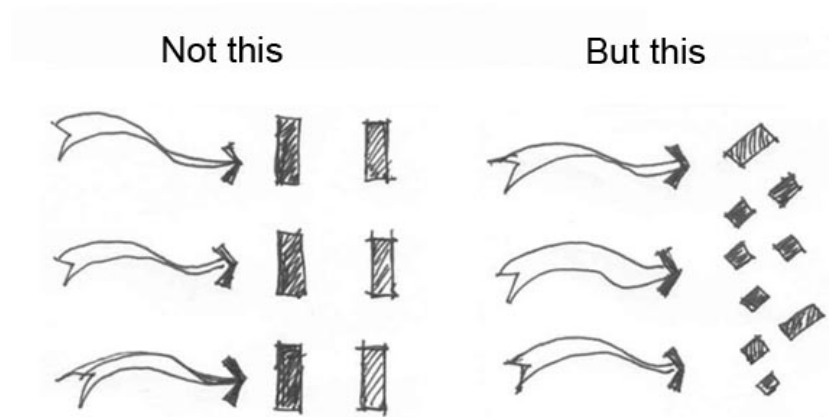
Homes &  
Streets



Utilize grid systems that conform to the topography of the site.

Squamish's rugged terrain makes straight grid patterns impractical in places. Connectivity should be maintained through a modified grid that follows the contours of the land when necessary.

Homes &  
Streets

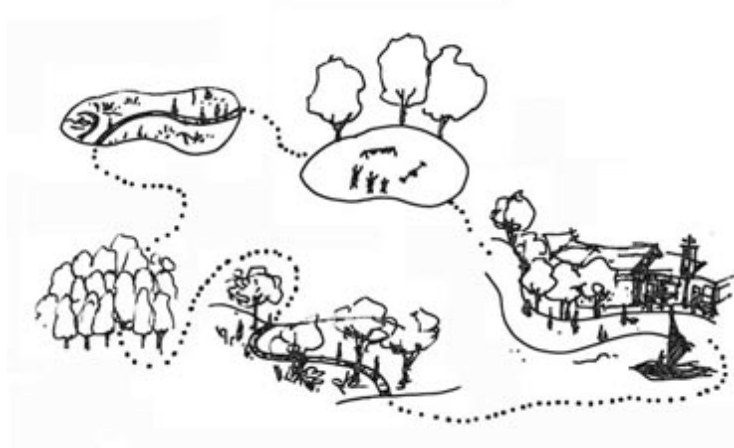


Orient houses and buildings to mitigate the effects of the prevailing winds.

Squamish is the birthplace of the wind, and yet downtown Squamish is laid out such that wind forces are exacerbated. Future development should better regard natural vectors of the wind.

Principle 2: Human Vectors are oriented towards the public realm.

Environment  
&  
Open Space

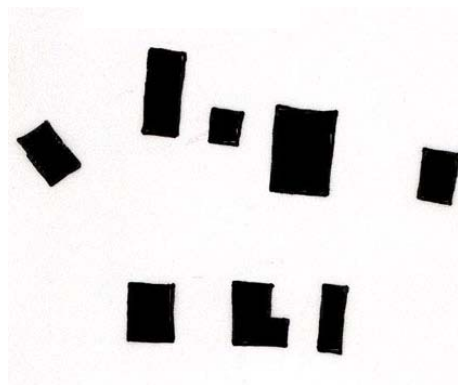


Create an accessible trail system that connects public spaces like the waterfront, parks, and town plazas.

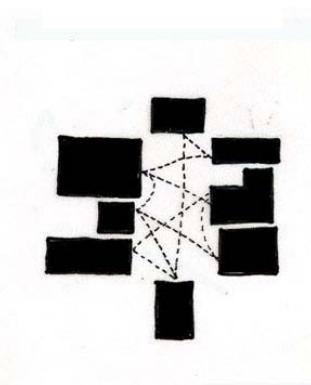
Trails will function as active public spaces and as a green corridor. Boardwalk trail systems should be used to make dynamic systems like floodplains and wetlands accessible.

Places

Not this



But this



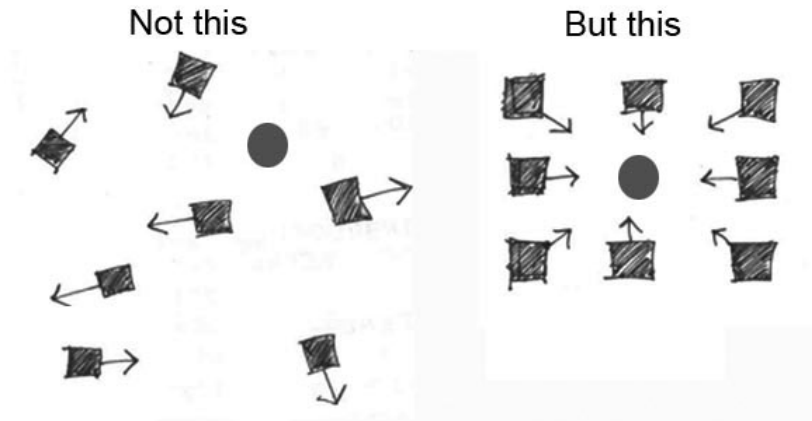
Place buildings and spaces with a variety of uses in close proximity to each other to create places vibrant with human activity.

Squamish's few pedestrian-oriented shops are dispersed along several streets. These shops, along with civic, recreational, and community facilities, should be centered on a public square to create an area animated by people.

## VECTORS

Principle 2: Human Vectors are oriented towards the public realm.

### Homes & Streets



Focus physical environment and social forces around a center.

The residential parts of Squamish have housing oriented according to randomly curving streets. The organization of housing and social needs will be focused around a center.

### Transportation



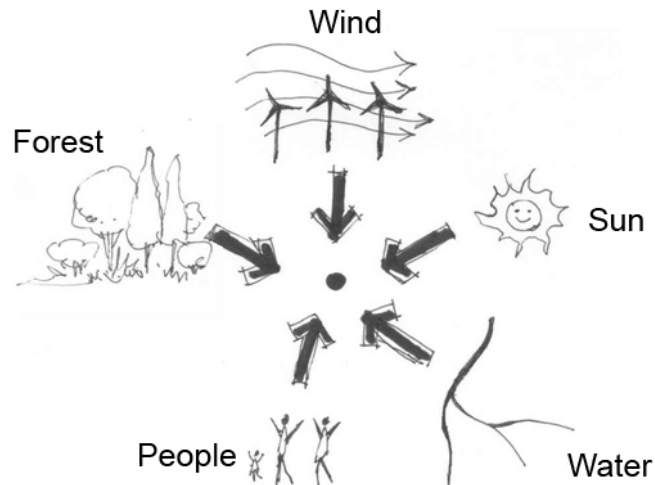
Develop focal points and public spaces along the waterfront.

Squamish's downtown doesn't lure people to the waterfront. Anchoring streets at their waterfront terminus will encourage people to walk through downtown.

## VECTORS

Principle 3: Town and neighbourhood centres are located at the intersections of main vector paths.

Environment  
&  
Open Space

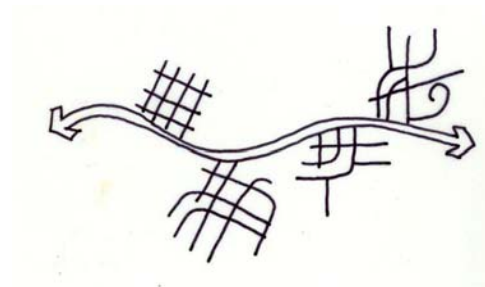


Utilize and create spaces that are best able to harness the powerful natural and human vectors in the area.

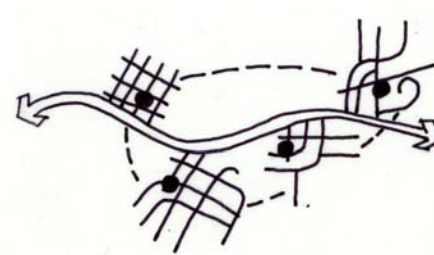
The available energies within Squamish are seldom considered in unison or to help create places. Developing and capitalizing on sites with intersecting vectors should allow Squamish to create unique and interesting places.

Places

Not this



But this

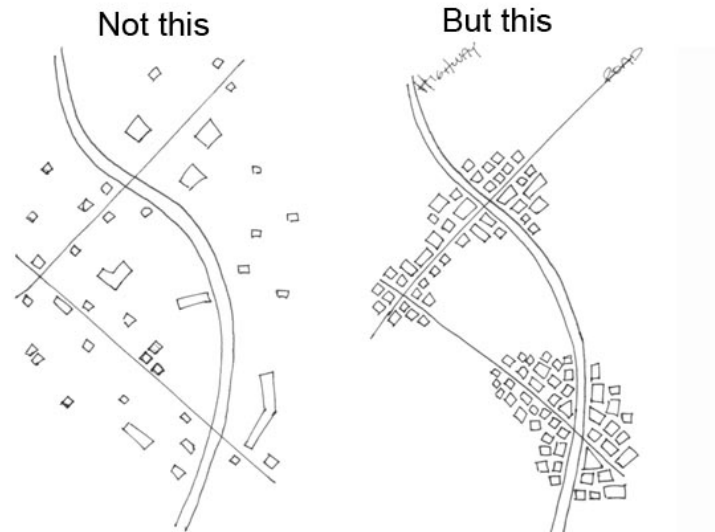


Confine and connect sprawling development, creating town centers within each community.

At present, the disparate neighbourhoods of Squamish are poorly connected to each other. Many of these areas also lack basic urban amenities such as groceries, retail, and services. The development of town centers will improve each community's overall liveability and help to impart a distinct sense of place in each neighbourhood.

Principle 3: Town and neighbourhood centres are located at the intersections of main vector paths.

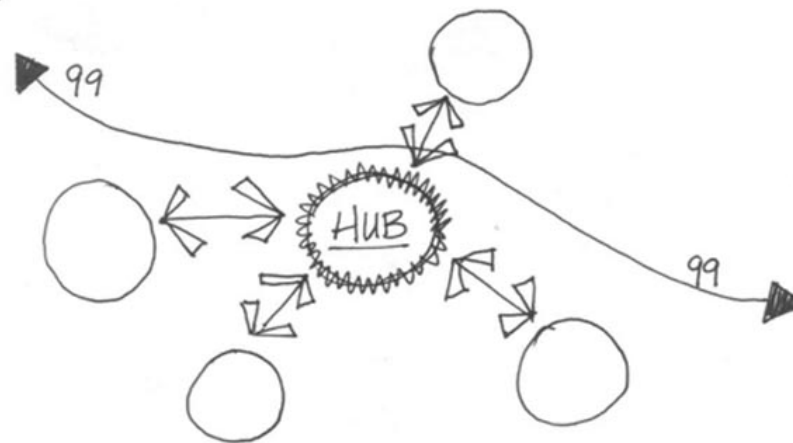
## Homes & Streets



Concentrate development at key intersections.

Dispersed development fails to take advantage of the major flows of capital and people. Capitalizing on existing networks and flows to guide development will help to prevent sprawl and preserve green space while allowing for the more efficient movement of people and goods.

## Transportation



Connect all neighbourhoods by public transit, through a central transportation hub.

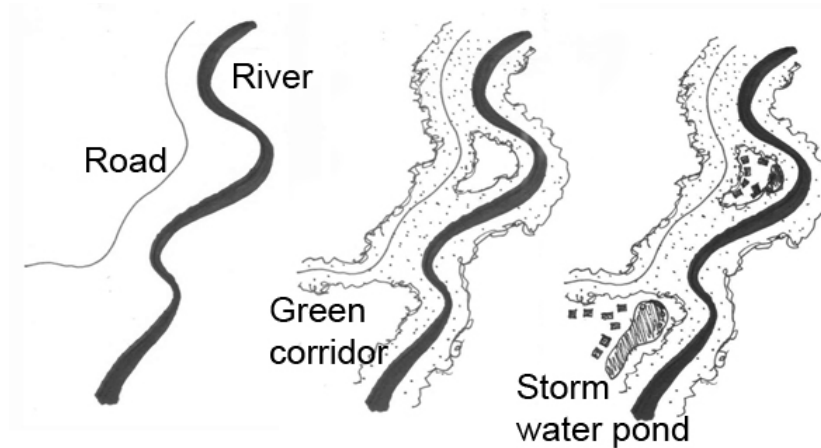
At present it is difficult to access different neighbourhoods within Squamish via public transit. Utilizing a transportation hub system would help to link neighbourhoods and to bring life back to downtown.



## VECTORS

Principle 4: Ecological flows and human vectors are connected and layered into both the physical and social infrastructure.

### Environment & Open Space



Layer the function of open spaces and green corridors for multiple human and natural uses.

Trail systems and green corridors designed for one function would be a wasted opportunity. Trails must be allowed multiple functions including providing a habitat corridor, and open spaces used to mitigate storm water run-off.

### Places

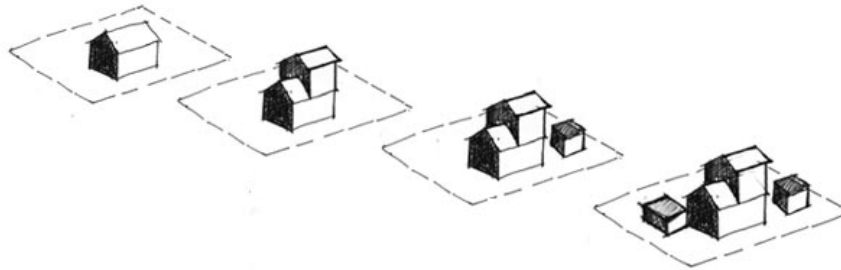


Harness sources of ecological energy.

Squamish has great potential for developing green sources of energy. This is a relatively unique feature of Squamish's location therefore where ecological forces meet (oceans, valley, estuary, etc) energy can be celebrated in very distinct place making ways.

Principle 4: Ecological flows and human vectors are connected and layered into both the physical and social infrastructure.

## Homes & Streets

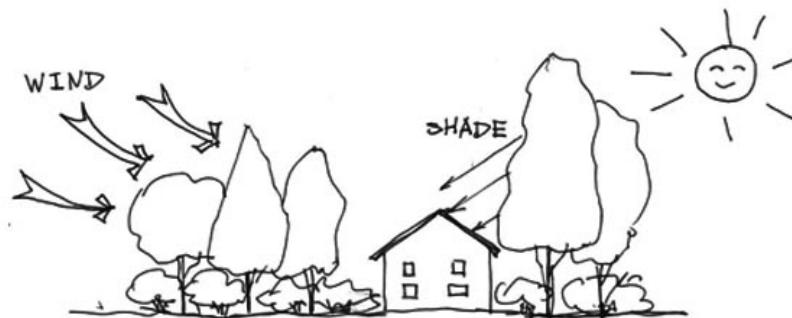


Utilize housing and building types that allow and encourage incremental growth over time.

Much of the housing in Squamish exists as a low density, single family, detached dwellings. Therefore density and infill should be a strategy of primary importance.

Reconsideration of the prevalent housing typologies and basic parcel restrictions may allow of density to occur in unique and organic ways. Growth over time may be based on knowledge of the site, gained through experience and occupation.

## Homes & Streets

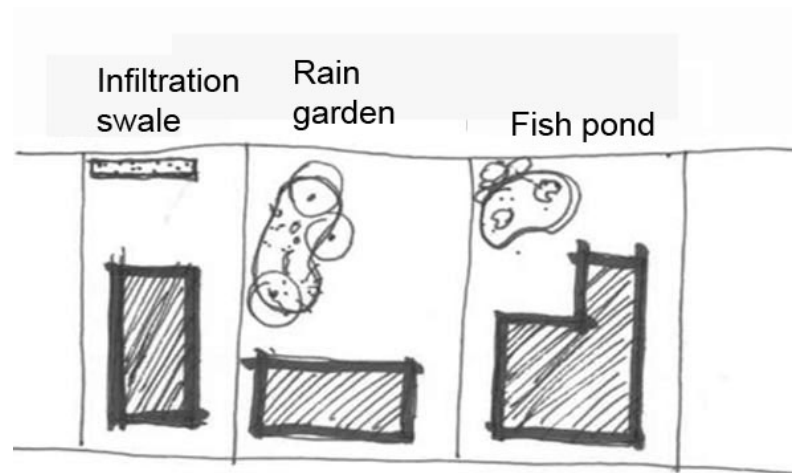


Utilize and layer natural elements for passive solar design and wind buffering.

The home is an important place in which both the mitigation and channelling of natural forces can be achieved. Incorporate trees (such as the Lombardi Poplar) as a means of protecting the homes and creating more pleasant living environments.

Principle 4: Ecological flows and human vectors are connected and layered into both the physical and social infrastructure.

Homes &  
Streets



Encourage storm water management at the parcel scale.

Storm water management is of critical importance to Squamish, which lies at the confluence of several major rivers and is subject to flooding. Through the use of site-specific storm water mitigation – rain barrels, green roofs, etc – there will be less strain put on system infrastructure and fewer problems with flooding.

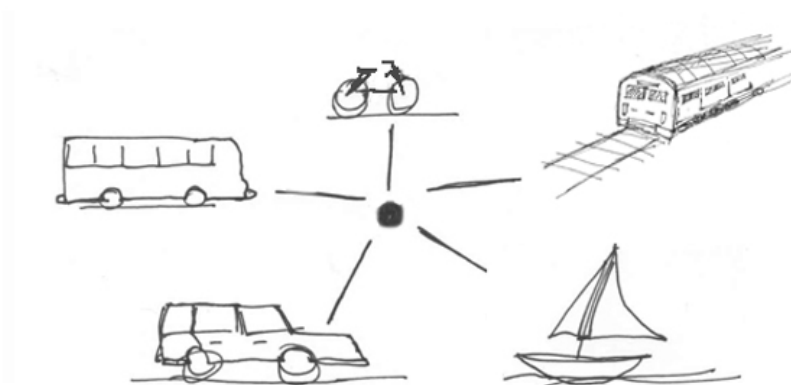
Transportation

Establish an interconnected network of greenways.

Transportation systems in Squamish prioritize the automobile, making it difficult for other uses to be accommodated. Develop and layer greenways to capitalize on systems of multimodal transportation, storm-water management, and continuous natural habitat.

Principle 5: Existing and historical transportation infrastructure is built on to increase connectivity with the region.

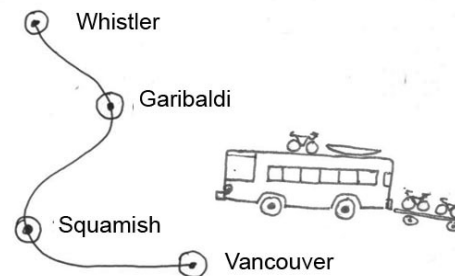
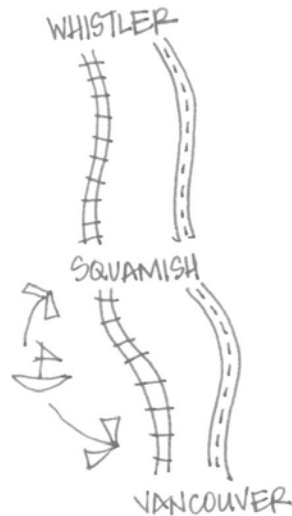
## Places



Create a vibrant transportation node with a common hub for all regional and local transportation modes.

Downtown Squamish has suffered since the loss of passenger rail service. A transportation hub will help passengers connect between modes and bring activity into the downtown centre.

## Transportation



Re-establish passenger rail and ferry service in the Sea-to-Sky corridor.

Currently the highway provides the only access to the community. Rail and ferry service would provide alternatives for commuters, tourists, and recreation enthusiasts. In addition, a community shuttle service would help self-propelled outdoor recreation enthusiasts get to key destinations with their gear.