



vancouver moves

Transportation System Plan Update

Transportation and Mobility Commission, July 5, 2022

Presenter: Thomas Brennan, Nelson Nygaard

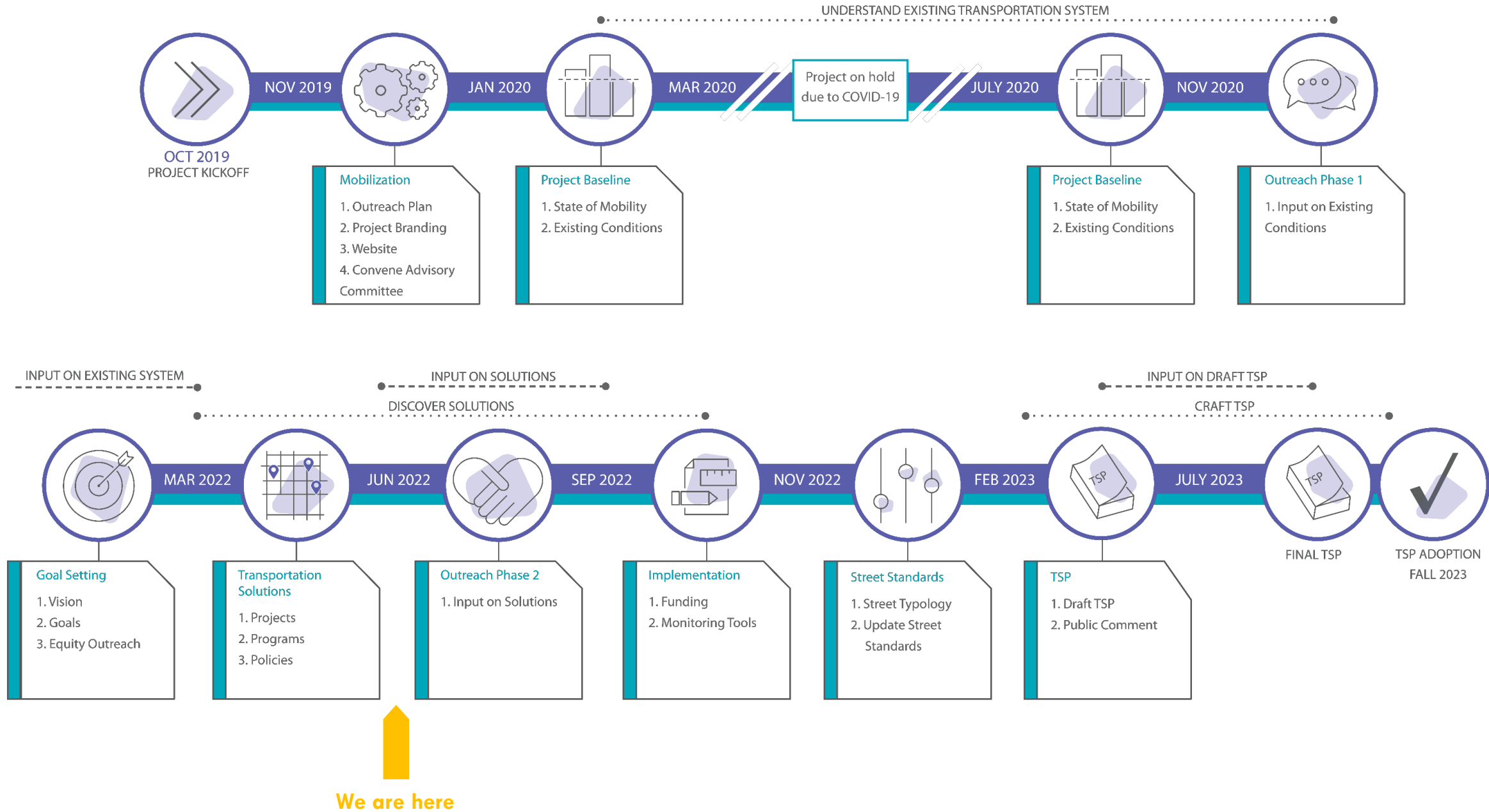
Agenda

- 1 **Goals Update**
- 2 **Draft Big Ideas and Policies, Programs, & Projects**
- 3 **Next Steps**



Image Source: Visit Vancouver

Project Schedule



1

Goals Update

Council Feedback

Revised Goals Framework presented on April 25, 2022 to City Council and received strong support.

TRANSPORTATION CHOICE



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

1

SAFETY



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

2

CLIMATE



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

3

EQUITY



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

4

REGIONAL CONNECTIVITY



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

5

MAINTAINING OUR ASSETS

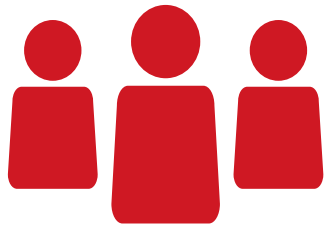


We take good care of our transportation infrastructure and invest strategically in new tools that help us operate the system better.

6

Council Universal Policy Priorities

EQUITY



SAFETY



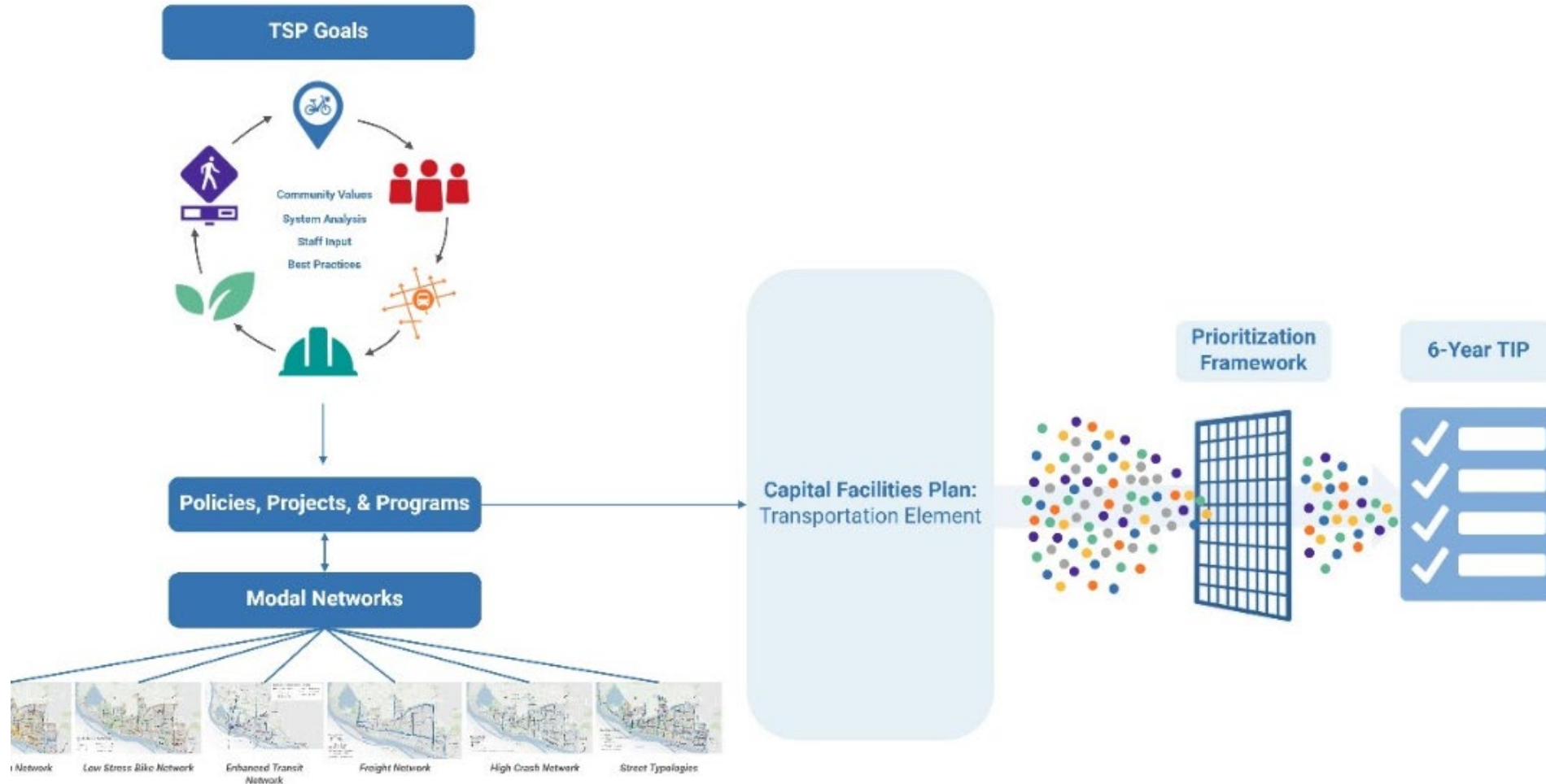
CLIMATE



2

DRAFT
Big Ideas &
Policies, Programs and Projects

From Goals to Policies, Projects and Programs



Public Input – Themes

- **Make it easier to walk, bike, or roll**
 - Improve the non-motorized network
 - Exercise and walking to neighborhood parks
 - The main barriers to cycling comfortably in the City are **inadequate existing bike lanes, aggressive drivers, a lack of bike lanes** in some places, and **unsafe crossings**.
- **Addressing traffic safety** is the most important improvement to the City's walking, cycling, and rolling network
- **Address network barriers** and provide more **direction connections**
- **Reduce congestion during rush hour**
- **Make transit a better experience:**
 - Increase frequency and reliability of C-TRAN services
 - Expand The Vine BRT
 - Bus lanes and signals to speed up transit travel times
 - Make it easier to walk to the bus
 - Improve bus stops (shelters, seating, lighting)

Draft Big Ideas

- Transformative ideas for the future of transportation in Vancouver
- Each big idea helps achieve our goals and objectives
- Each big idea has **policies, programs, and projects** associated with it

Support Thriving Neighborhoods

Create Complete Corridors

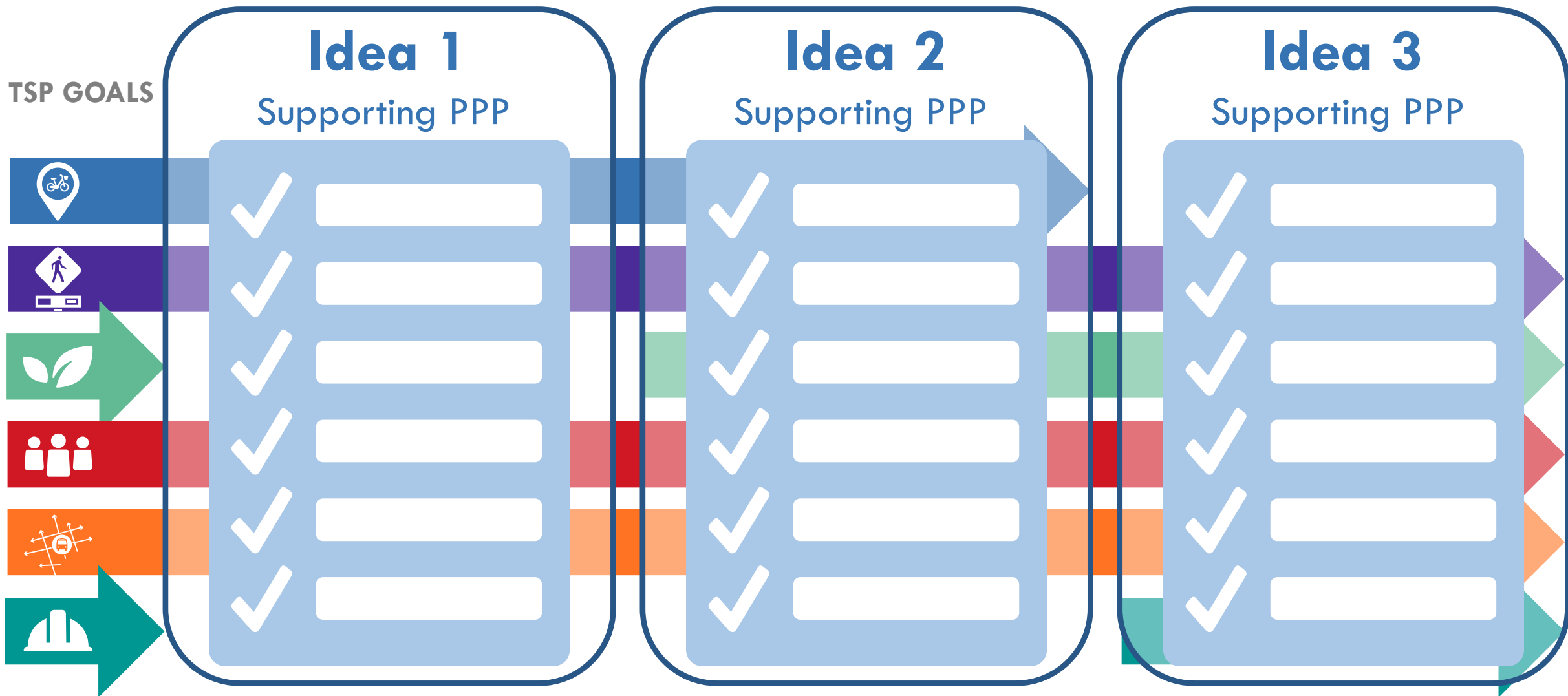
Connect People to Transit

Build Low-Stress Networks

Make Growth a Benefit for All

Embrace the Future

Goals - Big Ideas - Policies, Programs, & Projects



1. Support Thriving Neighborhoods

Support multiple convenient transportation options and connections in all of Vancouver's neighborhoods.

EQUITY



Prioritize neighborhoods with a high concentration of low-income and people of color (using City Equity Index)

SAFETY



Prioritize vulnerable users with improved biking and walking connections

CLIMATE



Make biking, walking, and transit more attractive for short trips



Big Idea Support Thriving Neighborhoods

15-Minute Neighborhoods

Create bicycling and walking connections that support access to basic day-to-day services within a 15-minute walk of Vancouverites' homes.

Draft Programs & Projects:

- Neighborhood Traffic Calming
- Safe Routes to School



Source: The Urbanist



Big Idea Support Thriving Neighborhoods

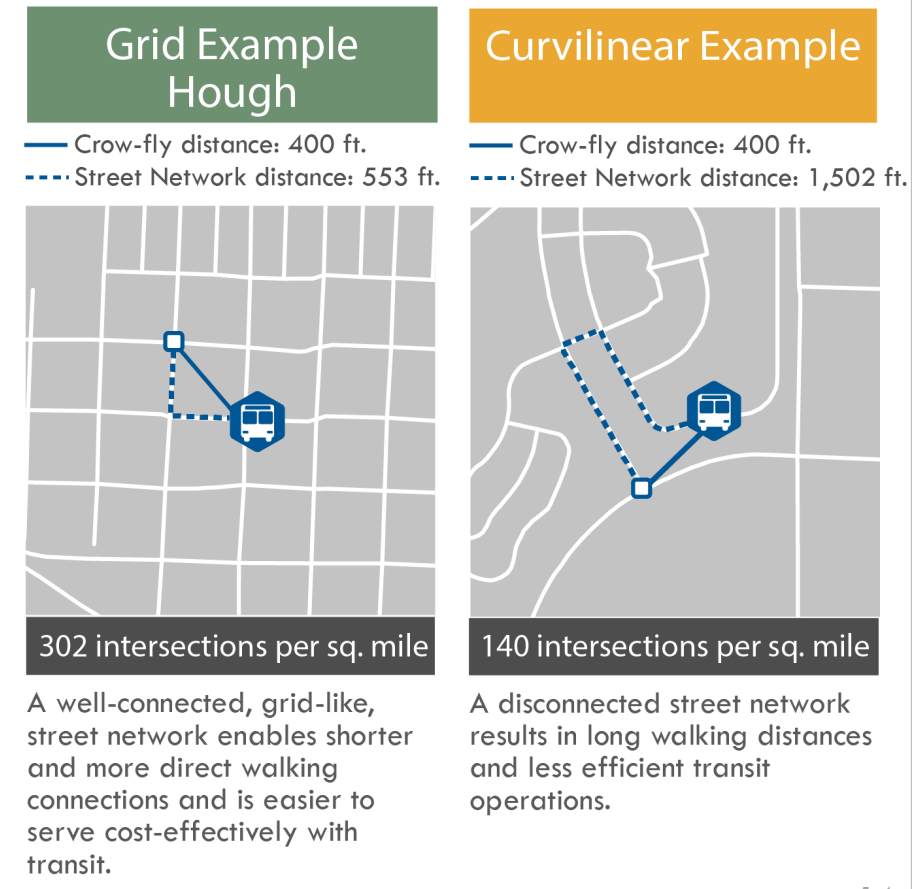
Street Connectivity

Adopt connectivity standards applied to development, capital, maintenance, and planning projects including maximum block length, cul-de-sac connections, and multiple access points.

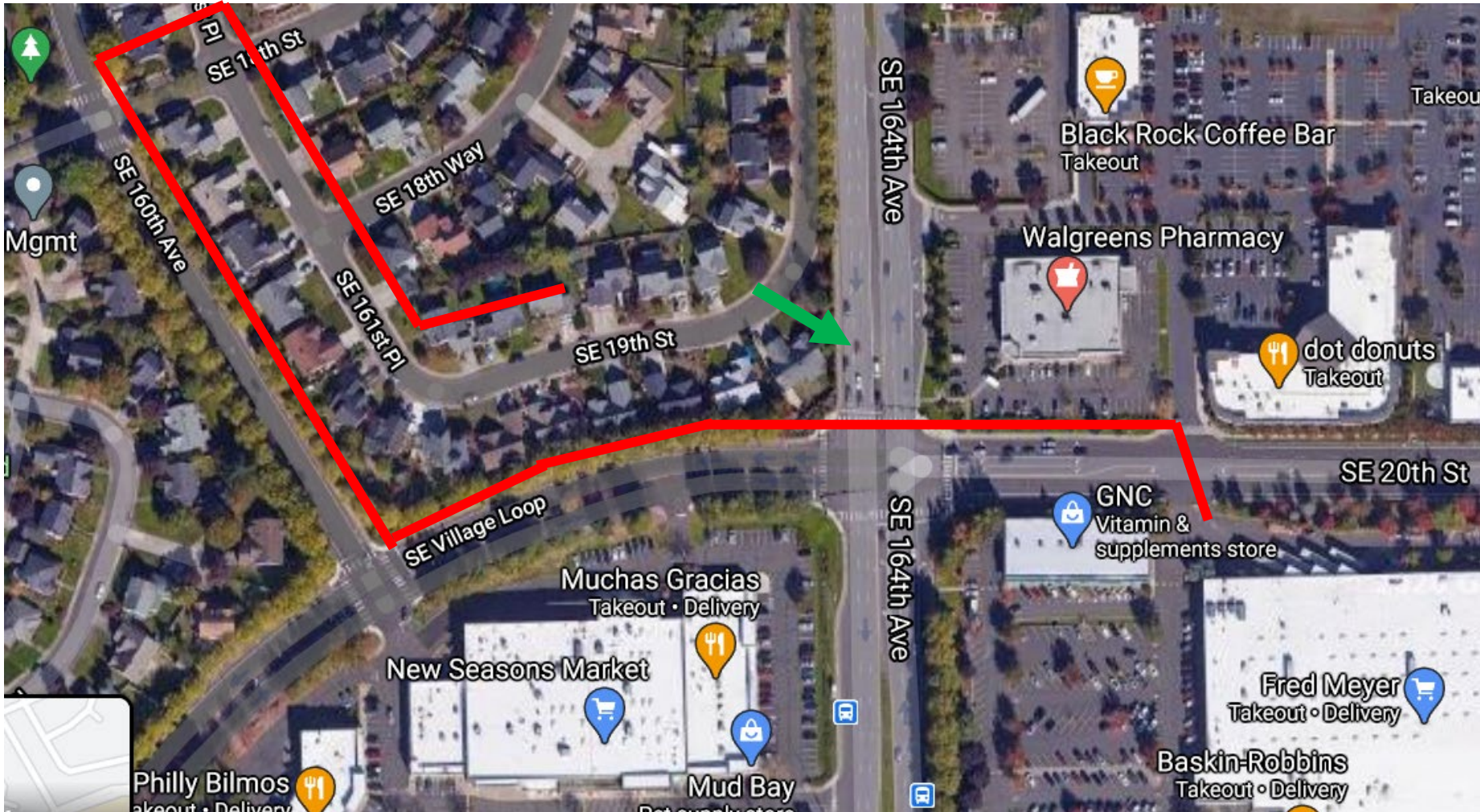
Draft Programs & Projects:

- Block Size
- Cul-de-sac Connections
- Connectivity Standards

Street Network Types



Outcome: Neighborhood Connectivity





Big Idea Support Thriving Neighborhoods

Green Streets

Reduce the climate impact of the transportation network

Draft Programs & Projects:

- Street Trees
- Surface Parking
- Stormwater Management



Clark County Green Streets Project on NE 99th St



Big Idea Support Thriving Neighborhoods

Community Streets

Encourage community use of street space

Draft Programs & Projects:

- Open Streets
- Street Art



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

**How well do these policies, programs,
and projects support Council and
community goals?**

2. Create Complete Corridors

Create complete corridors that connect growth areas, support business, serve transit, and increase safety for all modes.

EQUITY



Prioritize corridor improvements in areas with a high concentration of low-income and people of color (using City Equity Index)

SAFETY



Design major streets for vulnerable users using proven safety countermeasures

CLIMATE



Dedicate more street space to low/zero-emission modes



Big Idea Create Complete Corridors

Complete Corridor Planning

Create a framework for planning and designing for pedestrians, transit, bicyclists, freight, and motor vehicles on major streets.

Draft Programs & Projects:

- Street Typologies
- Street Space Allocation



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

Outcome: Corridors that Support All Modes





Big Idea
**Create Complete
Corridors**

Update Street Standards

Update street standards to integrate the latest best practices from NACTO, WSDOT, AASHTO, and MUTCD in terms of facility selection and design, traffic control, and signage and striping. Adopt into standard plans and municipal code Title 11.

Draft Programs & Projects:

- Pedestrian Crossing Policy
- Bicycle Facility Selection and Design Guidelines
- Signs and Striping
- Access Management

Highlighted PPP



Big Idea Create Complete Corridors

People-Based Metrics

Plan, design, and evaluate projects and developments using people-focused metrics including person movement and travel impacts from different user perspectives. Include design threshold updates and post-project evaluation metrics.

Draft Programs & Projects:

- TIP Prioritization
- Paving List
- Traffic Impact Analysis & Concurrency





Big Idea Create Complete Corridors

Vision Zero

Adopt a Vision Zero policy to eliminate serious traffic fatalities by 2040.

Draft Programs & Projects:

- High-Crash Corridors
- Street User Education
- Automated Enforcement
- Pedestrian-Scale Lighting
- Multimodal Safety Projects



Westside Bike Mobility Project, Rendering from Jan 2021



Big Idea
**Create Complete
Corridors**

Project Delivery

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

Draft Programs & Projects:

- Cross-Department Project Managers
- Project Development Mapping
- Community Organizers
- Communications Toolkit

**How well do these policies, programs,
and projects support Council and
community goals?**

3. Connect People to Transit

Support transit use with stop access improvements, partnering with C-TRAN on bus speed and reliability, and transit-supportive land use strategies.

EQUITY



Focus on routes that serve people who depend on transit

SAFETY



Make transit access safer with pedestrian improvements near stops

CLIMATE



Encourage a shift from driving to transit by enhancing the transit experience

Outcome: Partner to Invest in Enhanced Transit

1

Frequent
Network



2

Information for
Passengers



3

Safe, Convenient
Access



4

First-Last Mile
Connections



5

High-Quality
Stops



6

Affordable Fare
Programs



7

Land Use
Coordination



8

Outreach and
Awareness





Big Idea Connect People to Transit

Access to Transit

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

Draft Programs & Projects:

- Access Gaps
- Stop Improvements



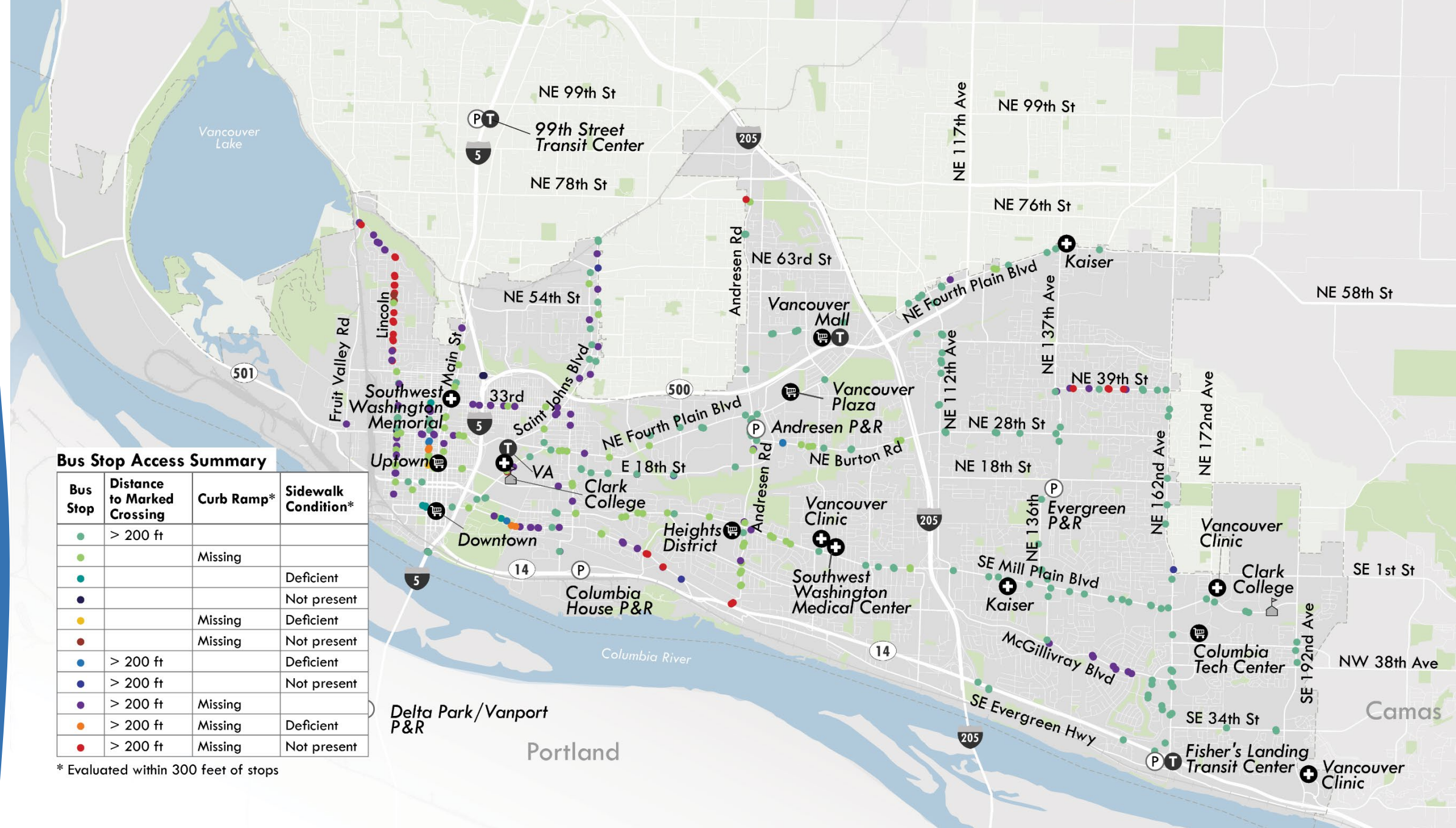
Bus stop at NW Lincoln & 51st, missing a sidewalk and more than 200 ft to a marked crosswalk

Pedestrian Bus Stop Access

Bus Stop Access Summary

Bus Stop	Distance to Marked Crossing	Curb Ramp*	Sidewalk Condition*
●	> 200 ft		
●		Missing	
●			Deficient
●			Not present
●		Missing	Deficient
●		Missing	Not present
●	> 200 ft		Deficient
●	> 200 ft		Not present
●	> 200 ft	Missing	
●	> 200 ft	Missing	Deficient
●	> 200 ft	Missing	Not present

* Evaluated within 300 feet of stops





Big Idea Connect People to Transit

Enhanced Transit Corridors

Designate a set of Enhanced Transit Corridors based on demand, growth potential, and connections between destinations. Maintain a map of ETC to be used as a criteria in project prioritization and development review.

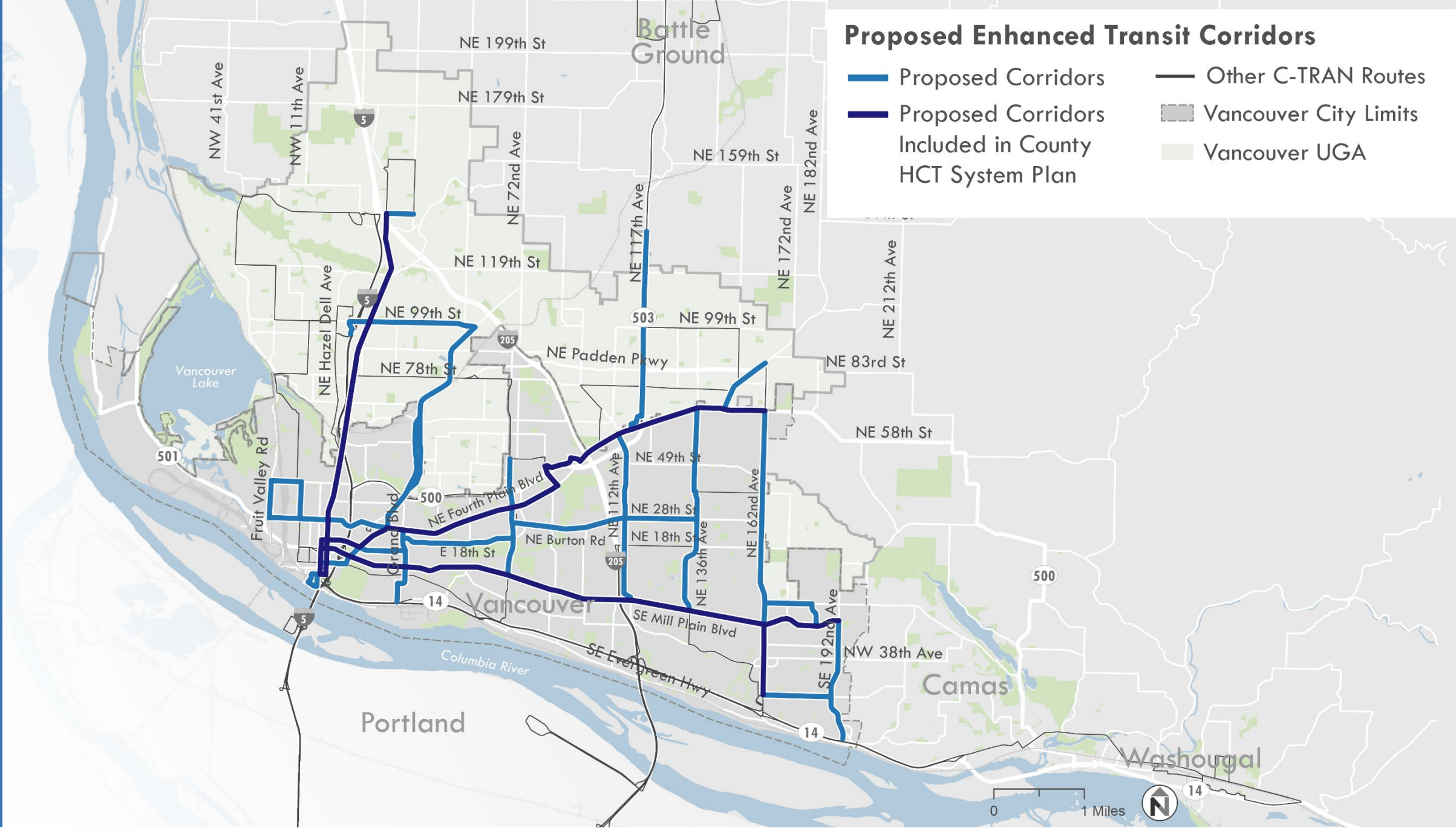
Draft Programs & Projects:

- Network of Bus Rapid Transit (The Vine)
- Speed and Reliability Designs
- Equity Corridors



Enhanced transit stop in Alameda County, CA

Enhanced Transit Corridors





Big Idea
**Connect People
to Transit**

Transit and Land Use

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

Draft Programs & Projects:

- Transit Overlay District
- Densities along Transit Corridors

**How well do these policies, programs,
and projects support Council and
community goals?**

4. Build Low-Stress Networks

Provide a low-stress bicycling and walking experience on key corridors that connects Vancouver's neighborhoods and destinations.

EQUITY



Provide more low-cost options; focus on completing the network in areas with a high concentration of low-income and people of color

SAFETY



Design bicycling and walking routes to be safe and comfortable for people of all ages and abilities

CLIMATE



Encourage a shift from driving to walking and/or bicycling by making these options more attractive



Big Idea Build Low-Stress Networks

Low-Stress Bicycle Network

Adopt a city-wide low-stress long-term bike network overlaid onto the existing network. Follow density standards, aiming for a low-stress facility every **X** miles.

Draft Programs & Projects:

- Bicycle Facility Selection and Design Guidelines
- Bicycle Map
- Bicycle Parking
- Critical Bicycling Gaps



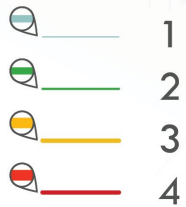
Fort Collins, CO has established a bicycling program, FC Bikes, that includes a low-stress network, a cycling map, learning resources, and a bike-to-work day.

Bicycle Level of Traffic Stress

Many existing bicycle lanes are high-stress

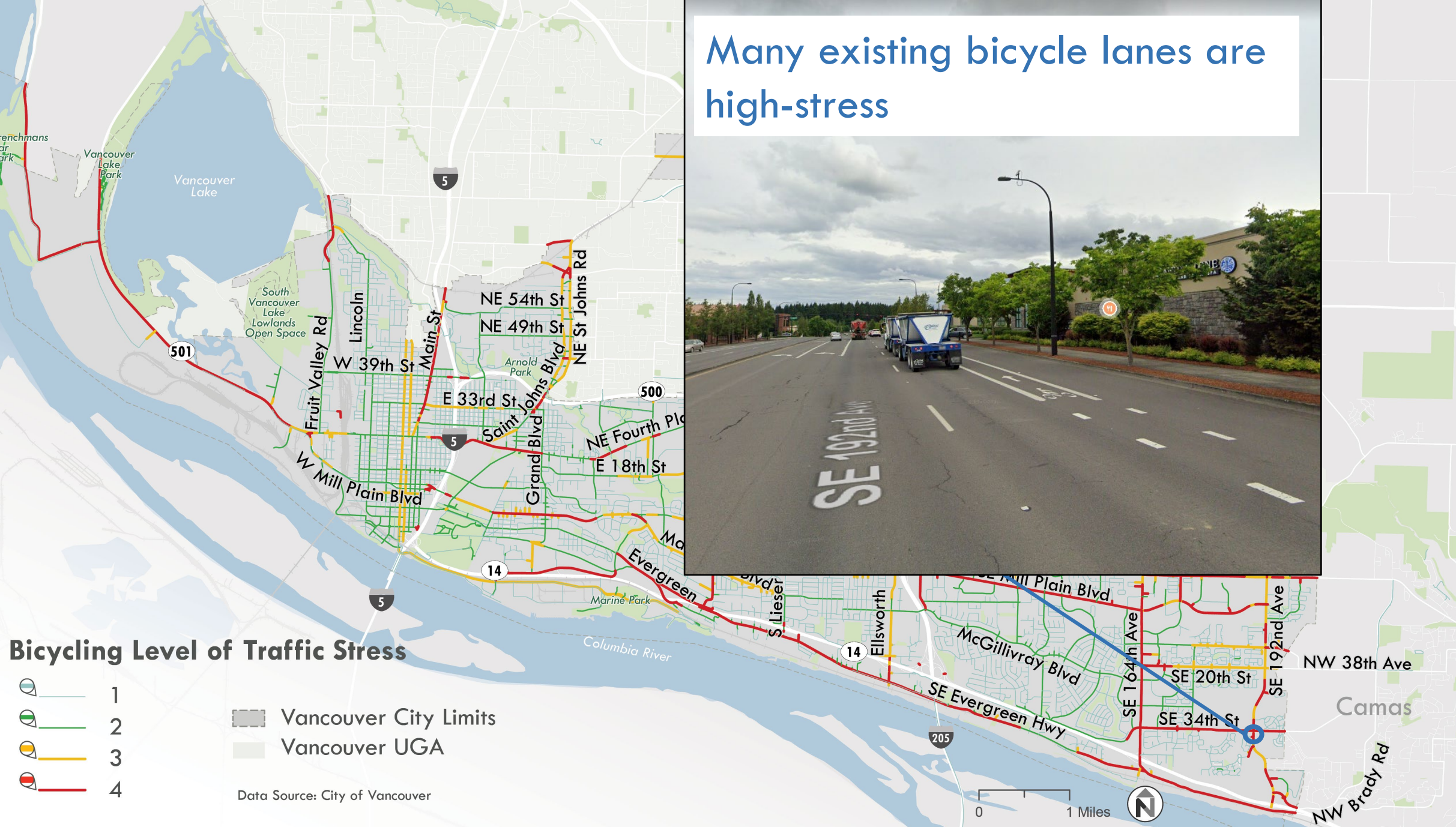


Bicycling Level of Traffic Stress

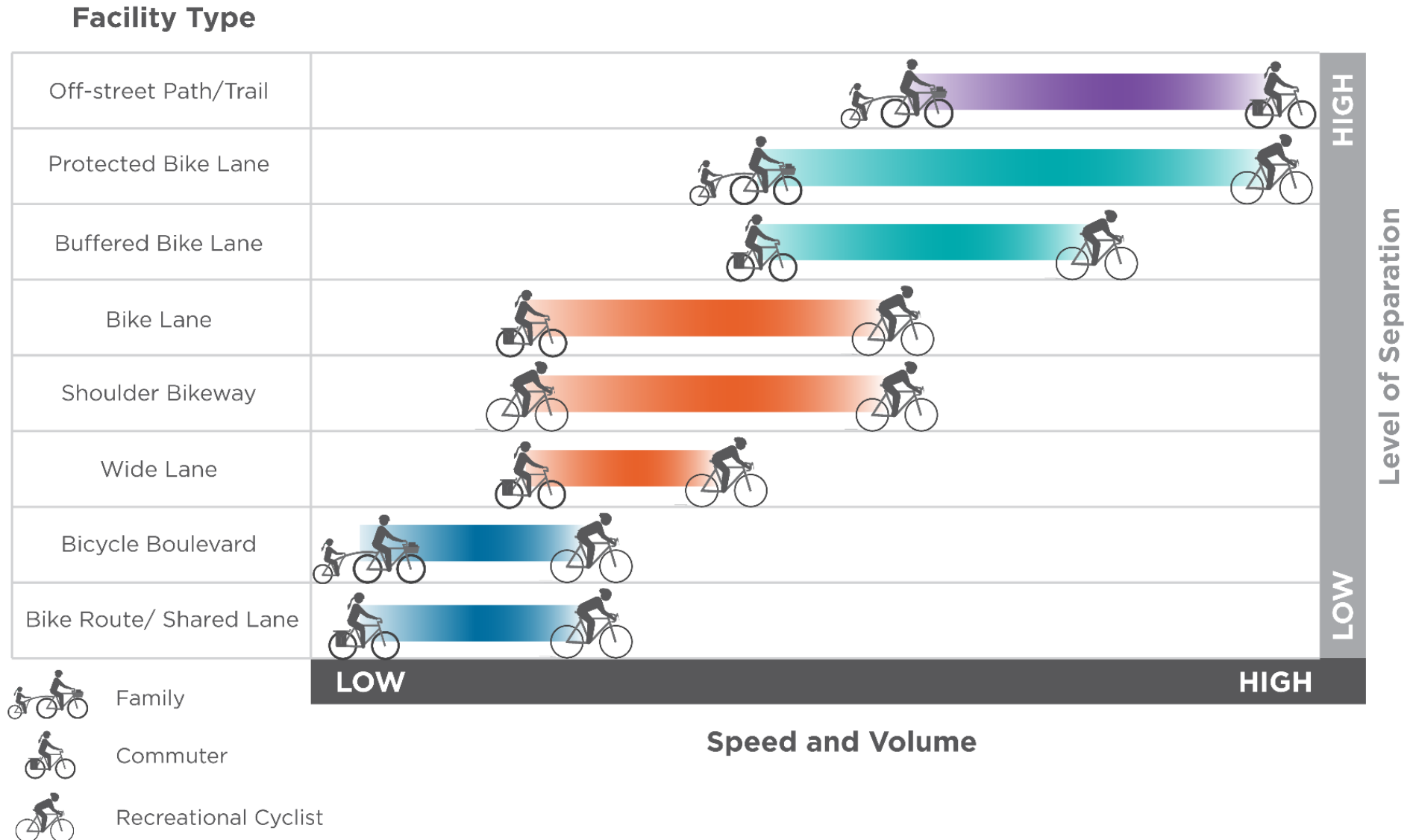


 Vancouver City Limits
 Vancouver UGA

Data Source: City of Vancouver



Outcome: Design for All Ages and Abilities





Big Idea Build Low-Stress Networks

Pedestrian Priority Streets

Adopt a network of corridors prioritized for walking based on land use, transit access, and urban centers.

Draft Programs & Projects:

- Sidewalk Facility Selection
- Critical Sidewalk Gaps

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

7. Shoulder Bikeways

Design Summary

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

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

Discussion

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

Wide Outside Lanes

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



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

Context for Shoulder Bikeways vs. Bike Lanes

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



Big Idea Build Low-Stress Networks

Bicycling & Walking Programming

Complement infrastructure with robust programming that encourages and educates people about the benefits of, how, and where to bicycle.

Draft Programs & Projects:

- Active Transportation Staffing
- TMC Subcommittee
- Bicycling Programs



FC Moves

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



Big Idea
**Build Low-Stress
Networks**

Manage Motor Vehicle Speeds

Higher motor vehicle speeds are associated with a greater risk of fatality and severe injury for people walking and bicycling who are involved in crashes. Design streets in a way that encourages slower speed and develop a policy framework to lower speed limits.

Draft Programs & Projects:

- Framework for lowering posted speeds
- Street design for lower speeds

Washington Examples:

- [Shoreline Speed Limits](#): lowered speed limits on arterials based on historical speed data and studies (e.g. from 35 to 30mph on select roadways)
- [Spokane Traffic Calming Program](#): roadway narrowing, traffic circles, pavement markings, signage for lower speeds

**How well do these policies, programs,
and projects support Council and
community goals?**

5. Make Growth a Benefit for All

Manage growth and development to support multiple transportation options and advance climate goals.

EQUITY



Coordinate with Comprehensive Plan to mitigate displacement

SAFETY



Leverage development to help build safe multimodal facilities

CLIMATE



Encourage walking, bicycling, and transit with expanded transportation demand management programs



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

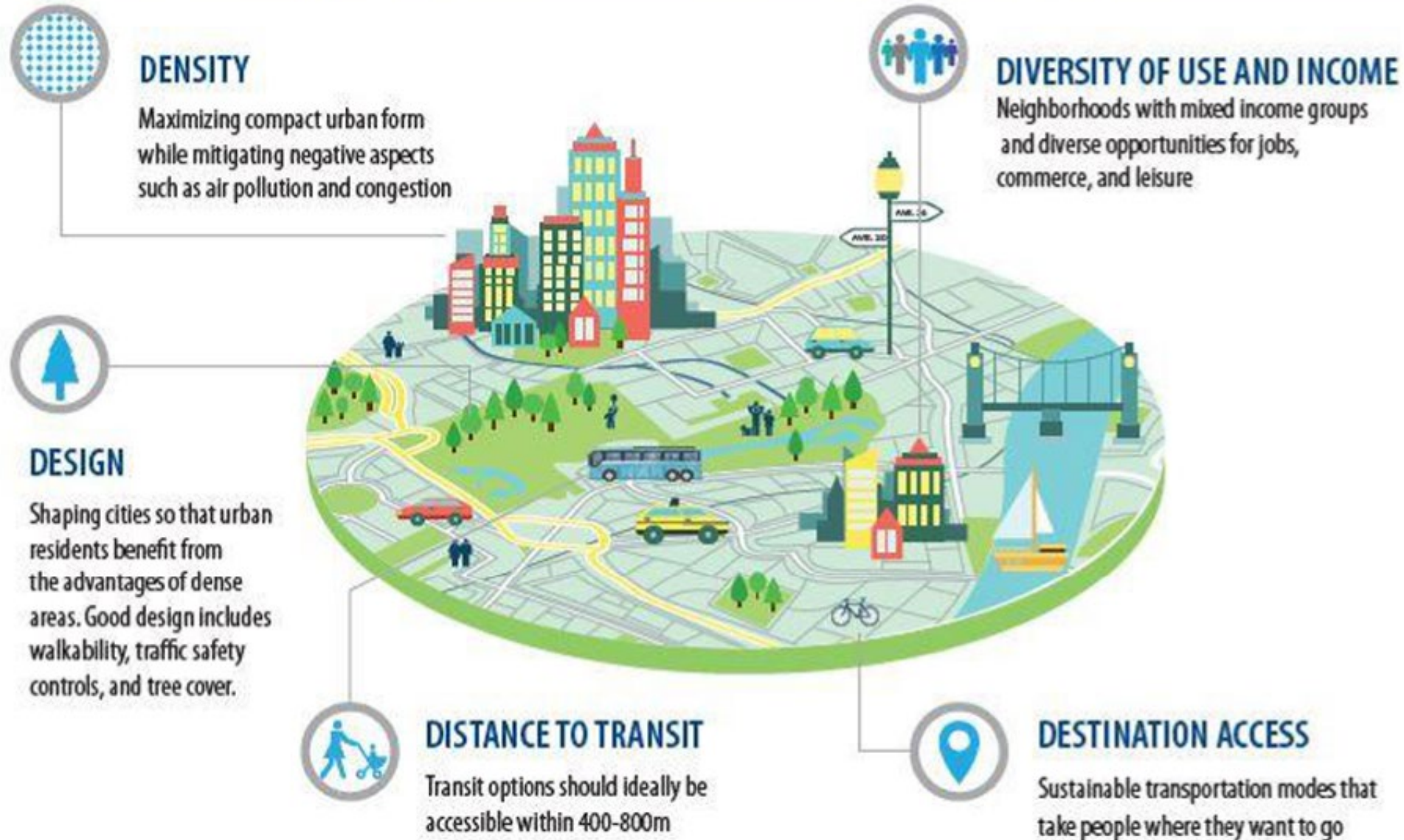
Development Review

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

Draft Programs & Projects:

- **Concurrency**
- **Transportation Impact Fees**
- **Frontage Requirements**
- **Sidewalk Widths**
- **Transit Oriented Development**

Outcome: Mutually Supportive Land Use and Transportation





Big Idea

Make Growth a Benefit for All

Parking Management

Update parking codes and policies to reduce the amount of space dedicated to parking and make the cost of parking clear to users.

Draft Programs & Projects:

- Parking Space Requirements
- Residential Parking
- Downtown Parking Strategies





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

Transportation Demand Management

Actively use demand management to encourage behavior change to more walking, biking, and transit trips.

Draft Programs & Projects:

- Expand Commute Trip Reduction
- TDM Coordinator
- Universal Transit Pass
- Demand Management as Development Mitigation

**How well do these policies, programs,
and projects support Council and
community goals?**

6. Embrace the Future

Prepare for future mobility and data needs.

EQUITY



Adopt equity-focused policies for emerging mobility and pricing strategies

SAFETY



Put safety at the center of data collection, monitoring, and emerging mobility policy

CLIMATE



Facilitate the transition to electric vehicles and support micro-mobility options (bikeshare, scooters)



Big Idea
Embrace the
Future

Data Collection & Monitoring

Use data to track travel pattern changes over time

Draft Programs & Projects:

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



Big Idea
**Embrace the
Future**

Technology for System Management

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

Draft Programs & Projects:

- Signal Modernization
- Transportation Management Control Center
- Broadband/5G



Big Idea Embrace the Future

Electric / Autonomous Vehicles

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

Draft Programs & Projects:

- Vehicle Miles Traveled Reduction
- City Fleet



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



Big Idea Embrace the Future

Emerging Mobility

Update city policies to: allow emerging mobility vendors; create data standards and sharing agreements; require equitable access to services both geographically and through reduced costs for people with low incomes.

Draft Programs & Projects:

- Bike & Scooter Share
- Mobility as a Service
- Dynamic Curb Management
- TNC Policy
- Goods Delivery
- Mobility Hubs



New mobility investments should support City goals and values (SDOT example)

**How well do these policies, programs,
and projects support Council and
community goals?**

What's Missing?

- Do these strategies support people with different mobility needs, including walkers, bikers, transit users, people using mobility devices, youth, and elderly people?
- What are issues that come to mind in operationalizing these ideas?

3

Next Steps

Next Steps

- PPP Engagement
 - City Council 7/18
 - Continued Agency Engagement
 - Continued Staff Engagement
- PPP Evolution
- Public Outreach Sept-Oct

Thank You!



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www.beheardvancouver.org/vancouvermoves