Vision Zero Safer Streets for Seattle

SLOW

Seattle Pedestrian and Bicycle Advisory Boards Joint Meeting Sam Zimbabwe, Jim Curtin, and Bradley Topol 01/08/2020



Historic Data Trends (1936 - 2019)





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TO 1939

Current Data Trends

30 Total **Fatalities** Motorcycle 25 Fatalities - Cyclist Pedestrian 20 Fatalities - Linear (Total Fatalities) 15 10 5 0 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Traffic Fatalities on Seattle Streets (as of 1/2/2020)

- 2019 preliminary data
 - 25 total fatalities
 - Highest in over a decade
 - Pedestrians continue to be overrepresented
 - 164 serious injury collisions
 - As of 12/16
 - 3-year average = 170



Data Trends (2015-Oct 2019) Ped Crashes





Reactive & Proactive Crash Reduction

- Reactive Actions
 - High collision locations (HCL's)
 - High collision corridor projects
 - Targeted SPD enforcement
 - Red-light camera enforcement
 - Major Crash Review Task Force





- Proactive Actions
 - BPSA 2.0 (Bike & Ped Safety Analysis)
 - LPI's (Leading pedestrian intervals)
 - Citywide speed limit reductions







Proactive Actions: BPSA Phase 2

Risk Factors

- Pedestrian, bicyclist, motor vehicle volumes
- Number of vehicle travel lanes
- Number of legs at intersection
- Roadway functional classification
- Number of transit stops
- Urban village/urban center designation
- Non-through lanes (ie., left-turn lanes, right turn lanes, bus lanes)
- Intersections with one or more one-way streets





BPSA Phase 2

- Hot spot locations are prioritized for LPI's
- 110 LPI locations targeted for 2020
- Review of hot spot locations for additional pedestrian and bicycle safety improvements





Proactive Actions: LPI's

Leading Pedestrian Intervals (LPIs)

- LPIs give pedestrians 'walk' signal before vehicular traffic get green lights
- LPIs reduce ped collisions up to 60%
- •141 installed citywide (15% coverage)
 - 102 installed in 2019
- 110 additional locations planned for 2020





Speed Limits : Center City



Center City signal timing

- Lowered speed limits in Center City to 25 MPH
- Roughly 400 signals were retimed for 25 MPH (40% of citywide signal network)
- Gateway signs at all arterial entry points to city

Traffic signals were re-timed to reduce posted speed limit to **25 MPH**





2016 speed limit changes



Speed Limits : Center City

Center City signal timing results

- Overall collisions reduced by 13%
- Severe and fatal collisions reduced by 20%





Citywide Speed Limits – Existing Network



City of Seattle

Citywide Speed Limits

• The World Health **Organization:** A five percent reduction in average speed can result in a 30 percent decrease in traffic fatalities



2019 Seattle Arterial Speed Limits in Miles (465 Miles Total)

ity of Seattle

Speed Limits: Greenwood Ave N/Phinney Ave N

<u>Action</u>

- Replaced existing 30mph signs (1 mile spacing) and installed new 25mph signs at ¼ mile spacing
- Implemented February 2018

Results

- 85th %tile speed reduction of 34 to 31 mph
- 50th %tile speed reduction of 29 to 27 mph (6.8%)
- 34% reduction in all crashes (30 to 20 a year)
- 10% reduction in injury crashes (12 to 11 a year)



N 65th St to N 90th St (1.3 miles)



Speed Limits: N 85th St

<u>Action</u>

- Previously unsigned
- Installed new 25mph signs at ¼ mile spacing
- Implemented February 2018

<u>Results</u>

- 50th %tile speed reduction of 27 to 26mph (3.7%)
- Number of drivers speeding reduced by 4%
- 53% reduction in all crashes (36 to 17 a year)
- 40% reduction in injury crashes (15 to 9 a year)



18th Ave NW to Fremont Ave N (1.4 miles)



Speed Limits: Green Lake/Roosevelt Urban Village

<u>Action</u>

- Posted all arterials to 25 mph (33 new signs)
 - 7 speed limit signs previously posted within urban village
- Implemented November 2018

<u>Results</u>

- 85th %tile speed reduction of 28 to 27 mph (3.5%)
- 26% reduction in top end speeders (+10 mph over speed limit)
- 44% reduction in all crashes (65 to 36 a year)



Multiple Arterial Streets (6.2 miles)



SPD Enforcement

Pedestrian Safety Patrols

 Focusing on drivers that fail to stop for pedestrians in crosswalks

Vision Zero Patrols

 600 hours of additional enforcement focusing on high crash corridors and top contributing factors to collisions

Funded November 2019 – December 2021





Red Light Cameras

Expand camera enforcement

- Red-light cameras reduce angle and pedestrian collisions
- Double the number of red-light cameras at high priority intersections from 31 to 62
- Install an additional five school zone speed cameras



Seattle's data-driven Red Light Camera Program has successfully reduced collisions at intersections. SDOT and SPD are currently monitoring several intersection for new cameras.



Major Crash Review Task Force

 Review details of serious and fatal collisions and develop recommendations to enhance safety

Launch 2020

Potential Task Force Members

SDOT, SPD, and SFD Mayor's Office Public Health – Seattle & King County City Attorney WSDOT Washington State Patrol King County Metro **King County Medical Examiner** Sound Transit Modal Advisory Board Representatives University of Washington Harborview Injury Prevention and Research Center



Potential New Initiative: No Turns on Red

- 105 Existing 'No Turn on Red' Signalized Intersections
 - 11% citywide coverage
- 2015-2019 Ped Crash Data
 - Of right turning ped crashes 60% are turns on green and 40% are turns on red (typ.)
 - 4% of total ped crashes are RTOR (est.)
 - 0.7% of pedestrian serious injury crashes are turns on red (2 of 269)
 - No known fatalities (2010-2019 crash data)





High Collision Corridors

Aurora Avenue North (SR-99)

- 2019 WSDOT partnership installed 63 new curb ramps, intersection improvements at N 83rd St, new red bus lane markings and repaved entire corridor
- Implement \$2 million in capital investments through Aurora Safety Corridor Project (2020-2024)
- Launch planning study to develop longterm, high capital street design concepts for Aurora Avenue North in (2021)





High Collision Corridors

Lake City Way (SR-522)

- \$8.5 million of capital investments through Lake City Way Safety Corridor Project (2020 – 2021)
 - Five blocks of new sidewalks
 - New signals and crosswalks at:
 - NE 82nd St
 - NE 135th St
 - Intersection improvements and new crosswalks at:
 - NE 95th St
 - NE 137th St
- Partnership with WSDOT



High Collision Corridors

Additional projects to be delivered through the Levy including:

- Rainier Avenue South
- SW Roxbury Street
- 23rd Avenue Phase 3
- Martin Luther King Jr Way S
- Sand Point Way





Questions?

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