

Attachment A: Speed Limit Reductions Save Lives & Improve Traffic Safety

According to recent studies conducted and published by Seattle's Department of Transportation (SDOT) and Portland's Bureau of Transportation (PBOT), the inexpensive implementation of speed limit signs, resulted in small reductions in vehicle speeds and significant street safety gains. This was possible because Oregon and Washington state have implemented laws which allow cities greater flexibility in setting speed limits on their streets.

PBOT released a report that collected data before and after residential speed limits were reduced from 25 mph to 20 mph, with an objective to determine if there was a change in observed vehicle speeds following the change. The report analyzed 214,220 data points collected at 58 locations.

Overall, the analysis suggests that the reduction of posted speed limits to 20 mph resulted in lower observed vehicle speeds and fewer vehicles traveling at higher speeds, such as vehicles travelling over 30 mph on residential roads. Most notably, the reduction in the percentage of vehicles travelling faster than 30 mph and 35 mph were larger in magnitude than the other changes¹.

Similarly, in a case study conducted by SDOT focused on a controlled study of streets in several North Seattle neighborhoods, they found that installing more speed limit signs reduced vehicle speeds and reduced crashes and injuries.

In all these locations, SDOT increased the speed limit sign frequency to 4 signs per mile – over four times as many speed limit signs as there were before the study. Some of the locations did not previously have speed limit signs at all, and some locations were reduced from 30 MPH to 25 MPH.

In order to remove other variables from the experiment, they intentionally did not advertise the changes with a communications campaign, retime traffic signals, increase enforcement, or make any other engineering adjustments to the street design.

SDOT found an overall 22% reduction in crashes and a 54% reduction in the most dangerous speeders². For example, SDOT installed new 25 mph speed limit signs at 1/4 mile spacing on a 1.3 mile stretch of road averaging 13,000 vehicles daily. This same stretch of road previously was signed with a speed limit of 30 mph at 1 mile spacing. Installing 25 mph speed limits signs at 1/4 mile spacing resulted in a 35% decrease in all crashes and 21% decrease in injury crashes - along with 7% decreases in 50th percentile speeds and 85th percentile speeds.³

These are just two examples of many U.S. states and local agencies who have lowered speed limits and seen positive safety outcomes. Additional examples are summarized in the University

¹ Seattle Department of Transportation SPEED LIMIT CASE STUDIES

https://www.seattle.gov/Documents/Departments/SDOT/VisionZero/SpeedLimit_CaseStudies_Report.pdf

² SDOT Blog, Seattle receives national recognition for preventing crashes with lower speed limits, <https://sdotblog.seattle.gov/2020/07/22/lower-25mph-speed-limit/>

³ Effect of Residential Street Speed Limit Reduction from 25 to 20 mi/hr on Driving Speeds in Portland, Oregon <https://www.portland.gov/sites/default/files/2020/pbot-20-mph-speed-study-finalv5.pdf>

of California Institute of Transportation Studies' Research Synthesis for the AB 2363 Zero Traffic Fatalities Task Force.⁴

Acknowledging these findings, the California State Transportation Agency (CalSTA) facilitated a Zero Traffic Fatalities Task Force, which developed a report to make recommendations on how to prevent traffic deaths in California.⁵ The Task Force, recommended, amongst other things, reconsidering the traditional 85th percentile methodology to set speeds, which has been in practice for more than 80 years.

⁴ University of California Institute of Transportation Studies' Research Synthesis for the AB 2363 Zero Traffic Fatalities Task Force, December 2019: <https://calsta.ca.gov/-/media/calsta-media/documents/final-uc-its-research-synthesis-ab2363-a11y.pdf>

⁵ Zero Traffic Fatalities Task Force Report, January 2020: <https://calsta.ca.gov/-/media/calsta-media/documents/calsta-report-of-findings-ab-2363-zero-traffic-fatalities-task-force-a11y.pdf>