Regional Transportation Plan

City of Kelowna

June 15th 2020

smartTRIPS

Agenda

1. Welcome
2. STPCO and What is Next
3. Draft Regional Transportation Plan
4. Draft Regional Bicycling and Trails Master Plan
5. Draft Regional Disruptive Mobility Strategy
6. Next Steps

Regional Governance Update

STPCO

Sustainable Transportation Partnership of the Central Okanagan

STPCO

Interjurisdictional service agreement

Local Government Service Agreement, under the auspices of the Local Government Act

"STPCO was formally established in 2012. At that time, the partnership agreement contemplated the joint funding and delivery of services related to transportation demand management, regional transportation planning and regional transportation surveys and studies."

2018-2020 Work Plan

It is expected to evolve in 2021

LAKE COUNTRY
Life. The Okanagan Way.

City of Kelowna

WEST KELOWNA

WESTBANK FIRST NATION

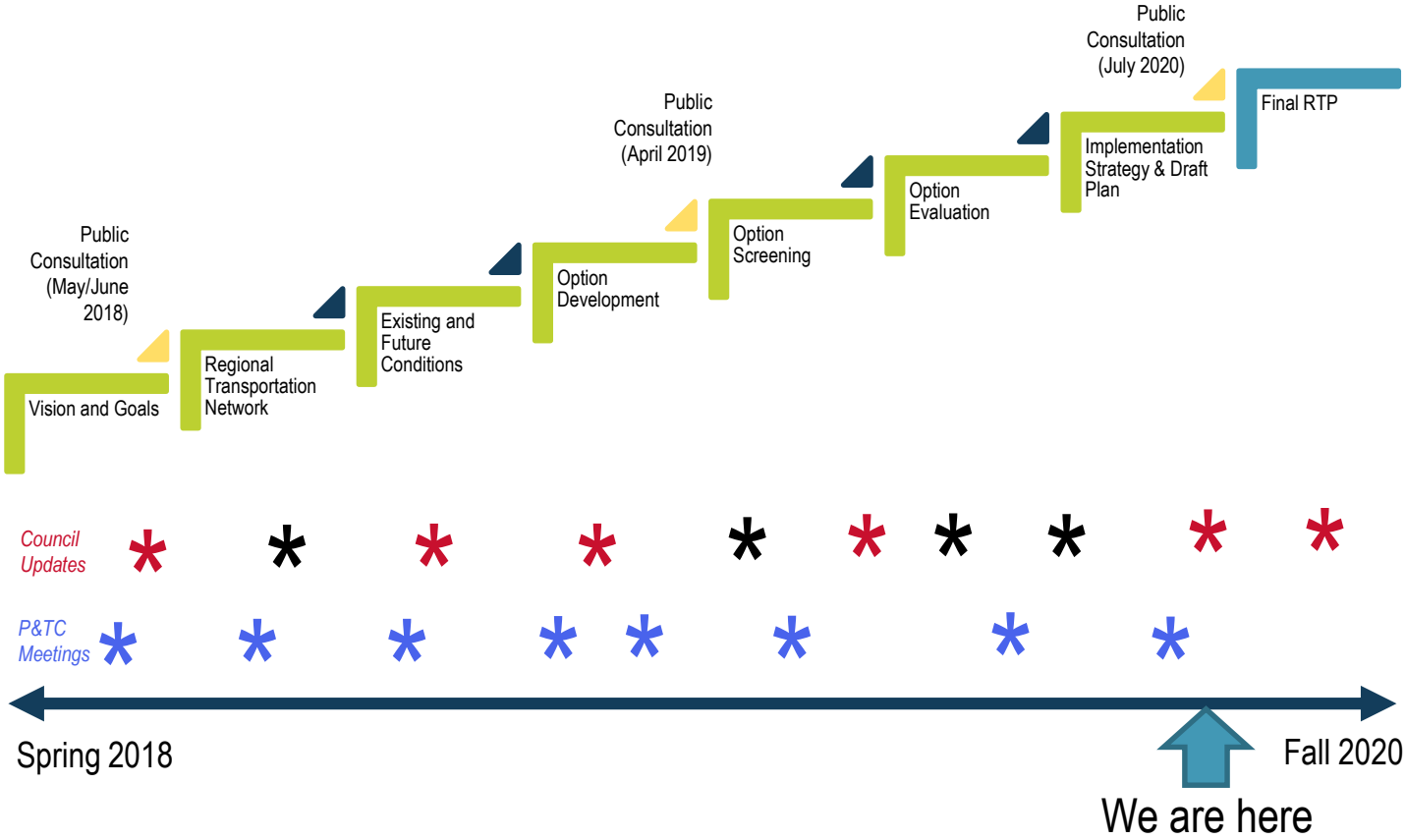
PEACHLAND
ON THE LAKE

RDCO
REGIONAL DISTRICT of CENTRAL OKANAGAN

RTP Timeline and Overview

Regional Transportation Plan - Schedule

Regional Transportation Plan - Schedule



What is the RTP?

The RTP identifies transportation projects and priorities that will help build and maintain a healthy, thriving and connected future for the Central Okanagan

Connecting our Region

- The long-range, high-level plan:
  - Establishes a framework of priorities over the next 20 years so communities can plan and seek funding collaboratively, as a unified region
  - Will help create a region where more people can choose sustainable and affordable transportation options
  - Will help improve the movement of people and goods

Working Together

The RTP reflects the interests and values we heard from people across the region:

- The plan was developed following more than two years of technical studies, consultation, and unprecedented region-wide partnership and collaboration
- Consultation with residents across the Central Okanagan, from Peachland to Lake Country, since 2018
- A partnership between the City of West Kelowna, District of Lake Country, District of Peachland, Westbank First Nation, City of Kelowna, and the Regional District of the Central Okanagan and in collaboration with the Ministry of Transportation and BC Transit

Key Benefits

The RTP contains interconnected recommendations for projects, programs and policies that will support and enhance the region's economy, environment, and quality of life; they will:

- Connect people and places across the region
- Help people of all ages and abilities get around
- Achieve fast and reliable transit
- Prepare for future population growth and technology innovations
- Reduce the growth of traffic congestion and greenhouse gases
- Help the region's economic recovery post COVID-19

COVID-19 and the RTP

- Situation is evolving and uncertain
- Short-term travel impacts:
  - increases in telework
  - decreases in transit
  - increases in on-line deliveries
- Long-term planning for next 20 years (2040)
  - RTP vision is still relevant
- RTP can help provide a roadmap for economic recovery

Draft Regional Transportation Plan

RTP Vision:

“A transportation system that connects people to regional destinations within the Central Okanagan and beyond, supporting and enhancing the region’s economy, social networks, and natural ecosystem.”

RTP Goals:

SAFE - transports people and goods safely

EFFICIENT - minimizes energy, emissions and travel times

SUSTAINABLE –creates a net positive social, environmental, and economic benefit to the region and future generations

AFFORDABLE – provides value to all users while minimizing costs to users and taxpayers

ECONOMIC GROWTH - supports regional economic growth

EQUITABLE –addresses the transportation needs of all areas, ages and incomes

ACCESSIBILITY – applies the principles of universal access

QUALITY OF LIFE - minimizes noise, visual and community effects while supporting community cohesion

ENVIRONMENTALLY RESPONSIBLE - minimizes negative effects on the natural ecosystem

MULTIMODAL – increases the variety of travel choices available

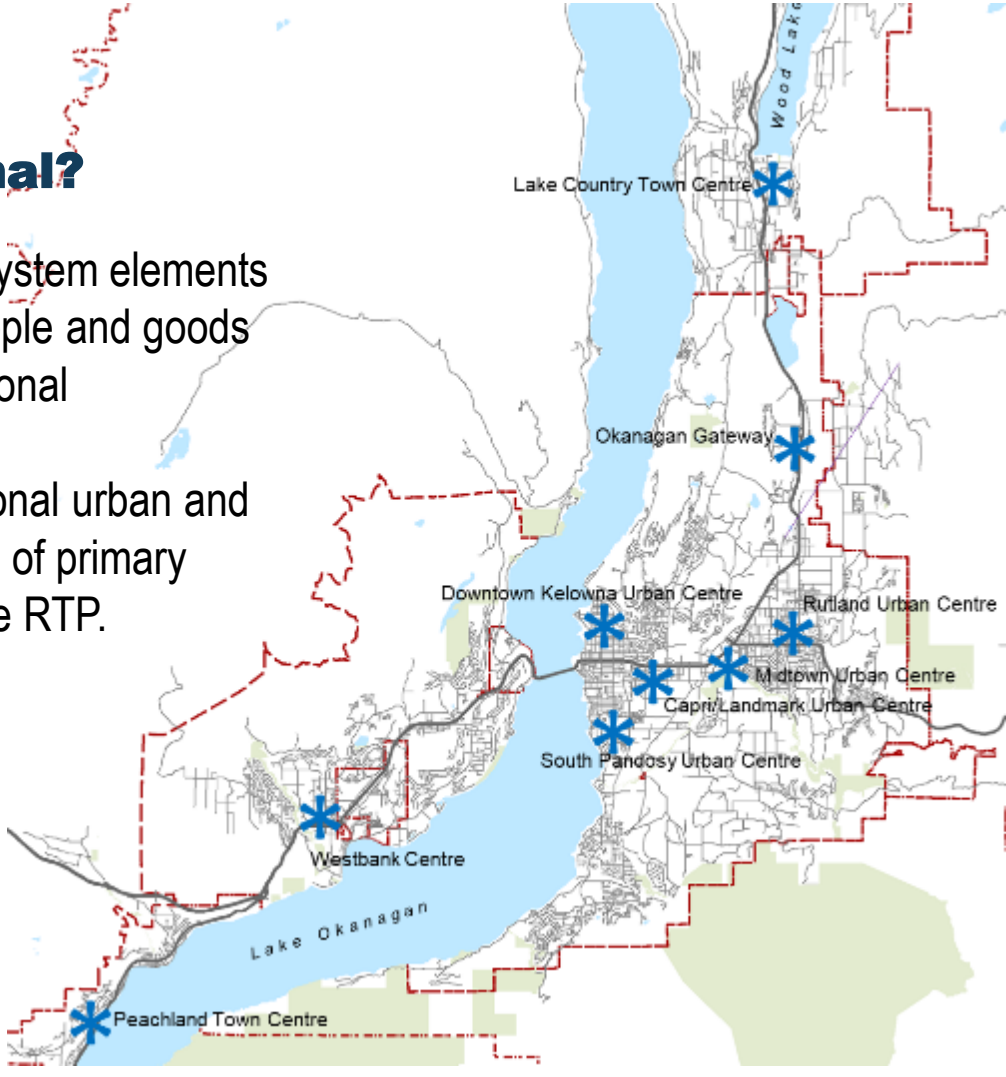
ADAPTABLE – can change in response to evolving technology and societal trends

Chapter 1: Connecting Our Region

- Introduction
- The Process for the Central Okanagan's First Regional Transportation Plan

What is Regional?

- Transportation system elements that connect people and goods to important regional destinations.
- Connecting regional urban and town centres are of primary importance in the RTP.



Chapter: 2
Existing and Future Conditions

- Regional Demographics
- Regional Travel Patterns
- Travel Conditions
- Emerging Trends

Existing and Future Conditions – Key Findings

Passenger Vehicles

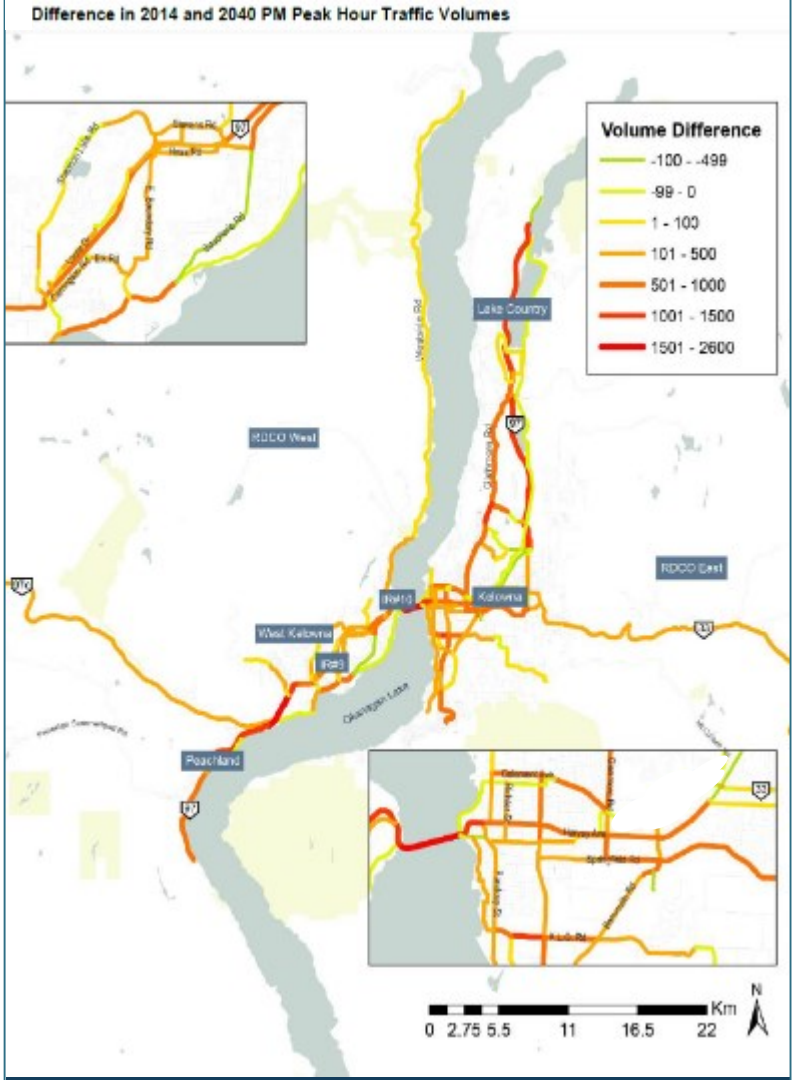
- Traffic volumes on Highway 97 continue to grow
- Within Kelowna, lack of capacity means lower growth on Highway 97 – new growth goes to Glenmore Road

Transit

- Population within walking distance of regional transit more than double by 2040
- UBCO transit demand to triple by 2040

Walking and Bicycling

- Okanagan Rail Trail key backbone
- Networks strong in Kelowna; key gaps elsewhere



Chapter 3: The Regional Transportation Network

- The Region
- Regional Transportation Modes: Background and Considerations

Transit Considerations

Light Rail Transit

- Section of Highway 97 closest to downtown Kelowna will be within lower threshold of LRT feasibility; no other opportunity for feasible **corridor**
- Costs for constructed corridors in the range of $1B - $2B per kilometre

Bus Rapid Transit / RapidBus / Autonomous Rapid Transit

- Usually lower cost, greater flexibility and easier phasing that LRT
- Corridors could be upgraded in the future to LRT or other new technology

Lake Ferries

- Densities on west side of the lake not sufficient for ferry
- Water taxi (similar to those operating to/from Granville Island) may be feasible with a private partner and could be a precursor to a formal ferry service

Chapter 5: Recommended Projects, Programs and Policies

- Key Strategies and Services
- Regional Transportation Policy Guidance
- Potential Projects

Key Strategies and Services

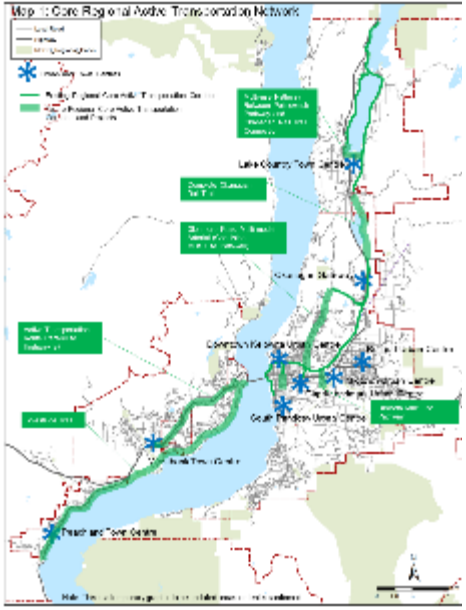
- Land Use
  - Urban and town centres
  - Regional transit corridors
  - Mobility hubs
- Multi-modal Integration
  - Local transit routes
  - Mobility hubs
  - Park and ride
  - Demand responsive transit
- Pricing
  - Parking
  - Mobility pricing
- Shared Mobility
  - Micromobility
  - Car share
  - Ridehailing

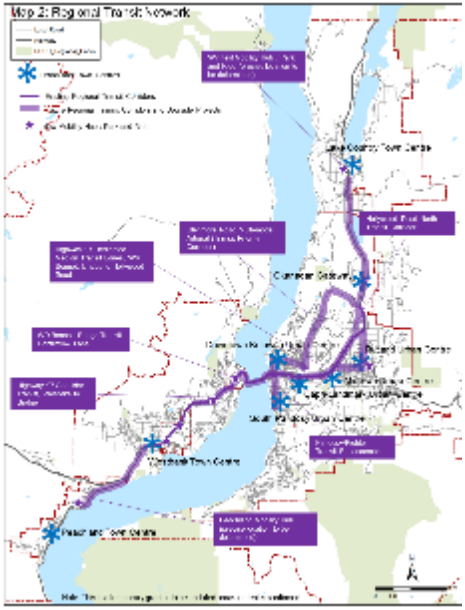
Policy Guidance Highlights

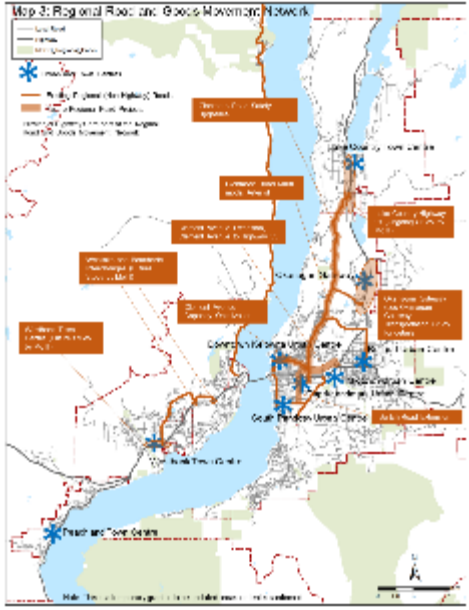
- Inclusion of RTP provisions in local TMP and OCP documents
- Strategies to reduce vehicle-kilometres and GHG emissions
- Work with BC Transit to accelerate introduction of zero-emission transit vehicles
- Agreement by all to be supportive of funding and grant applications for regional transportation projects, programs and services identified in the RTP
- Develop a regional commercial goods movement strategy
- Address equity in local transportation master plans
- Investigate technological solutions that increase network capacity before investing in significant roadway capacity expansion

Projects

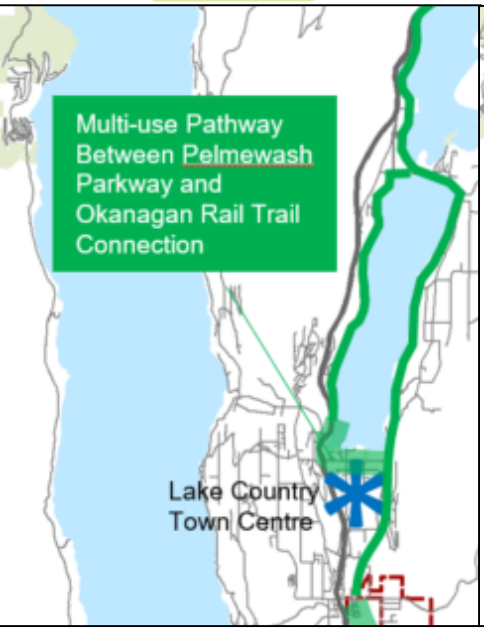
- All are concepts that require detailed planning and design
- Recommendations that involve the highway require further study and will be analyzed as part of the next phase of the Ministry of Transportation and Infrastructure's Central Okanagan Planning Study
- BC Transit will be an important partner on many potential projects







Lake Country

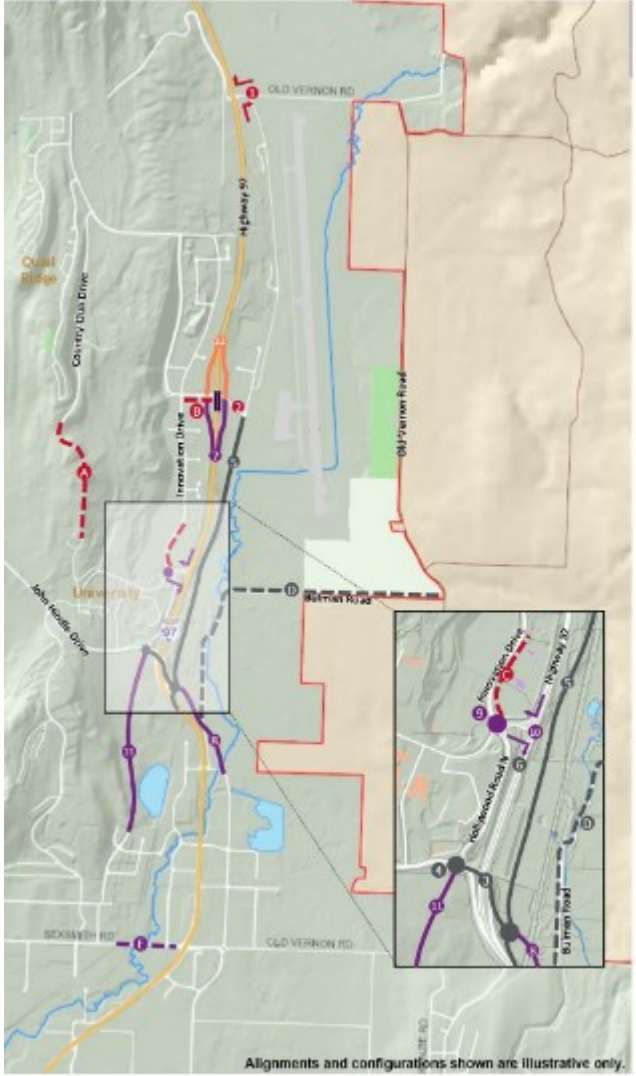


- Town centre land use intensification
- On-Demand Transit
- RapidBus Extension as ridership warrants

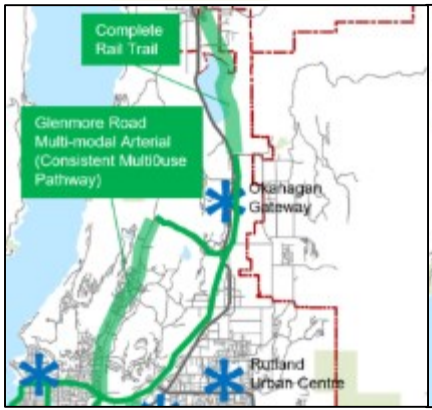
Okanagan Gateway

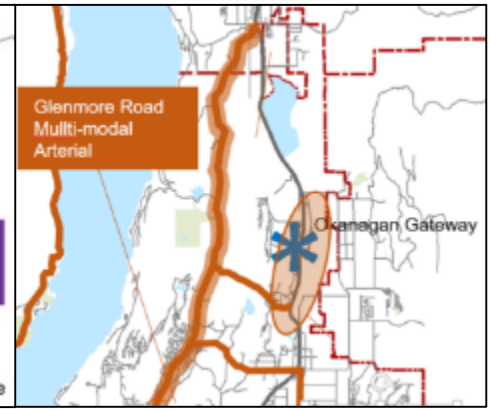
Draft recommendations from the OGTS:

- Phased upgrades to Hwy 97/John Hindle Drive and Highway 97/Airport Way
- Strengthen city street network to better link Gateway destinations to each other and Hwy 97
- Expanded transit service to accommodate future campus growth
- Improve transit service south of UBCO in coordination with future Rutland transit service expansions
- Extend transit to the Airport to reduce transfers
- Strengthen the active transportation network by leveraging existing facilities including John Hindle Drive and the Okanagan Rail Trail



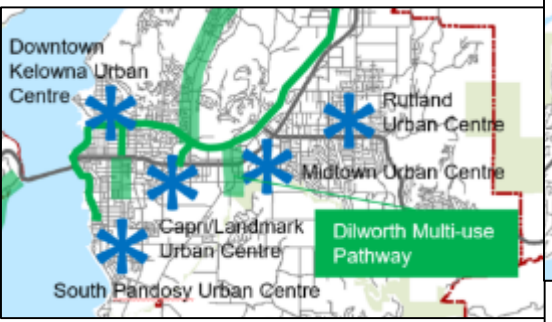
Kelowna – East, RDCO East

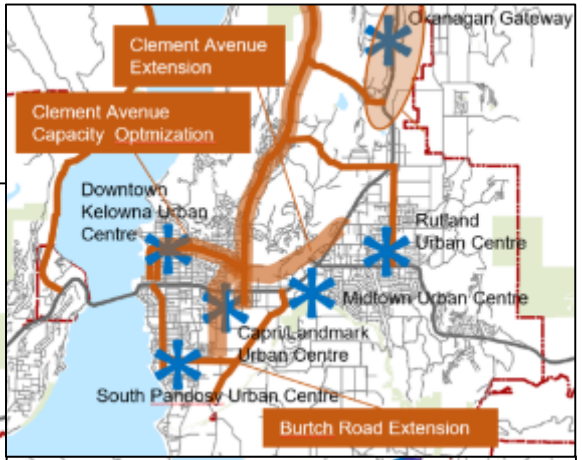


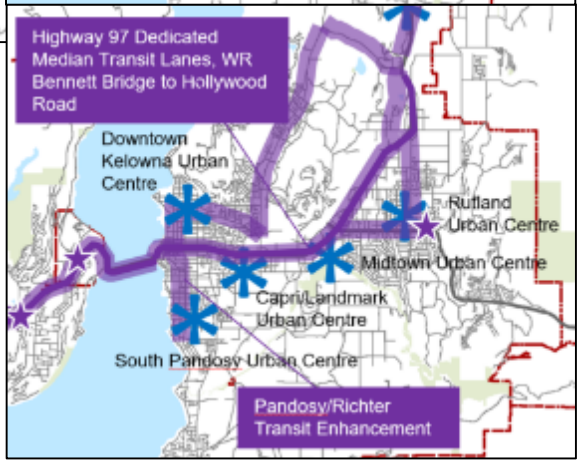


- Increased transit frequency
- Transit supportive land use along Glenmore and Hollywood Road North
- Rural RDCO On-Demand Transit
- Highway 33 ongoing maintenance and safety upgrades

Kelowna - West



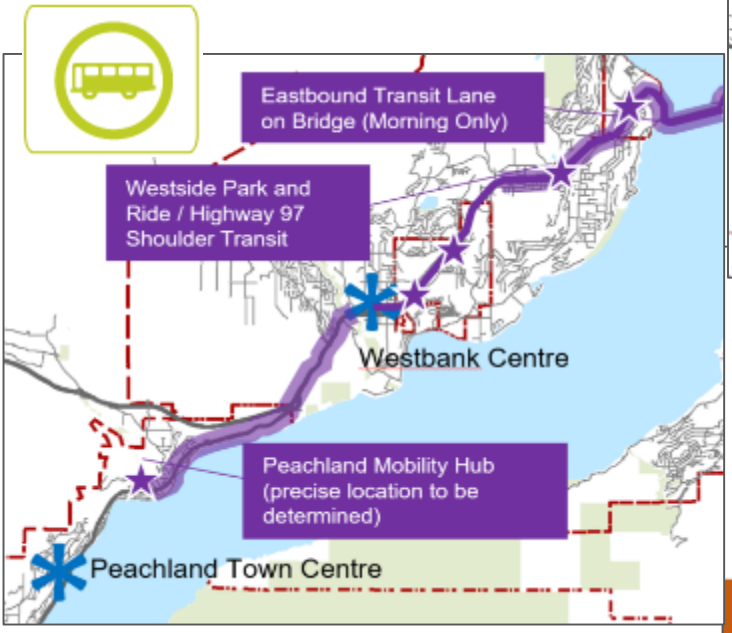


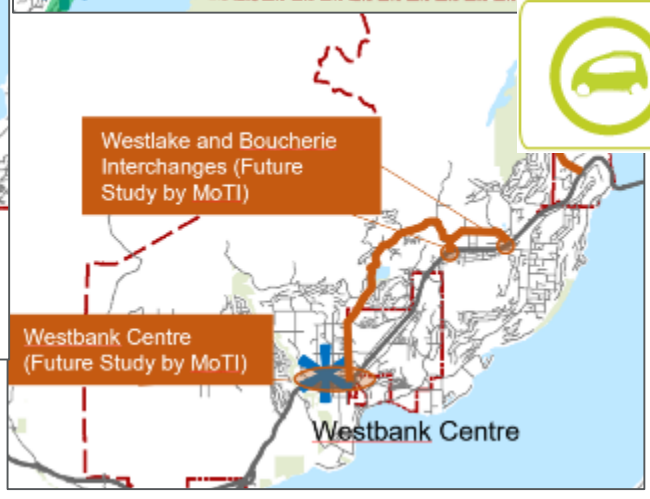


- Local transit network reorganization
- Transit supportive land use on Highway 97

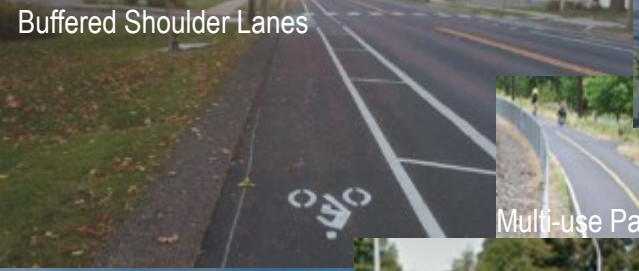
West Kelowna, WFN, RDCO West, Peachland

- Town centre land use intensification
- Highway 97 Park and Ride
- On-Demand Transit
- RapidBus Extension to Peachland as ridership warrants





- Westside Road ongoing safety upgrades and maintenance

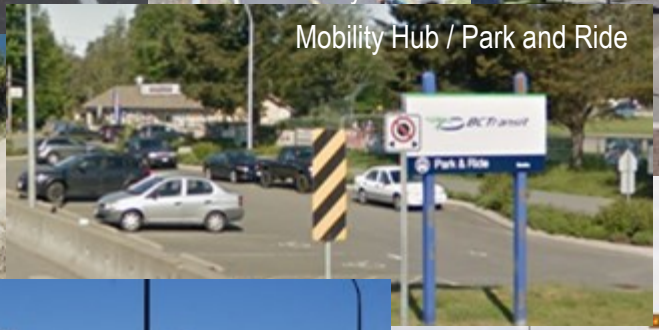

Buffered Shoulder Lanes

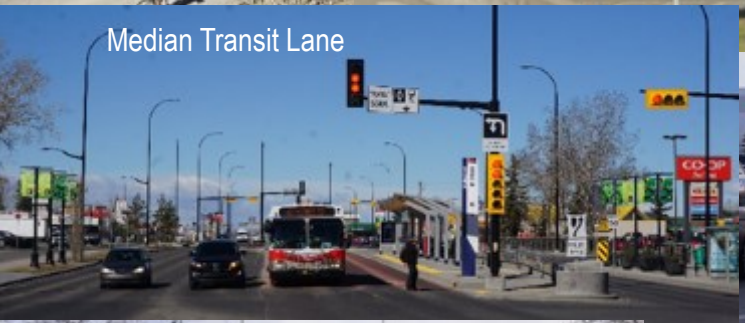

Transit Exchange


Multi-use Pathway

Protected Bike Lane


Rail Trail


Mobility Hub / Park and Ride


Median Transit Lane


Transit Queue Jump Lane


Transit Lane on Shoulder


Pathway in Highway Right-of-Way

Draft Regional Bicycling and Trails Master Plan Overview

Draft Regional Bicycling and Trails Master Plan (RBTMP)

Plan Objectives:

Update the 2012 Central Okanagan Regional Active Transportation Master Plan

Continue the **unified vision** of a future bicycle network

Align with the RTP

Plan Goals

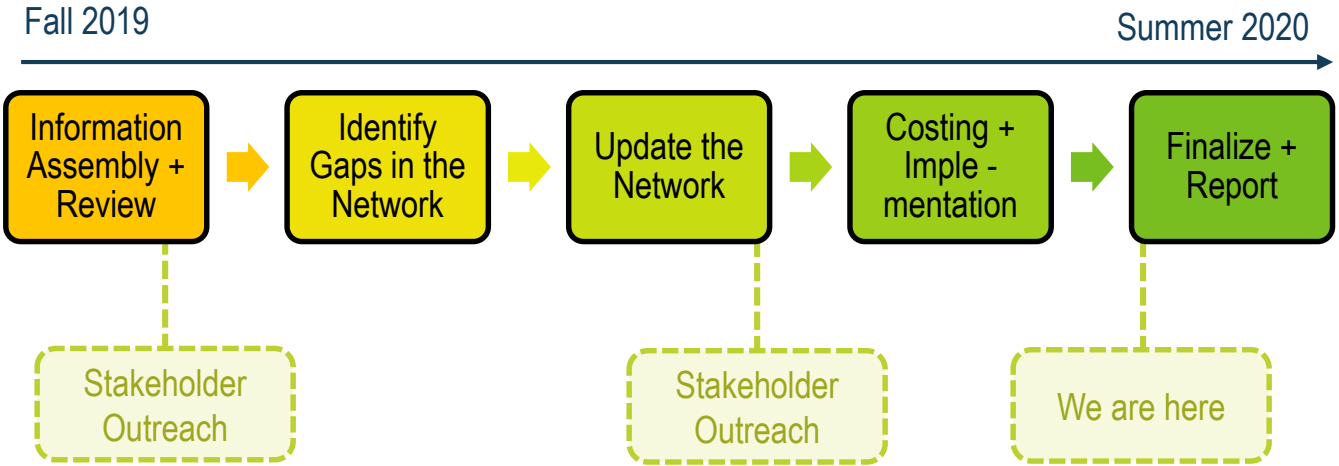
Increase the bicycling mode share across the region;

Reduce GHG emissions and other environmental impacts produced by the transportation sector;

- Reduce collision and injury rates involving vulnerable road users; and

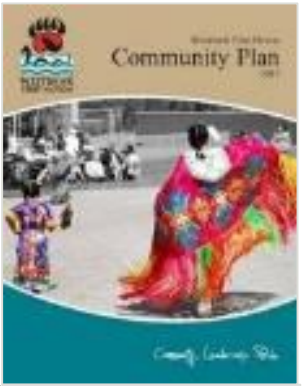
- Increase the sustainable and affordable transportation options available to all who live, work, and play in the Central Okanagan region.

RBTMP Process



Assemble, Review, and Confirm

- 2012 Regional Active Transportation Plan
- First Nations Plans
- Local Jurisdiction Plans
- Design Guidance
- Travel Survey
- RTP
- Interviews



Updating the Network: Guiding Principles

- Provide direct connections
- Provide facilities that serve:
  - People of all ages and abilities
  - Utilitarian and commuter trips
  - Longer regional trips
  - Design speeds of 20 to 30 km/h
- Improve safety and comfort
- Provide consistent design guidelines

Updating the Network: Design Guidance

Neighbourhood Street Bikeway

Protected Bike Lane

Two-way Protected Bike Lane

Multi-Use Path

Bike Path

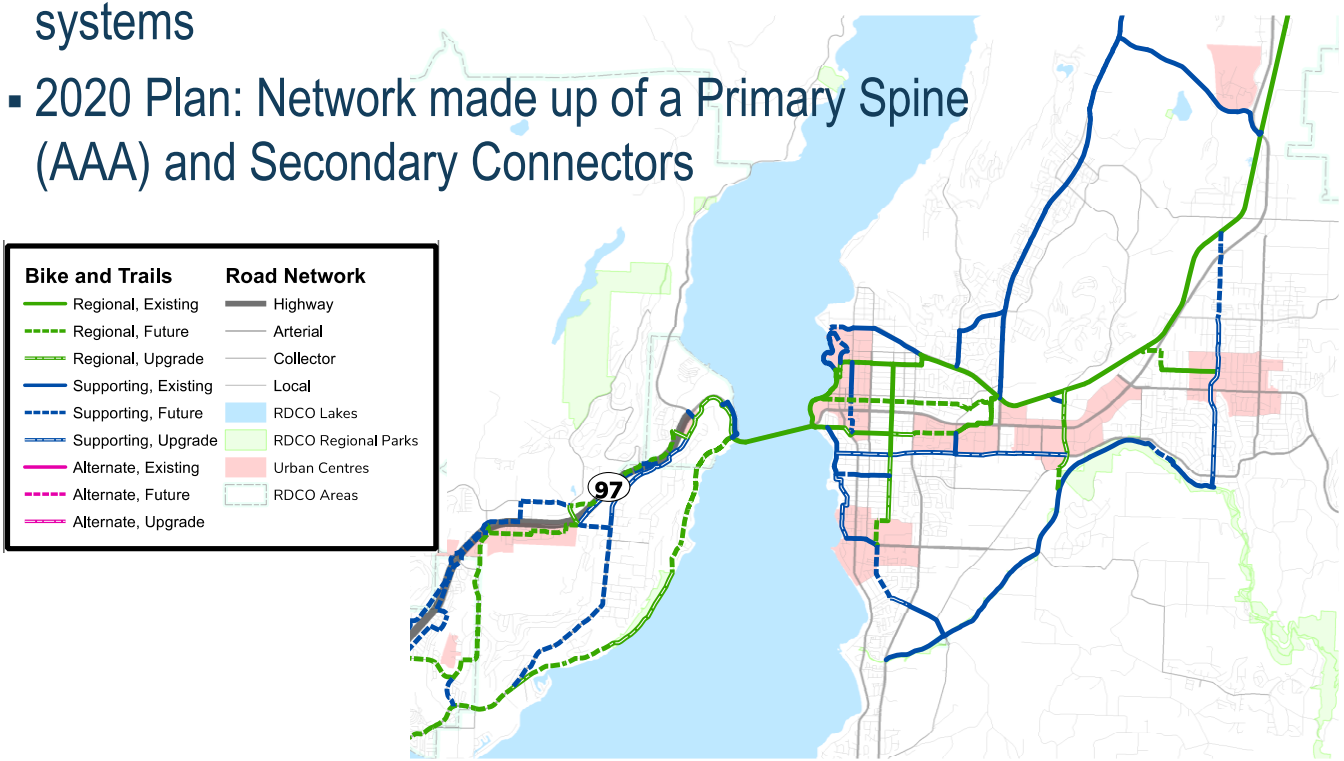
Bike Lane

Bike Accessible Shoulders

"AAA" indicates All Ages and Abilities facility

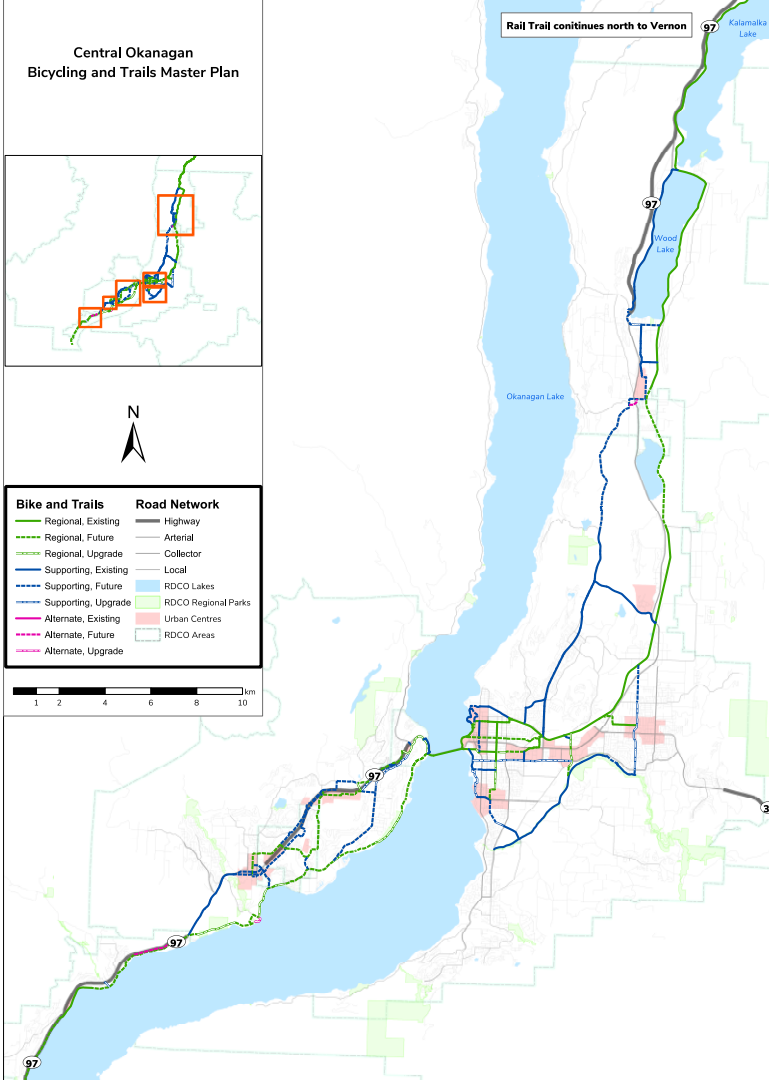
Updating the Network: Route Hierarchy

- 2012 Plan: Network made up of Primary and Secondary systems
- 2020 Plan: Network made up of a Primary Spine (AAA) and Secondary Connectors



Proposed Network

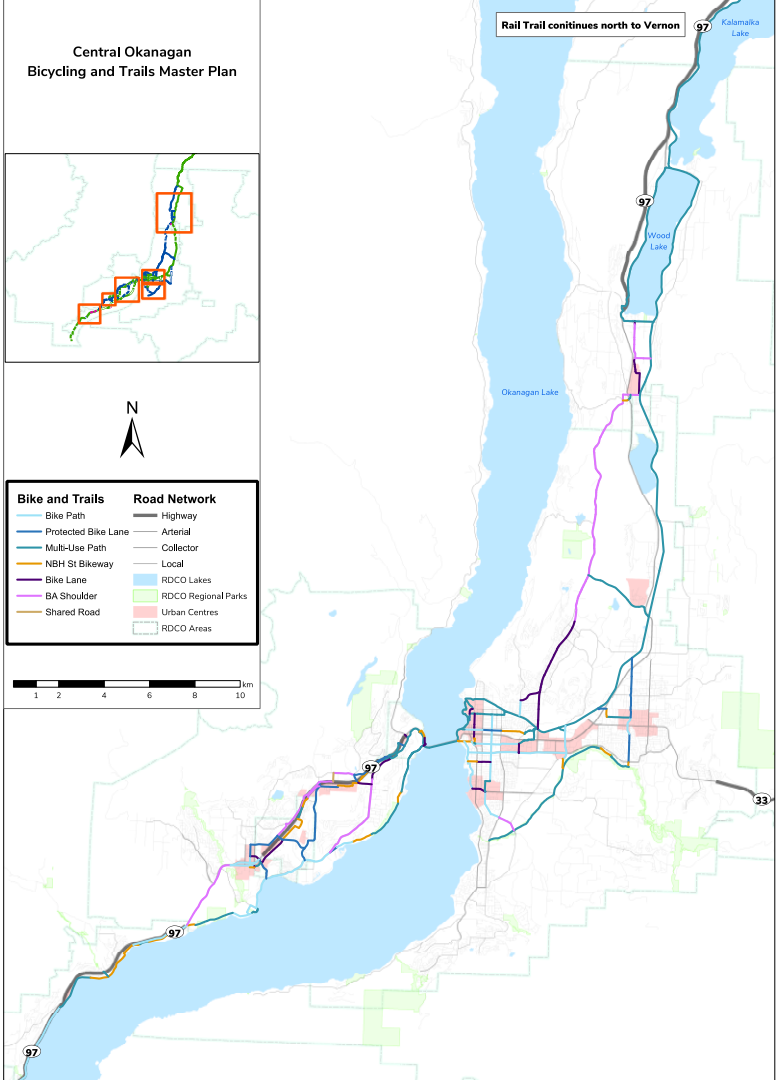
- 193 km total
  - 87 km exists today
    - 25 km existing but needs upgrading
    - 81 km new facilities



Proposed Network

By facility types:

- ~134 km of fully separated facilities
- ~17 km of shared facilities
- ~45 km of bike lanes or bike accessible shoulders



Proposed Network

Summary by sub areas:

Facility Type	Peachland (m)	West Kelowna (m)	WFN (m)	Kelowna (m)	Lake Country (m)	Total (m)
Bike Path	6,435	8,220	1,724	17,054	-	33,433
Protected Bike Lanes	0	8,327	3,849	5,432	-	17,610
Multi-Use Path	2,826	5,348	5,373	44,072	25,143	82,762
Neighb. Street Bikeway	4,146	4,561	2,452	3,861	-	15,020
Bike Lane	-	2,455	2,028	9,126	1,855	15,464
Bike Access. Shoulder	-	10,770	2,205	10,548	4,175	27,698
Shared Road	-	389	-	-	-	389
Total (m)	**13,407**	**40,070**	**17,631**	**90,095**	**31,173**	**192,376**

Phasing

- Priorities based on feedback from local representatives and local plans
- Key links and high demand routes recommended to be built in the near term

Peachland	Length (m)
High (under 5 years)	2,983
Medium (5-10 years)	2,633
Low (10 plus years)	5,694
West Kelowna	**Length (m)**
High (under 5 years)	16,195
Medium (5-10 years)	7,706
Low (10 plus years)	12,766
WFN	**Length (m)**
High (under 5 years)	4,471
Medium (5-10 years)	4,374
Low (10 plus years)	7,382
Kelowna	**Length (m)**
High (under 5 years)	16,225
Medium (5-10 years)	8,753
Low (10 plus years)	11,168
Lake Country	**Length (m)**
High (under 5 years)	3,433
Medium (5-10 years)	1,892
Low (10 plus years)	0

Costs

- Cost estimates include 50% contingency
- $70M for all facilities not yet in place
  - $48M for Primary Spine
  - $22M for Supporting Connectors
- Section 6 - Implementation
  - Recognizes that costs exceeds local funding capabilities
  - Requires support from senior levels of government


NATIONAL POST

Feds unveil new COVID-19 stream for provincial infrastructure program

"Projects to help people find ways to get outside safely will also be a priority, such as new or better paths, bike lanes, and nature trails."

Source: https://nationalpost.com/pmn/news-pmn/canada-news-pmn/feds-unveil-new-covid-19-stream-for-provincial-infrastructure-program

Supporting Implementation Requirements

- Protecting ROW
- Funding
- End of Trip Facilities
- Highway Crossings
- Operations and Maintenance
- Education and Promotion
- Monitoring and Evaluation

2019 Bike to School Week Results

Source: https://www.smarttrips.ca/events/bike-and-walk-school-week/2019-btsw-results

Realizing this Plan

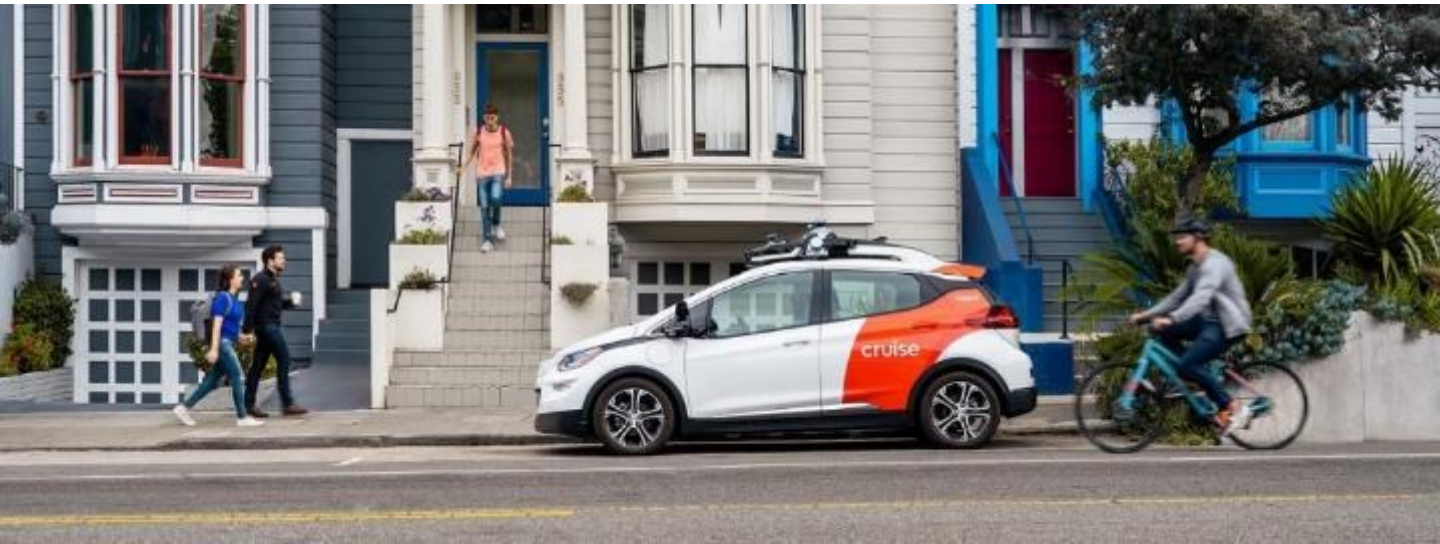
- Alignment across all levels of planning
- Collectively engage senior levels of government for funding
- Collaborate to monitor and report

Draft Regional Disruptive Mobility Strategy

What is Disruptive Mobility?

Disruption - innovation that creates a new market and eventually “disrupts” and displaces existing markets

“Disruptive mobility” refers to changes in transportation technologies that will fundamentally change how people get around in the future.



What does the disruptive mobility strategy aim to deliver?

- This document shines a light on
  - New technologies and distribution models for transportation
  - Transportation system adaptation

- Toolkit for each jurisdiction to identify the strategies and tactics best suited for their community.

Disruptive Mobility Themes

Connected

Self-driving

Shared

Electric

+ Funding and Growth

Disruptive Mobility Theme

Connected:

Everyday devices that can connect to the internet and communicate with each other has increased rapidly.

Currently residents use mobile apps to

- avoid traffic delays
- access real-time transit information
- reserve a carshare, bikeshare or other travel options on demand.

In the future, improved communication between our smart phones, vehicles and infrastructure will increase our:

- access to information
- enhance our ability to choose how to get to where we need to go

Disruptive Mobility Theme

Self-driving:

Our vehicles are likely to become increasingly automated, to the point where a human driver is not required.

Driverless technologies will enable changes in the demands that cars place on our cities.

We will need to adapt how we manage our streets as challenges arise.

Disruptive Mobility Theme

Shared:

Vehicles that are used to accommodate multiple people's travel throughout the day are deemed 'shared.'

We share buses, cars, and bikes through transit, taxis, carshare, and bikeshare networks.

Shared vehicles have the potential to:

- Eliminate the cost of car ownership
- Make it easier to shift between different travel modes

Disruptive Mobility Theme

Electric:

The price of batteries is dropping, and their storage capacity is increasing.

Electric vehicles are already on our streets today, including electric and hybrid cars, e-bikes and other small electric vehicles.

Transportation is the largest emissions contributor in the Central Okanagan and shifting to electric will be one part of the solution in curbing our environmental footprint.

Disruptive Mobility Theme

Funding and Growth:

- Stable funding for transportation
- Resilience to workforce changes as a result of disruptive mobility

Tactical Action Format

2.2 Support legislative efforts to ensure that self-driving vehicles operate safely

Develop recommendations for the Province on potential approaches to testing, licensing, and regulating private and shared self-driving vehicles to ensure the safe operation of such vehicles in Kelowna.

Action Initiator

Regional

Additional Participants

Local government

Related Actions

2.1, 2.3, 2.4, 2.6

2.2 {Indexed number}

Tactical Action Name

Description of tactical action

Action Initiator

Lead government agency

Additional Participants

Other agencies or key stakeholders

Related Actions

2.1, 2.3, 2.4, 2.6 {Indexed numbers for tactical action related to this one}

Phasing

Flexibility due to different technologies being deployed at different times.

Priority determined by an estimation of value compared to ease of implementation

Next Steps

Next Steps

- Presentations to Councils through June/July (dates subject to change):
  - June 15th, City of Kelowna
  - June 16th, City of West Kelowna
  - June 29th, Westbank First Nation
  - July 7th, District of Lake Country
  - July 9th, Regional District of Central Okanagan
  - July 14th, District of Peachland
- Public engagement on the draft Plan is targeted for July/August
- Revised plans to be brought for endorsement in Fall 2020