# Report to Council

Date:

June 16, 2020

To:

Council

From:

R. Villarreal, STPCO Administrator

Subject:

Draft Regional Transportation Plan, Draft Regional Bicycling and Trails Master Plan and

Draft Regional Disruptive Mobility Strategy

#### Recommendation:

THAT Council receives, for information, the report from STPCO dated June 16, 2020 with respect to the Draft Regional Transportation Plan (RTP) and its sub-components: The Draft Regional Bicycling and Trails Master Plan (RBTMP) and the Draft Regional Disruptive Mobility Strategy (RDMS).

#### Purpose:

To provide Council with an update on STPCO activities and provide an overview of the Draft Regional Transportation Plan and its sub-components: The Draft Regional Bicycling and Trails Master Plan and Draft Regional Disruptive Mobility Strategy.

#### Background:

The Sustainable Transportation Partnership of the Central Okanagan (STPCO) is a formal partnership of the City of Kelowna, City of West Kelowna, Districts of Lake Country and Peachland, Westbank First Nation and the Regional District of Central Okanagan. The STPCO coordinates the regional delivery of sustainable transportation programs and projects in support of common regional policy, plans and interests (economic, social and environmental), including the delivery of the Regional Transportation Plan. The STPCO also provides a formal forum for discussion amongst elected officials, senior and technical staff, as well as stakeholders and the general public.

The STPCO Work Plan is divided into the three areas of Strategic Partnerships with Senior Government, Transit Program and Delivery, and Regional Transportation Planning. This report provides an update on activities in the Regional Transportation Planning work area, including presentation of the Draft Regional Transportation Plan and its sub-components: The Draft Regional Bicycling and Trails Master Plan and the Draft Regional Disruptive Mobility Strategy.

<u>Local and Global Context</u>: Several global trends are shaping urban and regional transportation, as a result the RTP and its sub-components have been developed to be resilient and adaptable to these changing trends on the horizon. Examples include the COVID-19 pandemic, the global climate crisis, and rapid transportation technology change:

- COVID-19 Pandemic: The COVID-19 pandemic has evolved rapidly and changed the way people travel, with rapid increases in teleworking and decreases in transit ridership experienced in the short-term. While the situation is uncertain and changing daily, it is important not to lose sight of the mid and long term. The RTP is a long-range plan designed to establish the vision for regional transportation over the next 20 years and beyond. While the impacts and economic recovery from COVID-19 may delay growth in the next few years, the long term transportation vision established by the RTP is still anticipated to be relevant in 2040. In addition, it is hoped that the RTP can provide a roadmap for investment in the Central Okanagan that will be an important part of economic recovery over the next few years.
- Climate Change: Transportation is typically responsible for the largest share of metropolitan greenhouse gas emissions, and this is also true in Kelowna where 55% of climate warming gases come from the transportation sector alone. The RTP recognizes the urgency of the global climate crisis and provides recommendations that will help to better connect our region, while reducing automobile dependence and improving the quality, convenience and reliability of more sustainable and affordable transportation modes, such as bicycling, walking, transit and small electric vehicles. This will be critical to help protect the Central Okanagan's environment and high quality of life for future generations to come.
- Technology and our Changing Future: For the first time in nearly a century, transformative innovations are coming to the transportation sector. New technologies that are making transportation more connected, automated, shared and electric are reshaping how people get around and making owning a car less of a requirement. The RTP has been developed with these rapid changes in mind, and includes recommendations designed to take advantage of new mobility options, such as ride-hailing, bike share and car share that can help provide new mobility options to residents and extend the reach of transit. The Regional Disruptive Mobility Strategy component of the RTP provides a toolkit of policy options for local jurisdictions in the Central Okanagan to help embrace the benefits of transportation technology change, while incorporating lessons learned from other communities around the world to help mitigate impacts.

#### Discussion:

Development of the Central Okanagan's first Regional Transportation Plan (RTP) was initiated in early 2018. The need for the plan arose out of recognition that transportation directly impacts many of the areas important to Central Okanagan communities, including economic competitiveness, air quality, climate change, goods movement, social equity, emergency response, public health and quality of life. With the regional population expected to grow by nearly 40% in the next 20 years, the STPCO partners decided to work collaboratively to ensure that the transportation choices we make as a region today help strengthen our region's future economic competitiveness and quality of life.

After more than two years of technical studies (including the Okanagan Gateway Transportation Study), consultation, and unprecedented region-wide partnership and collaboration, the Draft Regional Transportation Plan and its sub-components, the Draft Regional Bicycling and Trails Master Plan and Draft Regional Disruptive Mobility Strategy, are ready for presentation to the STPCO Councils and RDCO Board. The draft plans can be viewed on the Smart Trips website at the following links:

• Draft Regional Transportation Plan: https://www.smarttrips.ca/sites/files/6/docs/related/Regional Transportation Plan DRAFT.pdf

- Draft Regional Bicycling and Trails Master Plan:
   https://www.smarttrips.ca/sites/files/6/docs/related/Regional Bicycling Trails Master Plan D

   RAFT.pdf
- Draft Regional Disruptive Mobility Strategy:
   <a href="https://www.smarttrips.ca/sites/files/6/docs/related/Regional Disruptive Mobility Strategy D">https://www.smarttrips.ca/sites/files/6/docs/related/Regional Disruptive Mobility Strategy D</a>
   RAFT.pdf

**Draft Regional Transportation Plan:** The Draft Regional Transportation Plan (RTP) identifies transportation projects and priorities that will help build and maintain a healthy, thriving and connected future for the Central Okanagan region. This long-range, high-level plan establishes a framework of priorities over the next 20 years to help communities plan and seek funding collaboratively, as a unified region.

The RTP sets the direction for Central Okanagan local jurisdictions to work together to prepare for future population growth, help people of all ages and abilities get around, reduce the growth of traffic congestion and greenhouse gases, and help the region's economic recovery post COVID-19. The plan contains interconnected recommendations for projects, programs and policies that will help connect people and places across the region. The recommendations are designed to work together to help improve the movement of people and goods, achieve fast and reliable transit, and help create a region where more people can choose sustainable and affordable transportation options.

The RTP reflects the interests and values the project team heard from people across the region. The plan development included multiple workshops with the STPCO Planning and Technical Committee, the Local Government Advisory Board, and presentations to the STPCO Councils and RDCO Board at key milestones throughout the planning process (representing over 35 presentations to date). Additionally, the plan reflects multiple public consultation touchpoints with residents and stakeholders across the Central Okanagan, from Peachland to Lake Country, since spring 2018.

Moving forward, the plan will help local jurisdictions collaborate to seek funding for transportation investments that benefit the entire Central Okanagan region. Recommendations that involve the highway and that require further study will be analyzed further as part of the next phase of the Ministry of Transportation and Infrastructure's Central Okanagan Planning Study.

Draft Regional Bicycling and Trails Master Plan: The Draft Regional Bicycling and Trails Master Plan (RBTMP) updates the 2012 Regional Active Transportation Master Plan. In the years since the 2012 Plan was created, many connections have been completed, additional active transportation plans have been developed and provincial and federal design guidance updated. The RBTMP reflects those changes, and along with the RTP, will help focus investments in regional bicycling and trail networks. The regional bicycling and trails network presented in the RBTMP provides safe and convenient travel options, connecting regionally significant destinations across the Central Okanagan. When complete, the proposed network will provide 134 km of fully separated facilities (e.g., such as multi-use pathways, bike paths, and protected bicycle lanes) and 62 km of shared facilities that are appropriate for those more comfortable riding beside motor vehicle traffic. A total of 81 km of new bicycling and trail infrastructure is recommended, along with 25 km of facilities that should be upgraded.

Implementation of the plan will be delivered in coordination with the RTP, and will require ongoing regional coordination and collaboration. Additionally, leadership at the local and regional level will be necessary to champion projects within each jurisdiction.

**Draft Regional Disruptive Mobility Strategy (RDMS):** "Disruptive mobility" refers to changes in transportation technologies that will fundamentally change how people get around in the future. These changes are making transportation more connected, automated, shared, and electric. These changes have the potential to benefit the region, though negative impacts that work against current policy directions are possible as well. By proactively preparing for the changes coming our way, Central Okanagan local jurisdictions can work together and help influence the Province to harness the benefits of new transportation technologies, while protecting our regional economic competitiveness and quality of life.

The Draft Regional Disruptive Mobility Strategy (RDMS) has been designed as a toolkit for local governments in the Central Okanagan to help prepare for technology change in transportation. It is a resource guide that will help each jurisdiction identify the strategies and tactics best suited for their community. It is recommended that each jurisdiction collaborate with community, nonprofit, and business leaders, to carefully consider a range of practical and efficient solutions to the challenges and opportunities presented by rapidly changing mobility technologies.

Okanagan Gateway Transportation Study: The Okanagan Gateway Transportation Study (OGTS) is a partnership of the Kelowna International Airport (YLW), City of Kelowna, the University of British Columbia - Okanagan (UBCO) and the BC Ministry of Transportation and Infrastructure (BC MoTI). It is a 20 year plan that defines future projects, programs and policies to strengthen the economy, quality of life and further the OGTS partners' commitment to climate action in the region by improving connections to the Kelowna International Airport and the University of British Columbia Okanagan. While recommendations from the OGTS have been coordinated with and incorporated into the Regional Transportation Plan, the final OGTS report is still being finalized and is anticipated for release later in summer 2020.

### **Conclusion:**

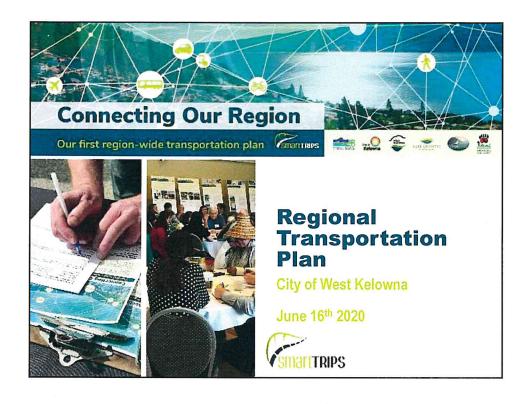
The three draft regional plans are being presented to each of the STPCO partner Councils and the RDCO Board through June and July. Following the presentations, public engagement activities (anticipated in July/August) will provide members of the public and stakeholders with the chance to review the draft plans and provide feedback. Public engagement activities are being designed to focus on digital and on-line platforms to follow the advice of the Provincial Health Officer in regards to COVID-19. Once the public engagement period closes, the plans will be updated and refined. Final versions of the plans will be presented to each of the STPCO Councils and the RDCO Board for endorsement, anticipated in fall 2020.

#### Attachments:

- Online Attachment 1: Draft Regional Transportation Plan: https://www.smarttrips.ca/sites/files/6/docs/related/Regional Transportation Plan DRAFT.pdf
- Online Attachment 2: Draft Regional Bicycling and Trails Master Plan:
   https://www.smarttrips.ca/sites/files/6/docs/related/Regional Bicycling Trails Master Plan DRAF

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- Online Attachment 3: Draft Regional Disruptive Mobility Strategy:
   https://www.smarttrips.ca/sites/files/6/docs/related/Regional Disruptive Mobility Strategy DRAF

   T.pdf
- Attachment 4: Draft Regional Transportation Plan Presentation



# **Agenda**

- 1. Welcome
- 2. STPCO and What is Next
- 3. Draft Regional Transportation Plan
- 4. Draft Regional Bicycling and Trails

  Master Plan
- 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."

It is expected to evolve in 2021





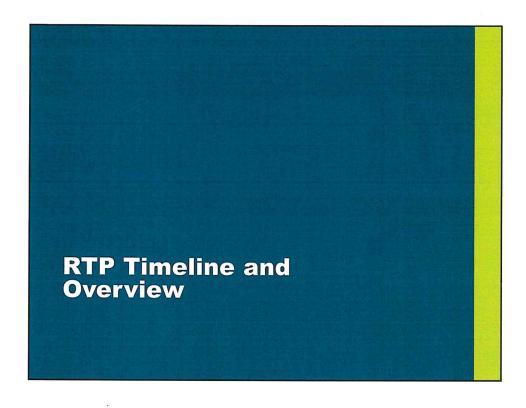


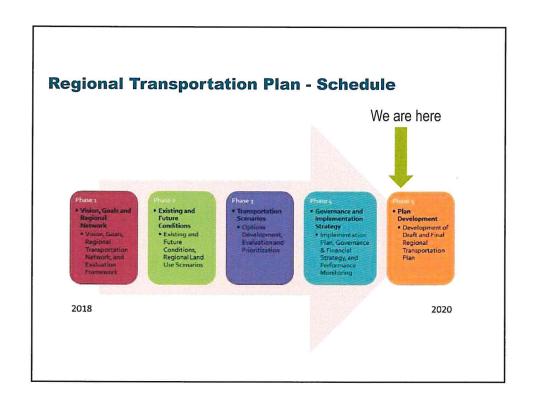


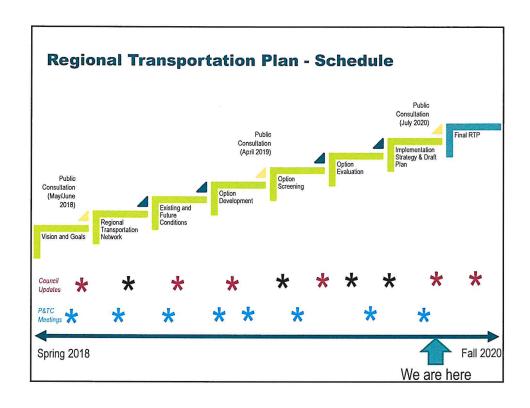












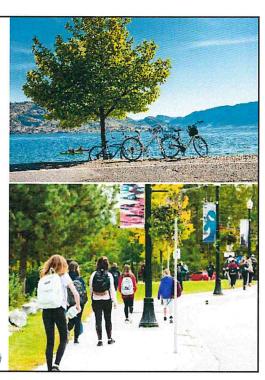
### What is the RTP?

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

















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**

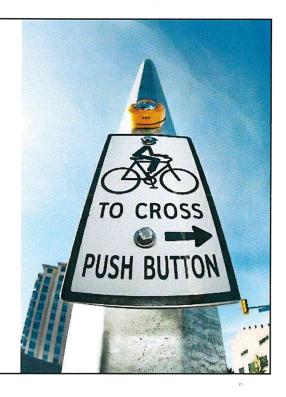
The RTP contains interconnected recommendations for projects, programs and policies that will support and enhance the region's economy, environment, and quality of life; they will:

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



# **COVID-19** and the **RTP**

- Situation is evolving and uncertain
- Short-term travel impacts:
  - o increases in telework
  - o decreases in transit
  - o increases in on-line deliveries
- Long-term planning for next 20 years (2040)
- o 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

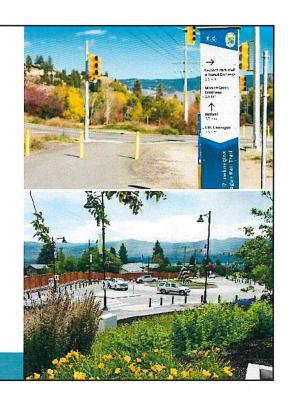
ENVIRONMENTALLY RESPONSIBLE - minimizes negative effects on the natural ecosystem

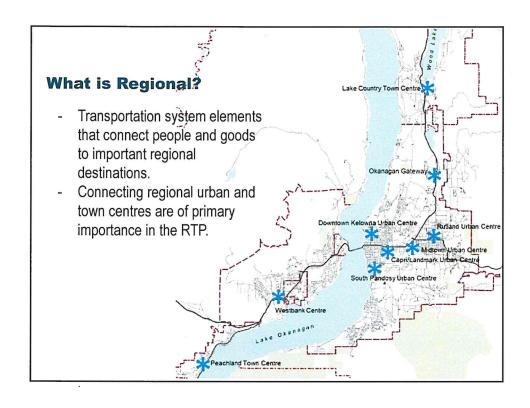
MULTIMODAL - increases the variety of travel choices available

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

### Chapter 1: Connecting Our Region

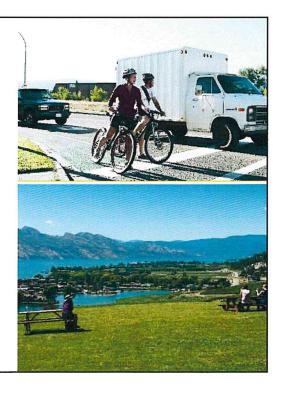
- Introduction
- The Process for the Central Okanagan's First Regional Transportation Plan





# Chapter: 2 Existing and Future Conditions

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



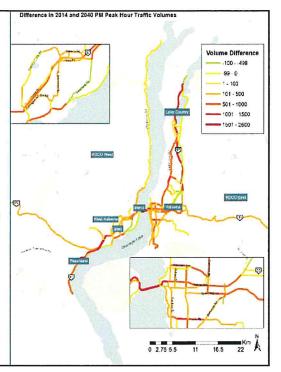
### Existing and Future Conditions – Key Findings

### 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
- 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

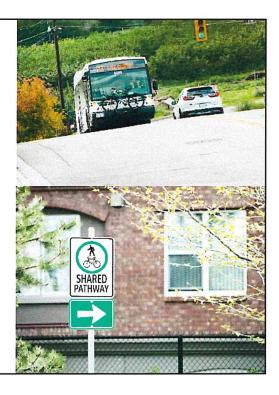


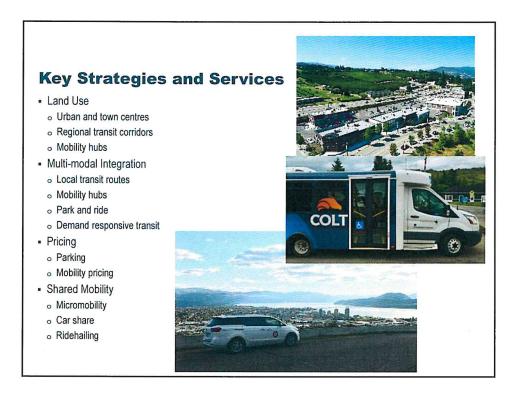




### Chapter 5: Recommended Projects, Programs and Policies

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



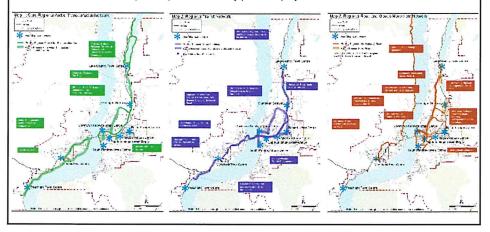


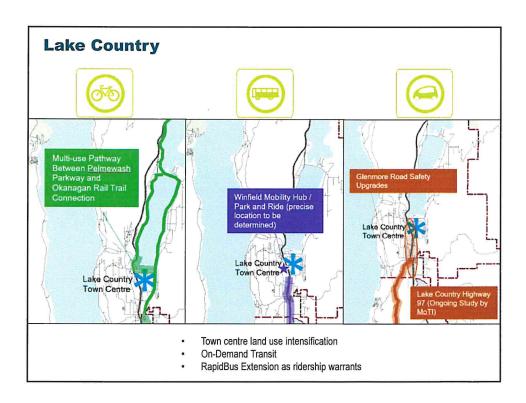
### **Policy Guidance Highlights**

- 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

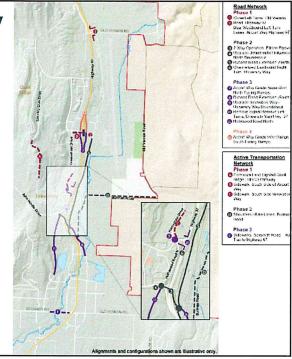


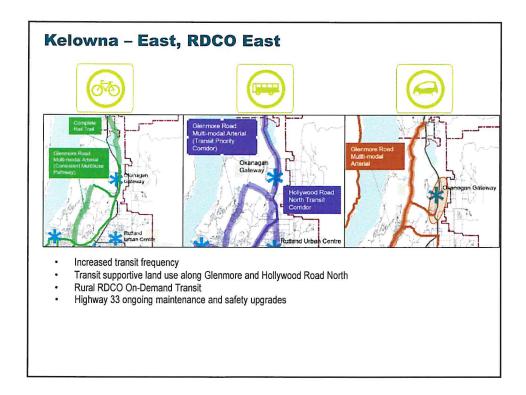


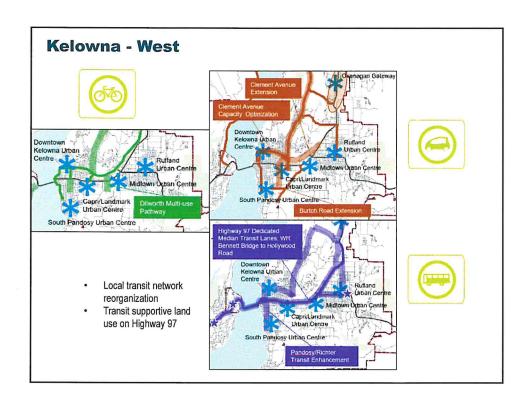
# **Okanagan Gateway**

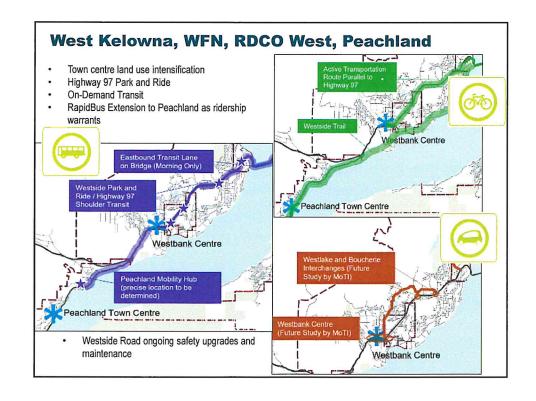
Draft recommendations from the OGTS:

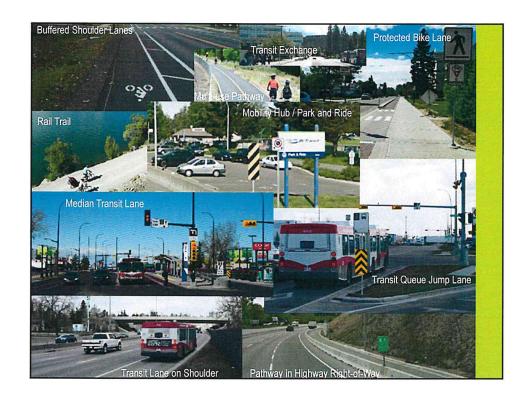
- Phased upgrades to Hwy 97/John Hindle Drive and Highway 97/Airport Way
- Strengthen city street network to better link Gateway destinations to each other and Hwy 97
- Expanded transit service to accommodate future campus growth
- Improve transit service south of UBCO in coordination with future Rutland 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











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;



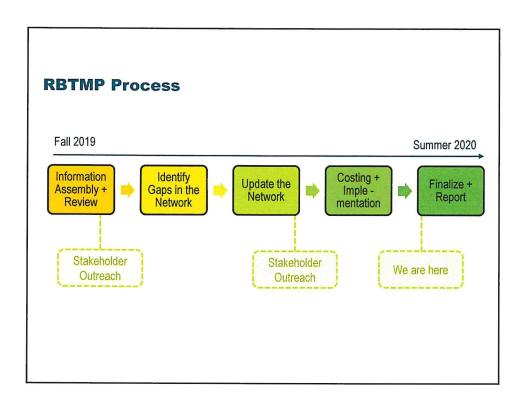
 Reduce GHG emissions and other environmental impacts produced by the transportation sector;

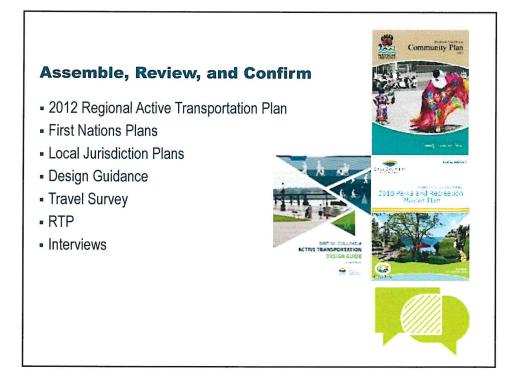


 Reduce collision and injury rates involving vulnerable road users; and



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

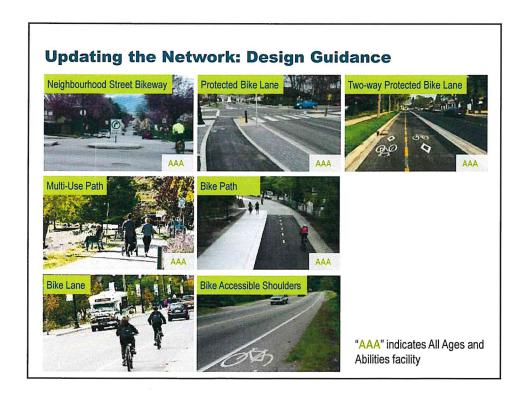


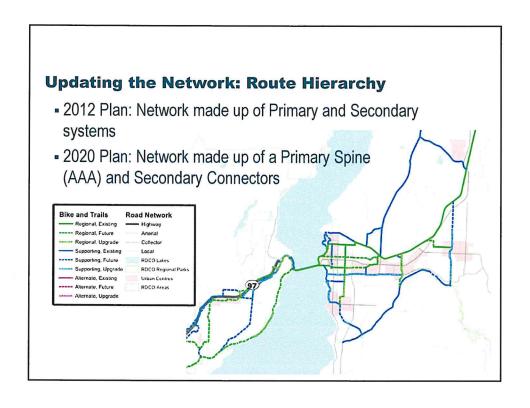


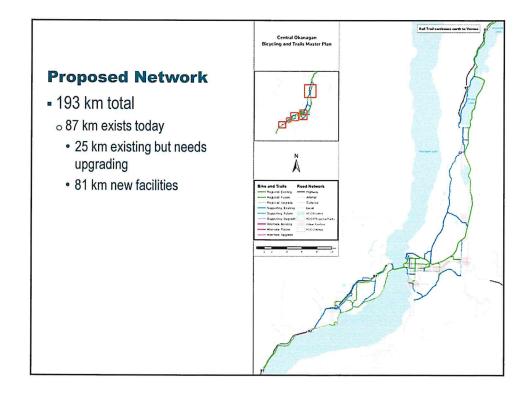
# Updating the Network: Guiding Principles

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





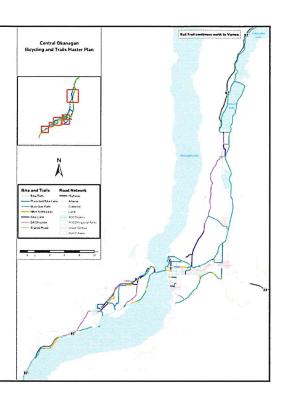




# **Proposed Network**

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	The state of the	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
  - o \$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















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
- o New technologies and distribution models for transportation
- o Transportation system adaptation
- Toolkit for each jurisdiction to identify the strategies and tactics best suited for their community.



# **Disruptive Mobility Themes**

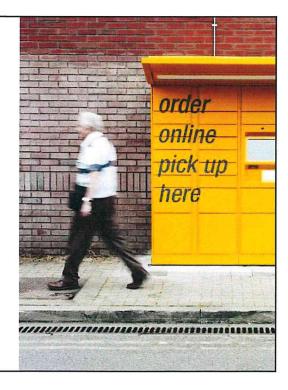
Connected

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



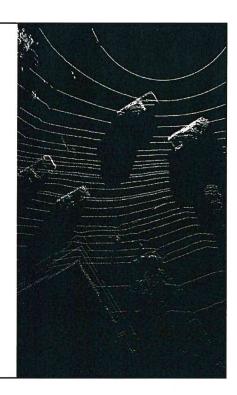
# **Disruptive Mobility Theme**

### 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



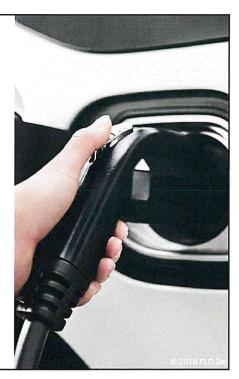
### **Disruptive Mobility Theme**

### **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.

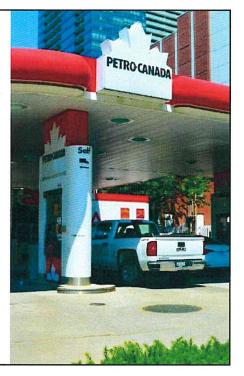
Transportation is the largest emissions contributor in the Central Okanagan and shifting to electric will be one part of the solution in curbing our environmental footprint.



# **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

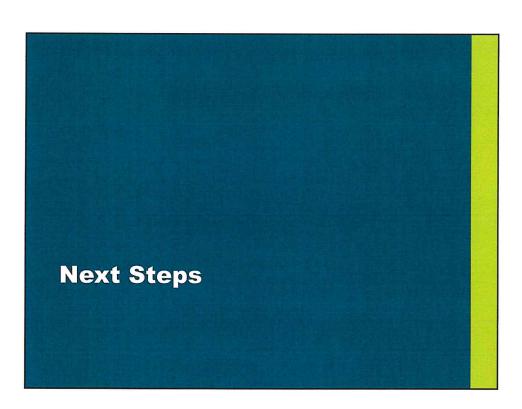
2.1, 2.3, 2.4, 2.6 {Indexed numbers for tactical action related to this one}

# **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**

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

