Section 5

5.0 Strategic Transportation Planning Process

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Phase 2: Develop Vision, Goals & Objectives

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Strategic transportation planning plays a key role in setting the vision, goals, and objectives for a geographic region, area or corridor. It is, by design, proactive in nature by anticipating and preparing for future conditions within or outside of an organization's control.

Strategic transportation plans are powerful tools that promote sound decision making and facilitate the evaluation of progress toward longer-term goals. They can take a broad view of conditions and look beyond jurisdictional boundaries and areas of responsibility to identify the essential directions for a region or corridor. These strategies often result in medium- to long-term implementation plans to address a critical challenge or common goal. They also establish the focused direction and priorities for an organization. All subsequent work (including project development planning and subsequent stages of design) is informed by the direction and action plan from the strategic transportation strategy. At MOTT, multiple strategic transportation plans may be relevant in any given case. Each will be informed by the others, and it is expected that the strategic directions may evolve over time.

Although project development planning (Chapter 6) can take place in the absence of a strategic transportation plan (regional, area, or highway corridor plan), the identification of the problem, options, and option evaluation will be best informed by a strategic transportation plan. For this reason, it is preferrable to have a strategic transportation plan in place prior to initiating the project development planning process.

Within integrated transportation planning, strategic transportation plans help ensure:

- Project development plans align with an overall vision for a region, area or corridor
- The best course of action is taken to address an identified problem
- Funds are used more efficiently
- Co-benefits are achieved
- There is greater support of initiatives from decision makers, the public, and interested parties

Often, a key outcome of the strategic transportation planning process will be the identification of specific projects to be advanced to project development planning.

The Strategic Transportation Planning Process includes five Phases:

PHASE 1 Take Stock of Existing and Future Conditions	**Step 1.1** Gather and Review Background Information **Step 1.2** Assess the Existing and Future Conditions of the Study Area **Step 1.3** Define Existing and Future Challenges and Opportunities
PHASE 2 Develop Vision Goals and Objectives	**Step 2.1** Develop a Vision Statement **Step 2.2** Develop Goals and Objectives
PHASE 3 Develop and Screen Opportunities and Options	**Step 3.1** Identify Opportunities **Step 3.2** Develop Options **Step 3.3** Perform an Initial Screening of Options
PHASE 4 Refine and Evaluate Options	**Step 4.1** Refine Options **Step 4.2** Evaluate Options and Select the Preferred Option(s)
PHASE 5 Prioritize Recommendations and Finalize the Plan	**Step 5.1** Prioritize Option(s) **Step 5.2** Finalize Plan

PHASE 1

Take Stock of Existing and Future Conditions

The objective of Phase 1 is to understand the current and future conditions of the study area through data collection and assessment.

There are three steps in Phase 1:

Step 1.1 Gather and Review Background Information

Step 1.2 Assess the Existing and Future Conditions of the Study Area

Step 1.3 Define Existing and Future Challenges and Opportunities

Deliverables in Phase 1 may include geographic, demographic and land use profiles, and reporting on existing and future conditions.

Step 1.1

Gather and Review Background Information

Data collection and preparation is an important first step of the strategic transportation planning process. This information will be used to assess the historical, present-day, and future conditions in Step 1.2, and all other steps of the process.

It may be necessary to prepare geospatial data (GIS) to visualize demographics, land use, physical environment, and other attributes associated with the study area. A spatial assessment will provide important context for the analysis and identification of challenges and opportunities. Site visits will also be necessary to collect data and understand the local context of the planning study area.

It is recommended that information on the following topics be gathered, prepared, and reviewed (detailed in sections 1.1.1 to 1.1.5):

- Strategies, Policies and Plans (Section 1.1.1)
- Geographic and Land Use Conditions (Section 1.1.2)
- Multi-Modal Transportation, Infrastructure, Systems, and Services (Section 1.1.3)
- Multi-Modal Travel Patterns, Mobility, Safety, and Reliability (Section 1.1.4)
- Socio-Community/Demographic Data (Section 1.1.5)

Step 1.1.1 Gather and Review Strategies, Plans, and Policies

Strategies, plans, and policies provide the strategic and regulatory context of the study area for the varying levels of government and First Nations within the study area. As the strategic transportation planning process is carried out, it is important to understand how the plan interacts with both internal and external strategies, plans, and policies. For example, the Ministry of Education may have short-, medium-, and long-term plans for the construction of new schools within the study area which could have implications on how the strategy may prioritize new transit and active transportation programming and capital improvements within the study area.

As it is critical to understand existing plans, it is also critical to identify any anticipated future updates to these strategies, plans, and policies to understand how it may impact your planning study. For example, updates to an OCP could signal potential changes to land use designations and a community's priorities and vision for the future, which would impact development and growth projections within the study area. These changes need to be reviewed and considered throughout the planning study.

Transit Oriented Areas (TOA) and Small-Scale Multi-Unit Housing (SSMUH) Legislation Considerations:

At this step, consider whether the study area is impacted by Bill 47 (TOA) and/or Bill 44 (SSMUH). If the study area is impacted, ensure growth projections are updated to account for the potential increase in development potential due to SSMUH and TOA in Step 1.2.

Consider the following:

- How do TOAs interact with the Highway system?
- How do regulated TOAs and SSMUH densities impact growth projections within the study area?
- What mode(s) of transportation connect to TOAs? How could connections be improved?
- Are there any park and ride facilities within the TOAs in the study area? Is a park and ride facility necessary for the context of the community (e.g. is there a high rate of commuters who leave the region for work?)
- Are there any provincial lands within the TOA that present an opportunity for integrated land uses (e.g. mixed-use development with a park and ride)?

For more information, read the SSMUH Provincial Policy Manual.

Guiding Questions

PHASE 1 | STEP 1.1.1

When gathering data, consider:

- *Have you considered strategies, plans, and policies that relate to both transportation and land use?*
- *When was the strategy, policy, or plan published, and is it still relevant? When will it be updated?*
- *What are the strategic priorities of each jurisdiction within your study area? For example, does the Transportation Master Plan identify priority improvements and timelines?*
- *Where are existing and proposed transportation networks? Have any priority upgrades been identified by the various levels of government?*
- *Do any of the strategies, policies, or plans reveal opportunities for partnerships?*
- *Are there any planning or strategic initiatives currently underway that have not yet been published?*
- *Are there any TOD Areas within your study area, or are there any anticipated in the future?*
- *Have you engaged with other provincial agencies and Ministries regarding their short and long-term strategies, plans and policies that may impact the study area?*

Data Types & Sources

Data types typically reviewed include (but are not limited to):

- Federal and Provincial Strategic Plans (e.g. housing action plans)
- Regional Growth Strategies
- Official Community Plans (OCP)
- Neighbourhood/Area Plans
- Comprehensive Community Plans (CCP)
- Climate Action Plans
- Transportation Studies
- Parking Studies
- Transportation Master Plans/ Strategic Transportation Plans
- Active Transportation Plans
- Transit Authority Strategic Plans
- Transportation Demand Management Strategies
- Economic Data and Development Plans
- Industrial and Employment Land Strategies
- Industry and Sector Strategies
- Tourism Strategies
- Other agency plans and strategies:
    - BC Ferries
    - Airports
    - Ports
    - Rail

Step 1.1.2 Gather and Review Geographic and Land Use Conditions

The existing land use and geographical conditions can impact the development potential and transportation network of an area. These conditions inform where, and what type of, development and infrastructure can be implemented in the future.

Guiding Questions

PHASE 1 | STEP 1.1.2

LAND USE CONSIDERATIONS – When gathering geographic and land use data, consider:

- *When were the RGS, OCP, and CCP (if applicable) adopted, and when will they be updated?*
- *Where is the Regional Growth Boundary (if applicable)?*
- *What are the land use patterns within the study area?*
- *What land use designations are currently in place?*
- *What zoning is currently in place? Are there any major zoning amendments proposed or underway? Or any major development applications in-stream?*
- *What are the key land uses in the study area and where are they located (e.g. urban centers, transit-oriented areas, major employment/institutions, industrial lands, etc.)?*
- *Are there any undeveloped greenfields in the study area that have development potential? What is the maximum development potential permitted in those areas?*
- *Where are the areas that have low potential for development or redevelopment? (e.g. agricultural zones within the ALR, parks)*
- *Are there other notable community destinations within the study area (schools, community facilities, arenas, parks etc.)?*
- *Will the lands within the study area be further developed or expanded according to existing plans?*
- *What type of development is planned on First Nation land?*
- *What are the land uses adjacent to the study area, and how might they influence the study area? For example, are the lands adjacent to the study area zoned for high traffic generating uses? How do people travel to the lands adjacent to the study area and when?*
- *What is the relevant land ownership in the area? (e.g. federal, First Nations, provincial, municipal, or private)*
- *Where are provincially owned lands within the study area? Are they suitable for integrated development opportunities?*
- *Are there any Statutory Right of Ways (SROWs) that need to be considered? For example, SROWs for major BC Hydro transmission lines.*
- *Where are First Nations reserve lands located? How might this change in the future? Has the First Nation community obtained any fee-simple lands within their traditional territory?*
- *Are there any properties within the ALR within the study area?*

Guiding Questions

PHASE 1 | STEP 1.1.2

GEOGRAPHIC CONSIDERATIONS – When gathering geographic and land use data, consider:

- *How do the topographical and environmental features of the study area constrain the study area?*
- *Are there lands within the study area that have been identified as vulnerable to climate change? (e.g. flooding or wildfire)*
- *Have you reviewed ClimateBC to understand future climate conditions?*

Guiding Questions

PHASE 1 | STEP 1.1.2

INFRASTRUCTURE SERVICING CONSIDERATIONS – When gathering geographic and land use data, consider:

- *How are the lands serviced? (e.g. water, sewer, and stormwater) Are there any service expansions or upgrades planned within the study area?*
- *How might servicing availability and capacity influence development patterns and growth in the future, and vice versa?*
- *What population density can the existing services support? How close is the community to reaching that population density?*
- *Is there any major utility infrastructure, such as high-voltage transmission lines or oil and gas pipelines, within the study area? Do the communities within the study area have any parking policies? (e.g. parking minimums or maximums)*

Guiding Questions

PHASE 1 | STEP 1.1.2

OTHER CONSIDERATIONS – When gathering geographic and land use data, consider:

- *Are there any archaeological sites, or areas of cultural significance, in the study area?*

Data Types and Sources

Data types to review include (but are not limited to):

Land Use Considerations

- Land Use Designations (OCP)
- Zoning
- Land ownership (e.g. private, municipal, provincial, federal, First Nations)
- First Nations communities, reserve lands, and traditional territories
- Agricultural Land Reserve (ALR) location and properties
- Destinations of interest and transportation generators
  - Industrial/Employment Lands
  - Commercial Centres
  - Major Tourism Destinations
  - Schools/Arenas
  - Parks/Beaches
  - Airports and Ferries
  - Provincial/Territorial Borders
  - Federal Border Crossings

Geographic Considerations

- Topography
- Natural Hazards (e.g. flood, wildfire, geohazards)
- Environmental Constraints (e.g. water bodies, wetlands, environmentally sensitive areas)
- Climate change vulnerable areas (e.g. coastal areas, floodplains)

Infrastructure Servicing Considerations

- Servicing (water, sanitary sewer, drainage, power)
- Floodplains and Dikes.

Other Considerations

- Archaeological sites and areas of cultural significance

Step 1.1.3 Gather and Review Multi-Modal Transportation Infrastructure, Systems, and Services Data

Create an inventory of all transportation infrastructure, systems, and services within the study area (e.g. bicycle pathways, rail tracks, highways, transit services) to understand the infrastructure and identify gaps or opportunities. This data will help to develop potential options in Phase 3.

Photo by Jill Patterson

Guiding Questions

PHASE 1 | STEP 1.1.3

When gathering data for multi-modal transportation infrastructure, systems, and services, consider:

- *What highways, roads, and bridges are present in the study area? Whose jurisdiction(s) do they fall under? How do these interact with other modes (e.g at grade rail crossings)*
- *What active transportation facilities and crossings are present in the study area?*
- *Are there any known gaps in multi-modal transportation infrastructure or services within the study area?*
- *What transit systems, routes, and services are present in the study area? What information is available about the system?*
- *What goods movement services are present in the study area (e.g. distribution centres, logistics and transloading facilities)?*
- *Are there any existing or ongoing transportation studies in the study area?*
- *Are there any other transportation projects underway, and when will they be completed?*
- *Where are existing and proposed multi-modal transportation networks? Have any priority upgrades been identified?*
- *Where are existing and proposed parking facilities and park-and-rides within the study area?*
- *How current and reliable is the information?*
- *If desired data does not exist, can it be easily collected within the scope of this study? Can it be enhanced or informed through community engagement?*

Data Types and Sources

Data types to review include (but are not limited to):

- Highways, interchanges, and roads;
- Structures (bridges, culverts, overpasses, underpasses);
- Active transportation networks, facilities, and crossings;
- Transit network stations, stops, routes, and frequency of service;
- School bus routes and stops (and any other public transit services);
- Parking facilities, including truck parking and park and rides;
- Truck routes, including brake checks and rest stops;
- Road Criticality from Asset Management data; and
- Other multi-modal transportation network facilities:
  - Ferry routes and frequency of service
  - Airports
  - Rail lines and crossings
  - Ports

Step 1.1.4 Gather and Review Multi-Modal Travel Patterns, Mobility, Safety, and Reliability Data

Along with the collection of information on the multi-modal transportation infrastructure, systems, and services of the study area, it is also important to collect observed data related to travel patterns and to mobility, safety, and reliability performance to better understand how people within the study area are moving today and how to address current and future transportation issues.

Guiding Questions

PHASE 1 | STEP 1.1.4

When gathering multi-modal travel patterns, mobility, safety, and reliability data, consider:

- *What information is available to understand how and where people are travelling in the study area?*
- *What are the typical highway mobility, safety, and reliability performance metrics?*
- *Have you consulted with road safety partners?*
- *What are the transit system performance metrics?*
- *What is the speed and travel time variability on key corridors?*
- *What are the key travel patterns for walking, rolling, bicycling, transiting, driving, and trucking?*
- *Are there any known gaps in the transit and active transportation networks and services which result in motor vehicles being the only mode, or only reliable or efficient mode of transportation?*
- *What other transportation/travel information is available to help understand the relationship between land use and transportation in the study area (e.g. commute time, safety, mode share by neighbourhood etc.)?*
- *If desired data does not exist, can it be easily collected within the scope of this study? Can it be enhanced or informed through community engagement?*

Data Types and Sources

Data types to review include (but are not limited to):

- Highway, Roadway, and Intersection Traffic Data
- Transit Route Frequency and Capacity
- Active Transportation User Data (including micromobility and 'Big Data' providers)
- Origin and Destination Data
- Travel Time Data
- Safety/Collision Data
- Mode Share Data
- Goods Movement Data

DATA TYPE	SOURCE	LINK
Multi-Modal Transportation Infrastructure and Systems		
Highways, interchanges, and roads	iMapBC - Transportation	www2.gov.bc.ca/gov/content/data/geographic-data-services/web-based-mapping/imapbc
Structures (bridges, culverts, overpasses, and underpasses)	iMapBC - Transportation - MOTT - Point Inventory	www2.gov.bc.ca/gov/content/data/geographic-data-services/web-based-mapping/imapbc
Parking facilities and park-and-rides	Local/regional government	https://bcparks.ca/
Truck routes, brake checks, and rest stops	Local or Provincial	https://www.th.gov.bc.ca/restareas/?zoom=5&loc=-126.600000%2C54.589121
Ferry Terminals	iMapBC - Transportation - Ferry Terminals	https://maps.gov.bc.ca/ess/hm/imap4m/
Airports	iMapBC - Transportation - Air Transportation Facilities	https://maps.gov.bc.ca/ess/hm/imap4m/
Rail lines and Crossings	iMapBC - Transportation - Railway Network	https://rac.jmaponline.net/canadianrailatlas/?autozoom=region;-15539324;6254746;2925398;2191602canadianrailatlas/?autozoom=region;-15539324;6254746;2925398;2191602
Ports	iMapBC - Transportation - Ports and Terminals	https://catalogue.data.gov.bc.ca/dataset/bc-ports-and-terminals
Border Crossings	Province of BC	https://www.cbsa-asfc.gc.ca/bwt-taf/menu-eng.html
Commercial Vehicle Inspection Stations	Commercial Transport Program	https://www.cvse.ca/inspection_stations.htm
Multi-Modal Travel Patterns		
Commuting	Census Data - Statistics Canada	https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/dt-td/Index-eng.cfm?LANG=E&SUB=98P1003&SR=0&RPP=10&SORT=date
Origin and Destination	Travel diary survey by regional government (ex. CRD) or transit agency (ex. Translink)	www.crd.bc.ca/project/regional-transportation/origin-destination-household-travel-survey
Mode Share	Travel diary survey by regional government (ex. CRD) or Translink	www.crd.bc.ca/project/regional-transportation/origin-destination-household-travel-survey
Traffic Counts	Local/regional government or MOTT	www.th.gov.bc.ca/trafficdata/
Safety/Collisions	ICBC, B.C.'s Traffic Accident System (TAS), RCMP, or Ambulance	www.icbc.com/about-icbc/newsroom/Statistics
Wildlife Accidents	Wildlife Accident Reporting System	https://www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/engineering-standards-guidelines/environmental-management/wildlife-management/wildlife-accident-reporting-system
Traffic Flow - Provincial	Drive BC	www.drivebc.ca/#welcome

DATA TYPE	SOURCE	LINK
Traffic Flow - Local/ Regional	HERE, Streetlight, or TomTom Data	www.here.com/platform/traffic-solutions/real-time-traffic-information
Transit		
Transit network stations, stops, and routes	BC Transit or Translink	https://www.translink.ca/schedules-and-maps/transit-system-maps#transit-system-maps https://www.translink.ca/schedules-and-maps/interactive-system-map
Route Frequency and Capacity	BC Transit or Translink	https://www.translink.ca/schedules-and-maps/transit-system-maps#transit-system-maps
Service Reliability	BC Transit or Translink	https://www.translink.ca/about-us/about-translink/corporate-reports www.translink.ca/plans-and-projects/projects/bus-projects/bus-speed-and-reliability
Boarding and Alighting	BC Transit or Translink	www.translink.ca/about-us/doing-business-with-translink/app-developer-resources/rtti
Active Transportation		
Active Transportation - Heat Maps	Strava	www.strava.com/maps/global-heatmap?sport=All&style=dark&terrain=false&labels=true&poi=true&gColor=blue&gOpacity=100#9/37.7749/-122.4194
Cycling - Volunteer Counts	Community groups/ organizations (e.g. HUB, BCCC, Velo Canada) BC Open Data	bikehub.ca/research-projects
BC Open Data		
Crowdsourced Collisions and Hazards	BikeMaps.Org and WalkRollMap.Org	bikemaps.org/
Provincial AT Plan Inventory	Safe Routes Now Project by BCCC	bccycling.ca/bc-safe-routes-now
Active Transportation-Permanent Counters	Local/regional government or MOTT	Search Data Source based on area of Interest.
Cyclist - Intersection Counts	Local/regional government or MOTT	Search Data Source based on area of Interest.
Bicycling Infrastructure - Local	Local/regional government	Search Data Source based on area of Interest.
Bicycling Infrastructure - Provincial	Canadian Bikeway Comfort and Safety Classification System (Can-BICS)	bccycling.ca/bike-infrastructure-map
Bicycling Infrastructure - National	Canadian Bikeway Comfort and Safety Classification System (Can-BICS)	https://www.arcgis.com/home/item.html?id=51e0cc39d9854eaa818b88fb2 e17c702

DATA TYPE	SOURCE	LINK
	Goods Movement	
Truck Network, Truck Routes	Local/ regional government	https://www2.gov.bc.ca/gov/content/transportation/vehicle-safety-enforcement/services/permitting/project-cargo-corridors#route
Dangerous Goods Routes	Local/ regional government	https://www2.gov.bc.ca/gov/content/transportation/vehicle-safety-enforcement/information-education/transporting-dangerous-goods
Project Cargo Routes (oversize/overheight vehicles)	MOTT	https://www2.gov.bc.ca/gov/content/transportation/vehicle-safety-enforcement/services/permitting/project-cargo-corridors#decide
Truck Classification, Characteristics, Cargo Type	MOTT BC Truck Survey Data Program, AFRI Lower Mainland Truck Classification Survey	https://www2.gov.bc.ca/assets/gov/driving-and-transportation/cvse/route-maps/cargo/vehicle-configuration-catalogue.pdf
Vehicle Length	MOTT Traffic Data Program	https://twm.th.gov.bc.ca/?c=tdp&lon=-123&lat=54.5&z=5&sb=1&
Logistics Facilities (inc warehouses, distribution centres)		https://www.britishcolumbia.ca/about-british-columbia-canada/infrastructure/
Air Cargo Data	Airports	https://open.canada.ca/data/en/dataset/fd1cb05f-8dd7-411c-a5a0-7821b873ed6d
Port Cargo Data	Port Authorities (Ports of Vancouver, Prince Rupert, Nanaimo_	https://open.canada.ca/data/en/dataset/5f3c273a-7a0d-4b5f-8059-b34cc3f116c7
Cross Border Freight Traffic and Value	US DOT, IMTC	https://www2.gov.bc.ca/gov/content/data/statistics/economy/trade/trade-data
Goods Movement Flows	Eg GeoTab	https://www2.gov.bc.ca/gov/content/data/statistics/economy/trade/trade-data


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Step 1.1.5 Gather and Review Demographic Data

Understanding the current and future demographics in a study area enables better planning for transportation infrastructure to meet the diverse needs of people living in the area.

As different individuals experience policies, programs, and strategies in different ways, keep in mind the Integrated Transportation Planning Framework strategic lenses (Diversity and Inclusion, Equity, and Reconciliation).

Consider: Engagement and Equity Analysis

At this step you may want to consider how Census data can be supplemented by public engagement. Engagement at this stage may lead to information that is not yet publicly available, such as anticipated developments, studies, or land use plans which may have an impact on your strategic planning study area. Refer to Section 4 for more information on Community Engagement and Consultation with First Nations.

Guiding Questions

PHASE 1 | STEP 1.1.5

When gathering demographic data, consider

- *What is the current and future anticipated population in the region, and in each community?*
- *What are the current and future anticipated demographics (age, gender, socio-economic status etc.) in the region, and in each community?*
- *Has other work provided insights into the existing conditions of population groups in the study area?*
- *Where is the population concentrated and where is it dispersed? Will this change in the future?*
- *What implications will future population growth have on different planning areas, such as public transportation, infrastructure planning, service provision, etc.?*
- *Which population groups are typically underrepresented in typical engagement processes, and how can they be meaningfully engaged as part of the strategic planning process?*
- *How will land use and transportation planning decisions impact people living in the study area?*
- *If desired data does not exist, can it be easily collected within the scope of this study? Can it be enhanced or informed through community engagement?*

Data Types and Sources

Data types to review include (but are not limited to):

- Population Growth Rate and Forecasts
- Age and Gender Demographics
- Housing Needs Reports
- Income and Household Spending
- Employment Rates and Industries
- Ethnicity, religion, and language spoken at home;
- Indigeneity
- Home ownership, homelessness (including corresponding services and shelter locations)
- Education level
- Other relevant documents, including studies related to specific population groups

Step 1.2

Assess the Existing and Future Conditions of the Study Area

This stage of the process involves using data to classify the existing and future conditions of the study area. Current and future base conditions identified during this step will identify gaps between project goals and the current and future conditions, and they will be used to define the greater transportation needs and opportunities across the study area.

Using the data collected in Step 1.1, profiles of existing and future conditions will be developed for the following categories:

- Geographic and Land Use Conditions, and Demographic Data
- Multi-Modal Travel Patterns, Mobility, Safety, and Reliability Data
- Major Transportation Networks and Services Data

Step 1.2.1 Develop a Geographic, Land Use and Demographic Profile

Refer to the data collected in sections 1.1.1, 1.1.2 and 1.1.5 to develop a geographic, land use, and demographic profile of the existing and future conditions of the study area.

Guiding Questions

PHASE 1 | STEP 1.2.1

GEOGRAPHIC PROFILE – When preparing the geographic, land use and demographic profile, consider:

- *Where is the Regional Growth Boundary (if applicable)?*
- *What are the existing (zoning) and future (OCP) key land uses in the study area and where are they located (e.g. urban centers, transit-oriented areas, major employment/ institutions, industrial lands, etc.)?*
- *Are there any undeveloped greenfields in the study area that have development potential?*
- *How do Bill 44 (Small-Scale Multi-Unit Housing) and Bill 47 (Transit-Oriented Areas) impact the study area and future development potential?*
- *How are the lands within the study area generally accessed (key neighbourhoods, employment centres, etc.)?*
- *Will the lands within the study area be further developed or expanded according to existing plans (OCP, CCP, RGS)?*
- *How do people travel to work, school, or home? Do they travel within or outside the study area to access daily needs?*
- *How many jobs are currently within each community of the study area? How many are anticipated? What types of industries are present and where? To what scale are these industries anticipated to expand over time?*
- *What type of development is planned on First Nation land?*

Guiding Questions

PHASE 1 | STEP 1.2.1

DEMOGRAPHIC PROFILE – When preparing the geographic, land use and demographic profile, consider:

- *How has the population and demographics changed over time, and where is it projected to grow?*
- *Where is the population concentrated and where is it dispersed? Which communities are projected to see the largest growth?*
- *How might demographic trends influence community priorities?*
- *What are the demographics of the people who live, work, and travel in the study area? What impact could this have on multi-modal travel patterns?*
- *How will the projected shift in demographics impact travel patterns throughout the region or within each community in your study area?*
- *Are there groups of people that are currently underserved by the transportation system? Are there groups of people who are underrepresented in observed data because the transportation system does not adequately serve their needs?*
- *Where are equity-deserving groups located within the study area? (e.g. seniors, youth, newcomers to Canada, BIPOC, etc.)*
- *Which Indigenous communities reside in the study area (on and off reserve)? What is the status of their lands (reserve, privately held?)*

Step 1.2.2 Multi-Modal Transportation Profile

Using the information from Steps 1.1.3 and 1.1.4, develop a profile of the existing and future multi-modal transportation conditions within the study area. During this step, travel patterns will be examined, as well as factors like safety, mobility, and reliability to define the overall current and projected performance of each multi-modal transportation system. Existing conditions will typically be considered based on observed data for both vehicular transportation/traffic (including goods movement) and active transportation. In some cases, historical data may need to be adjusted to account for changes between the time when the data was recorded to the existing conditions. Given the variability of vehicular traffic, it is important to measure both a variety of time periods such as morning, midday, evening, weekdays, and weekends as well

as other factors such as holidays, events, and construction. However, active transportation-related traffic does not necessarily follow the typical peak vehicular travel. Therefore, it is important to understand travel patterns and peak travel times associated with active transportation.

Future conditions will require some assumptions regarding population growth and number of trips. Appropriate growth assumptions are determined by looking at the previous data collected on historic and projected population growth, planned development, or transportation demand modelling. These assumptions can be guided by the data from strategies, plans, and policies highlighted in Section 1.1.1.

Guiding Questions

PHASE 1 | STEP 1.2.2

When preparing the major transportation networks and services profile, consider:

- *How does the multi-modal transportation network function and operate?*
- *How do people commute for daily needs and activities?*
- *Is there a relationship between land use patterns and travel patterns?*
- *Where are travel pinch-points or barriers located?*
- *Where are the gaps in the active transportation network?*
- *How reliable and frequent is transit service?*
- *Are there any safety concerns (collision history) or perceived safety concerns within the multi-modal network? Are there patterns or hot spots? Are there trends that are appearing when overlaying this with demographic information (Step 1.2.1).*
- *Where does multi-modal traffic originate from, and where are their destinations (locally and regionally)?*
- *What are the mobility patterns in the area (e.g. modal choice, travel time)?*
- *How might land use pattern changes in the future change travel patterns?*
- *If there are future multi-modal transportation projects underway, how will this impact travel patterns in the future?*
- *When are the peak travel periods (seasonally; day of week; time of day)? How might land use pattern changes in the future explored in Steps 2.1 & 2.2 change this?*
- *Do transportation forecasts or demand models exist for the area and can they be used to inform the multi-modal transportation profile of the study area?*
- *How are goods transported within and through the area?*
- *Are there any major industry projects planned that will affect traffic volumes or change requirement for goods movement services?*
- *What is the demand for parking in the study area? Where are parking structures and their accessibility constraints, where are park and rides located, are there paid or unpaid options, and how connected are they to other transportation facilities or networks (ie: transit stations, active transportation routes)?*

Key Themes

Key themes to identify include (but are not limited to):

Safety Performance	Mobility Performance	Reliability Performance	Travel Patterns
• Collision/Injury Frequency, Rate, and Severity (all modes of transportation) • Collision/ Injury Patterns and Trends (all modes of transportation) • Use of Collision Prediction Models	• Travel Time • Vehicle Kilometres Travelled (VKT) • Speed (average, variance) • Intersection Level of Service, delay, volume to capacity ration, and queues • Multi-modal level of service (MMLOS) • Access to Destinations (accessibility analysis) for all modes • Gaps in active transportation and public transportation networks (gap analysis)	• Road Closure Frequency and Duration • Motor Vehicle (including commercial vehicle) and Bus Speed and Reliability • Maintenance Schedules (especially in winter months) • Planning Time Index	• Local and Regional Travel Patterns (for all modes of transportation) • Daily Commuting to Work and School, and Work from Home (including telecommuting trends) • Mode Share (active transportation, transit, motor vehicle) • Goods Movement

Case Study: Moray Area Planning Study (MAPS)

Situation

The Moray Channel Bridge connects Richmond City Centre and the Vancouver International Airport (YVR), two evolving residential and economic hubs in Metro Vancouver. As the bridge neared the end of its useful life, MOTT completed a Mobility and Travel Pattern Assessment to understand how people and goods movement changed across the region since the bridge first opened in 1957, and how this might change into the future.

Action

The project team analyzed multi-modal data to understand the safety, mobility, and reliability performance of the corridor. The results revealed relatively consistent, two-way travel demand throughout the day on weekdays and weekends, in contrast to other urban areas where travel tends to be concentrated in weekdays during peak commuting hours. The project team interpreted the findings by considering the impact of key land uses on travel demand in the study area, such as the airport, outlet mall, casino, and dyke trail. YVR anticipates air cargo volumes will grow by 150,000 tonnes in the next decade, and by 350,000 tonnes over the next two decades. This alone will generate a significant number of trips within the study area and highlights the key importance of considering anticipated land use changes within the study area of the strategic transportation plan.

Opportunity

The integrated transportation and land use approach enabled the project team to produce a comprehensive list of issues and opportunities for different modes, users, and subareas. The findings from MAPS will provide a strong technical and engineering foundation to inform future business case development and engagement with key interested parties, such as YVR, City of Richmond, Musqueam Indian Band and other Indigenous groups, as well as agencies such as TransLink, Metro Vancouver, and the Vancouver Fraser Port Authority.

Step 1.3

Define Existing and Future Challenges and Opportunities

Once the existing and future conditions of the study area have been established, identify the key challenges and opportunities for the strategic transportation plan. The key insights from this step will inform the development of the vision, goals, and objectives later on in Phase 2.

During this step the project team will:

- Define the key challenges and opportunities based on the analysis conducted in Steps 1.1 and 1.2
- Present key data sources to support the challenges and opportunities identified
- Prepare a concise summary of key challenges and opportunities

Guiding Questions

PHASE 1 | STEP 1.3

When identifying the existing and future challenges and opportunities, consider:

- *What are the issues and challenges the strategic transportation plan will need to address?*
- *What evidence do we have that this challenge or opportunity is significant?*
- *Why are these challenges or opportunities important to address now? What are the consequences of not addressing them?*
- *What specific transportation issues are residents, First Nations, and interested parties facing? Have all modes of transportation been considered?*
- *How are transportation and land use interlinked in this area? How does land use affect transportation and vice versa? Are there areas where transportation infrastructure is not supporting the desired land use outcomes?*
- *What land use challenges are being encountered? How well do current land use patterns support sustainable development and community needs?*
- *Does the data collected support the conclusion findings/identified challenges and opportunities, and has it been well documented?*
- *Has all the data and analysis completed been considered?*
- *Have climate change factors been considered? How do current transportation and land use practices impact the environment?*
- *Has the movement of goods and the impact on economic competitiveness been reviewed?*
- *Have all planned and future transportation infrastructure projects been identified?*
- *Does addressing these issues and challenges align with community priorities, goals, and aspirations?*
- *Can the challenges and opportunities identified be addressed within the scope of the plan?*

Case Study: South Island Transportation Strategy (SITS)

Situation

The South Island Transportation Strategy is a long range, multi-modal transportation strategy for South Vancouver Island. The strategy aims to enhance sustainable travel, transit, and active transportation while strengthening connections among various travel modes. As part of the planning process, the project team analyzed existing and future challenges and opportunities, highlighting the need for strategic investments in the region's transportation system.

Internal and External Factors

During the process of identifying opportunities and challenges, consider both the internal and external factors that may influence the planning processes within an area.

Internal factors are considered as those MOTT may have a certain degree of control over, while external factors are outside of MOTT control.

Action

Using a data-driven approach, the team pinpointed critical transportation issues and identified actionable opportunities for improvement. While analyzing multi-modal transportation data, community surveys, and existing provincial guidelines, they identified four key focus areas: safety, reliability, sustainability, and connectivity. In each case, specific transportation challenges were aligned with corresponding opportunities for further exploration as part of the strategy.

Opportunity

Based on a comprehensive review of relevant data and broad community input, the table below outlines the specific challenges and opportunities that SITS aims to address.

	CHALLENGE	OPPORTUNITY
Safety	Collisions at major intersections on Highways 1 and 17.	Improvements to the active transportation networks, including crossings and separation from traffic.
Reliability	Variability in both travel and commute times are expected to increase over the decade, especially on Highway 17 and Highway 14.	Reducing the reliance on single occupancy vehicles by increasing transit and active transportation options.
Sustainability	Transportation is a significant source of greenhouse gas emissions in B.C.	Investing in sustainable travel modes in core areas and communities along Highway 14 and Highway 17.
Connectivity	Weak community connections between affordable housing and employment, especially in core areas along Highways 14 and 1.	Focusing on integrated transportation development and linking different travel modes.

Further information regarding the South Island Transportation Strategy can be found here: https://www2.gov.bc.ca/gov/content/transportation/transportation-reports-and-reference/reports-studies/vancouver-island/south-island-transportation-strategy

PHASE 2

Develop Vision, Goals, and Objectives

The objective of Phase 2 is to establish the vision, goals, and objectives. The vision, goals, and objectives should be reflective of the challenges and opportunities defined in Phase 1 and will serve as a framework in which to identify opportunities and options in Phase 3.

There are two steps in Phase 2:

Step 2.1 Develop a Vision Statement

Step 2.2 Develop Goals & Objectives

When developing the vision, goals, and objectives, refer to the Integrated Transportation Planning Assessment Tool to ensure alignment.

Step 2.1

Develop a Vision Statement

A vision statement is a forward-looking statement that describes the long-term aspirations of a community or organization. Vision statements are usually codeveloped with the appropriate local governments, First Nations, and transportation agencies. A well-crafted vision statement is concise, forward-thinking, motivating, and provides a sense of direction. An effective vision can help align efforts and foster a shared sense of purpose among interest groups, ensuring that all efforts contribute cohesively to the realization of a common vision.

Guiding Questions PHASE 2 | STEP 2.1

When developing the vision statement, consider:

- *Has a vision statement already been developed under a corresponding plan?*
- *Does the vision statement align with other federal, provincial, local, and First Nation priorities, goals, and aspirations?*
- *Is the vision statement reflective of the key challenges and opportunities?*
- *Does the vision statement acknowledge the relationship between land use and transportation?*
- *How does the vision statement influence the development and evaluation of options?*

Example Vision Statements.

MOTT Mission Statement	Planning Together BC Framework	South Mission Integrated Planning Study
To create an integrated and safe transportation network that incorporates all modes of transport, reflects regional priorities, and provides a strong foundation for economic growth. To maintain and improve the provincial highway system, ensuring the safe and efficient movement of people and goods provincially, nationally, and internationally.	Working together to align transportation and land use planning for smart and coordinated growth in B.C.	A safe and accessible multi-modal transportation network within the study area that facilitates efficient local and regional travel through equitable design while supporting sustainable economic development, complete communities, climate action and fostering a sense of place.

Step 2.2

Develop Goals and Objectives

Goals and objectives (sometimes referred to as 'guiding principles') play a pivotal role in translating the vision into actionable steps. Goals are typically broad, overarching outcomes or results that an organization aims to achieve. They can be qualitative or quantitative targets and range from the immediate to long-term. Objectives are specific, measurable actions or initiatives that contribute to the accomplishment of identified goals. Together, goals and objectives collectively function as a roadmap to guide efforts, enable effective allocation of resources, foster accountability, and allow for the continuous evaluation of progress towards the vision.

The goals and objectives developed during this phase will inform the screening criteria that will be used to screen and compare options in Phases 3 to 5.

Guiding Questions

PHASE 2 | STEP 2.2

When developing the goals and objectives, consider

- *Are the goals and objectives specific, measurable, and attainable?*
- *Do the goals and objectives align with other federal, provincial, local, and First Nations priorities, goals, and aspirations?*
- *Are the goals and objectives reflective of the challenges and opportunities?*
- *Do they reflect all users and members of the communities within the study area?*
- *Do the goals and objectives consider all modes of transportation?*
- *Were the Integrated Transportation Planning strategic lenses applied to this process (Diversity and Inclusion; Equity; Reconciliation)?*
- *Were the Integrated Transportation Planning goals and objectives considered in this process (Complete Communities; Safe and Integrated Transportation Systems; Economic Competitiveness; Resilience & Climate Change)?*
- *How can the goals and objectives define the development and evaluation of options?*

Case Study: Central Okanagan Integrated Transportation Strategy (CO-ITS)

Situation

The Central Okanagan Integrated Transportation Strategy (CO-ITS) is an integrated multi-modal transportation strategy focused on the Highway 97 corridor through the Central Okanagan Region. Building on the results of many years of previously completed planning studies and extensive engagement with local communities, CO-ITS recommended initiatives and projects that will improve safety and reliability for the movement of people and goods. In addition, CO-ITS identified opportunities to better align with economic, community and regional goals including improved affordability, liveability, and housing.

Action

In order to guide the development and evaluation of options in the strategy, CO-ITS established a comprehensive set of guiding principles. The guiding principles were based on current planning best practices, provincial policies, project objectives, and community engagement. A Gender Based Analysis Plus (GBA+) equity and inclusion lens was also applied to ensure that all community members would be considered in the decision-making process.

Opportunity

The CO-ITS Guiding Principles included a series of specific objectives, articulated in five goals, that were used to identify, develop, and evaluate potential transportation improvements.

GUIDING PRINCIPLE (GOAL)	OBJECTIVE
Enable Sustainable Transportation Choices that are healthier, more affordable, and reduce greenhouse gas emissions by:	• Reducing the need to travel by integrating transportation and land use planning and supporting denser mixed-use developments in core areas. • Ensuring a reliable and attractive high frequency transit service along the Highway 97 corridor. • Supporting the development of safe and convenient local walking, bicycling, and transit networks. • Implementing policies and developing infrastructure that promote more energy efficient choices.
Strengthen Connections between Communities by:	• Improving the safety and resiliency of key connections between rural and urban areas. • Increasing the people-moving capacity along Highway 97 through transit priority and high-occupancy vehicle measures that connect core areas. • Enhancing inter-regional transit and bicycling connections.
Promote Trade and Investment in the Region by:	• Enhancing the reliability and safety of goods movement in the Central Okanagan. • Enabling local residents to fully participate in and contribute to the economy through enhanced transportation options. • Leverage transportation improvements to attract investment and expand business opportunities.
Enhance Affordability, Inclusivity, and Livability by:	• Implementing transportation infrastructure and services that are accessible, safe, affordable, and comfortable for all. • Enabling greater access to transportation choices and modes. • Ensuring that the benefits of investments are shared for multiple purposes by a wider cross-section of society
Identify opportunities to partner with local governments, community organizations, and indigenous communities to deliver programs, services, and infrastructure by:	• Coordinating transportation investments with regional growth and development planning. • Supporting the development of affordable housing and mixed-use projects in core areas. • Building off previously completed planning processes in the Central Okanagan and moving projects towards implementation. • Support collaboration with non-profits and community services that provide transportation services.

Further information regarding the Central Okanagan Integrated Transportation Strategy can be found here: https://www2.gov.bc.ca/gov/content/transportation/transportation-reports-and-reference/reports-studies/okanagan/central-okanagan-integrated-transportation-strategy

PHASE 3

Develop & Screen Opportunities & Options

The objective of Phase 3 is to explore all possible opportunities and options to realize the vision, goals, and objectives of the strategic transportation plan.

The steps in Phase 3 are:

Step 3.1 Identify Opportunities

Step 3.2 Develop Options

Step 3.3 Perform Initial Screening of Options

By the end of this phase, a shortlist of options will be prepared for further evaluation and refinement in Phase 4.

Step 3.1

Identify Opportunities

Identify a list of high-level initiatives, options, or opportunities, that respond to the vision, goals, and objectives established in Phase 2. Opportunities should look beyond typical barriers and constraints and consider all possible perspectives. A 'blue sky' approach (where no limits or constraints are placed on idea generation) is initially recommended to ensure a comprehensive spectrum of opportunities is considered. At this step, care should be taken to avoid making assumptions regarding expected outcomes.

Opportunity identification is an essential step in the strategic planning process because it allows organizations to explore a wide variety of ideas and solutions, and to evaluate different approaches to find the most effective way to achieve the vision, goals, and objectives. Informed decision-making is enabled through this process by identifying, reviewing, and comparing all possible opportunities.

Document Findings

During this Phase it is important to clearly document all the opportunities and options identified to demonstrate to decision makers and interested parties that each angle was explored and considered as part of the planning process.

Engagement could be a powerful tool to activate during this step of the process. Who is engaged at this stage of the process will depend on the nature of the study. Through engagement, a broader diversity of backgrounds and experiences can offer new insights and encourage the exploration of different angles and approaches to realizing the strategic initiative.

By the end of this step, a long list of opportunities should be identified and documented.

Guiding Questions

PHASE 3 | STEP 3.1

When identifying opportunities, consider:

- *Has a broad range of short-, medium-, and long-term opportunities been explored?*
- *Have a wide variety of perspectives been involved in this process?*
- *Do the opportunities respond to what users within the study area value? (e.g. travel time reduction, transportation mode choice, or transit network expansion)*
- *Do the opportunities respond to each of the Strategic Transportation Plan's goals and objectives?*
- *Do the opportunities align with the objectives and targets of relevant provincial priorities and strategies (i.e. CleanBC, BC Road Safety Strategy)?*
- *Were the Integrated Transportation Planning strategic goals and objectives considered in this process (Complete Communities; Safe and Integrated Transportation Systems; Economic Competitiveness; Resilience & Climate Change)?*
- *Were the Integrated Transportation Planning strategic lenses applied to this process (Diversity and Inclusion; Equity; Reconciliation)?*
- *Have options been identified in the past through previously completed planning studies or engagement?*
- *Have policy, program, operational, and infrastructure solutions to address each of the project goals been considered?*
- *Have all modes of transportation been considered?*
- *Have opportunities for co-benefits (e.g. land use, active transportation, transit, park & ride etc.) been explored?*
- *How might future technologies impact the study area (e.g. emerging modes of transportation)?*
- *Has a 'blue sky' approach been used to ensure that all potential opportunities are documented and considered, regardless of perceived barriers?*
- *Is engagement with external interested parties and First Nations appropriate at this stage?*

Step 3.2

Develop Options

Next, develop a broad list of options by grouping together complimentary opportunities. Typically, individual opportunities are aligned with other opportunities that either enhance the overall outcomes, must be implemented together, or that are related in some way (e.g. timeframe, geography, technology and mode-type, scale, and infrastructure). For example, an opportunity to extend a transit priority lane may require the relocation of an existing active transportation facility. If improving the active transportation facility is also a potential opportunity, these two opportunities may be combined into one option (e.g. extend transit priority lane and relocate and improve active transportation facility).

In some cases, single opportunities may need to remain as their own option. By the end of this step, a longlist of options should be established and documented, which will be screened and evaluated in detail throughout the remainder of the planning process. The level of effort through this phase is intended to be relatively low, with options developed at a conceptual or "sketch" level only.

Guiding Questions

PHASE 3 | STEP 3.2

When developing options, consider:

- *Has a broad spectrum of potential options been considered, including policy, program, and infrastructure recommendations?*
- *Have potential options been developed to address each of the identified issues and opportunities?*
- *Has input from other partners, agencies, interested parties, and community members been included in the development of options?*
- *Have both short and long-term options been considered? Have both incremental and transformational options been considered?*

Step 3.3

Perform an Initial Screening of Options

Perform a preliminary screening of each identified option against established and documented criteria. This process will quickly eliminate clearly impractical or less promising options. Criteria may include, but are not limited to:

- Alignment with vision, goals, and objectives (Phase 2)
- High-level feasibility analysis including cost, impacts to community, property considerations etc.
- Effectiveness at addressing challenges and degree of impact
- Scope and scale of the problem versus the proposed solution
- Risks and unknowns
- 'Fatal flaws' options that have insurmountable challenges

Note that detailed analysis and refinement of options is not completed at this stage. However, some desktop analysis, concept planning, or high-level modelling may be required to make initial screening decisions.

By the end of this step, a shortlist of feasible options is established for further evaluation

Guiding Questions

PHASE 3 | STEP 3.3

When screening options, consider:

- *Do the options align with the vision, goals, and objectives?*
- *Have trade-offs for each option been considered?*
- *Does the scale of the option(s) reflect the scale of the problem?*
- *Do the options consider short-, medium-, and long-term impacts for the study area?*
- *Have the options considered integrated, multi-modal transportation of varying scales (walking, bicycling, micro-mobility, transit, land use etc.)?*
- *What is in scope vs. out of scope? Consider geographic span, high-level cost, available technology, etc.*
- *What assumptions have been made that might require further analysis in later steps of the planning process?*
- *Do options complement or conflict with other strategic initiatives, policies, program areas, plans, or projects (local government, provincial, federal, First Nations)?*
- *Do options complement or conflict with other interested parties, such as active transportation advocacy groups, and goods movement dependant industries?*
- *Do the options consider resiliency factors such as redundancy, robustness, rapidity, and resourcefulness?*

Case Study: Central Okanagan Integrated Transportation Strategy (CO-ITS)

Situation

Population growth in the Okanagan Valley creates new transportation challenges and opportunities that span different communities. The Central Okanagan Integrated Transportation Strategy (CO-ITS) adopted a multi-modal, interjurisdictional approach to synthesize the findings from multiple studies centred on the Highway 97 corridor.

Action

The CO-ITS project team developed five guiding principles based on the strategy objectives, community engagement, and the findings from an in-depth GBA+ exercise that documented the different transportation needs of equity-deserving groups. The guiding principles were applied consistently to screen, develop, and evaluate project options from each study. The project relied on these guiding principles to help them prioritize competing project options that proposed distinctly different improvement options for the same location or to address the same issue. For example, the CO-ITS used the guiding principles to arrive at the recommendation that increasing the 'people moving' capacity of the existing W.R. Bennett Bridge (through transit priority measures) across Okanagan Lake is a more suitable option, compared to adding a second crossing.

This conclusion was based on both qualitative and quantitative analysis of options across a number of perspectives in alignment with the CO-ITS Guiding Principles and corresponding Objectives. The results of this screening process was summarized in qualitative evaluation summarize like the example below.

Enable sustainable transportation choices that are healthier, more affordable, and reduce greenhouse gas emissions	✓✓
Strengthen connections between communities	✓✓
Promote trade and investment in the region	✓
Enhance affordability, inclusivity, and livability	✓
Identify opportunities to partner with local governments, community organizations, and indigenous communities to deliver programs, services, and infrastructure	✓✓

Opportunity

The screening process enabled the project team to develop a comprehensive implementation strategy that clearly identified next steps for project options and improvements across the entire regional transportation system, including roads, transit, active transportation, and supportive policies.

PHASE 4

Refine and Evaluate Options

The objective of Phase 4 is to refine and evaluate the shortlist of options and select the preferred option for the strategic transportation plan.

There are two steps in Phase 4:

Step 4.1	Refine Options
Step 4.2	Evaluate Options and Select the Preferred Option(s)

Step 4.1

Refine Options

Further refine the shortlisted options by addressing remaining concerns and uncertainties. This refinement process is iterative and will likely involve additional analyses and modelling, preparation of conceptual designs, and adjustments to the options by adding or removing elements. The refinement process should continue until there is a comprehensive understanding of the options, their implications, and their alignment with the vision, goals, and objectives.

It is important to remain flexible during this step, since options may need to be adjusted based on new information that emerges or as conditions change. The objective of this step is to establish well-informed, effective options that could all feasibly respond to the overall plan's vision.

Guiding Questions

PHASE 4 | STEP 4.1

When refining options, consider:

- *Were internal and external factors considered that might impact the success of each option? How could these factors be mitigated?*
- *Are there elements of previously screened-out options that can be included in another remaining option?*
- *Are there minor changes or modifications to any options that could mitigate potential challenges and risks identified during the option screening step?*
- *Are there variations of options that should be considered?*
- *Could the options be packaged in different ways to better achieve the project objectives or mitigate risks?*
- *Is engagement with external interested parties and First Nations appropriate at this stage?*

Step 4.2

Evaluate Options and Select the Preferred Option(s)

Evaluate each of the refined options using defined criteria defined criteria and select the option(s) that is most align with the plan's vision, goals, and objectives, and which has the highest potential for success. Criteria are defined by each planning study and could include (but are not limited to):

- Cost effectiveness (typically in terms of cost to society)
- Economic impact (including economic impact on various sectors and interested parties)
- Environmental impact
- Climate resiliency
- Safety impact (to all modes of transportation)
- Improvements to accessibility, equity, and mobility
- Opportunities for reconciliation and impact on First Nations interests
- Population reach
- Timeframe for implementation
- Alignment with other current strategies and initiatives
- Administrative complexity or ease of implementation
- Public and interested party impacts, perspectives, and approval.

In some cases, the evaluation of options will seek to identify the preferred option of two competing choices (i.e. where only one option can be chosen). It may be possible to implement many options in some cases however, in others, choosing one option eliminates the other possibilities. Identifying the option(s) that addresses the most urgent need is desired to inform project prioritization.

A number of approaches may be used at this step, depending on the information available and the context of options being considered. A qualitative evaluation can be undertaken to assess and rank how the options are expected to achieve the overall goals and objectives. Other frameworks, including MOTT's Multiple Criteria Assessment (MCA) or Multiple Account Evaluation (MAE) processes, may also be undertaken. While the full MCA or MAE process is best suited to Project Planning, a high-level qualitative version of these frameworks may still be useful. Whichever evaluation framework is used, it is essential to use and clearly define the objective, along with specific and clear evaluation criteria, to eliminate bias and subjectivity from the process. For example, defining the threshold of 'low-, medium- and high-impact' for each parameter so that it is clear how each option was evaluated.

The final decision on the preferred strategic option package should be well-informed by project team expertise, professional judgement, and interested party input, and should take into account all relevant factors and considerations.

Guiding Questions

PHASE 4 | STEP 4.2

When evaluating and selecting options, consider:

- *What criteria is appropriate to use to rank each refined option package?*
- *What measures have been put in place to eliminate bias and maintain impartiality during this process?*
- *Does the selected option package align with each of the Integrated Transportation Planning Framework strategic goals and objectives (Complete Communities; Safe & Integrated Transportation Systems; Economic Competitiveness; Resilience & Climate Change)? Refer to section 3.1.*
- *Does the selected option package align with each of the Integrated Transportation Planning Framework strategic lenses (Diversity & Inclusion; Equity; Reconciliation)? Refer to section 3.2.*
- *What options are most effective at responding to the vision, goals, and objectives?*
- *What are the implications of the selected option(s)?*
- *Can the option evaluation results be clearly communicated and understood by readers who have not been directly involved in the process?*


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PHASE 5

Prioritize Recommendations and Finalize Strategy

The objective of the final Phase of strategic transportation planning is to identify and prioritize the preferred option into a set of short-, medium-, and long-term actions and next steps, understand dependences, and finalize the plan.

There are two steps in Phase 5:

Step 5.1 Prioritize Option(s)

Step 5.2 Finalize the Plan

Step 5.1

Prioritize Options

The penultimate step to completing the strategic transportation plan is to prioritize the selected option package into a series of short-, medium-, and long-term actions or initiatives. The prioritization process involves balancing multiple factors that together result in a strategic transportation plan that is both feasible and effective in achieving the overall strategic vision. Project teams (and potentially interested parties) should be actively engaged in the prioritization process to ensure overall organizational alignment and clarity. Key factors to consider when prioritizing actions include (but are not limited to):

- Ease of implementation of specific option elements
- Level of impact on achieving your goals and objectives
- Risk and level of certainty with respect to implementation
- Timeline of need (urgent needs and critical vulnerabilities)
- Other existing and ongoing initiatives
- Existing and future capabilities and resources of the organizations involved in implementation
- Dependencies and logical sequencing of actions
- Degree of alignment with other government plans (cross-government, local governments, First Nations, etc.)
- Budget and expected availability of funding (consider cost to all levels of government)
- Scale of impact and benefit to communities within the study area
- Scale of impact to relevant interested parties and sectors (e.g. private sector)

Step 5.2

Finalize the Plan

In this final step of the strategic planning process, prepare a formal document that encapsulates the finalized strategic integrated transportation plan (Phases 1 through 5). This should include:

- An executive summary
- An overview of the planning process
- The strategic vision, goals, and objectives
- An action plan describing specific initiatives, the associated timelines, resource requirements, and who is responsible for implementation
- Supporting analyses and evidence

A monitoring plan should also be developed to establish a framework for regular monitoring and assessment of the progress and effectiveness of the strategic plan. The plan should clearly state the frequency of reviews, identify groups responsible for monitoring, and outline procedures for adjusting the strategic plan based on changing conditions and/or performance of the plan.

Once the strategic transportation plan is finalized, key steps to conclude the plan should be completed. This includes seeking executive MOTT approval(s), communicating to partners, First Nations, and interested parties, and publicly launching the plan. In some cases, a more concise public facing document may be appropriate in addition to the detailed technical report(s).

Case Study: South Island Transportation Strategy (SITS)

Situation

The South Island Transportation Strategy laid the groundwork for improvements to the way people and goods move around South Vancouver Island. Since the Strategy's completion in 2020, significant progress has been made in advancing and implementing dozens of recommendations from SITS. An ongoing progress monitoring reporting process has been undertaken to communicate progress on the strategy over time.

Action

A Progress Report was published in 2024 that reviews and summarizes project by project progress across the SITS goals. This report includes various strategy monitoring measures including project status, levels of investment, and other milestones. An example of the Accomplishments summary from the SITS Progress Report is illustrated to the right.

Accomplishments

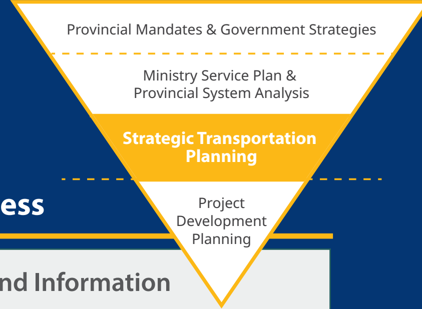
Goal 1: Ensure sustainable options for a variety of travel modes

	Initiative	Project	Status
Short	Prioritize First Nations community transit stop improvements	Two new transit stops on West Saanich Road (Pauquachin)	*complete*
		With BC Transit, new service on East Sooke Road including a new transit stop (Beecher Bay) ***(image 1)***	*complete*
		Enhanced transit stops at Hwy 17/Mt Newton Cross Road (Tsawout)	*complete*
	Install EV charging stations at mobility hubs	New Hwy 14 Park & Ride with eight EV charging stations (target completion spring 2023)	*complete*
	Support BC Transit's Low Carbon Fleet Program (battery electric buses)	New View Royal handyDART Centre will expand handyDART service and accommodate a larger transit fleet including new battery electric buses (in-service 2025)	*under construction*
		BC Transit's first 10 battery electric buses are scheduled for delivery in Victoria (in-service 2024)	*in progress*
		Upgrades being made to BC Transit facilities to accommodate future battery electric buses	*in progress*
	Prioritize transit queue jumpers on Hwy 17	Installed at Hwy 17/Mt Newton Cross Road ***(image 2)***	*complete*
		Designing transit queue jump lane at Hwy 17/Sayward Road southbound	*in progress*
Medium	With BC Transit, advance Rapid Transit on Hwy 1 between Victoria and the western communities	Launching Downtown to West Shore RapidBus (spring 2023)	*complete*
		Designing next phase bus-on-shoulder lanes (McKenzie to Six-Mile)	*in progress*
		Designing Burnside Bridge widening to accommodate bus-on-shoulder	*in progress*
		With BC Transit, View Royal and Colwood, designing transit priority queue jump lanes on Old Island Hwy	*in progress*
		West Shore Rapid Transit Priority Corridor Planning	*in progress*
Long	Explore Island Rail Corridor commuter rail (Westhills to Victoria)	Engaging with local stakeholders, First Nations, Island Corridor Foundation, and Transport Canada	*ongoing*
	Explore marine transportation corridors	BC Ferries initiated engagement for Charting the Course: A Vision for Coastal Ferries	*in progress*

Opportunity

A publicly available Progress Report provides community members and stakeholders with an understanding of progress on the implementation of the strategy. This approach improves confidence in the value of community and stakeholder input, may generate greater participation in future initiatives, and contributes to a greater sense of openness and transparency.

The South Island Transportation Strategy Progress Report can be found here: https://www2.gov.bc.ca/assets/gov/driving-and-transportation/reports-and-reference/reports-and-studies/vancouver-island-south-coast/south-island-transportation/south-island-transportation-strategy-progress-report-september-2024.pdf



Integrated Transportation Planning Guide | Strategic Transportation Planning Process

1 Take Stock of Existing & Future Conditions

1. Gather & Review Background Information
2. Assess the Existing & Future Conditions of the Study Area
3. Assess the Existing & Future Conditions of the Study Area

GUIDING QUESTIONS

- What are the transportation and land use priorities, goals, and aspirations of the communities within the study area?
- What are the existing and future land uses in the study area? How will this impact transportation systems?
- Have all modes of transportation been considered?
- What are the challenges the strategic transportation plan will need to address?
- What evidence do we have that this challenge or opportunity is significant?

2 Develop Vision, Goals & Objectives

1. Develop a Vision Statement
2. Develop Goals & Objectives

GUIDING QUESTIONS

- How can engagement with local governments and First Nations inform the vision, goals, and objectives?
- Does the vision acknowledge the relationship between land use and transportation?
- Are your goals and objectives specific, measurable (quantitatively, qualitatively) and attainable?
- Do the goals reflect all users and members of the community?
- Do the goals and objectives consider all modes of transportation?

3 Develop & Screen Opportunities & Options

1. Identify Opportunities
2. Develop Options
3. Perform an Initial Screening of Options

GUIDING QUESTIONS

- Have a broad range of short and medium-term opportunities been identified?
- Have policy, program, operational and infrastructure solutions to address each of the goals been considered?
- Do the options align with the vision, goals, and objectives of the plan?
- Do the options consider resiliency factors such as redundancy, robustness, rapidity, and resourcefulness?
- Have all modes of transportation been considered?

4 Refine & Evaluate Options

1. Refine Options
2. Evaluate Options & Select Preferred Option

GUIDING QUESTIONS

- Are there elements of previously screened-out options that can be included in another remaining option?
- Are there minor changes or modifications to any options packages that could mitigate potential challenges and risks identified during the option screening phase?
- Which options are the most effective at advancing the vision, goals, and objectives?
- Which options are the most responsive to urgent needs?

5 Prioritized Recommendations & Finalize the Strategy

1. Prioritize Options
2. Finalize the Strategic Transportation Plan

GUIDING QUESTIONS

- Are there clear implementation phases or priorities? Are there obvious first steps?
- Are there any actions that are time-sensitive or critical to the success of the strategy?
- What is the level of impact of each action on the strategy's vision, goals, and objectives?
- What is the scale of community impact and benefit?
- Who are the key stakeholders involved in the strategy, and what are their roles and responsibilities?