

Westside Mobility Strategy Community Forum #2



October 15th, 2015

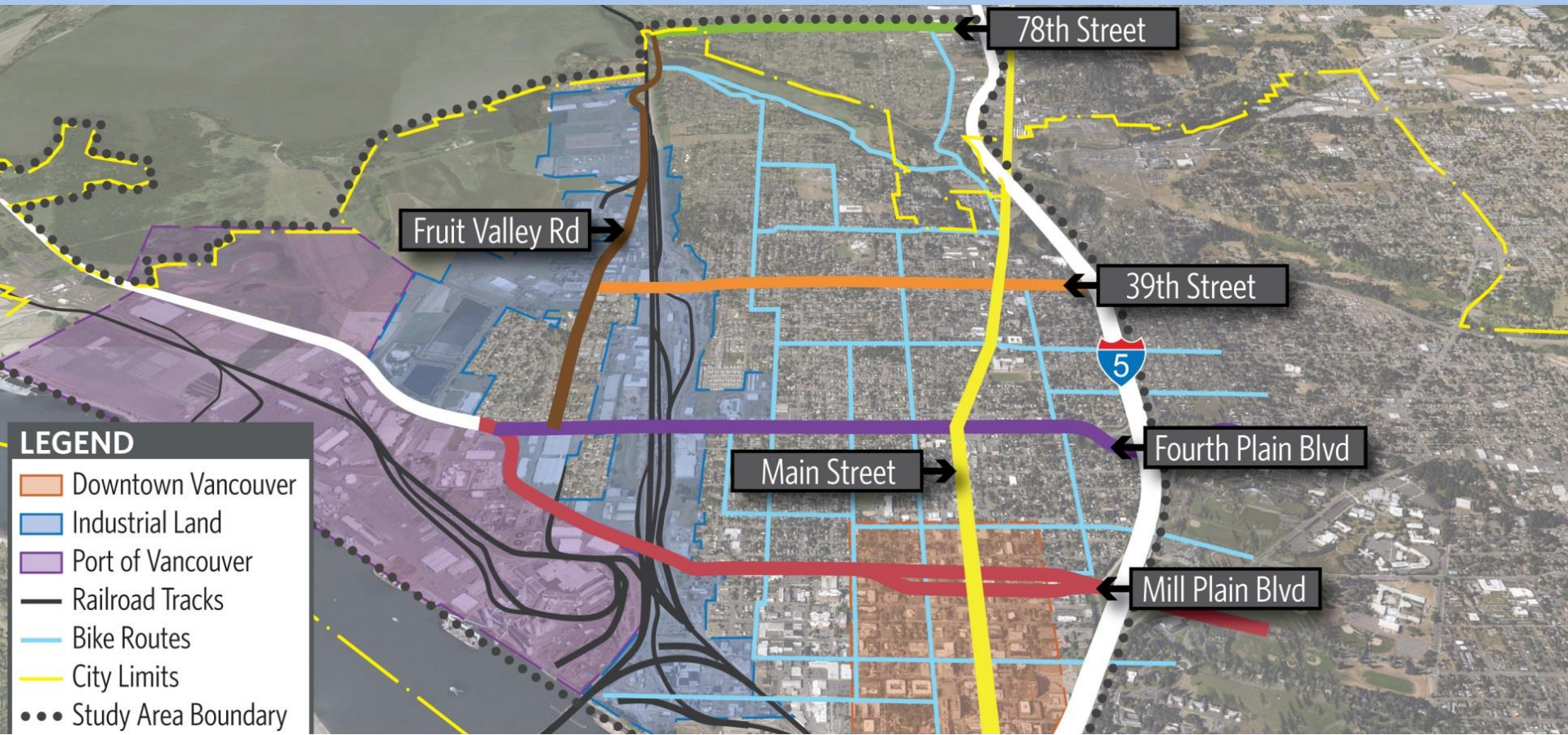
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Purpose of Work Session

1. Project Overview
2. New Data: Review 2035 Travel Demand
3. Community Engagement Summary
4. Traffic Analysis: What We Learned/What We Saw
5. Phase 2 Approach
6. Next Steps

Overview: Study Area



Overview: Priority and Objectives

PRIORITY

Balance neighborhood livability and economic growth
Collaborate with public and stakeholders throughout project

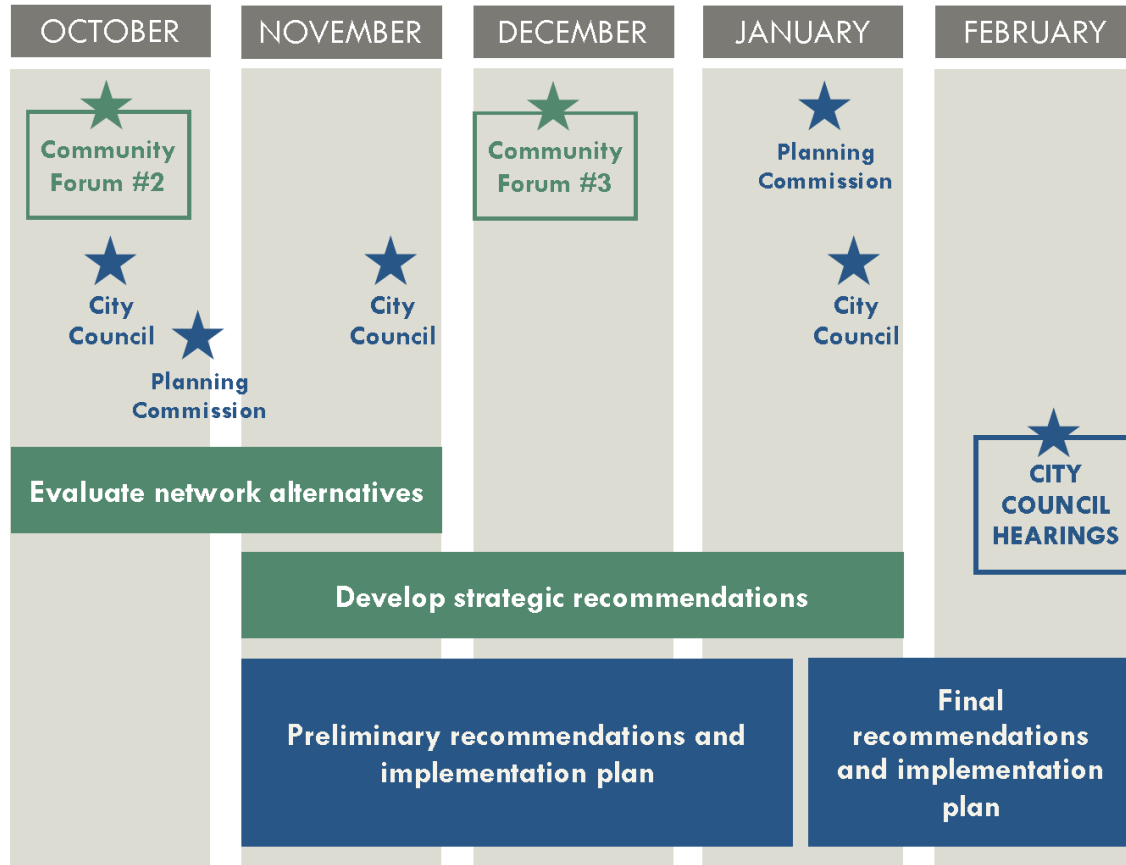
PHASE 1

- Assess the context and future trends for the overall westside street network

PHASE 2

- Develop Network Improvement Ideas and Concepts
- Organize Concepts into Strategies with Long and Short Term Actions
- Deliver Strategic Recommendations Report to City Council

Overview: Schedule



Overview: What do we mean by Mobility?

1. Everything that moves along public streets in west side Vancouver
2. “Everything that moves” include the following:

WALKING

BIKING

AUTOMOBILES

TRANSIT

DELIVERY TRUCKS

ARTICULATED FREIGHT TRUCKS

OVER-DIMENSIONAL LOAD TRUCKS

Overview: Articulated Trucks

Class 8:

Four Axle Tractor Trailer (*Heavy Truck*)



Class 9:

Five Axle Tractor Trailer (*Heavy Truck*)



Class 12

Six Axle Truck – Two Trailers (*Heavy Truck*)



Class 13:

Eight Axle Tractor Trailer (*Heavy Truck*)

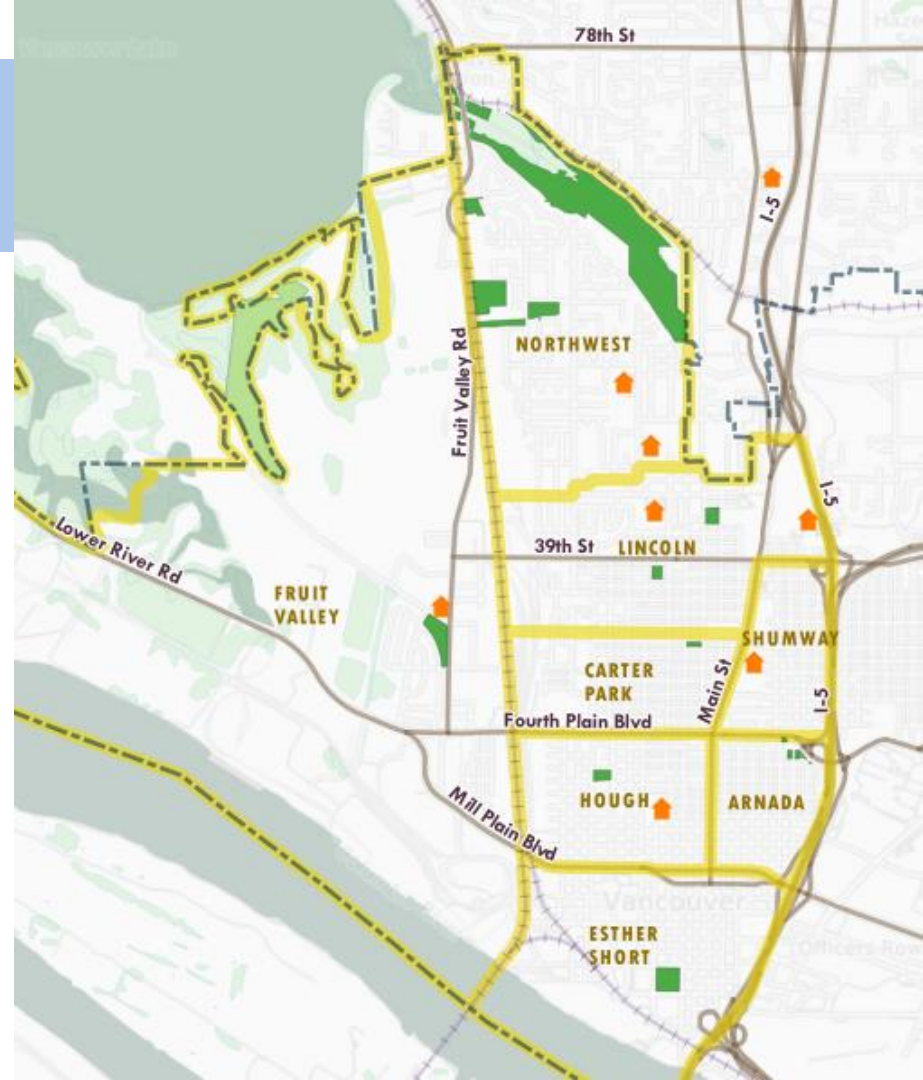
Over-Dimension Load – Requires Permits



Overview: Non-Articulated Trucks



Overview: Neighborhoods, Parks and Schools



Overview: Potential Redevelopment and Infill



Westside
Industrial
Potential
Redevelopment

Downtown and
Riverfront
Potential
Redevelopment

Review of 2035 Projected Travel Demand

Future Vehicle Traffic Capacity PM Peak Projection

Land Use Assumptions

- Includes Industrial growth
- Includes Downtown and Waterfront commercial and residential

Capital Assumptions:

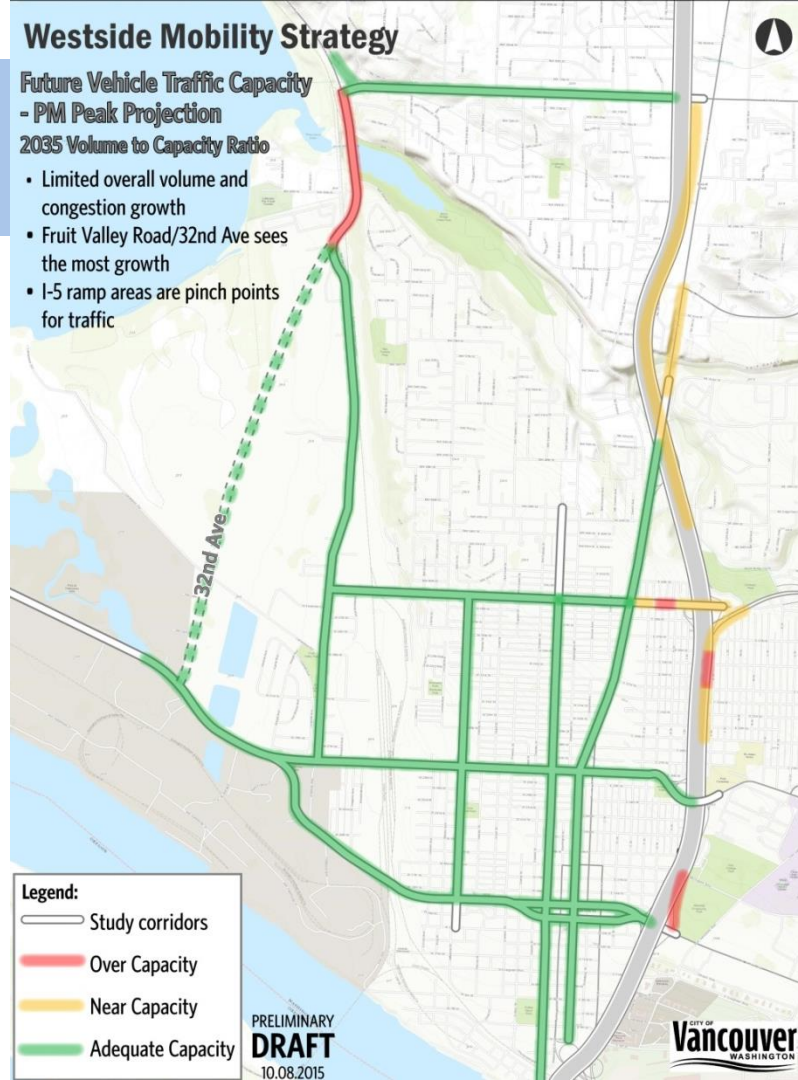
- I-5 Improvements (CRC)
- NW 32nd (no FVR RR bridge)
- Mill Plain Corridor

Westside Mobility Strategy

Future Vehicle Traffic Capacity - PM Peak Projection

2035 Volume to Capacity Ratio

- Limited overall volume and congestion growth
- Fruit Valley Road/32nd Ave sees the most growth
- I-5 ramp areas are pinch points for traffic



Review of 2035 Projected Travel Demand

Future Vehicle Traffic Capacity AM Peak Projection

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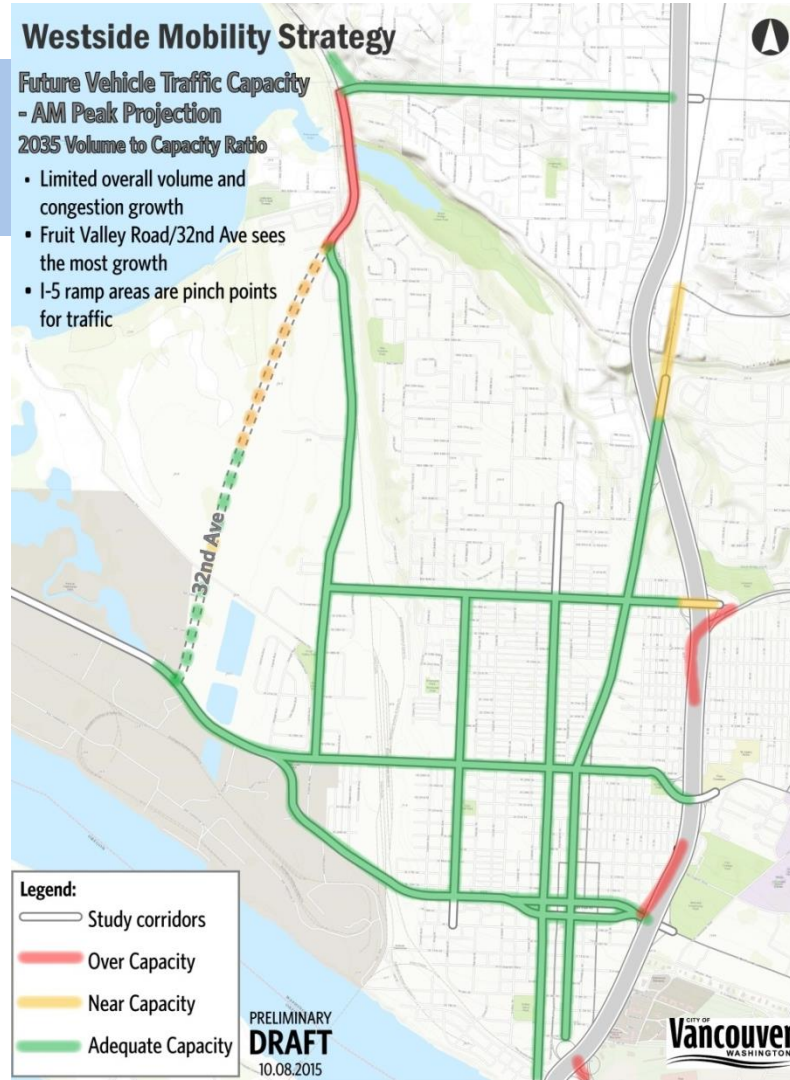
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Westside Mobility Strategy

Future Vehicle Traffic Capacity - AM Peak Projection 2035 Volume to Capacity Ratio

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Community Engagement Summary



8 stakeholder interviews

10 neighborhood meetings

2 City Council work sessions

1 Planning Commission Briefing

Farmer's Market Booth

Community Engagement Summary

Community Forum #1

May 30, 2015



Community Engagement Summary

Community Walk and Bike Ride
October 10, 2015



Community Engagement Summary

Make all school zone flashing lights double-sided	N/A	1
Adjust signal timing to better accommodate north/south traffic	N/A	1
Raise street tree canopy on designated freight routes	N/A	1

Downtown

Capital

Suggestion	Specific Location	Count
Enhance signage and wayfinding downtown, including parking wayfinding	N/A	2
Reduce a.m. congestion on 5th from Columbia to Broadway	Columbia to Broadway	1
Improve 6th St. as a gateway to downtown	6th St	1
Extend two-way conversion of McLoughlin/Washington south of 15th	McLoughlin and Washington	1
Upgrade signals south of Mill Plain	N/A	1
Improve consistency of intersection control on Washington	N/A	1

System/Operations

Suggestion	Specific Location	Count
Right-size delivery vehicles in downtown/create delivery permit system	N/A	2
Reduce diversion of I-5 traffic through downtown	N/A	2
Close I-5 SB ramp at Washington St. during morning rush hour	Washington/I-5	2
Restrict times for delivery vehicles downtown	N/A	1
Develop more consistent traffic controls throughout downtown	N/A	1

Neighborhoods

Capital

Suggestion	Specific Location	Count
Widen 45th St. from Washington to Main	45th, Washington to Main	2
Remove sharrows and create bike/ped bridge at Burnt Bridge Creek Park	Burnt Bridge Creek	2
Improve access and signage to Burnt Bridge Creek	Burnt Bridge Creek	2
Reduce congestion/improve visibility on 15th from Columbia to Main	15th from Columbia to Main	1
Improve sight lines at 22nd/Broadway intersection	22nd/Broadway	1
Designate 29th as a local street connection to Burnt Bridge Creek	29th/Burnt Bridge Creek	1
Improve bike/ped safety at 32nd/Lower River	32nd/Lower River	1
Designate 33rd as a local street connection to Burnt Bridge Creek	33rd/Burnt Bridge Creek	1
Improve sightlines at 8th/Franklin intersection	8th/Franklin	1
Install sidewalks on major streets connecting Division and Washington	Division and Washington	1
Add lighting to Burnt Bridge Creek area to improve safety	Burnt Bridge Creek	1

Establish north/south bike route on C St	C St	1
Establish north/south bike route on F St, especially at north end	F St	1
Enhance sidewalk connectivity between Franklin and Lincoln Elementary	Franklin/Lincoln schools	1
Add sidewalks around schools in north neighborhoods	N/A	1
Implement parking management (metering and/or permitting) in Uptown	N/A	1

System/Operations

Suggestion	Specific Location	Count
Reduce congestion and improve safety during school drop-off/pick-ups	Franklin Elementary, VSAA	1
Develop disaster response plans for Lincoln neighborhood	Lincoln Neighborhood	1

39th St.

Suggestion	Specific Location	Count
Improve traffic control/flow and visibility at 39th and Lincoln intersection	39th/Lincoln	2
Add signal to 39th/Lincoln intersection	39th/Lincoln	2
Install pedestrian crossing and/or signals at 39th/Washington	39th/Washington	2
Allow street parking on both sides of 39th St.	N/A	2
Improve pedestrian crossings at Columbia/39th	39th/Columbia	1
Install school zone speed enforcement cameras at 39th/Daniels	39th/Daniels	1
Remove safety island at 39th/Daniels intersection	39th/Daniels	1
Install pedestrian signal at 39th/Daniels	39th/Daniels	1
Install signal at 39th/Fruit Valley intersection	39th/Fruit Valley	1
Improve I-5/39th interchange to allow trucks better access	39th/I-5	1
Improve 39th St/SR 500 interchange	39th/SR-500	1
Reduce congestion on 39th from I-5 to Columbia	I-5 to Columbia	1
Widen lanes to allow both vehicles and bikes on 39th from Main to Lincoln	Main to Lincoln	1
Install more crosswalks on 39th	N/A	1
Improve overall safety of 39th St.	N/A	1
Create consistent sidewalks throughout 39th St. corridor	N/A	1

System/Operations

Suggestion	Specific Location	Count
Apply weight restriction and/or discourage/ban trucks on 39th St.	N/A	8
Change classification of 39th St.	N/A	1

150+ suggested improvements

What We Learned

**Where does freight go?
When and why?**

- Between industrial areas and I-5, through neighborhoods, primarily on Mill Plain and Fourth Plain peaking around 7 am and 3 pm

Which routes are preferred by which modes?

- Freight mobility/neighborhood livability issues
- Freight: Mill Plain #1, Fourth Plain #2, 78th #3, 39th #4
- Motor vehicle traffic volume the highest on Fourth Plain and 78th
- Bikes: east/west on Mill Plain, north/south on Columbia, Main and Kauffman/Lincoln
- Pedestrians – any street, but pedestrian activity concentrated on Main Street, School routes, Downtown, Waterfront

What We Learned – Areas of Conflict

Locations	Conflicts
Major corridors near I-5	Interchange areas have higher collision rates due to congestion on I-5
Mill Plain couplet	High number of collisions
Fourth Plain around Main Street	High vehicle collision rate
Kauffman around Mill Plain and Fourth Plain	Conflicts between north-south bike traffic and east west freight traffic
33 rd just east of Main Street	Multi-modal conflicts
8 th Street just east of Esther Short Park	Multi-modal safety conflicts, namely pedestrian crossings
Intersections at Mill Plain, Fourth Plain, and 39 th with or without crosswalks, traffic signals, and bike facilities	Multi-modal safety conflicts, namely pedestrian crossings

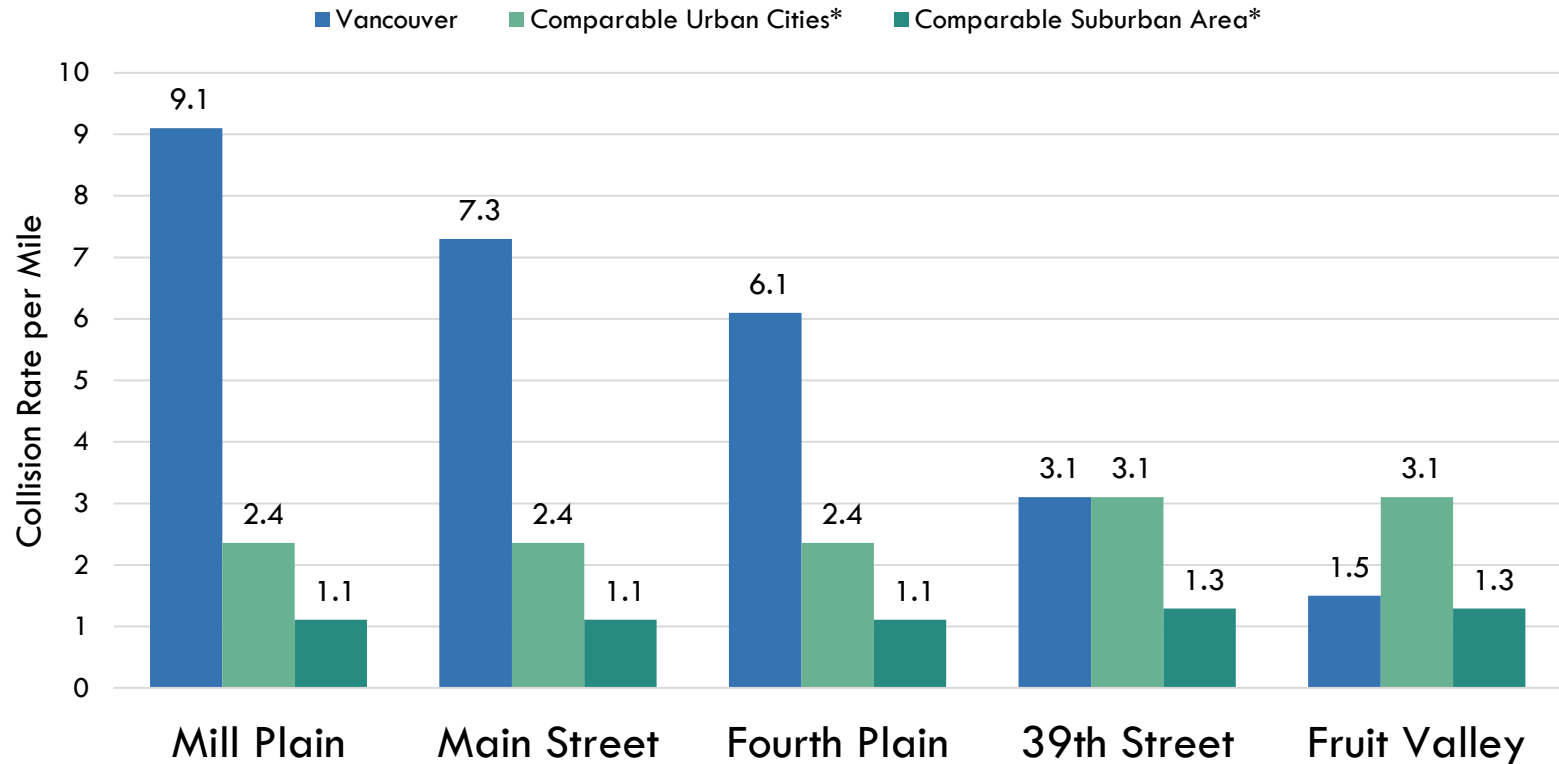
What We Learned

How much cut-through traffic is occurring from I-5 through the westside? When and Why?	Main Street and other N/S streets are common diversion routes during a.m. peak and midday congestion
What is the most frequent traffic complaint?	Speeding
What are some of the likely causes?	Conflicts between modes and speeds
Where are the most collisions occurring?	<ul style="list-style-type: none">• Concentration along Main Street, Fourth Plain, Downtown• Between Main Street and I-5 at Mill Plain, Fourth Plain, and 39th

What We Learned

**Comparable average from ODOT collision tables 2013*

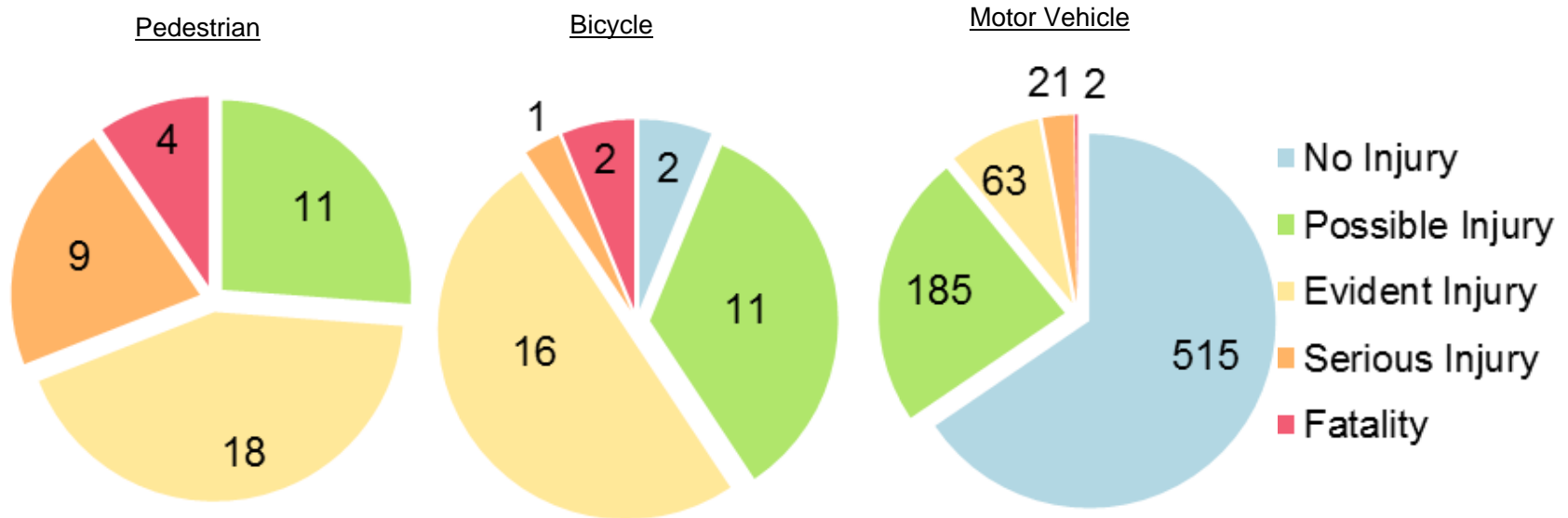
Collision Rates, Vancouver Arterials vs. Comparable Averages



What We Learned

Majority of bike/pedestrian collisions resulted in an injury

- In vehicle-only collisions, majority produced no injuries
- Compared to motor vehicle collisions, injury severity and chance for fatality for bicyclists and pedestrians is higher



What We Learned

Economic Development and More People

- Projected increase in number of housing units and jobs in the study area by 2035 (compared to 2010 numbers)
- Potential for over 5,500 additional housing units
- Up to 15,000 jobs additional jobs

Industrial areas have room for growth

- Port of Vancouver and other industrial areas have approx. 1,100 gross acres (600-800 net developable acres) available for growth

There is enough capacity in east/west corridors to accommodate projected 2035 travel demands

What We Learned: Summary

- Overall, the street grid and short blocks create very walkable and bike friendly neighborhoods
- Congestion on I-5 adds stress to street network and neighborhoods
- Growth is occurring in neighborhoods and industrial areas
- East/West freight mobility is necessary
- Pedestrian and bicycle travel choices are increasing
- Safety for people who walk, bike, or drive is a big issue

What We Saw: Main



What We Saw: 39th Street



Tradeoffs?

What We Saw: Columbia Street



Tradeoffs?



At the end of Phase 1...The Big Questions

1. Are we managing the network to optimize vehicle mobility?
2. Are we balancing the needs of vehicles with the needs of people who walk and people who bike?
3. If freight had designated and reliable routes, could we minimize conflicts between freight mobility and neighborhood livability and downtown vitality?

Phase 2: Defining the Problem

In some areas:

- The current network places a high priority on vehicle traffic flow to accommodate industrial area freight needs, commuters, and I-5 corridor congestion.

In other areas:

- The current network places a high priority on pedestrian and bike connectivity, residential neighborhood livability and accessibility, and downtown vitality.

A lack of consistent, focused priorities in neighborhoods and along east/west corridors results in unsafe modal conflicts.

Phase 2 Direction: Network Balance

Modal balance is needed – mobility needs to be more consistent through the street network

A balanced network for all users would include:

- 1) Improved transportation safety
- 2) Improved connectivity for people who walk/people who bike
- 3) Improved E/W reliability for freight
- 4) Maintain land use vitality – manage all modes consistently to sustain long-term value and multi-modal accessibility

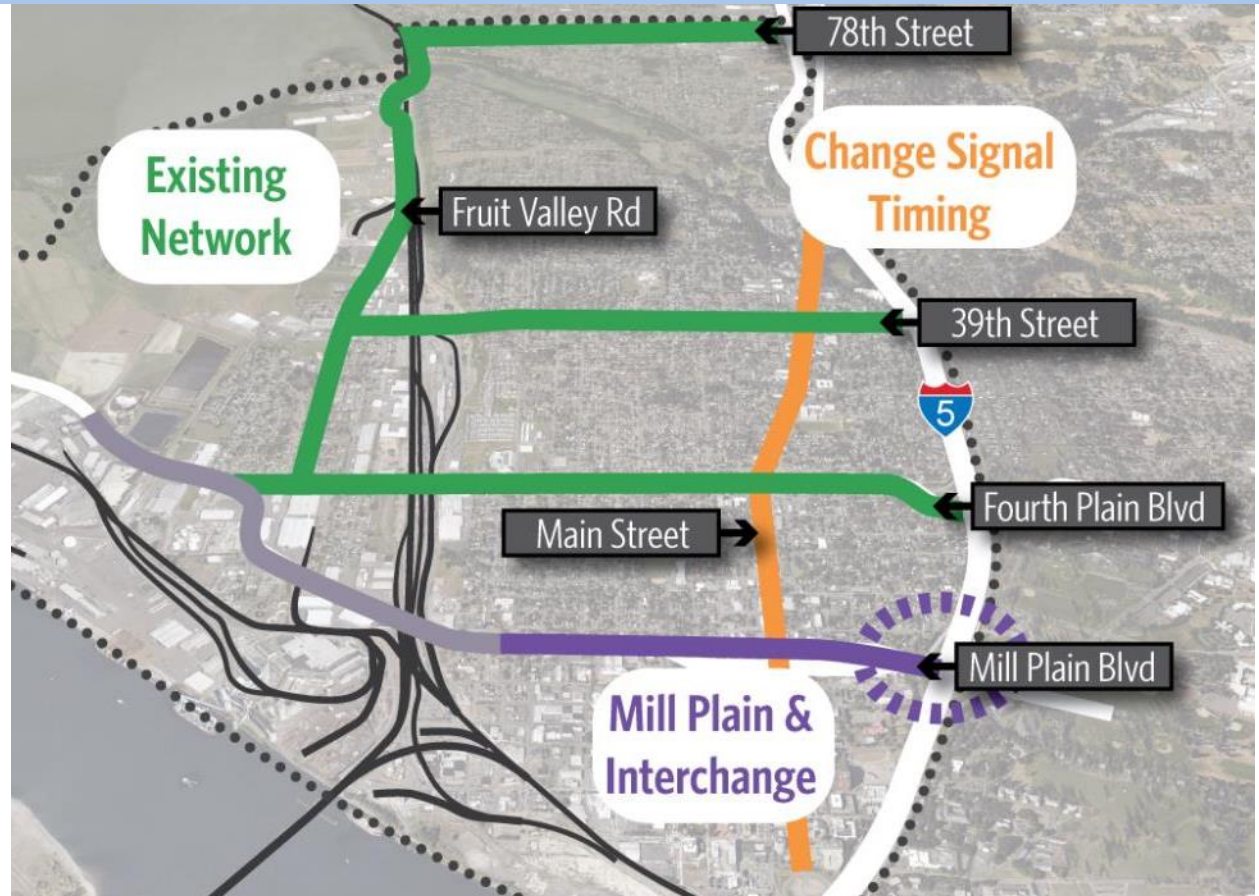
Phase 2 Approach

Ensure comprehensive, coordinated, and balanced approach to address needs of all users

- Develop and evaluate alternative mobility scenarios
- Determine the best alternative to improve the needs for all users
- Develop strategy for capital improvements
 - Analogy: Major remodel for historic house – Comprehensive design first, then select windows, doors, siding, etc...

Alternative Mobility Scenarios

Concept #1
Optimize Mill Plain, Manage Main Street



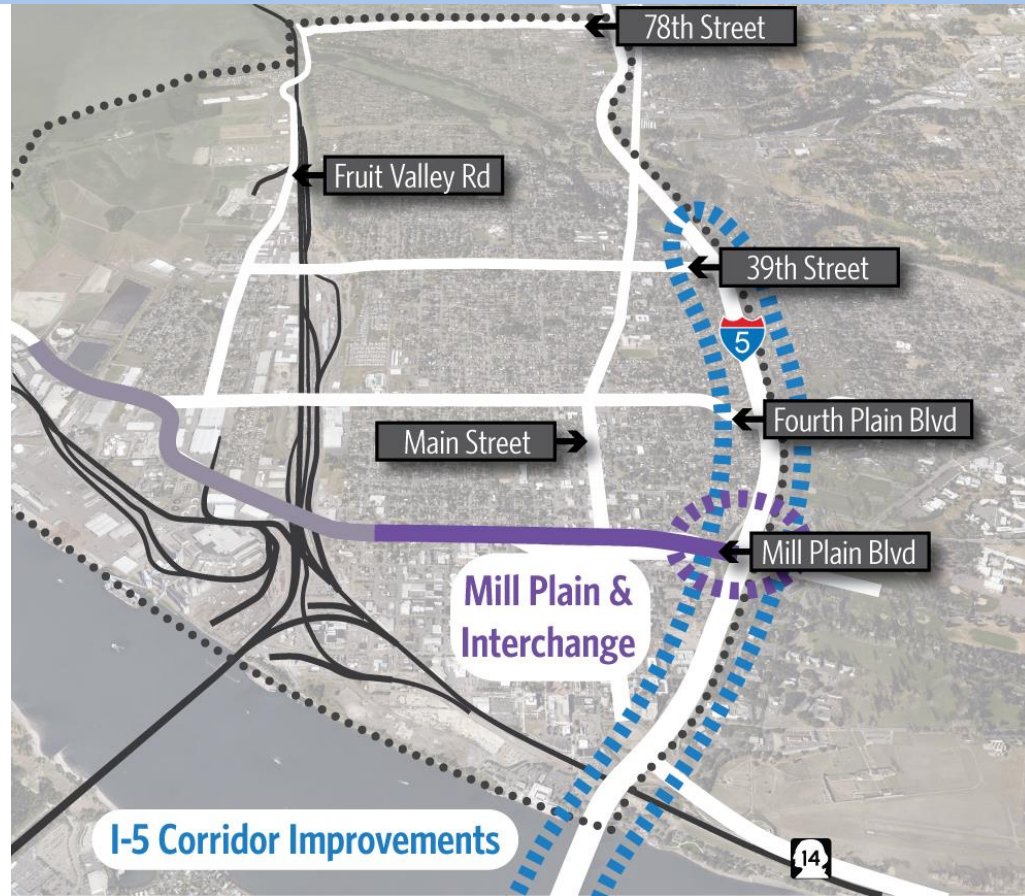
Alternative Mobility Scenarios

Concept #2 *Mill Plain and 78th Freight Routes*



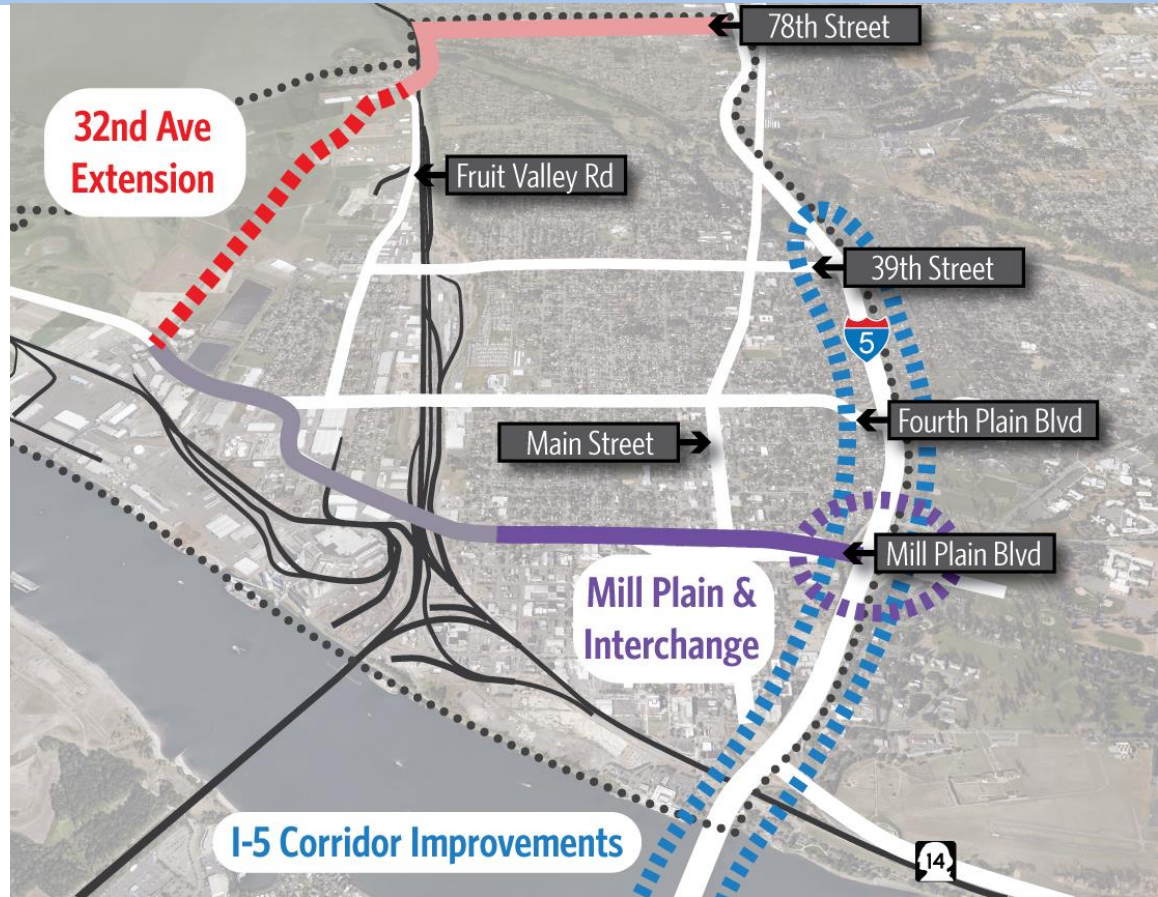
Alternative Mobility Scenarios

Concept #3
Address I-5



Alternative Mobility Scenarios

Concept #4 *The Kitchen Sink*



Evaluate Alternative Mobility Scenarios

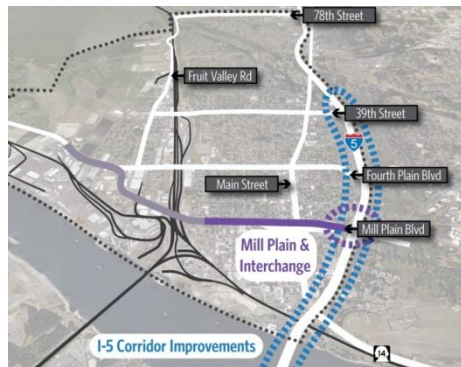
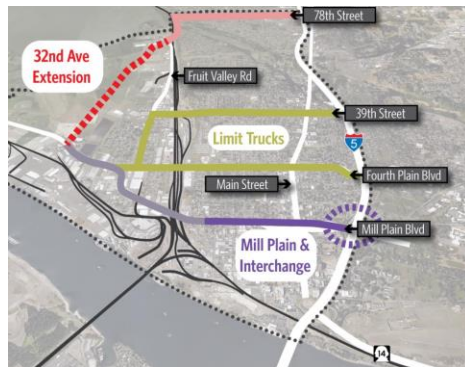
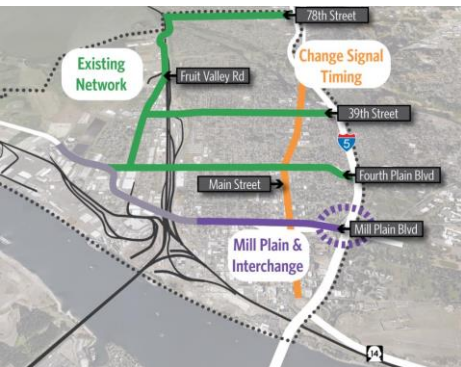
Which alternative balances the needs of all users?

Community values guide the evaluation of alternatives

1. Improved transportation **safety** for all network users
2. Improved **connectivity** for people who walk/people who bike
3. Improved E/W **reliability** for freight
4. Maintain land use **vitality** throughout west side neighborhoods

Strategically integrate capital improvements with preferred strategy

Evaluate Alternative Mobility Scenarios



Questions?

Next Steps

- Model and Evaluate Alternative Mobility Scenarios
- Develop Capital Improvement Strategy
- Planning Commission Briefing: October 27
- City Council Work Session: December 14
- Community Forum #3: December 2015

Conclusion

Thank You

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Project Website

www.cityofvancouver.us/wms