Rainier Valley Transportation Improvements Open House

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July 30, 2015

SDOT
Seattle Department of Transportation

Our mission, vision, and core values

Mission: deliver a high-quality transportation system for Seattle

Vision: connected people, places, and products

Committed to 5 core values to create a city that is:

- Safe
- Interconnected
- Affordable
- Vibrant
- Innovative

Presentation overview

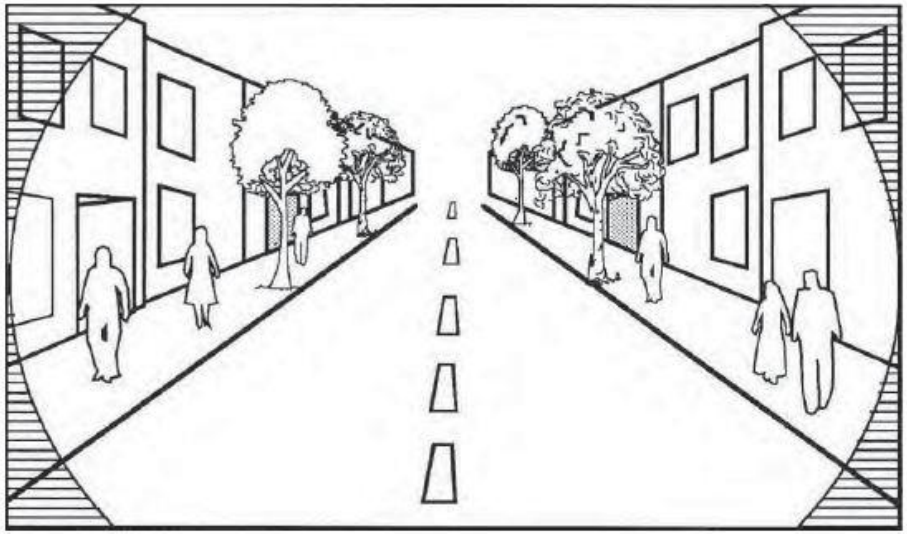
- Vision Zero
- Rainier Valley North-South Neighborhood Greenway
- Accessible Mt. Baker
- Rainier Ave S Road Safety Corridor
- Q&A
- Open house
- Adjourn

Vision Zero

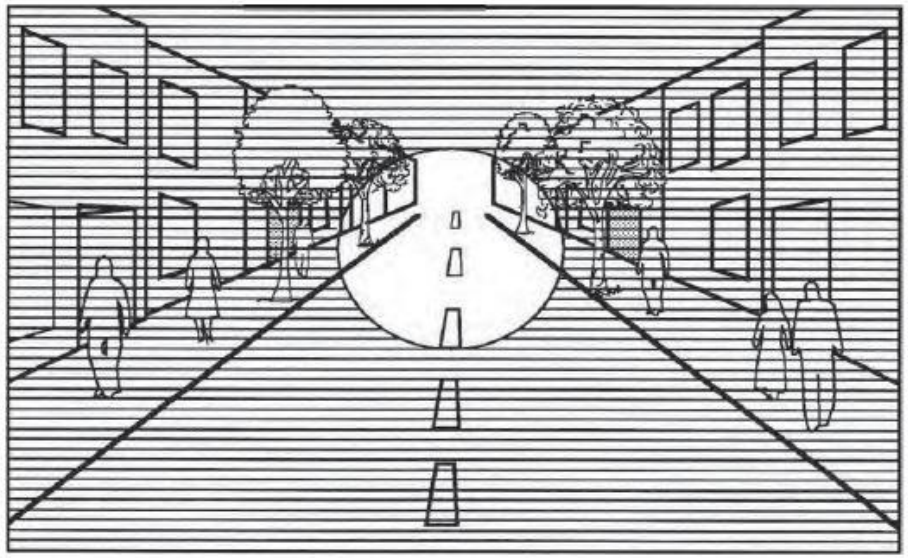
Zero traffic fatalities
or serious injures by 2030

www.seattle.gov/visionzero

Why speed matters



Drivers' field of vision
15 mph



Drivers' field of vision
30 mph

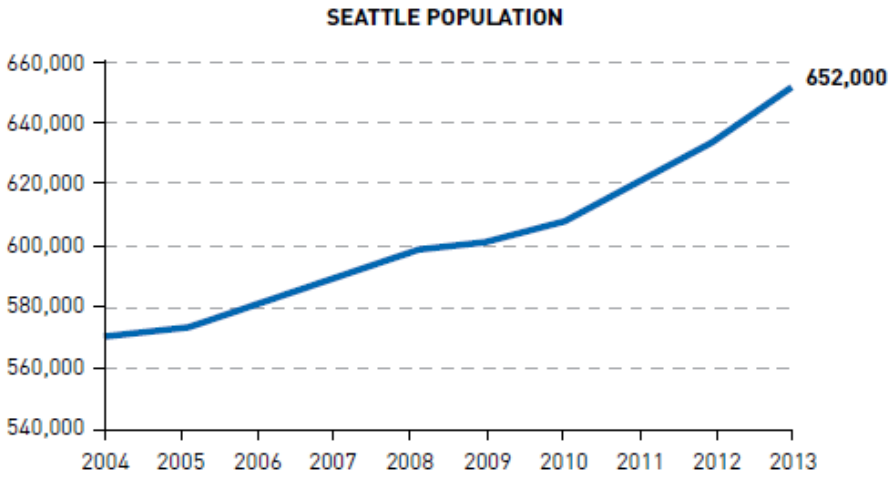
Why speed matters

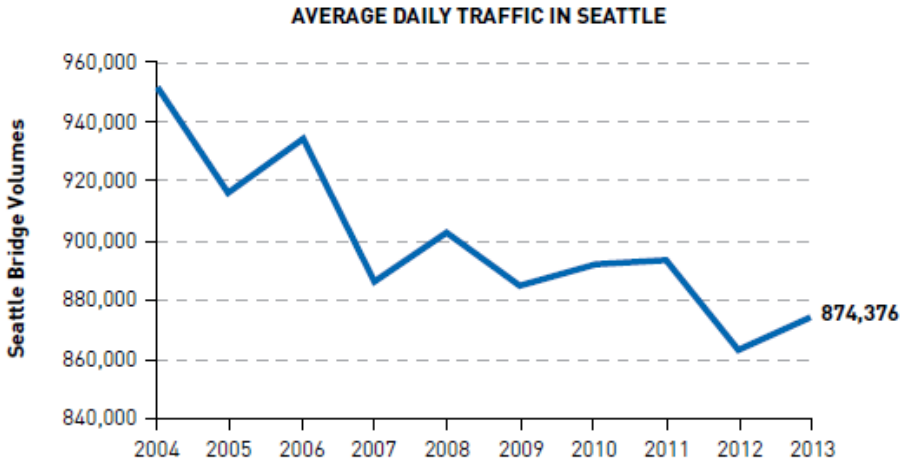
Speed is especially critical for vulnerable travelers like people walking and biking.

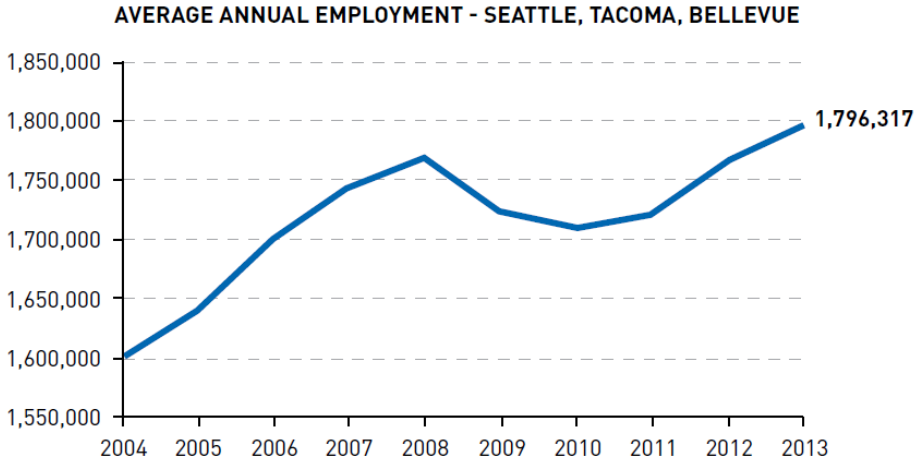
Citywide trends

- Seattle's population is growing rapidly
- Traffic volume dropping
- More people are walking, biking and using transit

seattle.gov/transportation/reports.htm







Rainier Valley North-South Neighborhood Greenway

What is a neighborhood greenway?

A safer, calm residential street for you and your family

Greenway design elements

Slow Speeds and Stop Signs

- Calm traffic entering and crossing the greenway
- Drivers better able to stop and prevent collisions

Speed Humps

- Slow motorists and people riding bikes
- Reduce cut-through traffic

Placemaking

- Promote the activation of public space

Safer Crossings at Busy Streets

- Easier for seniors and children to cross
- Make motorists aware of people walking and biking

Signs and Markings

- Direct people walking and biking to and along the greenway
- Help motorists know people walking and biking are present

Smooth Sidewalks and Pavement

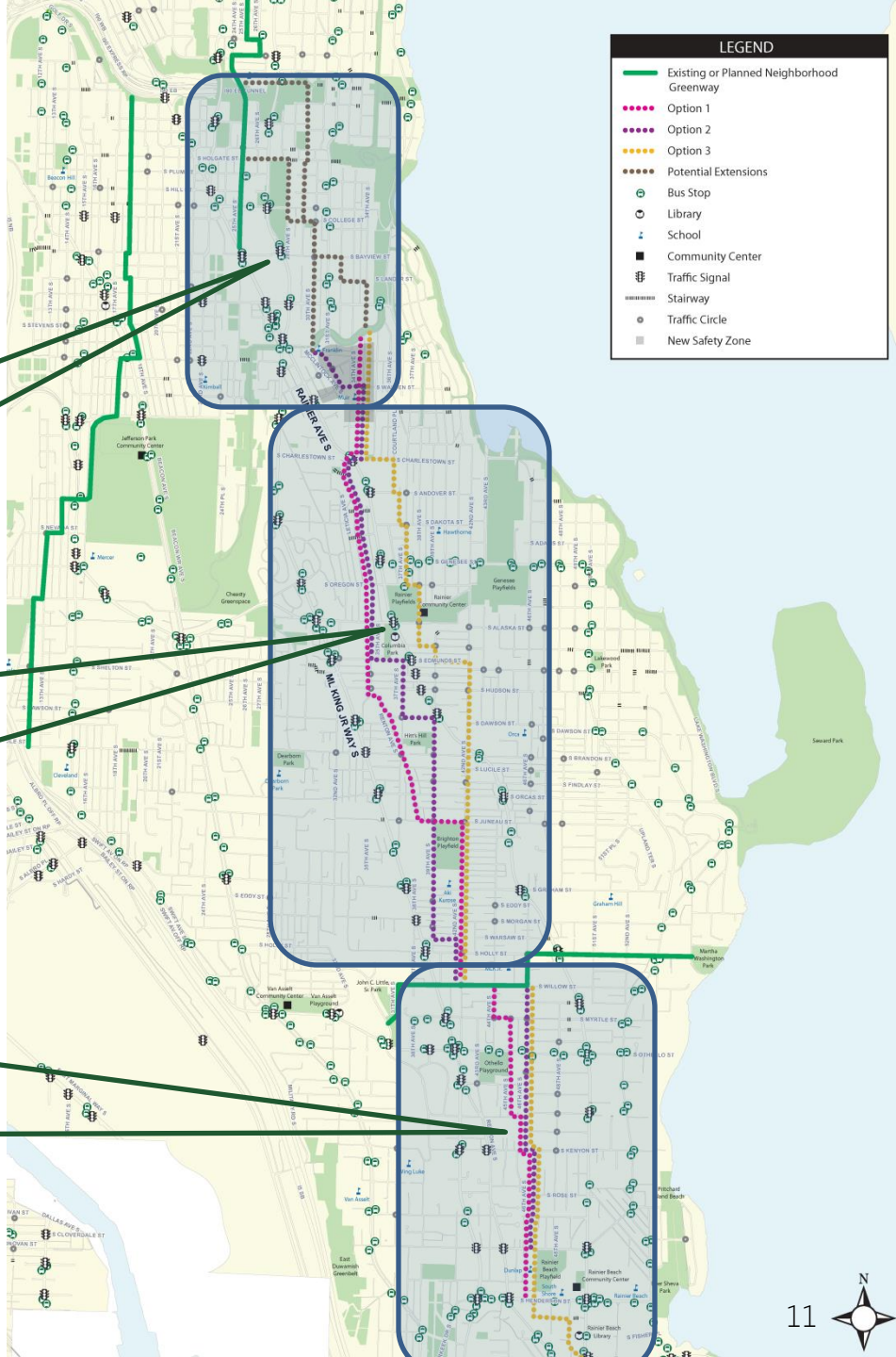
- Safer for you and your family to walk and ride bikes
- Help people in wheelchairs or with strollers

Potential alternatives

Group 1
I-90 to S Mt Baker Blvd

Group 2
S Mt Baker Blvd to S Holly St

Group 3
S Holly St to S Henderson St



Most promising route

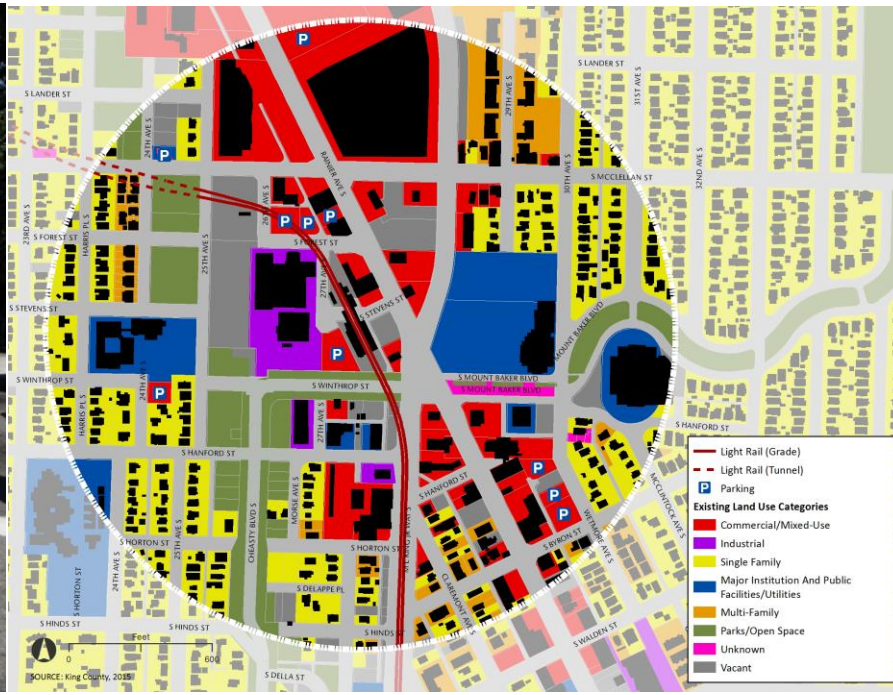
Next steps

Date	Activity
July 2015	Open house #2
2016	Implementation
2017	Evaluation

Accessible Mt. Baker

Project Purpose

- Identify and implement safety improvements
- Develop a long term, integrated plan to improve access at the Mt. Baker station area



Guiding Principles

- Improve access to neighborhood destinations consistent with the neighborhood plan
- Create a network of streets, paths, and open space
- Respect the existing character and assets
- Establish a neighborhood and regional destination

Guiding Principles (cont)

- Prioritize modes within the station area:

  1. **Ped/Bike**: Safety and comfort
  2. **Transit**: Reliable and frequent
  3. **Freight**: Access and reliability
  4. **Auto**: Calm and predictable

- Ensure diverse voices and traditionally underrepresented communities are heard and considered

Long-term sketch concept

Key Elements:

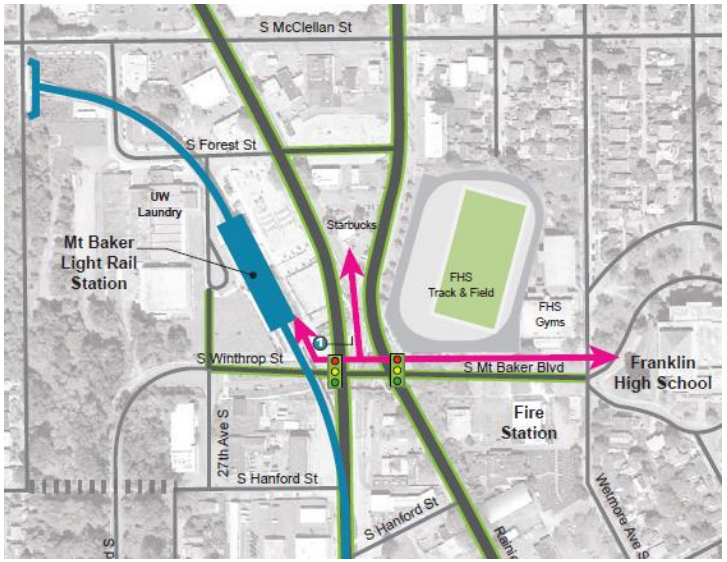
- Improve pedestrian crossing of MLK / Rainier
- Eliminate the intersection bottleneck
  - Allow space for sidewalk and bike facilities
  - Predictable through movements for all users
- Improve Bus / Rail connections
- Reconnect the Olmstead Greenbelt
- Integrate open space
- Support neighborhood plan and Town Center

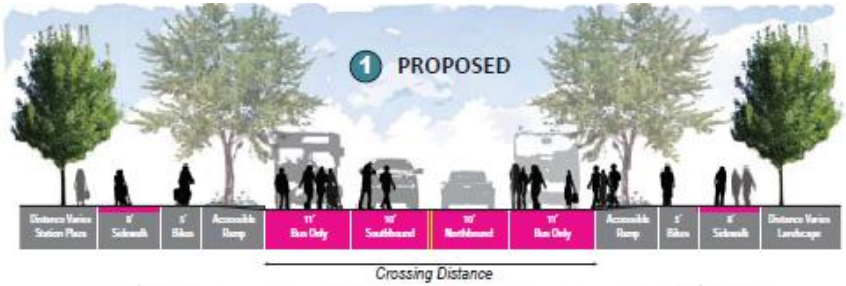

Build-to Line
(no driveways)
New retail street
w/ on-street parking
S Forest St
UW
Laundry
Starbucks
FHS
Track & Field
Public Open-Space
otential Bus Loop
LRT
Bus Stop For Routes 7, 8, 9
27th Ave S
Bike/Walk Enhanced Crossing
Protected Bike Lane
and Sidewalk
S Mt Baker Blvd
Enhanced S
Mt Baker Blvd
Fire
Station
Transit and Emergency
Vehicles only
Bus Stop for
Routes 14 & 48

Walk Example – *What it could look like…*

KEY HIGHLIGHTS

- Shorter crossing distances
- Direct and easy to navigate routes
- Less wait – fewer signal phases
- Ample space for safe movement and waiting
- Improved and protected sidewalks and cycle lanes
- All at-grade (no pedestrian bridge)
- Tree-lined streetscape





Rainier Ave. S.

Concept Refinement

- Refining the bike and pedestrian connections
- Metro bus coordination
- Traffic analysis
- Coordination with property owners and Sound Transit
- Coordination with Rainier Ave S Pilot & N/S Greenway

Accessible Mt. Baker Open House

October 1, 2015 - 6 pm to 8 pm

Kings Hall

2929 27th Ave S.

Seattle, WA

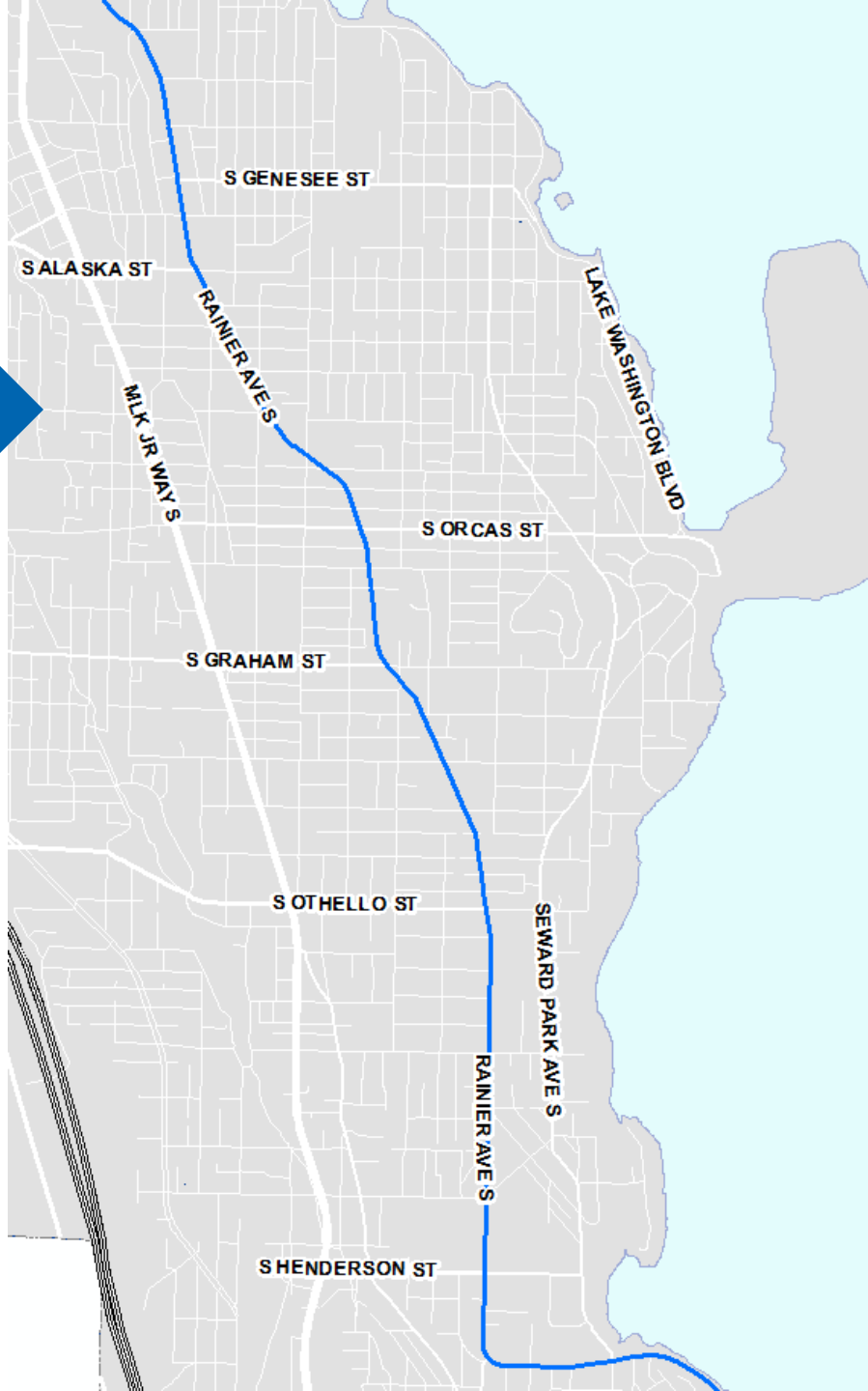
(located west of the Mt. Baker light rail station)

- Review the draft implementation plan
- Comment and inform
- Hope to see you there!

Rainier Ave S Road Safety Corridor

Project area

Rainier Avenue S, between Letitia Avenue S and Seward Park Avenue S



Roadway characteristics

- Principal arterial
- 4 to 5 lane street
- 50-54 feet wide
- Served by multiple transit routes
- Emergency response route

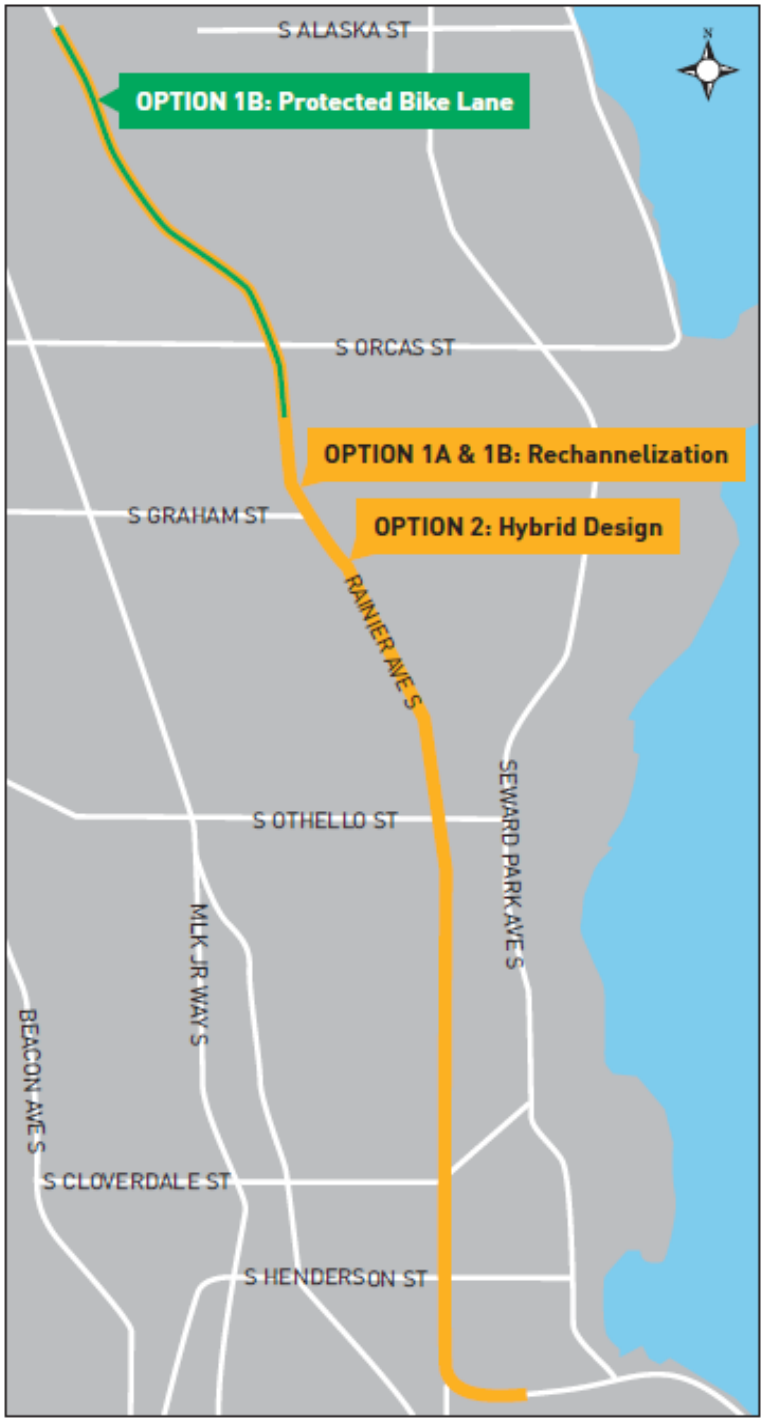
Project review

Goals

- Make Rainier safer for everyone
- Reduce speeds
- Improve conditions for pedestrians
- Maintain efficient transit service
- Improve intersection safety
- Reduce injuries

Outreach

- Four public meetings
- Tours
- Community and business briefings
- Design alternatives released March 2015



Speed studies

Posted speed limit on Rainier is 30 miles per hour (mph)

Location	85th percentile speed	Average number of high-end speeders (10+ mph over posted speed limit)
S Hudson Street	35 mph	611/weekday
42nd Avenue S	38 mph	1812/weekday
S Holly Street	37 mph	1083/weekday
S Cloverdale Street	36 mph	1083/weekday

Collision data

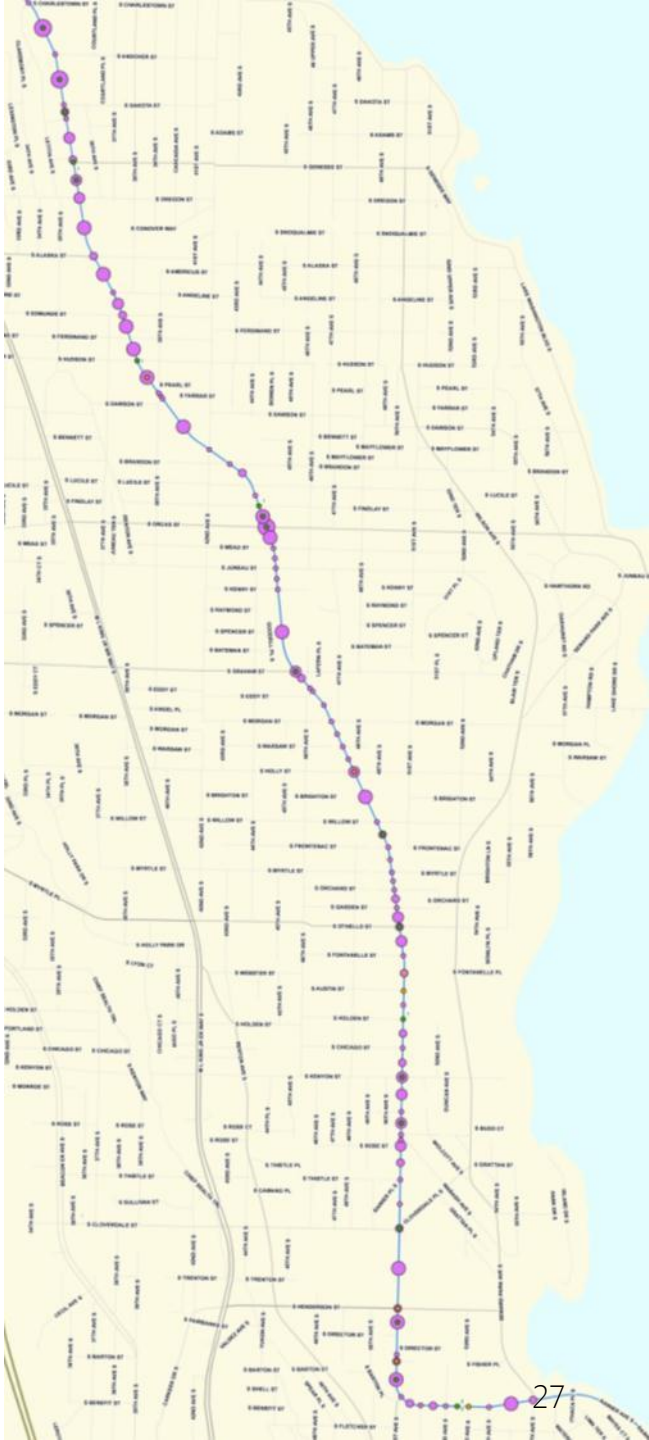
Average of 1 crash/day on Rainier

Last 3 years

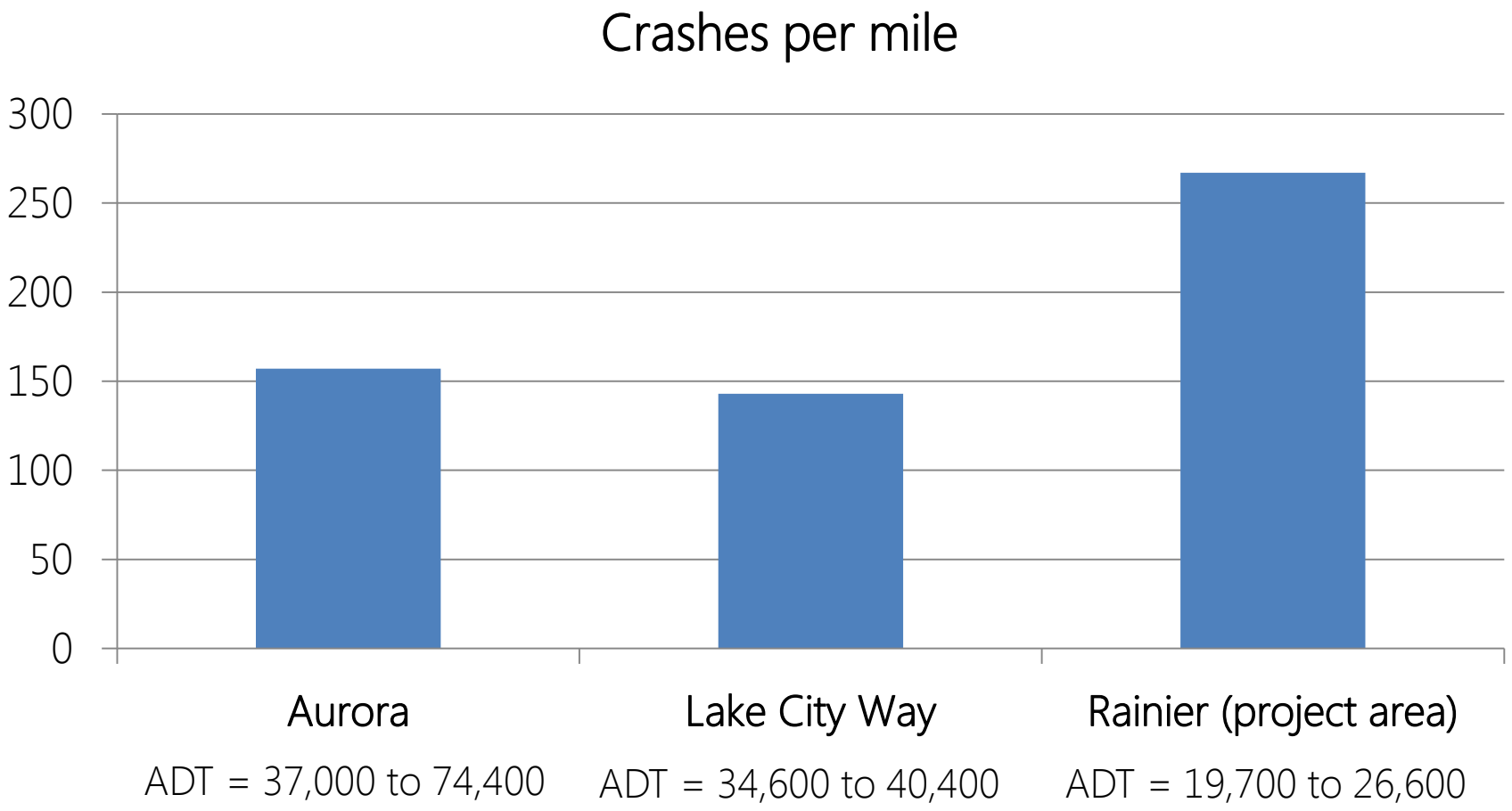
- 1243 total collisions
- 630 injuries
- 2 fatalities

Last 10 years

- Nearly 3600 total collisions
- 1700+ injuries
- 11 fatalities



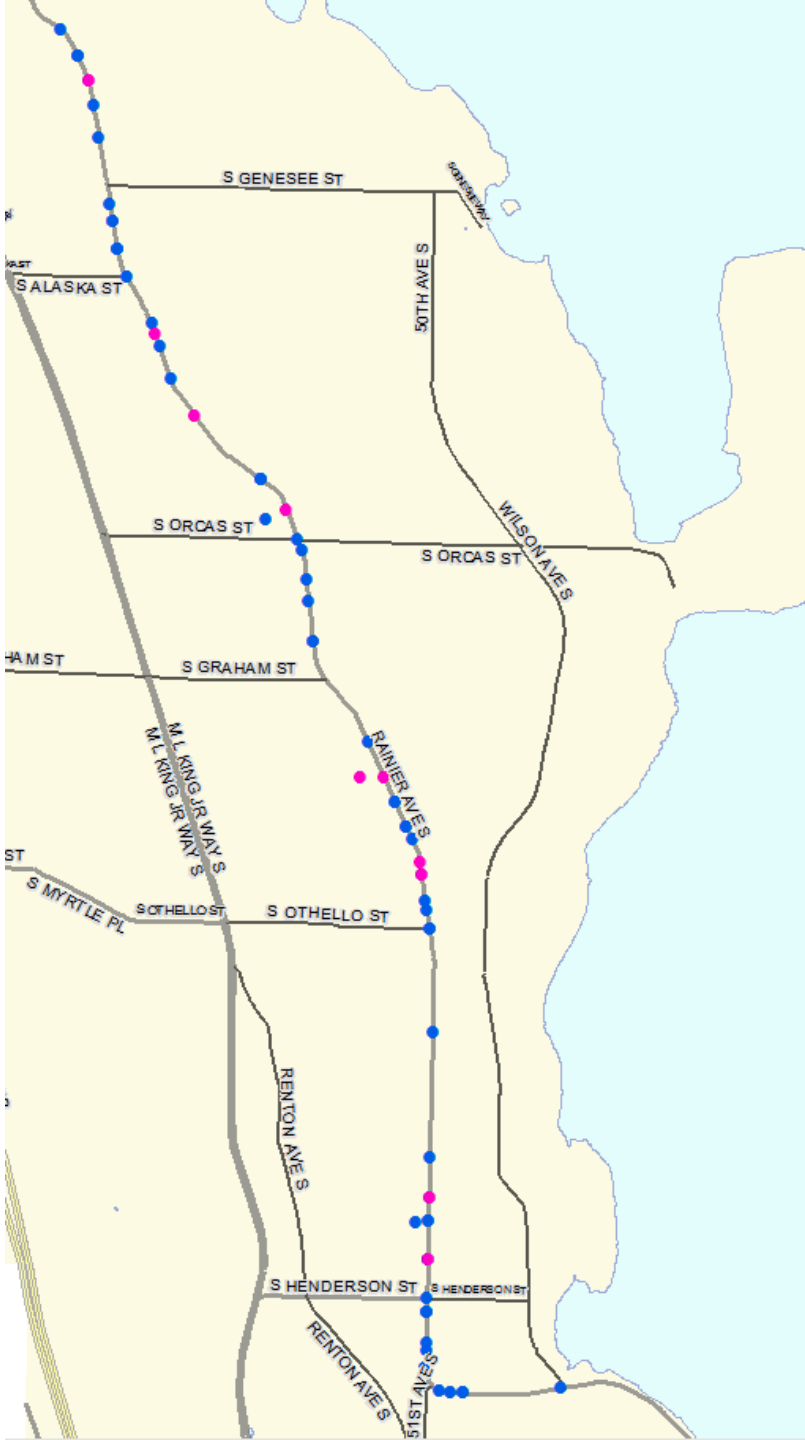
Collision data



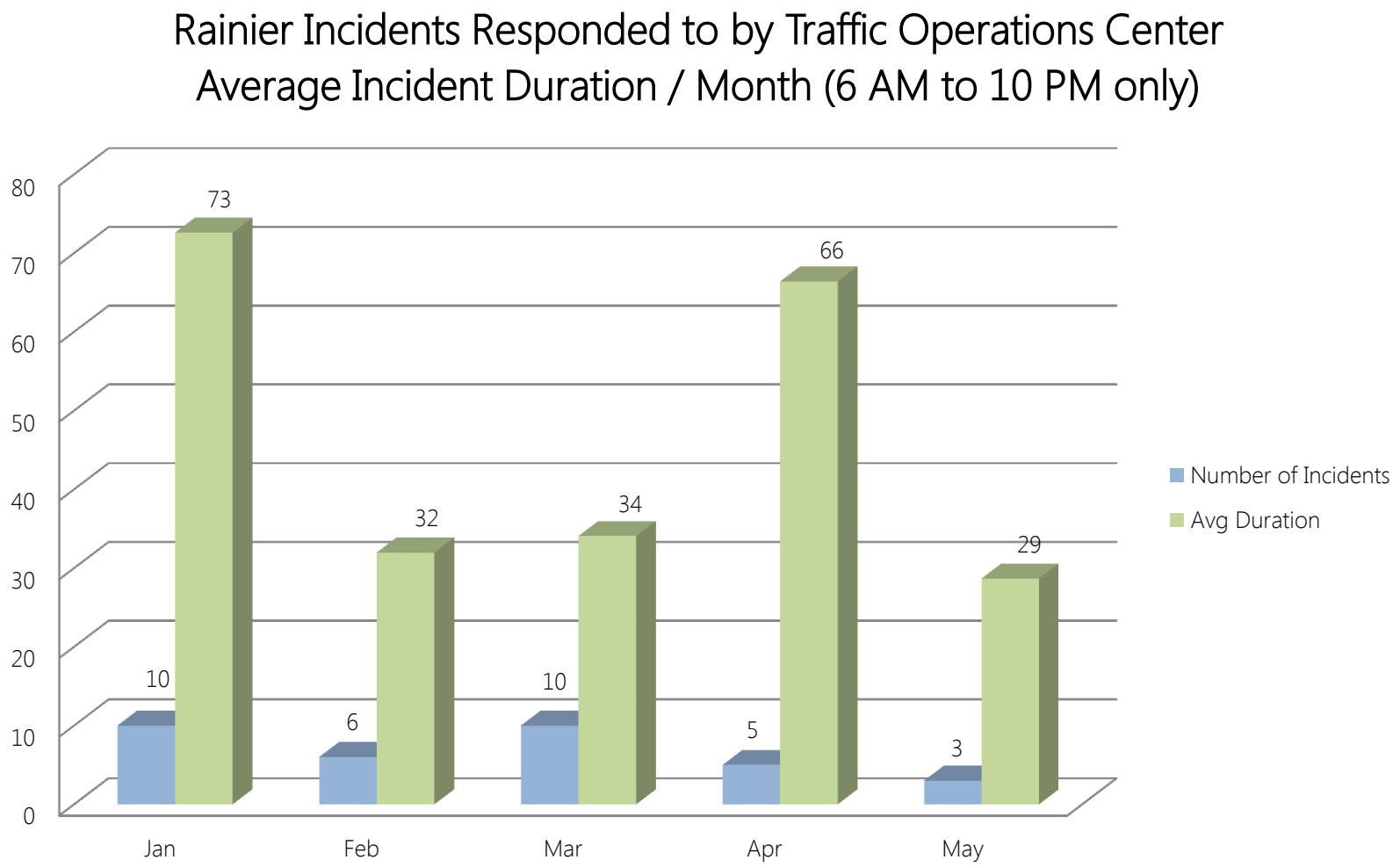
Collision data

Fatal and serious injury crashes within project area last 10 years

- Fatal collisions
- Serious injury collisions



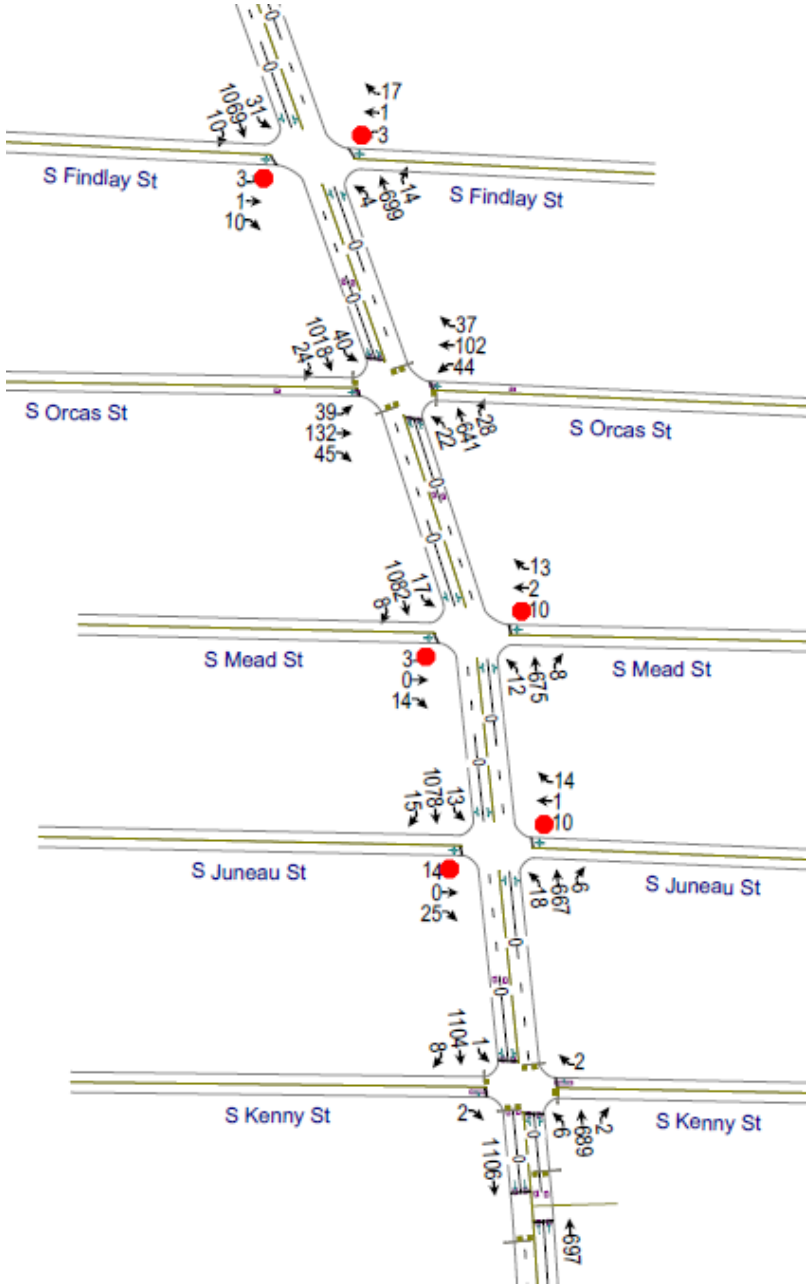
Collision data



- Average time to clear incidents = 47 minutes

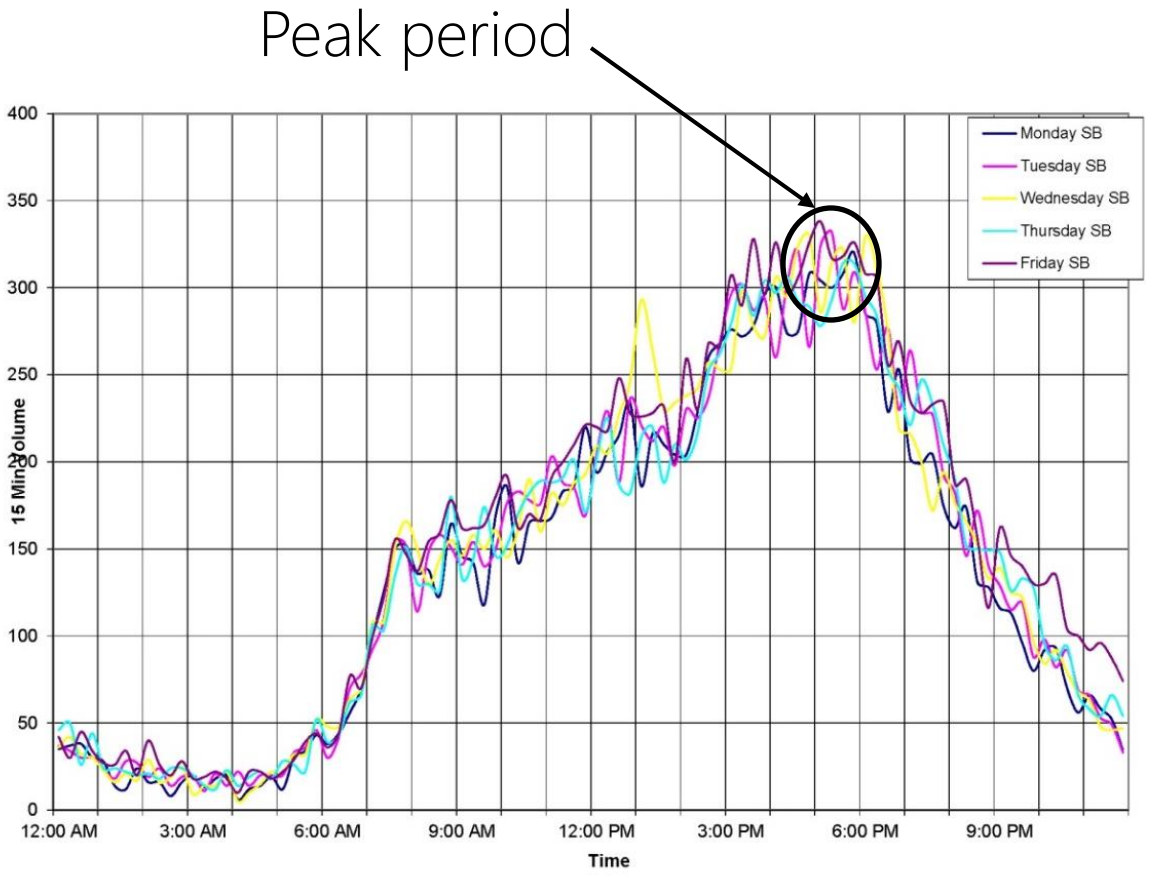
Data collection

- Updated volumes on Rainier and nearby arterials
- Turning movement counts collected at every intersection
  - During AM peak, off-peak, and PM peak hours
  - Includes counts of pedestrians, bicyclists, freight and transit
- Recorded corridor travel times
- Reviewed detailed transit data



Traffic modeling

- Modeled the "peak" period – the hour of the day where recorded traffic volumes were the highest

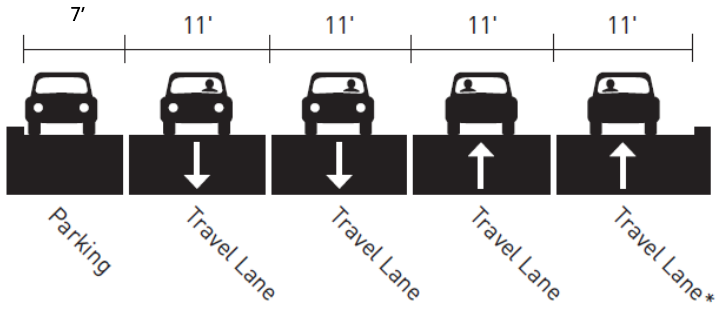


Change is coming to Rainier Ave S

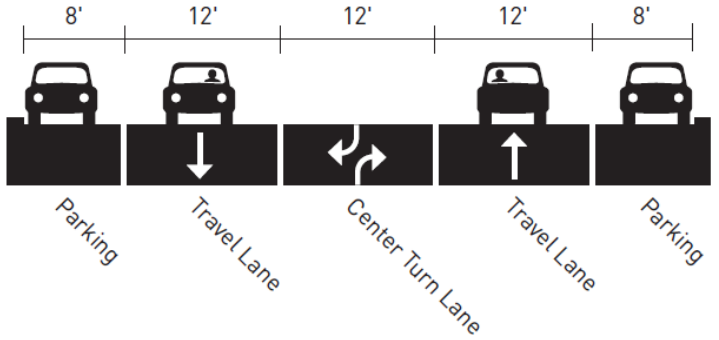
2015 implementation plan

- Rainier "Pilot" Rechannelization
  - Option 2 – hybrid design
  - S Alaska Street to S Kenny Street (0.9 miles)
  - One lane in each direction with center turn lane
  - 25 mph speed limit
  - Longer pedestrian crossing time at all signals
  - Leading Pedestrian Interval at Rainier and Ferdinand
  - New parking spaces and more space to park on Rainier

TYPICAL CROSS SECTION (EXISTING)



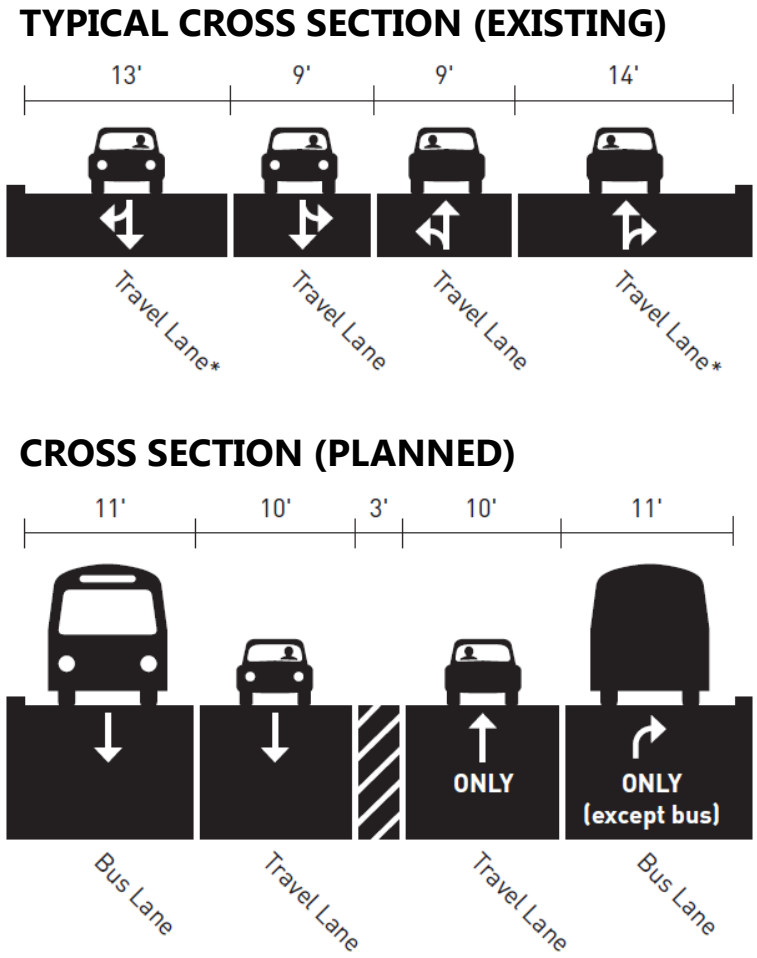
TYPICAL CROSS SECTION (PLANNED)



*Parking available at some locations

2015 implementation plan

- Bus and turn lanes between Edmunds and Alaska
- Southbound transit queue jump at Edmunds
- Southbound left turns to be restricted at Edmunds
- Left turns will be permitted at Angeline and PCC entrance
- Turn restrictions at Safeway

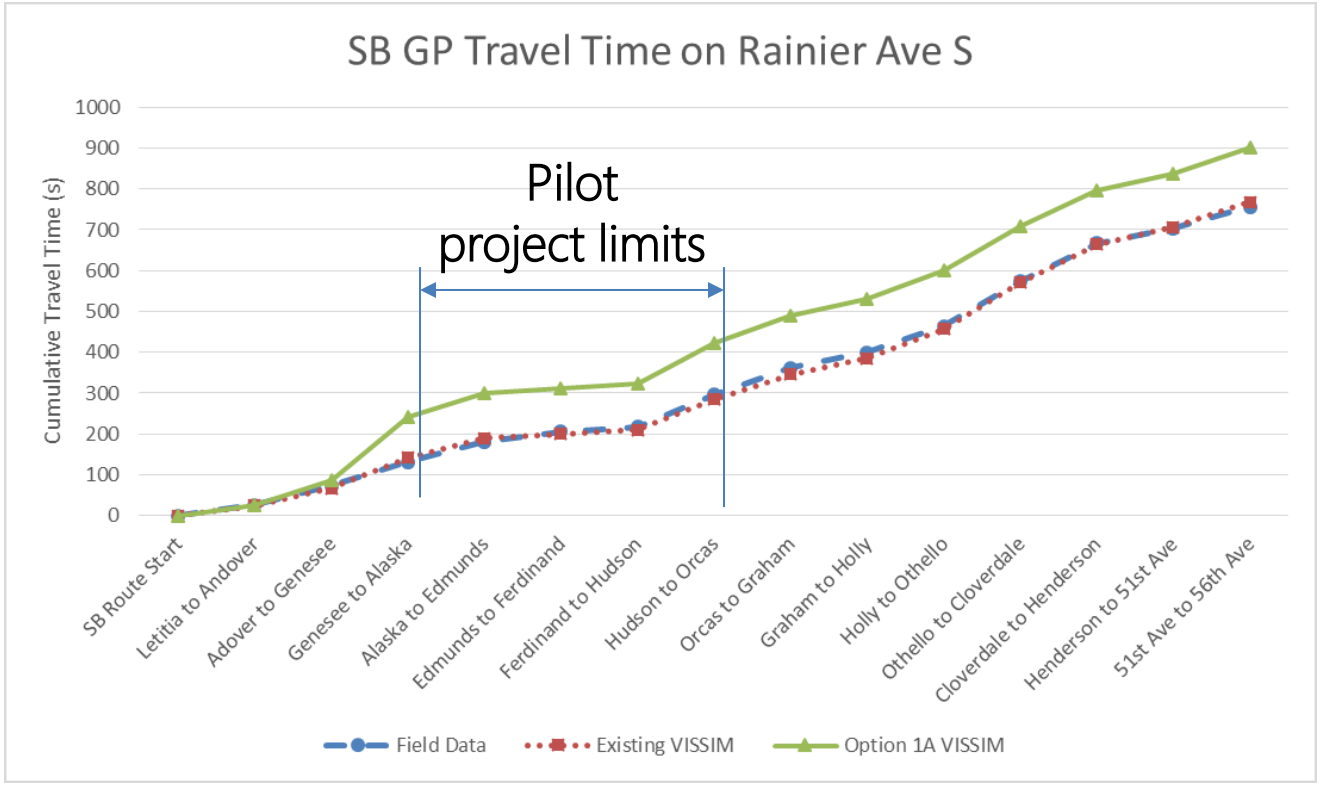


Rainier at S Edmunds Street

Travel times (PM peak)

Rainier Avenue S between Letitia and Seward Park Ave S

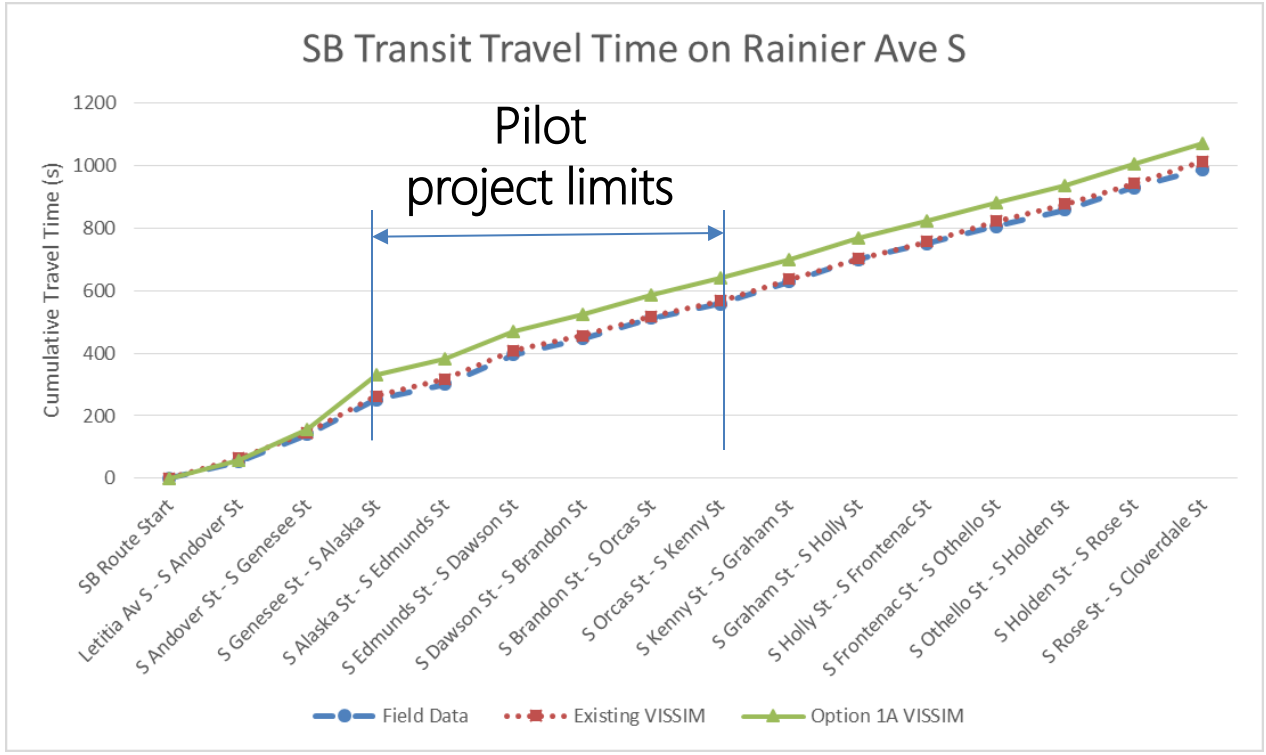
Direction	Existing	Anticipated	Change
Northbound	10 mins, 43 secs	11 mins, 6 secs	+33 seconds
Southbound	12 mins, 36 secs	15 mins, 1 sec	+2 mins, 25 secs



Transit travel times (PM Peak)

Rainier Avenue S between Letitia and Seward Park Ave S

Direction	Existing	Anticipated	Change
Northbound	22 mins, 9 secs	22 mins, 28 secs	+19 secs
Southbound	16 mins, 27 secs	17 mins, 27 secs	+1 min



Design details

- Efficiency of design and longer signal cycles substantially offset loss of travel lanes

	AM		Off		PM	
Location	**Existing**	**Proposed**	**Existing**	**Proposed**	**Existing**	**Proposed**
S Edmunds St	60	120	60	60	65	130
S Ferdinand St	60	120	60	60	65	130
S Hudson St	60	120	60	60	65	130
39th Ave S	60	60	60	60	65	65
Brandon St	60	60	60	60	65	65
S Orcas St	60	120	60	60	65	130
S Kenny St	60	60	60	60	65	65

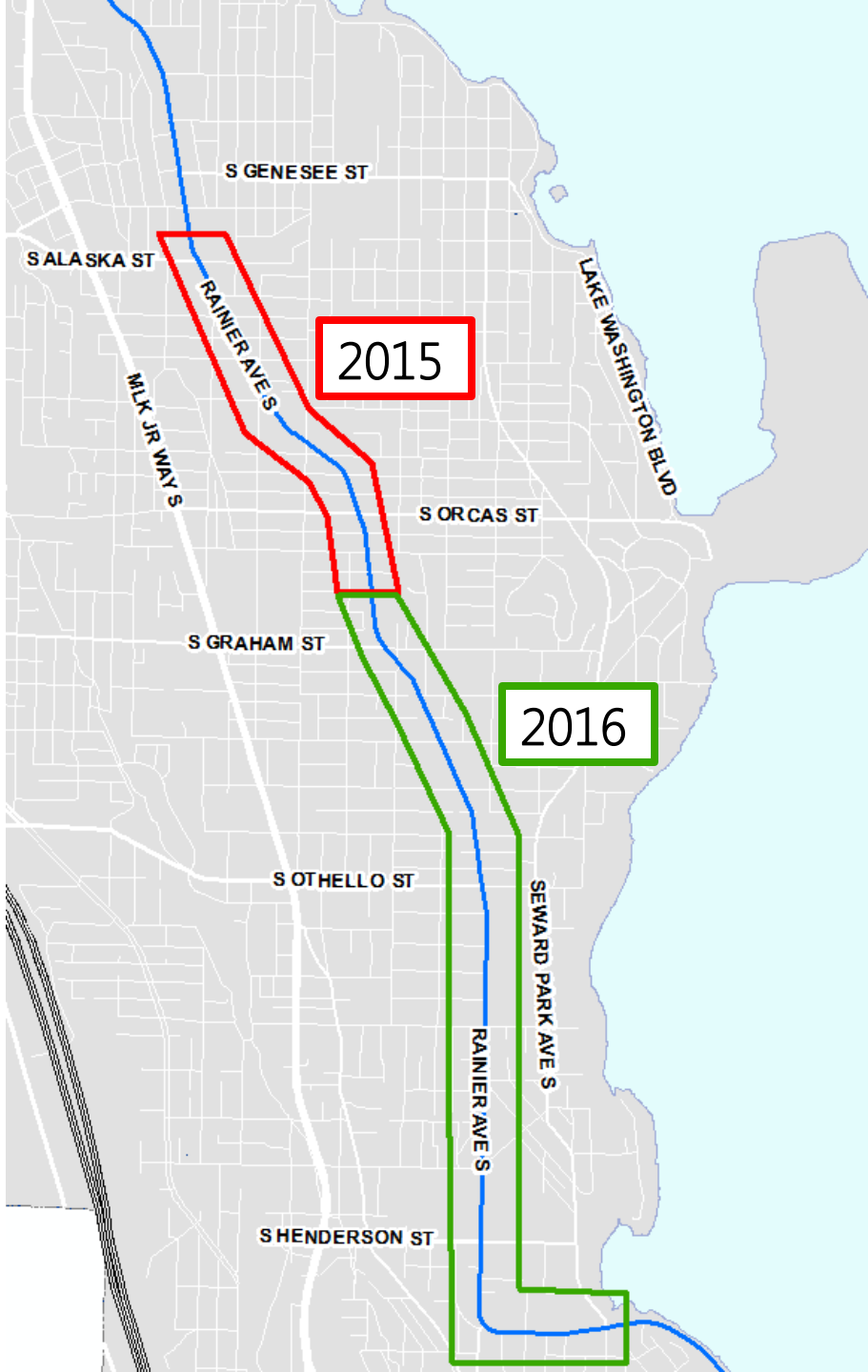
Signal cycle lengths

Evaluation

- Evaluation to begin upon project completion
- Fine tune traffic signal timings
- Monitor travel times for vehicles and transit
- Monitor traffic volumes on Rainier and nearby arterials
- Monitor collisions
- Economic analysis review

2015 - 2016

- Continue Vissim analysis of design alternatives
- Community design meetings
- Engineering changes from south to north
- Coordination with Greenway implementation and Accessible Mt. Baker project
- Pedestrian signal design changes at Rainier and Oregon



Enforcement

- Increased enforcement efforts
  - SeaStat-Vision Zero patrols
  - Grant funded pedestrian emphasis patrols

Benefits

- Reduction in crash frequency
- Lower speeds, fewer severe crashes
- Improves parking conditions
- Addresses correctable collision patterns
- Less exposure for pedestrians
- Potential low cost crossing improvements
- Easier turns to and from Rainier
- Transit efficiency treatments
- Minimal impact to traffic

Benefits

- Rechannelization is a FHWA-recognized proven measure to reduce speeds and collisions
- Local results confirm that rechannelization is an effective countermeasure

Street	Collisions	85% speed	10+ mph speeders	Volume change
Nickerson St	-23%	-21%	-94%	-1%
Fauntleroy Way SW	-31%	-1%	-13%	+0.3%
NE 125th St	-10%	-8%	-69%	+4%
NE 75th St	-50%	-13%	-75% to 79%	+3%

Next steps

August 3 – 14	Phase 1 implementation
	Evaluation begins upon completion
Winter 2016	Project information sessions
Summer 2016	Phase 2 implementation begins

Questions?

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