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

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
- 85\textsuperscript{th} percentile speeds:
  - 38.5 mph at SW Brandon St
  - 40.9 mph at SW Willow St
  - 36.5 at SW Roxbury St
  - 39.3 at SW Graham Street
- 15 percent of drivers travel faster than the 85\textsuperscript{th} percentile speed
Why speed matters

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

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

<table>
<thead>
<tr>
<th>Year</th>
<th>At Roxbury</th>
<th>At Alaska</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>22,400</td>
<td>22,400</td>
<td>--</td>
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<tr>
<td>2009</td>
<td>20,600</td>
<td>23,600</td>
<td>-3.6%</td>
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<tr>
<td>2010</td>
<td>16,100</td>
<td>22,700</td>
<td>-9.0%</td>
</tr>
<tr>
<td>2011</td>
<td>15,800</td>
<td>23,500</td>
<td>+1.5%</td>
</tr>
<tr>
<td>2012</td>
<td>16,000</td>
<td>23,000</td>
<td>0.0%</td>
</tr>
<tr>
<td>2013</td>
<td>16,500</td>
<td>24,600</td>
<td>+4.3%</td>
</tr>
<tr>
<td>2015</td>
<td>16,937</td>
<td>24,631</td>
<td></td>
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</tbody>
</table>
Citywide trends

- Seattle’s population is growing rapidly
- Traffic volume dropping
- Transit ridership is up 40+ percent
- More information at: www.seattle.gov/transportation/reports.htm
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

<table>
<thead>
<tr>
<th>Time of day</th>
<th>Pedestrian count</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM peak hour (7:45 AM – 8:45 AM)</td>
<td>313</td>
</tr>
<tr>
<td>Mid-day (11:30 AM – 12:30 PM)</td>
<td>239</td>
</tr>
<tr>
<td>PM peak hour (4:30 PM to 5:30 PM)</td>
<td>561</td>
</tr>
</tbody>
</table>
Collision data

Last 3 plus years
- 294 total collisions
- 128 injuries
- 2 fatalities

Last 10 years
- 1065 total collisions
- 412 injuries
- 5 fatalities
Collision data

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
Collision data

Top Collision Types

- Pedestrian: 15
- Head On: 1
- Angles: 49
- Left turns: 33
- Rear end: 59
- Parked car: 31
- Sideswipe: 26
- Other: 20
Collision data

Top contributing collision causes:

– Distraction
– Speeding
– Impairment
– Failure to grant right of way
Collision data

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

<table>
<thead>
<tr>
<th>Top Corridors for Traffic Fatalities (last 10 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aurora/SR-99</td>
</tr>
<tr>
<td>2. Rainier Avenue S</td>
</tr>
<tr>
<td>3. MLK Jr Way S</td>
</tr>
<tr>
<td><strong>4. 35th Avenue SW</strong></td>
</tr>
<tr>
<td>East Marginal Way</td>
</tr>
<tr>
<td>Lake City Way NE</td>
</tr>
</tbody>
</table>
Outreach

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

• SDOT cannot install speed photo enforcement cameras outside of 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

<table>
<thead>
<tr>
<th>Street</th>
<th>Collisions</th>
<th>85% speed</th>
<th>10+ mph speeders</th>
<th>Volume change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickerson St</td>
<td>-23%</td>
<td>-21%</td>
<td>-94%</td>
<td>-1%</td>
</tr>
<tr>
<td>Fauntleroy Way SW</td>
<td>-31%</td>
<td>-1%</td>
<td>-13%</td>
<td>+0.3%</td>
</tr>
<tr>
<td>NE 125th St</td>
<td>-10%</td>
<td>-8%</td>
<td>-69%</td>
<td>+4%</td>
</tr>
<tr>
<td>NE 75th St</td>
<td>-50%</td>
<td>-13%</td>
<td>-75% to 79%</td>
<td>+3%</td>
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## Next steps

<table>
<thead>
<tr>
<th>July 2015</th>
<th>Outreach meetings</th>
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<tr>
<td>September-October 2015</td>
<td>Phase 1 implementation begins</td>
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<tr>
<td>Spring 2016</td>
<td>Project information sessions</td>
</tr>
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<td>Summer 2016</td>
<td>Phase 2 implementation begins</td>
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Questions?

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http://www.seattle.gov/transportation/35thSW.htm

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