



**To:** Public Works and Transportation Committee      **Date:** September 2, 2021  
**From:** Lloyd Bie, P.Eng.      **File:** 02-0775-50-6708/Vol  
 Director, Transportation      01  
**Re:** **Cycling Network Plan Update – Proposed Phase 2 Engagement**

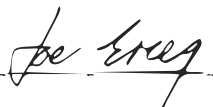


**Staff Recommendation**

That the proposed Phase 2 engagement activities to support the update of the Cycling Network Plan, as described in the report titled “Cycling Network Plan Update - Proposed Phase 2 Engagement,” dated September 2, 2021 from the Director, Transportation, be endorsed for implementation.



Lloyd Bie, P.Eng.  
 Director, Transportation  
 (604-276-4131)

Att. 3

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Communications	<input checked="" type="checkbox"/>	 <hr/>
Parks Services	<input checked="" type="checkbox"/>	
Recreation & Sport	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Sustainability & District Energy	<input checked="" type="checkbox"/>	
Development Applications	<input checked="" type="checkbox"/>	
Policy Planning	<input checked="" type="checkbox"/>	
<b>SENIOR STAFF REPORT REVIEW</b>	INITIALS: 	<b>APPROVED BY CAO</b> 

## Staff Report

### Origin

At its May 25, 2021 meeting, Council endorsed the Phase 1 engagement activities to support the update of the City's Cycling Network Plan and directed staff to report back on the results. This report presents the results of the Phase 1 engagement activities and the proposed Phase 2 engagement activities, which are intended to gain feedback from the public and stakeholders regarding the prioritization of potential cycling network improvements.

This report supports Council's Strategic Plan 2018-2022 Strategy #4 An Active and Thriving Richmond:

*An active and thriving community characterized by diverse social and wellness programs, services and spaces that foster health and well-being for all.*

*4.2 Ensure infrastructure meets changing community needs, current trends and best practices.*

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

*Leadership in effective and sustainable growth that supports Richmond's physical and social needs.*

*6.3 Build on transportation and active mobility networks.*

### Analysis

#### Phase 1 Engagement Activities

All engagement activities took place on-line during June 1-30, 2021. Public engagement was held via the City's Let's Talk Richmond site, which hosted a survey, mapping tool and ideas board. Public awareness of the engagement process included issuing a news release, promoting on the City's social media channels, inclusion on the City website, posting a notice at transit shelters in the City Centre that have a digital panel, and installation of temporary signage along bike routes across the city. Separate stakeholder sessions were convened with relevant external agencies<sup>1</sup>, the Advisory Committee on the Environment (ACE) and the Richmond Active Transportation Committee (RATC).

#### Phase 1 Engagement Results

The Let's Talk Richmond site recorded 1,180 visitors who contributed:

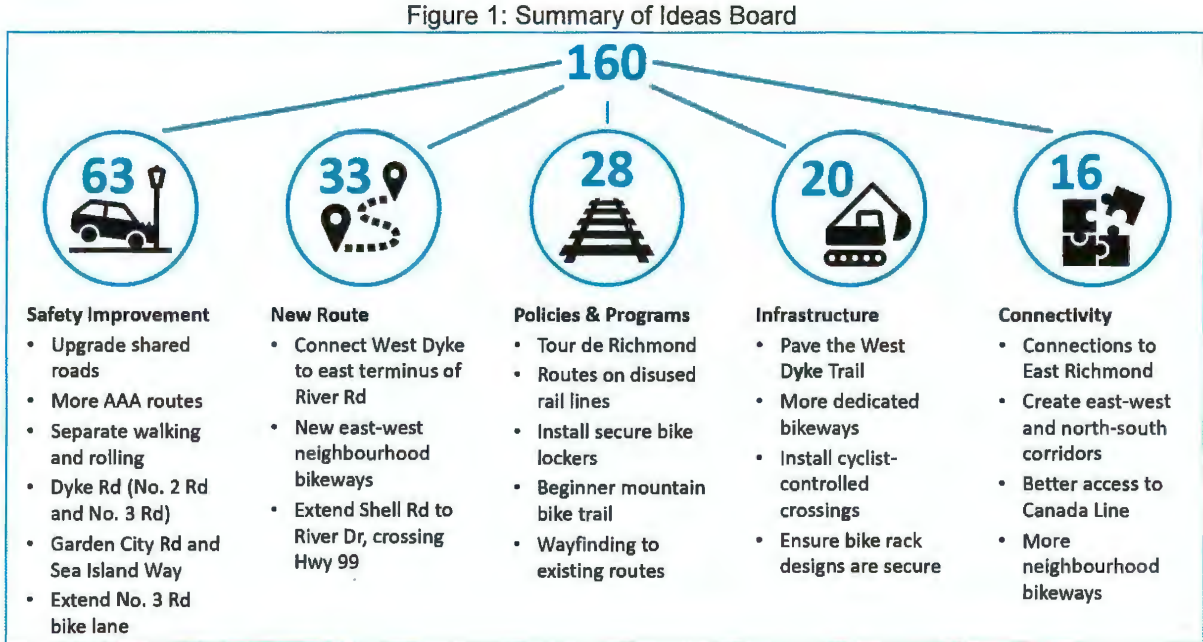
- 160 ideas that received a total of 814 "likes"
- 222 map pins
- 604 completed surveys (571 general public and 33 students)

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<sup>1</sup> The Ministry of Transportation and Infrastructure, TransLink, Vancouver Airport Authority, Richmond School District, Metro Vancouver, ICBC, HUB Cycling, Richmond RCMP, and Vancouver Coastal Health.

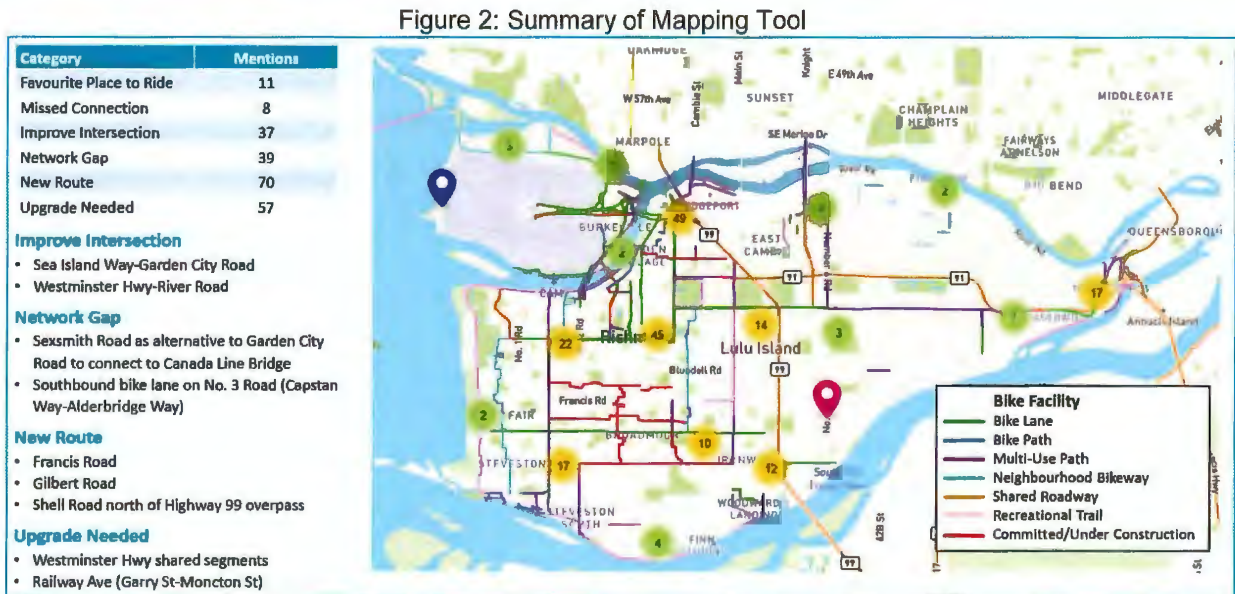
*Ideas Board*

Figure 1 summarizes the most common ideas generated and the most popular in terms of votes.



*Mapping Tool*

Figure 2 summarizes the location specific feedback across the categories of pins (see Attachment 1 for more detailed maps by category).



*Public Survey*

Table 1 and Figure 3 highlight key findings with respect to where residents feel comfortable riding and why they ride based on a weighted average of the ranked responses.

Table 1: Summary of Comfort Level for Riding

Category	Proportion	Level of Comfort
Frequent Cyclist (cycle daily, weekly or monthly)	80%	<ul style="list-style-type: none"> <li>• 100% comfortable cycling on trails and off-street paths, in bike lanes with barriers, and in bike lanes without barriers</li> <li>• 70% comfortable cycling in mixed traffic on local streets</li> </ul>
Infrequent Cyclist (cycle never, rarely, or sometimes)	20%	<ul style="list-style-type: none"> <li>• 67% comfortable cycling on trails and off-street paths</li> <li>• 58% comfortable cycling in bike lanes with barriers</li> <li>• Less than 33% comfortable for all other facility types</li> </ul>

Figure 3 Reasons Why Respondents Ride



*Student Survey*

Of the 33 students that responded, most identified as being in Grades 9 through 12 and most already use active transportation to get to school (Figure 4). The reasons for biking to school are varied (Figure 5). Of the nine respondents who reported they did not bike to school, seven reported walking.

Figure 4: Typical Ways to Get to School

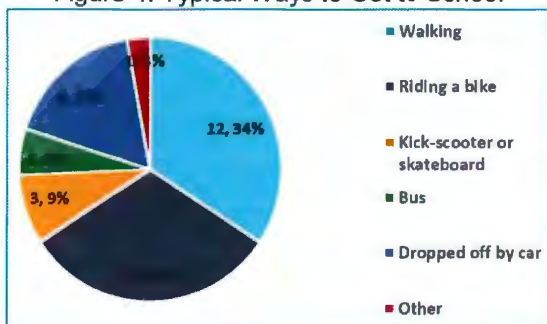
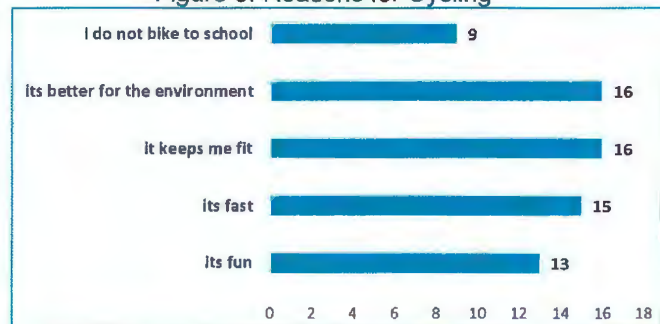


Figure 5: Reasons for Cycling



*Stakeholders*

Safety and connectivity were common themes identified by stakeholder groups (Table 2).

Table 2: Summary of Stakeholder Feedback

Stakeholder	Key Topics
Advisory Committee on the Environment	<ul style="list-style-type: none"> <li>Enhanced separation on bike routes used by students (e.g., Williams Road, Westminster Highway)</li> <li>Additional major north-south cycling route</li> <li>Connectivity to transit</li> </ul>
Richmond Active Transportation Committee	<ul style="list-style-type: none"> <li>Connectivity, safety and wayfinding as priorities</li> <li>Extend east-west routes</li> <li>Upgrade existing routes for continuous facility and complete missed connections</li> </ul>
External Agencies	<ul style="list-style-type: none"> <li>Safety, connectivity and education as priorities</li> <li>Lower speed limits on cycling corridors</li> <li>Separated facilities in urban centres</li> <li>Improve intersection design</li> </ul>

Cycling Network Evaluation

Based on the Phase 1 public and stakeholder feedback, several key themes emerged to inform an evaluation of cycling routes for an updated network and prioritized implementation strategy:

- Safety: Improve cycling comfort and serve all ages and abilities
- Connectivity: Add new facilities that connect the existing network, and enhance cycling connections to the wider region and east Richmond
- Utility and Convenience: Improve access to transit, schools, and other key destinations
- Feasibility: Consider high level costs and constraints, impacts on other modes
- Network Gaps: Complete gaps in the existing major network and improve wayfinding
- Social Equity: Be aware of accessibility of the network to ensure equity across all groups

For Phase 2, several of these themes were codified into a route level evaluation matrix. This analysis provides an indication of priority areas and routes for including within the core cycling network (Attachment 2). The analysis will be used as the basis for the Phase 2 public and stakeholder engagement, and as a stepping-stone for leading into the implementation strategy.

Proposed Phase 2 Engagement

The proposed Phase 2 consultation will focus on three major objectives (Attachment 3):

- validating the findings from the route level evaluation,
- refining feedback heard during Phase 1 engagement, and
- understanding how stakeholders and the public prioritize between different cycling network improvements and connections at the implementation stage.

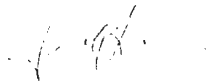
As with Phase 1, all engagement activities will take place on-line with initiation in November pending Council approval. Public engagement will be via the City’s Let’s Talk Richmond site, which will again host a survey, ideas board and mapping tool. Separate stakeholder sessions will be convened with relevant external agencies, ACE and RATC.

**Financial Impact**

All activities can be accommodated within the existing approved funding sources.

**Conclusion**

The Phase 2 engagement activities for the public and stakeholders will inform finalization of an updated cycling network plan and prioritized implementation strategy, which is anticipated to be brought forward for Council approval in spring 2022.



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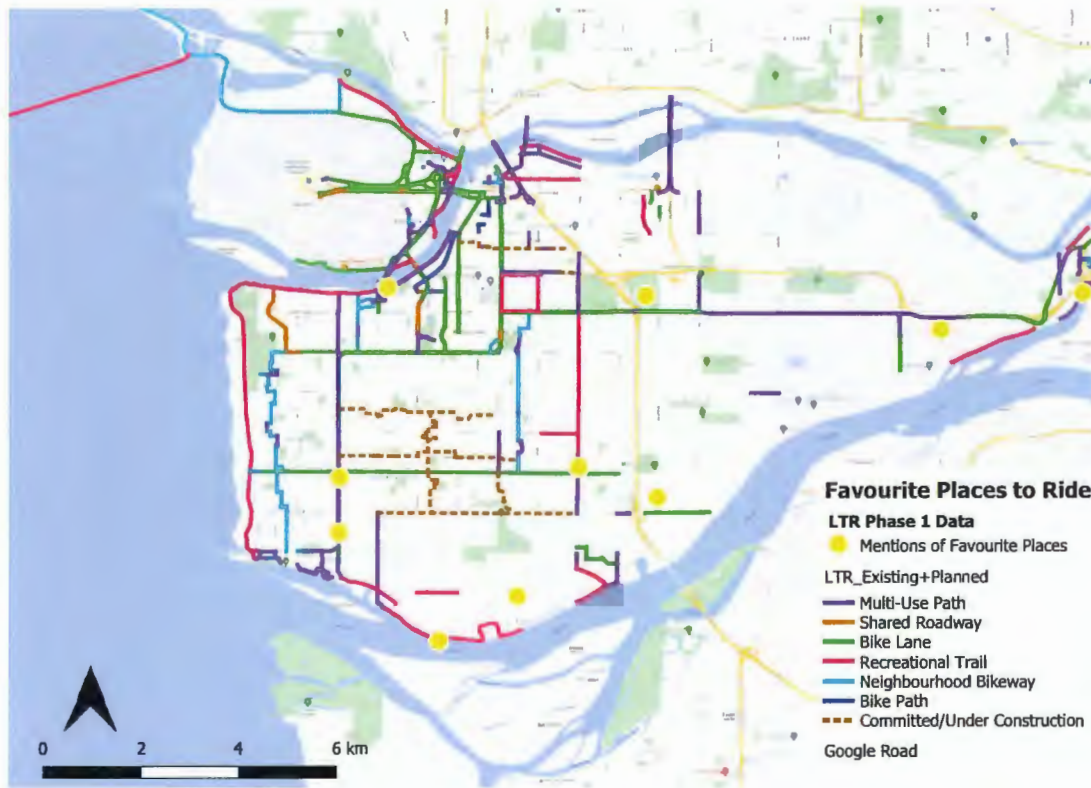


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Transportation Planner  
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JC:jc

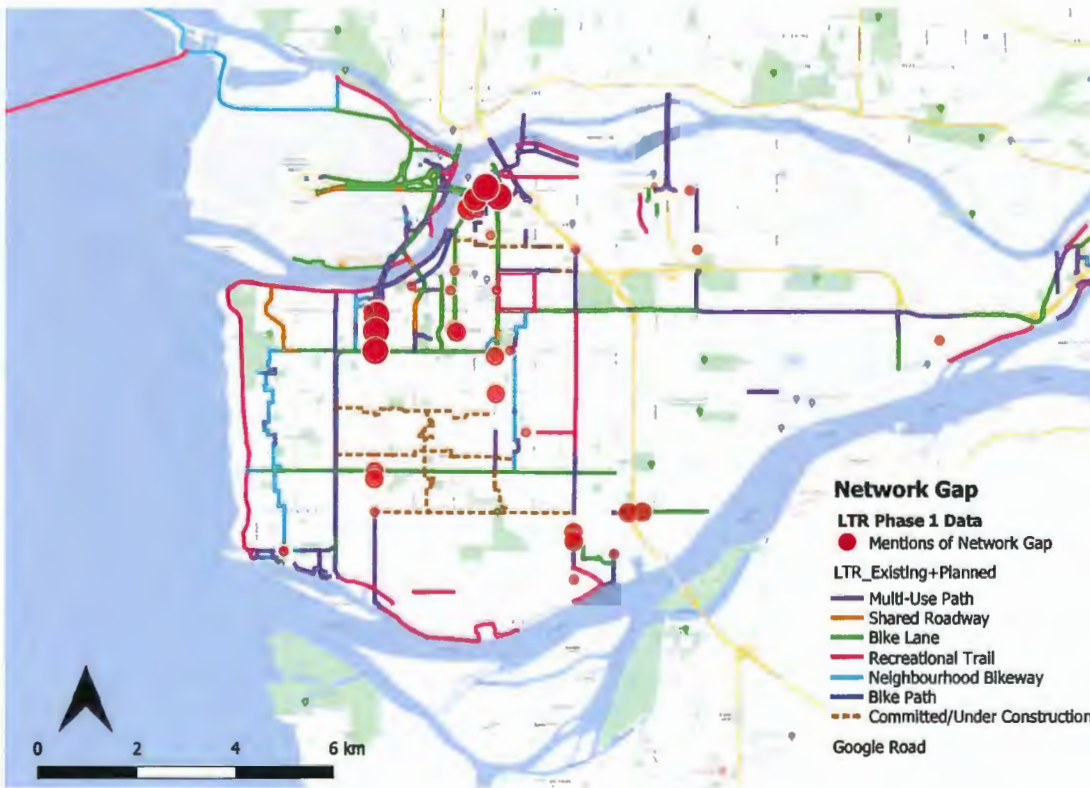
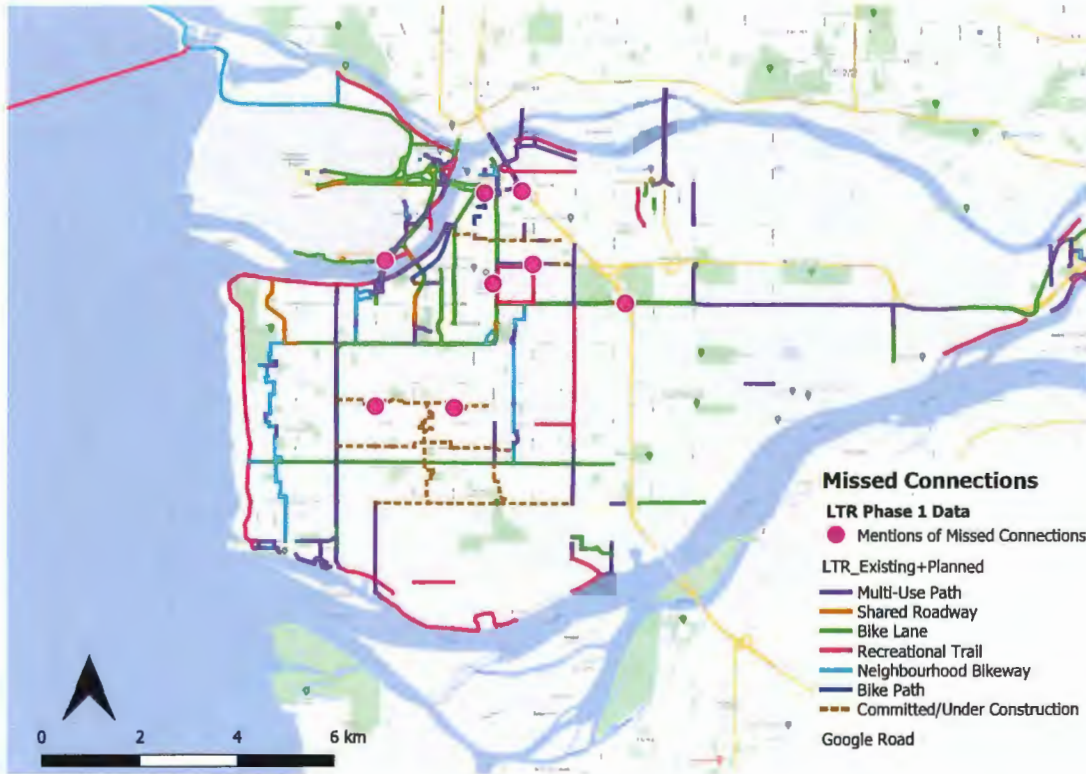
- Att. 1: Phase 1 Engagement Results – Mapping Tool Responses by Category
- Att. 2: Preliminary Cycling Network Analysis – Priority Routes
- Att. 3: Phase 2 Engagement – Proposed Activities and Questions

Phase 1 Engagement Results – Mapping Tool Responses by Category



Note: LTR = Let's Talk Richmond

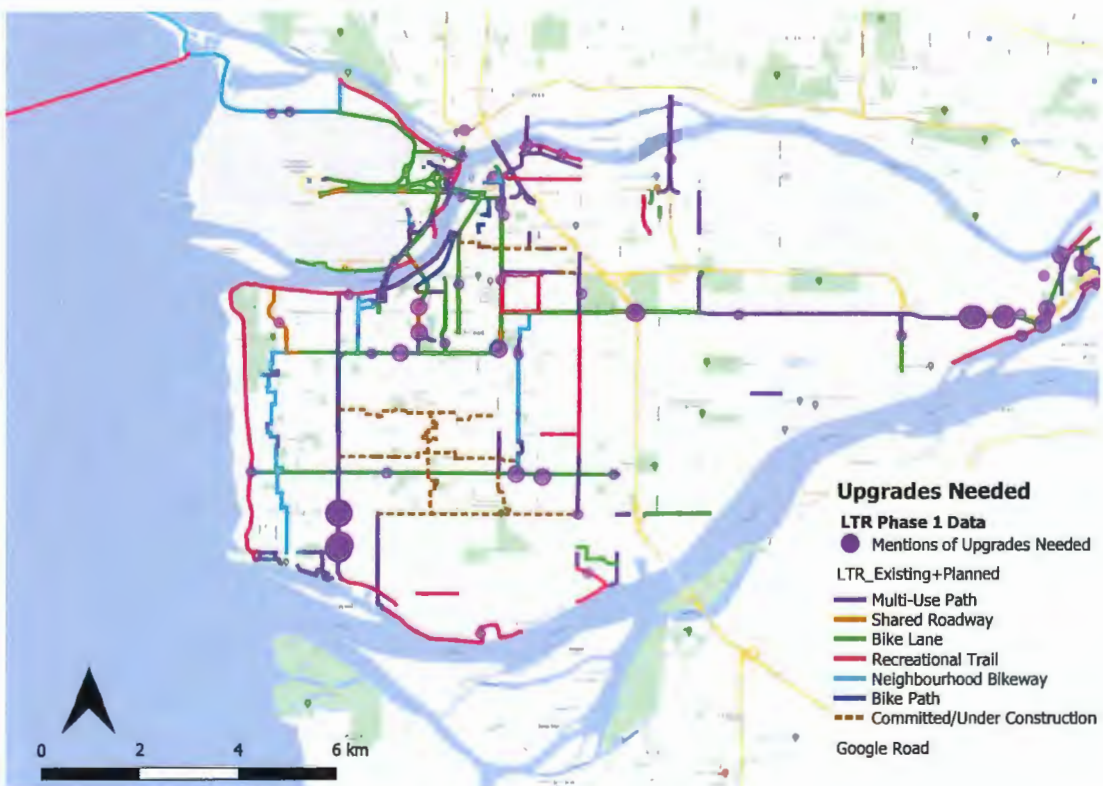
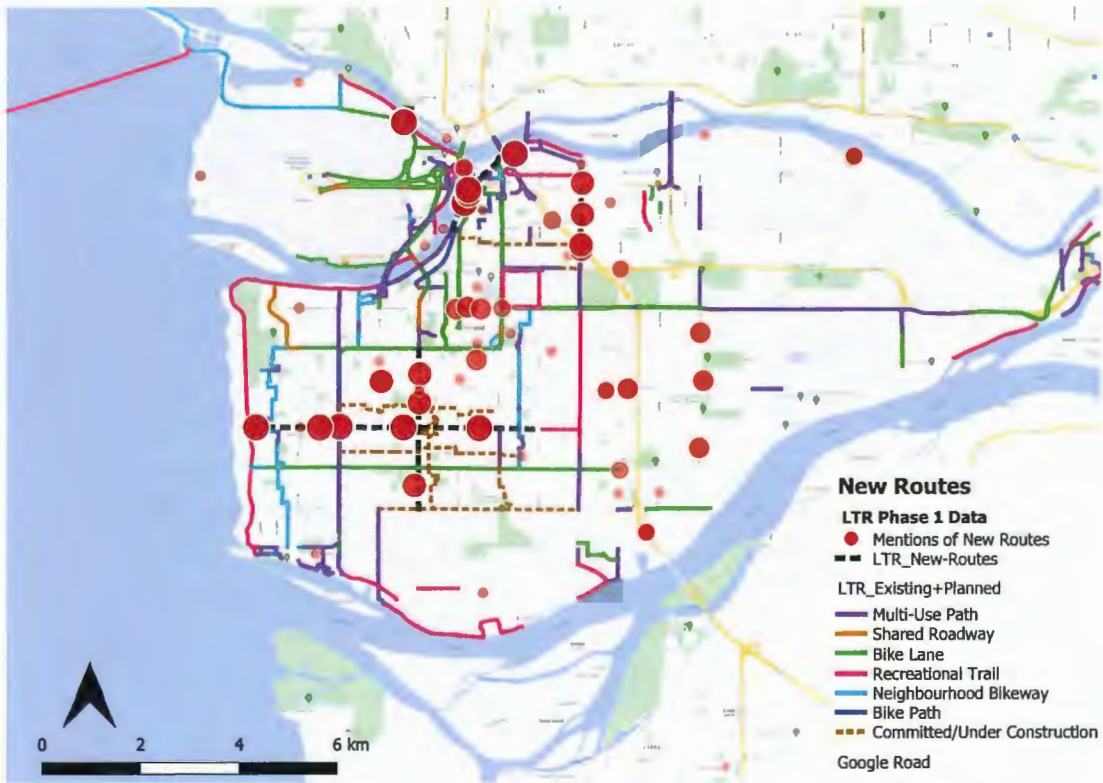
Phase 1 Engagement Results – Mapping Tool Responses by Category



Note: LTR = Let's Talk Richmond



Phase 1 Engagement Results – Mapping Tool Responses by Category



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## Preliminary Cycling Network Analysis – Priority Routes

### Network Evaluation – Utility / Convenience

#### Discrete Destinations

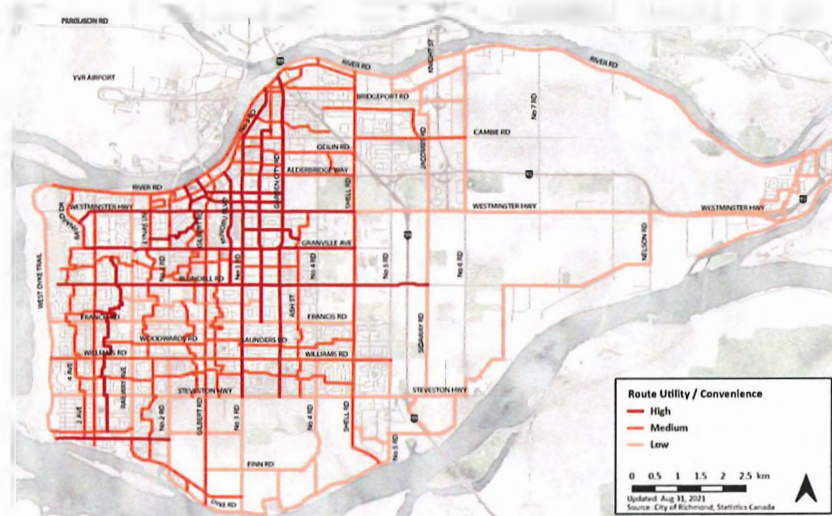
- 200m Buffer around route to count relative number of destinations along route
  - Schools (4-6 High, 3-4 Medium)
  - Points of Interest (4-6 High, 3-4 Medium)
  - Transit Stations (3 High, 1-2 Medium)

#### Population and Employment

- Plotted employment uses in the land-use bylaw
- Plotted population density



- High – provides direct access into and within population or employment centres
- Medium – provides access to the edges of population or employment centres
- Low – does not provide direct connection



### Network Evaluation – Connectivity

#### Regional

- Major Bike Route (TransLink)
- Regional Greenway (Metro Vancouver)
- Entry point for adjacent municipalities

#### Existing Network

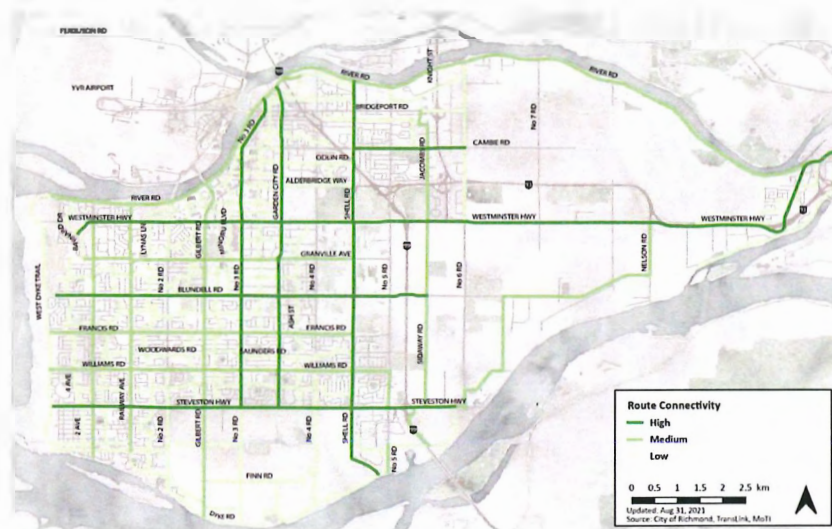
- Directly connects between several routes in the existing network
- Provides additional east-west or north-south corridor

#### Neighbourhood Centres

- Provides direct connection to at least 1 neighborhood centre in the OCP

#### East Richmond

- Provides a direct connection between East Richmond and the network



## Preliminary Cycling Network Analysis – Priority Routes

### Network Evaluation – Community Support

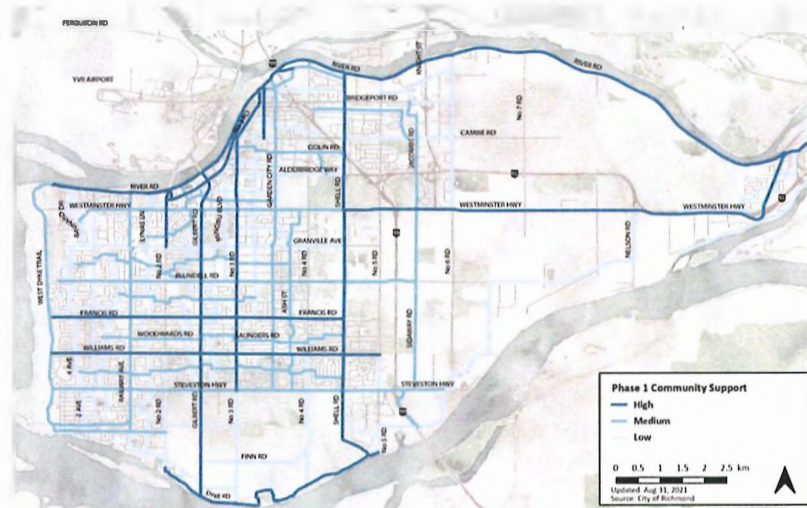
#### Public/Stakeholder Feedback

##### High

- Sexsmith Rd to Canada Line Bridge
- No. 3 Rd - Sea Island Way to Granville Ave
- No. 2 Rd - Westminster Hwy to Granville Ave
- Francis Rd - West Dyke Trail to Shell Rd
- Gilbert Rd - continuous north-south route between Ash St and Railway Ave
- Connect North and West Dyke Trails
- Shell Rd - extension to River Rd
- Dyke Rd - No. 2 Rd to No. 3 Rd
- Westminster Hwy – upgrade shared road segments

##### Medium

- Create east-west and north-south corridors
- New east-west neighbourhood bikeways



### Network Evaluation – Social Equity

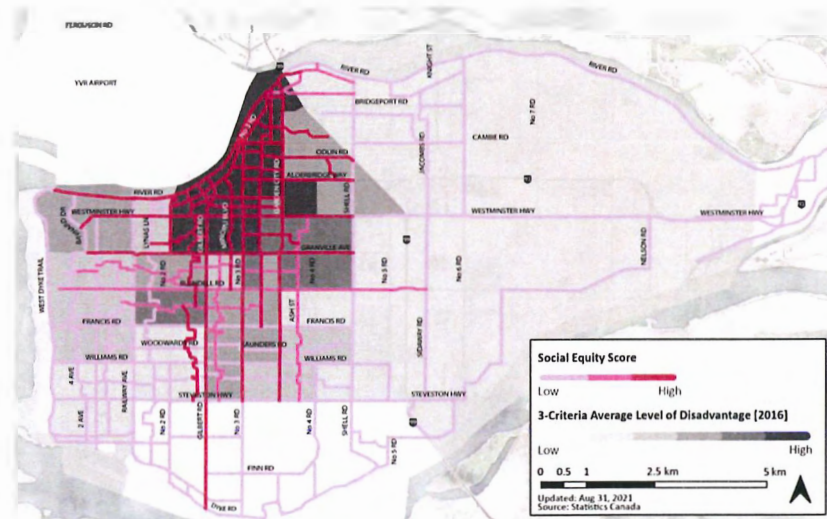
#### 3-Criteria Average

Equal weighting of three indicators of equity deserving groups in the 2016 Census:

- **Unaffordable housing** - households spending 30% or more of income on housing
- Percentage of **low-income** households based on Statistics Canada low income measure (LIM) thresholds
- Percentage of population identifying as **Indigenous**

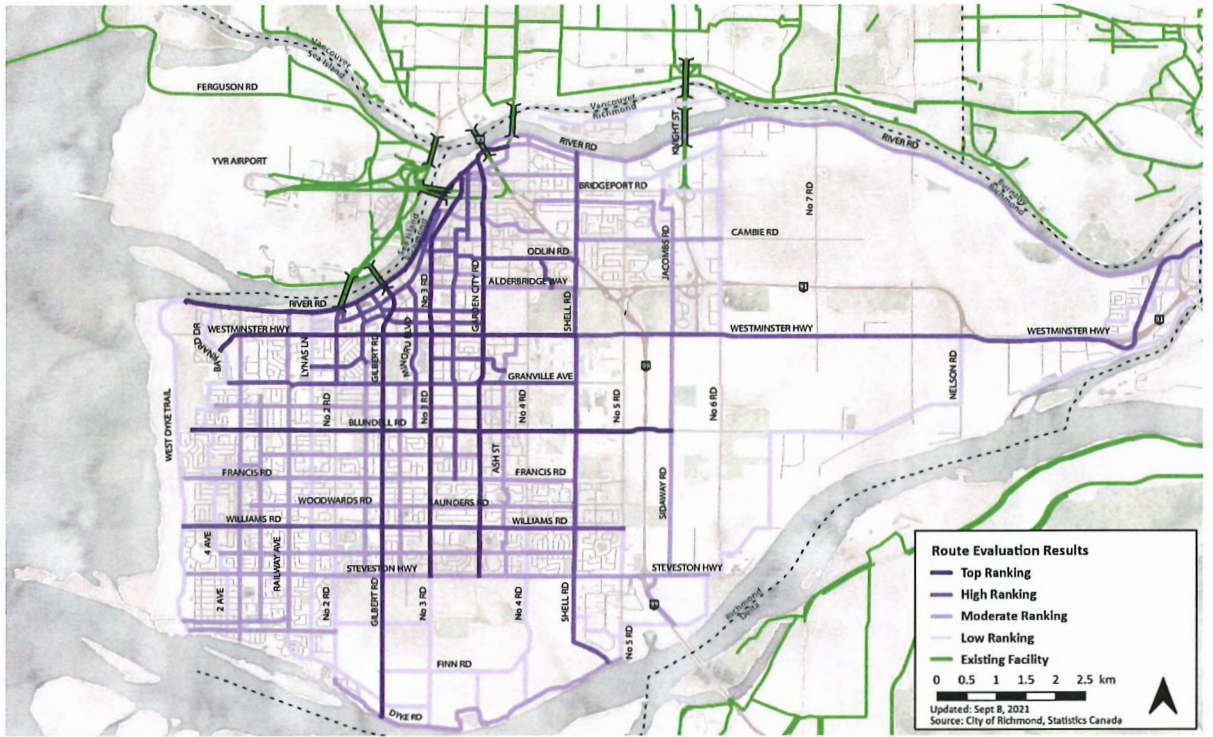
#### Key Finding

Strong correlation between prioritizing routes for equity seeking groups and prioritizing routes in the downtown.



Preliminary Cycling Network Analysis – Priority Routes

Network Evaluation – Results



Top Routes

- No. 3 Road: Sea Island Way to Steveston Highway
- Garden City Road
- Gilbert Road
- River Road: West Dyke to Canada Line Bridge
- Westminster Highway: No. 1 Road to Shell Road
- Blundell Road: Crabapple Ridge Bike Route to Sidaway Road

## Phase 2 Engagement – Proposed Activities and Questions

### Phase 2 Engagement – Ideas Board

#### Sparking a Discussion

Steer conversations towards key topics where feedback is desired but are not well suited for a survey format such as:

- Open-ended questions, or questions where a long list of options would need to be provided
- Temperature check on different ideas
- Qualitative and experiential data

#### Examples

- What is your experience using electric mobility devices (e.g., e-scooters, e-bikes, segways, bike share, etc)? For what trip purposes do you usually use your device? Do you feel safe on these devices on roads and bike lanes?
- Richmond recently amended bylaws to establish a 15 km/h speed limit for e-bikes on Multi-use Paths (e.g., Railway Greenway) and trails (e.g., West Dyke trail and Shell Road trail). What are your views on this change? What is your experience on shared paths and trails with people walking, cycling and use electric mobility devices?
- What are your attitudes and suggestions regarding the sharing trails between pedestrians and electric mobility devices?
- In Phase 1, some participants reported being uncomfortable cycling in mixed traffic on local streets. What improvements would like to see on these routes to make them feel safer and more comfortable?
- In Phase 1, we received several requests to establish a Tour de Richmond (defined cycling route around the City of Richmond) via signage, marketing, etc. What do you think of this idea? What destinations (parks, viewpoints, restaurants, cafes, stores, etc.) in Richmond do you like to visit while riding your bike?
- For families with children in Elementary or High School, do your children ride their bikes to school? What is your or your child's experience and what improvements would encourage them to ride to school more often?

### Phase 2 Engagement – Mapping Tool



#### Purpose

**Phase 1 Engagement** – received feedback on site specific issues.

**Network Analysis** – identifies routes with high potential to generate cycling benefits.

#### Proposed Consultation

Based on the results provided and your experience as a cyclist in Richmond, please reflect on the routes considered top or high ranking. **Are there additional routes that you would consider high priority?**

## Phase 2 Engagement – Proposed Activities and Questions

### Phase 2 Engagement – Survey

#### Potential Questions

1. If you had \$1 million dollars to invest in cycling infrastructure, would you rather build 10 kilometres of neighbourhood bikeways, 5 kilometres of unprotected bike lanes, 2.5 kilometres of protected bike lanes, or 1 kilometre of multi-use pathways? Please rank in order of importance.
2. How would you allocate funding between new routes, maintenance, adding protection to existing facilities, upgrading existing intersections, completing gaps in the existing network, and bike parking? Participants to allocate percentage of funding.
3. Many routes will likely need to be completed in segments. Different segments may provide greater access to various destinations. Please rank the following destinations from most to least important when deciding which segments to prioritize.
 

<ul style="list-style-type: none"> <li>• Schools</li> <li>• Parks</li> <li>• Canada Line stations</li> </ul>	<ul style="list-style-type: none"> <li>• Bus exchanges</li> <li>• Commercial areas</li> <li>• Community <u>centres</u></li> </ul>	<ul style="list-style-type: none"> <li>• City centre</li> <li>• Neighbourhood centres</li> </ul>
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4. Please rank the following locations for prioritizing new secure bike parking facilities in Richmond.
 

<ul style="list-style-type: none"> <li>• Schools</li> <li>• Parks</li> <li>• Canada Line stations</li> </ul>	<ul style="list-style-type: none"> <li>• Bus exchanges</li> <li>• Commercial areas</li> <li>• Community <u>centres</u></li> </ul>	<ul style="list-style-type: none"> <li>• City centre</li> <li>• Neighbourhood centres</li> </ul>
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5. How many minutes of extra travel time on a 20-minute cycling trip would you be willing to incur to remain in a fully protected facility (off street multi-use path or off-street bike lane)? Participants select from 0 to 5+ minutes.
6. We heard in Phase 1 that many residents don't feel comfortable cycling on local roads. Which improvements would increase the level of comfort and have the greatest positive impact on your likelihood to use neighbourhood bikeways? Please rank from greatest to least impact.
 

<ul style="list-style-type: none"> <li>• Safer crossings at intersections</li> <li>• Reduced speed limits</li> <li>• Traffic calming measures</li> </ul>	<ul style="list-style-type: none"> <li>• Improved wayfinding</li> <li>• Shared lane markings</li> <li>• Other</li> </ul>
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7. Please confirm your level of agreement with the following statements (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree):
  - A. Cyclists should travel at slower speeds when sharing multi-use facilities with pedestrians.
  - B. The City of Richmond should expand slow-speed signage programs on multi-use pathways and trails.
  - C. Separated facilities should be prioritized in high-traffic and high-density areas (e.g., City Centre, arterials, major streets).