

# TRANSPORTATION SYSTEM PLAN

**DRAFT 2023-08-25** 





HOLD FOR INTRODUCTION FROM
CITY COUNCIL CITY MANAGER

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## **Executive Summary**

HIGHLIGHTS FROM REPORT

## 1. A City on the Move

The Vancouver Moves: Transportation System Plan (TSP) is grounded in shared community values. It provides a transportation vision, programs and policies and investment priorities for the next 20 years. The TSP outlines a strategy for moving more people and goods as the city grows.

Vancouver is growing and diversifying, putting increased pressure and fresh demands on the transportation system. A new waterfront district, increased multifamily development, great parks and schools, and significant job and business growth continue to attract people and investment to the city. Vancouver sits at a virtual crossroads shaped by the Columbia River and the West Coast's major interstate, I-5, and is well-positioned to capture economic benefits from regional trade.

But growth can come with challenges. Vancouverites place a high priority on neighborhood livability as well as access to parks and schools. As more people live and work in Vancouver, concerns grow about congestion, safety, and displacement of people with lower incomes, communities of color, and renters.

Yet these desires—for both progress and preservation—do not need to be in conflict. Vancouverites have consistently shared their values—people want safe streets and comfortable and reliable ways to move within their neighborhood, city, and region. For some, that means better walking and rolling conditions; for others, that means better access to frequent transit or more reliable ways to drive.

#### **Our Core Values**

With input from the community, the Vancouver City Council prioritizes safety for its residents, funding and processes that center equity, and action-oriented solutions to the climate emergency. These values were integrated into the TSP goals.







## Vancouver by the Numbers









191,000

people live in Vancouver as of 2023 – the largest city

in Clark County

31,000

more people live in Vancouver in 2021 — an increase of 19% since 2010

\$63,600

median household income

20%

speak a language other than English at home



12.7%

live in poverty



9.7%

have a disability



48%

rent their home and 52% own their home



10%

Identify as LGBTQ



6%

are veterans



**97**%

are employed



**29**%

hold a Bachelor's degree



22%

are under age 18

For an overview of mobility patterns, see Appendix A: State of Mobility.

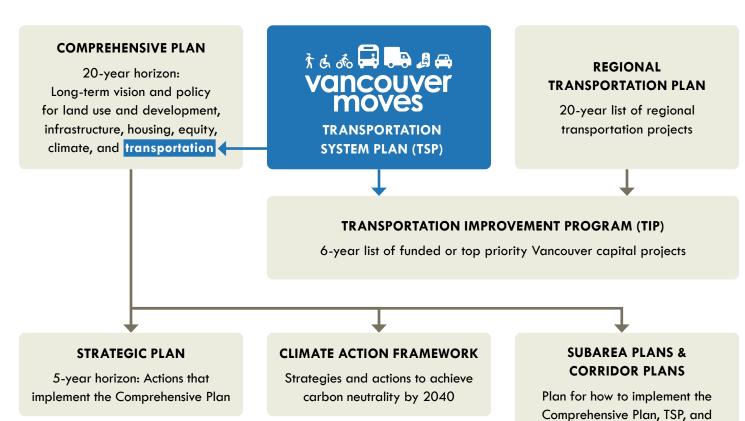


## What is the TSP?

The Vancouver Moves: Transportation System Plan Update (TSP) is our 20-year vision for maintaining and growing a transportation system that supports a safe, equitable, and resilient city. Transportation investment during the past 75 years focused primarily on cars. This TSP expands the focus to walking, rolling, bicycling and small mobility, taking transit, and moving freight. The policies, programs, and capital projects in the TSP will be integrated into the city's adopted roadway projects and programs.

The TSP serves as the transportation element of the Comprehensive Plan. The Washington State Growth Management Act (GMA) requires adoption of a transportation plan consistent with land use, population, and job growth targets. Land uses coordinated with transportation result in mixed-use places where it is easy to walk, bicycle, use small mobility devices or take transit. The TSP process began before the Comprehensive Plan update, but has been crafted to serve forecasted areas of growth. The 2045 Comprehensive Plan update will be complete in 2025, and the TSP may be amended to ensure alignment with the goals and growth needs of the Plan.

The TSP ties into several City plans and policies:



#### Key outcomes of the TSP



#### MAINTAIN QUALITY OF LIFE IN A TIME OF GROWTH

Vancouver's growth into a more urban city must be balanced with maintaining the community's quality of life.



#### PRIORITIZE SAFETY

Design must maximize safety and be supported by policy and programming to make streets safe for everyone.

#### **CENTER EQUITY** IN TRANSPORTATION

Choices about transportation investment, project development, and community participation must integrate equity in every step.



#### **DIVERSIFY** TRANSPORTATION OPTIONS

Comfortable and convenient walking, bicycling or small mobility, carpooling, or transit options will attract more people and are essential to making our streets safer and more equitable.



#### **BUILD SUPPORT FOR MULTIMODAL STREETS**

Transportation is a major concern for residents, as voiced in the City's Strategic Plan. The TSP process educates the public and stakeholders about the value of a multimodal system and the

## **RESPOND TO**

Vancouver Moves seeks to engage community in a genuine and equitable manner, ensuring TSP policies, programs, and projects are effective and reflective of the needs of our residents, workers and visitors.

**COMMUNITY PRIORITIES** 

common tradeoffs cities face during project implementation

#### What is Vancouver Moves?

Vancouver Moves serves as the umbrella name for all transportation investments in the City. The TSP sits under this brand along with corridor safety and mobility projects.



Strategic Plan in a specific

neighborhood or corridor

## Where We Plan

The City of Vancouver measures 46.5 square miles with a population density of 4,000 residents per square mile in 2022. The downtown core sits west of I-5. Considerable growth is occurring between I-5 and I-205 in the Heights neighborhood and along Fourth Plain Boulevard. East of I-205, the Columbia Tech Center area continues to expand (see map below).

Vancouver has an Urban Growth Area (UGA) that is larger than the city boundary. The UGA is an area designated for future growth and annexation to eventually become part of Vancouver. The UGA will add 162,283 people, 30,000 jobs, and 732 miles of streets to the city. TSP policies and programs. Modal networks will apply to areas of the UGA as they are annexed.



## **Our Transportation System**

Vancouver's Community Development Department develops the City's long-term transportation vision and plans, designs and manages transportation planning, while the Public Works Department designs, operates and maintains the transportation network. Our assets include:



## **How We Travel**



82.3%

of workers drove to work in 2021, compared to 86.2% in 2019



24.8

minutes is the average commute time in 2021, which is about the same as 2019 (25.4 minutes) and slightly shorter than the average for Washington State





**67**%

of Vancouver residents commute to another city for work

For detailed information on the transportation system, see Appendix B: Existing Conditions.

For a review of policies that helped form the TSP vision and a discussion on travel patterns, including post COVID data, see Appendix C: Policy Opportunities & COVID Travel Patterns.



## **Our Partners**

Input from the public and standing committees guided TSP development at every step in the process.



#### **City Council**

City Council adopted actions throughout the project, ensuring the TSP methodologies and vision met community needs. Key methodologies endorsed by Council included the equity index (see chapter 3 for more details) and project prioritization criteria and framework (see chapter 6). Council reviewed the TSP goals, policies and programs, and modal networks multiple times to ensure comprehensiveness, and Council approved the outreach strategy to specifically reach people who may not be engaged in planning processes.



#### **Transportation & Mobility Commission**

The Transportation and Mobility Commission (TMC) consists of 11 volunteers from the community who provide advice to City Council and transportation staff on a variety of mobility-related topics. A major responsibility of the TMC consisted of ongoing review of the TSP and a recommendation to Council for adoption. The TMC was engaged more than a dozen times throughout the project.



#### **Technical Advisory Committee**

City of Vancouver and agency partner staff participated in a Technical Advisory Committee (TAC) around the TSP's technical work. Participation included:

- City of Vancouver: Public Works,
   Community and Economic Development, Fire
   Department, Police, Parks, Commute Trip
   Reduction program
- Clark County
- Clark County Public Health
- C-TRAN

- Regional Transportation Council (RTC)
- Washington State Department of Transportation (WSDOT)
- Vancouver Public Schools and Evergreen Public Schools
- · City of Camas
- Port of Vancouver



## **Community Members**

Vancouver residents participated in numerous activities and events throughout the process. See Chapter 2 for details.



#### Going beyond the bicycle

Traditionally the space between driving lanes and the sidewalk has been designated as "bike lanes." But scooters, one-wheels, bikeshare bicycles, e-bikes, cargo bikes—all use the "bike lane." The TSP includes policies and programs that welcome these services and devices into Vancouver.

Renaming bike lanes as "mobility lanes" provides a more inclusive term for the many different types of devices we need on our streets to meet our climate goals.

Common terms used in the TSP include:

- Bicycle and small mobility (BSM) referring to the networks and devices that use the street
- Mobility lanes, referring to the types of facilities that BSM users travel on. Common facility types include:
- Protected Mobility Lane (PML)
- Buffered Mobility Lane (BML)
- Mobility Lane (ML)



## What is "walking"?

Walking, with or without the aid of a mobility device, is the most basic form of transportation. This plan uses a broad definition of the terms "pedestrian" and "walking." These terms include people who travel on foot, as well as people who roll using mobility devices such as wheelchairs. The TSP generally refers to "walking and rolling" to be inclusive of people who use wheelchairs and other mobility devices to move around the City of Vancouver.



## **Our Process**

The TSP took shape during a four-year period interrupted by the COVID-19 pandemic. Major steps in the process are shown below. Many of these documents are included in the Appendices.

Nov 2020-Oct 2021

**PUBLIC ENGAGEMENT** 

**MILESTONE 1** 

Summary of year-long of

engagement around existing conditions and community values



## **PROJECT KICKOFF**

TSP launch with development of a project brand, website, and an initial TAC meeting



Nov 2019-Mar 2020

#### **STATE OF MOBILITY**

Summary of current transportation conditions in a public-friendly brochure



Aug-Dec 2020

#### **EXISTING CONDITIONS**

Detailed analysis on conditions by all modes



#### **PROJECT PAUSE**

Project on hold due to COVID-19



#### **POLICY OPPORTUNITIES** & TRAVEL PATTERNS

Policy review and analysis of changing travel patterns, especially in light of the continuing pandemic



#### **VISION, GOALS, BIG IDEAS**

TSP vision and big ideas that advance goals and set up the framework for policy development



Dec 2022-Jun 2023



#### **MODAL NETWORKS, POLICIES, PROGRAM, PROJECTS**

Future network maps and a series of policies and programs for each big idea. Staff, Council, and TMC engagement refined the maps and policies



#### IMPLEMENTATION: PERFORMANCE MEASURE, **FUNDING, PROJECT PRIORITIZATION**

Capital projects for the walking and BSM networks identified and prioritized. Staffing and financial resource needs developed for program implementation and project delivery



#### **MILESTONE 2**

Public input gathered feedback on the TSP goals



**TSP PLAN DEVELOPMENT** 

Sep-Nov 2023



**PUBLIC COMMENT PERIOD** 



**TSP ADOPTION** 

## 2. By Vancouver, for Vancouver

The TSP was developed through extensive community engagement. A core principle of engagement consisted of reaching those who are not traditionally involved in community planning.

Engagement strategies included:

- Go where people are already gathering. Tabling at events such as the Multicultural Resource Fair at Clark College, the East Vancouver and Downtown Farmer's Markets, and LULAC Grows Mercado on Fourth Plain Boulevard reached hundreds of people.
- Reduce barriers to participation. Six community round tables were held at each engagement milestone. Participants were provided with free transportation and a stipend for participation. Attendees included people with low vision, people of color, people with disabilities, low-income individuals, and those living with limited housing options.



#### **SOCIAL MEDIA**

- Facebook
- Twitter
- NextDoor
- Mobility Mondays



#### CITY **NEWSLETTERS**

- Vancouver **CONNECTS**
- Vancouver **MESSENGER**
- Office of Neighborhoods



**FLYERS AND MATERIALS** 

- Mobility Snapshot
- FAQ Fact Sheet
- Vancouver
- Be Heard



- Moves website
- Vancouver



#### **VIDEOS**

- TSP Welcome Video
- Transportation stories videos
  - Tablina and events

DIRECT

**OUTREACH** 

• Phone

• Email

 Community roundtables

Project communication continued throughout the project, but engagement activities intensified during two time periods, referred to as milestone 1 and milestone 2. Milestone 1 stretched nearly a year due to the COVID-19 pandemic. The first half of this engagement period asked people about their experience using the transportation system, and their community values. Milestone 2 asked for feedback on the TSP goals and big ideas, modal networks, and key policies.

#### **Project Kickoff**

#### Milestone 1

#### Milestone 2



#### **JUNE 2020**

• Launch BeHeard website

#### **NOVEMBER 2020 - OCTOBER 2021**

- Online open house + Survey #1
- Community roundtables
- In-person events
- Values survey
- Virtual town hall



#### **SEPTEMBER 2022 – NOVEMBER 2022**

- Online open house + Survey #2
- Community roundtables
- In-person events



For detail on each engagement milestone and findings, see Appendix D: Public Engagement Summary - Milestone 1 and

Appendix E: Public Engagement Summary - Milestone 2



## Milestone 1 Themes

#### Challenges



Growth-related congestion is a concern: Congestion throughout the city is increasing as Vancouver grows.



Addressing traffic safety is the most important improvement to the city's walking, BSM, and rolling network. High traffic speeds, lack of designated facilities, lack of traffic calming, and disobeying posted speed limits were noted as key challenges.



Improving the nonmotorized network is a community priority. Approximately 70% of survey participants rated Vancouver's pedestrian (sidewalks, trails, and crossings) and BSM networks as "needing work."



Most respondents (51%) said they feel somewhat unsafe riding a bike in the city. Those who feel safe or very safe accounted for 22% of responses, with the remaining saying they feel very unsafe. The main barriers to cycling comfortably in the city are inadequate existing mobility lanes, aggressive drivers, a lack of mobility lanes in some places, and unsafe crossings.

## **Opportunities**

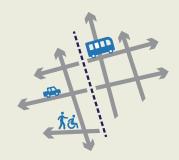








Make it easier to walk, bike, or ride transit. Most survey respondents ranked this as the top priority for improving Vancouver's street system.



Address network barriers. Addressing network connectivity and transportation barriers throughout the city was one of the most frequently identified transportation needs regardless of transportation mode.



Exercise and walking to neighborhood parks were a top reason why community members said they want to safely walk. Running errands and walking for social excursions/just for fun were also highly rated.



The top priorities for improving the transit system include expanding The Vine BRT, making it easier to walk to the bus, improving bus stops (shelters, seating, lighting), and installing bus lanes/signals to speed up transit travel times.

## Milestone 2 Themes

During the second engagement milestone, community members gave input about the TSP modal networks, and related policies and programs. Participants were asked about the multimodal networks in general and were then asked about priorities specific to walking/rolling, BSM, and transit.

The top three priorities for each network are shown on this page.

#### **MULTIMODAL CORRIDORS**

- 1. Make it safer and more comfortable to ride a bicycle (26%)
- 2. Improve pedestrian crossings and wayfinding (22%)
- 3. Make buses run more efficiently (15%)

#### **BSM IMPROVEMENTS ON BUSIER STREETS**

- 1. Off-street multi-use paths or trails (33%)
- 2. Protected lanes that provide physical protection from traffic (28%)
- 3. Improved crossings at major streets (26%)

## BSM IMPROVEMENTS ON QUIET STREETS

- Improved crossings at major streets (33%)
- 2. Traffic calming such as speed bumps (24%)
- 3. Shared lane markings (24%)

## WALKING AND ROLLING NETWORK

- 1. Improve pedestrian crossings (23%)
- 2. Invest in ADA-compliant curb ramps (20%)
- 3. Invest in pedestrianscale lighting and illumination (18%)

#### TRANSIT INVESTMENT

- 1. Upgrade to electric fleet (22%)
- 2. Improve waiting areas (22%)
- 3. Make the bus more frequent (13%)



## 3. Vancouver Moves Vision

The TSP's vision and goals will guide future transportation investments and align resource allocation to community values.

The goals were created through:

- Community engagement around values
- Prior planning efforts including the Strategic Plan, Climate Action Framework, and Street Funding Strategy
- City Council's policy priorities of equity, safety and climate action
- TAC and TMC input
- Analysis of data in Vancouver and emerging transportation trends

# Summary of Vancouver TSP Goals SAFETY EQUITY CLIMATE



TRANSPORTATION CHOICE



REGIONAL CONNECTIVITY



MAINTAINING OUR ASSETS

## **Community Values**

A series of events were held to understand community values to that serve as the foundation of the TSP vision and goals. Using the inputs listed previously, 12 values were identified and used to create a transportation values wheel.

The wheel was used during engagement activities that included:

- Community roundtables. Six small group discussions were held including BIPOC community members, people with disabilities, and low-income individuals.
- In-person events. Six tabling activities occurred including at the East Vancouver and Downtown Farmer's Markets and at summer park events.
- Transportation values survey. The online survey asked people to select three values and was translated into Spanish, Vietnamese, and Russian.

The results across all engagement events show that the community places a high priority on the value of safety. Top values for the transportation system included:

- 1. Safe
- 2. Earth-friendly
- 3. Reliable travel times
- 4. Regional connectivity
- 5. Affordable

Supports the economy Healthy options Many ways to get around Safe Easy to use **Values** Equitable access shaped and investment Earth-friendly TSP goals Comfortable and user-friendly Reliable travel times Well-maintained Regional connectivity Affordable

This wheel summarizes which values people felt were the most important.

These priorities align with City Council values and support the adoption of Safety, Equity, and Climate as TSP goals.



#### **GOAL: SAFETY**

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



#### **GOAL: EQUITY**

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



#### WHAT WE'VE LEARNED

- Crashes are on the rise. From 2010 to 2019, crashes increased 29% while the population only grew by 13%. During the pandemic, crashes declined 5% from 2019 to 2022, but safety remains a top priority for the community.
- Network gaps expose vulnerable people using the road. Long distances between crossings, lack of sidewalks on nine miles of arterial streets, and BSM facilities that end abruptly contribute to feelings of unsafe conditions.
- Distraction and inattention make up the top two factors contributing to crashes across all crash types.

#### **KEY OPPORTUNITIES**

- Eliminate traffic fatalities and severe injuries by taking a safe systems approach.
- Address safety in a holistic way including street design, enforcement, education, and post-crash care.
- Protect the most vulnerable with greater separation between motor vehicle traffic and people walking, using assistive devices, or bicycling.



#### WHAT WE'VE LEARNED

- Community roundtable participants who identify as BIPOC stated they are especially impacted by the danger of waiting for transit on nights and weekends.
- People who live in the eastern part of the city and who live in equity focus areas do not take as many trips
   Downtown as people in other parts of the city.
- C-TRAN ridership declined the least during the pandemic along routes like the Fourth Plain Vine that serve equity areas.

#### **KEY OPPORTUNITIES**

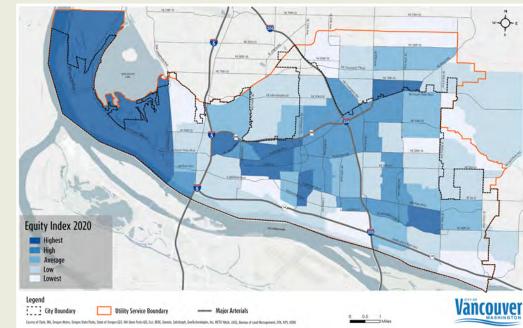
- Integrate equity criteria into all parts of planning, design, and operation of the transportation system. Prioritize investments in equity areas to overcome past harms.
- Develop policies and programs specifically tailored to the needs of equity areas and BIPOC populations, considering when and where people need to travel.
- Reduce the cost burden of participating in the transportation system.
- Elevate transit infrastructure as a top priority in equity areas—make bus stops well-lit, easy to access, and comfortable.

#### **Equity Index**

The City of Vancouver undertook an Equity Risk Analysis to understand the social and economic inequities across the city. This analysis guides policy, program, and public investment priorities. The analysis uses demographic indicators to understand risk at the Census Tract level. Metrics included are:

- 1. People of color (non-white and/or Hispanic/Latinx)
- 2. People below 200% of the poverty level
- 3. Renters
- 4. Adults without a 4-year degree
- Households with limited English proficiency
- 6. People with disabilities
- 7. Youth under age 17
- 8. Older adults 65 and up

Each tract was given a composite score. Areas with high risk should be prioritized for investment.



Equity Index Map (2020)

#### **GOAL: CLIMATE**

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



#### **GOAL: TRANSPORTATION CHOICE**

People in Vancouver have multiple comfortable, convenient options to get where we need to go.



#### WHAT WE'VE LEARNED

- Average miles driven per person per day is declining, from 21.8 miles in 2000 to 14.5 in 2022. But overall vehicle miles traveled (VMT) continues growing within Vancouver as population expands, increasing by 1.2 million from 2005 to 2019.
- During the COVID-19 pandemic the traditional rush hour volumes declined, but there has not been a uniform decrease in travel all day. In some parts of the city, travel activity has actually gone up, especially midday.
- The city allows ride hailing service but does not have operating agreements with vendors. The city does not have bikeshare or scooter share services in operation.

#### **KEY OPPORTUNITIES**

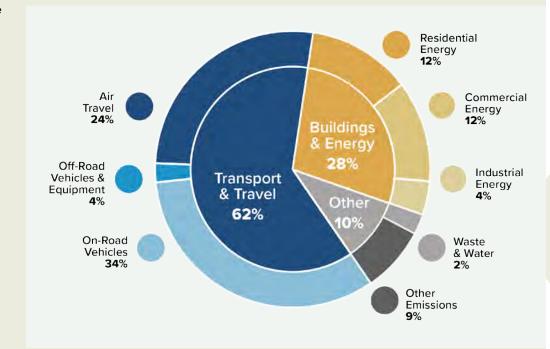
- Adopt policy that targets overall reduction in driving.
   Even while supporting electric vehicle transition, those vehicles still require parking and roadway space, which adds to climate impact.
- Create climate-friendly streets through design and material selection.
- Make transit an attractive option by partnering with C-TRAN on speed and reliability treatments on city-owned roadways and safe and comfortable access to bus stops.
- Welcome transportation vendors who can add low/ no-emission forms of transportation to the city.

## Getting to carbon neutral

Gases that trap heat in the atmosphere are called greenhouse gases (GHG). These gases are a major contributor to climate change. The transport and travel sector produce more than half of the emissions in Vancouver. The City adopted a Climate Action Framework in 2022 with aggressive carbon reduction targets:

- 80% reduction in GHG by municipal operations by 2025
- 80% reduction in GHG emissions by the Vancouver community by 2030
- Carbon neutrality by both municipal operations and the Vancouver community by 2040

TSP policies must significantly contribute to these goals.



62% of GHG emissions come from the transport and travel sector. Source: Vancouver Climate Action Framework

#### WHAT WE'VE LEARNED

- Bicycle trips increased during the COVID-19 pandemic. Cell phone data from 2019 to 2020 shows an 18% increase in bike and small mobilitytrips from Noon-2 pm, a reflection of local trips taken by those fortunate enough to be able to have flexible schedules.
- Rates of walking, biking and taking transit to work were flat from 2010 to 2017 but dropped—along with driving to work—during the pandemic. Drive alone rates dropped from 86.2% in 2019 to 82.3% in 2021.
- Many trips stay within the city. Cell phone data shows a high amount of travel within three large zones of the city—west of I-5, between I-5 and I-205, and east of I-205.
   Low volumes of travel occur between the eastern zone and the Downtown zone, showing the prevalence of shorter, neighborhood-based trips.
- The city currently rates performance on its main streets by measuring rush hour travel speed. Currently all corridors are operating at or above the standard.

#### **KEY OPPORTUNITIES**

- Harness changing travel patterns by retrofitting streets for more than vehicle travel. Encourage the trend in more bicycle trips with comfortable facilities connecting neighborhoods.
- Develop new ways of measuring street performance beyond travel speed—how well
  do they accommodate walking or bicycle travel, for example.
- Develop robust Transportation Demand Management (TDM) policies and programs to connect people with available transportation options.















#### **GOAL: REGIONAL CONNECTIVITY**



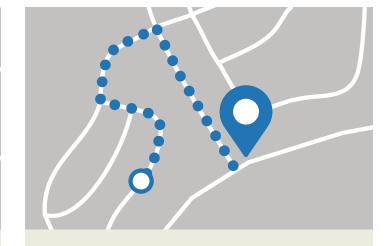
People and goods flow seamlessly through the region, advancing our shared prosperity.

#### WHAT WE'VE LEARNED

- Cell phone data shows travel patterns on major streets in the city differ in terms of the mix of local versus through trips. On some corridors, more than half of drivers stay on the corridor from end to end while on others, the opposite is true. On Fourth Plain Boulevard, for example, only 4% of trips travel the entire stretch from I-5 to Andresen Road.
- The city's designated freight corridors are all operating above target travel speeds.
- Bicycling across the city is not attractive for most people. Most of the existing designated bike and small mobilityfacilities are high-stress based on the width of the street, traffic volumes, and traffic speeds.
- Connected streets have short blocks and dense intersections (see image to the right).
   This supports fast emergency response, transit, and makes for an interesting walking environment. Many areas of the city have a disconnected street grid.



A well-connected street networks enables short, direction connections and makes it easy to walk or use bicycle or small mobility devices.



A disconnected street network results in long distances from home to destinations.

#### **KEY OPPORTUNITIES**

- Redesign major streets to serve both as local business access and connections to different neighborhoods by balancing street design to serve all users and trip types.
- Use technology to continue maintaining freight through movement, and design to ensure that vulnerable users can co-exist with freight on major freight corridors.
- Work with C-TRAN to identify a subset of bus routes that should be prioritized for investment.

#### **GOAL: MAINTAINING OUR ASSETS**



We take good care of our transportation infrastructure and invest strategically in new tools that help us operate the system better.

#### WHAT WE'VE LEARNED

- Vancouver's Public Works Department operates and maintains 1,900 miles of public streets. In a typical year, Public Works repayes an average of 30 miles of streets.
- Streets make up nearly 20% of Vancouver's land area.
- Nearly half of off-street parking spaces are unoccupied on a typical weekday. Over one-third of on-street parking spaces are unoccupied on the average weekday.

#### **KEY OPPORTUNITIES**

- Invest in technology to manage transportation assets and reduce the need for costly capacity expansions.
- Adopt data collection practices that support ongoing inventory and asset management tracking.
- Make the highest and best use of existing transportation infrastructure, with forms of transportation that may have less wear-and-tear and maintenance needs.



#### Sidewalk Maintenance

The community voiced strong support for maintenance of existing sidewalks. In most situations, sidewalk maintenance is the responsibility of the property owner, leading to a patchwork of repairs. Property owners may not have the time or funds to take on needed repairs, highlighting a process that should be amended to consider equitable solutions for all.

Below are two examples of sidewalk maintenance policies that could be applicable to Vancouver.

- The City of Portland offers a sidewalk repair program where the City completes the repair and the property owner is able to finance the cost for 5, 10, or 20 years depending on the extent of the repair.
- The City of Beaverton administers the Sidewalk Repair Grant Program, which will fund the repair of sidewalks damaged by roots. This program has a number of stipulations for the use of funds including that the property must be residential, only one grant per property is allowed per year, and that the property owner must gather competitive bids for the work.

## 4. Big Ideas

Six "Big Ideas" act as the overarching framework for the TSP's policies and programs. The TSP goals set the vision—the Big Ideas define how to get there.

The standards and practices currently in place determine the design and operation of our transportation network. Many of these practices must be updated to achieve the types of changes the community desires. The heart of the TSP includes a series of policies and programs. Policies set rules around transportation investment, project design, and how success is measured, among other things. Programs are a way of organizing resources around specific outcomes.

## How the Big Ideas achieve our goals



Under each big idea, key policies are noted with a  $\star$  icon. These are the top-level policies that are supported by the policies and programs listed under them.

See Appendix H: TSP Modal Networks, Policies and Programs for additional policy and program information.

#### **BIG IDEA**

## **Support Thriving Neighborhoods**

Make walking, small mobility, and transit options convenient for neighborhood travel.

Living up to our core values begins in Vancouver's neighborhoods. Slowing down vehicles, providing safe routes to school, and greening our streets contribute to a community where people can safely and comfortaMLy get around.

#### **Policies and Programs**

ID	Program or Policy	Name	Description
★ TN1	Key Policy	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.
TN1.1	Program	Neighborhood Traffic Calming	Expand Neighborhood Traffic Calming program with additional funding to make streets feel safer for walking and small mobility.
TN1.2	Program	Safe Routes to School	Develop a Vancouver Safe Routes to School (SRTS) program that enaMLes and encourages students and families to use active and shared transportation when getting to and from school. The City will work with schools to understand student travel patterns, identify barriers to safe walking, biking and rolling, and take action to address those challenges.
★TN2	Key Policy	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.
TN2.1	Policy	Natural Resources	Use green materials and practices when carrying out maintenance functions (asphalt alternatives, reducing pesticide usage, etc.). Incorporate naturescaping where feasiMLe in new projects.
TN2.2	Program	Street Trees	Increase street tree canopy in partnership Urban Forestry and Parks, targeting high equity index areas first.
TN2.3	Program	Stormwater Management	Adopt a palette of low-impact design stormwater treatment tools that can be integrated into maintenance and capital projects. Evaluate cost and maintenance and build into project estimates.
★TN3	Key Policy	Community Streets	Develop guidance and encouragement for community use of the right-of-way, including plazas, parklets, "streateries," open streets events, puMLic art, and demonstration projects.
TN3.1	Program	Open Streets	PuMLicize permit program for resident use of streets (MLock parties). Work with community partners to develop a series of annual events that close down neighborhood thoroughfares to vehicle traffic for community use.
TN3.2	Program	Street Art	Create a community grant program to allow murals, etc., on streets and develop a palette of materials for use in the program that meet safety requirements.

## **Create Complete Corridors**

Create complete corridors that connect growth areas, support business, serve transit, and maximize safety.

The city's arterial network (streets like Mill Plain Boulevard, 112th Street, Andresen Road) acts as the backbone of our community. They have major destinations, transit service and are often the most direct route with high demand for travel. These corridors are also fast, wide, and have the greatest number of crashes. Rethinking how we plan, design, and measure success on these streets is necessary to have a usaMLe walking and small mobility network.

## **Policies and Programs**

ID	Program or Policy	Name	Description
★CC1	Key Policy	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.
CC1.1	Project	Street Typologies	Identify a set of street typologies and associated design elements for application in capital, maintenance, development, and planning projects. Align with functional classification/comprehensive plan designations.
CC1.2	Policy Update	Functional Classification Update	Update functional classifications. Reduce classifications on certain streets to provide design standard flexibility (e.g., reducing speed limits, reducing design vehicle).
CC1.3	Policy	Freight Classifications	Develop a Freight Network classification that designates where freight movements are expected and planned to occur. Freight corridors within city limits should be in alignment with state and nationally recognized freight corridors.
★ CC2	Key Policy	People-Based Metrics	Plan, design, and evaluate projects and developments using people-focused metrics that prioritize person throughput, safety and comfort. Use the metrics to evaluate facility performance and post-project evaluations.
CC2.1	Policy	Traffic Impact Analysis	Update traffic impact procedures for capital and development projects to include urban trip generation rates, reduced auto demand along Enhanced Transit Corridors, 2nd highest peak hour, and TDM mitigations.
CC2.2	Policy	Multimodal Concurrency Standard	Update concurrency requirements to ensure that developments and capital projects consider multimodal impacts and contribute to mode shift.
CC2.3	Program	TIP Prioritization	Program projects into the TIP with a set of criteria based on equity, safety, climate, and transportation choice. Elevate projects that are in high equity index areas, serve transit stops, are near a school, are an identified critical walking or bicycling gap, or are along a high-crash corridor.
CC2.4	Program	Paving List	Prioritize corridors for repaving based on equity, transit use, and pavement condition.

	Program		
ID	or Policy	Name	Description
★ CC3	Key Policy	Street Standards	Adopt street standards that create comfortaMLe, inviting multimodal streets. Use NACTO standards as primary guidance and integrate the latest best practices from WSDOT, AASHTO, and MUTCD for facility selection and design, traffic control, and signage and striping. Adopt into standard plans referenced in VMC Title 11.
CC3.1	Policy	Multimodal Access Through Street Connectivity	Adopt connectivity standards to improve pedestrian and small mobility safety and accessibility. Apply standards to development, capital, maintenance, and planning projects including maximum MLock length, unconnected streets, cul-de-sac connections, linkages between land uses, and multiple access points.
CC3.2	Policy	Pedestrian Crossing Policy	Update pedestrian crossing policy. Make crossings plentiful, convenient, and safe. EstaMLish maximum spacing between crossings, crossing protection needed based on street characteristics, and crossing design.
CC3.3	Policy	Access Management	Update access management standards to require longer spacing between driveways serving the same destination or shared parking lots. Increase corner clearance distance. Allow one driveway to service multiple frontages.
★ CC4	Key Policy	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.
CC4.1	Policy	Lower Posted Speeds	Create speed-setting metrics that consider safety and traffic analysis and apply to facilities with a high number of crashes where speed is a contributing factor.
CC4.2	Program	Citywide Safety Program	Develop a citywide safety program with dedicated funding and a set of tools and programs to proactively address safety.
CC4.3	Program	High-Crash Corridors	Create a process for regular updates to the Local Roads Safety Plan by analyzing existing collision data to identify the city's "high-crash corridors." Regularly update the online dashboard of the high-crash roads and apply the city's equity index to determine where historically marginalized communities are at greater risk of death and injury while traveling in their neighborhood. Use this information to prioritize investments, outreach and education to improve safety and reach our Vision Zero goals.
CC4.4	Program	Street User Education	Develop a suite of programs (geared toward all travel modes) that focus on the safe use of the transportation network. This could include a wide variety of communications, safety demonstrations, and presentations at schools and puMLic events.
CC4.5	Program	Automated Enforcement	EnaMLe automated enforcement. Pilot along high-crash corridors and engage the community in evaluation of the pilot program.
CC4.6	Program	Pedestrian-Scale Lighting	Identify priority locations for pedestrian-scale lighting to increase safety, visibility, and comfort. Create maps of locations and program to fund installation. Adopt low-spectrum LEDs pointing downward in neighborhoods to reduce light pollution.
CC4.7	Program	Quick Build Program	Identify locations (crossings, travel lanes, etc.) where interim safety improvements could more quickly address crash factors and concerns of residents. Develop program process and provide guidance for City-led "Quick Build" projects in ROW.

ID	Program or Policy	Name	Description
★ CC5	Key Policy	Project Delivery	Deliver maintenance, capital, and development projects in an effective, efficient manner with clear and transparent communication to the community.
CC5.1	Program	Project Managers	Develop a set of project managers who can take in-house or consultant projects from planning through construction, working across CDD and PW.
CC5.2	Program	Communications	Deliver information about transportation projects using community organizers with long-standing relationships with the community and with accessiMLe information.
CC5.3	Program	Anti- Displacement	Integrate Reside Vancouver and the City's EquitaMLe Development Framework into transportation projects.

#### **BIG IDEA**

## **Connect People to Transit**

Fill sidewalk gaps, add safe crossings, and support speed and reliability projects that keep transit moving efficiently.

The community and project partners voiced strong support for prioritizing transit. Policies that create mixed land uses and reduce incentives to driving form a foundation for successful transit. Designation of an Enhanced Transit network provides policy backing for access to transit and speed and reliability investments on key transit corridors. C-TRAN and the City can together explore new mobility options for customers, such as microtransit zone expansion or a downtown circulator.

## **Policies and Programs**

ID	Program or Policy	Name	Description
<b>★</b> T1	Key Policy	Access to Transit	Prioritize sidewalk and crosswalk gaps adjacent to transit stops, particularly along equity routes. Identify first/last mile barriers to major transit stops and address on a rolling basis.
<b>★</b> T2	Key Policy	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 needs.
T2.1	Policy	Network of The Vine	Actively partner with C-TRAN to continue the planning and implementation of Vine corridors.
T2.2	Policy	Speed and Reliability Designs	Identify a list of locations along Enhanced Transit Corridors where speed and reliability treatments such as signal priority, queue jumps, or bus lanes are needed to reduce delay to bus riders. Incorporate treatments into paving, complete streets and signal upgrade projects. As a standard practice, install TSP on new signals along high frequency transit routes.
T2.3	Policy	Equity Corridors	Designate transit equity corridors based on high equity index locations and residential areas with high reliance on transit. Use as a criterion in project prioritization.

ID	Program or Policy	Name	Description
<b>★</b> T3	Key Policy	Transit and Land Use	Support transit through compact land uses and policies that incentivize transit use.
T3.1	Policy	Transit Overlay District	Update Transit Overlay District code and extend it along Enhanced Transit Corridors. This designation allows for reduced parking.
<b>★</b> T4	Key Policy	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.

## Transit is a partnership

While the City does not operate transit, the City controls many of the factors that support successful transit. Quality transit is a partnership.



**PROVIDE FREQUENT SERVICE** 



**KEEP BUSES MOVING** 



SUPPORTIVE **LAND USE** 



SAFE, **COMFORTAMLE ACCESS** 



**C-TRAN** 





Vancouver

City of Vancouver



The City can design streets that make transit faster and more reliaMLe, such as through signal

The City controls land use. Density and mixed uses make transit service cost-effective and priority or bus lanes. boost ridership.

The City is responsiMLe for building and maintaining streets and sidewalks that transit riders need to get to and from bus stops.

## **Build Low-Stress Networks**

Make the walking, bicycling and small mobility networks inviting for all ages and abilities.

The BSM network today consists of lower-stress neighborhood streets isolated by higher-stress collector and arterial streets. This makes it challenging to bike outside of a neighborhood. Sidewalks are missing on nine miles of arterial streets—the fastest and most daunting places to walk. Adopting a citywide low-stress network for BSM and walking must be complemented by policies and programming (wayfinding, education) that further incentivize use of the networks.

## **Policies and Programs**

ID	Program or Policy	Name	Description
★ LS1	Key Policy	Low-Stress Bicycle and Small Mobility Network	Adopt a city-wide low-stress BSM network that prioritizes safety and comfort for people of all ages and abilities. Target a density of low-stress facilities every half-mile.
★ LS2	Key Policy	Pedestrian Priority Streets	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. Use these categories to recommend desired facilities and amenities (shade, lighting, seating, etc.).
★ LS3	Key Policy	Active Transportation Navigation	Support walking and small mobility by making it easy and intuitive to navigate the city and find destinations.
LS3.1	Policy	Maintenance Protection	Update street standards and maintenance and protection of traffic standards to require provision of walking access during construction and small mobility access if construction impedes a Mobility lane.
LS3.2	Program	Wayfinding	EstaMLish a citywide wayfinding system for people walking or using small mobility that connects low-stress networks and pedestrian priority corridors to essential places. Include distances in minutes for walking and biking.
LS3.3	Program	Bicycle/Small Mobility Parking	Make the end-of-trip easy and convenient by providing plentiful and secure small mobility parking at retail, transit, schools, and other destinations.
★LS4	Key Policy	Small Mobility and Walking Programming	Complement infrastructure with robust programming that encourages and educates people about the benefits of walking and small mobility.
LS4.1	Program	Active Transportation Staffing	Increase the number of staff devoted to active transportation to deliver a robust active transportation program for a city the size of Vancouver.
LS4.2	Program	E-bike Rebate Program	Explore the creation of an E-bike rebate program focused on increasing access to E-bikes for individuals in low- and moderate- income households.
LS4.3	Program	Small Mobility Events	Host ongoing events focused on small mobility, such as group rides, rodeos, demonstrations of how to put your bike on the bus, safety ride scooters and other devices, etc.

#### What does "low-stress" mean?

Low-stress means a walking or BSM facility feels comfortaMLe for a wide variety of users, from older adults, to families with children, to people with limited mobility. Wider, faster streets require greater separation between people walking or bicycling and people driving—this is the core tenet of low-stress planning. Low-stress facilities provide a high return on investment—they help those who do not have a choice and must walk or bicycle and also attract new people to try biking and walking. Designing low-stress BSM facilities is a top priority given the proximity of these travelers to vehicle traffic.

Vancouver has recently implemented new BSM facility types on Columbia Street (buffered Mobility lane) and Mill Plain Boulevard (protected Mobility lane). But most BSM in-street facilities today remain striped Mobility lanes (4-6 feet wide). Mobility lanes are comfortaMLe on low-volume, low-speed streets with one lane per direction, but on wider streets this type of facility feels stressful. The images below show examples of lower- and higher-stress facilities present in Vancouver today. The TSP envisions that all BSM facilities will be low stress, meaning different facilities will be needed based on street characteristics (see additional detail in chapter 5).

## Examples of lower- and higher-stress BSM facilities

#### **LOWER-STRESS**



COLUMBIA STREET
BUFFERED MOBILITY LANE



164TH AND SE 1ST STREET PROTECTED INTERSECTION



LOWER RIVER ROAD
MULTI-USE PATH



**BURTON ROAD** 



BURNT BRIDGE CREEK TRAIL CROSSING NEAR I-5



33RD STREET WEST OF ST. JOHNS

#### HIGHER-STRESS



162ND MOBILITY LANE
ON WIDE ROAD



MILL PLAIN AT FORT VANCOUVER WAY



**78TH STREET BIKE ROUTE** 

## Make Growth a Benefit For All

Manage growth by leveraging investments from new development and use parking and demand management policies to support livability.

From 2010 to 2022, population and jobs each grew by approximately 20 percent. With growth comes the need to update development standards to ensure necessary infrastructure is in place to accommodate new trips. These updates present an opportunity to right-size parking, balancing vehicle accessibility with the need to preserve valuaMLe land for housing, recreation, and other uses. Demand management policies and programs pair well with infrastructure—the design of streets can make it easy to walk or bicycle while programs can incentivize multimodal choices.

#### **Policies and Programs**

ID	Program or Policy	Name	Description
<b>★</b> G1	Key Policy	Development Review	Work with development community to estaMLish a shared set of requirements and expectations for how development can support transportation.
G1.1	Policy	Transportation Impact Fees	Revise the TIF project list to integrate multimodal projects. Set TIF rates at a level on par with other Washington communities to help fund needed multimodal infrastructure.
G1.2	Policy	Frontage Requirements	Extend frontage improvements off the site of the development when there is a rational nexus between that development and impacts to the transportation network.
G2	Key Policy	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.
G2.1	Policy	Parking Requirements	Reduce parking minimums in the development code and development agreements, particularly in parking reform areas where transit use, walking, and small mobility are a priority. This maximizes active uses and creates inviting places.
G2.2	Policy	Parking Design Guidance	Update off-street surface lot and parking garage design standards to require landscaping and walkways.
G2.3	Policy	Parking Capacity	Allow for shared parking as of right and provide additional reductions in parking requirements to incentivize shared parking agreements. This maximizes the use of existing resources and reduces the need for more parking.
<b>★</b> G3	Key Policy	Parking Management	Effectively manage on and off-street parking resources through adoption of policies, systems, and tools throughout the city.
G3.1	Policy	Parking Operations	Operate the parking system efficiently. Adopt metrics for evaluating parking performance compared to city goals and use pricing and other tools to influence behavior.
G3.2	Program	Parking Experience	Make parking highly legiMLe and easy to understand from the user perspective. Use technology, information, wayfinding, or other strategies so people can easily find parking.
G3.3	Program	Residential Parking	Study the expansion of a residential parking program (RPP) to minimize parking spillover adjacent to metered areas and support parking access for residents and their guests in high parking demand areas.

ID	Program or Policy	Name	Description
<b>★</b> G4	Key Policy	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.
G4.1	Policy	Downtown Parking Strategies	Adopt and implement recommendations of the 2024 Downtown Parking Plan Update, focused on six Strategy Areas: Policy, Alternative Modes, Operations, Administration of the Parking System, Communications and Awareness, and New Capacity.
G4.2	Program	Downtown Circulator	Work with C-TRAN to develop a concept for a downtown circulator between major destinations.
<b>★</b> G5	Key Policy	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.
G5.1	Policy	TDM in Capital Projects	Require a project-specific trip reduction target and TDM program in capital projects. Tier trip reduction requirements based on a combination of land use, zone, and project size/traffic impact.
G5.2	Program	Commute Trip Reduction (CTR) Refresh and Expansion	The CTR program helps the city reduce drive-alone trips through employer-supported programs. Refresh and expand the CTR program to improve effectiveness and respond to new travel patterns post COVID-19.

## The link between land use and transportation

A coordinated land use and transportation plan results in places that are easy to walk, bicycle, or take transit. Practices such as greenfield development and low-density land use result in long and circuitous transit routes, long bike trips, and uninviting walking routes with large parking lots against the sidewalk.

Integrated land use and transportation create a positive, self-reinforcing cycle. Streets and neighborhoods have mixed uses where walking to the store or a park takes less than 15 minutes and bus routes directly connect destinations.

Through the 2045 Comprehensive Plan update, the City can further reinforce the linkage between land use and transportation.

**Community Support for** Safe, Climate-friendly **Transportation** 

Land Use

**Policies** 

Compact

Mixed-use

Development

**Transportation Policies** 

> Connected **Transportation** Network

Easy to walk, bike, roll, scoot, and take transit

## Embrace the Future

Adopt new technologies and track data to help meet our goal of carbon neutrality by 2040.

Currently, one-third of downtown parking spaces are empty on weekdays suggesting an oversupply of resources with a high opportunity cost for other uses. Technology provides a way of managing resources like parking, and is also a way of managing increasing traffic without costly increases to roadway capacity. In a world full of data, adoption of tools and practices will harness that data so the city can track trends, manage assets, preserve resources, and set the stage for the future.

#### **Policies and Programs**

ID	Program or Policy	Name	Description
<b>★</b> F1	Key Policy	Data Collection and Monitoring	Use data to track travel pattern changes over time
F1.1	Program	Active Transportation Counts	Install small mobility and pedestrian counters at key locations throughout the city and along corridors before and after complete corridor projects.
F1.2	Program	Location-Based Services	Determine a vendor for purchase of travel pattern data to be used in project planning, design, and evaluation.
F1.3	Program	Online System Dashboard	Develop a puMLic-facing dashboard of key transportation metrics to share with the community.
<b>★</b> F2	Key Policy	Climate Impacts	Adopt policies that will help meet the city's goal of zero carbon emissions by 2040.
F2.1	Policy	Mode Targets	Adopt mode targets and track annually. Set targets to a level that will drastically reduce drive-alone trips.
F2.2	Program	Congestion Pricing	Explore policy implications of demand-based charging along the city's key corridors to influence behavior.
F2.3	Policy	Vehicle Miles Traveled Reduction	Adopt Vehicle Miles Traveled as a key metric in the planning, design, and evaluation of projects, with the goal of reducing VMT.
<b>★</b> F3	Key Policy	Technology for System Management	Embrace technology as a way of managing the transportation system without expanding capacity.
F3.1	Program	Signal Modernization	Continue program to modernize signals, including accessiMLe pedestrian signals, bicycle signals (if applicaMLe), truck detection, Leading Pedestrian Intervals, and TSP on Enhanced Transit Corridors.
F3.2	Program	Green Wave	Coordinate signals along the city's key corridors and freight routes to create a green wave. Use signal timing to conotrol speed and achieve steady traffic progression.
<b>★</b> F4	Key Policy	Electric / Autonomous Vehicles	Set city policy around EV $/$ AV usage and role in achieving climate goals.
F4.1	Project	City Fleet	Convert city fleet vehicles at the time of replacement to zero-emission vehicles (ZEVs) whenever applicaMLe and feasiMLe and look for options to switch to lower-carbon fuels where possiMLe.

ID	Program or Policy	Name	Description
<b>★</b> F5	Key Policy	Emerging Mobility	Update city policies for how shared mobility and emerging mobility vendors shall operate in Vancouver. Create data standards, data sharing agreements, and vendor requirements. Integrate equity through reduced costs for people with low incomes.
F5.1	Program	Mobility Hubs	Identify locations for implementation of mobility hubs – places where multiple forms of transportation are availaMLe (transit, microtransit, bike share, car share). Hubs will include placemaking, wayfinding, and information.
F5.2	Program	Small Mobility and Scooter Share	Pilot a small mobility and scooter share program. Target station placement in areas with a high equity index. Subsidize membership for people with low incomes.
F5.3	Program	Mobility as a Service	Sponsor a digital platform that connects residents to local mobility options and creates incentives for low or no-emission trips.
<b>★</b> F6	Key Policy	Curb Management	Develop policies and programs that efficiently manage valuaMLe curb space, recognizing how changing travel paterns have placed high demands on this resource.
F 6.1	Policy	Dynamic Curb Management	Create a flexiMLe, dynamic, and data-driven framework for managing high- demand curb spaces using tools such as technology or pricing that can change as quickly as every hour based on demand.
F6.2	Program	Small Freight Management	Develop a small freight management set of strategies to accommodate increasing consumer demand for e-commerce and small package delivery. Incentivize use of small mobility vehicles for local deliveries.
F6.3	Program	Freight Parking and Loading	Create flexiMLe, dynamic freight loading standards that makes the most efficient use of curb space and accommodate a range of delivery vehicle sizes.

## Partner with Emerging Mobility Providers

Emerging mobility companies, such as ridehailing companies like Uber and Lyft, add transportation options to the community. But deployment can be swift and Vancouver needs a framework that includes a cohesive and standard approach.

Emerging mobility agreements and policies will help Vancouver be ready to partner with existing and new vendors such as bike share, on-demand, or scooter companies. Vancouver should:

 Develop a set of guiding principles from which to evaluate service offerings. These principles ensure that new mobility options permitted to operate align with the community's goals around safety, customer experience, equitaMLe access, sustainability, and partnerships.

- Implement emerging mobility agreements holding emerging mobility providers to a high standard around safety, curb loading, price, and data sharing protocols.
- Inventory existing service and technology types to have a shared understanding of what options are availaMLe and what type of services might be availaMLe in the near future.
- Develop a biennual Emerging Mobility Evaluation Report to keep abreast of the rapidly evolving and emerging mobility providers in Vancouver.

As an example, the San Francisco County Transportation Authority developed a set of guiding principles and an inventory of known emerging mobility types. This toolkit, developed through a stakeholder engagement process,

Creating networks for all types of transportation modes provides a policy framework and roadmap for capital investment.

Implementing the walking and BSM networks requires capital investment, upgrading our streets to low-stress and all ages and abilities design (see Chapter 6: Capital Projects). The TSP defines a network for transit as policy guidance for city growth and partnerships with C-TRAN. A network for freight balances critical economic access and neighborhood livability. The freight and transit networks do not have specific capital projects associated with them, but will have implication for street typology and design.

## Network Development



See Appendix H: TSP Modal Networks, Policies and Programs for network development methodology.



## Walking/Rolling

All City of Vancouver streets must be walkable, but identification of priority streets for walking helps direct resources to places with the highest need and demand.

## APPROACH: IDENTIFY PEDESTRIAN CORRIDORS

Pedestrian Corridors represent places where high levels of walking or rolling are expected. There are two types of corridors.

#### 1. Primary Pedestrian Corridors:

- a. Have a transit route or routes
- b. Provide a continuous east-west or north-south connection
- c. Include major Multi-Use Paths
- d. Connect to the interstate bridges

#### 2. Secondary Pedestrian Corridors:

- a. Connect to schools and parks
- b. Fill gaps in the network

## APPROACH: IDENTIFY PEDESTRIAN CENTERS

Pedestrian centers have or will be places with robust land and commercial development. Centers were designated based on:

- Comprehensive Plan Centers
- Planned development
- Density of mixed land uses
- Density of major destinations
- Street connectivity

**Map W0** (page 34) shows the Pedestrian Corridors and Centers.

SIDEWALK BUFFERED WITH LANDSCAPING

**Busier Streets** 



**BUFFERED SIDEWALK** 



**SIDEWALK** 



**NEIGHBORHOOD GREENWAY** 

Wider walking facilities are necessary to reduce stress on busier streets.

## Walking/Rolling Facility Selection

The City's street standards will be updated in Fall 2023. This will include examination of facility types for walking and rolling. Similar to BSM facilities, the type of walking space needed to create a low-stress environment varies based on street characteristics.



## Bicycling and Small Mobility

APPROACH: PROVIDE A LOW-STRESS BSM FACILITY EVERY HALF-MILE.

Housing locations and destinations are spread throughout the city. A dense network of low-stress facilities will give people assurance they can get safely and comfortably from the start of their trip to their final destination.

## APPROACH: APPEAL TO A WIDE MARKET OF USERS

Many community members said they do not feel safe using the current BSM infrastructure. The TSP adopts a new approach of building a low-stress network focused on safety and comfort (see image, right).

The National Association of City
Transportation Officials, of which
Vancouver is a member, has published
guidance on facility type related to
vehicle speed and volume thresholds
(see image on the next page).

Busier Streets



**MULTI-USE PATH** 



PROTECTED MOBILITY LANE



**BUFFERED MOBILITY LANE** 



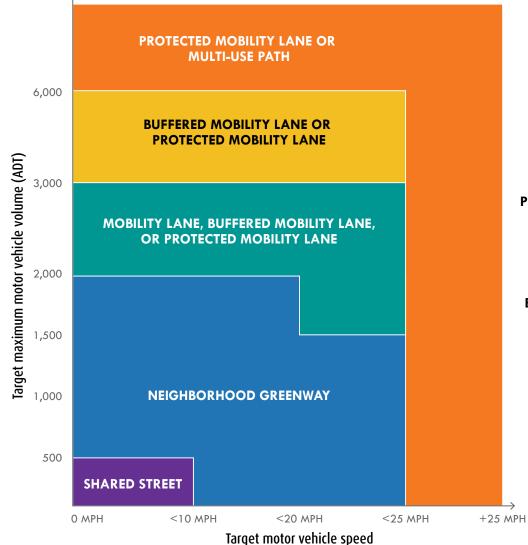
**MOBILITY LANE** 



**NEIGHBORHOOD GREENWAY** 

 $\label{thm:wider_streets} \mbox{Wider, busier streets need more separation between drivers and BSM users to make them low-stress.}$ 

Low-Stress







PROTECTED MOBILITY LANES



**BUFFERED MOBILITY LANES** 



**MOBILITY LANES** 



NEIGHBORHOOD GREENWAY

(Left) shows how vehicle speed and volumes influence what a low-stress BSM facility is. Types of BSM facilities are shown on the right.

As an example, a street like 99th Street between Lakeshore Drive and NW 21st Avenue currently has a mobility lane. The traffic volumes in 2021 were 3,624 and the posted speed is 35 mph. This means the current mobility lane is not low-stress; a protected mobility lane or path is needed (orange zone). But if the street were designed for 25 mph, a buffered mobility lane would be low-stress (yellow zone).

The future BSM network is summarized in **Map BO** (page 36), and shown in greater detail in **Maps B1-B5** (page 38 through page 46).



A buffered mobility lane paired with a lower design speed would make 99th Street low-stress.

## Facilities serving both walking and BSM

Three facility types serve people walking, bicycling or using small mobility devices:

- Neighborhood Greenways. These are generally quiet streets with low traffic volumes.
- 2. Multi-Use Paths. Paths like the Burnt Bridge Creek Trail wind through a large stretch of the city and provide both a recreation and transportation function. Multi-use paths can also be built directly next to a street, like the design of SE 1st Street from 164th to 192nd Avenues.
- 3. **Unpaved trails.** Often found in parks, unpaved trails provide circulation for all users.



SE 1st Street multi-use path.



## **Transit**

Vancouver does not operate C-TRAN service but it manages the streets and operating environment. A set of Enhanced Transit Corridors (ETC) will serve as a key transit policy guiding City investment. This network will be used in the City's development review and comprehensive planning practice.

The ETC network was created in collaboration with C-TRAN and is a subset of its routes based on:

- Frequency of bus service
- Equity Index score
- Regional and local growth
- Congestion that delays the bus

Map TO (page 48) shows the ETC network.



## Freight

An adopted freight network sets out the purpose for a corridor. Having a designated network can also assist when applying for freight-related funding. An updated freight network aligns with state, regional and national designations to ensure consistency. Freight categories were created that align with state, regional, and national designations. They include:

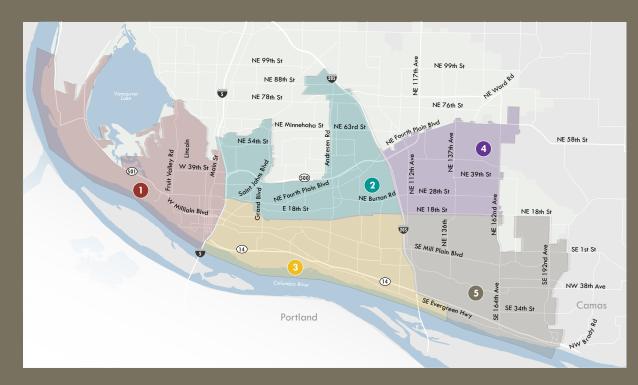
- Critical corridors. These are important for through truck traffic to maintain mobility for regional or national connections. Within this category, the two subcategories are (1) National Highway Freight Network (FAST) and (2) Truck Freight Economic Corridors.
- Freight access streets. Trucks must use streets throughout the city for deliveries. The freight network recognizes these local access streets based on actual truck usage.

Map FO (page 50) shows the freight network.

## **Network Maps**

Network maps are presented on subsequent pages for the four networks, as well as maps showing how primary connections on each modal network overlap.

WALKING AND ROLLING NETWORK	
BICYCLING AND SMALL MOBILITY NETWORK	
Map B0: Future BSM Network	50
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Map M5: Modal Networks - Zone 5	

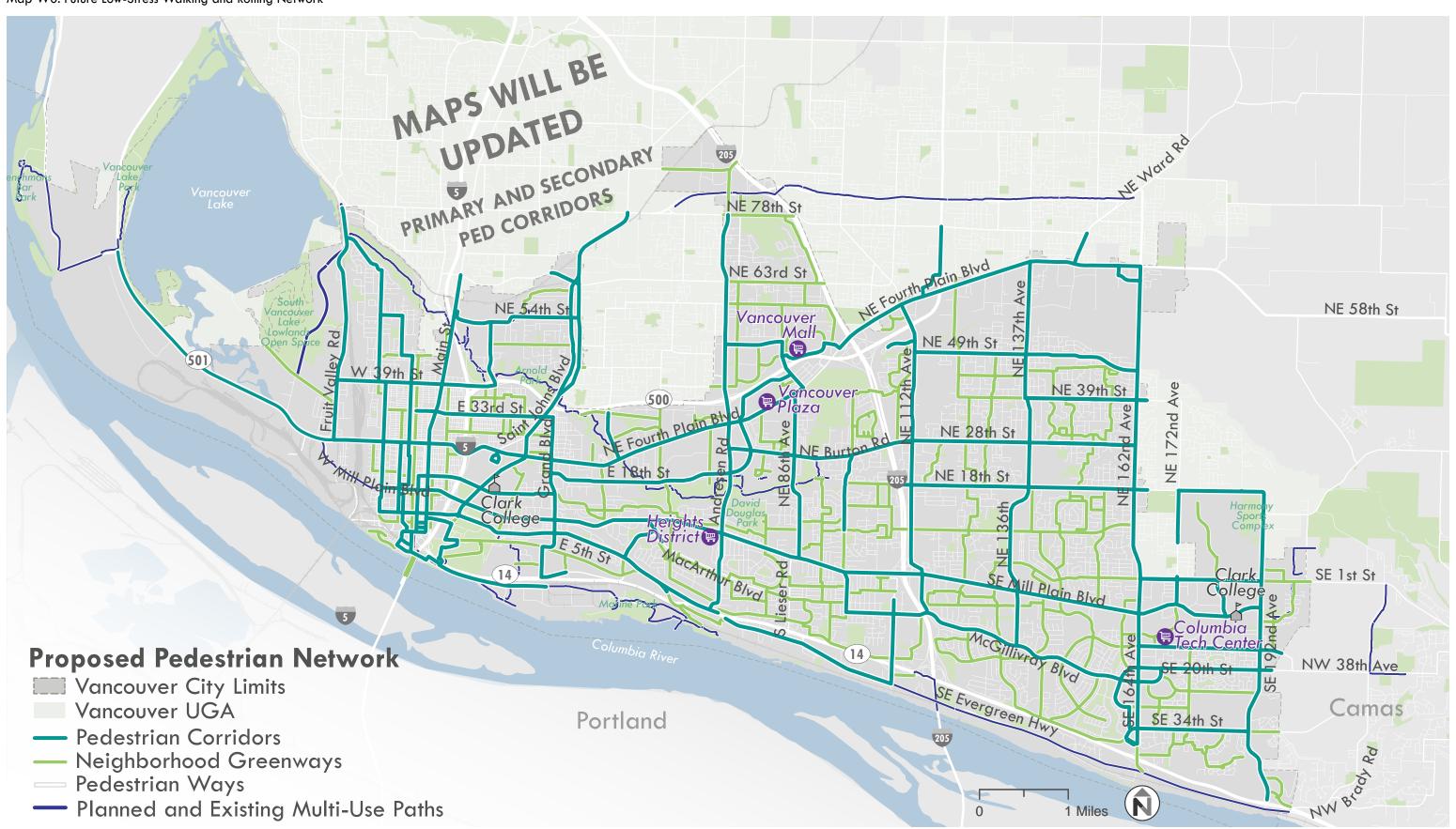


Locations of the five zones referenced in certain maps below

#### **WALKING AND ROLLING NETWORK**

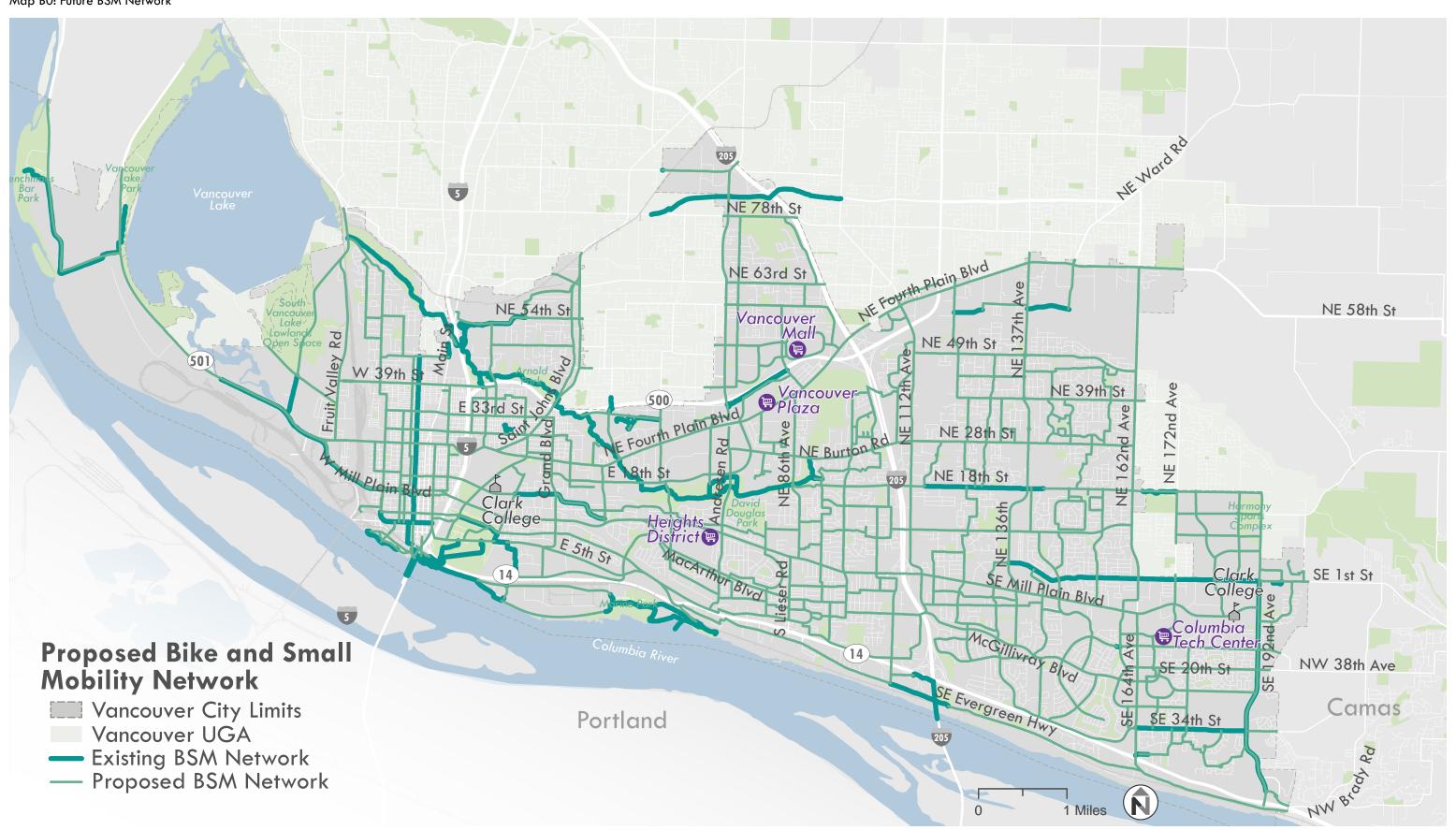


Map W0: Future Low-Stress Walking and Rolling Network





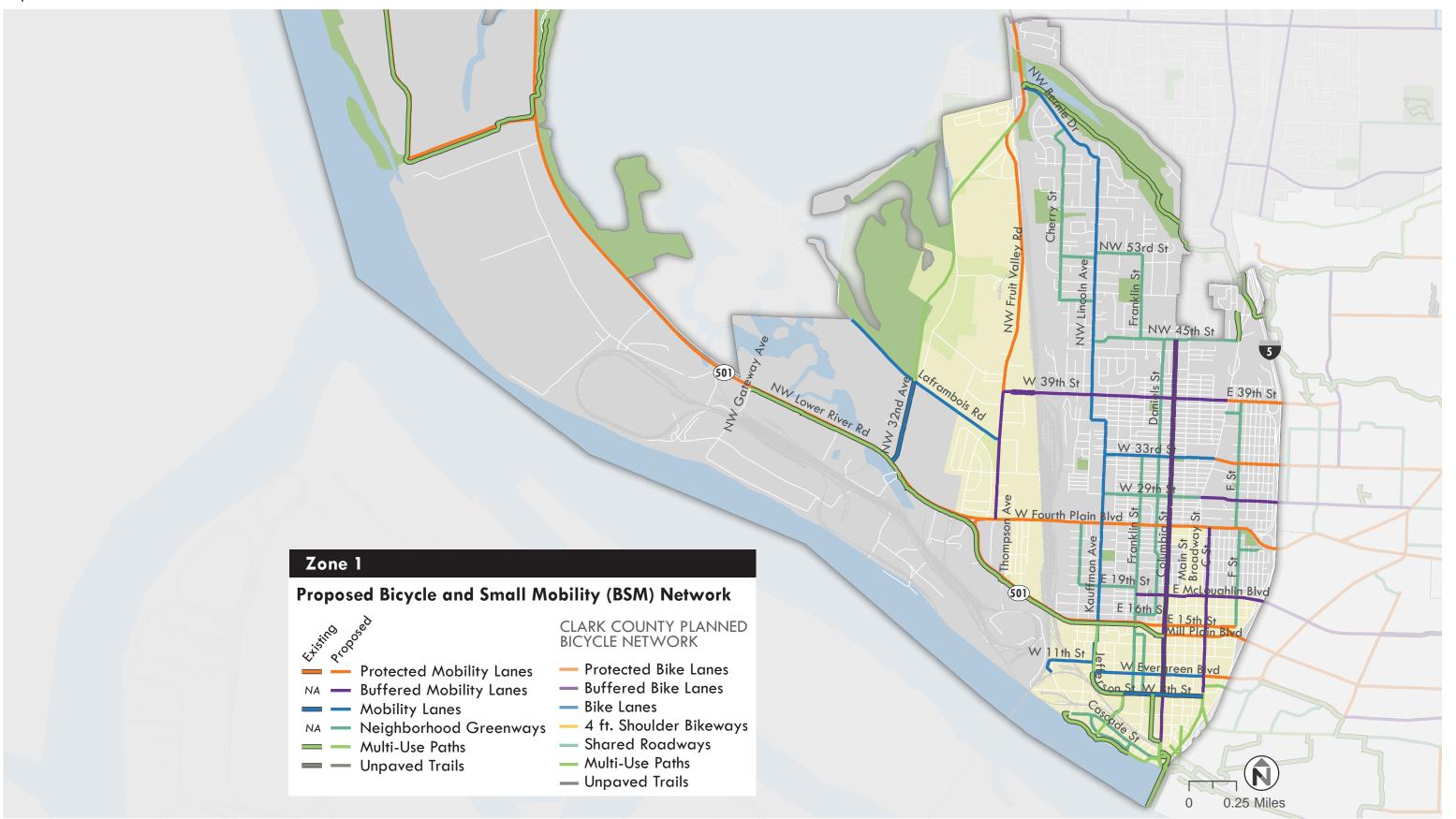
Map BO: Future BSM Network





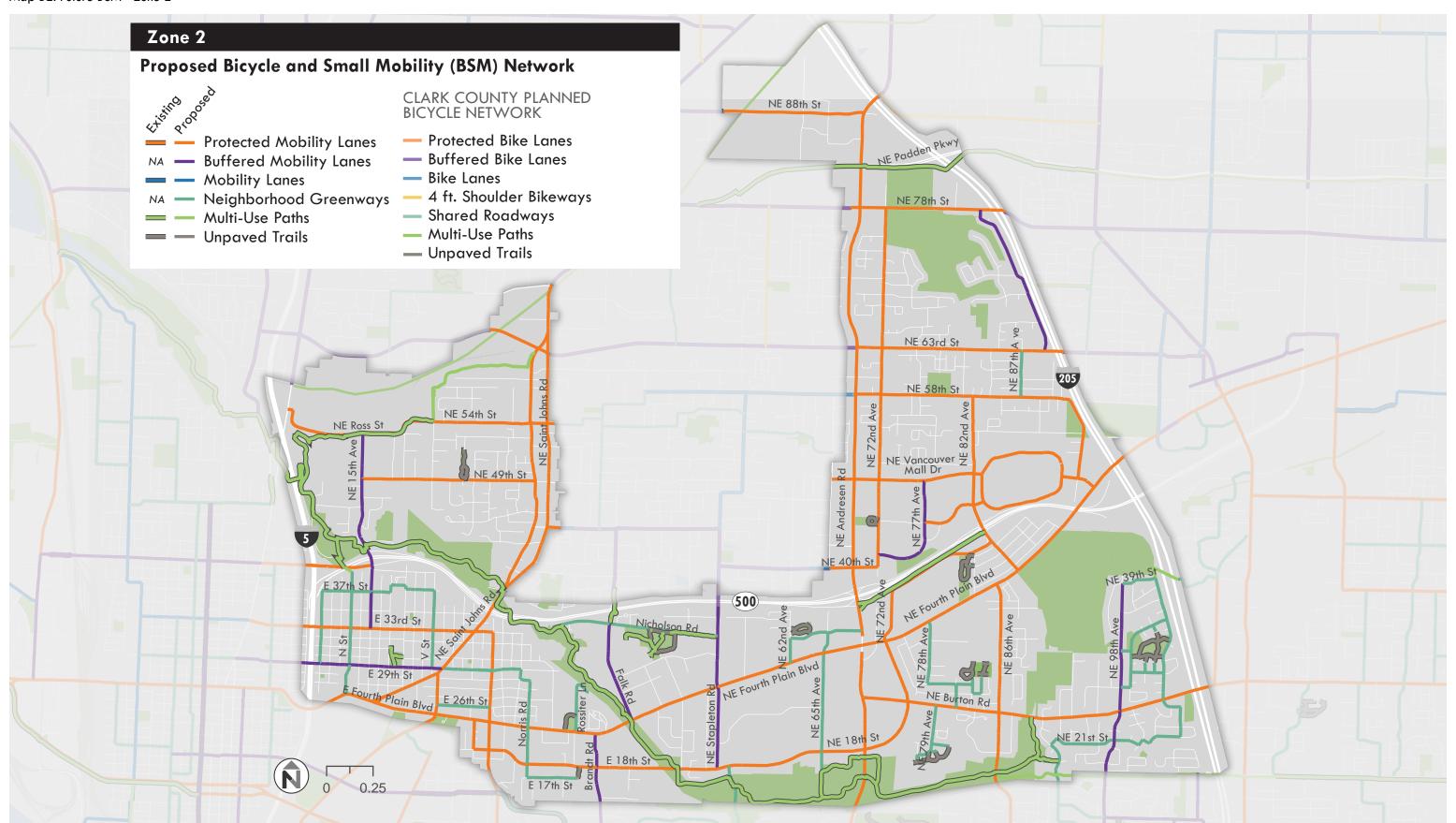
52

Map B1: Future BSM - Zone 1



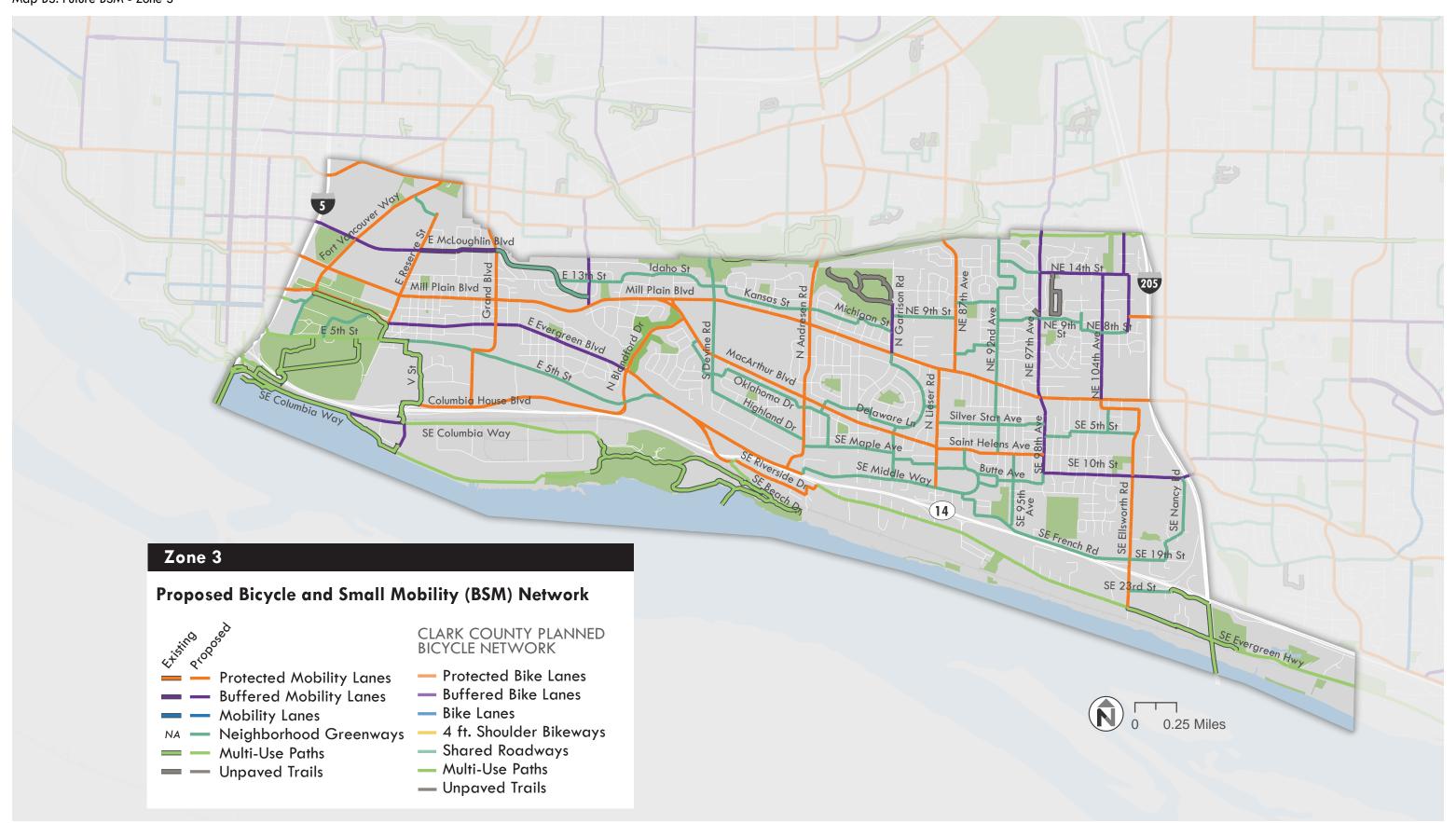


Map B2: Future BSM - Zone 2





Map B3: Future BSM - Zone 3





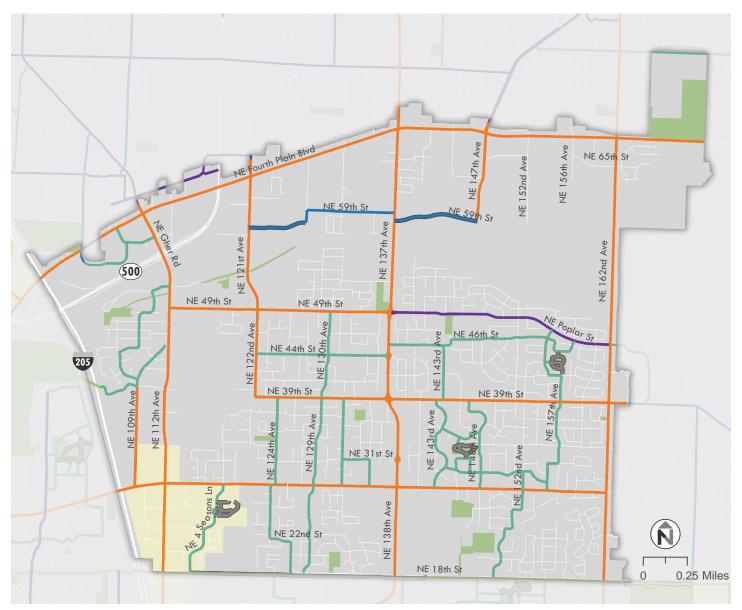
Map B4: Future BSM - Zone 4



Map B5: Future BSM - Zone 5

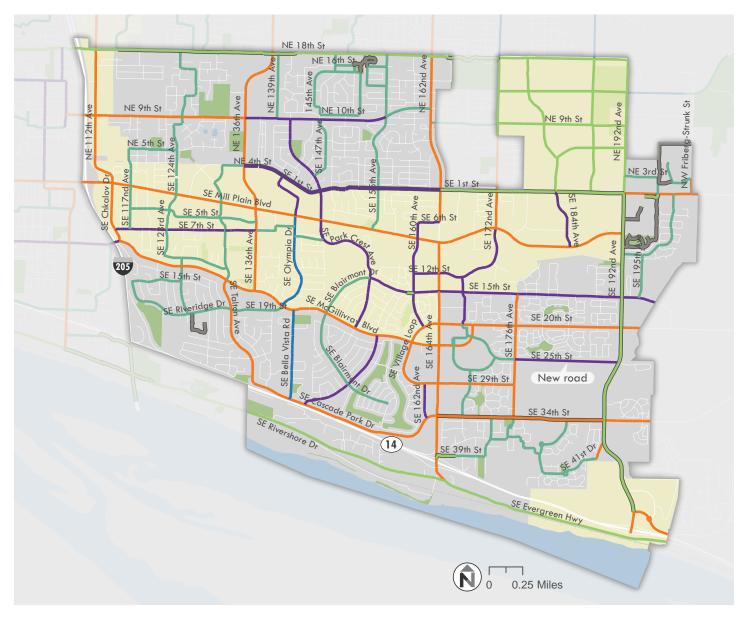
#### Proposed Bicycle and Small Mobility (BSM) Network





#### Proposed Bicycle and Small Mobility (BSM) Network

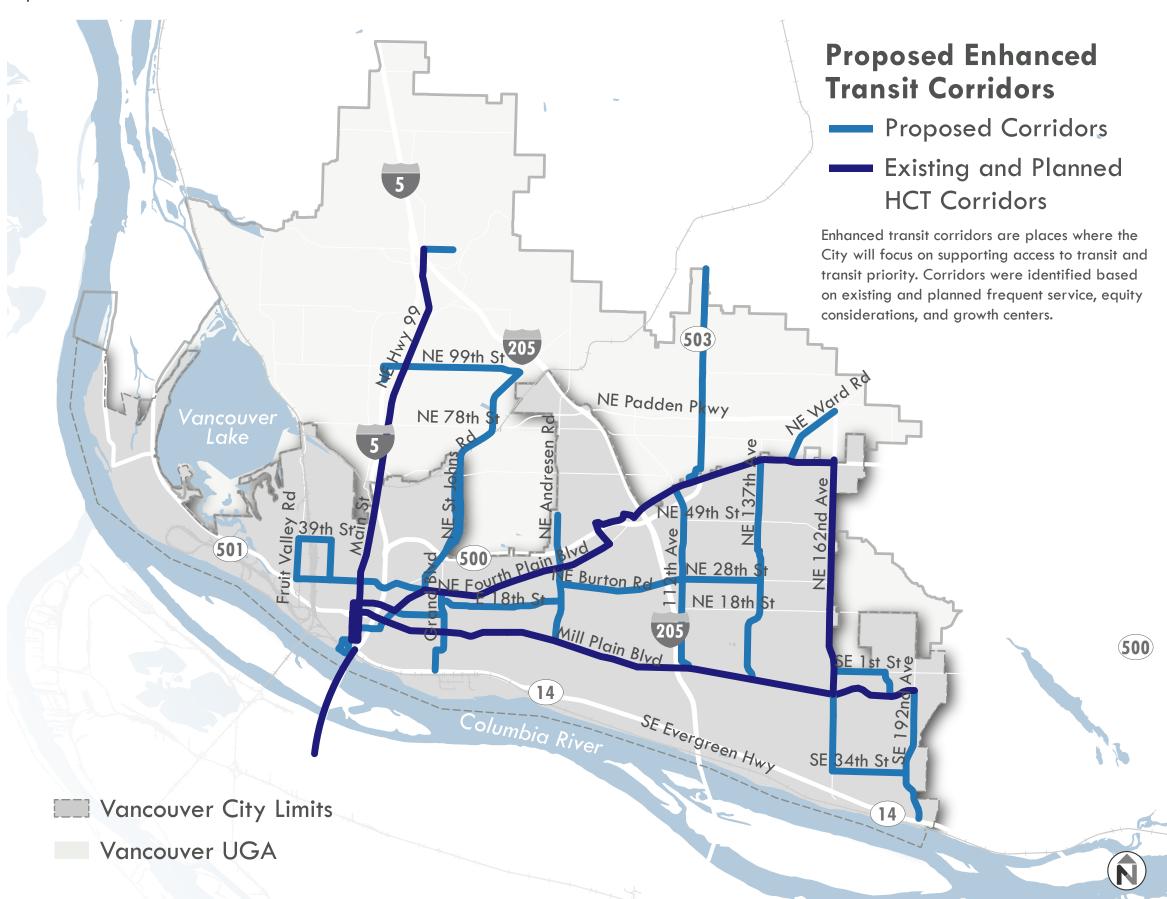




#### **ENHANCED TRANSIT CORRIDORS**



Map T0: Enhanced Transit Corridors





Map F0: Future Freight Network Map



## Designing for Freight

Freight is delivered on a wide range of vehicle sizes, from interstate semi-trailers to small box trucks. Designing for large vehicle turning and through movements has tradeoffs to the environment for walking or bicycling. For example, a street corner designed for a semi-trailer means a passenger car driver can navigate that same turn at a higher speed.

Freight is critical to our economy. The city can integrate design and policy treatments so freight and vulnerable users can navigate the same streets.

#### FREIGHT DESIGN TREATMENTS



Recessed stop bars allow lager vehicles to make right turns.

Photo: Nelson\Nygaard



During design, assume trucks will swing into adjacent lanes, which they do in practice.

Photo: Nelson\Nygaard



Mountable corners slow down passenger vehicles but can be mounted by trucks.

Photo: Google Street View



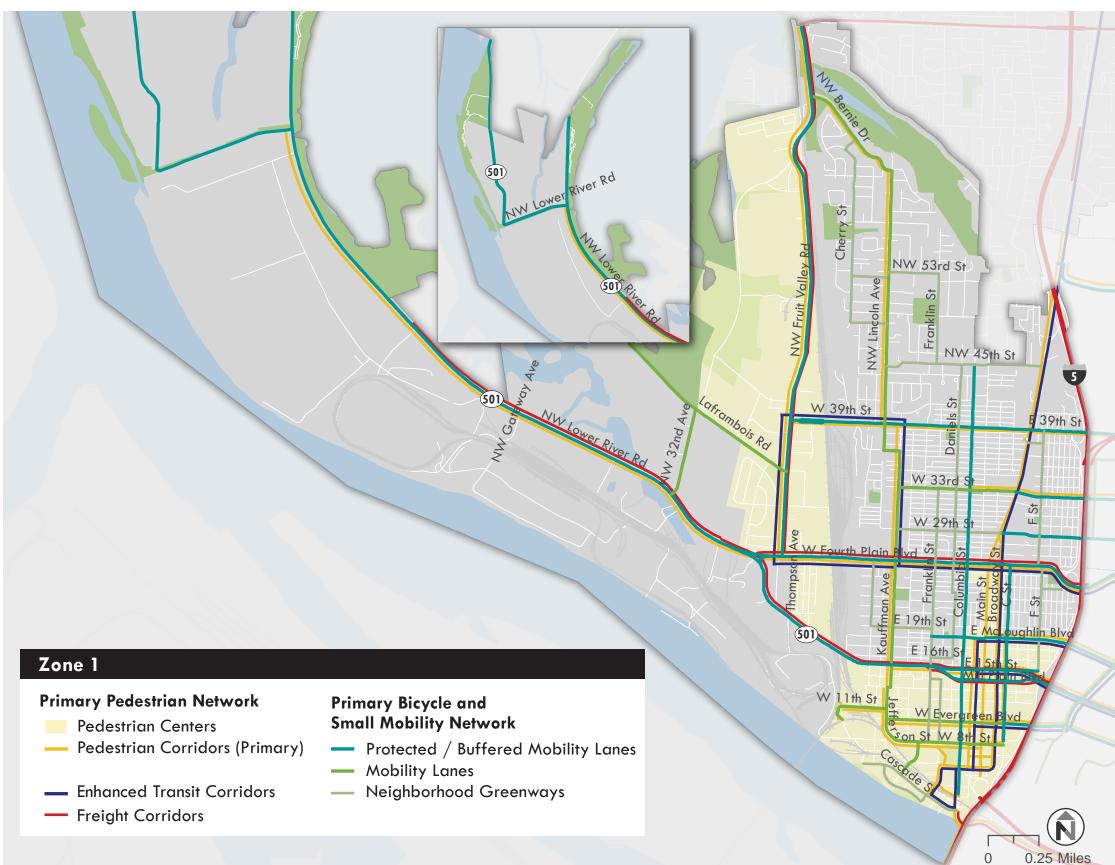
Vertical separation allows trucks and vulnerable users to co-exist more comfortably

Photo: City of Vancouver

#### **MODAL NETWORKS OVERLAP**



Map M1: Modal Networks - Zone 1

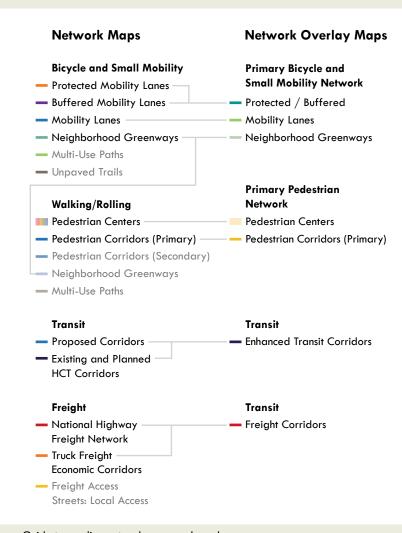


## How the networks overlap

Sometimes one street is part of multiple modal networks. In parts of the city with short blocks and a strong grid, freight, for example, can be accommodated on one street with truck-friendly designs and loading zones, while a parallel street with low traffic volumes will be more suitable for those on bike or small mobility devices. But many of the city's key corridors—like Fourth Plain Boulevard and Fruit Valley Road, for example—do not have parallel routes. In those cases all transportation needs are concentrated on one street.

Maps M1 through M5 show the modal networks overlaid. For legibility, the maps show the primary designated corridors and facilities, and leave off lower-tier designations like unpaved trails.

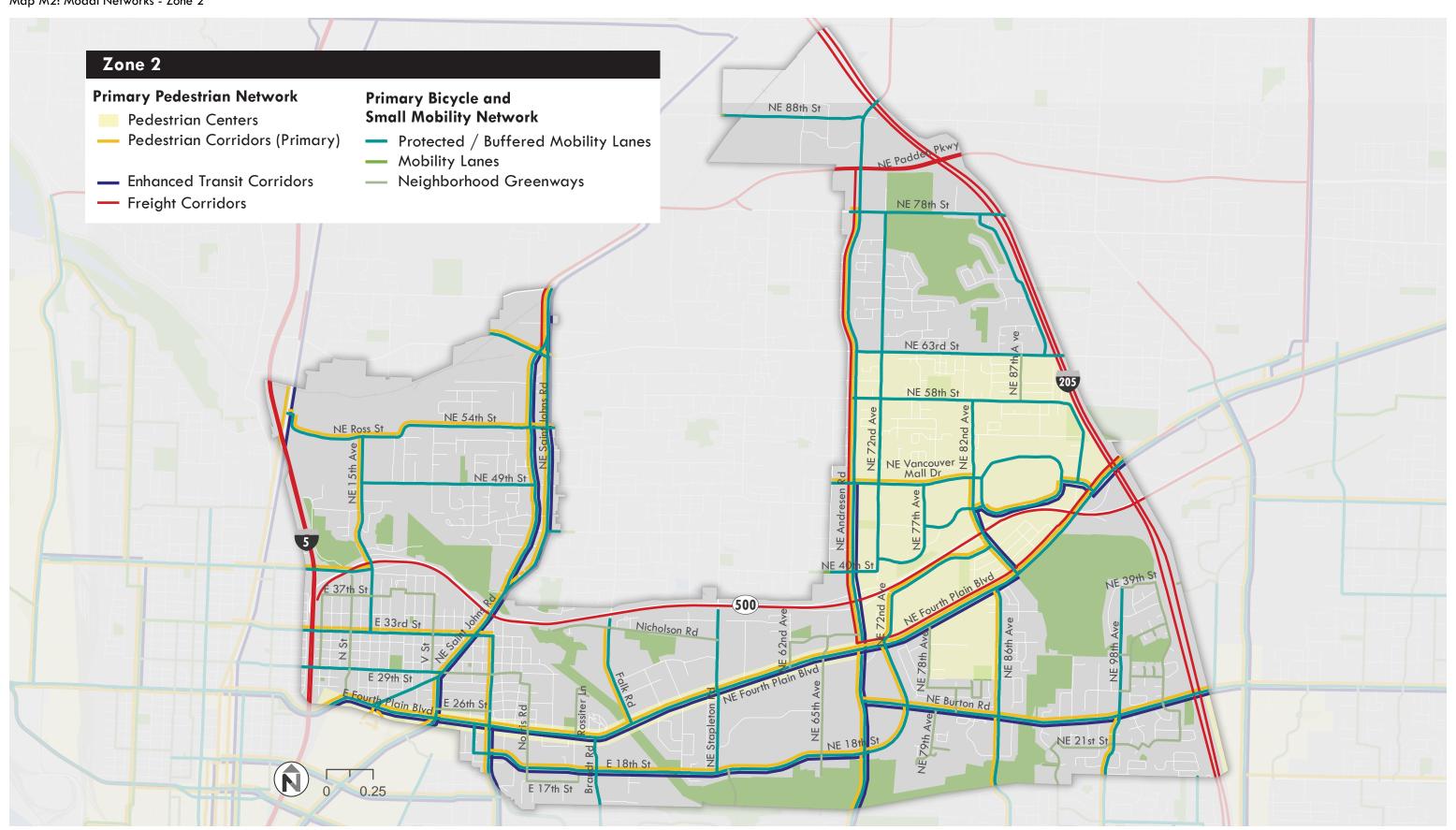
Designation as part of multiple modal networks means extra care will be needed to rebalance those streets for all.



Guide to reading network maps and overlay maps.

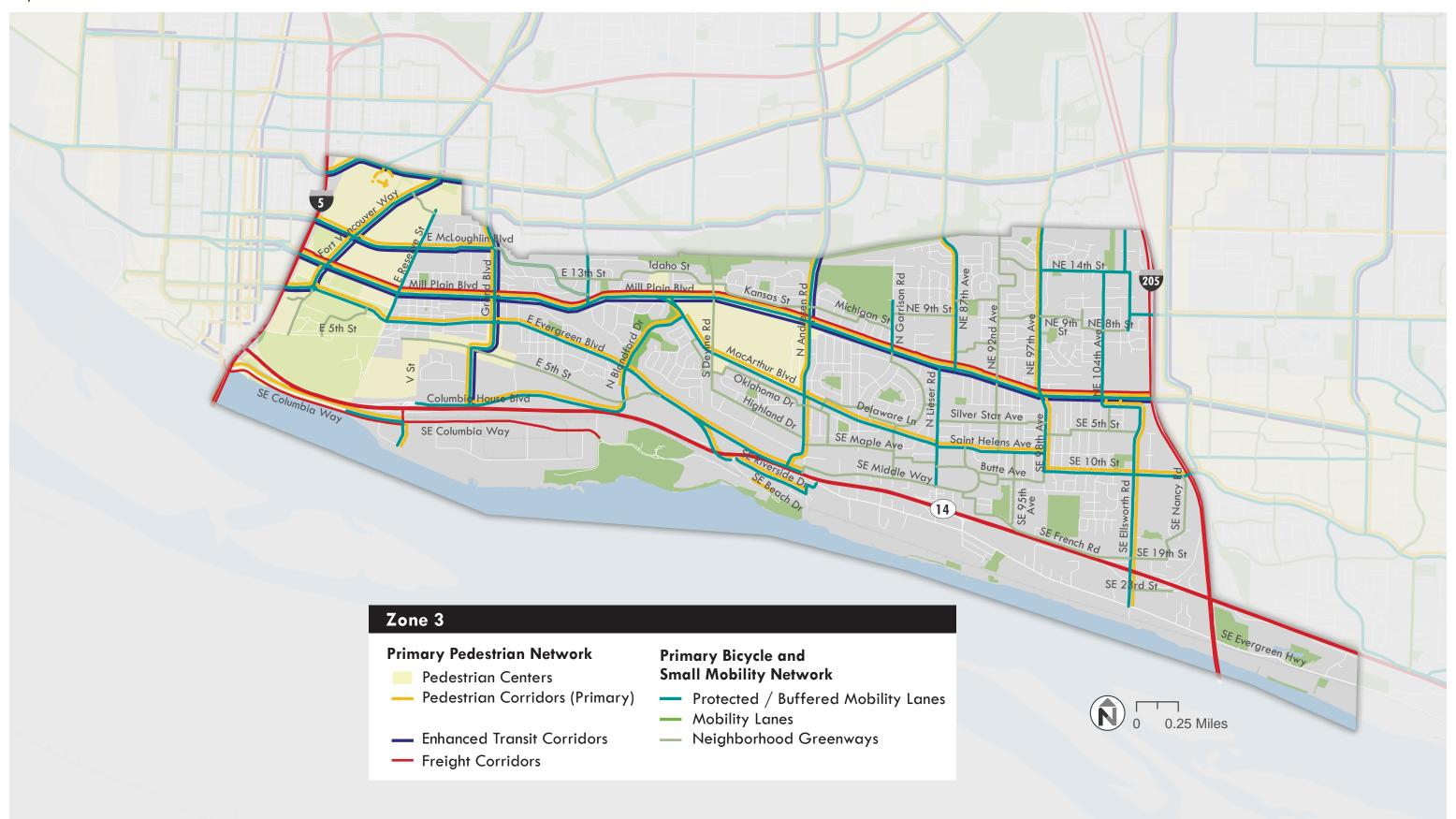


Map M2: Modal Networks - Zone 2





Map M3: Modal Networks - Zone 3





Map M4: Modal Networks - Zone 4

Map M5: Modal Networks - Zone 5

#### **Primary Pedestrian Network**

- Pedestrian Centers
- Pedestrian Corridors (Primary)
- Enhanced Transit Corridors
- Freight Corridors

#### Primary Bicycle and Small Mobility Network

- Protected / Buffered Mobility Lanes
- Mobility Lanes
- Neighborhood Greenways

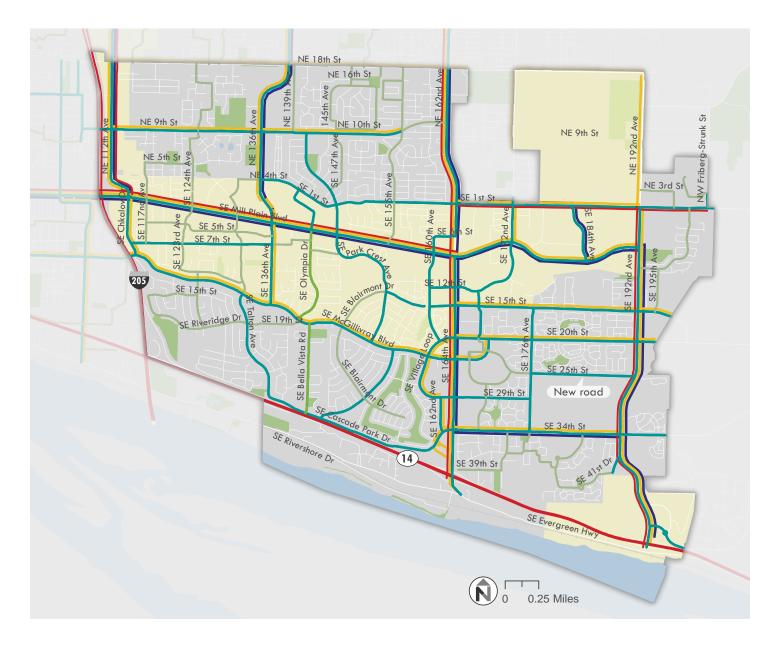
# NE 49th St NE 44th St 5 NE 39th St NE 31st St 0.25 Miles

#### Primary Pedestrian Network Primary

- Pedestrian Centers
- Pedestrian Corridors (Primary)
- Enhanced Transit Corridors
- Freight Corridors

#### Primary Bicycle and Small Mobility Network

- Protected / Buffered Mobility Lanes
- Mobility Lanes
- Neighborhood Greenways



# 6. Capital Projects

Capital projects include infrastructure investments that are new and outside of typical maintenance activities. Capital projects get funded and built in three ways:

- 1. Capital Facilities Plan (CFP). Long-range plan of unfunded projects needed for all city services (schools, utilities, transportation).
- 2. Transportation Improvement Program (TIP). Six-year capital project list, updated annually. The intent is for the TIP to include funded projects.
- 3. Coordinated with Development. Some capital projects become needed as a result of development but were not predicted so they do not live in the CFP or TIP.

The CFP and TIP already include a range of projects tied to roadway needs. The TSP developed modal networks for walking and BSM that require additional capital investment. After TSP adoption, the City will combine existing CFP and TIP projects with the TSP project list and sort them according to the prioritization framework outlined in the TSP.

# **Capital Projects Overview**

Typical TSP capital projects include:

- Making existing BSM facilities low-stress. For example, upgrading the existing BSM lane on Saint Johns Boulevard to a protected BSM lane with vertical separation.
- Adding new BSM facilities, such as a protected BSM lane on priority corridors, such as 112th Avenue.
- Filling sidewalk gaps on primary pedestrian corridors.
- Adding crossings that meet City's updated crossing policy spacing and design guidance.

In total, 229 capital projects have been identified to implement the TSP BSM and walking networks:

Project Summary							
229 projects							
Bike/Small Mobility	Pedestrian		Both				
33	8		188				
324 New Crossings	Level 2	LENG.	•				
Level 1	Level 2	DDED	Level 3				
8 510	89 p.E	YDD.	227				
Small Mobility Facilitie	s (one-way di	stance)					
Existing		Proposed					
197 miles		247 miles					
		(226% incr	ease)				

#### TYPES OF CROSSINGS

#### Level 1



Level 2



Level 3



# **Project Prioritization**

Prioritization includes two sets of considerations.

- 1. Where should we invest? This question asks where the highest need exists based on criteria such as safety history, equity considerations, existing and future growth, etc.
- 2. When should we invest? In reality, some factors mean investment should happen sooner. These are either opportunistic criteria, such as when a project is already planned in a location, or criteria that could slow a project down, such as the need to purchase right-of-way.

Moving forward, this framework will be used for TIP and TSP project prioritization.

# Where should we invest? What should be our top priority?

TSP Capital Project List







# When should we invest?

Criteria	Later	Sooner
Is there an upcoming pavement project?	No	Yes
Is there an upcoming agency partner project?	No	Yes
Does the project fill a small, critical gap in the walking or BSM networks?	No	Yes
Will the project have to go through environmental review?	Yes	No
Will the project have right-of-way impacts?	Yes	No



Near-term
Medium-term
Long-term

In some cases, medium or high priority projects may end up in the long-term phase if they touch environmentally sensitive areas, for example, that would take a long time to clear through regulatory processes. Or if a street was recently repaved, that project might take a longer time before the City revisits it. In other cases the opposite is true. Low-priority projects may be in the near-term phase due to opportunistic timing with other projects (such as a planned repaving).

A planning-level cost estimate was generated to understand the magnitude of resources needed to construct each project.

\$ Low Cost \$\$ Medium Cost \$\$\$ High Cost

# **Capital Projects Areas**

# **Capital Projects List**

The next section shows the capital projects for each zone of the city, including their prioritization, phasing, and construction cost. The zones were created to break the map into smaller pieces for readability and do not signify any other grouping purpose.

#### **FACILITY TYPE**

PML Protected Mobility Lane

MUP Multi-Use Path

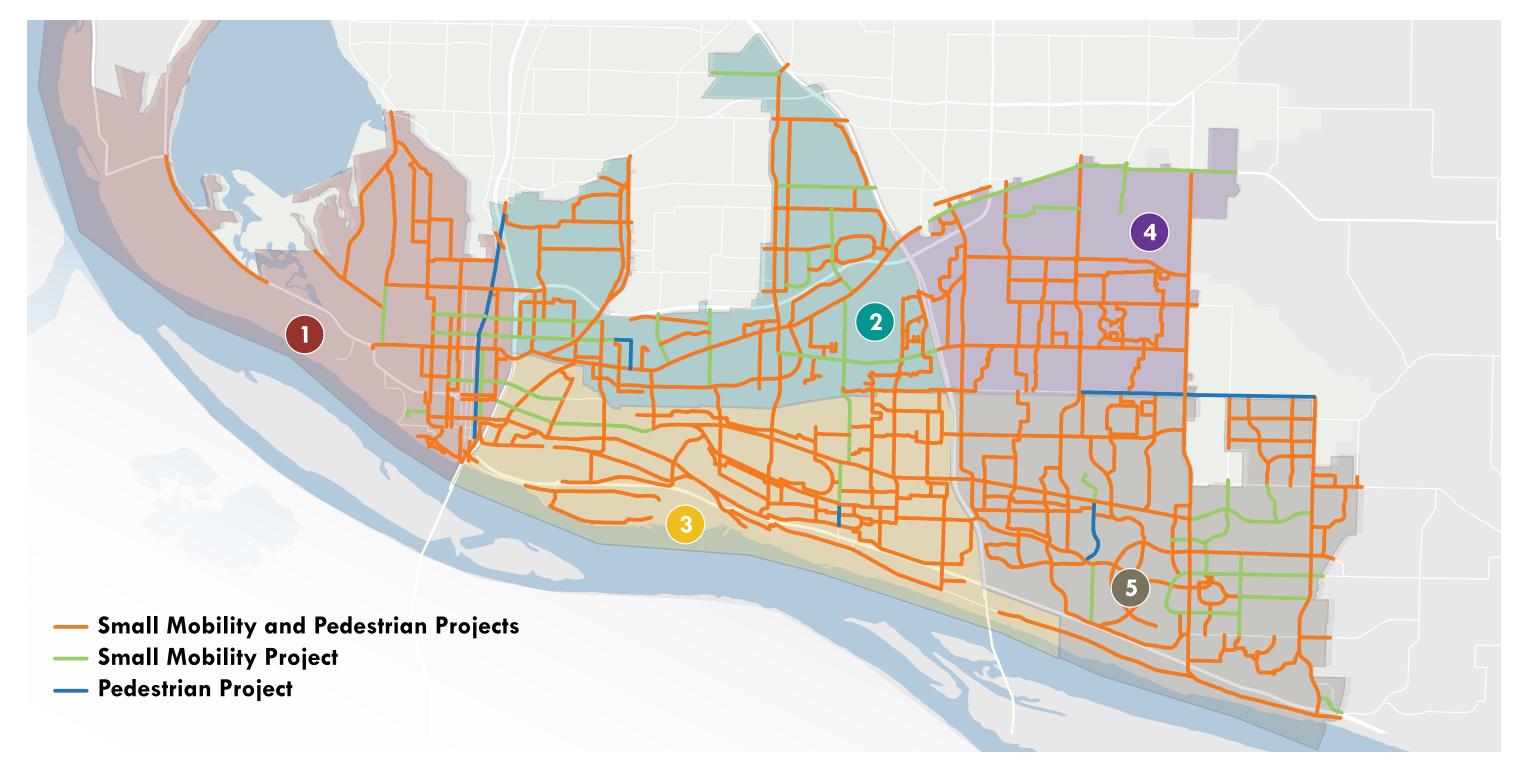
**BML** Buffered Mobility Lane

ML Mobility Lane

**NG** Neighborhood Greenway

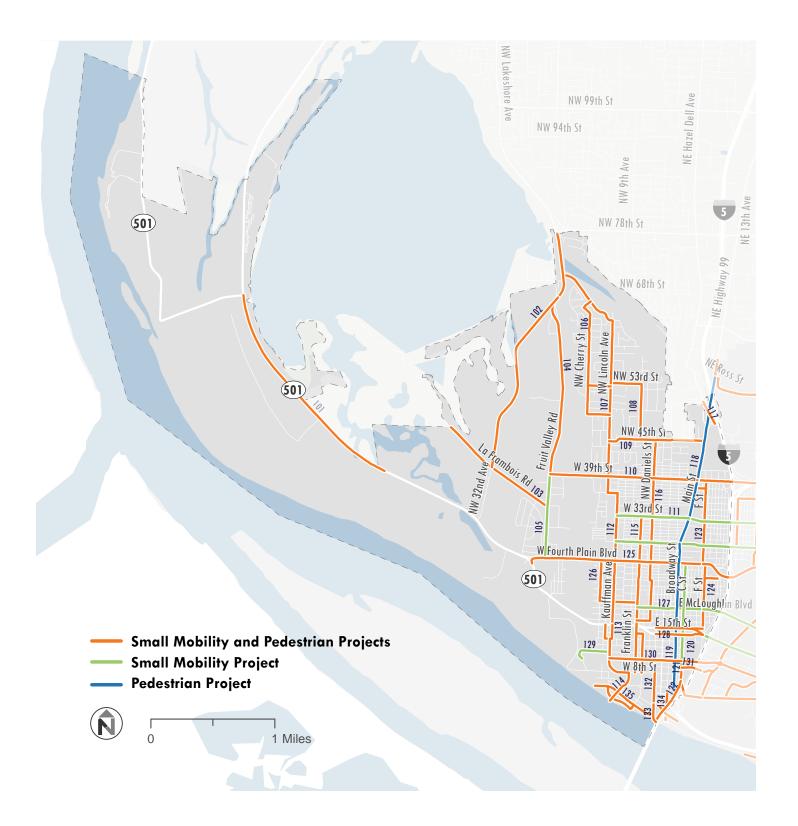
Ped Pedestrian Improvement

Priority	Timing	Cost
★ Low	Near-Term	\$ Low
<b>★★</b> Medium	>>>> Medium-Term	<b>\$\$</b> Medium
<b>★★★</b> High	Long-Term	<b>\$\$\$</b> High









Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
•	101	501: Fill in MUP gap from Gateway Drive to Lower River Rd	<b>~</b>	<b>~</b>	*		
•	102	New off-street connection: MUP from Laframbois Road to Fruit Valley Road	<b>~</b>		**		
•	103	Laframbois Rd: NG from Fruit Valley Road to end of industrial area	<b>~</b>		**		
•	104	Fruit Valley Rd: Upgrade discontinuous ML to PML from W 39th St to city limit	<b>~</b>	<b>~</b>	**		
•	105	Fruit Valley Rd: Upgrade existing ML to BML from W 39th St to Fourth Plain Blvd	<b>~</b>	<b>~</b>	**		
	106	NW Cherry St: NG from Bernie Dr to Lincoln Ave	<b>~</b>		*		
•	107	Lincoln Ave: Complete continuous ML from Fruit Valley Rd to W 39th St	<b>~</b>	<b>~</b>	*		
•	108	Franklin and 53rd Streets: NG from Lincoln Ave to NW 45th St	<b>~</b>		*		
•	109	NW 45th St: NG from Lincoln Ave to Main St	<b>~</b>		**		
•	110	W 39th St: Add new or upgrade existing ML to BML from Fruit Valley Rd to Main St	<b>~</b>	<b>~</b>	**		
	111	W 33rd: ML from Kauffman to Main St	5	<b>~</b>	**		
	112	W 33rd: ML from Kauffman to Main St  Kaufman Ave: ML from Mill Plain to W 39th St  Kauffman Ave: ML from Mill Plain to Evergreen Blvd.	<b>~</b>	<b>~</b>	**		
•	113	Kauffman Ave: ML from Mill Plain to Evergreen Blvd. See also Project 114.		<b>~</b>	***		
•	114	Kauffman/Jefferson/8th: MUP on west side. See also Project 113. Grant St: MUP continues from 8th St to waterfront.	<b>~</b>	~	***		
	115	Franklin St: NG from W 8th St to W 33rd St		<b>~</b>	***		
•	116	Daniels St: NG from NW 45th St to 16th St; continue west on 16th St to Franklin St	<b>~</b>		**		
•	117	MUP: New path connection from Hazel Dell Ave across Main St and connecting to the Discovery Trail			*		
•	118	Main St: Add crossings and missing sidewalks from E 29th St to NE Ross st	<b>~</b>	<b>~</b>	***		
•	119	Broadway: Add crossings from W 29th St to E 6th St		<b>~</b>	***		
•	120	C St: Upgrade existing ML and create continuous BML from E 8th St to Fourth Plain Blvd		<b>~</b>	***		
•	121	C St: Add MUP on C Street between 8th and 7th Streets, connecting to Project #26		<b>~</b>	**		
•	122	MUP: New path connection from C and 7th Streets along the west side of I-5 to Columbia Way and the waterfront			**		

	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
	123	F St: NG from E 39th St to Fourth Plain Blvd	<b>~</b>		**		
	124	F St: NG from Fourth Plain Blvd to E 15th St	<b>~</b>		**		
•	125	Fourth Plain Blvd: Upgrade existing ML to PML from 501 to F St	<b>~</b>	<b>~</b>	***		
•	126	Lincoln Ave and 19th St: NG from Fourth Plain Blvd to Franklin St	<b>~</b>		**		
•	127	McLoughlin Blvd: BML from Franklin to G S		-	***	-	
•	128	Mill Plain Blvd/15th St: PML on the Mill Plain/15th St couplet from Columbia St to I-5	<b>~</b>		***		
•	129	11th St: Add ML from Jefferson Street to the Amtrak Station		<b>~</b>	**		
•	130	Evergreen Blvd: New ML from Jefferson St to C St		<b>✓</b>	***		
•	131	MUP: New path connection across I-5 from around C St and E 8th St to Anderson St, which connects to Fort Vancouver Way	~		**		
•	132	Columbia St: Continue BML from 8th St to Phil Arnold Way			***		
•	133	Columbia St: MUP (west side) from Phil Arnold Way to I-5	5 🗸	~	***		
•	134	I-5 crossing: New MUP crossing I-5 from Main and E 5th Streets to the MUP along Columbia Way at the waterfront			**		
•	135	Columbia Way and Waterfront Way waterfront streets: NG		<b>~</b>	**		

## **JEFFERSON/KAUFFMAN (#113)**

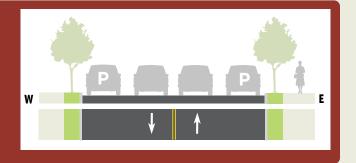
The Jefferson/Kauffman corridor links neighborhoods in the western part of Downtown to the multi-use path on Mill Plain Blvd and the waterfront. The City has secured funding for this project and it is anticipated to go to construction in 2024.

#### STREET CHARACTERISTICS

Posted Speed: 25 MPH

Traffic Volumes:

Bus Service: C-TRAN Route 25 (St. Johns)



#### PROJECT DESCRIPTION



Project Length: P

Bike and Small Mobility:

Pedestrian: Pr

**Priority:** High **Phasing:** Near

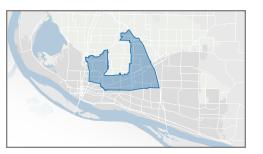
X ft sidewalk

- Multi-use path on Jefferson/Kauffman from Evergreen to Mill Plain, on 13th Street from Kauffman to Markle Avenue, and on Markle Avenue from 13th Street to Mill Plain
- This path investment connects people to the multi-use path on Mill Plain Boulevard and to the future multi-use path continuing south to the waterfront

# MODAL NETWORKS Multi-Use Path Primary Pedestrian Corridor









Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
•	201	NE Ross/NE54th: PML from Highwa★	<b>~</b>	<b>~</b>	**		
	202	MUP: Formalize Ellen Davis Trail connection as a paved MUP between NE 54th St and Saint James Rd	<b>~</b>		*		
•	203	NE Minnehaha St: Add PML in the city section of Minnehaha St, connecting to facilities planned by Clark County.	<b>~</b>		**		
•	204	Sants James/Saint Johns: Upgrade existing ML to PML from Petticoat Lane to city limits	<b>~</b>	<b>~</b>	**		
•	205	P St/NE 15th Ave: Continuous BML from E 33rd St to NE 54th St	<b>~</b>	<b>~</b>	**		
•	206	NE 49th St: PML between NE 15th Ave and Saint James Rd	<b>~</b>		**		
•	207	Sants James/Saint Johns: Upgrade existing discontinuous ML to PML from Fourth Plain Blvd to Petticoat Lane	<b>~</b>	<b>~</b>	***		
•	208	E 39th St: Upgrade ML to PML from Main St to NE 15th Ave	<b>~</b>		***		
•	209	K/V/E 37th Streets: NG with connection points to 29th St	<b>S V</b>		**		
•	210	N St: NG from Fourth Plain Blvd to just south of SR-500  E 33rd St: PMI from Main St to Grand Blvd	<b>~</b>		**		
	211	E 33rd St: PML from Main St to Grand Blvd	<b>~</b>	<b>~</b>	***		
	212	E 29th St: BML from Kauffman Ave to Neals Lane	<b>~</b>		**		
	213	Fourth Plain: PML from F St to Falk Rd	<b>~</b>	<b>~</b>	***		
•	214	Fourth Plain: BML from Fort Vancouver Way to General Anderson Ave	<b>~</b>	<b>~</b>	***		
•	215	Fourth Plain: ML from General Anderson Ave to 62nd Ave		<b>~</b>	***		
•	216	Fourth Plain: MUP on one side from 62nd Ave to Andresen Rd		<b>~</b>	***		
•	217	Fourth Plain Blvd: Add new PML from Andresen Rd to city limits (102nd Ave)		<b>~</b>	***		
	218	Z St/E 18th/E 20th: Upgrade existing ML to PML from Fourth Plain Blvd to Stapleton Rd	<b>~</b>	<b>~</b>	***		
	219	E 18th: Upgrade existing ML to PML from Stapleton Rd to NE 25th St	<b>~</b>		***		
•	220	E 25th St: NG between Fort Vancouver Way and Grand Blvd	<b>~</b>		***		
•	221	Norris Rd/E 17th St: NG from 29th St to south of E 18th St	<b>~</b>		***		
•	222	E 29th St/Neals Lane: Fill in missing sidewalk from Watson Ave to Fourth Plain Blvd	<b>~</b>		***		

Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
•	223	Rossiter Ln: NG from Fourth Plain Blvd to Burnt Bridge Creek Trail	<b>~</b>		***		
•	224	Nicholson Rd: NG from Burnt Bridge Creek Trail to NE Stapleton Rd	<b>~</b>		**		
•	225	Falk Rd: Upgrade existing ML to BML from the city limit to Fourth Plain Blvd		<b>~</b>	***		
•	226	Plomondon St: Add NG and fill missing sidewalks from Falk Rd to Stapleton Rd	<b>~</b>		***		
	227	Stapleton Rd: BML from city limit to E 18th St	<b>✓</b>		***		
•	228	Brandt Rd: Upgrade existing ML to BML from Fourth Plain to Mill Plain Blvds	<b>~</b>		**		
•	229	NE 65th/62nd/33rd: NG on NE 65th Ave from Burnt Bridge Creek Trail to NE 33rd St. NG on 33rd St and 62nd Ave connecting to Fourth Plain Blvd. New connection extending NE 33rd St east to Andresen Rd.	<b>~</b>		***		
•	230	Andresen: Upgrade existing ML to PML from Fourth Plain to NE 40th	<b>~</b>	<b>~</b>	***		
•	231	Andresen: Upgrade existing ML to PML from NE 40th to NE 63rd  Andresen: Upgrade existing ML to PML from NE	5	<b>~</b>	***		
•	232	Andresen: Upgrade existing ML to PML from NE 63rd to City limits	<b>~</b>	<b>~</b>	**		
•	233	NE 72nd Ave: Upgrade existing ML to PML from NE 78th St to the city limit on NE 40th St	<b>~</b>		***		
•	234	NE 88th St: Upgrade existing ML to PML from city limits to Andresen Rd			*		
•	235	NE 78th St: Upgrade existing ML to PML in the city section, connecting to planned Clark County facilities	<b>~</b>		*		
•	236	Meadows Drive: BML from NE 78th to NE 63rd Streets	<b>~</b>		*		
•	237	NE 63rd St: PML in City section connecting to planned facilities in Clark County			**		
	238	NE 87th Ave: NG from NE 63rd to NE 58th Streets	<b>~</b>		**		
•	239	NE 58th St: New PML from city limit to Vancouver Mall Dr	<b>~</b>		***		
•	240	Thurston Way: Upgrade existing ML to PML from NE 58th St to Fourth Plain Blvd		<b>~</b>	***		
•	241	Vancouver Mall Access: Add a continuous PML network on the Vancouver Mall ring road and key links leading up to the mall	<b>~</b>	~	***		
•	242	NE 41st St: Upgrad existing ML to BML from NE 72nd Ave to Vancouver Mall Drive			***		

Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
•	243	Vancouver Plaza Dr: Add PML on roadway connecting from NE 25th St to NE Thurston Way	<b>~</b>	<b>~</b>	***		
•	244	NE 78th/84th Ave: NG from Fourth Plain Blvd to Burton Rd	<b>~</b>		**		
•	245	NE 77th/79th Ave: NG from Burton Rd to the end of 77th Ct			**		
•	246	NE Burton Rd: Upgrade existing ML to PML from Andresen Rd to I-205	<b>~</b>	<b>~</b>	***		
•	247	NE 86th/87th Ave: Upgrade existing ML to PML from Fourth Plain to Mill Plain Boulevards	<b>~</b>	<b>~</b>	***		
•	248	MUP: New connection crossing I-205 linking NE 102nd Ave to Fairview Ct	<b>~</b>		**		
•	249	Oakbrook Park area: NG in the streets connecting to the park including NE 101st, NE 103rd, NE 99th, NE 29th, NE 39th	<b>~</b>		*		
	250	NE 21st/25th: NG from Burton Rd to NE 18th St MUP	<b>~</b>		*		

IN PROGRESS

## **BURTON ROAD (#246)**

Burton Road/28th Street provides a direct east-west connection across the city from Andresen Road to the eastern city limit (as 28th Street). The high posted speed makes the existing mobility lanes challenging for all ages and abilities.

Near

**Phasing:** 

#### STREET CHARACTERISTICS

**Traffic Volumes:** 9,390 ADT at NE 86th Avenue (Source: RTC, 2022)

Bus Service: C-TRAN Route 30 (Burton) Posted Speed: 35 MPH



#### **PROJECT DESCRIPTION**



**Project** 

Length:



Bike and Small 1.8 miles

**Mobility:** Upgrading existing ML

to PML



5 new level 3 High crossings 20 ft new

#### **MODAL NETWORKS**



Protected Mobility Lane



Primary Pedestrian Corridor



**Enhanced Transit Corridor** 



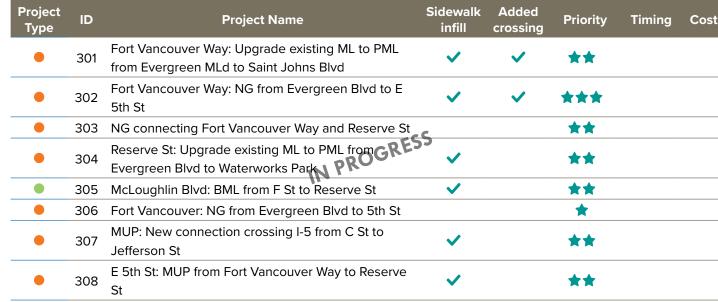
#### **Crossings on Burton Road:**

- Today, crossings are spaced every 1,358 feet that's a 6 ½ minute walk for the average person
- 6 out of 16 Route 30 bus stops are more than 200' from a crossing

sidewalk

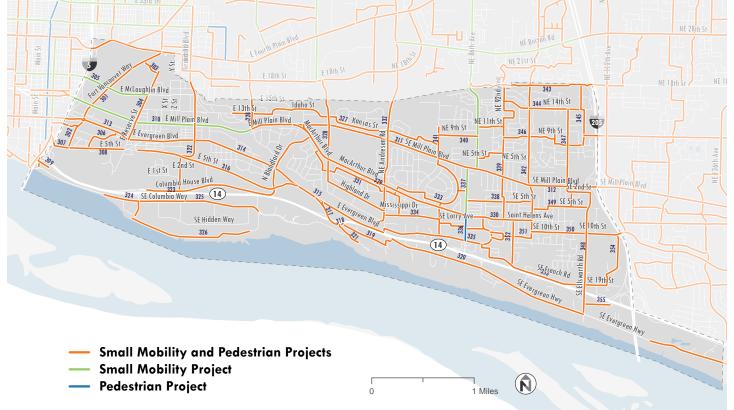
- Project 246 adds five level 3 crossings (includes a pedestrian signal)
- In the future, crossings will be spaced every **792 feet**, which meets the city's updated pedestrian crossing policy











Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
•	309	MUP: New connection crossing I-5 from 3rd St to Fort Vancouver	<b>~</b>		***		
	310	Mill Plain Blvd: Add PML from I-5 to Brandt Rd	<b>~</b>	<b>~</b>	***		
	311	Mill Plain Blvd: Add PML from Brandt Rd to Garrison Rd	<b>~</b>	<b>~</b>	**		
	312	Mill Plain Blvd: Add PML from Garrison Rd to I-205	<b>~</b>	<b>~</b>	***		
	313	Evergreen Blvd: PML from C St to Reserve St	<b>~</b>	<b>~</b>	***		
•	314	Evergreen Blvd: Upgrade existing ML to BML from Reserve St to MLandford Dr	<b>~</b>	<b>~</b>	**		
•	315	Evergreen Blvd: PML from CMLanford Rd to just east of Andresen Rd	<b>~</b>	<b>~</b>	*		
	316	E 5th St: NG from Fort Vancouver to Evergreen Blvd	<b>~</b>		**		
•	317	Shorewood Dr: PML connecting Evergreen Blvd across SR-14 to Beach Dr.	<b>~</b>	<b>~</b>	*		
•	318	MUP: MUP on Shorewood Dri from Beach Dr to Riverside Dr	<b>~</b>	<b>~</b>	*		
•	319	Riverside Dr: PML from Shorewood Dr to Evergreen Hwy	<b>~</b>	<b>~</b>	*		
•	320	Evergreen Highway: MUP from Chelsea Ave to Ellsworth Rd  SE Beach Dr: MLIP from Piverside Dr to Wintler Park	5 🗸		*		
	321	SE Beach Dr: MUP from Riverside Dr to Wintler Park	<b>~</b>	<b>~</b>	*		
•	322	Grand Blvd: Upgrade existing ML to PML from Columbia House Blvd to 33rd St	<b>~</b>	<b>~</b>	***		
•	323	Columbia House Blvd/MLanford St: PML connecting from Columbia Way to MacArthur Blvd	<b>~</b>	<b>~</b>	**		
	324	Columbia Way: BML from housing area west of Surprise Beach to Columbia Shores Blvd	<b>~</b>	<b>~</b>	*		
•	325	Columbia Way: MUP connecting from Columbia Shores Blvd to Marine Park	<b>~</b>		*		
•	326	MUP: New connection between Marine Park and Columbia House Blvd along the waterfront	<b>~</b>		*		
•	327	Kansas/Michigan/E 13th St: NG parallel to Mill Plain from McLoughlin Blvd to Garrison Rd	<b>~</b>		**		
•	328	Devine Rd/Highland Dr: NG from E 18th St to Andresen Rd	<b>~</b>		**		
•	329	MacArthur Blvd: Upgrade existing ML to PML from Mill Plain to Lieser Rd	<b>~</b>	<b>~</b>	**		
•	330	Saint Helens Ave: PML from Lieser Road to SE 98th Ave	<b>~</b>	<b>~</b>	*		
•	331	Oklahoma Dr/Memphis Way: NG connecting from MacArthur Blvd to Corrigidor Rd	<b>~</b>		*		
•	332	Andresen: Upgrade existing ML to PML from Fourth Plain to Evergreen	<b>~</b>	<b>~</b>	***		

Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
•	333	Delaware Lane: NG from Mill Plain to MacArthur Blvds around Lieser Crest Park	<b>~</b>		**		
•	334	Maple Ave: NG east-west between Andresen Rd and Lieser Rd; NG north-south connecting MacArthur Blvd to Middle Way	<b>~</b>		*		
•	335	SE Middle Way/Columbia Ridge Dr: NG from Evergreen Blvd to St Helens Ave	<b>~</b>		*		
	336	Lieser Rd: PML from MacArthur Blvd to Middle Way	<b>~</b>		**		
•	337	Lieser Rd: Upgrade existing ML to PML from Mill Plain to MacArthur Boulevards	<b>~</b>		***		
	338	Silver Star Ave: NB from Lieser Rd to SE 98th Ave	<b>~</b>		**		
•	339	NE 92nd Corridor: Network of NG on north/south NE 92nd, between 67th and 97th Avesnues with connections from NE 18th St MUP to Saint Helens Ave	<b>~</b>		**		
	340	NE 9th St: NG from Garrison Rd to 87th Ave	<b>~</b>		***		
•	341	Garrison Rd: BML from Mill Plain Blvd to Douglas Park	<b>~</b>		***		
•	342	NE 97th/98th Ave: Upgrade existing ML to BML from Burnt Bridge Creek Trail at NE 97th Ave to \$E 10th St	5 🗸	~	**		
•	343	MUP: New MUP adjacent to NE 18th St from NE 86th Ave (Burnt Bridge Creek Trail) to Four Seasons Lane	~		*		
	344	NE 14th St: BML from NE 97th Ave to NE 104th Ave	<b>~</b>		**		
•	345	NE 107th/108th Ave: BML from NE 18th St to NE 8th St	<b>~</b>		**		
	346	NE 9th St: NG from NE 108th Ave to NE 92nd Ave	<b>~</b>		**		
	347	NE 104th: BML from NE 14th to Mill Plain Blvd	<b>~</b>		**		
•	348	Ellsworth Rd: PML from Evergreen Hwy to Mill Plain Blvd	<b>~</b>	<b>~</b>	**		
	349	SE 5th St: NB from SE 98th Ave to Ellsworth Rd	<b>✓</b>		**		
•	350	SE 10th St: BML from SE 98th Ave across I-205 to Chkalov Dr	<b>~</b>	<b>~</b>	***		
•	351	Butte/98th Ave: NG from Columbia Ridge Dr to SE 10th St	<b>~</b>	<b>~</b>	*		
•	352	NE 95th Ave: NG from Sain Helens Ave to Mt Hood Ave	<b>~</b>		*		
	353	Mt Hood Ave: NG from Middle Way to Ellsworth Rd	<b>~</b>		*	-	
•	354	SE 19th St/Nancy Rd: NG from Ellsworth Rd to SE 10th St	<b>~</b>		*		
	355	SE 23rd Ave: NG from Ellsworth Rd to I-205 MUP	<b>~</b>		*	-	

## **GRAND BOULEVARD PML (#322)**

Grand Boulevard from Columbia House Boulevard to 33rd Street is the only north-south direct connection between Interstate 5 and Andresen Road. This critical connection provides access to many essential places, including grocery stores, schools, and employment opportunities.

#### STREET CHARACTERISTICS

#### **Traffic Volumes:**

9,500 ADT at Columbia House Blvd (Source: RTC, 2017) 8,000 ADT at Mill Plain Boulevard (Source: RTC, 2021)

**Posted Speed: Bus Service:** 

**25 MPH** C-TRAN Route 6 (Fruit Valley/Grand)



#### **PROJECT DESCRIPTION**





Small

Mobility: Upgrading

PML on both

sides of street

Bike and

5 new level 3 crossings 1,520 ft new existing ML to sidewalk

Pedestrian:



**Priority:** 

**Phasing:** 

#### **MODAL NETWORKS**



Protected Mobility Lane



Primary Pedestrian Corridor



**Enhanced Transit Corridor** 



#### PROJECT SPOTLIGHT

## **NE 136TH AVENUE (#515, 516)**

NE 136th Avenue provides a direct north-south connection from McGillivray Boulevard to the northern city limit at Fourth Plain Boulevard. The TSP identified the entire corridor for a protected mobility lane. Projects 515 and 516 upgrade the existing mobility lane to protected mobility lane from McGillivray Boulevard to NE 18th Street.

#### STREET CHARACTERISTICS

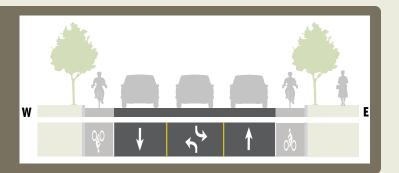
#### **Traffic Volumes:**

15,800 ADT at Mill Plain Boulevard (Source: RTC, 2022) 19,250 ADT at NE 18th Street (Source: RTC, 2022)

Posted Speed: 35 MPH

**Bus Service:** C-TRAN Route 80

(Vancouver Mall/Fisher's)



#### PROJECT DESCRIPTION



Length:

1.9 miles



PML

Small Mobility:

crossings Upgrade existing ML to



**Priority:** Pedestrian: 5 new level 3 X

Phasing:

MODAL NETWORKS



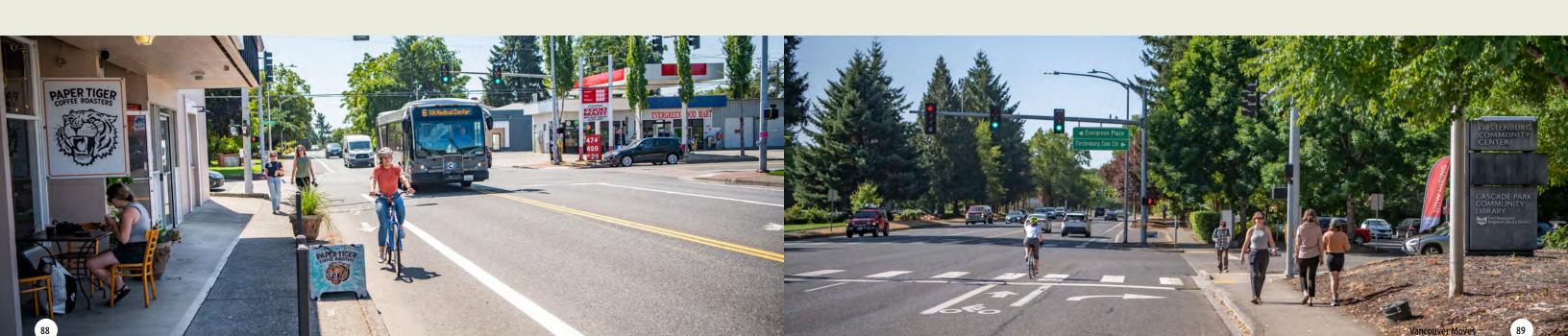
Primary Pedestrian Corridor

Protected Mobility Lane

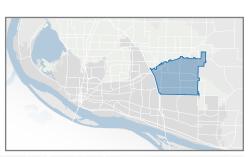


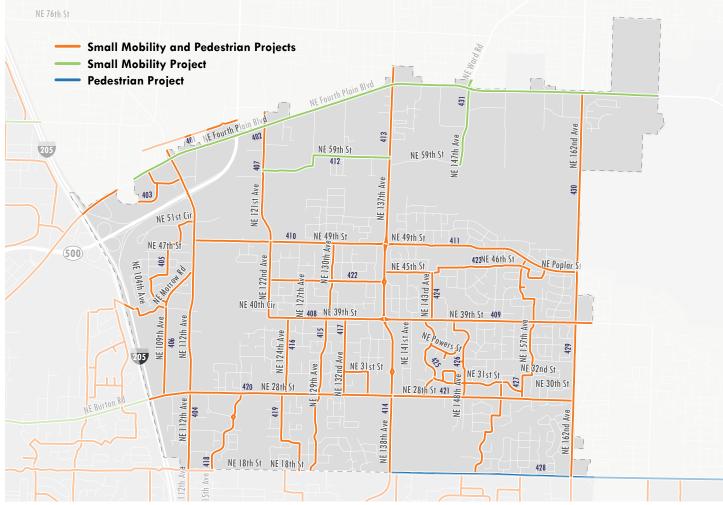
Enhanced Transit Corridor











Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
	401	NE Rosewood Ave: BML at NE 105th to SR 503					\$
	402	Fourth Plain Blvd: Upgrade existing ML to PML from western to eastern city limit					\$
	403	Coxley Dr/107th Ave: NG in the Orchards neighborhood between Fourth Plain Blvd and Ghees Rd	5				
	404	NE 112th Ave: PML from City limit (just north of Fourth Plain) to NE 18th St					
	405	NE 106th-110th Ave: Network of NG Connecting from NE 112th Ave and Morrow Road to a new MUP (#248) across I-205					
	406	NE 109th Ave: PML from NE 39th St to NE Burton Rd					

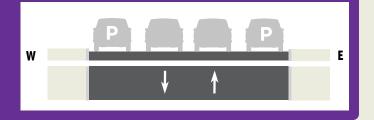
Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
	407	NE 121st-122nd Ave: PML from City limit to NE 49th St					
	408	NE 39th St/NE 122nd Ave: PML from NE 49th St to NE 137th Ave					
	409	NE 39th St: PML from NE 137th Ave to NE 162nd Ave					
	410	NE 49th St: PML from NE 112th Ave to NE 137th Ave					
	411	NE Poplar St: BML from NE 137th Ave to NE 162nd Ave					
	412	NE 56th/NE 59th Streets: ML from NE 121st Ave to NE 137th Ave					
	413	NE 136th/138th Ave: PML from Citiy Limits to NE 49th St					
	414	NE 136th/138th Ave: PML from NE 49th St to NE 18th St					
	415	NE 129th/130th Ave: NG from NE 49th St to NE 18th St					
	416	NE 124th Ave: NG from NE 39th St to NE 28th St					
	417	NE 31st St: NG from NE 39th St to NE 28th St					
	418	Four Seasons Lane: NG from NE 28th St to NE 18th St  NE 124th Ave: NG from NE 28th St to NE 18th St  Burton Rd/NE 28th St: Upgrade existing ML to PML	5				
	419	NE 124th Ave: NG from NE 28th St to NE 18th St					
	420	Burton Rd/NE 28th St: Upgrade existing ML to PML from I-205 to NE 138th Ave					
	421	NE 28th St: Upgrade existing ML to PML from NE 138th Ave to NE 162nd Ave					
	422	NE 44th St: NG from NE 122nd Ave to NE 137th Ave					
	423	NE 45th /46th St: NG from NE 137th Ave t oNE Poplar St					
	424	NE 143rd Ave: NG from NE 45th Ave to NE 39th St					
	425	NE 143rd/14th Ave: NG network from NE 39th St to NE 28th St					
	426	NE 31sth/3nd St: NG network between NE 39th St and NE 28th St					
	427	NE 145th/157th Ave: NG from NE 31st St to NE 18th St					
	428	NE 18th St: Continue MUP east from Evergreen High School at NE 41st Ave to eastern city limit (192nd Ave).					
	429	NE 162nd Ave: Upgrade ML to PML from NE Poplar St to NE 18th St					
	430	NE 162nd Ave: Upgrade ML to PML from NE Poplar St to City limits					
	431	NE 147th Ave: Upgrade ML to PML from NE 59th St north to cit limit					

## **NE 129TH/130TH AVENUES (#415)**

NE 129th/130th Avenues are quiet residential streets between NE 112th Avenue to the west and NE 138th Avenue to the east. Project #415 connects from the multi-use path on NE 18th Street at the south end to NE 49th Street at the north end.



**Bus Service:** N/A None



**MODAL NETWORKS** 

#### **PROJECT DESCRIPTION**



**Project** 

Length:

1.5 miles

**25 MPH** 



Bike and Small

**Mobility:** Upgrade existing

neighborhood

greenway



5 new level 3 crossings 1,520 ft new sidewalk



Medium





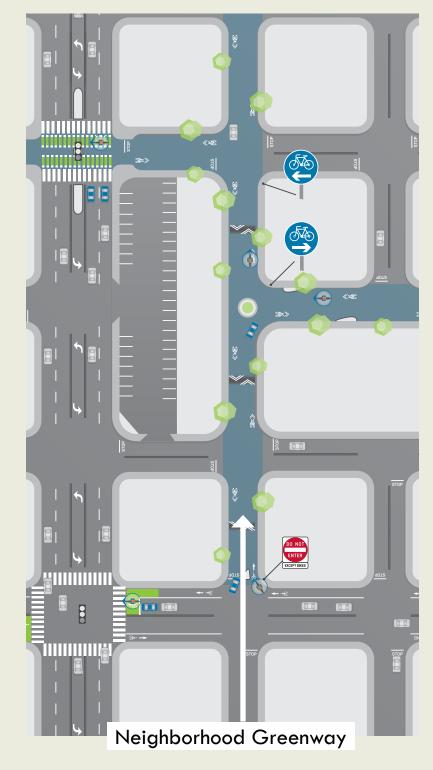




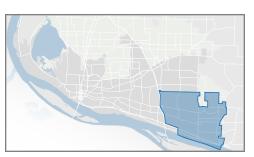
#### **ELEMENTS OF NEIGHBORHOOD GREENWAYS**

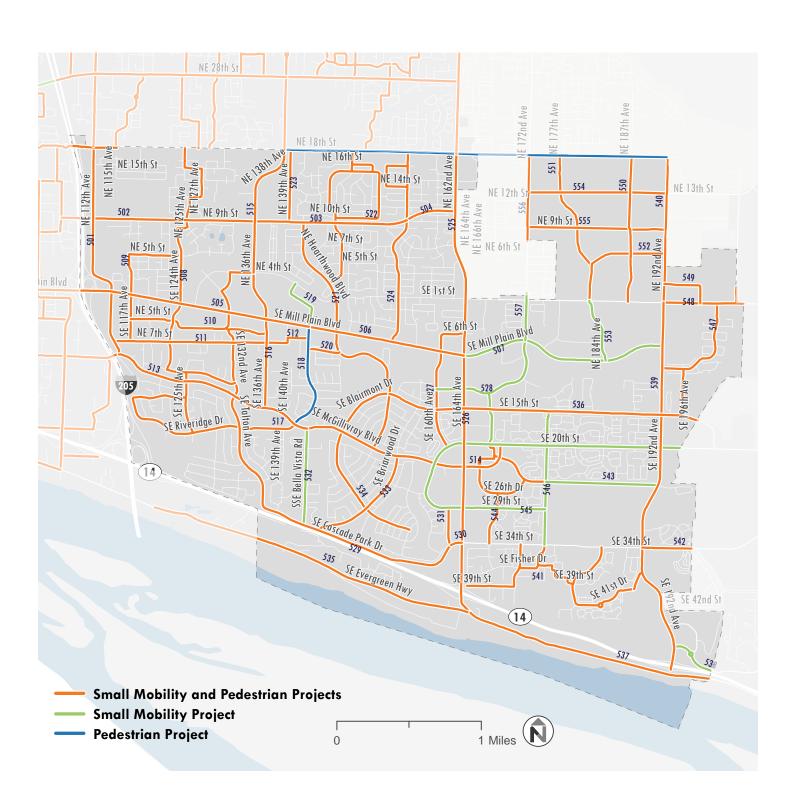
Neighborhood greenways (NG) are low-volume, low-speed streets comfortaMLe for walking or bicycling. Typical elements include:

- Branded signs and sharrows. These give the route a visual identity, guide bicyclists and small mobility users, and signal to drivers that the street is a bicycle route.
- Traffic calming. Speed humps, cushions, and tables slow down vehicle traffic.
- Traffic diversion. Access and turning movement restrictions reduce vehicle traffic volumes.
- Crossing treatments. Traffic circles with 4-way yield signs or stop signs just for cross streets allow bicyclists and small mobility users to pass straight through.
- Wayfinding. Wayfinding directs people from neighborhood greenways to major destinations.









Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
	501	NE 112th Ave: PML from NE 18th St to McGillivray Blvd					\$
	502	NE 9th St: Upgrade existing ML to PML from NE 108th Ave to NE 136th Ave					\$
	503	NE 9th St: BML from NE 136th Ave NE 155th Ave					
	504	NE 11th St: NG from NE 155th Ave NE 162nd Ave					
	505	Mill Plain Blvd: Add PML from I-205 to Olympia Dr					
	506	Mill Plain Blvd: Add PML from Olympia Dr to 164th St					
	507	Mill Plain Blvd: Add PML from 164th to 192d Ave					
		"NE 123rd-127th Ave: NG in the Fircrest and					
	508	Cascade Park West neighborhood between NE 18th St and SE 11th St"					
	509	NE 117th Ave and NE 5th St: NG from SE 7th St to NE 124th St					
	510	SE 131st-132nd Ave and SE 5th-6th St: NG from SE 117th Ave to NE 136th Ave	•				
	511	SE 7th St: Upgrade existing ML to BML from SE RES Chkalov Dr to SE 136th Ave	5				
	512	SE 6th and 7th St: NG from SE 136th Ave to SE Olympia Dr					
	513	SE McGillivray Blvd: Upgrade existing ML to PML from SE Chkalov Dr to SE Bella Vista Rd					
	514	SE McGillivray Blvd: Upgrade existing ML to PML from SE Chkalov Dr to SE 20th St					
	515	NE 136th Ave: Upgrade existing ML to PML from NE 18th St to NE 4th St					
	516	NE 136th Ave: Upgrade existing ML to PML from NE 4th St to SE McGillivray Blvd					
	517	SE 15th St and SE Riveridge Dr: NG in the Riveridge neighborhood					
	518	SE Olympia Dr: Add ML from SE Mill Plain Blvd to SE McGillvray Blvd					
	519	SE Olympia Dr: Upgrade existing ML to BML from SE 1st St to SE Mill Plain Blvd					
	520	SE 7th St: NG from SE Olympia Dr to SE Parkcrest Ave					
	521	SE Hearthwood St and SE Park Crest Ave: Upgrade existing ML to BML from NE 9th St to SE McGillivray Blvd					

Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
	522	NE 145th-152nd Ave: NG from NE 18th St to NE Hearthwood Blvd					
	523	NE 139th Ave: NG from NE 18th St to NE 9th St					
	524	NE 14th-17th St, NE 153rd-155th Ave: NG from NE 18th St to SE Mill Plain Blvd					
	525	NE 162nd-164th Ave: Upgrade existing ML to PML from NE 18th St to SE Mill Plain Blvd					
	526	SE 164th Ave: Add PML from SE Mill Plain Blvd to SE Evergreen Hwy					
	527	SE 160th Ave: Upgrade existing ML to BML from SE 164th Ave to SE Village Loop					
	528	SE Tech Center Dr: BML from SE Mill Plain Blvd to SE 160th Ave, SE 20th St					
	529	SE Talton Ave and SE Cascade Park Dr: Upgrade existing ML to PML from SE McGillivray to SE 162nd Ave					
	530	SE Cascade Park Dr: Add PML from SE 162nd Ave to SE 164th Ave					
	531	SE 162nd Ave: Upgrade existing ML to BML from SE Village Loop to SE Cascade Park Dr	5				
	532	SE Bella Vista Rd: Add ML from SE McGillivray to SE Cascade Park Dr					
	533	SE Briarwood Dr: Add BML from SE McGillivray to SE Cascade Park Dr					
	534	MLairmont Dr: NG from Park Crest Ave to SE 157th Ave					
	535	SE Evergreen Hwy: MUP from Columbia Springs Park to SE 164th Ave					
	536	SE 15th St: BML from Park Crest Ave to the eastern city limit, including short path connection at SE 160th Ave					
	537	SE Evergreen Hwy: MUP from SE 164th Ave to City limits					
	538	SE Brady Rd and SE Columbia Palisades Dr: Add PML from SE 192nd Ave to City limits					
	539	SE 192nd Ave: Upgrade existing ML to PML from SR-14 to SE 1st Ave					
	540	NE 192nd Ave: MUP from NE 18th St to SE 1st St					
	541	SE 39th-42nd St, SE 171st-179th Ave: NG in the Fisher's Creek neighborhood					
	542	SE 34th St: Add PML from SE 192nd Ave to City limit					
	543	SE 25th St: Add BML from SE 176th Ave to SE 192nd Ave					

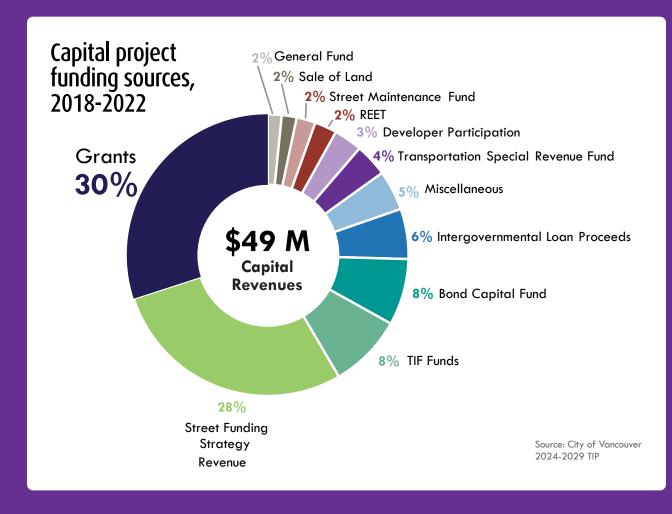
Project Type	ID	Project Name	Sidewalk infill	Added crossing	Priority	Timing	Cost
	544	SE 22nd-26th St, SE 166th-169th Ave: NG from SE 20th St to SE 34th St					
	545	SE 20th St, SE 29th St, Village Loop: Upgrade existing ML to PML from SE 176th Ave to City limits					
	546	SE 176th Ave: PML from SE 15th St to SE 34th St					
	547	SE Westridge Blvd: NG from SE 1st St to SE 15th St					
	548	SE 1st St: Upgrade existing ML to PML from NE 192nd Ave to City limits					
	549	NE 3rd St and NE 197th Ave: NG from NE 192nd Ave to SE 1st St					
	550	MUP: New path connection between NE 18th St and SE 1st St					
	551	MUP: New path connection from NE 18th St to NE 182nd Ct					
	552	MUP: New path connection between SE 1st St and NE 192nd Ave					
	553	SE 184th Ave: Add BML from SE 1st St to SE Mill Plain Blvd					
	554	MUP: New path connection between NE 172nd Ave and NE 192nd Ave  MUP: New path connection between NE 172nd Ave	5				
	555	MUP: New path connection between NE 172nd Ave and NE 192nd Ave					
	556	NE 172nd Ave: MUP from NE 18th St to City limits					
	557	SE 172nd Ave: Add PML from City limits to SE Mill Plain Blvd					

# 7. Implementation

Implementation of the TSP starts now. More resources are needed to fully realize the policies and programs in this vision, but we can start work today on key community priorities.

# Funding: Current Sources

More than half the funding for capital projects comes from grants or the Street Funding Strategy (SFS) (see chart below). The city passed the SFS in 2015 as a package of new funding for transportation. It secured revenues through things like utility taxes and a Business License Surcharge. A main source of SFS funds comes from designating the city as a Transportation Benefit District (TBD) with the ability to collect a \$40 vehicle license fee. SFS makes up more than one-fifth of maintenance revenues and more than one-quarter of capital revenues. This funding source allowed the city to upgrade substandard streets throughout the city.



# Funding: Resource Needs

Implementing the TSP requires funding both for design and construction as well as staff to manage programs.

The capital projects in chapter 6 cost will be costly to construct. This cost, phased during the next 20 years, could be implemented through either expanding the TIP or swapping out projects in the TIP that may no longer be a high priority.

Given the intense development in Vancouver, another method for building TSP projects is through development. Development fees through the Transportation Impact Fee program have not been updated since 2014. See additional detail in the near-term priorities section.

Vancouver already receives a large portion of capital project funding through grants, but more programs exist the City could tap into.

Lastly, more City staff are needed to deliver the TSP. Key programs with staffing needs include:

- Safety Program to deliver on Vision Zero and all associated safety projects
- Complete corridors projects throughout the City
- Active Transportation program creation and community education
- Freight and transit coordination

Altogether, these programs are forecast to need an additional X full-time staff.



See **Appendix I: Prioritization and Funding Memo** for additional information around resource needs and prioritization methods.



# Tracking our Progress

Performance measures monitor progress toward desired outcomes, inform decision-making, keep staff focused on priorities, and provide greater transparency to the public. The table below shows measures that are readily available and can be consistently collected by the city to track progress. Most of these metrics change very little year to year, and a specific numeric benchmark can dilute progress by locking the City into an arbitrary target. Therefore progress shall be measured by direction or whether the metric is going up or down.

### **Performance Measures**

	Goal	Measure	Metric	Target	
	Safety	Reduce the number and	Number of fatal and serious crashes per year	•	
		severity of all crashes	Percent change in fatal and serious crashes		
		Reduce the number and	Number of fatal and serious ped/bike crashes per year		
Safety		severity of ped/bike crashes	Percent change in fatal and serious ped/bike crashes		
	Complete projects with known safety benefits on high-crash corridors and intersections	Percent of safety projects on high-crash corridors	•		
Equity	Invest transportation dollars in high Equity Index areas	Percent of paving project annual mileage in high Equity Index areas	-		
	Make walking/rolling more	Number of ADA-compliant curb ramps added or retrofitted			
		accessible	Number of accessible pedestrian signals (APS)		
Climate	Climanto	Reduce emissions	Per capita single occupant motor vehicle miles traveled		
	Cillidie	Reduce emissions	GHG emissions from motor vehicles		
	Increase the number of people	Percent change in walking trips			
		using active transportation	Percent change in biking/small mobility trips		
	Transportation	Provide low-stress small	Miles of new small mobility lanes/facilities		
Choice	mobility facilities	Miles of improved new small mobility lanes/facilities with buffers/protection			
	Increase the coverage of pedestrian facilities	Miles of sidewalk infill			
		Increase transit use	Transit ridership		
Regional Connectivity	_	Expand the walking and rolling network to connect Pedestrian Corridors and Pedestrian Centers	Number of newly marked or enhanced crossings meeting City's pedestrian crossing policy guidelines along Pedestrian Corridors and in Pedestrian Centers	•	
	Connectivity	Ensure efficient freight movement	Freight corridor travel times on designated freight corridors	-	
		Make transit faster and more	Miles of bus lanes or queue jumps		
		reliable	Number of signals with transit priority		
			Keep pavement in good	Miles of rehabbed pavement	
	Maintaining	condition	Percent of lane miles in good condition		
	Our Assets	Continue to upgrade existing sidewalks	Miles of sidewalk upgraded from deficient to good	-	

# **Near-Term Priorities**

The TSP sets out our long-term vision, but we will make immediate progress in the next two years by focusing on our top four initiatives.











**VISION ZERO** 



**SAFE ROUTES TO SCHOOL** 

## **Complete Corridors**

**COMPLETE CORRIDORS** 

**PROGRAM** 

Vancouver's street network consists of a set of arterials with neighborhood streets in between. Few streets directly connect across the city. The City's complete corridors program will tackle a handful of these important streets each year, to transform them into places where people want to walk or use BSM.

Expanding the corridors program gives the City resources to make changes more quickly. During the past few years, the City implemented three major complete corridor projects:

- Tech Center Drive from SE 172nd to SE 167th Avenues. This project filled a gap in the BSM network with access to a major employment center.
- McLoughlin Boulevard from Reserve Street to Brandt Road. Speed cushions and buffered bike lanes were installed.
- Columbia Street from 8th to 45th Streets, where buffered bike lanes were installed.

Current projects reimagine the following corridors:

- Fourth Plain Boulevard
- Fort Vancouver Way
- SE 34th Street
- McGillivray Boulevard

# A Safer McLoughlin Boulevard

McLoughlin Boulevard is a major east-west connector from downtown to the east. In 2019, the City installed 16 speed cushions, two pedestrian crossings, buffered mobility lanes, and sharrows from Reserve Street to Brandt Road. In 2022, an evaluation of the project showed:

- Bike volumes increased on the west end of the corridor near Hudson's Bay High School, Clark College, and the Washington State School for the Blind
- Bike Level of Traffic Stress decreased
- Vehicle speeds decreased 2-7 mph
- No negative impacts were reported from C-TRAN, waste collection, schools, or Vancouver Fire and Police.



McLoughlin Boulevard post-project

# **Leveraging Development**

With a shift to a more multimodal TSP comes a shift in how Vancouver will measure the impacts of new development on the transportation system. The City has three existing processes that are triggered through the new development process—concurrency, Transportation Impact Analysis (TIA), and the Traffic Impact Fee (TIF) program. Each of these will be updated as a near-term action of the TSP.

- Concurrency requires the availability of sufficient transportation system capacity to support development. Historically, Vancouver and many other Washington cities have measured capacity using auto performance metrics - Vancouver relies on afternoon peak vehicle speed. This autocentric approach hinders broader improvements to the multimodal system. A revised concurrency policy will measure conditions and performance of all modes.
- Traffic Impact Analysis (TIA) Guidelines lay out how developments measure their impacts and what types of mitigations they must complete. The measurements are autocentric and assume the worst conditions – meaning the mitigations result in overbuilt roadways for most of the day. A revised TIA approach will be less auto focused, use metrics for a more typical rather than worst-case condition, and include TDM as part of mitigations.
- Traffic Impact Fee Program (TIF) is a package of regional transportation system improvement projects required to support planned growth consistent with the policies of the Comprehensive Plan. This onetime fee is paid at the time of the development application to offset the developments' proportionate system impacts, such as increased traffic. Recent Washington legislation now allow funds collected through the TIF to be used for multimodal project. The TIF project list will be updated to add walking and BSM projects from the TSP. The TIF rate list will be adjusted to better align with peers.

#### Vision Zero

Vision Zero is a policy based in a belief that serious injuries and deaths on our streets are preventable. Developed in Sweden in the 1990's, the movement gained momentum in the United States, where 45 cities have Vision Zero policies.1

Vision Zero policies are rooted in safe system principles (Figure 44). Many factors contribute to crashes, therefore a safe system builds in redundancy to minimize the chance of a crash occurring (Figure 45). At the national level, a safe systems approach has been adopted and tied to many federal grants such as Safe Streets for All. Cities such as New York, Hoboken, and Jersey City are seeing reductions in deaths through Vision Zero initiatives.<sup>2</sup>

See Appendix L: Concurrency Memo for additional detail on leveraging development.

See Appendix J: Collision Dashboard Tutorial on how to use the collision tool.

See Appendix K: Local Road Safety Plan for an overview of priorities for grant funding that address safety needs.



# SAFE SYSTEM PRINCIPLES



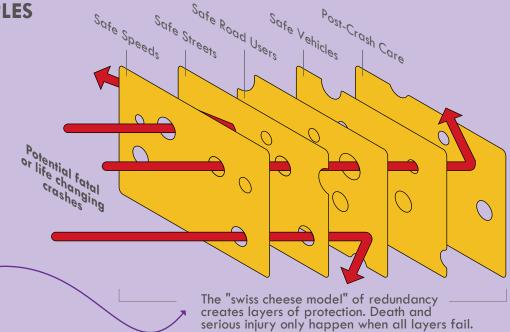












## Safe Routes to School

Vancouver is home to 80 schools that serve 45,461 students between Vancouver and Evergreen School Districts. Safe Routes to School (SRTS) is a nationally funded program to encourage students and caregivers to walk and bike to school along safe pathways.

SRTS programs have increased walking and bicycling to school by 37 percent. SRTS benefits include:

- Reduced congestion at school drop off and pickup times
- Forms healthy physical habits

programs can increase walking and biking by 37%.

Benefits of Safe Routes to School

• Increases attendance as students can get to school if their parent or caregiving is sick or working

In July 2022, Clark County received a SRTS grant for \$389,000 to continue their work in enabling safety and mobility for vulnerable users.<sup>2</sup> A City-led SRTS program can further this work locally. It can also be the impetus to have a list of capital projects around schools ready for grant applications when opportunities arise.

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Safe Routes to School

<sup>1</sup> https://visionzeronetwork.org/about/what-is-vision-zero/

<sup>2</sup> https://www.bloomberg.com/news/articles/2022-11-25/the-us-cities-where-vision-zero-traffic-safety-fixes-are-working

<sup>1</sup> https://www.saferoutespartnership.org/safe-routes-school/101/benefits 2 https://www.columbian.com/news/2022/jul/23/clark-county-receives-safe-routes-to-school-grant/

# 8. Moving Forward

Transportation investments in Vancouver historically prioritized the private vehicle at the expense of growth in other modes. Recent projects have gathered momentum around achieving the multimodal vision of the TSP.

# What's Coming Next

The Vancouver TSP is one of several parallel efforts that will come to fruition during the next few years. These initiatives will help advance the policies in the TSP:



#### **VANCOUVER COMPREHENSIVE PLAN UPDATE**

The TSP is the transportation element of the Comprehensive Plan, set to be updated by 2025. The Comprehensive Plan guides land use patterns—a major factor in the ability to walk, bike, or take transit.



#### **CARBON NEUTRALITY BY 2040**

Meeting the goals of the Climate Action Framework require changes to how we travel. Implementing the framework requires implementing the policies and programs of the TSP.



#### **VINE BRT EXPANSION**

C-TRAN is opening its second BRT line on Mill Plain Boulevard, and plans to open its third line on Main Street/Highway 99 in 2027. C-TRAN will extend the Fourth Plain Vine to 162nd Avenue and south to Columbia Tech Center. This will create a connected ring of Vine corridors across the city.



#### **VANCOUVER STRATEGIC PLAN**

The recently updated Strategic Plan lays out the City's direction for the next six years and beyond. One of the Plan's focus areas is to ensure Vancouver has a safe, future-ready, and convenient transportation system that offers affordable and climatefriendly options.



#### **INTERSTATE BRIDGE REPLACEMENT (IBR)**

IBR will provide a critical connection between Oregon and Washington. While the locally preferred alternative is set, a wealth of details remain on how the project can be designed to support Vancouver's goals. IBR has the potential to transform Vancouver and how people travel between the waterfront and downtown.

# Setting Ourselves Up for the Long-Term

The way people move is changing, which is being solidified by the lasting trends of the COVID-19 pandemic. Innovations in transportation services—like app-enabled ridehailing, shared e-bikes and scooters, and trip planning tools—can add travel options and customer convenience. As people seek new ways to move safely, demand for small personal mobility options will continue to grow. And for some, the best mobility option is not traveling at all. Digital apps for home deliveries and permanent flexibility to work from home made lasting changes to how people travel. And further innovations, like autonomous vehicles, are waiting around the corner.

## What are the Trends?

- Emerging mobility options such as shared e-bikes, scooters, and ridehailing services offer an effective alternative for people who don't have access to a car or prefer not to own one. Agreements with these providers are needed to ensure services align with the Ccity's goals and standards.
- Mobility-as-a-Service apps enable users to seamlessly plan, book, and pay for trips of any type—be it on transit, ridehailing, micromobility, etc. As multimodal options become more prevalent in Vancouver, seamless

- Data from mobility service providers is being leveraged by cities to improve day-to-day operations and planning of their transportation systems.
- Electric vehicles will be ever more common in the years ahead, forcing Vancouver to get ahead of charging infrastructure demands.
- Autonomous vehicles are on the horizon and the City's policies must provide a framework for how autonomous vehicles operate in the city in support of the TSP goals.
- Changing travel patterns with more people working at home will require Vancouver to focus on all types of trips, not just commute trips. Education and outreach programs and incentives tied to all types of trips will be a critical focus in the years ahead to shift people to bike, walk, transit, and shared rides.

Our new transportation vision needs to consider changes in transportation technology and leverage the right mix of innovations to deliver a safer, more vibrant, and more prosperous city for all.

