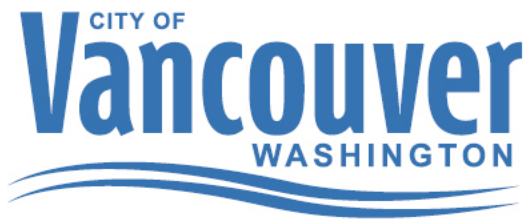




# Transportation System Plan Update

Vancouver City Council  
January 9, 2022



**Kate Drennan, Principal Transportation Planner, Community Development Department**

**Thomas Brennan, Consultant Project Manager, Nelson\Nygaard Consulting**



# Agenda

- Modal Networks Update
- Big Ideas, Policies and Programs
- Community Engagement
- Next Steps



# Presentation Purpose

**Update on Transportation System Plan and feedback requested**

## **Modal Networks**

- Review updates to modal networks

## **Community Engagement**

- Review community engagement activities and input to-date

# Prior Council Review

## **Aug 24, 2020**

- Intro to TSP Update

## **Jun 14, 2021**

- Existing conditions
- City council values and the TSP
- Public outreach

## **Dec 20, 2021**

- Project Chartering Process

## **Apr 25, 2022**

- TSP goals

## **July 18, 2022**

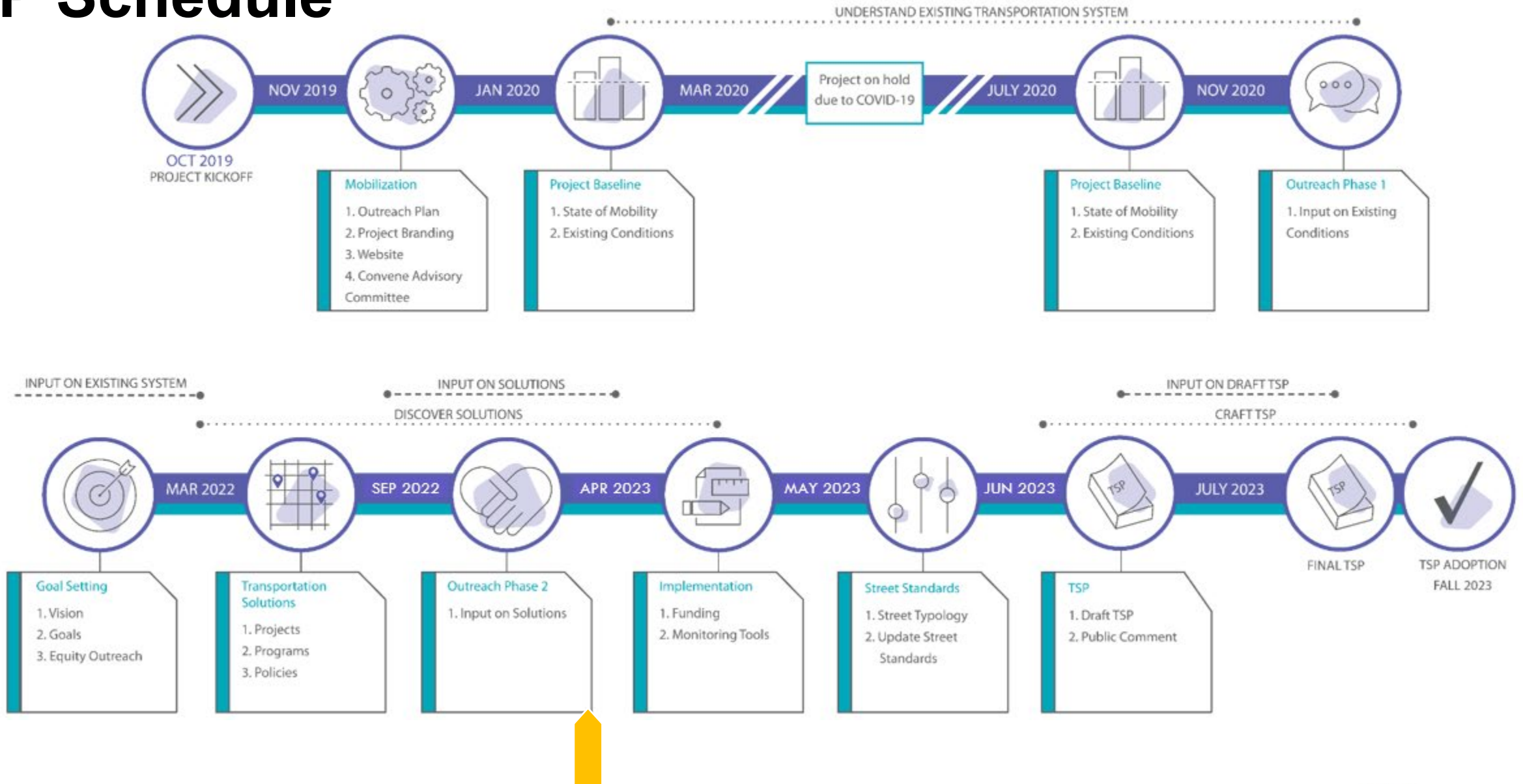
- Big Ideas
- Draft Policies, Projects and Programs (PPP)

## **September 12, 2022**

- Big Ideas
- Modal Networks
- Prioritization



# TSP Schedule



# TSP Chartering Process

Project Phase	Elements	Council and TMC Action	Completed Dates/Tentative Dates
Project Baseline	<ul style="list-style-type: none"> <li>State of mobility</li> <li>Existing conditions</li> <li>Vulnerability analysis</li> <li>Community input</li> </ul>	TMC review	Jan 5, 2021; Mar 2, 2021; Jun 1, 2021; Jul 6, 2021
		Council workshop	Jun 14, 2021
Values and Goals	<ul style="list-style-type: none"> <li>Enhanced Transit Corridor analysis</li> <li>Community input on project values and associated project opportunities</li> </ul>	TMC review	Sep 7, 2021; Jan 4, 2022
		Council workshop	Apr 25, 2022
Final Goals and Priorities	<ul style="list-style-type: none"> <li>TSP Goals</li> <li>Project prioritization process</li> </ul>	TMC review	Mar 1, 2022; Jul 5, 2022; Sep 6, 2022
		Council workshop	Jul 18, 2022; Sep 12, 2022
		Council resolution	September 26, 2022
Solutions	<ul style="list-style-type: none"> <li>Policies and programs</li> <li>Modal networks</li> </ul>	TMC review	Jul 5, 2022; Sep 6, 2022; Dec 6, 2022
		Council workshop	Jul 18, 2022; Sep 12, 2022; Jan 9, 2023
		Council resolution	January, 2023
Implementation	<ul style="list-style-type: none"> <li>Street typology and standards update</li> <li>Pedestrian crossing policy</li> <li>Performance measures</li> <li>Funding recommendations</li> </ul>	TMC review	April 2023; May 2023
		Council workshop	April 2023; May 2023
		Council resolution	May/June 2023
Plan Adoption	<ul style="list-style-type: none"> <li>Review of draft plan</li> <li>Community input on draft plan</li> <li>Plan adoption</li> </ul>	TMC action item	July 2023; September 2023
		Council workshop	July 2023; September 2023
		Council resolution	September 2023



# Alignment with Policy Priorities

- Progress on **climate, equity, and safety** priorities are directly linked to transportation and the goals of the TSP

## Climate

- Our transportation system helps to reduce our impact on the climate and our natural environment.

## Equity

- Transportation in Vancouver supports the needs of all and investment counteracts historic and current inequities.

## Safety

- Our transportation system keeps people safe when they walk, roll, bicycle, take transit, or drive.



## Big Idea Support Thriving Neighborhoods

# 15-Minute Neighborhoods

Make walking and small mobility convenient through mixed-use zoning and investment in complete corridors to serve all travel modes. Foster redevelopment within strategic development nodes to support 15-minute neighborhoods.

*Supporting programs and policies:*

- Neighborhood Traffic Calming
- Safe Routes to School







## Big Idea Support Thriving Neighborhoods

# Climate Corridors

Develop climate corridors to mitigate climate impacts through greener streets, street tree canopies, natural plantings for stormwater management, linear parks, and other climate resilient techniques. Use city-owned right-of-way to create a network of corridors that support climate adaptation and safe and healthy mobility as climate change occurs.

*Supporting programs and policies:*

- Natural Resources
- Street Trees
- Stormwater Management



Clark County Green Streets Project on NE 99<sup>th</sup> St



# Big Idea Support Thriving Neighborhoods

## Community Streets

Develop guidance and encouragement for community use of the right-of-way, including plazas, parklets, “streateries”, open streets events, public art, and demonstration projects.

*Supporting programs and policies:*

- Open Streets
- Street Art



*Communities around the U.S. started using streets for civic life, walking, and cycling during the pandemic.*



## Big Idea Create Complete Corridors

# Complete Corridors

Create complete corridors throughout the city that connect growth areas, support business, serve transit, and increase safety. Corridors connect destinations and include identifying parallel options.

*Supporting programs and policies:*

- Street Typologies
- Functional Classification Update
- Freight Classifications
- Critical Network Gaps



[Olympia, WA Complete Corridors Program](#) – project at 7<sup>th</sup> Ave and Plum St along a pilot corridor





## Big Idea Create Complete Corridors

# People-Based Metrics

Plan, design, and evaluate projects and developments using people-focused metrics that prioritize person through-put, safety and comfort. Use the metrics to evaluate facility performance and post-project evaluations.

*Supporting programs and policies:*

- Traffic Impact Analysis
- Multimodal Concurrency Standards
- TIP Prioritization
- Paving List





## Big Idea Create Complete Corridors

# Street Standards

Adopt street standards that create comfortable, inviting multimodal streets. Integrate the latest best practices from NACTO, WSDOT, AASHTO, and MUTCD in terms of facility selection and design, traffic control, and signage and striping. Adopt into standard plans referenced in VMC Title 11.

*Supporting programs and policies:*

- Multimodal Access Through Street Connectivity
- Pedestrian Crossing Policy
- Access Management



## Big Idea Create Complete Corridors

# Vision Zero

Adopt a Vision Zero policy committing to end traffic fatalities and serious injuries on Vancouver streets by 2040. This policy would be a resolution to address the intersecting factors that lead to fatal crashes, such as unsafe behavior, alcohol and drug impairment, street design, and traffic speeds.

*Supporting programs and policies:*

- Lower Posted Speeds
- Citywide Safety Program
- High-Crash Corridors
- Street User Education
- Automated Enforcement
- Pedestrian-Scale Lighting
- Quick-Build Response





## Big Idea Create Complete Corridors

# Project Delivery

Deliver maintenance, capital, and development projects in an effective, efficient manner with clear and transparent communication to the community.

*Supporting programs and policies:*

- Project Managers
- Communications
- Anti-Displacement



## Big Idea Connect People to Transit

# Access to Transit

Prioritize sidewalk and crosswalk gaps adjacent to transit stops, particularly along equity routes, and identify first/last mile barriers to major transit stops to address on an ongoing basis.



*Bus stop at NW Lincoln & 51<sup>st</sup>, missing a sidewalk and more than 200 ft to a marked crosswalk*



## Big Idea Connect People to Transit

# Enhanced Transit Corridors

In coordination with C-TRAN, build a network of Enhanced Transit Corridors where higher level of transit service (frequency, hours of operation, stop amenities) are desired based on existing and future density and equity.

*Supporting programs and policies:*

- Network of The Vine
- Speed and Reliability Designs
- Equity Corridors





Big Idea  
**Connect  
People to  
Transit**

# Transit and Land Use

Support transit through compact land uses and policies that incentivize transit use.

*Supporting policy:*

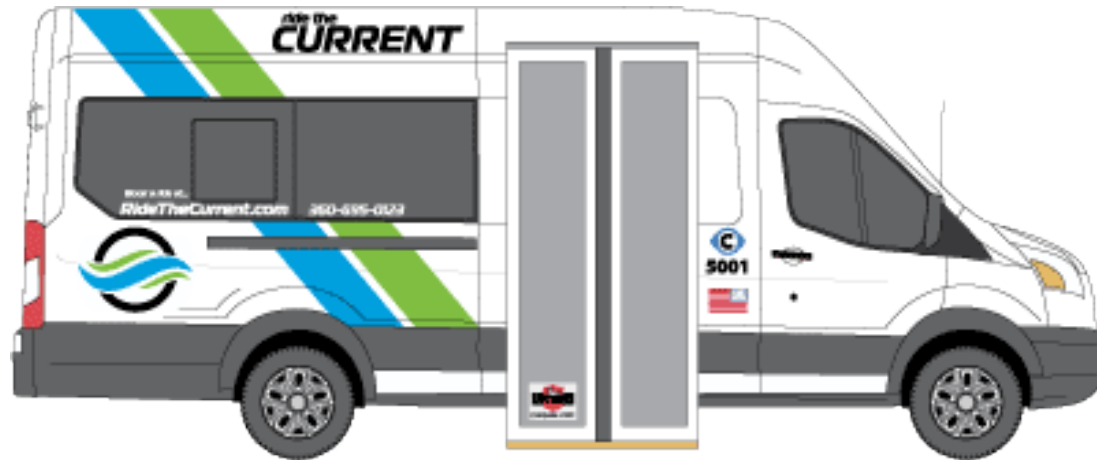
- Transit Overlay District



## Big Idea Connect People to Transit

# Microtransit

Integrate shared and emerging mobility technology and tools with C-TRAN microtransit zones to provide a suite of mobility options, especially in lower-density areas without high-frequency transit





## Big Idea Build Low- Stress Networks

# Low-Stress Mobility Network

Adopt a city-wide low-stress long-term mobility network that prioritizes safety and comfort for people of all ages. This network is a subset of the city's larger mobility network consisting of lower-stress facilities such as neighborhood greenways and shared-use paths. The density target for low-stress facilities is every half-mile.

*[Fort Collins, CO](#) has established a bicycling program, FC Bikes, that includes a low-stress network, a cycling map, learning resources, and a bike-to-work day.*



# Pedestrian Priority Streets



## Big Idea Build Low- Stress Networks

Adopt a network of Pedestrian Priority streets where safety and comfort for people walking is prioritized. Assign categories (primary, secondary) based on the roadway classification, level of demand, and existing and planned land uses, and use these categories to recommend desired facilities and amenities (shade, lighting, seating, etc.).

### 7. Shoulder Bikeways

#### Design Summary

Typically found in less-dense areas, shoulder bikeways are paved roadways with striped shoulders (4'+) wide enough for bicycle travel. Shoulder bikeways often, but not always, include signage alerting motorists to expect bicycle travel along the roadway. Shoulder bikeways should be considered a temporary treatment, with full bike lanes planned for construction when the roadway is widened or completed with curb and gutter. This type of treatment is not typical in urban areas and should only be used where constraints exist.

The choice of bike lane facilities, whether bike lanes should be striped or if a road should be a shared-use roadway, can be a simple quantitative matter of the speed and volume of traffic on the roadway. It can also be a much more complicated analysis that includes consideration of facility users, key connections, type of traffic, as well as other qualitative factors. The table to the right provides guidance for making facility type decisions.

#### Discussion

In many cases, the opportunity to develop a full standard bike lane on a street where it is desirable may be many years. It is possible to stripe the shoulder in lieu of bike lanes if the area is 50 percent of the desirable bike lane width and the outside lane width can be reduced to the AASHTO minimum. If the available bike lane width is 2/3 of the desirable bike lane width, the full bike lane treatment of signs, legends, and an 8" bike lane line would be provided. Where feasible, extra width should be provided with pavement resurfacing jobs, but not exceeding desirable bike lane widths.

#### Wide Outside Lanes

A wide outside lane may be sufficient accommodation for bicyclists on streets with insufficient width for bike lanes but which do have space available to provide a wider (14'-16') outside travel lane.



Shoulder bikeways are appropriate along wide roads where vehicles can avoid passing close to bicyclists

#### Context for Shoulder Bikeways vs. Bike Lanes

Variable	Effect on Need for Bike Lanes
1. Land Use Indicators	
Urban Center, CBD	Decreases
Suburban	Increases
Buildings at back of sidewalk	Decreases
Buildings set back from roadway (parking lots front street)	Increases
On Street Parking	Decreases
Short block length	Decreases
Long block length	Increases
2. Traffic speed/volume indicators	
Signal coordination timed at higher than posted speeds	Increases
Signal coordination timed at lower than posted speeds	Decreases
Peak Hourly Traffic Volume > 10%	Increases
3. Roadway characteristics	
Wide roadway / multiple travel lanes	Increases
Steep grades: uphill	Increases
Steep grades: downhill	Decreases
4. Bicycling demand indicators	
Popular Route to School	Increases
Provides continuity of bike lanes, routing or trail	Increases
Other high-use indicators	Increases

Tacoma, WA has developed [pedestrian and bicycle design guidelines](#) as a part of their Mobility Master Plan





Big Idea  
**Build Low-  
Stress  
Networks**

# Active Transportation Navigation

Support walking and small mobility by making it easy and intuitive to navigate the city and find destinations.

*Supporting programs and policies:*

- Maintenance Protection
- Wayfinding
- Bicycle/Small Mobility Parking



## Big Idea Build Low- Stress Networks

# Small Mobility and Walking Programming

Complement infrastructure with robust programming that encourages and educates people about the benefits of walking and small mobility.

*Supporting programs and policies:*

- Active Transportation Staffing
- E-bike Rebate Program
- Small Mobility Events



FC Moves

[Contact Us](#)

[Events](#) [Plans & Projects](#) [Education](#) [Resources & Tools](#) [Calendar](#) [About](#)

Fort Collins, CO developed [FC Moves](#), a city department that exists to advance mobility solutions to increase walking, bicycling, transit use, shared and environmentally sustainable modes



Big Idea  
**Make Growth a  
Benefit for All**

# Development Review

Work with development community to establish a shared set of requirements and expectations for how development can support transportation.

*Supporting programs and policies:*

- Transportation Impact Fees
- Frontage Requirements



Big Idea  
**Make Growth a  
Benefit for All**

# Citywide Parking Policy & Code

Update parking code and policies to right-size the amount of parking developed with future growth and create safe streets, compact urban form, and encourage non-driving forms of transportation.

*Supporting programs and  
policies:*

- Parking Requirements
- Parking Design Guidance
- Parking Capacity





## Big Idea Make Growth a Benefit for All

# Parking Management

Effectively manage on and off-street parking resources through adoption of policies, systems, and tools throughout the city.

*Supporting programs and policies:*

- Parking Operations
- Parking Experience
- Residential Parking





Big Idea  
**Make Growth a  
Benefit for All**

# Downtown Parking

For those who drive downtown, create a user-friendly, well-managed, and right-sized “park once” environment where people can walk between destinations without moving their car.

*Supporting programs and  
policies:*

- Downtown Parking Strategies
- Downtown Circulator



Big Idea  
**Make Growth a  
Benefit for All**

# Transportation Demand Management (TDM)

Require transportation demand management to reduce drive-alone trips, offer all travelers more mobility choices, and incentivize behavior change to more walking, biking, carpooling, and transit trips.

*Supporting programs and  
policies:*

- TDM in Capital Projects
- Commute Trip Reduction (CTR) Refresh and Expansion



**Big Idea**  
**Embrace the**  
**Future**

# Data Collection and Monitoring

Use data to track travel pattern changes over time.

*Supporting programs and policies:*

- Active Transportation Counts
- Location-Based Services
- Online System Dashboard





## Big Idea Embrace the Future

# Climate Impacts

Adopt policies that will help meet the city's goal of zero carbon emissions by 2040.

*Supporting programs and policies:*

- Mode Targets
- Congestion Pricing
- Vehicle Miles Traveled Reduction



Big Idea  
**Embrace the  
Future**

# Technology for System Management

Embrace technology as a way of managing the transportation system without expanding capacity

*Supporting programs and  
policies:*

- Signal Modernization
- Green Wave



## Big Idea Embrace the Future

# Electric / Autonomous Vehicles

Set city policy around EV / AV usage and role in achieving climate goals.

*Supporting project:*

- City Fleet



*It is important to understand the issues related to equitable access to mobility, gentrification, and access as EV use and charging expands*



## Big Idea Embrace the Future

# Emerging Mobility

Update city policies for how shared mobility and emerging mobility vendors shall operate in Vancouver. Create data standards and sharing agreements, vendor requirements, and require equitable access to services both geographically and through reduced costs for people with low incomes.

*Supporting programs and policies:*

- Mobility Hubs
- Small Mobility and Scooter Share
- Mobility as a Service





## Big Idea Embrace the Future

# Curb Management

Develop policies and programs that efficiently manage valuable curb space, recognizing the high demands on this resource with changing living and shopping patterns.

*Supporting programs and policies:*

- Dynamic Curb Management
- Small Freight Management
- Freight Parking and Loading

# Modal Networks Update



**Low-Stress Active  
Transportation  
Networks**



**Enhanced Transit  
Network**



**Street Network and  
Complete  
Corridors**

# Modal Networks

## Focus on policy, programs, and capital projects

- Walking and Rolling
- Mobility (Bicycle and Small Mobility)

## Focus on policy and programs

- Transit
- Freight
- Parking
- Emerging Mobility
- Street Network



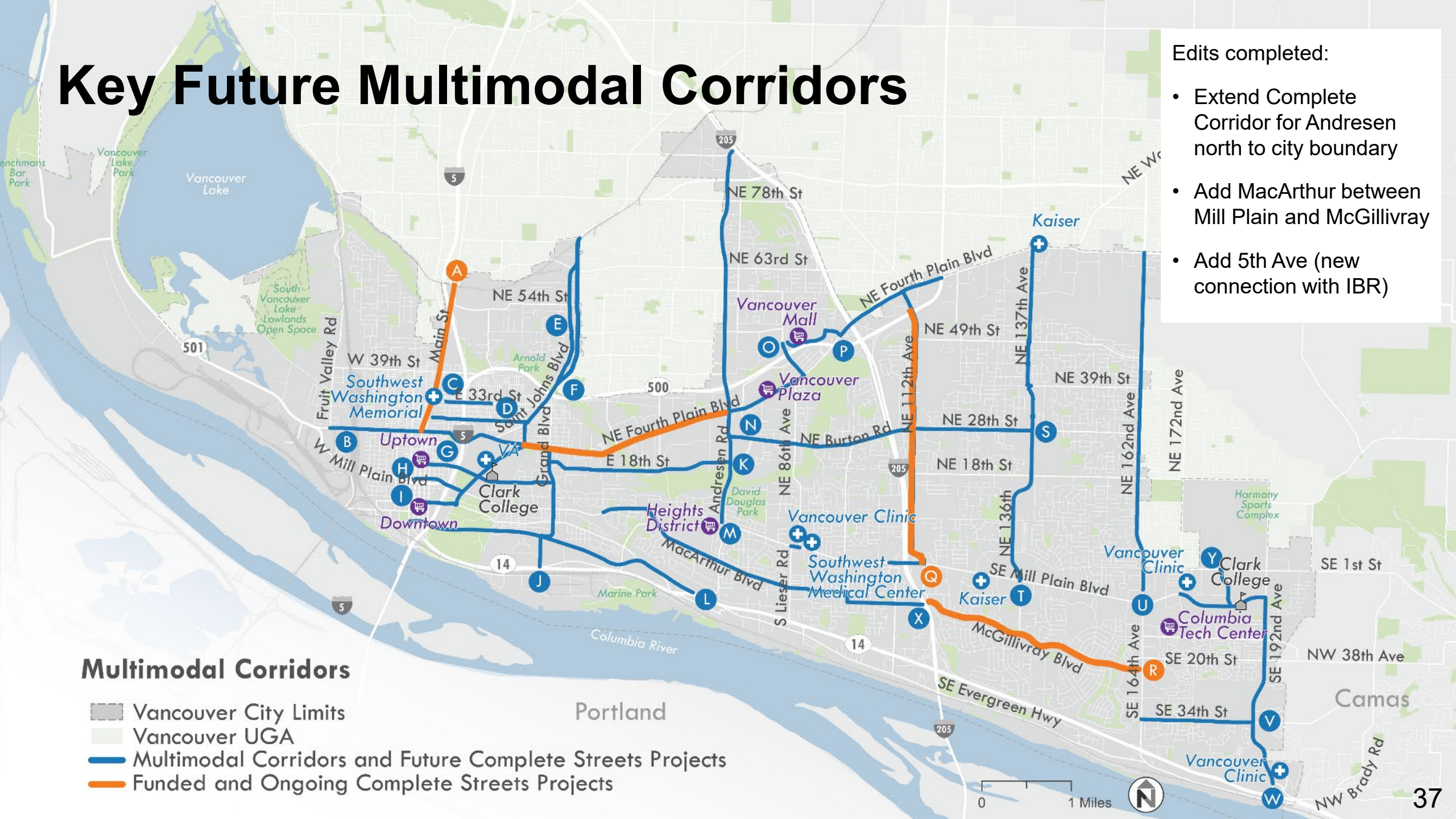
# Key Future Multimodal Corridors

Edits completed:

- Extend Complete Corridor for Andresen north to city boundary
- Add MacArthur between Mill Plain and McGillivray
- Add 5th Ave (new connection with IBR)

## Multimodal Corridors

-  Vancouver City Limits
-  Vancouver UGA
-  Multimodal Corridors and Future Complete Streets Projects
-  Funded and Ongoing Complete Streets Projects





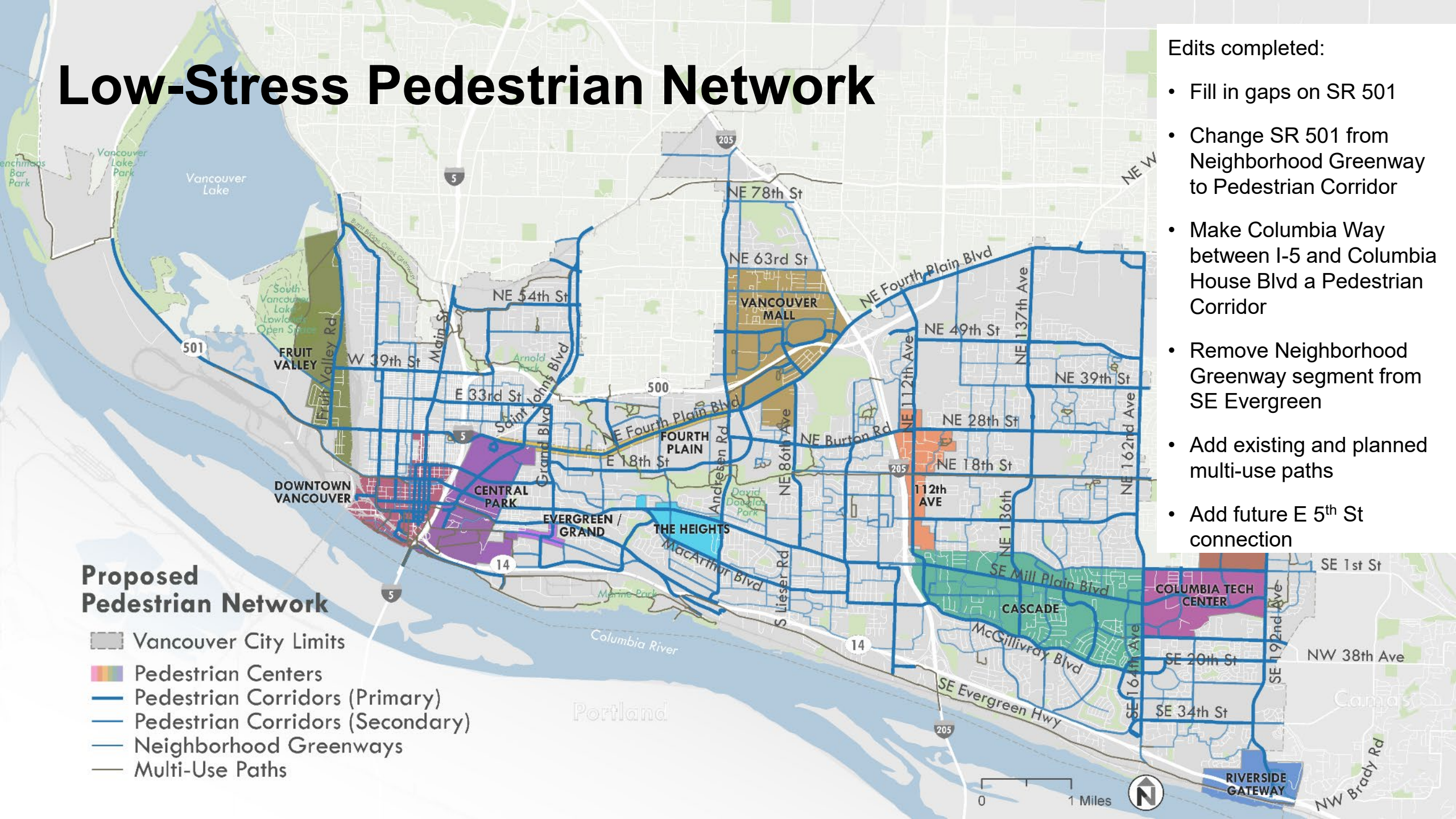
# Low-Stress Pedestrian Network

Edits completed:

- Fill in gaps on SR 501
- Change SR 501 from Neighborhood Greenway to Pedestrian Corridor
- Make Columbia Way between I-5 and Columbia House Blvd a Pedestrian Corridor
- Remove Neighborhood Greenway segment from SE Evergreen
- Add existing and planned multi-use paths
- Add future E 5<sup>th</sup> St connection

## Proposed Pedestrian Network

- Vancouver City Limits
- Pedestrian Centers
- Pedestrian Corridors (Primary)
- Pedestrian Corridors (Secondary)
- Neighborhood Greenways
- Multi-Use Paths





# Low-Stress Bike and Small Mobility Network

## Proposed Bicycle and Small Mobility (BSM) Network

▬ Vancouver City Limits  
▬ Vancouver UGA

### PROPOSED BSM NETWORK\*

▬ Protected BSM Lanes  
▬ Buffered BSM Lanes  
▬ BSM Lanes  
▬ Neighborhood Greenways  
▬ Multi-Use Paths  
▬ Unpaved Trails

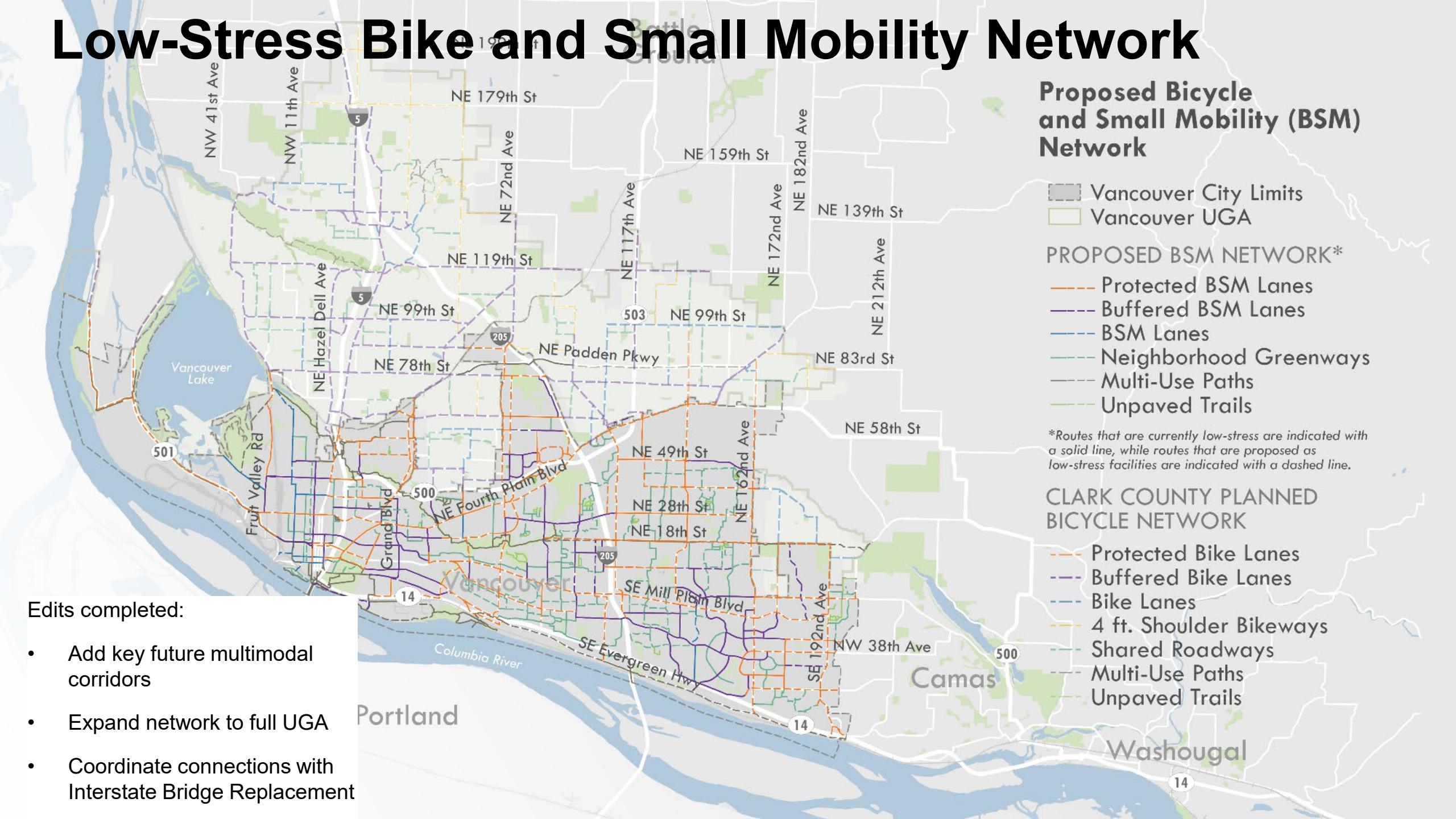
*\*Routes that are currently low-stress are indicated with a solid line, while routes that are proposed as low-stress facilities are indicated with a dashed line.*

### CLARK COUNTY PLANNED BICYCLE NETWORK

▬ Protected Bike Lanes  
▬ Buffered Bike Lanes  
▬ Bike Lanes  
▬ 4 ft. Shoulder Bikeways  
▬ Shared Roadways  
▬ Multi-Use Paths  
▬ Unpaved Trails

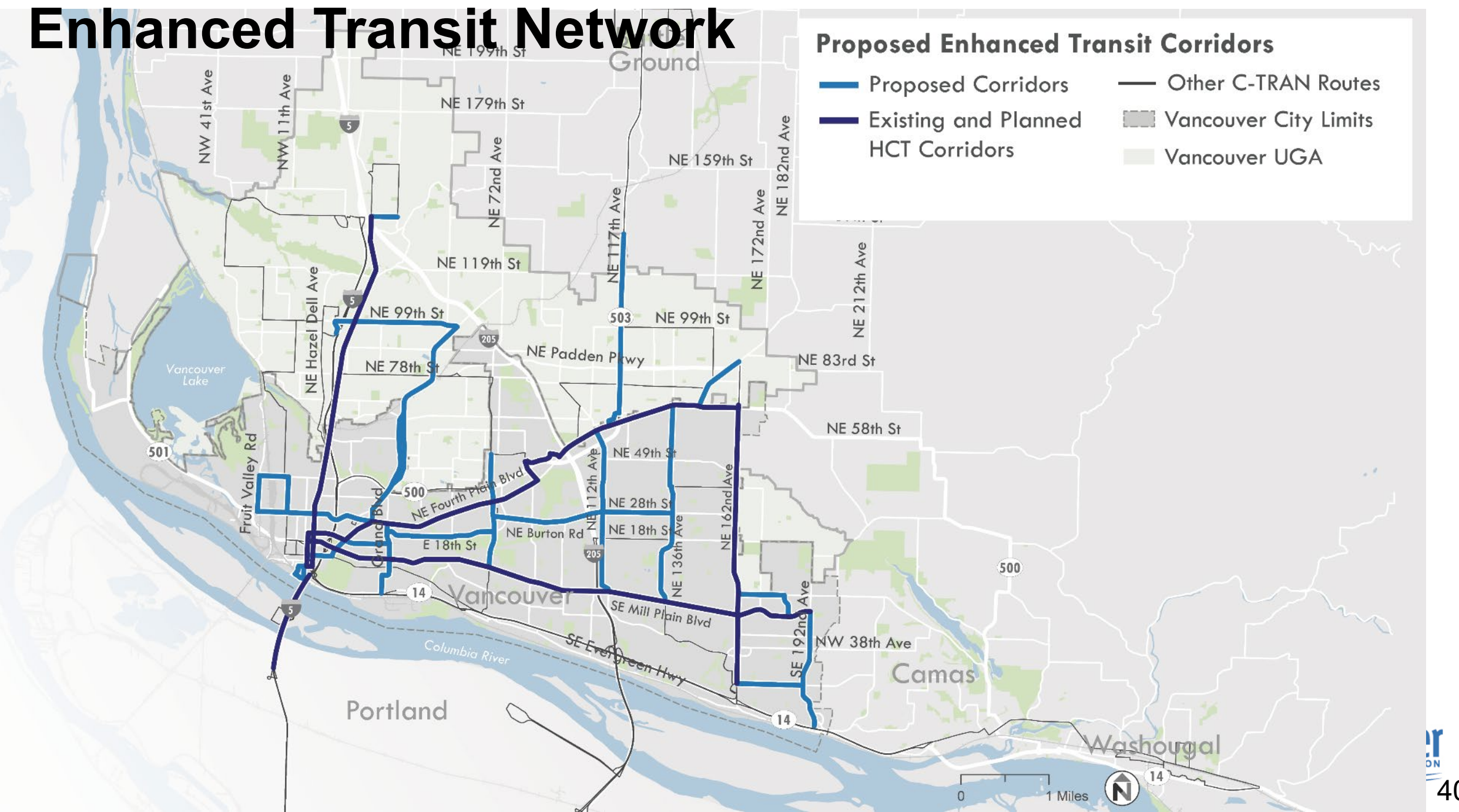
### Edits completed:

- Add key future multimodal corridors
- Expand network to full UGA
- Coordinate connections with Interstate Bridge Replacement





# Enhanced Transit Network



# From Networks to a Capital Project List

- The TSP provides facility selection policies, design standards, and targets
- Designated networks define the long-term vision and lead to capital projects
- Prioritization (next section) identifies highest priority locations and determines phasing

# Fall 2022 Community Engagement



**Direct  
Engagement**



**Online Open  
House and Survey**

# Fall 2022 Engagement Overview (Aug – Nov)

- BeHeard Web Updates
- Tabling and Business Canvassing
- Community Roundtable + Clark College Focus Groups
- Community Presentations to neighborhood associations and CBOs
- Online Open House #2 and Survey

Other outreach was carried out in conjunction with:

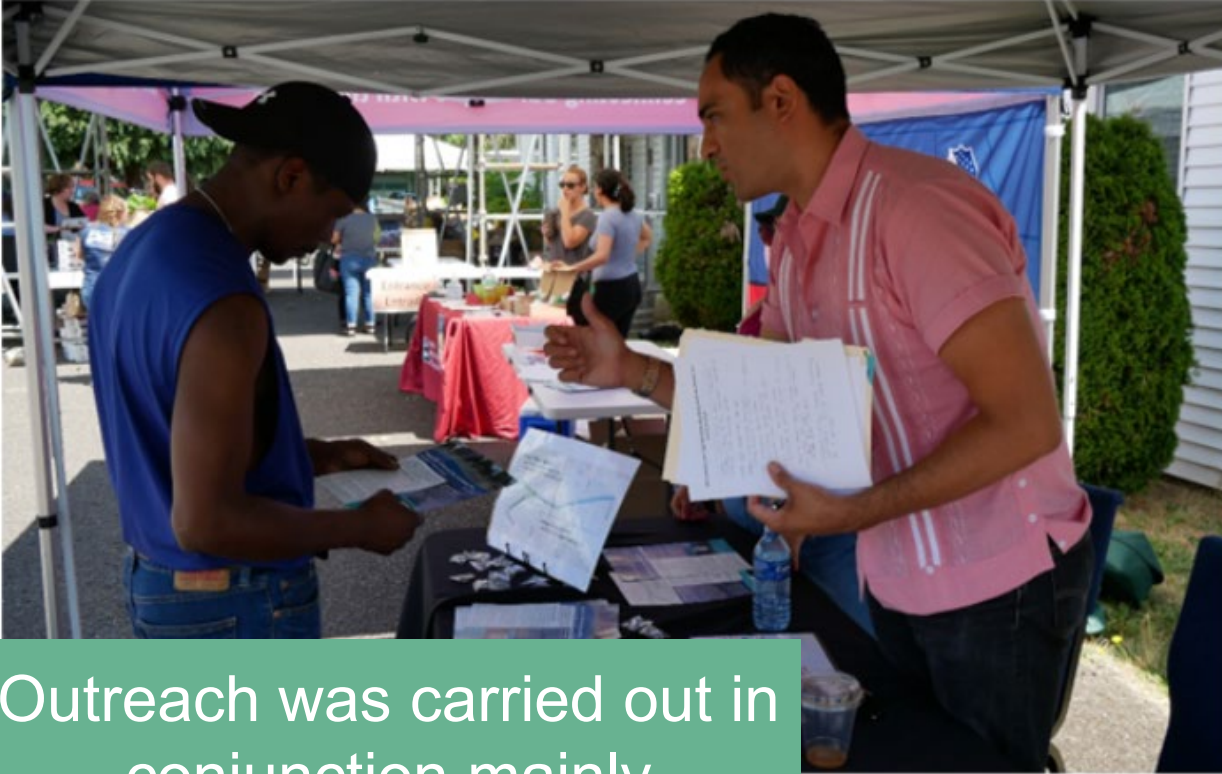
- **Fourth Plain Safety & Mobility Project**
- 34th Street Safety & Mobility Project
- Heights District Plan
- ARPA Planning
- Strategic Plan



# Tabling and Business Canvassing

Activity	Date	Event / Location / Group	TOTAL REACHED
<b>Tabling</b>	August 2	Fourth Plain Forward & Columbia Play Project Arte en El Parque	<b>170+</b> Total engaged
	September 17	LULAC Grows Mercado	
	September 17	Multicultural Resource Fair at Clark College	
	October 1	Downtown Vancouver Farmers Market	
<b>Business Canvassing</b>	October 11, 12, & 19	Project corridor (F Street to Ft. Vancouver Way) – Ft Vancouver Way (Fourth Plain to Mill Plain)	<b>34</b> Businesses

# Tabling and Business Canvassing



Outreach was carried out in conjunction mainly with **Fourth Plain Safety & Mobility Project**



# Community Focus Groups

- **Nov 8 Community Roundtable** - Attended by representatives from ADA, blind and low-vision, walking and biking communities.
- **"Transportation Talks"** at Clark College Sept 26 and 29

What are the key corridors and network connections you want to see improved?



# Neighborhood and Community Presentations

- Vancouver Neighborhood Traffic Safety Alliance – Nov 16
- Action for Climate Emergency (ACE) – Nov 16
- Meadow Homes Neighborhood Association – Nov 16
- Fourth Plain Forward – Ongoing
- Also contacted: Arnada, Fourth Plain Village, Central Park, Harney Heights, Hudson's Bay, Maplewood, Rose Village Neighborhood Associations, and Washington School for the Blind.

# Input from Focus Groups and Presentations

- Support for bike facilities on Chkalov Dr and McGillivray/MacArthur, and for multi-use paths
- Consider EV charging and fleet electrification
- Consider bus-only lanes, park-and-rides
- Address scooters/small mobility
- Expand focus of commute trip reduction beyond from downtown
- Bike lane maintenance/street cleaning is important
- Concern about congestion with lane reconfigurations



# Online Open House and Survey

- Launched Sept 26 – Closed Nov 15, 2022
- **403** Open House Visits
- Avg. **6.8** per day
- **41** Completed Surveys
- English and Spanish



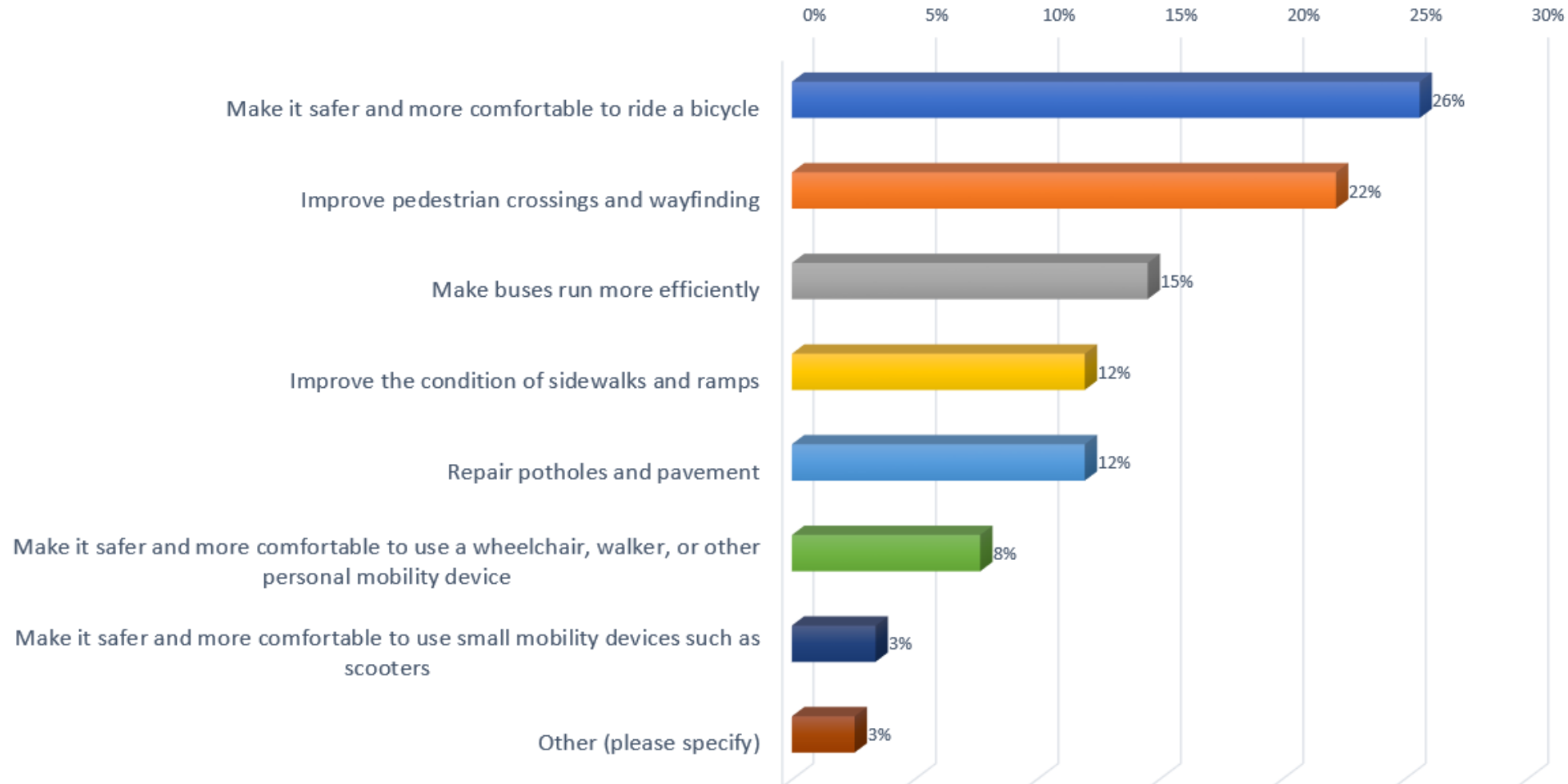
## Welcome!

**This open house will share information and ask for your feedback on the future of transportation in Vancouver.**

The *Vancouver Transportation System Plan (TSP)* is still underway - the plan to help guide transportation decision investments in the City over the next 20 years. As of Summer 2022, the City has made progress on the TSP by drafting "Big Ideas" for the plan as well as drafting transportation networks. This open house summarizes this recent work and will ask for your feedback to help shape the plan's recommendations and strategies as the process moves forward.

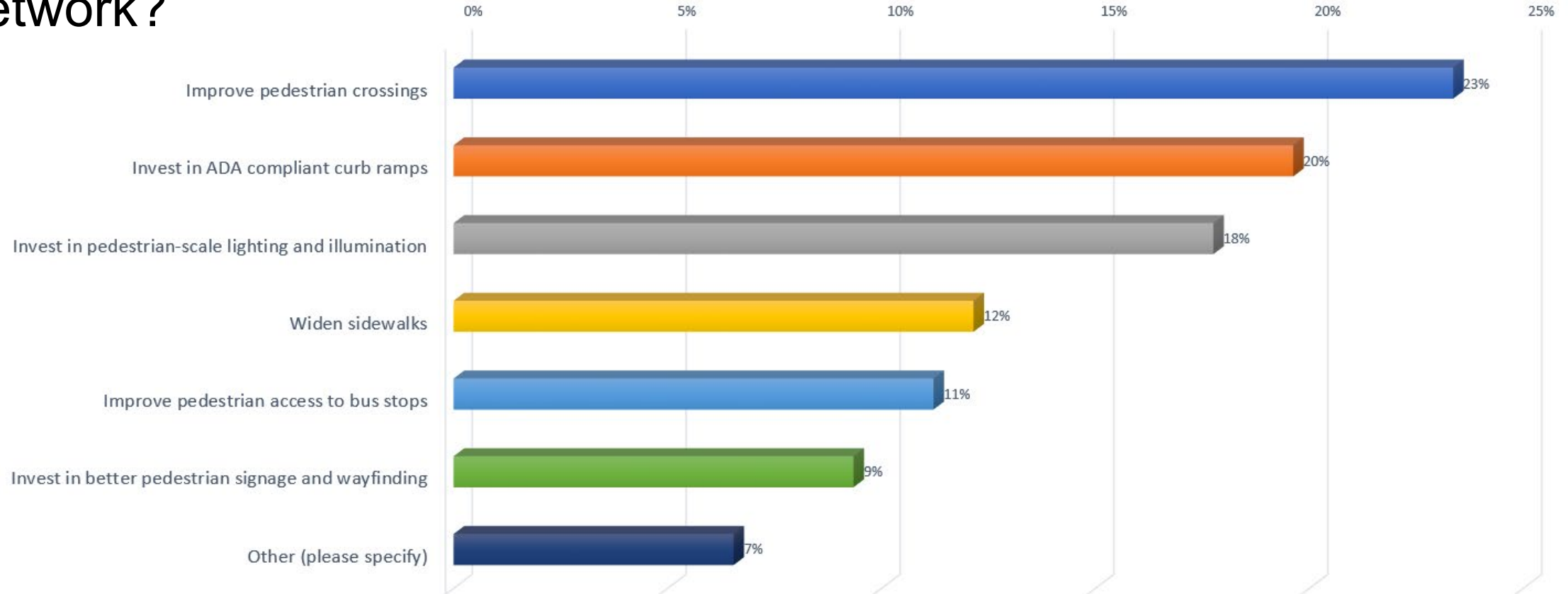
# Online Survey

What are your top three (3) priorities for future investments on multimodal corridors?



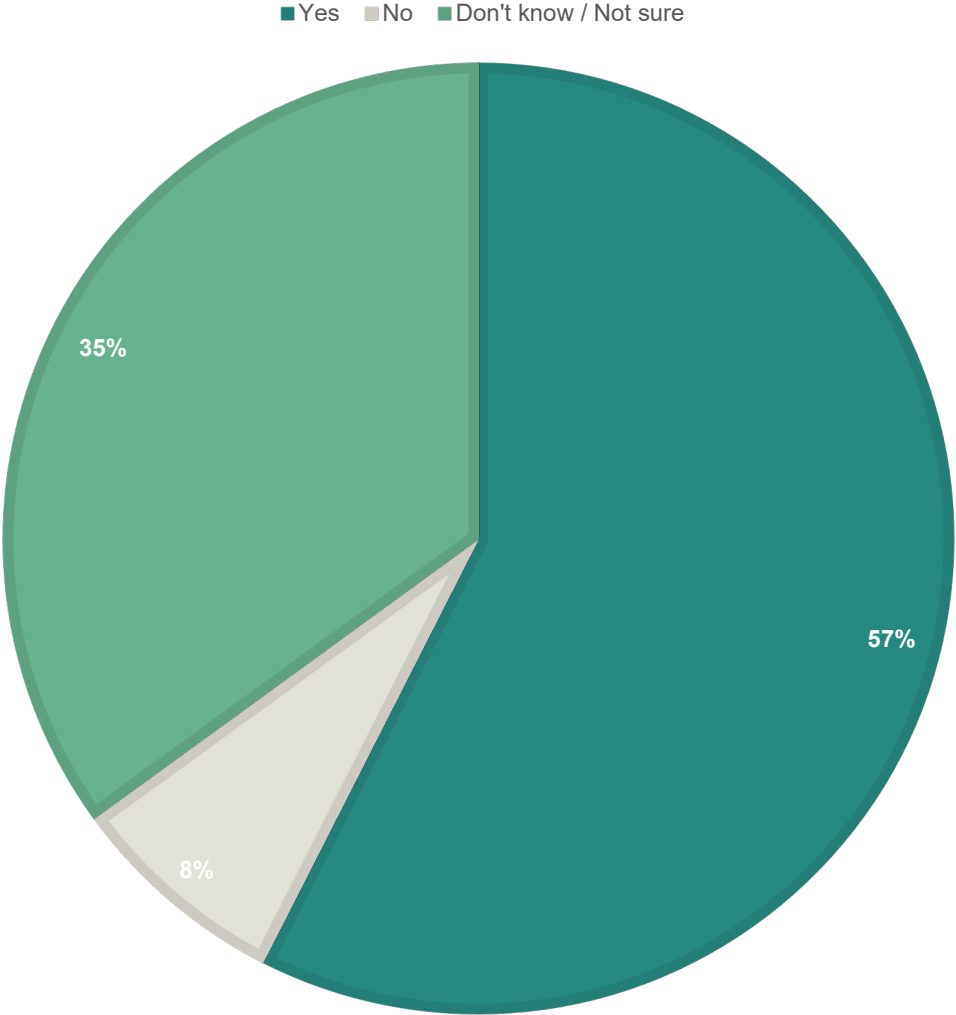
# Online Survey

What are your top three (3) priorities for the future walking and rolling network?



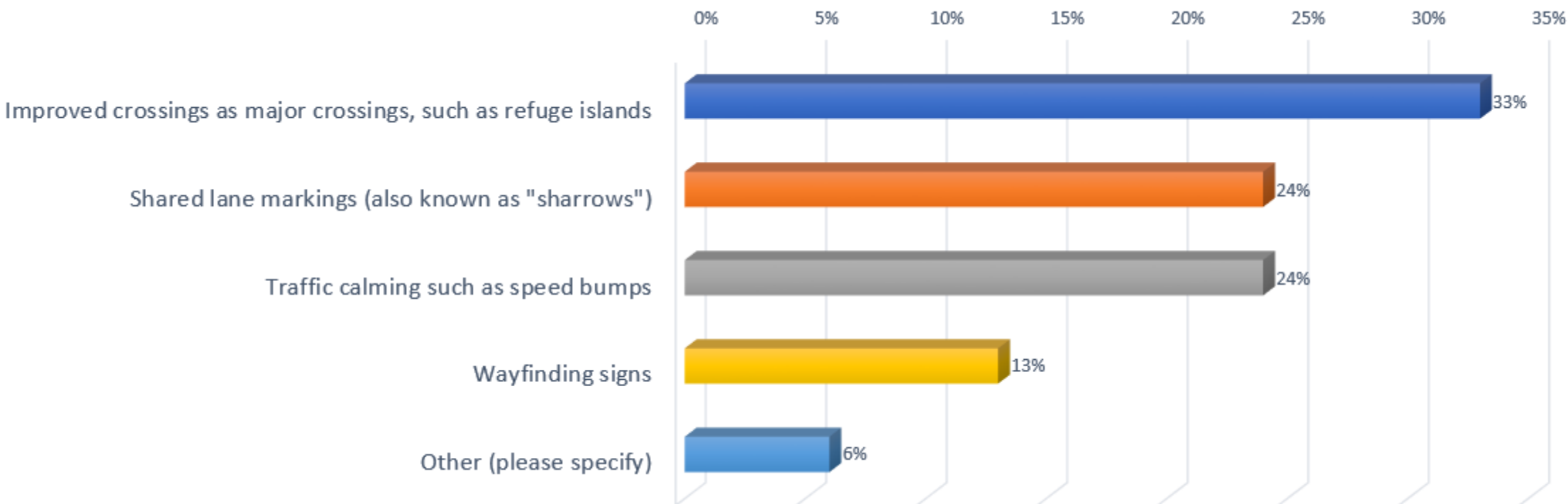
# Online Survey

DO YOU THINK IT'S IMPORTANT THAT THE CITY'S FUTURE BICYCLE AND SMALL MOBILITY NETWORK PROVIDES ACCESS TO A LOW-STRESS FACILITY WITHIN EVERY HALF MILE?



# Online Survey

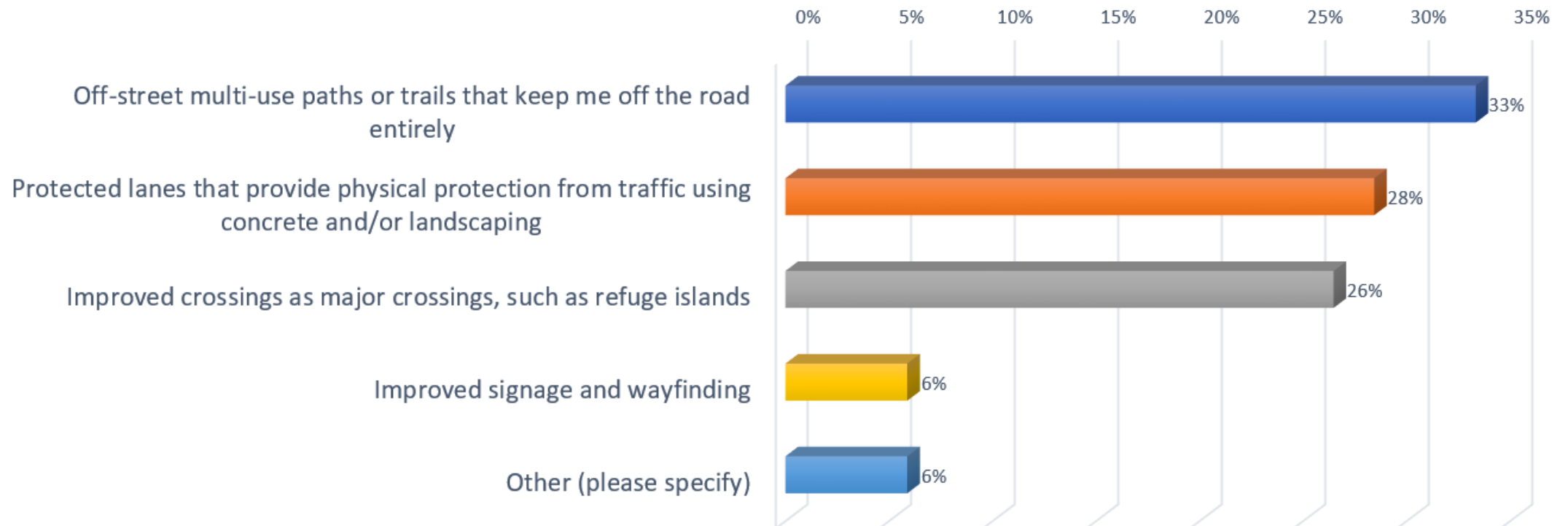
What three (3) bicycle and small mobility improvements are most important to you on *quieter* neighborhood streets?





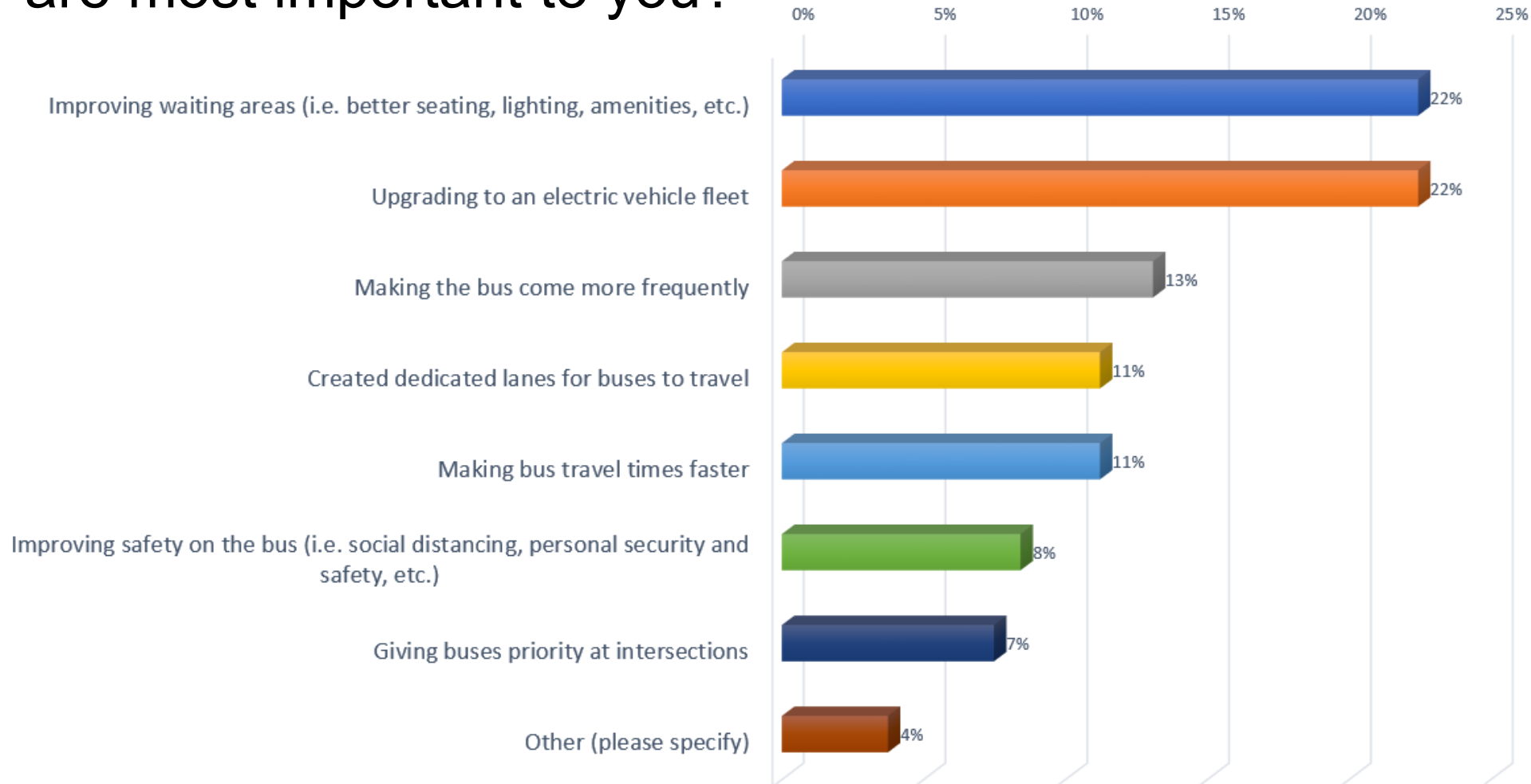
# Online Survey

What three (3) bicycle and small mobility improvements are most important to you on *busier* neighborhood streets?



# Online Survey

What three (3) types of enhanced transit investments are most important to you?



# Feedback

- Support for frequent, efficient, and electric buses
- Support for off-street multi-use paths and trails along busier corridors
- Protected bike/small mobility lanes for on-street facilities
- Median refuge islands at high volume crossings
- Speed reduction and control throughout the City

# Feedback

- Modal Network recommendations:
  - Generally, most were in support of the draft modal networks.
  - Multimodal improvements needed on Mill Plain east of I-205, with a connection to Columbia Tech Center
  - Better walking network in Fruit Valley
  - Andresen Road should be a multimodal corridor
  - Improved crossings at 34<sup>th</sup>, 112<sup>th</sup>, 117<sup>th</sup>, and 162<sup>nd</sup>
  - Safety improvements needed at Fourth Plain & F Street



# 2023 Engagement

- Ongoing meetings and presentations to neighborhood associations and CBOs:
  - Arnada Neighborhood Association, January 7, 2023
  - Fourth Plain Village Neighborhood Association, Feb-Mar 2023 (TBD)
  - Fourth Plain Forward – Ongoing
  - Our Place Nuestra Casa (TBD)
- Spring Online and In-Person Engagement on Draft TSP

**Questions or comments?**

# Next Steps



**Final Networks,  
Policies, and  
Programs**



**Capital Project List  
+ Prioritization**



**Draft  
Transportation  
System Plan**

# Topics for Council Workshops (Spring 2023)

- Prioritized project list
- Street typology and standards update
- Pedestrian crossing policy
- Performance measures
- Funding recommendations



# Thank You

To learn more, visit [\[website\]](#)

