

35th Avenue SW Road Safety Corridor

Project Manager Jim Curtin July 15 and 16, 2015



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

- Welcome
- Project overview
- 35th SW design and implementation plan
- General Q & A
- Speak directly with SDOT



Project review

- Safety improvements requested by local community on several occasions
- 35th Avenue SW Road Safety Corridor Project launched October 2014



Report #1: Pedestrian-safety rally at 35th/Juneau October 7, 2008 at 4:36 pm | In High Point, Safety, West Seattle news | 9 Comments



Posted October 2008



Project goals

Make 35th Avenue SW safer for everyone

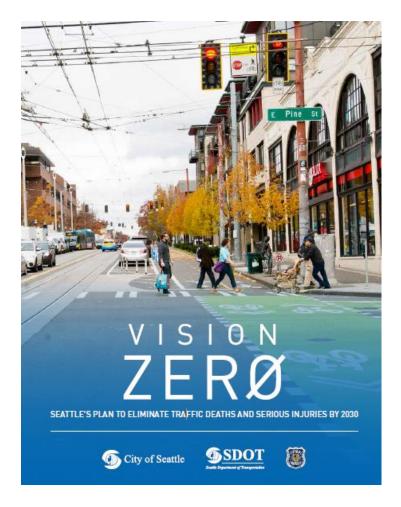
- Reduce speeds
- Reduce collisions and injuries
- Improve conditions for vulnerable users
- Maintain acceptable vehicular travel times



Vision Zero

Seattle's plan to eliminate traffic deaths and serious injuries

- Street designs that prioritize safety
- Public education and engagement
- Targeted enforcement patrols



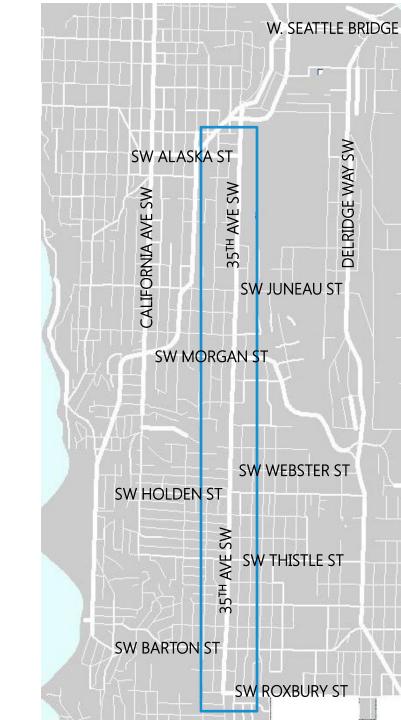
www.seattle.gov/visionzero

Project area

35th Avenue SW between SW Avalon Way and SW Roxbury Street

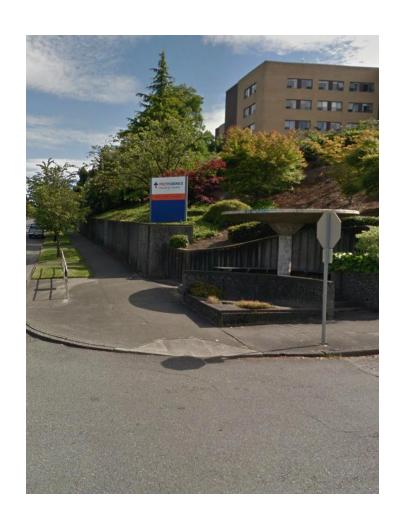
Current street design

- Principal arterial
- 4 to 5 lane street
- 54-55 feet wide
- Served by multiple transit routes
- Emergency response route



Along the corridor

- 488 parcels
 - 73% single family residential (359)
 - 11% apartment, condo, townhouse (55)
 - 10% commercial/industrial (48)
- 4 churches or religious service centers
- 3 schools within two blocks
- 2 libraries, parks and community centers
- 2 daycare centers
- Retirement/nursing homes, medical services



Recent speed studies

Posted speed limit 35 mph

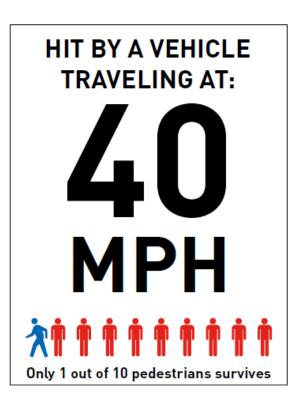
- 38.5 mph at SW Brandon St
- 40.9 mph at SW Willow St
- 36.5 at SW Roxbury St



Why speed matters

HIT BY A VEHICLE TRAVELING AT: MPH 9 out of 10 pedestrians survive

HIT BY A VEHICLE TRAVELING AT: 30 MPH 5 out of 10 pedestrians survive



Note that the chance of injury is nearly 100 percent when pedestrians or people biking are involved in a collision

Volumes

- 17,00 AWDT at Roxbury; 25,000 AWDT at Alaska (2015)
- Transit: 21, 21X, Rapid Ride C Line

35 th Avenue SW Traffic Volume Roxbury to Alaska					
	Average Weekday Traffic				
Year	At Roxbury	At Alaska	% change		
2008	22,400	22,400			
2009	20,600	23,600	-3.6%		
2010	16,100	22,700	-9.0%		
2011	15,800	23,500	+1.5%		
2012	16,000	23,000	0.0%		
2013	16,500	24,600	+4.3%		
2015	16,937	24,631			

Pedestrian volumes

- Many pedestrian generators line 35th including schools, parks, libraries, businesses and transit stops
- Counts were taken during peak hours and mid-day at 15 locations

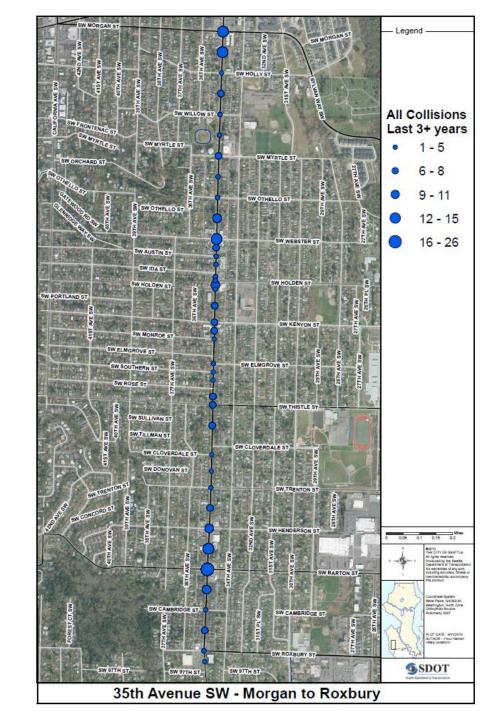
Pedestrian volumes				
Time of day	Pedestrian count			
AM peak hour (7:45 AM – 8:45 AM)	313			
Mid-day (11:30 AM – 12:30 PM)	239			
PM peak hour (4:30 PM to 5:30 PM)	561			

Last 3 plus years

- 294 total collisions
- 128 injuries
- 2 fatalities

Last 10 years

- 1065 total collisions
- 412 injuries
- 5 fatalities

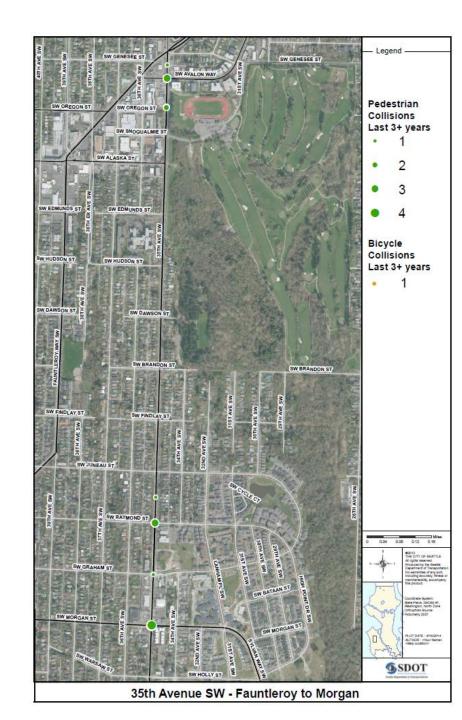


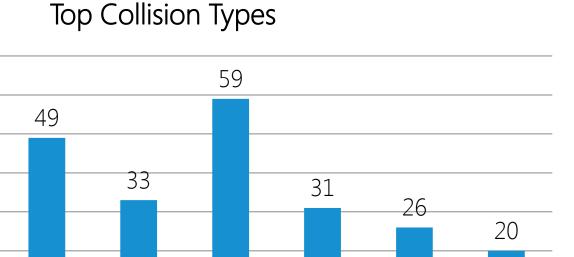
Pedestrian and bicycle collisions last 3 plus years

- 15 pedestrian-vehicle
- 1 bicycle-vehicle

Pedestrian and bicycle collisions last 10 years

- 40 pedestrian-vehicle
- 8 bicycle-vehicle
- 4 of 5 fatalities were pedestrians or bicyclists





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Top contributing collision causes:

- Distraction
- Speeding
- Impairment
- Failure to grant right of way



- Collision rate on 35th
 Avenue SW is below citywide rate
- 35th is a top corridor for fatalities

Top Corridors for Traffic Fatalities (last 10 years)

- 1. Aurora/SR-99
- 2. Rainier Avenue S
- 3. MLK Jr Way S
- 4. 35th Avenue SW

East Marginal Way

Lake City Way NE

Outreach

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

35TH AVENUE SW ROAD SAFETY CORRIDOR PROJECT

MARCH 201

Design Alternatives

OPTION A

SW ROXBURY ST TO SW EDMUNDS ST

Rechannelization

- 4 lanes to 3 lanes
- 2 general purpose lanes
- Center left turn lane

Key Features

- Reduces top collision types
- Lower vehicle speeds
- Better conditions for people walking
- Opportunities for new crossings
- Improved efficiency
- Easier turning movements especially for large vehicles

Limitations

 Initial modeling shows vehicle delays of 3 to 4 minutes during peak hour traffic

OPTION B

SW ROXBURY ST TO SW RAYMOND ST

Rechannelization

SW ROXBURY ST TO SW EDMUNDS ST

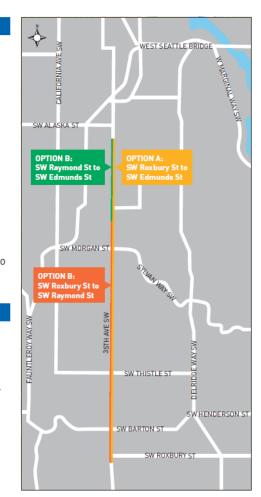
- Peak hour parking restrictions allows for one additional lane for vehicular traffic
- AM northbound
- PM southbound

Key Features

- Maintains extra travel lane during peak
- Same benefits as alternative 1 south of SW Raymond Street

Limitations

- Initial modeling shows vehicle delays of 3 minutes during peak hour traffic
- Partial pedestrian safety benefits during peak hours



Community feedback

- Make 35th safer for pedestrians
- Reduce speeds
- Improve parking conditions
- Put/don't put 35th on a road diet
- Repair pavement
- Provide bicycle facilities on adjacent routes
- Provide more enforcement patrols
- Two petitions



Remarks from Mayor Ed Murray

Design process

Options developed to:

- Balance the need to move people and goods with the function of the nearby land uses
- Achieve project safety goals

Performance monitoring

- Regularly monitor and collect data including:
 - Volumes
 - Speeds
 - Collisions

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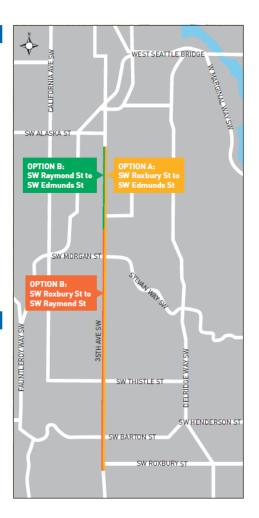
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Design

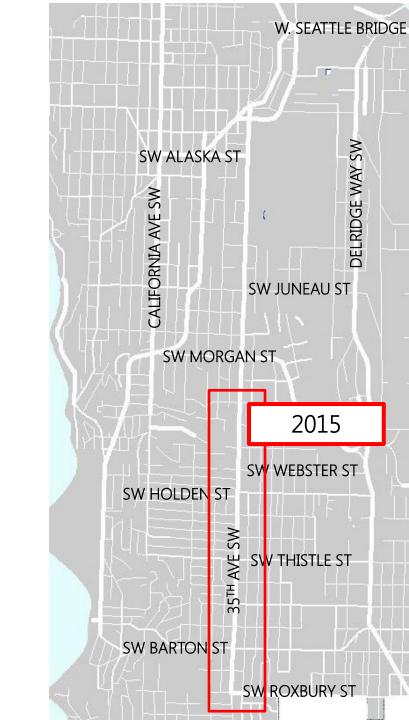
Modeling and travel times

- Design alternatives modeled using Synchro 8 and SimTraffic 8
- Efficiency of design and longer signal cycles substantially offset loss of travel lanes
- Modeling results:
 - 1 to 2 two minutes delay depending on time of day and direction of travel
 - Maximum delay of 2.5 minutes during PM peak hour

Implementation plan

2015

 Option A between SW Roxbury Street and SW Willow Street

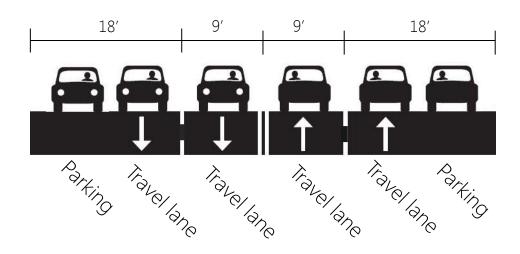


Design

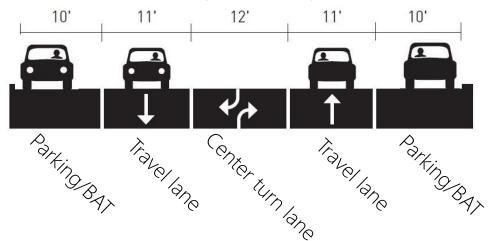
2015 design details

- More space for parking
- One lane in each direction
- Center turn lane
- Bus and turn lanes (BAT) at:
 - Barton, Thistle, Holden and Webster
- 30 mph speed limit
- Signal optimization
- Channelization improvements on SW Barton Street
- No changes on approaches to SW Roxbury Street

35TH AVENUE SW (EXISTING)



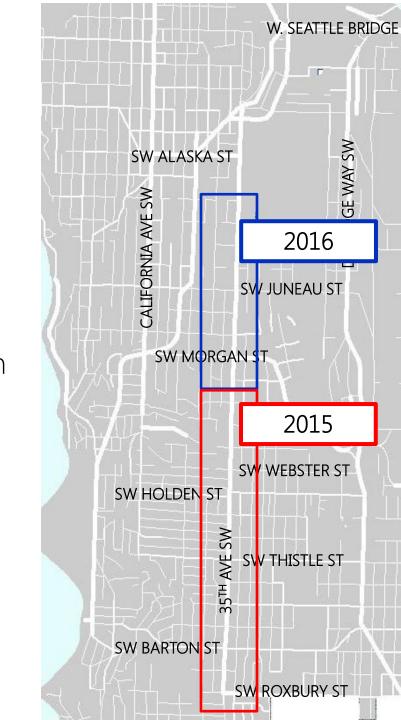
35TH AVENUE SW (PLANNED)



Implementation plan

2016

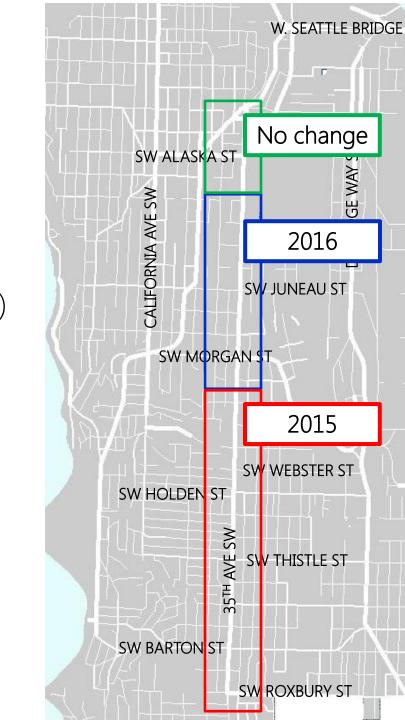
- Evaluation of 2015 changes
- Neighborhood greenway study
- SHA development at 35th and Graham
- NPSF partnership
- Channelization changes on SW Morgan Street
- *Option A north of SW Morgan Street*



Implementation plan

North of SW Edmunds Street

- No changes channelization changes north of SW Edmunds Street
- Re-paving and new curb ramps (entire corridor, pending Levy to Move Seattle)



Enforcement

- Increased enforcement efforts
 - SeaStat-Vision Zero patrols
 - Grant funded pedestrian emphasis patrols
- Target areas:
 - North of Morgan
 - At Barton
 - At Raymond
 - School zones



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
- Maximum capacity turn pockets
- Easier turns to and from 35th
- 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 125 th St	-10%	-8%	-69%	+4%
NE 75 th St	-50%	-13%	-75% to 79%	+3%

Next steps

July 2015	Outreach meetings
September-October 2015	Phase 1 implementation begins
Spring 2016	Project information sessions
Summer 2016	Phase 2 implementation begins

Questions?

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http://www.seattle.gov/transportation









