Rainier Avenue South Road Safety Corridor

Seattle Bicycle Advisory Board

Project Manager Jim Curtin

December 3, 2014

SDOT

Seattle Department of Transportation

SDOT's mission & vision

Mission: delivering a first-rate transportation system for Seattle.



Vision: a vibrant Seattle with connected people, places, and products.

SDOT's values

Presentation overview

- Project background
- Project area
- Existing conditions
- Data
- General Q & A
- Feedback session

Background

Project Inception

- Safety improvements requested by local community
- Data indicates significant speed and collision issues along the Rainier corridor

Background

Project Goals

- Reduce speeds
- Provide new and enhance existing pedestrian crossings
- Maintain efficient transit service
- Improve intersection safety
- Reduce injuries

Background

Strategies

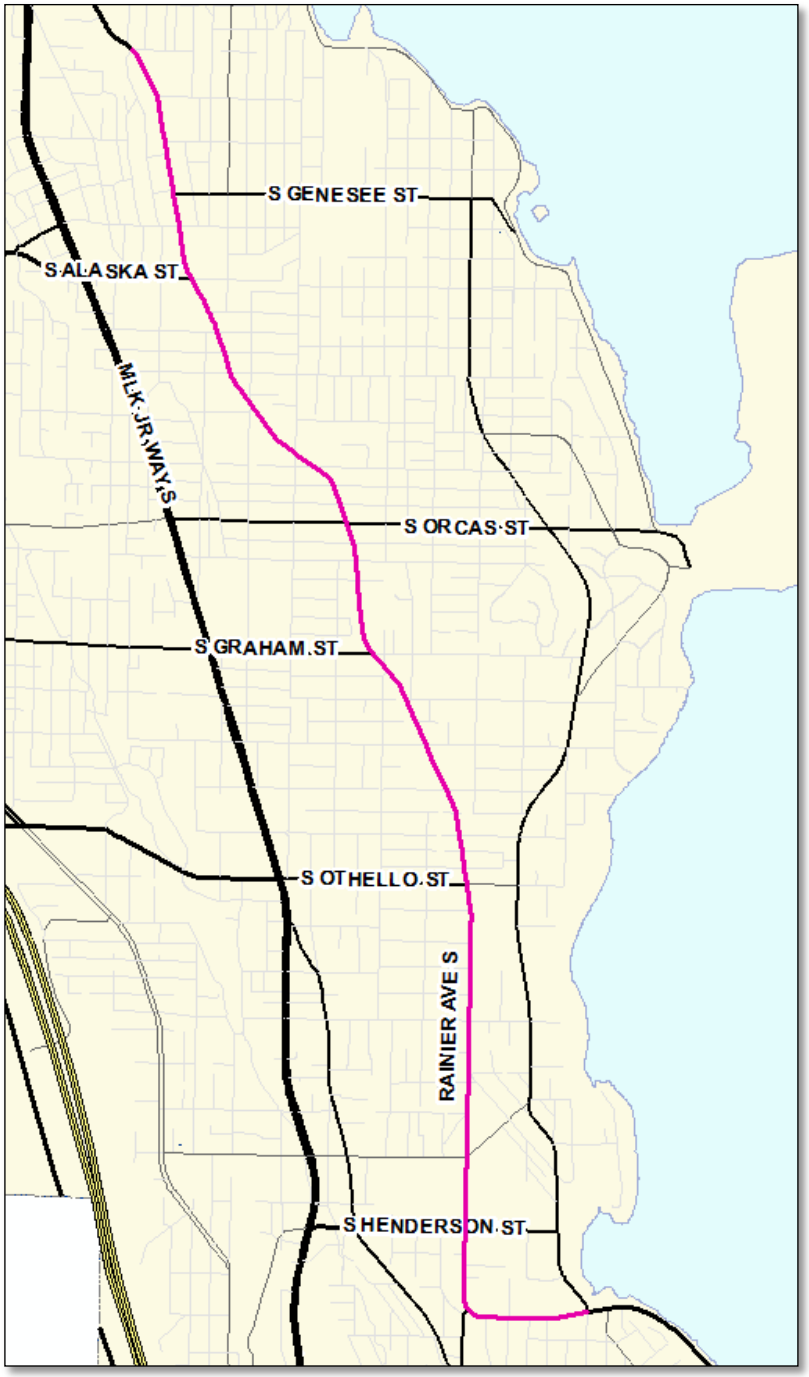
- Data-driven education, enforcement, and engineering efforts
- Short and long-term engineering solutions
- Public input

Implementation

- Spring 2015 and beyond

Project area

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



Current street design

Rainier Avenue South

- Principal arterial
- 4 to 5 lanes
- 50-52 feet wide
- Curves and skewed intersections

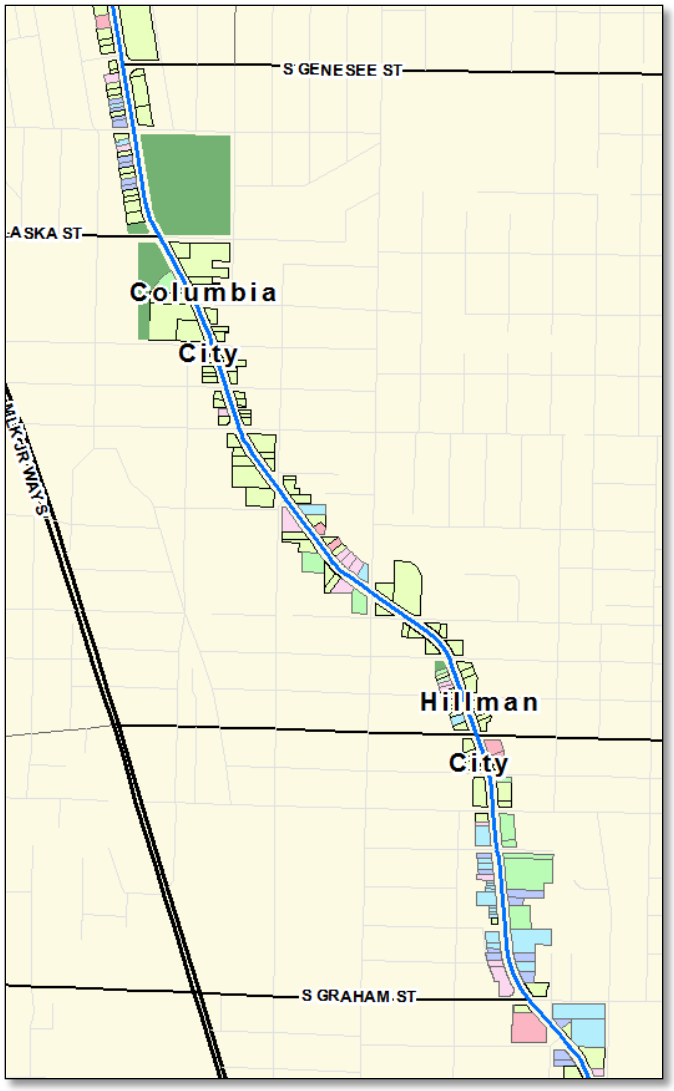
What's along the corridor

People

- More than 70,000 live in zip codes 98118 and 98144

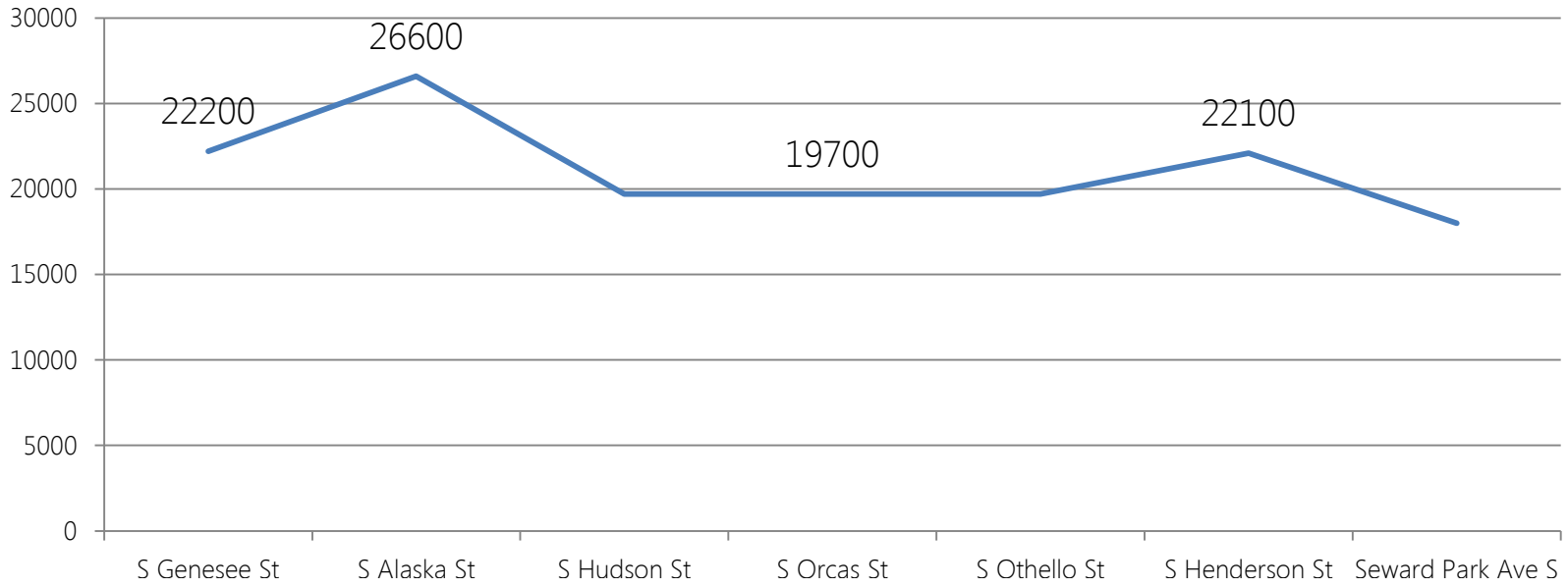
Land uses

- 431 parcels
  - 45% Commercial/Mixed Use (195)
  - 30% Single/Multi-Family (128)
  - 16% Vacant (70)
- 18 major institutions
- 10+ schools and daycare centers within three blocks
- 10 industrial uses
- 5 parks
- Senior housing and community centers
- 2 libraries



Traffic data

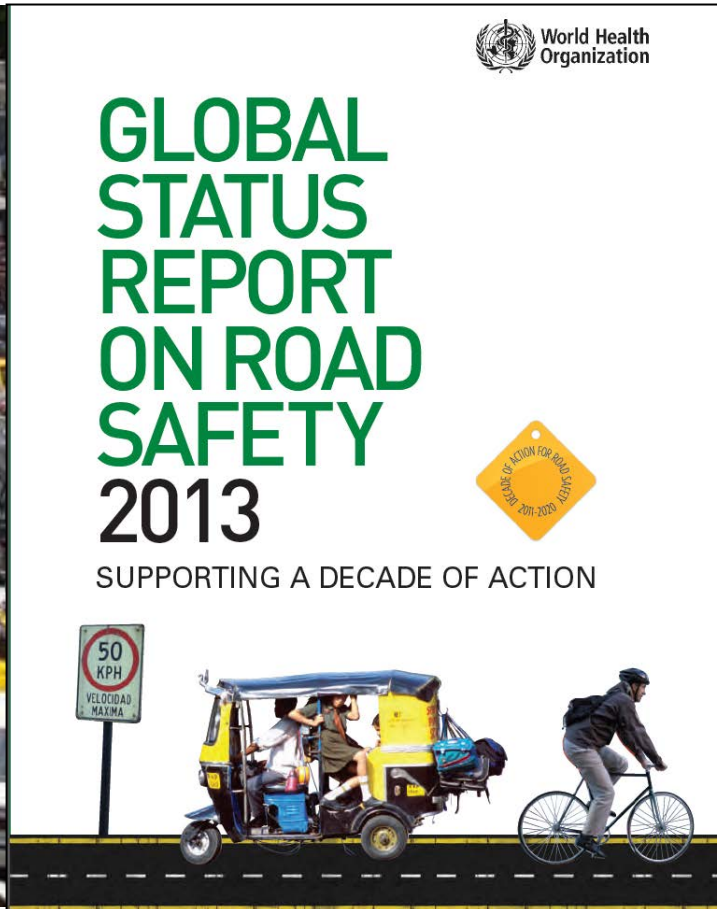
- 19,700 to 26,600 vehicles per weekday
- More than 11,000 daily transit trips, transit service every 10 minutes
- High levels of pedestrian activity
  - 100 crossings per day Rainier and Henderson
- Primary emergency response route
- Commercial vehicle route



Average Weekday Traffic Volume

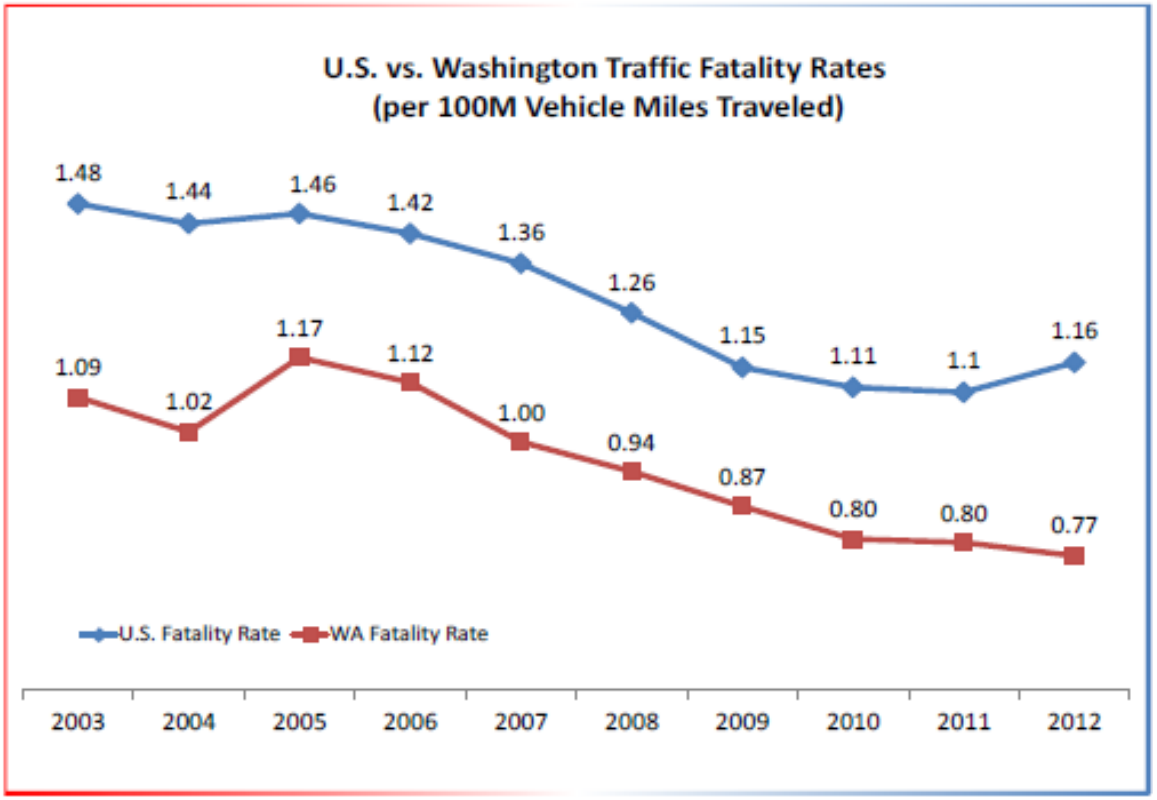
Collisions: World Health Issue

- 1.24 million per year worldwide road traffic deaths
- 35,200 traffic deaths in United States
- 3.8 million crash injuries



2013 WA Annual Collision Summary

- 5,359,469 licensed drivers, 6,003,141 vehicles
- 440,773 speeding citations
- 39,389 cell/texting citations, 31,724 DUI
- 440 deaths in Washington, 76 in King County

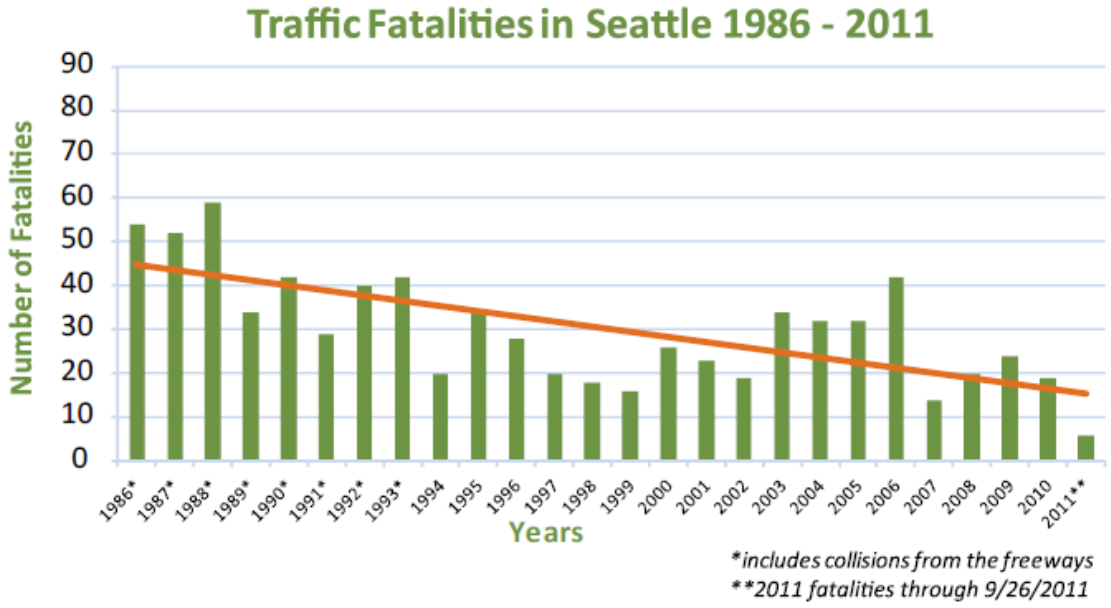


Source: CLAS (WSDOT) and FARS (WTSC). See Appendix A and B for more information.
2013 data is not available.

Working toward zero traffic deaths

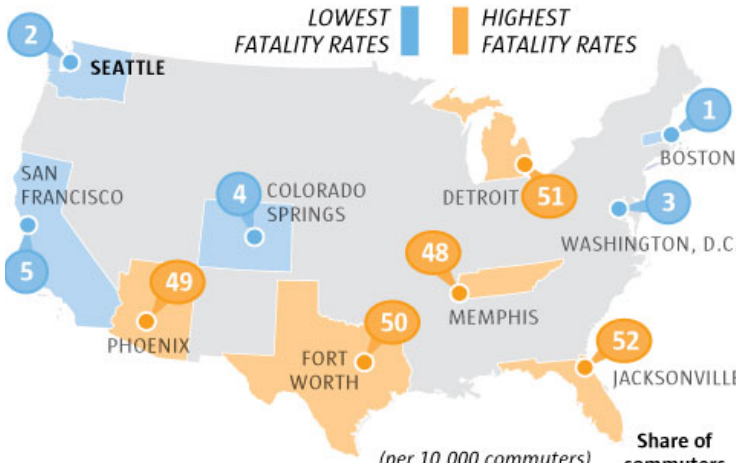
Seattle frequently recognized as safe city but there's room for improvement

- 10,000+ collisions annually
- 350+ pedestrian crashes annually
- 400+ bicycle collisions annually
- Around 20 deaths per year



Safest, deadliest cities for walking and biking

Cities where many people walk or bike to work are among the safest. Seattle ranks second, based on a formula to determine the overall fatality rate for bike and pedestrian commuters.

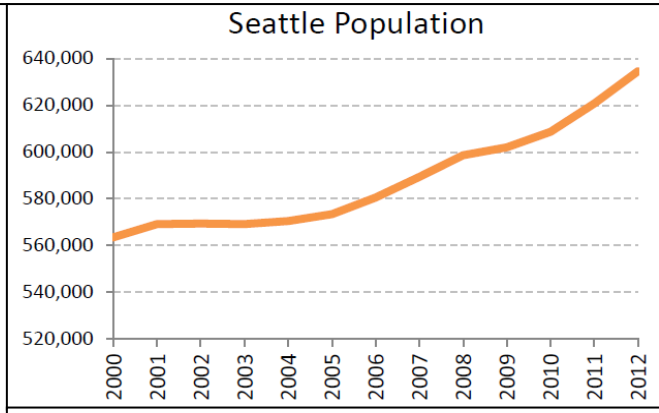


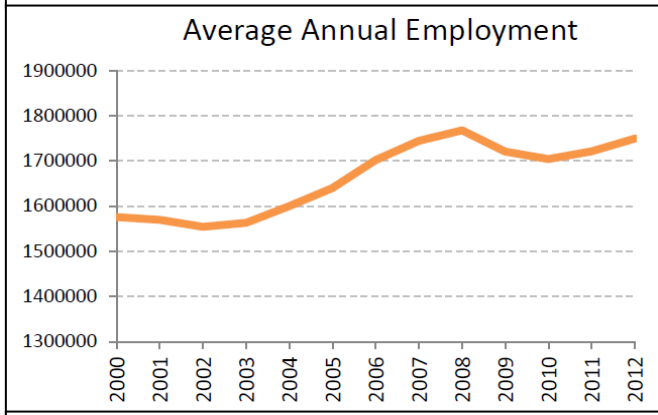
	RANK/CITY	(per 10,000 commuters) Bike fatalities	Pedestrian fatalities	Share of commuters who walk or bike
SAFEST CITIES	1. Boston	2.5	0.9	16.7%
	2. **Seattle**	1.7	2.7	12.0
	3. Washington, D.C.	1.1	3.3	14.7
	4. Colorado Springs	4.8	3.4	3.7
	5. San Francisco	0.9	4.0	13.2
DEADLIEST CITIES	52. Jacksonville	33.1	41.6	1.7 %
	51. Detroit	39.8	40.1	3.5
	50. Fort Worth	41.9	29.6	1.1
	49. Phoenix	19.3	29.6	2.7
	48. Memphis	36.0	29.1	2.1

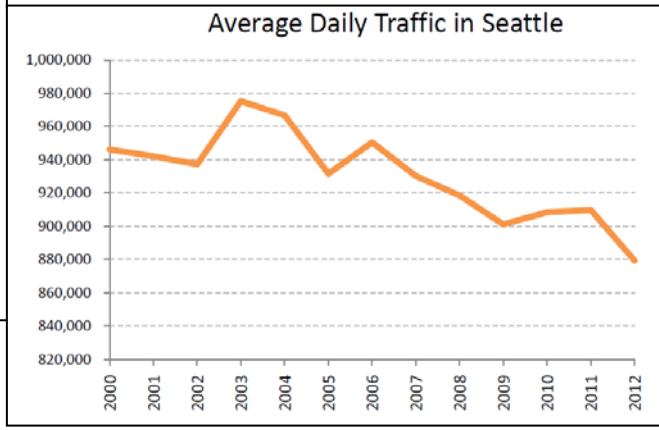
Source: Benchmarking Report, Alliance for Biking & Walking, 2014

GARLAND POTTS / THE SEATTLE TIMES

Seattle is growing. A lot.







Collision data

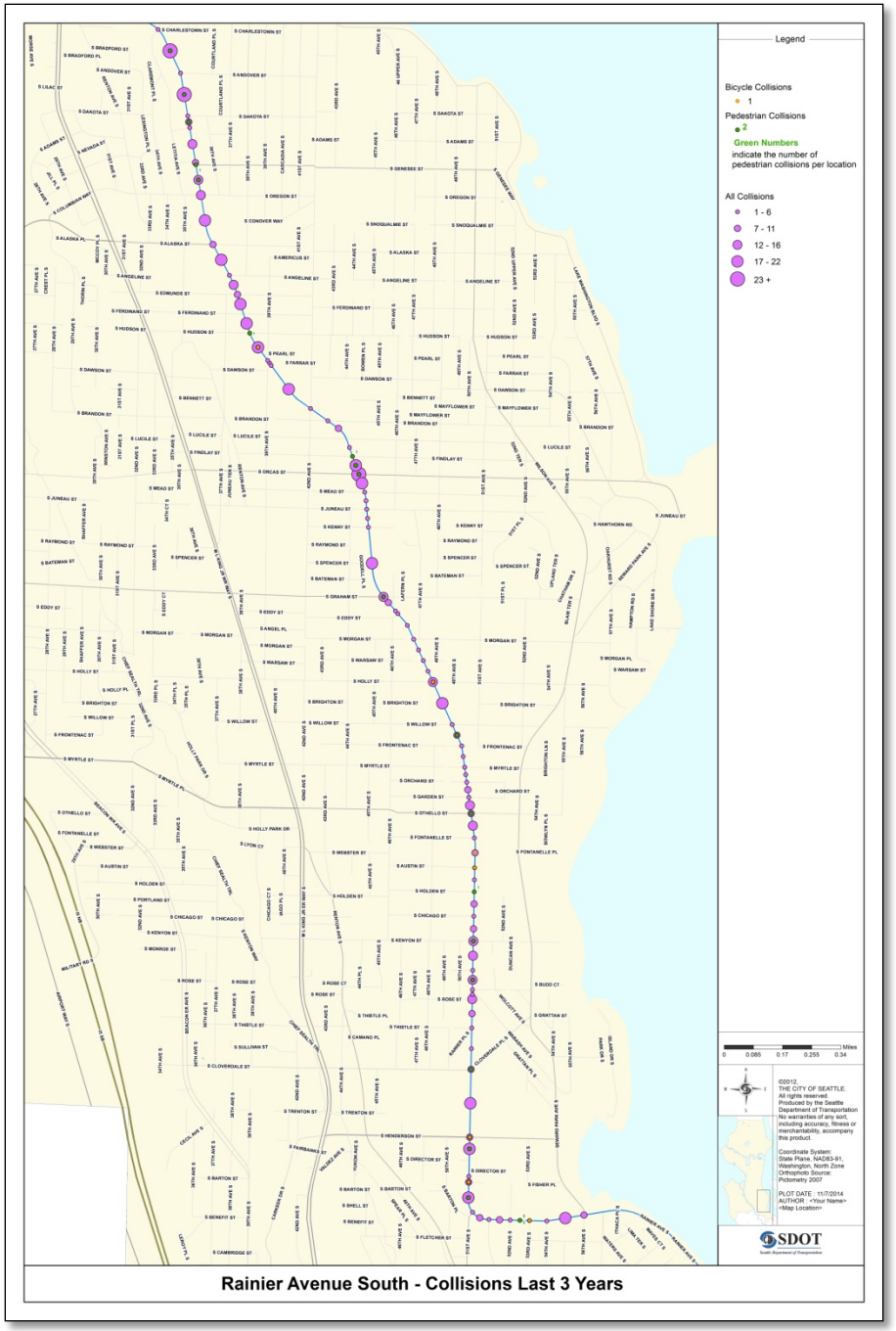
Average of 1 crash/day on Rainier

Last 3 years

- 1243 total collisions
- 630 injuries
- 2 fatalities

Last 10 years

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



Collision data

Pedestrian and bicycle collisions

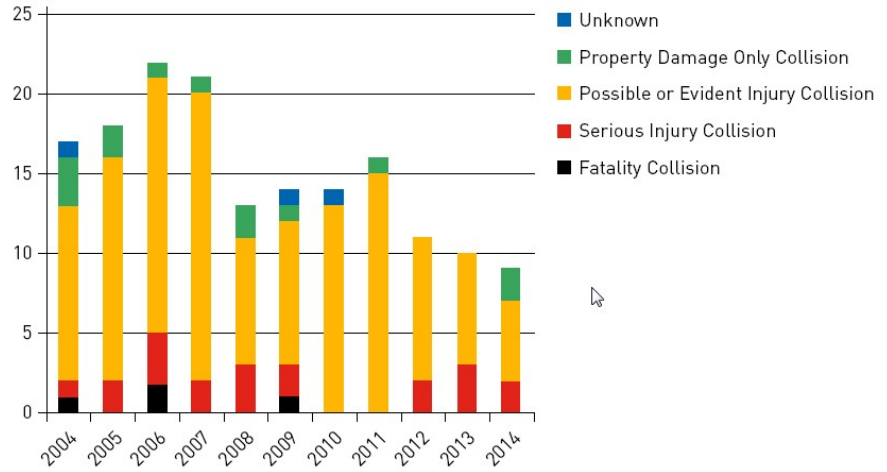
Last 3 years

- 46 pedestrian-vehicle
- 10 bicycle-vehicle

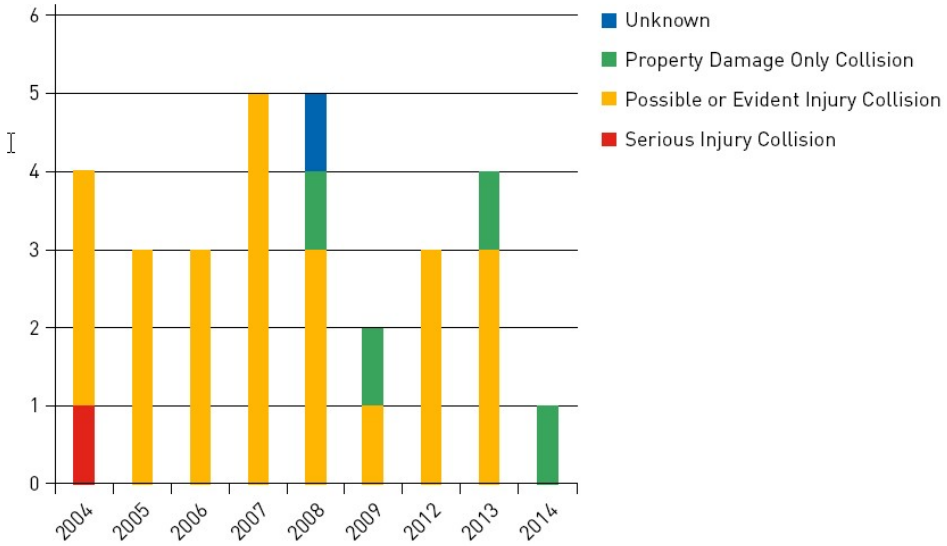
Pedestrian and bicycle collisions

Last 10 years

- 165 pedestrian-vehicle
- 30 bicycle-vehicle



Annual Pedestrian Collisions



Annual Bicycle Collisions

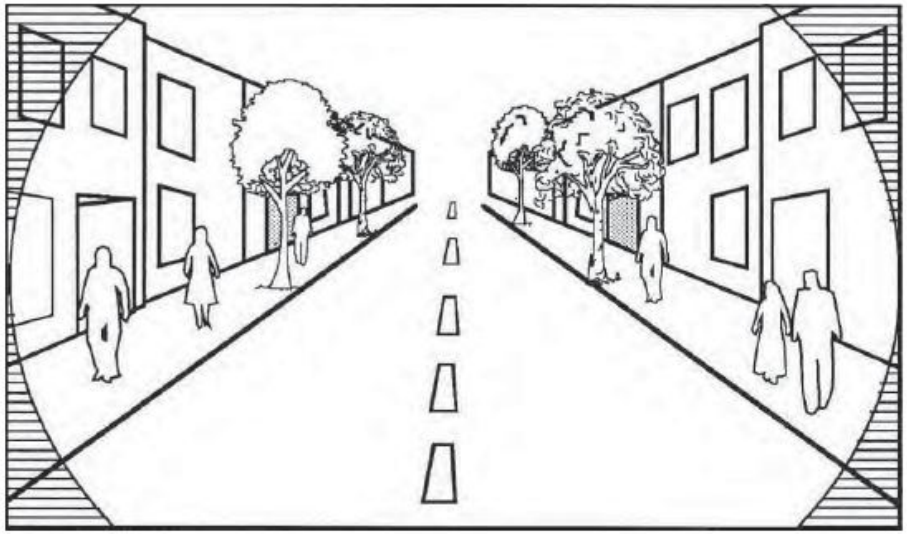
Recent speed studies

Posted speed limit 30 miles per hour

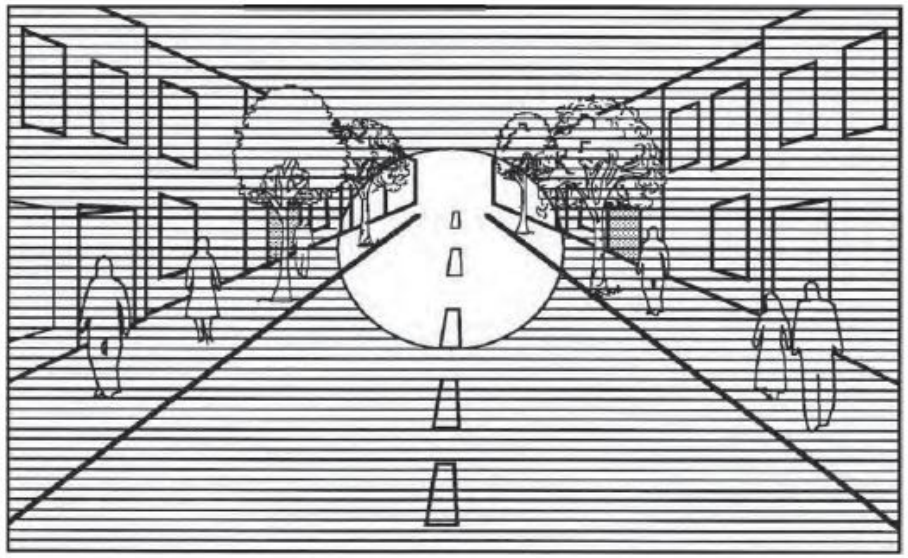
Location	85th Percentile Speed	Percent Speeding (3+ mph over the speed limit)	Average number of high-end speeders per weekday
S Hudson Street	35 mph	20%	611/day
42nd Avenue South	38 mph	55%	1812/day
S Holly Street	37 mph	56%	1083/day
S Cloverdale Street	36 mph	38%	1083/day

High-end speeders = 10+ miles per hour over the speed limit

Why speed matters

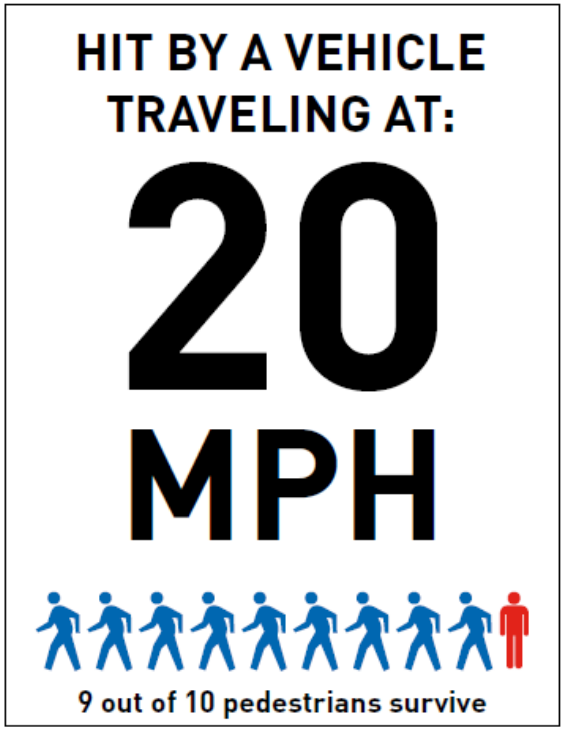


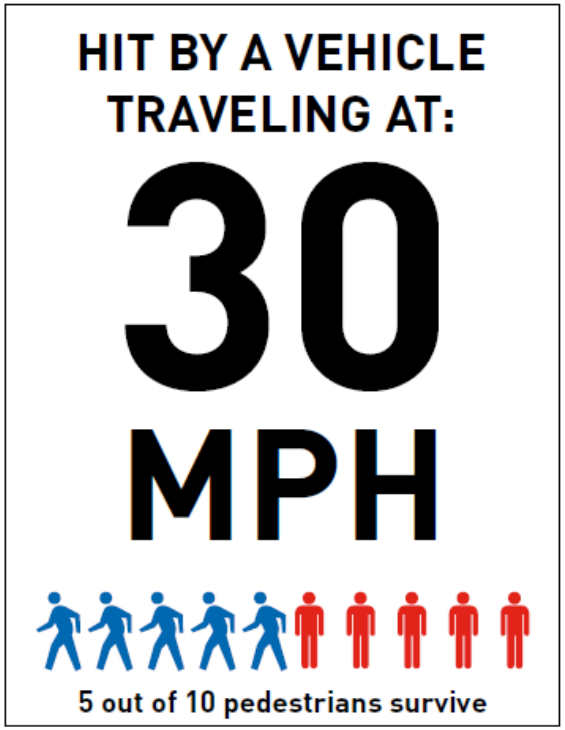
Drivers' Field of Vision
15 mph

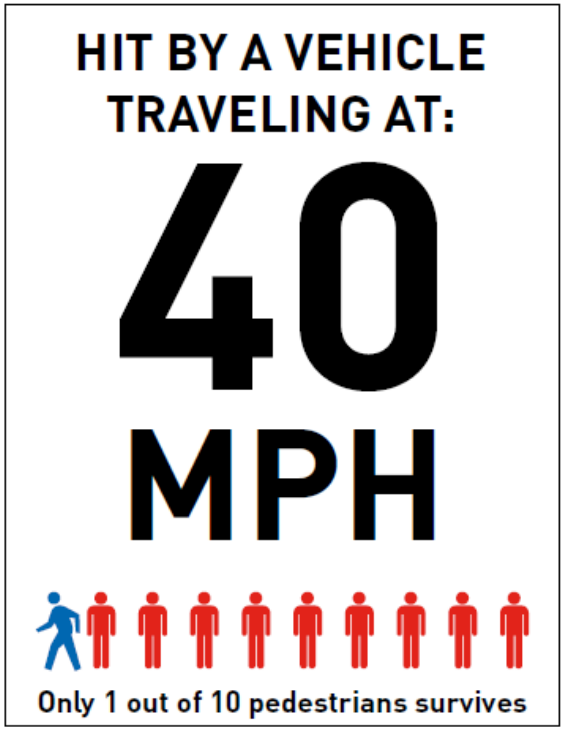


Drivers' Field of Vision
30 mph

Why speed matters







Behavioral issues and enforcement

Contributing causes

- Distraction
- Speeding
- Impairment
- Failure to yield

Enforcement

- Targeted patrols
- Photo enforcement

Bicycling along and across Rainier

BMP

- No facilities recommended

Rainier Safety Project

- Low cost, big safety impact
- No funding for PBL at this time

Bicycle Community

- Rainier an attractive route
- Strong desire for protected bike lanes

Next steps

December through January	Outreach and conceptual designs
February 2015	Design Alternatives Review Meetings
March/April 2015	Final determination and outreach meeting
Spring 2015	Implementation begins