

Introduction

The purpose of this briefing is to explore Denver's unposted speed limit policy and how it compares to its peer cities. Selecting an appropriate speed limit can be a contentious issue in the community, as more vulnerable residents (pedestrians, cyclists, parents, etc.) may want slower speeds to promote safety and a higher quality of life; while motorists may seek higher speed limits to minimize travel time. According to the Federal Highway Administration (FHWA) speed limits must be credible and must set reasonable expectations of driver behavior. To achieve safe speed limits, it is recommended by the FHWA that road authorities:

- Make the road and its environment more “self-explaining” through traffic control devices, publicity and education campaigns, and reconstruction where required
- Build a case over time for a new paradigm as to what is regarded and legislated as a safe speed limit for the street network ¹

How speed limits are posted in the urban context

The Uniform Vehicle Code (UVC) provides guidelines on speed limit statutes and regulations. This code was designed by the National Committee on Uniform Traffic Laws and Ordinances. The UVC recommends a minimum speed of 35 mph for urban districts.² Speed limits are determined locally between the state and municipality since the repeal of the National Maximum Speed Limit in 1995.

There are several methods for setting speed limits:

- Engineering approach – pertaining to the 85th percentile travel speed
- Expert system approach - speed limits are set by a computer program
- Optimization - speed limits are set to minimize the total societal costs of transport
- Injury minimization or safe system approach - speed limits are set according to crash types that are most likely to occur³

Peer cities and unposted speed limits

Seattle has several ordinances delineating the appropriate speed of a vehicle within its code pending the designation of the street: arterial or non-arterial. Sec. 2(11.52.060) states that unposted speed limits on non-arterial streets shall not exceed 20 mph. Sec. 2(11.52.080) states that unposted speed limits on arterial streets shall not exceed 25 mph. Seattle changed the maximum speed limits in 2016 as a part of its strategy to eliminate traffic deaths in alignment with its Vision Zero goals.⁴

Portland recently lowered its speed limits on residential streets from 25 mph to 20 mph earlier in 2018⁵. Reducing residential speed limits is also part of Portland's Vision Zero plan to eliminate traffic fatalities by 2025.⁶ The Portland Bureau of Transportation (PBOT) has determined that narrow

¹ https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa12004/fhwasa12004.pdf

² <https://law.resource.org/pub/us/cfr/ibr/004/ncutlo.vehicle.1969.pdf>

³ https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa12004/fhwasa12004.pdf

⁴ <https://www.seattle.gov/visionzero>

⁵ <https://www.portlandoregon.gov/transportation/article/666620>

⁶ <https://www.portlandoregon.gov/transportation/article/594740>

residential roadways have speed limits of 15 mph. A narrow residential roadway is defined as a residence district not more than 18 feet wide at any point.⁷

Minneapolis: In accordance with state law speed limits on streets in urban districts is 30 mph.⁸ Cities, counties, and towns have very limited power to set speed limits on streets and highways under their own jurisdiction. Local municipalities must request MnDOT perform an engineering and traffic study of the road. MnDOT determines the safe and reasonable speed limit.⁹ However, Minn. Stat. §169.011 (64) states that local road authorities may reduce the speed limit to 25 mph on a “residential roadway.”

San Francisco’s Municipal Transportation Authority determines speed limits. The slowest *prima facie* is 25 mph. In alignment with its Vision Zero plan San Francisco reduced its speed limits in areas that have experienced high pedestrian injury from 30 mph to 25 mph in 2017.¹⁰

Denver’s unposted speed limits

According to DRMC Sec. 54-157 unposted speed limits are:

- (1) Fifteen (15) miles per hour in alleys;
- (2) Twenty (20) miles per hour on park roadways;
- (3) Twenty-five (25) miles per hour on streets and highways

In Denver, the City Traffic Engineer has the power and authority to determine the basic maximum speed limit. The City Traffic Engineer is authorized to accept recommendations of the state department of highway traffic engineer for speed limits upon any state highway or federal aid highway within city limits. This authority is granted and defined in DRMC Sec. 54-43(a).

According to the City Traffic Engineer minimum speeds are determined by the state. However, in the Colorado Revised Statutes:

The Colorado Department of Transportation and local authorities may change the speed limit for any road under their respective jurisdictions if the department or local authority determine that the speed limit is unreasonable for safe road or traffic conditions.¹¹

Arguments for Reducing Unposted Speed Limits in Denver

According to the U.S. Department of Transportation National Highway Traffic Safety Administration there is a 5% mortality rate for pedestrians struck by a vehicle traveling 20 mph, 40% for vehicles traveling 30 mph, and 80% for vehicles traveling 40 mph.¹² Studies have shown that reducing vehicles speeds can reduce pedestrian injuries by eliminating some crashes all together and by reducing injury severities.¹³

Denver’s Vision Zero seeks to reduce traffic-related injury and deaths, and reducing unposted speed limits in residential areas would fall within the Vision Zero mission. Speed reduction is also considered

⁷ <https://www.portlandoregon.gov/transportation/article/594740>

⁸ <https://www.dot.state.mn.us/speed/>

⁹ <https://www.house.leg.state.mn.us/hrd/pubs/ss/ssspdlit.pdf>

¹⁰ <http://www.sfexaminer.com/sfmta-reduces-speed-limit-major-city-streets/>

¹¹ §42-4-1101 (4), C.R.S.

¹² <https://one.nhtsa.gov/people/injury/research/pub/hs809012.html>

¹³ <https://www.ncbi.nlm.nih.gov/pubmed/9316714>

an “essential Vision Zero strategy.”¹⁴ However, lowering the speed from 25 mph to 20 mph is not specifically listed as a strategy in Denver’s Vision Zero Action Plan.

Arguments Against of Reducing Unposted Speed Limits

One hypothesis of reducing speed limits in urban areas is that there will accident displacement on arterial roadways. However, studies have shown that there is no significant change in accident distribution when lowering speed limits.¹⁵

Enforcement of lower speed limits is also difficult, particularly in residential areas. Utilizing automatic speed enforcement (ASE) cameras is contentious as their accuracy is not entirely 100%, and there is the public perception that traffic enforcement cameras are simply used by municipalities as a revenue generator.¹⁶

¹⁴ <https://www.denvergov.org/content/dam/denvergov/Portals/705/documents/visionzero/Denver-Vision-Zero-Action-Plan.pdf>

¹⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1119319/>

¹⁶ <https://www.cdc.gov/motorvehiclesafety/calculator/factsheet/speed.html>