



City of Longview

1525 Broadway
Longview, WA 98632
www.ci.longview.wa.us

City Council

*Mayor MaryAlice Wallis
Mayor Pro Tem Michael Wallin
Council Member Ruth Kendall
Council Member Chet Makinster
Council Member Steve Moon
Council Member Christine Schott
Council Member Hillary Strobel*

Thursday, August 26, 2021

6:00 PM

HYBRID/ZOOM - 2nd Floor, City Hall

NOTICE IS HEREBY GIVEN, in accordance with RCW Chapter 42.30, that the City Council of the City of Longview, Washington, will be holding a workshop on Tuesday, August 26th, at 6:00 p.m. at the Council Chamber, City Hall, 1525 Broadway St, Longview. The meeting is also available by Zoom.

Zoom meeting link:

<https://us02web.zoom.us/j/86021375244>

Telephone options (you may need to try more than one number if you receive a busy signal):

Dial any of the following numbers:

1-253-215-8782
1-346-248-7799
1-408-638-0968
1-669-900-6833
1-301-715-8592
1-312-626-6799
1-646-876-9923

Meeting ID: 860 2137 5244

The City Hall is accessible for persons with disabilities. Special equipment to assist the hearing impaired is also available. Please contact the City Executive Offices at 360.442.5004 48 hours in advance if you require special accommodations to attend the meeting.

1. **CALL TO ORDER**

2. **ROLL CALL**

3. **WORKSHOP**

21-000919 CITY WIDE SPEED STUDY

RECOMMENDED ACTION:

DIRECTION TO STAFF TO DRAFT AN ORDINANCE TO BRING TO CITY COUNCIL THAT WILL IMPLEMENT SPEED REDUCTIONS.

DIRECTION TO STAFF ON IMPLEMENTATION OF THE SPEED REDUCTIONS.

DIRECTION TO STAFF TO IMPLEMENT FUTURE PHASES OF SPEED REDUCTIONS.

4. ADJOURNMENT

*** Any invocation that may be offered at the Council meeting shall be the voluntary offering of a private citizen, to and for the benefit of the Council. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the Council, and the Council does not endorse the religious beliefs or views of this, or any other speaker.**

NEXT REGULAR COUNCIL MEETINGS:

THURSDAY, SEPTEMBER 9, 2021-7:00 P.M.

THURSDAY, SEPTEMBER 23, 2021-7:00 P.M.

NEXT COUNCIL WORKSHOPS:

THURSDAY, SEPTEMBER 23, 2021- 6:00 P.M. UPDATE ON HOSWWA ACTIVITIES



Memorandum

August 10, 2021

TO: City Council

FROM: Ken Hash, Public Works Director

SUBJECT: City Wide Speed Study and Recommendations

What is a speed study?

We measure the real time speeds of traffic using radar and speed study software. The software then calculates a speed for the zone that 85% of the drivers were comfortable driving at or below, through free-flowing conditions. Then the 85th percentile speed is rounded to the nearest 5 MPH and the speed limit is set.

This is a very traditional method used widely on state highways and county roads.

Doesn't always work well on city streets.

Our City streets are generally wide and straight. When we have performed traditional speed studies using the methodology outlined above they always show that the speeds are set appropriately and many times are shown to be set too low.

According to AAA, about 45 percent of drivers report going 10 mph over the speed limit on a residential street in the past 30 days, and 11 percent admit doing so fairly often or regularly.

This is likely why, when used on city streets, traditional speed studies are unreliable for setting speed limits.

See attached 38th Avenue Speed Study

Speed limit on this section of 38th Avenue is 30 MPH. The speed study for 38th Avenue shows an 85th percentile of approx. 34.5 MPH. By the method outlined above, we should be raising the speed limit to 35 MPH. By using this methodology on city streets, we would likely be raising speed limits on many streets. This is why traditional speed studies can be flawed when used on city streets.

City Wide Speed Case Study

Since a traditional speed study will not be valid for evaluating city speed limits, I have chosen instead to develop a case study.

What is a case study?

A case study involves an up-close, in-depth, and detailed examination of a particular case or cases, within a real-world context.

City Wide Speed Study and Recommendations

What we did

We looked at what other municipalities have studied and published.

We looked at our speed limits.

We looked at our crash locations.

We took others' previous work and applied it to Longview.

We drew our own conclusions and are offering our own recommendations.

Seattle DOT Speed Limit Case Study

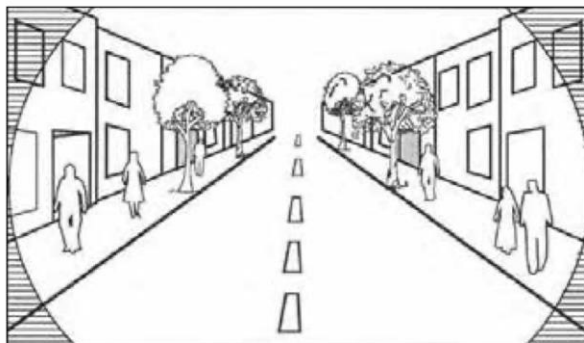
The most recent and most thorough speed case study was completed by the Seattle DOT. A copy of their report is attached. In summary, three of their findings were:

1. When streets were signed for 25 MPH they found:

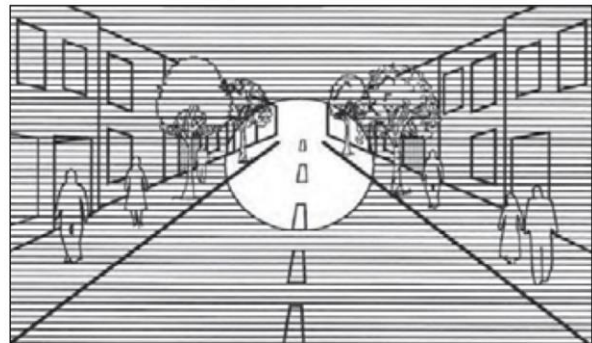
- Total crashes decline.
- Injury crashes decline.
- 50th percentile speed decline.
- 85th percentile speed decline.
- High-end speeding declined.

Seattle is one of the first cities in the country to study how reducing speed limits and increasing speed limit sign frequency improves safety for everyone. Early results show a decrease in vehicular speeds and a reduction of up to 39% in crashes.

2. A driver's field of vision increases as speed decreases. At lower speeds, drivers can see more of their surroundings and have more time to see and react to potential hazards.



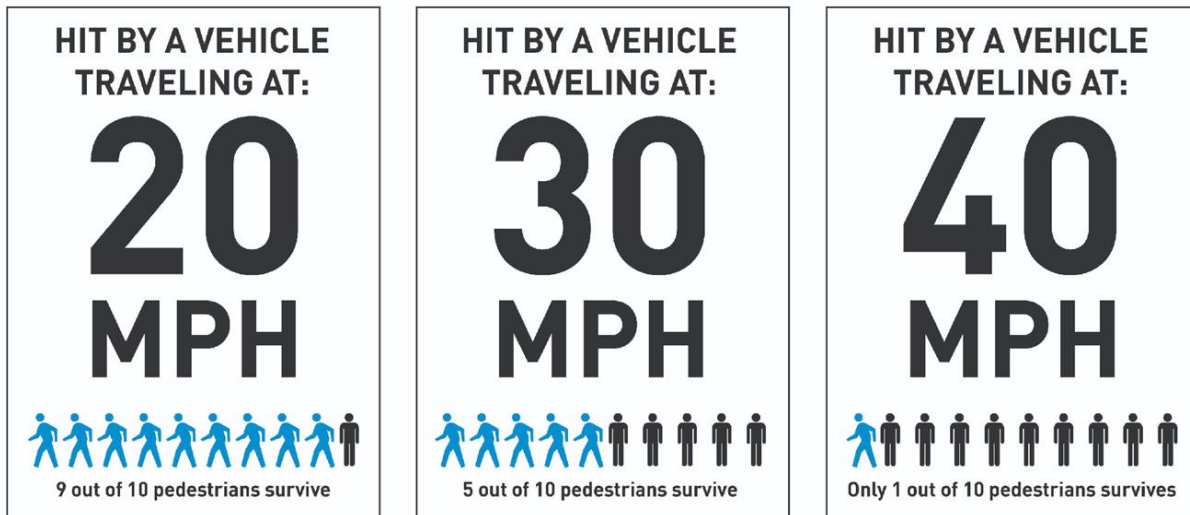
Field of vision at 15 MPH



Field of vision at 30 to 40 MPH

City Wide Speed Study and Recommendations

3. Speed is the critical factor in the frequency and severity of crashes. A few miles per hour difference can make a big impact on a person's chance of survival.



What has Seattle done?

To quote from their webpage:

Our early work with reducing speed limits started with redesigning high injury streets - places that have had high frequency of crashes due to vehicular speeds and activity from those who walk and roll throughout the corridor. We'll continue redesigning streets and making proactive, systemwide changes.

In 2016, we changed the Seattle Municipal Code to reduce citywide default speed limits. The default speed limit for non-arterial streets changed from 25 MPH to 20 MPH. The default speed limit for arterial streets changed from 30 MPH to 25 MPH, unless otherwise posted. At that time, we installed new signs at highway off-ramps, ferry terminals, and at the arterial city limits, and reduced downtown speed limits to 25 MPH.

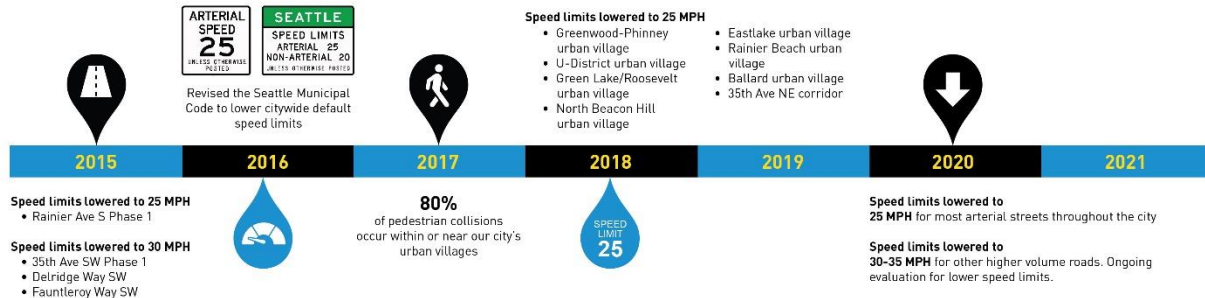
In 2017, we focused our speed limit efforts on urban villages (think: neighborhood business districts). These are where we see the most activity (lots of people walking, biking, driving, and taking transit) and the most crashes involving pedestrians - nearly 80% of pedestrian collisions occur within or near urban villages.

In 2020, we moved forward with reducing speed limits to 25 MPH for most arterial streets across the city, with some arterial streets posted 30-35 MPH.

In 2021, we reduced speed limits on several WSDOT arterials and will continue working closely with WSDOT on evaluating lower speed limits on the state arterials that go through the city.

City Wide Speed Study and Recommendations

A timeline illustrating the speed limit changes shared in text above



What other cities have taken similar measures?

The four cities that are highlighted by the National Association of City Transportation Officials are Seattle, New York City, Cambridge and Portland.

New York City

New York City has worked for over a decade on comprehensively reducing speeds on streets across its five boroughs. In 2011, the City installed its first Neighborhood Slow Zone: a program that revamps small (about . square mile) residential areas with low traffic volumes and minimal through traffic, with 20 mph on-street markings, signs, speed humps, and other traffic calming treatments. This program quickly expanded to over two dozen neighborhoods, increasingly demonstrating the large demand for safer streets across the city.

In 2013, family members of people killed in traffic crashes in New York joined with City Council members and local agencies to petition the State Legislature to reduce speed limits. At the time, the citywide speed limit was 30 mph, the lowest allowed by state law. The campaign hit political hurdles and the State took no action.

The next year, New York City rolled out its Vision Zero Action Plan, which called for City Hall to lead a campaign to reduce the citywide speed limit to 25 mph.

With the combined advocacy of a years-long campaign by local safe streets advocates, as well as sustained pressure from the Mayor's Office and city agencies, the state legislature passed a new bill in June 2014 authorizing New York City to lower its citywide speed limit. The City promptly took action, and a new citywide speed limit of 25 mph went into effect in November of the same year.

In the same legislative session, the State Legislature also granted New York City permission to establish an automated speed enforcement program with a limited number of cameras located in school zones. The program was successful, with speeds lowered by an average of over 60 percent in camera locations. In 2019, the City obtained new authority to expand this program more than five-fold, from 140 to 750 active zones.

City Wide Speed Study and Recommendations

Cambridge

In 2016, the City of Cambridge lowered speed limits to 25 mph citywide and began implementing 20 mph safety zones in 2018. Cambridge—along with other cities and towns in Massachusetts—have the right to set speed limits for “thickly settled” areas under the state’s 2016 Municipal Modernization Act.

Prior to this reform, the default speed limit in thickly settled areas was 30 mph and required a speed study to change a speed limit. But when a new Governor was elected in 2015, his office asked all municipalities how the legislature could update state regulations to make cities more effective. Among the asks was a request for greater local authority in setting speed limits.

The law allows any city or town to adopt citywide default limits of 25 mph for areas that meet the definition of thickly settled (homes or businesses spaced 200’ or less apart) and safety zone limits of 20 mph with local government approval. The definition of safety zone is broad, taking into account the presence of vulnerable users, schools, parks, and senior centers, among other factors. Implementation of a Safety Zone on streets under municipal control does not require State authorization.

In 2019, using this authority, the City of Cambridge embarked on an effort to reduce speed limits to 20 mph on most streets. At the time of publication, Cambridge has successfully reduced speed limits to 20 mph on the majority of streets in the city.

Portland

In 2018, Portland City Council approved an ordinance that lowered the speed limit on all residential streets to 20 mph, a change that resulted in reductions on 70 percent of the city’s street network.

Oregon state law also allows the city to implement a 20 mph speed limit in business districts and to lower speed limits on specific non-residential streets pending approval from Oregon DOT in each case.

In Portland, there are 228 miles of nonresidential arterials with speed limits between 35 and 45 mph where most road deaths occur. Effective May 1, 2020, the Oregon DOT began using a revised speed setting methodology for streets like these in urban areas that weighs 50th instead of 85th percentile speeds, and that better accounts for the presence of exposed road users, street design, and land use characteristics. This important change came after years of coordination between City of Portland staff and Oregon DOT staff to develop a revised methodology for determining speed limits on non-residential streets.

After a speed limit change is approved, but before installing new signs, City of Portland staff notify neighborhood residents about the speed limit changes, along with officials at the local transit agency, which notifies their operators.

City Wide Speed Study and Recommendations

Where possible, City of Portland staff work to coordinate speed limit reductions with street redesigns, such as road reorganizations. However, Portland frequently reduces speed limits on streets without any expected near-term changes in street design or enforcement.

Other previous work

Previous research by NHTSA estimates that speed plays a factor in nearly 10,000 deaths per year. Drivers are more likely to be seriously injured or killed at higher speeds, and speeding increases the risk of being in a crash because there is less time and distance available to respond.

Conclusions that we can draw from previous work

When speed limits are lowered:

- Total crashes decline
- Injury crashes decline
- Speeds decline

How does this apply to Longview

Current speed limits

- Our basic speed limit is 25 MPH.
- Speed limits vary from 20 MPH to 55 MPH
- 80% of our streets are signed at 25 MPH or lower
- 20 % of our streets are signed at 30 MPH or higher

Bike and Pedestrian Crashes 2011 – 2021

- 243 crashes
- 9 fatalities
- 234 injuries

How do speed limits correlate with crashes?

- On streets with a speed limit of 30 MPH and higher (20% of our streets)
 - 190 crashes (80%)
 - 8 fatalities (90%)
 - 191 injuries (92%)
 - 20% of our streets have 80% of our bike and pedestrian crashes.

City Wide Speed Study and Recommendations

What are the societal costs?

According to FHWA's Crash Costs for Highway Safety Analysis document. For the State of Washington, in 2010 dollars, the societal cost per incident was:

- Fatal \$2,900,000
- Incapacitating injury \$2,900,000
- Non-incapacitating injury \$155,000
- Possible Injury \$60,000
- No injury \$10,000

Longview

2011 to 2021

243 Bike and pedestrian crashes

\$144,085,000 is societal costs.

What can we do?

Option 1

Reduce the speed limit on Nichols Blvd.

This study and workshop were prompted by an pedestrian crash on Nichols Blvd. so, option 1 is to lower the speed limit on Nichols Blvd from 35 MPH to 25 MPH. In the ten year period that was studied, there were 12 bike and pedestrian crashes on Nichols Blvd. so with a statistical reduction of 40% we move from 243 crashes to a theoretical 238 crashes.

Option 2

Reduce the speed limits on streets that have frontage on parks and schools.

This option reduces speed at some, but not all of our major pedestrian and bike generators, namely parks and schools. Speed limits would be reduced to 25 MPH on:

- Nichols Blvd
- 38th Ave
- 30th Ave
- Beech St
- Olympia Way
- 15th Ave
- 7th Ave
- Pacific Way

Statistically this reduces overall crashes from 243 to 233. It also shifts crashes from a higher speed category to the lower speed category. 190 to 139 and 53 to 84 respectively. So, even though total crash remain at 233 because of the shift in in speed, there is a corresponding shift in the severity of the crashes.

Option 3

Reduce speed on most arterial streets.

City Wide Speed Study and Recommendations

This option reduces speed on most arterial street and at all major pedestrian and bike generators. Speed limits remain higher on:

- Ocean Beach
- 1st/3rd Ave
- Tennant Way
- Industrial Way/Mt Solo
- Fibre Way
- International Way
- 38th Ave *
- Prudential
- Oregon Way*

* Indicates a speed reduction on a portion of these streets

Statistically this reduces overall crashes from 243 to 188. It also shifts crashes from a higher speed category to the lower speed category. 190 to 52 and 53 to 136 respectively. So, even though total crash remain at 188 because of the shift in in speed, there is a corresponding shift in the severity of the crashes. Under this option, fatalities drop from 9 to 4, this assumes a 90% survival rate on lower speed streets. The majority of the 52 crashes on higher speed routes and 3 of the fatalities are all along Ocean Beach Highway.

Option 4

The same as option 3 and we also reduce the basic speed limit to 20 MPH.

Statistically this reduces overall crashes from 243 to 175. The higher speed category keeps the same shift in crashes 190 to 52 crashes on 25 MPH routes go from 53 to 104. We add a new category of 20 MPH routes with a total of 19 crashes. So, even though total crash remain at 175 because of the shift in in speed, there is even more of a corresponding shift in the severity of the crashes. The majority of the 52 crashes on higher speed routes and 3 of the fatalities are all along Ocean Beach Highway.

Implementation

None of these options can be implemented with first taking into consideration the 5 E's of traffic engineering: Engineering, Education, Encouragement, Enforcement, and Evaluation. Examples of measures that could be taken are:

- Engineering
 - Phase in over time
 - Change signs
 - Increased number of signs on routes
- Education
 - Full page flyer in utility bills
 - Flyer on city website
 - Outreach to media

City Wide Speed Study and Recommendations

- Encouragement
 - Full page flyer in utility bills
 - Flyer on city website
 - Outreach to media
 - Mobile speed trailer
 - Warnings from LPD
- Enforcement
 - Emphasis patrols
 - Speeding tickets
- Evaluation
 - Evaluate biannually

Knowing that LPD resources are limited, the question will be ask, “How effective will this be with the limited encouragement and enforcement options that we have?” referring back to the previously mention AAA report, about 55% of drivers will slow to the new speed limit most of the time. Another 34% will mostly slow down. Their conclusion is that 11% will still exceed the speed limit fairly often or regularly.

Proposed Implementation Timeline

- 2021 – Implement Option 2
- 2023 – Evaluate changes
- 2023 – Report back to Council
- 2023 – With Council direction, implement Option 3
- 2025 – Evaluate changes
- 2025 – Report back to Council
- 2025 – With Council direction, implement Option 4
- 2027 - Evaluate

RECOMMENDATION

Direction to staff to draft an ordinance to bring to City Council that will implement the speed reductions in Option 2.

Direction to staff to implement the 5 E’s as outlined above.

Direction to staff to implement future phases as outlined above.

Attachments:

- 38th Speed Study
- SDOT - Speed Limit Case Studies
- SDOT – Speed Limit Adjustment Justification
- SDOT – FAQ Flyer



Volume By Speed Report

Generated by Ken Hash from City of Longview-WA on Sep 16, 2020 at 5:2:0 PM

Time View: By Day of Week (Avg Volumes)

Speed Bins: Size 5, Range 1 to 100

Site: 2610 38th Ave, SB

Time of Day: 0:00 to 23:59

Dates: 9/9/2020 to 9/15/2020

Day of Week	Spd Lim	1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	56 to 60	61 to 65	66 to 70	71 to 75	76 to 80	81 to 85	86 to 90	91 to 95	96 to 100	Avg Spd	Avg #
Sun	25	2	43	148	187	235	652	844	336	75	7	0	0	0	0	0	0	0	0	0	0	28.7	2529
Mon	25	1	80	172	221	334	836	863	256	33	4	0	1	0	0	0	0	0	0	1	0	28.1	2802
Tue	25	0	0	6	3	7	9	17	8	1	1	0	0	0	0	0	0	0	0	0	0	27.4	52
Wed	25	0	13	126	155	199	519	566	168	19	6	1	0	0	0	0	0	0	0	0	0	27.7	1772
Thu	25	3	68	184	270	429	1036	967	282	38	3	1	0	0	0	0	0	0	0	0	0	28.0	3281
Fri	25	2	58	207	238	414	936	1032	282	37	10	1	0	0	0	0	0	0	0	0	0	28.2	3217
Sat	25	1	67	166	210	302	800	985	325	51	5	1	0	0	0	0	0	0	0	0	0	28.7	2913
Avg #		1	47	144	183	274	684	753	237	36	5	1	0	0	0	0	0	0	0	0	0	28.1	2367

11%

$$2367 * 85\% = 2012$$

Car 2012 is the 85th percentile.

Cumulative from 0 MPH

→ 2086 cars under 35 MPH

85th percentile is Approx. 34.5 MPH

Speed limit is 30 MPH

Engineering and Traffic Investigation Providing Justification for Lowering *Default* Arterial and Non-Arterial Speed Limits

August 2016

Overview

Seattle is committed to improving public health and safety through Vision Zero, the city's aspirational initiative to eliminate fatalities and serious injuries on Seattle's streets by 2030. At the core of this initiative is the belief that death and injury on city streets is preventable and acknowledging the importance of street design in mitigating the frequency and severity of collisions.

The city of Seattle is an increasingly dense urban environment with more than 1,000,000 daily motor vehicle trips, thousands of daily pedestrian and bike trips, and approximately 400,000 daily transit trips. More than 10,000 collisions occur on Seattle streets annually. Less than 10 percent of these crashes involve pedestrians, bicyclists or motorcycles yet these modes make up more than 50 percent of fatalities. Vehicular speed is often the critical factor for survival in collisions. The higher a driver's speed, the greater risk to vulnerable road users.

While we can engineer for safer streets, Vision Zero acknowledges that human beings are fallible. In just the last three years, collisions attributed to inattention increased 280 percent in Seattle and contributed to more than 3,000 crashes in 2014 alone. With each crash, speed makes the difference between no injury, minor injury, serious injury or death.

In an effort to improve safety for everyone that uses Seattle's transportation systems, the Seattle Department of Transportation (SDOT) proposes the following changes to the Seattle Municipal Code (SMC) regarding speed limits:

- Non-arterial speed limit reduction from 25 miles per hour (mph) to 20 mph (SMC 11.52.060)
- *Default* speed limit reduction for unsigned arterial streets from 30 mph to 25 mph (SMC 11.52.080)

These amendments to the SMC will be consistent with Washington State code and Federal Highway Administration (FHWA) recommendations.

Lower speed limits have been shown to be safer for our most vulnerable populations. According to a recent World Health Organization (WHO) report, legislation on road safety is a critical piece in reducing road traffic crashes, injuries and deaths¹.

The following report provides the engineering justification for lower non-arterial and default speed limits.

¹ WHO "Global Status Report on Road Safety 2015"

Background

The primary purpose of having a speed limit is to enhance road safety for everyone. Setting an appropriate speed limit:

- **Alerts drivers about the environment ahead** – speed limits generally reflect the geometric design of the street and adjacent land uses as well as the amount of on-street parking, driveways, and pedestrian and bicycle activity
- **Enhances safety for everyone** – Setting appropriate speed limits reduces the probability and severity of crashes under favorable roadway and environment conditions
- **Provides regulatory framework** – Speed limits allow law enforcement and the municipal court system the governing context for controlling speeds

As far back as 1927 (as far as is catalogued in the Municipal archives) the city established a maximum speed limit of 25 mph on all city streets.² For arterial highways Seattle deferred to the state of Washington, which set all arterial highway speed limits in Seattle. At this time streets and highways were just starting to develop into what we understand today – the first traffic signal in Seattle was installed in 1924 at 4th Ave S and S Jackson St.

Until 1934 speed limits on arterial highways in Seattle were relegated to the state. Beginning in 1934, the city began including a handful of arterials in the traffic code with 35mph limits³. These streets included important routes such as Empire Way (now MLK Jr Way), E Marginal Way, and Westlake Ave. Between 1934 and 1948 the traffic code added and removed individual streets to this 35mph list through a series of ordinances.

In 1948 Seattle updated the traffic code to reflect the current default speed limit regulations we know today – 30 mph *default* arterial speed limit and 25 mph on all other streets, unless otherwise marked⁴.

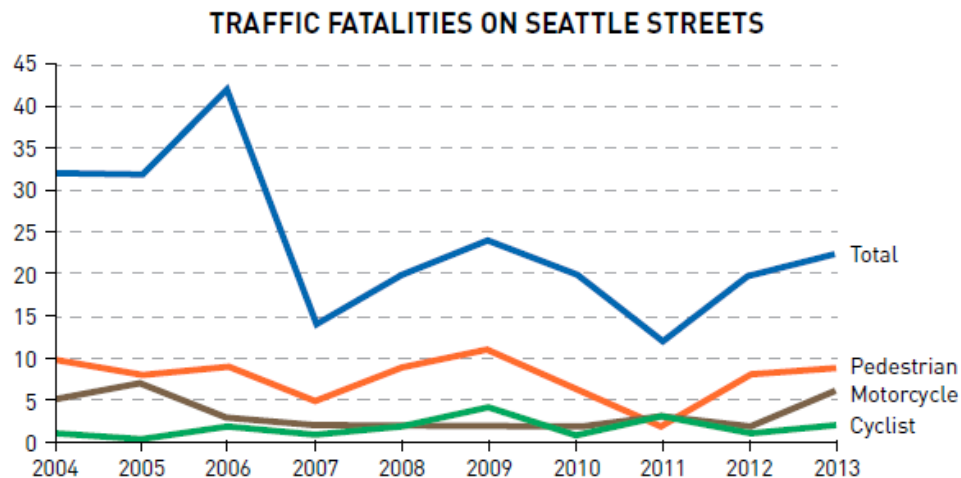
Seattle's Vision Zero Initiative, which launched in 2015, places emphasis on safety for bicyclists and pedestrians. Safety for vehicle drivers and passengers has improved substantially over the last decade but safety for vulnerable users has not experienced the same positive trend. Furthermore, the likelihood of injury is high for pedestrians or bicyclists involved in collisions. The injury rate for pedestrians involved in collisions is 77 percent and 83 percent for bicyclists involved in collisions.⁵

² Ordinance 53233

³ Ordinance 64692

⁴ Ordinance 77299

⁵ Seattle Department of Transportation 2015 Traffic Report, <http://www.seattle.gov/transportation/reports.htm>



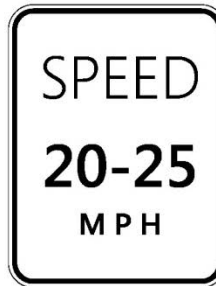
Seattle's transportation infrastructure serves an increasing amount of vulnerable users like pedestrians and bicyclists. Non-motorized and trips taken by transit continue to increase and rose 7 percent and 5 percent respectively between 2012 and 2014⁶ in the City Center. SDOT has also tracked increasing pedestrian and bicycle counts at most locations counted through the National Bicycle and Pedestrian Documentation project.⁷

While increasing non-motorized and transit trips improves the efficiency of our transportation network, studies demonstrate the negative effects of higher driving speeds. For instance, the cognitive abilities of drivers decline at higher speeds. Without factoring in behavioral issues like distracted driving, drivers becomes less aware of surroundings as speed increases and our ability to process information is limited by our field of view. An increase in travel speed increases the stopping distance of a vehicle, decreases the driver's field of vision and results in less time for the driver to react to a person or hazard in the roadway⁸.

⁶ "2014 Center City Commuter Mode Split Survey", Commute Seattle (2016)

⁷ "2015 Traffic Report", Seattle Department of Transportation,
<http://www.seattle.gov/transportation/docs/2014TrafficReport.pdf>

⁸ "Street Environment, Driving Speed and Field of Vision" by A. Bartmann, W. Spijker & M. Hess (1991)

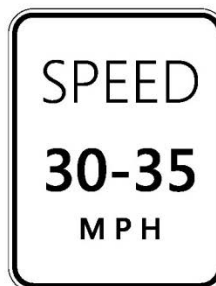


STOPPING
DISTANCE

40 feet

FATALITY RISK

5%



STOPPING
DISTANCE

75 feet

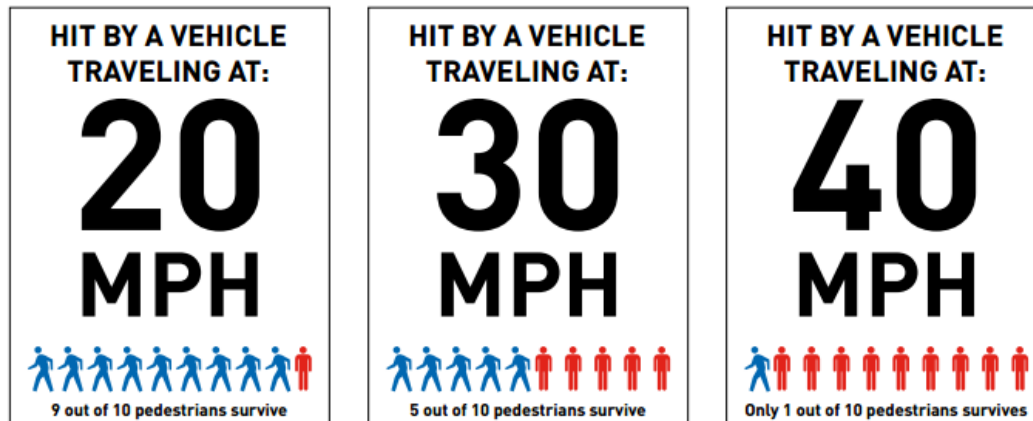
FATALITY RISK

45%

Injuries for vulnerable road users increase in severity as vehicle speeds increase. When a person is struck at a high rate of speed, a proportion of the vehicle's kinetic energy is transferred to the human body. Kinetic energy is determined by the square of the vehicle's speed⁹, rather than by speed alone. If a vehicle were traveling 20 percent faster along an arterial (e.g. from 25 mph to 30 mph), the kinetic energy increases by 44 percent, or more than doubling the risk of injury due to the greater amount of energy the vulnerable person in the roadway has to absorb. For reference, "the human tolerance for a pedestrian struck by a well-designed car will be exceeded if the vehicle is traveling at over approximately 20 mph."¹⁰

⁹ $E_K = \frac{1}{2}mv^2$, where E_K = Kinetic Energy, m = mass of object, and v = speed of object

¹⁰ Tingvall, C. and Haworth, N. (1999) Vision Zero - An ethical approach to safety and mobility, Paper presented to the 6th ITE International Conference Road Safety & Traffic Enforcement: Beyond 2000, Melbourne, 6-7 September 1999 (<http://www.monash.edu/miri/research/reports/papers/visionzero>)



Furthermore, behavioral issues like inattention increase the likelihood of collisions and data show an alarming trend in the number of collisions attributed to driver distraction. In Seattle, inattention-related collisions increased 280 percent between 2011 and 2014. Lower speed limits will minimize injuries when these mistakes like this occur and will help improve public safety in Seattle.

The benefits of this speed limit reduction proposal are consistent with city and SDOT policies.

- **Reduce collisions that result in injuries, serious injuries and fatalities** – through Vision Zero, the city is committed to a goal of ending all serious injuries and fatalities on city streets by 2030. Speed is a contributing cause of death and serious injury on Seattle streets.
- **Reduce collisions and provide a cost savings to society** – AAA¹¹ estimates that each serious collision costs taxpayers roughly \$6 million, based on the FHWA comprehensive costs for serious injuries and fatalities. These costs are based on 11 components which include: property damage; lost earnings; lost household production (non-market activities occurring in the home); medical costs; emergency services; travel delay; vocational rehabilitation; workplace costs; administrative costs; legal costs; and pain and lost quality of life.
- **A safer city encourages a healthier city** – Streets that feel safer may encourage more active forms of transportation, such as walking and biking. Reducing the speed limit for vehicles will make vulnerable users more comfortable with using our transportation infrastructure, and create more opportunities for physical activity. Additionally, lower vehicle speeds mean reduced noise pollution from the road and foster more vibrant communities, such as neighborhoods lined with small businesses.
- **Safer streets encourage more non-motorized travel** – Streets that feel safer may help the city achieve mode share goals and improve the efficiency of the transportation network. Seattle currently administers programs to promote transit use, ridesharing, bicycle trips, and walking and biking to school.

¹¹ "Crashes vs. Congestion – What's the Cost to Society" (AAA, November 2011)

Speed Limit Proposal

Non-arterial Speed Limit Reduction Justification

Existing non-arterial speed limit: 25 mph

Proposed non-arterial speed limit: 20 mph

To enhance safety for vulnerable users on non-arterial streets, SDOT proposes to amend SMC 11.52.060 to reduce the speed limit on non-arterial streets from 25 mph to 20 mph. This change would affect all of Seattle's 2400 miles of non-arterial streets as shown in maps 1 and 2. Reducing the speed limit on non-arterials is consistent with Washington's Neighborhood Safe Streets Law (2013) which authorizes municipalities to lower limits to 20 mph.

Seattle's non-arterial streets (commonly referred to as 'residential' or 'local' streets) are designed for low speeds. The standard residential street in Seattle is 25 feet wide with 7-foot wide parking lanes on both sides of the street. This leaves one 11 foot-wide general purpose travel lane for vehicles. Two vehicles travelling in opposite directions on a standard non-arterial street must take turns navigating the street. The width of our non-arterials maintains low speeds on these roadways.

While the frequency of collisions on non-arterial streets is relatively low, nearly 3600 collisions occur on these roadways each year. Approximately 10 percent of annual serious injury and fatal collisions occur on these streets.

Annual Collisions on Non-arterial Streets (3 year average)			
Total Collisions	Injuries	Serious Injuries	Fatalities
3594	400	14	1.66

Speed limit signs are not posted on non-arterial streets unless the street passes through a special designation area such as a school zone or 20 mph zone. The non-arterial speed limit will be posted on signage at major entrances to the city as described later in this document.

Case Study – "Slow Zones"

Countries around Europe have started implementing "Slow Zones" which sets the speed limit at 20 mph to slow traffic down on non-arterial streets in neighborhoods. After implementing "Slow Zones", the following safety impacts were noticed¹²:

¹² NACTO "Neighborhood Slow Zones – A community-driven approach to reducing speeds to 20MPH" (http://nacto.org/wp-content/uploads/2012/10/ViolaRob_Neighborhood-Slow-Zones-NACTO-Conference-2012.pdf)

- **London** – 46% reduction in collisions. Average speeds also reduced by 9 mph. In another study¹³, there was a 41.9% reduction in fatalities and serious injuries where the reduction was greatest in younger children under 15 years old

New York City started implementing “Slow Zones” in 2011. Since then, their findings show promising trends¹⁴:

- 10-15% reductions in speeds
- 14% overall reduction in crashes with injuries
- 31% reduction in driver or passenger injuries

On September 8, 2015, SDOT formally announced the 20 mph zone program to improve neighborhood safety for all travelers near schools and playgrounds. This pilot program is consistent with our current city laws based on SMC 11.52.100. SDOT reduced non-arterial speed limits to 20 mph at six pilot locations in 2015 based on collision history, number of nearby pedestrian generators, geographical representation, and partnership opportunities. There are two phases to this neighborhood 20 mph zone program:

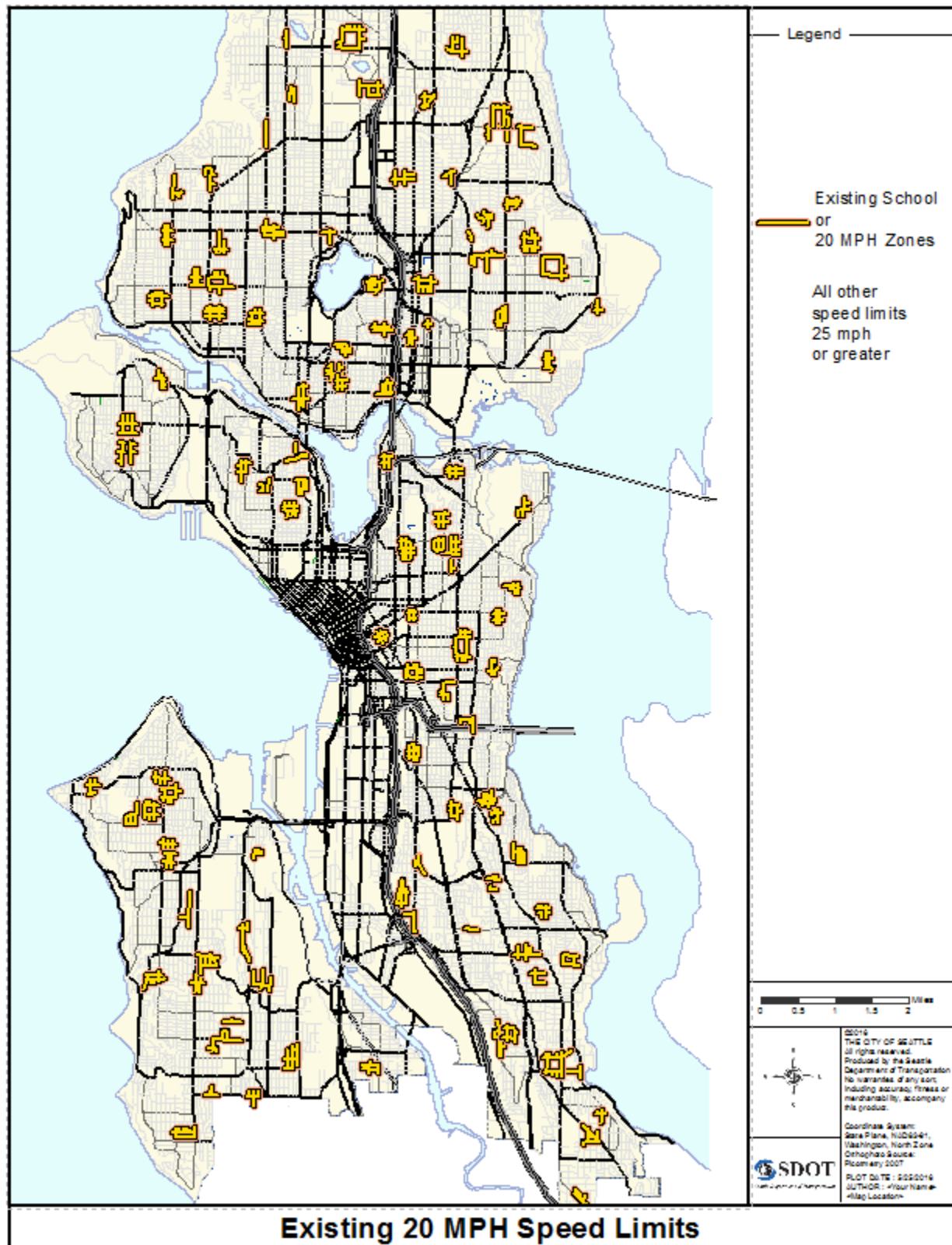
- Phase One – Install 20 MPH signs and 20 MPH markings on the street.
- Phase Two – If speeds are not reduced with signs, install other safety improvements such as curb bulbs, speed humps, and other appropriate traffic calming devices.

Speeds were reduced by a maximum of 1.6 mph and collisions dropped in five out of the six 20 MPH zones.

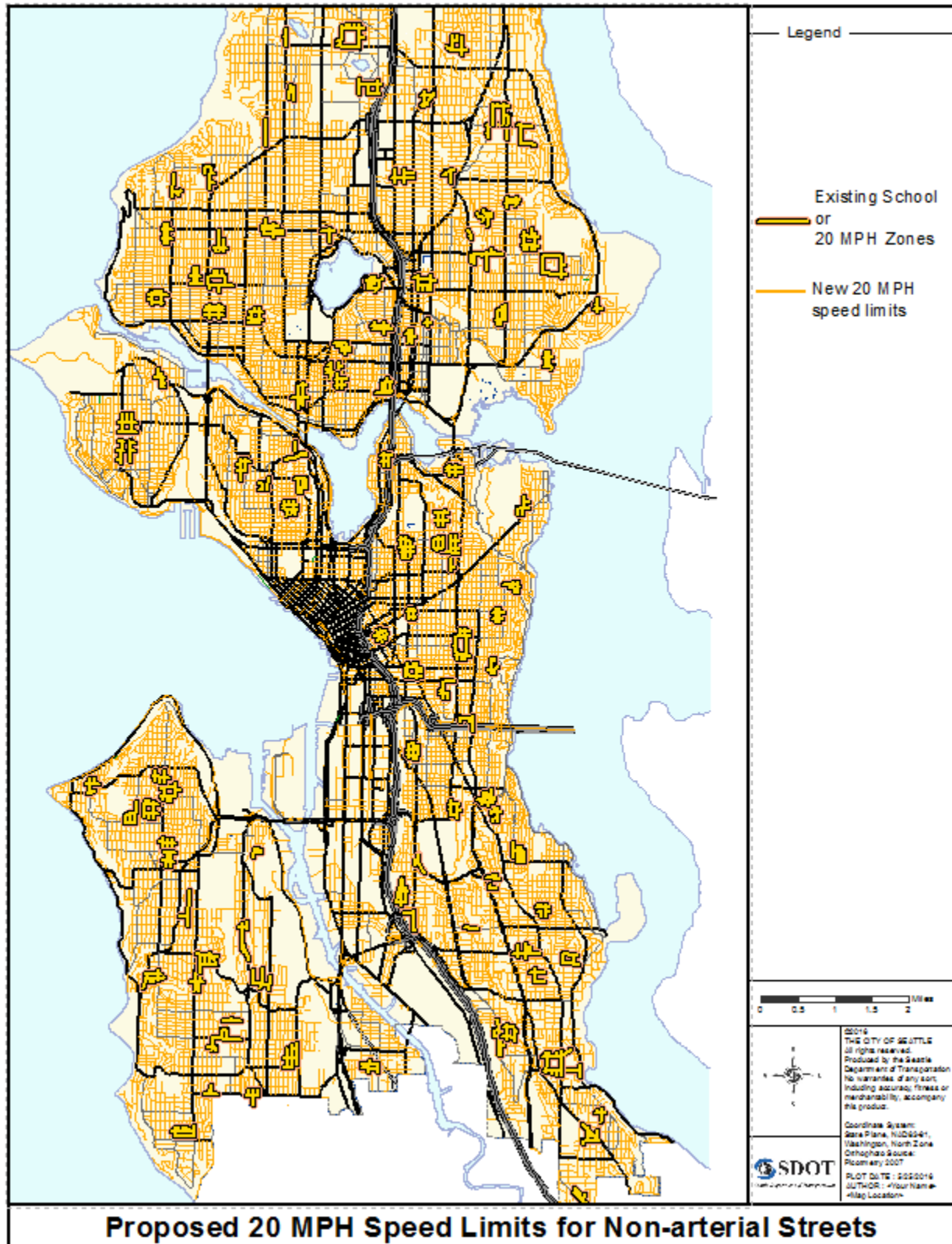
¹³ Effect of 20 mph traffic speed zones on road injuries in London, 1986-2006: controlled interrupted time series analysis (BMJ 2009;339:b4469)

¹⁴ <http://www.nyc.gov/html/dot/downloads/pdf/2015-02-hudson-heights-slowzone.pdf>

Map 1 – Existing non-arterial speed limits



Map 2 – Proposed Speed Limits for Non-arterial Streets



Default Arterial Speed Limit Reduction Justification

Existing *default* arterial speed limit: 30 mph

Proposed *default* arterial speed limit: 25 mph

SDOT proposes to amend SMC 11.52.080 to reduce the *default* arterial speed limit from 30 mph to 25 mph. Reducing the default arterial speed limit will make Seattle's speed limit consistent with the Washington state speed limit of 25 mph for city streets¹⁵. Of the 39 cities within King County, Seattle is the only city with a default speed limit higher than 25 mph. Other major cities that have a *default* arterial speed limit of 25 mph or lower include: London, Paris, Tokyo, New York City, Phoenix and Portland, Oregon. The city of Boston reduced their default speed limit to 20 mph.

The default speed limit is in effect on streets where the speed limit is not posted or where signs are missing or illegible. Streets where the *default* arterial speed limit is currently in effect include areas of the Central Business District, South Lake Union, Lower Queen Anne, the International District and portions of Capitol Hill and First Hill west of 23rd Avenue.

Current operating speeds for vehicular traffic in study area (85th percentile): 22 to 25 mph

Changing the default arterial speed limit to 25 mph would be compliant with Federal Highway Safety Administration¹⁶ guidance for setting speed limits.

Engineering improvements have been implemented to support existing vehicle speeds. In 2015 and 2016, SDOT retimed and coordinated more than 300 signals in the areas where the default speed limit is currently in effect. Vehicular traffic speeds were determined for arterial streets. Current operating speeds range from 22 to 25 mph – below the default speed limit of 30 mph. A 25 mph design speed was used for SDOT's signal timing and coordination project. This signal design has been in operation since January 2016. SDOT is prepared to install or replace nearly 500 signs to highlight the new speed limits upon passage of legislation. More information about signage changes can be found later in this report.

The proposed reduction to the default speed limit would become effective immediately upon acceptance of this proposal in central Seattle. The default speed limit reduction is intended to address an increase in crash severity in this area.

More than 9000 collisions occur on Seattle's arterial streets annually. These roadways are typically wide (40 feet wide or greater) and designed to accommodate transit, freight and higher traffic volumes. The majority of arterial streets have posted speed limits of 30 mph or higher. Given higher vehicular speeds and traffic volumes for all modes on these roadways, there is greater opportunity for conflicts.

¹⁵ RCW 46.61.400 "Basic rule and maximum limits"

¹⁶ "Methods and Practices for Setting Speed Limits: An Informational Report", FHWA, 2012

Average Annual Collisions on Arterial Streets (3 year average)			
Total Collisions	Injuries	Serious Injuries	Fatalities
9810	3111	144	17

90 percent of serious injuries and fatal collisions occur on our arterial street network and speed has become an increasingly significant contributing factor in central Seattle. Although a small land area, this area has concentrated a collision frequency 6 times of land area percent. Speed has been involved in a greater proportion of fatal collisions over the last decade. In general, speed contributed to 4 percent of annual collisions in downtown but 42 percent of fatal crashes in downtown Seattle from 2011-2013. Collision data show that the majority of the serious, speed-related collisions occur during the evening after the heavy traffic volumes subside. Lower volumes make attaining higher speeds possible.

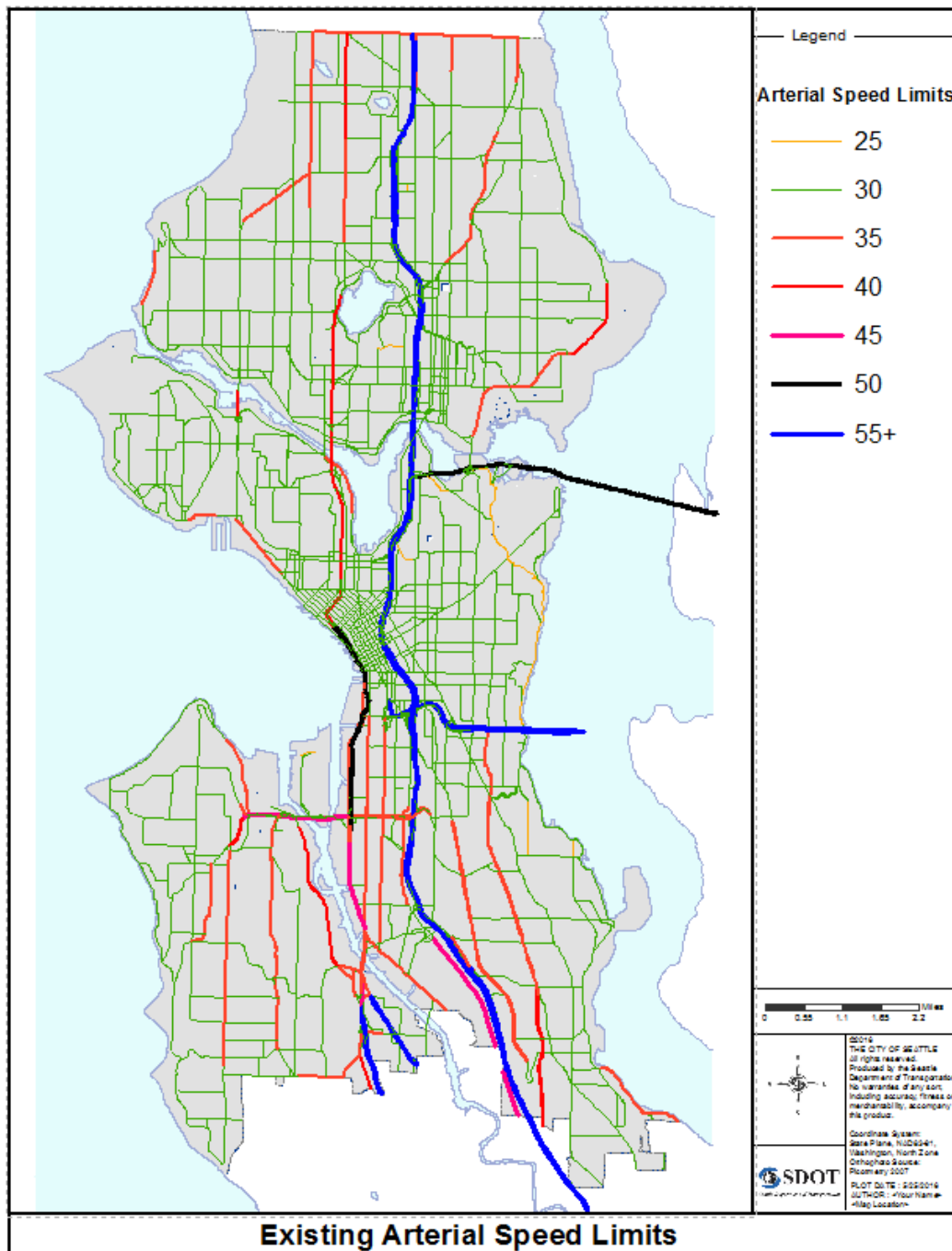
Please note that the data below relies on a relatively small sample size due to the fact that few traffic fatalities occur in Seattle. Because of its sample size, this data is only one of the factors supporting the City's decision.

Collisions and severity: Central Seattle and citywide

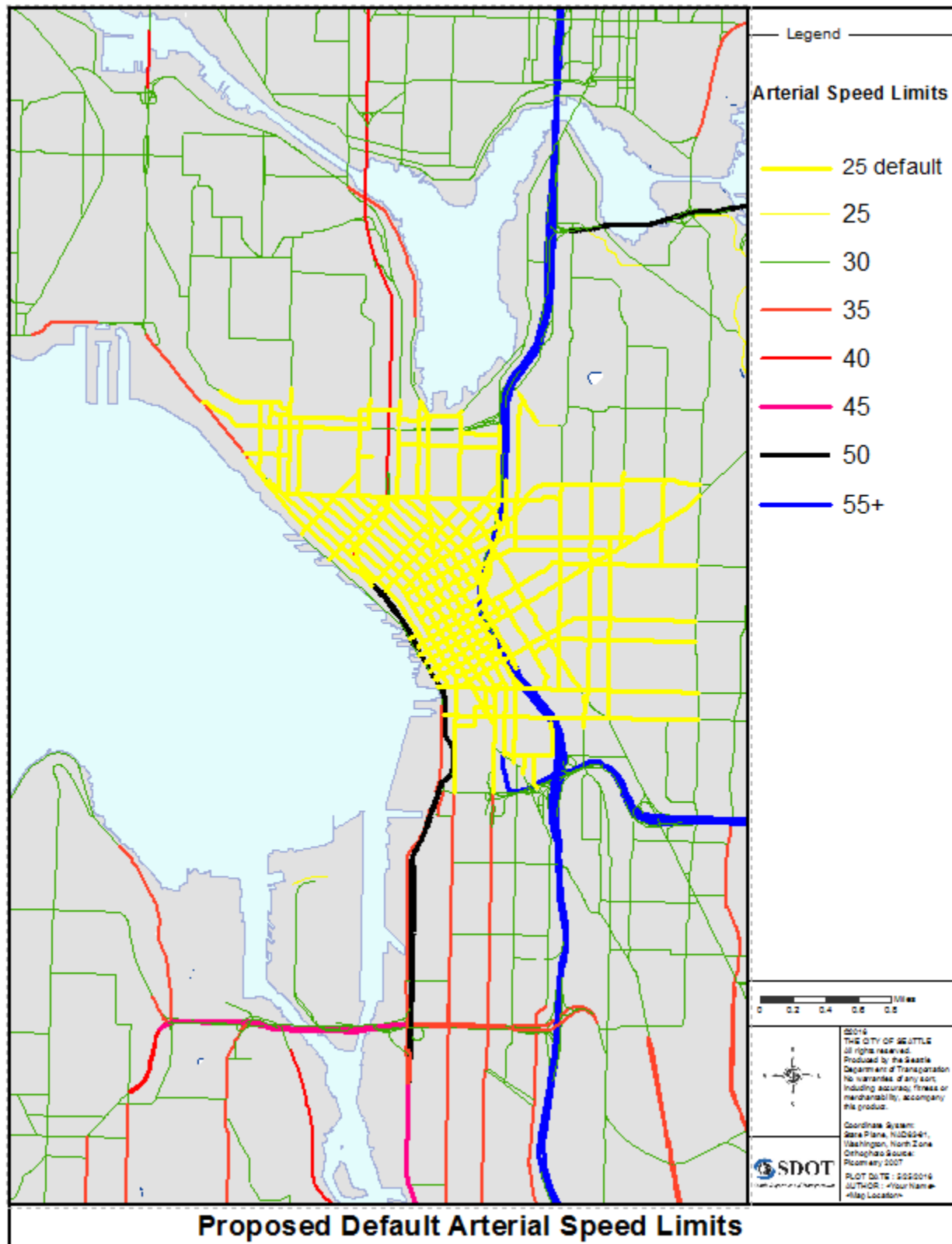
Time	Indicator	Downtown	City	% Downtown/City
	Area	2.13	83.54	2.55%
2004-2013	All collisions	21741	140086	15.52%
	Annual Average	2174.10	14008.60	
	Speeding	783	7114	11.01%
	% Speeding	3.60%	5.08%	70.92%
	Serious + Fatal	310	2228	13.91%
	Annual Average	31.00	222.80	
	% of all collisions	1.43%	1.59%	89.65%
	Speeding	29	327	8.87%
	% Speeding	9.35%	14.68%	63.74%
	Serious collisions	283	2009	14.09%
	% of all collisions	1.30%	1.43%	90.77%
	Speeding	23	262	8.78%
	% Speeding	8.13%	13.04%	62.32%
	Fatal collisions	27	219	12.33%
	% of all collisions	0.12%	0.16%	79.44%
	Speeding	6	65	9.23%
	% Speeding	22.22%	29.68%	74.87%
2011-2013	All collisions	5787	38227	15.14%
	Annual Average	1929.00	12742.33	
	Speeding	193	1501	12.86%
	% Speeding	3.34%	3.93%	84.94%
	Serious + Fatal	85	524	16.22%
	Annual Average	28.33	174.67	
	% of all collisions	1.47%	1.37%	107.15%
	Speeding	10	63	15.87%
	% Speeding	11.76%	12.02%	97.85%
	Serious collisions	78	472	16.53%
	% of all collisions	1.35%	1.23%	109.16%
	Speeding	7	48	14.58%
	% Speeding	8.97%	10.17%	88.25%
	Fatal collisions	7	52	13.46%
	% of all collisions	0.12%	0.14%	88.92%
	Speeding	3	15	20.00%
	% Speeding	42.86%	28.85%	148.57%

Changing the *default* arterial speed limit will impact the Central Business District, South Lake Union, Lower Queen Anne, the International District and portions of Capitol Hill and First Hill west of 23rd Avenue. See the maps below to view existing arterial speed limits and the specific areas where the default speed limit will take effect with this proposed change to the Seattle Municipal Code.

Map 3 – Existing Arterial Speed Limits

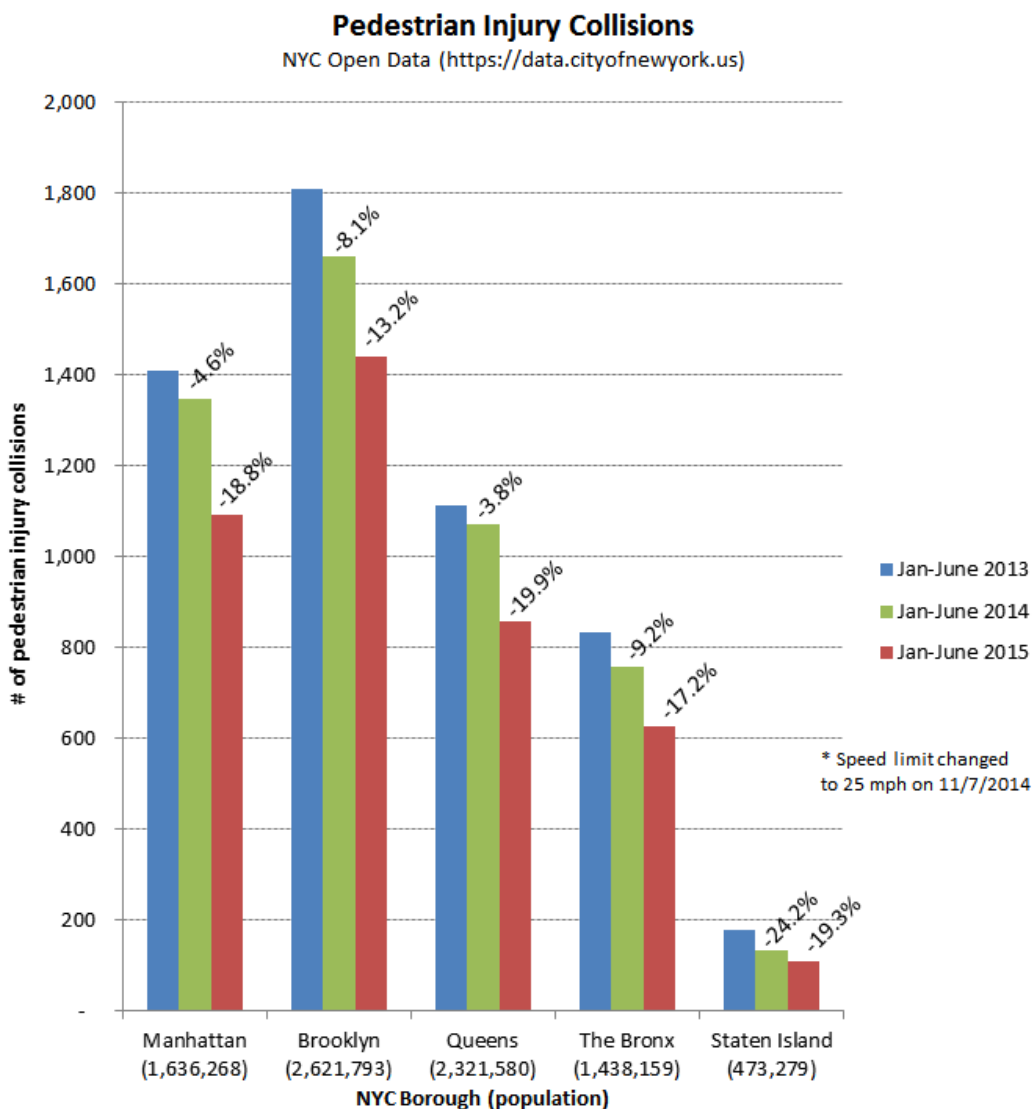


Map 4 – Proposed *Default* Arterial Speed Limit Changes



Case Study - New York City

Since 1965, New York City has had a speed limit of 30 mph¹⁷. On November 7, 2014, New York lowered their *default* speed limit from 30 mph to 25 mph in an effort to reduce serious injuries and fatalities¹⁸. The *default* arterial speed limit is in effect on 90 percent of arterial streets. The remaining 10 percent of arterials continue to have higher posted speed limits while the New York City Department of Transportation (NYCDOT) reviewed select arterials for speed limit reductions. While New York's speed limit changes have been in place for less than two years, collision data show that this change has contributed to promising safety trends. Most importantly, the total number of pedestrian injury collisions substantially dropped for four of the five boroughs following the speed limit reduction.



¹⁷ <http://nymag.com/daily/intelligencer/2014/11/things-to-know-about-nycs-new-speed-limit.html>

¹⁸ <http://www1.nyc.gov/office-of-the-mayor/news/494-14/transcript-mayor-de-blasio-signs-new-law-lowering-new-york-city-s-default-speed-limit-25-mph>

Arterial Speed Limits

This proposal does not suggest altering the process for adjusting speed limits on arterial streets where the speed limit signs are posted. Posted speed limits adjustments typically occur after geometric design changes are implemented and only after engineering studies validate adjustment in accordance with national guidelines for setting speed limits¹⁹. Adjustments to the posted speed limit require approval from the City Traffic Engineer.

The Seattle Department of Transportation currently maintains a multi-year program to review posted speed limits on arterial streets. Review of posted speed limit will occur as budget and other demands on the department will allow. Changes to posted speed limits will be recommended if the City's review, including engineering studies, support such changes.

Conclusion

The Seattle Department of Transportation and the City Traffic Engineer propose to amend the Seattle Municipal Code to reduce the speed limit on non-arterial streets from 25 mph to 20 mph. SDOT and the City Traffic Engineer also propose to reduce the default arterial speed limit from 30 mph to 25 mph given that:

- Existing vehicular speeds in the areas impacted by this change are within accepted guidance set by the FHWA for setting speed limits
- There has been an increase in speed-related fatal collisions in central Seattle
- Higher vehicular speeds increase collision severity
- Engineering improvements have been made in the areas impacted by this change to support the 25 mph speed limit
- Additional signage improvements will be installed to inform drivers of the speed limits
- Additional arterial speed limit adjustments will be considered through SDOT's annual programs and adjustments will be made in accordance with national guidelines for setting speed limits

Implementation methodology

Seattle's speed limits have not substantially changed in decades. SDOT will coordinate a multifaceted approach to help educate residents and visitors about lower the speed limits. Effectively lowering the speed limits will be accomplished through the following:

- **Education** – Installing new signs throughout the city to remind residents and visitors of the new default arterial speed limits
- **Engineering** –Signal adjustments will reinforce the new default arterial speed limits
- **Enforcement** – SDOT and the Seattle Police Department (SPD) coordinate on a monthly basis to deploy SPD to areas where we need to target driver behavior that puts those around them at risk

¹⁹ "Methods and Practices for Setting Speed Limits: An Informational Report", FHWA, 2012

- **Evaluation** – Seattle evaluates the health of their transportation system on an annual basis through the public facing Annual Traffic Report. We will continue to evaluate the effectiveness of our policies and approaches through this report

Engineering

Seattle’s arterial street network outside of the downtown core is lined with speed limit signs at regular intervals. Seattle currently posts speed limit signage at major and minor arterial entrances to the city. Variability in speed limit sign placement is due to site conditions along each roadway.

In order to educate people about the new speed limits, SDOT will install 75 to 100 new signs. “Gateway signs” will be placed at 40 locations citywide and provide the *default* arterial speed limit as well as the non-arterial speed limit. These new signs will be posted where people enter Seattle including near the city limits and near highway off-ramps where visitors may be visiting from outside of Seattle:



Existing gateway signs located near city limits

SEATTLE	
SPEED LIMITS	
ARTERIAL	25
NON-ARTERIAL	20
UNLESS OTHERWISE POSTED	

New gateway signs

Smaller signs with speed limits will be posted on minor arterial entries to Seattle. There are currently 38 existing signs posted citywide that SDOT will remove and replace.



Existing signs located near city limits on minor arterials



New signs

SDOT will continue to ensure that speed limit signs are posted regularly on arterials outside of downtown through annual maintenance programs.

Through the Seattle Department of Transportation's (SDOT) Neighborhood Traffic Program, more than 400 advisory 20 mph speed limit signs have been installed on non-arterial streets. With the lower non-arterial speed limit, the advisory speed limit signs will be removed to remain in compliance with the Manual on Uniform Traffic Control Devices (MUTCD).

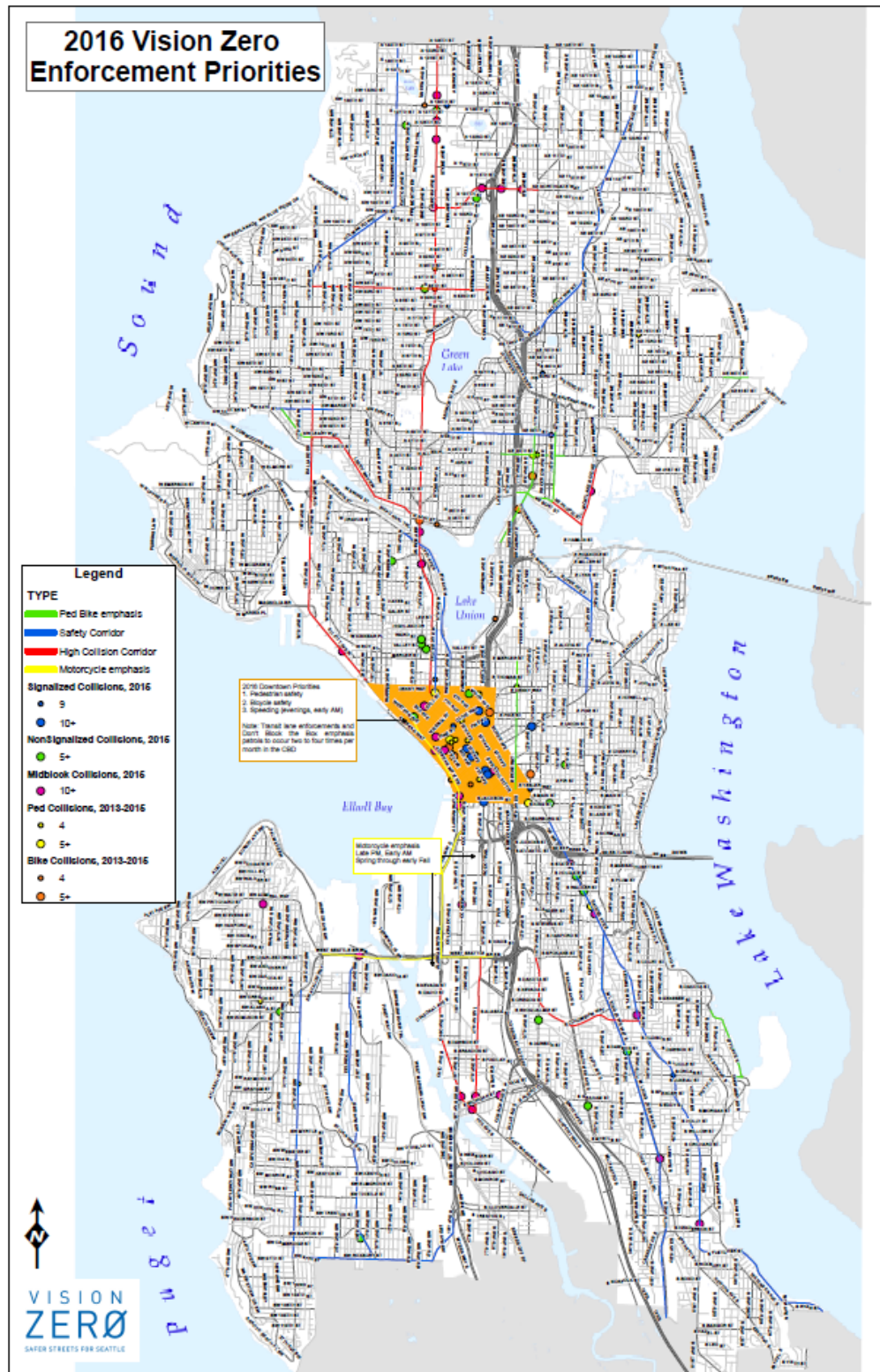


Existing 20 mph advisory speed limit signs will be removed

Enforcement

The Seattle Police Department (SPD) is committed to the city's Vision Zero goal. SDOT and SPD meet regularly to discuss trends and enforcement priorities. Speeding is a top citation issued by SPD annually and Seattle will continue to use enforcement to reinforce the posted speed limit.

Enforcement priorities are determined by speed and collision data. SDOT and SPD work to ensure that enforcements occur throughout the city but target the areas where speeding has contributed to collisions more often. Common locations for speed limit enforcements include arterial corridors, locations identified through SDOT's High Collision Evaluation Program and school zones. Priority enforcement locations for 2016 are shown in the map below:



Education

In addition to the new signage noted above, the city will conduct a comprehensive public outreach campaign to educate drivers about the speed limit changes. Outreach methods will include earned media, newspaper and radio ads, social media messages and online resources.

Implications

Lowering speed limits may foster a public perception of decreased mobility for increased safety on our arterial street network. However, the actual impact to vehicular travel times are minimal considering the safety benefits of lower speeds. The average trip by car is 3.5 miles. Reducing the speed limit from 30 mph to 25 mph would add 1.4 minutes to the average trip.

Speed (mph)	Time to Travel One Mile (mins)
25	2.4
30	2.0
35	1.71
40	1.5

There will be a transition period as more drivers within Seattle become accustomed to the lower speed limit; however, education campaign and targeted police enforcement to help change the driver behavior and reinforce the speed limits.

Safer neighborhoods results in benefits to the quality of life for everyone. Road safety improves the transportation system, which impacts people's reach for opportunities in jobs, education, and a better life. For businesses and communities, reducing speeds may reduce road noise which can promote public health and growth for economic centers. Seattle has also established the Housing Affordability and Livability Agenda (HALA) initiative to keep Seattle affordable and not displace families.

SPEED LIMIT CASE STUDIES



July 2020



Seattle
Department of
Transportation

EXECUTIVE SUMMARY

The Seattle Department of Transportation (SDOT) has committed to eliminating all traffic fatalities and serious injuries through our Vision Zero program and capital investments to the City's street network. Vehicular speed is a major factor in the severity of collisions. Speed management is an important component of SDOT's Vision Zero approach and these Case Studies present an evaluation of recent changes in SDOT's approach to speed management. When SDOT signed streets for 25 mph, the data showed total crashes decline, injury crashes decline, 50th percentile speeds decline, 85th percentile speeds decline, and high-end speeding decline for every location reviewed. The largest changes were in the reduction of high-end speeders and in number of total crashes.

This was true for streets that were previously signed for 30 mph as well as streets that were previously unsigned for speed limits (25 mph default speed limit).

SDOT has found lowering speed limits and increasing sign density alone - absent any marketing campaigns, additional enforcement, retimed signal progressions, or engineering changes to the street geometry - resulted in lower speeds and fewer crashes.

The results of these case studies led SDOT staff and Mayor Jenny Durkan to embark on a citywide speed limit reduction program in 2020. Additional speed and crash data will be collected citywide and will contribute to additional case study locations.



COMPILED LOCATION DATA

Crashes	All Crashes	Injury Crashes
Before	517	193
After	403	158
% Change	-22%	-18%

*Source: Seattle GIS Collisions (<http://data-seattlecitygis.opendata.arcgis.com/>)

Speeds	50th Percentile	85th Percentile	40+ MPH Speeders
Before	25.6 MPH	31.2 MPH	1119
After	23.1 MPH	29.0 MPH	513
% Change	-9.9%	-7.1%	-54.1%

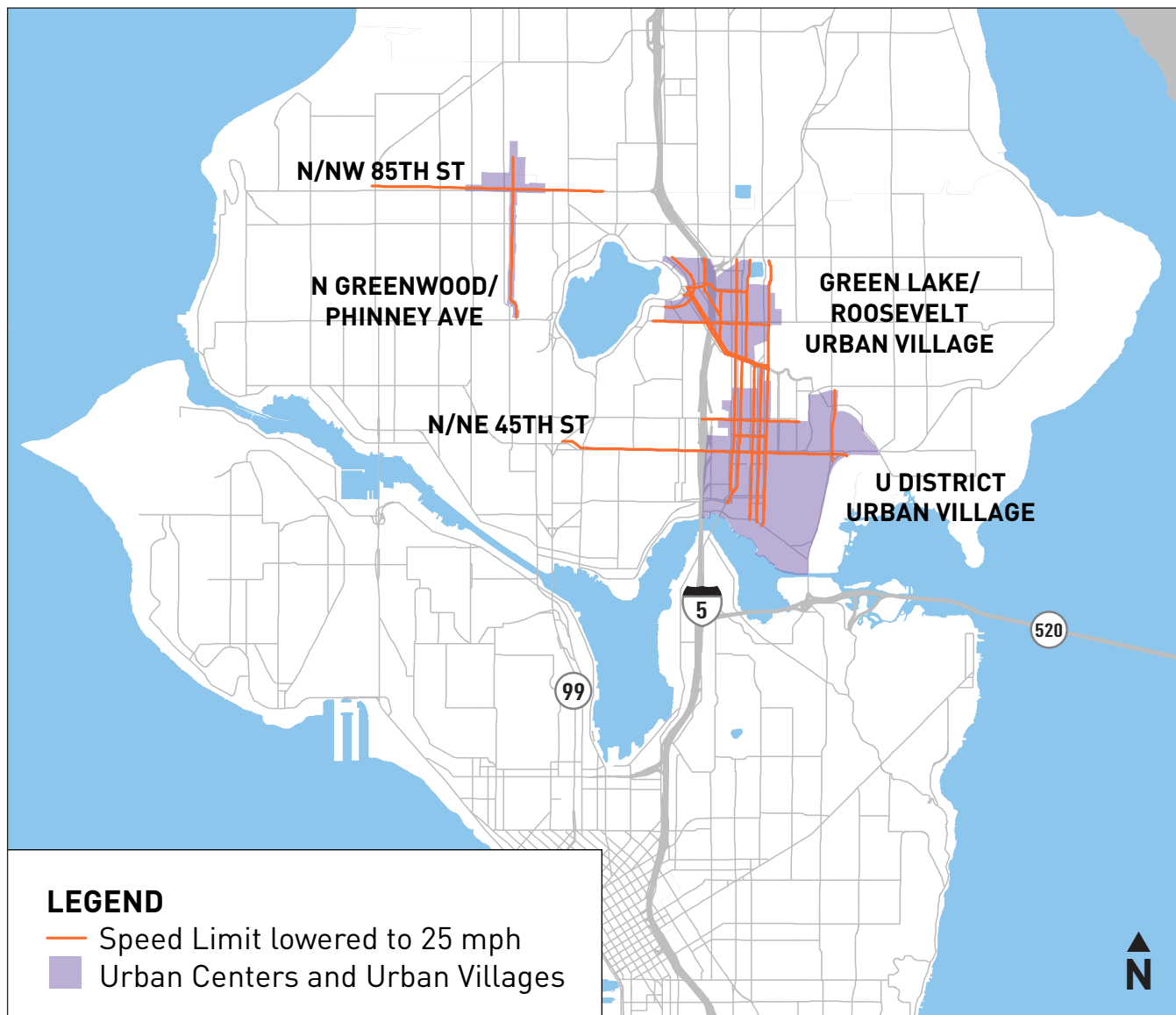


For each of the case study locations in this report, SDOT only modified signage. SDOT did not market the changes via a communications campaign, nor did the agency retime signals, increase enforcement, or make any other engineering adjustments to the street design or geometry for any of the following case studies. By removing these variables SDOT was able to review the safety and speed impacts of two specific changes: speed limit signs with a new reduced speed and increased speed limit sign density.

Prior to speed limit reductions, most locations included 30 mph signs with sign spacing ranging from 1 to 1 ½ miles in each direction or they were unsigned (default 25 mph speed limit). All locations included new 25 mph signs spaced at ¼ mile intervals in each direction.

The estimated cost to install reduced speed limit signs in Seattle is \$4,000 to \$5,000 per mile and includes design, materials and labor.

CASE STUDY LOCATIONS



Locations included for the following case studies are broken into two groups: individual corridors and urban centers/villages. Urban center/village locations contain multiple arterial streets and the speed and collision data is compiled from those various arterial streets.

GREENWOOD/PHINNEY AVE N



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

Average Daily Traffic: 13,000 vehicles

Previous Speed Limit: 30 mph (1-mile sign spacing)

Action: Replaced existing 30 mph speed limit signs with 25 mph signs and installed new 25 mph signs at ¼ mile spacing

Installed: February 2018

	All Crashes	Injury Crashes	50th Percentile Speed	85th Percentile Speed	# of 40+ MPH (high end speeders)
Before	27.4	10.8	28.7 MPH	33.5 MPH	1,023 vehicles
After	17.7	8.6	26.7 MPH	31.2 MPH	373 vehicles
% Change	-35%	-21%	-7%	-7%	-64%

*Before data: 5 years annualized (Feb 2013 – Jan 2018)

*After data: 1.8 years annualized (Mar 2018 – Nov 2019)

*Injury Crashes include injury, serious injury, and fatal collisions

NW/N 85TH ST



Limits: 18th Ave NW to Interlake Ave N (1.9 miles)

Average Daily Traffic: 19,000 vehicles

Previous Speed Limit: 25 mph (unsigned default speed limit)

Action: Installed new 25 mph signs at ¼ mile spacing

Installed: February 2018

	All Crashes	Injury Crashes	50th Percentile Speed	85th Percentile Speed	# of 40+ MPH (high end speeders)
Before	71.4	27.4	27.3 MPH	32.6 MPH	2,115 vehicles
After	43.4	18.9	26.4 MPH	32.3 MPH	1,156 vehicles
% Change	-39%	-31%	-3%	-1%	-45%

*Before data: 5 years annualized (Feb 2013 – Jan 2018)

*After data: 1.8 years annualized (Mar 2018 – Nov 2019)

*Injury Crashes include injury, serious injury, and fatal collisions

N/NE 45TH ST



Limits: N 46th St & Whitman Ave to Montlake Blvd NE (2.2 miles)

Average Daily Traffic: 22,500 vehicles

Previous Speed Limit: 25 mph (unsigned default speed limit)

Action: Installed new 25 mph signs at ¼ mile spacing

Installed: November 2018

	All Crashes	Injury Crashes	50th Percentile Speed	85th Percentile Speed	# of 40+ MPH (high end speeders)
Before	101.6	38.2	26.3 MPH (EB)	31.6 MPH (EB)	653 vehicles (EB)
After	87.0	34.0	19.7 MPH (EB)	27.9 MPH (EB)	221 vehicles (EB)
% Change	-14%	-11%	-25%	-12%	-66%

*Before data: 5 years annualized (Feb 2013 – Jan 2018)

*After data: 1.8 years annualized (Mar 2018 – Nov 2019)

*Injury Crashes include injury, serious injury, and fatal collisions

GREEN LAKE / ROOSEVELT URBAN VILLAGE



Previous Speed Limit:

15th Ave NE: 30 mph (1.5-mile sign spacing))

All other streets: 25 mph (unsigned default speed limit)

Action: Installed new 25 mph signs at ¼ mile spacing

Installed: November 2018

	All Crashes	Injury Crashes	50th Percentile Speed [†]	85th Percentile Speed [†]	# of 40+ MPH (high end speeders) [†]
Before	72.8	25.2	20.6-26.5 MPH	25.9-31.3 MPH	1,072 vehicles
After	55.0	22.0	18.2-26.1 MPH	22.2-30.7 MPH	571 vehicles
% Change	-24%	-13%	-2%	-4%	-47%

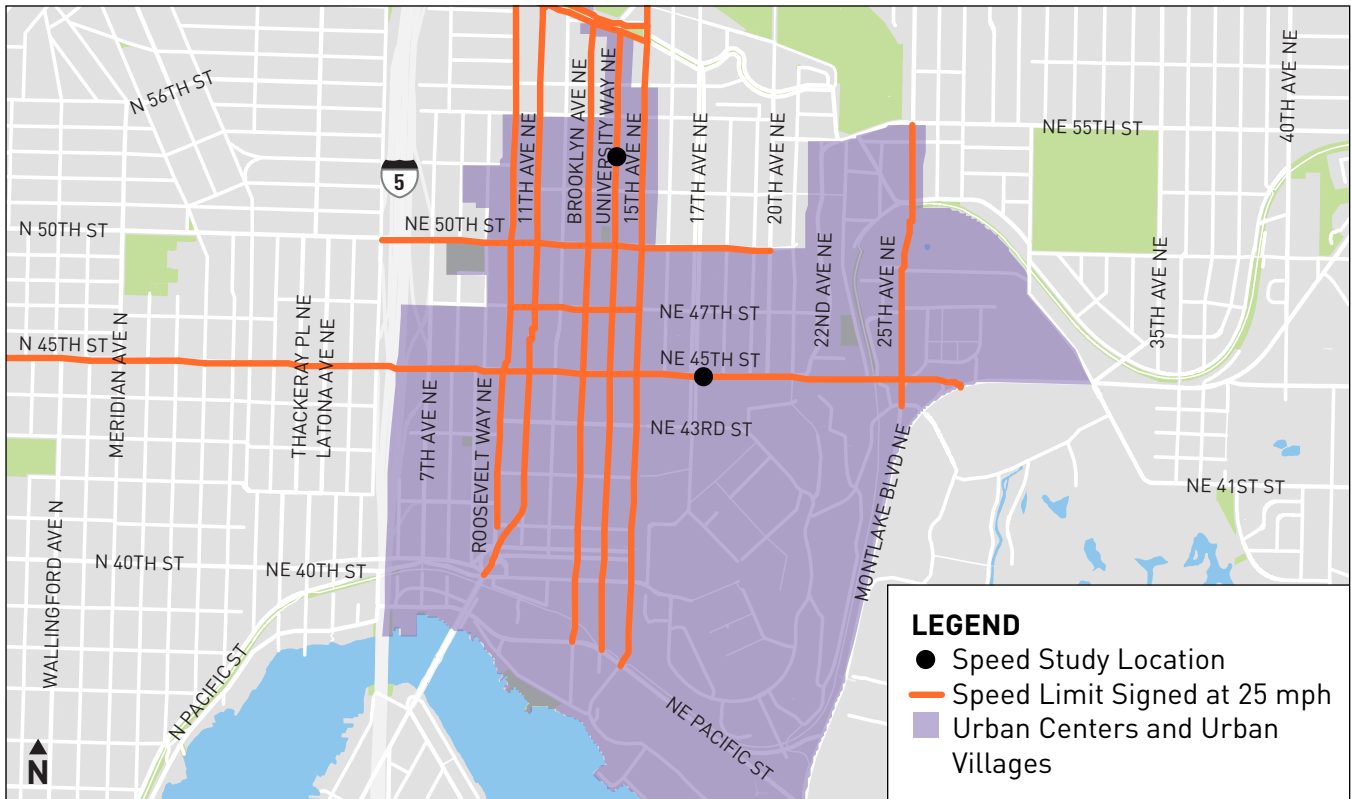
*Before data: 5 years annualized (Nov 2013 – Oct 2018)

*After data: 1 year annualized (Dec 2018 – Nov 2019)

*Injury crashes include injury, serious injury, and fatal collisions

[†]Speed data based on studies at 7 locations

U-DISTRICT URBAN CENTER



Previous Speed Limit:

University Way NE & 15th Ave NE: 30 mph (1.5-mile sign spacing))

All other streets: 25 mph (unsigned default speed limit)

Action: Installed new 25 mph signs at ¼ mile spacing

Installed: November 2018

	All Crashes	Injury Crashes	50th Percentile Speed†	85th Percentile Speed†	# of 40+ MPH (high end speeders)†
Before	243.8	91.8	22.1-26.3 MPH	27.9-31.6 MPH	733 vehicles
After	200.0	75.0	19.7-21.2 MPH	26.3-27.9 MPH	246 vehicles
% Change	-18%	-18%	-15%	-9%	-66%

*Before crash data: 5 years annualized (Nov 2013 – Oct 2018)

*After crash data: 1 year annualized (Dec 2018 – Nov 2019)

*Injury crashes include injury, serious injury, and fatal collisions

†Speed data based on studies at 2 locations

HISTORY OF SEATTLE LOWERING SPEED LIMITS



In 2013 the Washington State legislature passed the Neighborhood Safe Streets Bill (HB 1045), which allowed individual municipalities to establish a maximum speed limit of twenty miles per hour within residential districts. This is listed under the revised code of Washington as RCW 46.61.415 and it works in tandem with RCW 46.61.400 (passed in 1965) which allows for a speed limit of twenty-five miles per hour on city streets.

Seattle endorsed Vision Zero in 2015 to eliminate all fatal and serious injury collisions and with speeds being a major contributor, Seattle formalized lower speed limits on city streets. In 2016 the Seattle City Council unanimously passed a new ordinance revising municipal codes 11.52.060 and 11.52.080 to set the residential street speed limit to 20 miles per hour and the default arterial street speed limit to 25 miles per hour unless otherwise signed.

As soon as the new ordinances passed, Seattle quickly began implementing lower speed limits. This began with the downtown area to reduce speeds in the densest pedestrian areas in Seattle. From there, SDOT took on speed limit reductions in conjunction with other capital projects and started to target Seattle's Urban Villages.

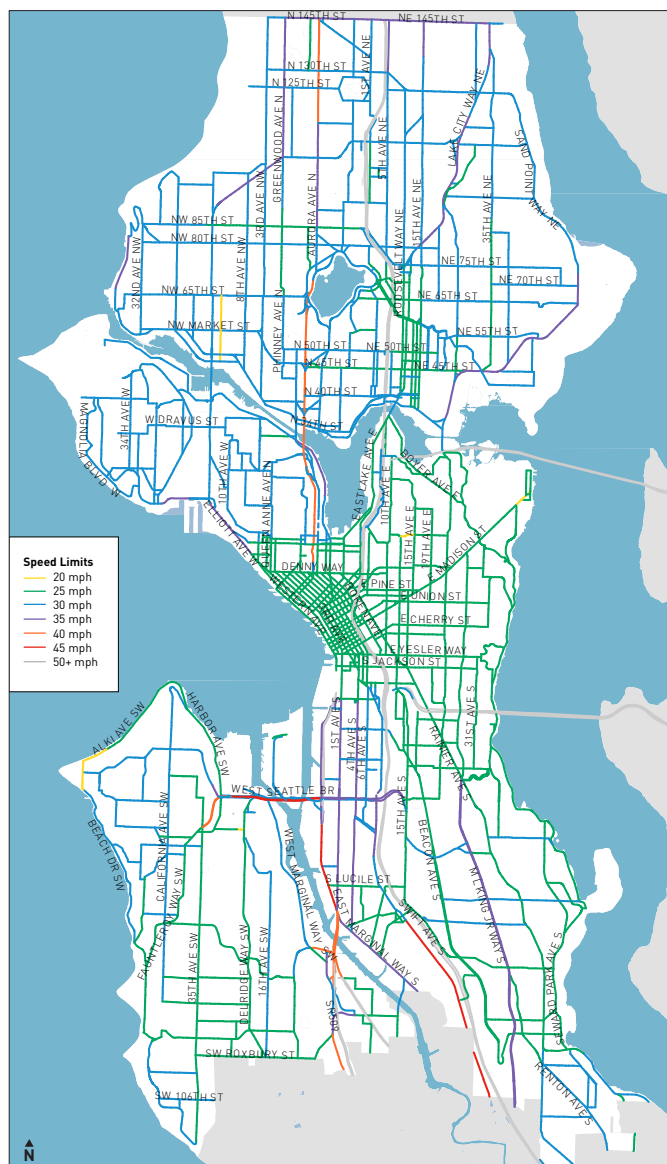
In 2019 the results of the Case Studies helped guide Mayor Jenny Durkan to commit to a citywide effort to reduce speed limits on all of Seattle's arterial streets as part of a suite of actions to advance Vision Zero.

NEXT STEPS

In 2020 SDOT continues to take aggressive action to reduce speed limits citywide. Speed limit reductions have shown to be a effective treatment but are part of a larger set of Vision Zero tools to reduce serious injury collisions and fatalities across Seattle. SDOT will continue to evaluate the effectiveness of reduced speed limit locations for

additional engineering and educational efforts that are context sensitive to the surrounding neighborhoods and street use. As of June 1st, city crews have installed new 25 mph signs on over 90 miles of arterial streets and SDOT will reduce speed limits on an additional 270 miles of streets by May 2021.

Seattle's Existing Speed Limit Network (as of 7/15/20)



The Seattle Department of Transportation
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PO Box 34996
Seattle, WA 98124-4996
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Seattle
Department of
Transportation

7.2020

CITY OF SEATTLE

VISION ZERO: SPEED LIMIT REDUCTION FAQ

What is happening to the speed limit in Seattle?

The City of Seattle is proposing new speed limit measures to enhance street safety – thanks to a new proposal from Mayor Ed Murray and Councilmember Tim Burgess.

Proposed changes include reducing the speed limit on all residential streets from 25 to 20 MPH and on streets in the center city from 30 to 25 MPH.

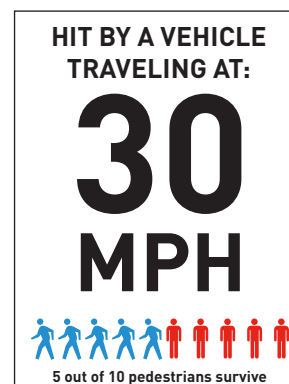
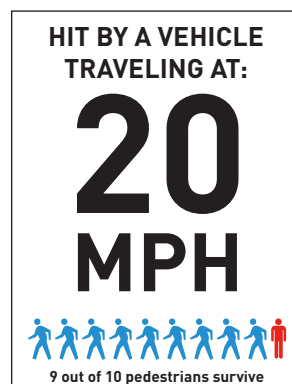
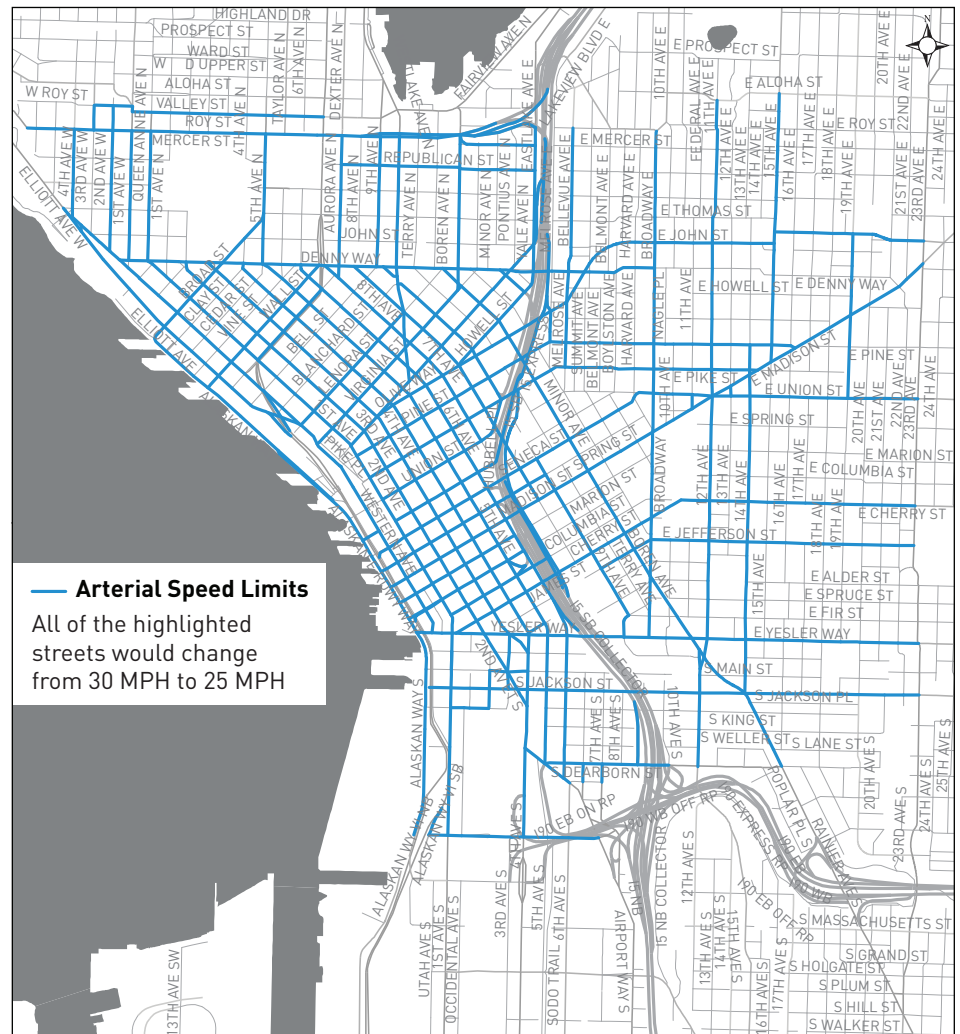
This is part of Seattle's Vision Zero plan to end traffic deaths and serious injuries on city streets by 2030.

Why is this necessary?

While Seattle is one of the safest cities in the country, each year about 20 people are killed in traffic collisions and another 150 are seriously injured. Their lives are cut short or changed forever, impacting their families, friends, and broader communities. One life lost or altered is one life too many.

And while safety has generally improved over time, we still see our most vulnerable travelers (those walking and biking) impacted disproportionately.

People who are hit while walking or bicycling make up only 7% of crashes, but 47% of fatalities. And, 9 out of 10 bicycle/pedestrian collisions result in injury. Reducing the speed limit will help save lives and make Seattle streets safer for everyone.



City of Seattle



Seattle
Department of
Transportation

VISION
ZERO
SAFER STREETS FOR SEATTLE

Will reducing the speed by a few miles per hour really make a difference?

Yes. Speed contributes to 25% of traffic fatalities citywide, and 42% of downtown traffic fatalities every year.

Speed is a critical factor in whether you survive a car crash: People who are walking are twice as likely to live after being hit by a car at 25 MPH than at 30 MPH. This small speed limit reduction doubles the odds of survival. That's why every other city in King County, and major cities like New York, Los Angeles, Washington, DC, Portland, Denver, and Houston have already made this choice and have a speed limit of 25 MPH or lower.

Reducing the speed limit works for several reasons: One, it gives people who drive, walk, and bike more time to see each other and react. Two, reducing the speed limit decreases cars' stopping distance. (Reducing the speed limit from 30 to 25 MPH decreases stopping distance by 45 feet, or 23%.)

In many cases, the change will help people avoid crashes altogether. If a crash does occur, the reduced speed will reduce its severity, so people have less serious injuries.

Won't lowering the speed limit make traffic worse?

Not much: The average car trip in Seattle is 3.5 miles. Reducing that car's speed from 30 to 25 MPH will add 1 minute and 15 seconds to the trip – just over a minute to save a life.

But, most of the time, drivers in 30 MPH speed zones are already going 25 MPH during peak commute times. That's because, in the center city, signal timing has already been adjusted to 25 MPH and drivers are moving more efficiently through the city.

What's more, travel time is primarily determined by factors like traffic signals, congestion (often caused by crashes), and obstacles like double-parked vehicles and turning vehicles. A reduced speed limit will effectively impact drivers who travel at excessive, unsafe speeds and save lives while getting Seattle where it needs to go.

On most neighborhood streets, it's already difficult to drive faster than 20 MPH due to street widths, traffic circles, and parking. When people do speed, it is especially dangerous for our youngest and oldest residents living and playing in their neighborhoods.

Why is the City targeting drivers?

Vision Zero targets dangerous behaviors and choices – like speeding – not specific people.

Reaching Seattle's goal of zero traffic fatalities and serious injuries by 2030 requires people who drive, walk, and bike to all be part of the solution. Reducing the speed limit gives everyone more time to see each other and avoid a crash.

Drivers benefit, too, from having better ability to stop in time to avoid a crash. No one should go through life knowing that they caused a traffic-related death or injury.

On neighborhood streets, going from 25 to 20 MPH essentially expands the existing school zone speed limit to cover all 2,400 miles of residential streets, creating safer routes for everyone in neighborhoods across the city.

Sometimes, an accident is just an accident. Why are we focusing on speed?

Most car crashes can be prevented by avoiding dangerous choices like speeding – they are not truly "accidents." Vision Zero recognizes that humans make mistakes, but

they should not be deadly or lead to a life-altering injury.

By reducing the speed limit, we can create a safer place for Seattle residents to live, work, and play at the speed of life.

What is the status of this change? When does it take effect?

Mayor Ed Murray and Councilmember Tim Burgess unveiled their safety proposal on September 6, 2016.

The next steps include:

- September 20: Discussion and vote by the Seattle City Council's Sustainability and Transportation Committee
- September 26: Discussion and vote by the full Seattle City Council
- 10 day period for Mayor Murray to sign legislation into law
- 30 day period for the law to take effect

November is the anticipated roll-out timeframe for adding or altering hundreds of new signs, launching a public education campaign, and enforcement.

How will the law be enforced? What will be done to educate drivers about the lower speed limit?

If the proposal becomes law, the City of Seattle expects to use enforcement to deter violations of the speed limit. In addition, the City plans to undertake a comprehensive public education campaign to reach Seattle residents with information about the speed limit reduction before the new law would take effect.

Learn more about Vision Zero at www.seattle.gov/visionzero.