



Staff Report

File #: 21-50
Version: 1

Date: 3/8/2021
Item #: 3.3a.

TO: Mayor and City Council
THROUGH: Steve Powers, City Manager
FROM: Peter Fernandez, PE, Public Works Director

SUBJECT:

Speed limit review of 17th Street SE/NE from Mission Street SE to Silverton Road NE and 45th Street NE from Center Street NE to Sunnyview Road NE.

Ward(s): 1, 2, 5, 6
Councilor(s): Stapleton, Andersen, Gonzalez, Hoy
Neighborhood(s): SESNA, NEN, Lansing, ELNA, NOLA
Result Area(s): Welcoming and Livable Community

ISSUE:

Should Council concur with the speed limit review by the Oregon Department of Transportation (ODOT) that recommends retaining the 30 mph speed limit on 17th Street NE from State Street NE to Silverton Road NE, and recommends reducing the speed limit on 45th Street NE from 35 mph to 30 mph?

Further, should Council reject ODOT’s recommendation to increase the speed limit on 17th Street SE/NE between Mission Street SE to State Street NE, from 25 mph to 30 mph?

RECOMMENDATION:

Concur with the speed limit review by the Oregon Department of Transportation (ODOT) that recommends retaining the 30 mph speed limit on 17th Street NE from State Street NE to Silverton Road NE, and recommends reducing the speed limit on 45th Street NE from 35 mph to 30 mph.

Reject ODOT’s recommendation to increase the speed limit on 17th Street SE/NE between Mission Street SE to State Street NE from 25 mph to 30 mph.

SUMMARY:

At the January 27, 2020, Council Meeting, City Council directed staff to initiate a speed limit review for 17th Street SE/NE from Mission Street SE to Silverton Road NE, and for 45th Street NE from

Center Street NE to Sunnyview Road NE

Staff submitted a request to ODOT to conduct an engineering study on 17th Street SE/NE and on 45th Street NE to determine if the existing speed limits should be reduced. Attached are those studies. The following is a summary of the results of those studies.

17th Street SE/NE

According to the ODOT speed study (Attachment 1), 17th Street has an average daily traffic volume of 10,000. From January 2016 through December 2018 there were 149 reported crashes with no fatal crashes and three Injury A (severe) crashes. In the 25 mph section (between Mission Street SE and State Street NE), 99% of the vehicles exceed the speed limit with the 50% speed at 32 mph. In the 30 mph section (between State Street NE and Sunnyview Road NE), between 49% and 93% exceeded the speed limit with the 50% speed at 30 mph to 32 mph. (Note: there were multiple speed measurement locations on this segment of 17th Street NE.)

ODOT recommended the existing 30 mph speed limit be retained on the section of 17th Street between State Street and Silverton Road NE. This recommendation is based on the percent of vehicles exceeding the existing posted speed limits and the low number of Injury A crashes verses total crashes. Public Works staff agree with this recommendation.

ODOT further recommended the section of 17th Street between State Street and Mission Street that is currently posted at 25 mph be posted at a higher speed of 30 mph. ODOT's recommendation is based on the 50% speed. Public Works staff does not believe it prudent to increase the speed limit at this segment of 17th Street.

45th Street NE

According to the ODOT speed study (Attachment 2), 45th Street NE has an average daily traffic volume of 5,700. From January 2016 through December 2018 there were 12 reported crashes with no fatal or serious injuries. Additionally, 48% of the vehicles exceed the 35 mph speed limit. The 50% speed is 35 mph.

ODOT recommended the speed limit be lowered to 30 mph based on the speed limit being no more than 5 mph below the 50% speed. Public Works staff agree with ODOT.

FACTS AND FINDINGS:

17th Street is an improved minor arterial street. The posted speed limit varies, with 25 mph posted between Mission Street SE and State Street NE, and 30 mph posted between State Street NE and Sunnyview Road NE. The 25 mph speed limit posting was not established by ODOT. When that section of 17th Street was posted 25 mph, it was a local street and did not connect between State Street and Mission Street SE. (At the time, there was no bridge on 17th Street over Mill Race). The 30 mph speed limit was established in 1967.

45th Street NE is an improved collector street. The posted speed limit is 35 mph, which was established by ODOT in 1977.

Effective May 1, 2020, the process ODOT uses for conducting speed zone investigations and determining recommendations was revised. There are a number of factors considered when conducting a speed zone study including traffic volumes, crash history, roadway geometry, roadside development and density, and vehicle speeds. The biggest change in the process is the consideration of the 50% speed verses using the 85% speed as was in the earlier process. Studies suggested posting speeds near the 85% speed (the speed at or below which 85 percent of the vehicles are traveling) minimizes crash occurrences and provides better driver compliance. Recent studies suggest that posting speeds near the 50% speed is more applicable for urban higher density areas.

If Council rejects ODOT's recommendations for 17th Street (except the existing section that is currently posted 25mph) and for 45th Street, a hearing with the Oregon Speed Control Board will be set to make a final determination on the speed zones. Since the section of 17th Street currently posted 25 mph was done when it was a dead end, local residential street, ODOT will not object to that portion remaining 25 mph or require it be presented to the Oregon Speed Control Board.

BACKGROUND:

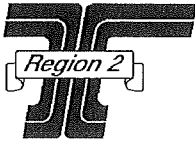
The Oregon Department of Transportation (ODOT) has authority to set speed zones on all roads in Oregon that do not meet statutory standards (Oregon Vehicle Code 811.105, ORS 811.111, and ORS 810.200). Oregon Administrative Rules (734-020-0015) establishes the process for designating speed zones on public roads.

Following the January 27, 2020, Council Meeting, staff submitted a request to ODOT to conduct an engineering study on 17th Street SE/NE and on 45th Street NE to determine if the existing speed limits should be reduced.

Robert D. Chandler, PhD, PE
Assistant Public Works Director

Attachments:

1. 17th Street SE/NE Speed Zone Investigation
2. 45th Avenue NE Speed Zone Investigation



INTEROFFICE MEMO

DATE: November 16, 2020

TO: Michael Kimlinger, P.E.
State Traffic-Roadway Engineer

FROM: Dorothy Upton, P.E.
Region 2 Traffic Operations Engineer
(503) 986-5761

File Code: City of Salem

Dorothy **Date:**
Upton 2020.11.16
15:21:42
-08'00'

Region 2 Traffic Operations Engineer

SUBJECT: **Speed Zone Investigation**
17TH STREET SE / 17TH STREET NE
Salem Highway #072 (OR 22) / Mission Street SE to
Silverton Road NE
City of Salem

A speed zone investigation has been conducted on 17th Street SE / 17th Street NE from Salem Highway #072 (OR 22) / Mission Street SE to Silverton Road NE. The investigation was requested by Kevin Hottmann, Traffic Engineer, City of Salem. City Council made a motion for staff to request ODOT reduce the speed limit to 25 mph based on numerous pedestrian fatalities in the community.

The investigated section is 2.37 miles in length and heavy residential in density and culture, a suburban residential context and has an ADT of 10,000. This road is classified as an Urban Minor Arterial (City of Salem). Four spot speed checks showed the average 85% speed to be 36 mph and the 50% speed to be 32 mph. Eighty-three percent of the cars are traveling within the pace limits of 28 - 37 mph. 99% of the vehicles were exceeding the existing unestablished posted 25 mph zone and 71% exceeding the established posted 30 mph zone. There were 149 reported crashes between 01/01/16 and 12/31/18 with no fatal crashes and 3 injury A.

The recommended speed zoning for this section is to be established under "OAR 734-020-0015 (2)(b) Based on context". We are recommending to retain the existing 30 mph zone, and to establish a 30 mph speed limit on the currently unestablished, posted 25 mph, section from Salem Highway #072 (OR 22) / Mission Street to State Street. Because of the percent of people exceeding the existing posted speeds and the low number of injury A crashes vs total crashes, we are not recommending using exclusion 2 to establish this zone.

If you concur with this recommendation, please note your concurrence on the attached report.

DU/WR

OREGON DEPARTMENT OF TRANSPORTATION
 Report of Speed Zone Investigation
17TH STREET SE / 17TH STREET NE
Salem Highway #072 (OR 22) / Mission Street SE to Silverton Road NE
City of Salem
November 16, 2020

Approved by
 State Traffic-Roadway Engineer

Recommendation: Rescind existing SSCB Resolution 1529, dated September 12, 1967 to establish the speed zoning as shown below:

<u>Section Investigated</u>		Existing	Recommended
	<u>ON 17TH STREET SE</u>		
Section A	From: Salem Highway #072 (OR 22) / Mission Street SE	25 mph (Unestablished)	30 mph
	To: State Street		
	<u>ON 17TH STREET NE</u>		
	From: State Street	30 mph	30 mph
	To: Silverton Road NE		

Historical Background:

Investigation Requested by: Kevin Hottmann, Traffic Engineer, City of Salem

Requested Speed: 25 mph, City Council made a motion for staff to request ODOT reduce the speed limit based on numerous pedestrian fatalities in the community.

Previous Action: Existing SSCB Resolution 1529, dated September 12, 1967

<u>Investigation:</u>	<u>Section A</u>
Section Length	2.37 mile
85% Speed	36 mph
50% Speed	32 mph
2016-2018 Section Crash Rate	5.74
2018 Average Daily Traffic	10000
Context	Suburban Residential
Culture Type & Density	Heavy Residential
Horizontal Alignment	3 curves
Vertical Alignment	Level
Curve Signs & Speed Riders	None
Existing Posted Speed	25 mph (unestablished) / 30 mph
Recommended Speed	30 mph

Roadway Data:

Surface
Lanes
Width
Parking
Shoulders
Intersecting Streets
Paved
Stopped
Signalized and Other
Pedestrian Activity
Bicycle Activity
Bicycle Lanes
Sidewalks
Marked Crosswalks
Enhanced Crosswalks
Transit

Section A

AC
2 – 5 4/
29' – 38' curb to curb
Partially Prohibited
66% 5' – 6' paved bike lane / 33% 0' (curb)
28
28
23
5
High
Medium
66%
90%
15
3 (ped islands)
Yes

Crash Data:

Study Period 1/1/2016 – 12/31/2018
2016-2018 Total Crashes 149
2016-2018 Fatal K Crashes 0
2016-2018 Serious Injury A Crashes 3
2016-2018 Injury B and C Crashes 95
2016-2018 No Injury O Crashes 51
2016-2018 Section Crash Rate (R) 5.74
2017 Comparable Crash Rate (r) 1/ 3.07
Deviation (R-r) 2.67

Spot Speed Data:

85% Speed 36 mph
50% Speed 32 mph
Pace Limits 2/ 28 – 37 mph
% in Pace 83%
Maximum Speed 44 mph
Posted Speed 25 mph / 30 mph
% Exceeding Posted Speed 99% in 25 mph / 71% in 30 mph
Computed 85% Speed 3/ 33.33 mph
Recommended Speed 30 mph

1/ Urban Minor Arterial (City of Salem)

2/ Ten mile-per-hour range containing the largest number of sample vehicles

3/ 85% speed minus deviation/85% speed

4/ Majority 2 lanes w/ continuous center turn lane / 5 lanes at Mission / 4 lanes at Center / 2 lanes Pearl St to Silverton Rd

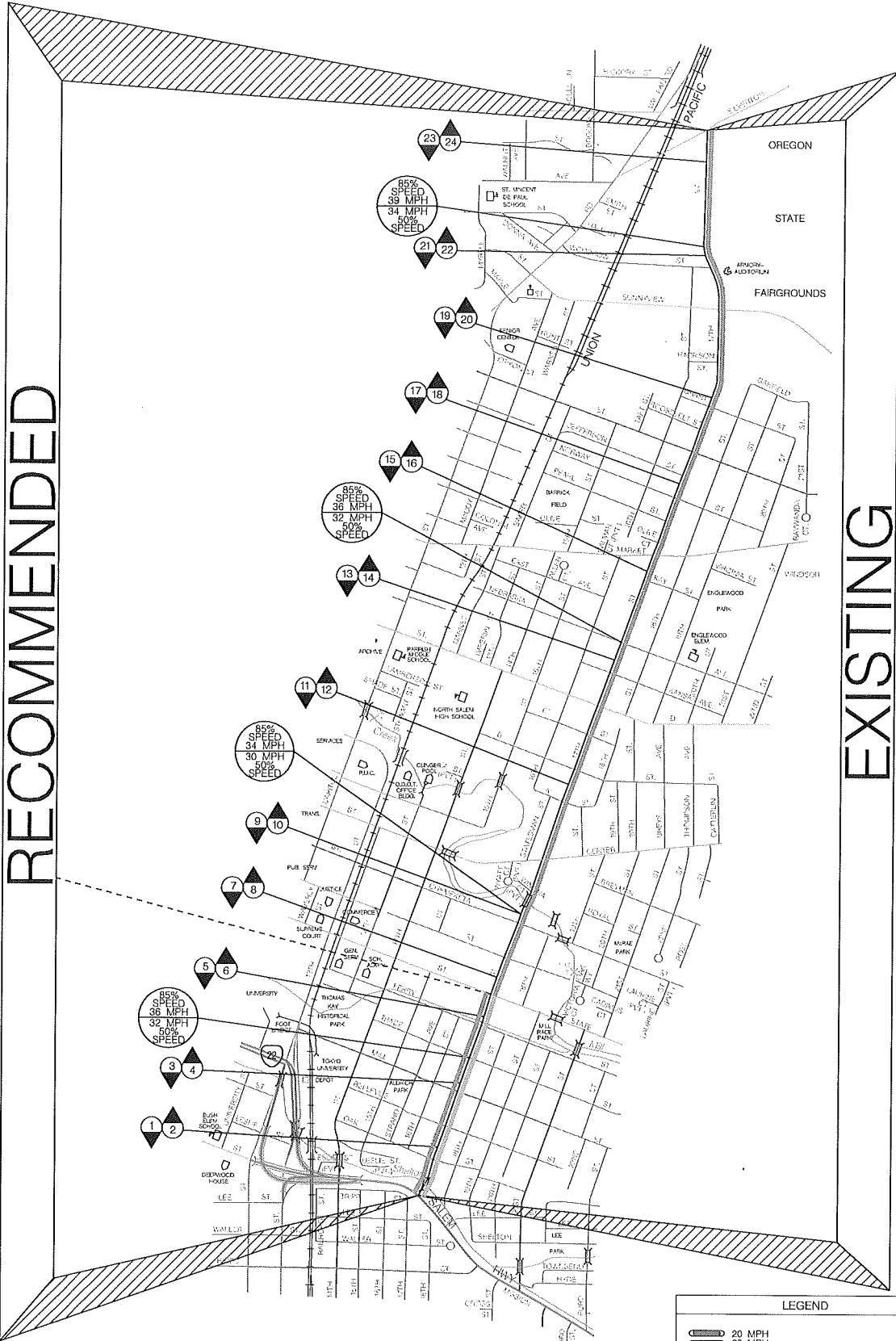
Factors Influencing Recommendation: 85th / 50th percentile speed, pace limits, % exceeding existing posted speeds, context speed range.

OAR 734-020-0015 (2)(b) Based on context

SPEED ZONE INVESTIGATION

17TH STREET

CITY OF SALEM



RECOMMENDED

EXISTING



LEGEND

	20 MPH
	25 MPH
	30 MPH
	35 MPH
	40 MPH
	45 MPH
	50 MPH
	55 MPH (STAT)
	CITY LIMITS

**TYPICAL VIEWS
17TH STREET SE
CITY OF SALEM
SEPTEMBER 22, 2020**



1. Looking south from 150 feet north of Oak Street.



2. Looking north from 150 feet north of Oak Street.

TYPICAL VIEWS
17TH STREET SE
CITY OF SALEM
SEPTEMBER 22, 2020



3. Looking south from 100 feet north of Mill Street.



4. Looking north from 100 feet north of Mill Street.

TYPICAL VIEWS
17TH STREET SE
CITY OF SALEM
SEPTEMBER 22, 2020



5. Looking south from 100 feet north of Ferry Street.



6. Looking north from 100 feet north of Ferry Street.

TYPICAL VIEWS
17TH STREET NE
CITY OF SALEM
SEPTEMBER 1, 2020



7. Looking south from 200 feet north of State Street.



8. Looking north from 200 feet north of State Street.

TYPICAL VIEWS
17TH STREET NE
CITY OF SALEM
SEPTEMBER 1, 2020



9. Looking south from 100 feet north of Chemeketa Street.



10. Looking north from 100 feet north of Chemeketa Street.

TYPICAL VIEWS
17TH STREET NE
CITY OF SALEM
SEPTEMBER 1, 2020



11. Looking south from 200 feet north of A Street.



12. Looking north from 200 feet north of A Street.

TYPICAL VIEWS
17TH STREET NE
CITY OF SALEM
SEPTEMBER 1, 2020



13. Looking south from 150 feet north of Kansas Avenue.



14. Looking north from 150 feet north of Kansas Avenue.

TYPICAL VIEWS
17TH STREET NE
CITY OF SALEM
SEPTEMBER 1, 2020



15. Looking south from 100 feet north of Kay Street.



16. Looking north from 100 feet north of Kay Street.

TYPICAL VIEWS
17TH STREET NE
CITY OF SALEM
SEPTEMBER 1, 2020



17. Looking south from 100 feet south of Jefferson Street.



18. Looking north from 100 feet south of Jefferson Street.

TYPICAL VIEWS
17TH STREET NE
CITY OF SALEM
SEPTEMBER 1, 2020



19. Looking south from 100 feet north of Grant Street.



20. Looking north from 100 feet north of Grant Street.

TYPICAL VIEWS
17TH STREET NE
CITY OF SALEM
SEPTEMBER 1, 2020



21. Looking south from 150 feet north of Woodrow Street.



22. Looking north from 150 feet north of Woodrow Street.

TYPICAL VIEWS
17TH STREET NE
CITY OF SALEM
SEPTEMBER 1, 2020



23. Looking south from 350 feet south of Silverton Road.



24. Looking north from 350 feet south of Silverton Road.

Crash Listing

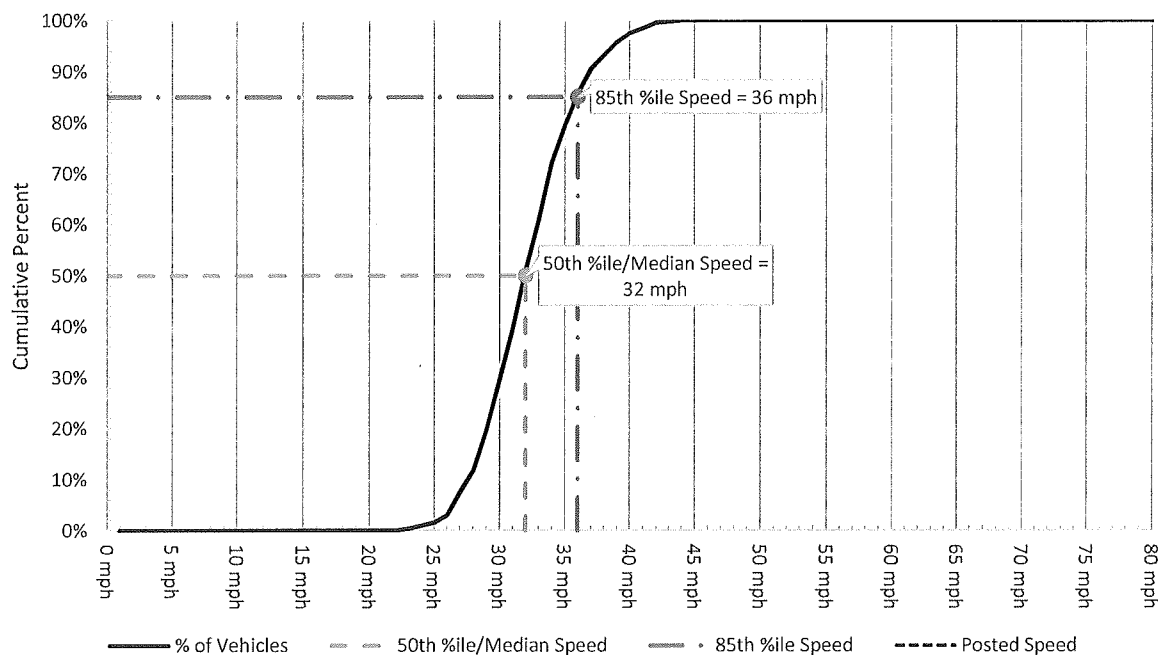
Year	Collision Type										Classification						
	Angle	Head-On	Rear-End	Sideswipe Meeting	Sideswipe Overtaking	Turning Movements	Parking Maneuver	Non-Collision	Fixed-Other Object	Pedestrian	Backing	Other	Bicycle Crashes*	All Crashes*	Fatal K	Serious Injury A	Injury B and C
2016	14	23	1	2	5	1	1	2	2	1	1	1	1	49	2	30	17
2017	11	28	1	1	7	1	1	1	1	1	1	1	1	49	1	31	18
2018	10	22	1	1	13	1	1	2	2	2	2	1	1	51	1	34	16
Total	35	73	1	4	25	2	0	5	3	1	0	3	149	0	95	51	
Total																	
Total																	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total																	
Total																	
Total																	
Total																	
Total																	
Total																	

Roadway 17th Street SE/NE
 Route Number _____
 City Salem
 County Marion From _____
 To Salem Hwy / Mission St
 To Silverton Rd
 Years 2016 To 2018

Spot Speed Measurement Report - Corridor Summary

Roadway	17th Street	Start of First Spot Speed Study	August 12, 2020 10:30 AM
City	Salem	End of Last Spot Speed Study	September 22, 2020 11:34 AM
County	Marion	Weather	Various
Location	Mission St to Silverton Rd	Investigator	WR
Direction of Travel	Southbound & Northbound	Agency/Company	ODOT

Combined Direction Speed Profile



Summary Statistics (4 Spot Speed Studies)

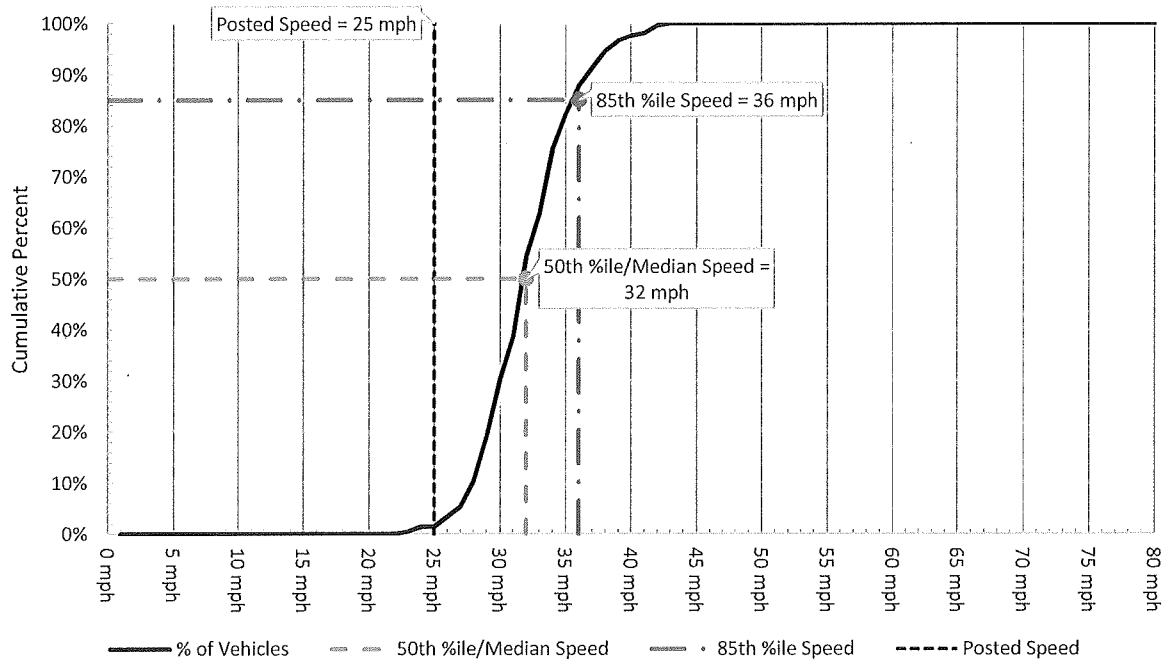
Direction	Southbound	Combined	Northbound
Total # of Vehicles	403 vehicles	823 vehicles	420 vehicles
50th %ile/Median Speed	32 mph	32 mph	32 mph
85th %ile Speed	36 mph	36 mph	36 mph
Mean Speed	33 mph	33 mph	32 mph
Standard Deviation	3.7 mph	3.7 mph	3.6 mph
Pace Limits*	27 mph - 36 mph	28 mph - 37 mph	28 mph - 37 mph
% In Pace	84%	83%	83%
Max Speed	44 mph	44 mph	43 mph
Posted Speed	Varies	#N/A	Varies
% Exceeding Posted Speed	Posted Speed Varies	Posted Speed Varies	Posted Speed Varies

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

Roadway	17th St	Date	September 22, 2020
City	Salem	Time	10:04 AM - 11:34 AM
County		Weather	LT CLOUDS
Location	At Trade St	Investigator	WR
Direction of Travel	Northbound & Southbound	Agency/Company	ODOT

Combined Direction Speed Profile



Summary Statistics

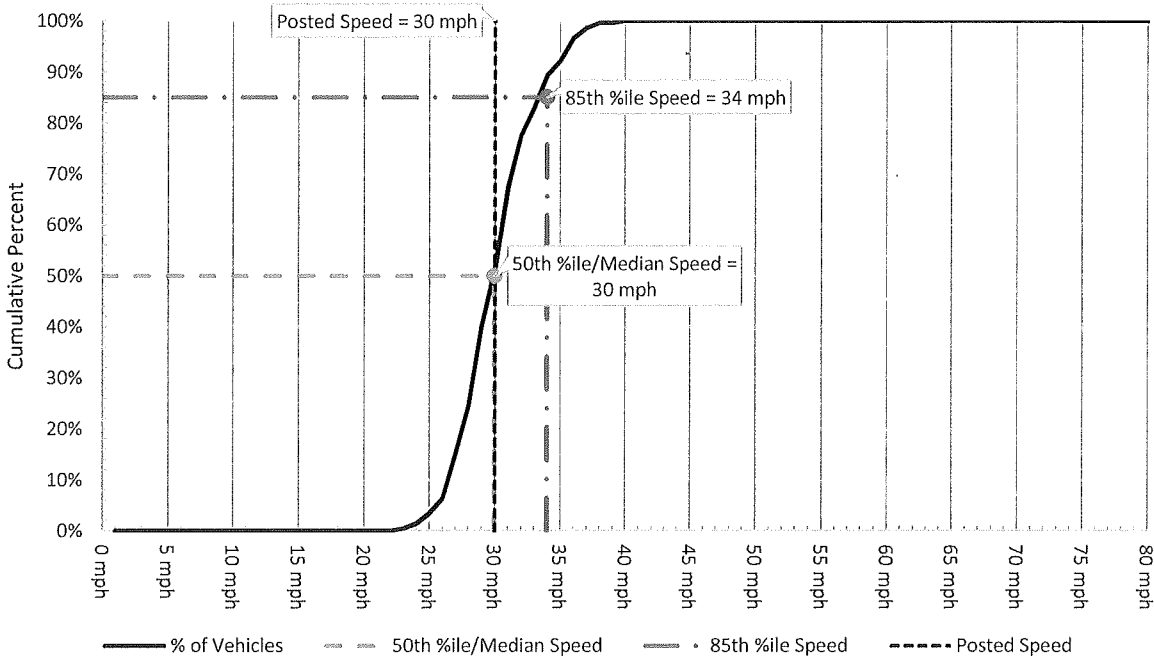
Direction	Northbound	Combined	Southbound
Total # of Vehicles	98 vehicles	204 vehicles	106 vehicles
50th %ile/Median Speed	32 mph	32 mph	33 mph
85th %ile Speed	36 mph	36 mph	36 mph
Mean Speed	32 mph	32 mph	33 mph
Standard Deviation	3.7 mph	3.5 mph	3.3 mph
Pace Limits*	28 mph - 37 mph	28 mph - 37 mph	28 mph - 37 mph
% In Pace	83%	86%	89%
Max Speed	42 mph	43 mph	43 mph
Posted Speed	25 mph	25 mph	25 mph
% Exceeding Posted Speed	97%	99%	100%

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

Roadway	17th Street NE	Date	August 12, 2020
City	Salem	Time	10:30 AM - 11:47 AM
County		Weather	LT CLOUDS
Location	100 ft N of Chemeketa St	Investigator	WR
Direction of Travel	Southbound & Northbound	Agency/Company	ODOT

Combined Direction Speed Profile



Summary Statistics

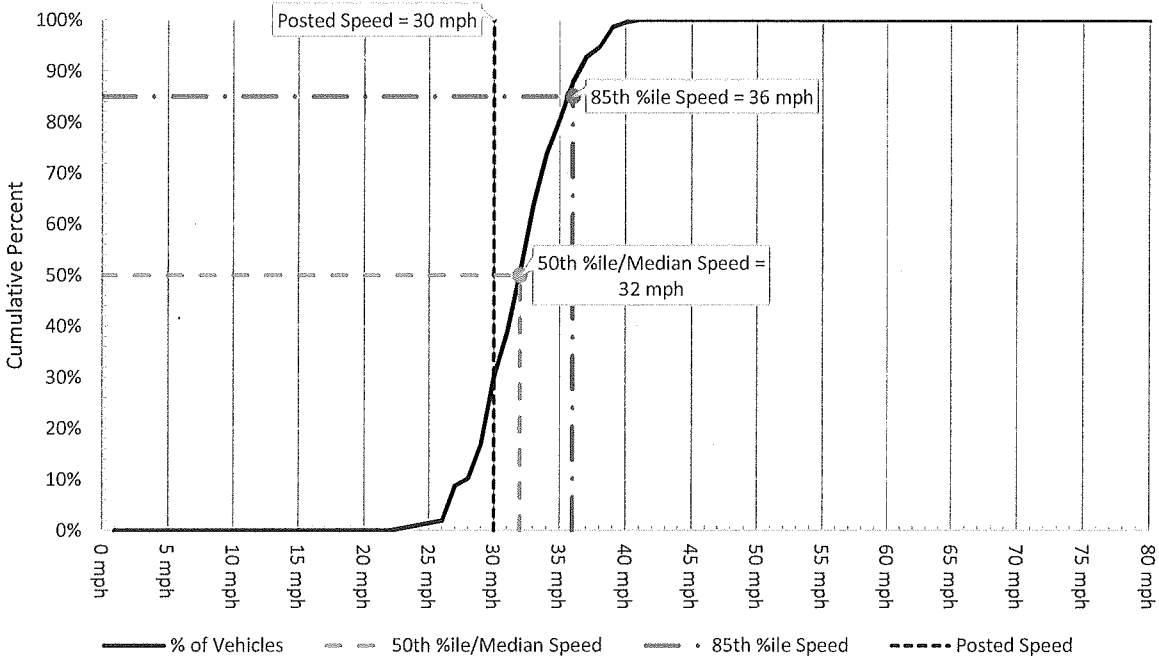
Direction	Southbound	Combined	Northbound
Total # of Vehicles	103 vehicles	205 vehicles	102 vehicles
50th %ile/Median Speed	31 mph	30 mph	30 mph
85th %ile Speed	34 mph	34 mph	34 mph
Mean Speed	31 mph	31 mph	31 mph
Standard Deviation	3.0 mph	3.0 mph	3.0 mph
Pace Limits*	25 mph - 34 mph	27 mph - 36 mph	27 mph - 36 mph
% In Pace	89%	90%	91%
Max Speed	38 mph	40 mph	40 mph
Posted Speed	30 mph	30 mph	30 mph
% Exceeding Posted Speed	51%	49%	46%

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

Roadway	17th Street NE	Date	August 12, 2020
City	Salem	Time	12:35 PM - 01:51 PM
County		Weather	LT CLOUDS
Location	At Nebraska	Investigator	WR
Direction of Travel	Northbound & Southbound	Agency/Company	ODOT

Combined Direction Speed Profile



Summary Statistics

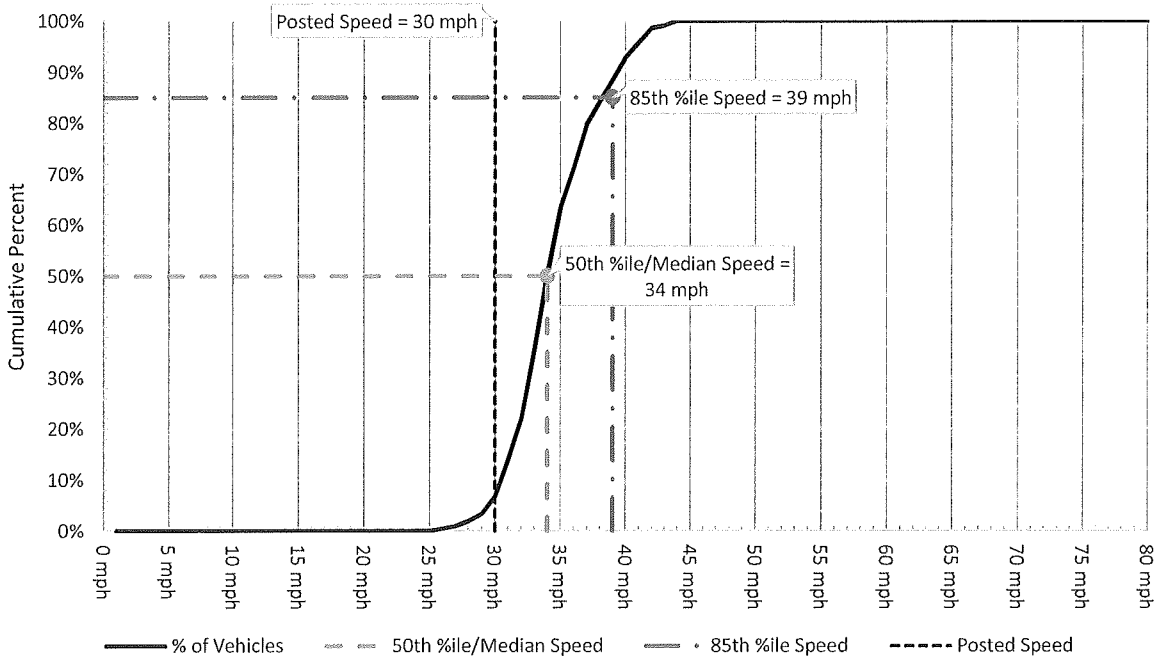
Direction	Northbound	Combined	Southbound
Total # of Vehicles	108 vehicles	206 vehicles	98 vehicles
50th %ile/Median Speed	33 mph	32 mph	32 mph
85th %ile Speed	36 mph	36 mph	36 mph
Mean Speed	32 mph	32 mph	33 mph
Standard Deviation	3.1 mph	3.4 mph	3.6 mph
Pace Limits*	27 mph - 36 mph	27 mph - 36 mph	27 mph - 36 mph
% In Pace	87%	86%	85%
Max Speed	39 mph	41 mph	41 mph
Posted Speed	30 mph	30 mph	30 mph
% Exceeding Posted Speed	71%	70%	68%

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

Roadway	17th St NE	Date	August 19, 2020
City	Salem	Time	09:43 AM - 11:50 AM
County		Weather	SUNNY
Location	250 ft north of Woodrow St	Investigator	WR
Direction of Travel	Southbound & Northbound	Agency/Company	ODOT

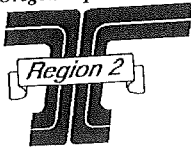
Combined Direction Speed Profile



Summary Statistics

Direction	Southbound	Combined	Northbound
Total # of Vehicles	96 vehicles	208 vehicles	112 vehicles
50th %ile/Median Speed	35 mph	34 mph	34 mph
85th %ile Speed	39 mph	39 mph	38 mph
Mean Speed	35 mph	35 mph	35 mph
Standard Deviation	3.3 mph	3.4 mph	3.4 mph
Pace Limits*	31 mph - 40 mph	31 mph - 40 mph	30 mph - 39 mph
% In Pace	86%	86%	86%
Max Speed	44 mph	44 mph	43 mph
Posted Speed	30 mph	30 mph	30 mph
% Exceeding Posted Speed	95%	93%	92%

*10 mph range containing the largest number of sampled vehicles.



INTEROFFICE MEMO

DATE: November 9, 2020

TO: Michael Kimlinger, P.E.
State Traffic-Roadway Engineer

FROM: Dorothy Upton, P.E.
Region 2 Traffic Operations Engineer
(503) 986-5761

File Code: City of Salem /
Marion County

UPTON Date:
Dorothy J 2020.11.09
17:23:44 -08'00'

Region 2 Traffic Operations Engineer

SUBJECT: Speed Zone Investigation
45TH AVENUE NE
Center Street NE to
Sunnyview Road NE
City of Salem / Marion County

A speed zone investigation has been conducted on 45th Avenue NE from Center Street NE to Sunnyview Road NE. The investigation was requested by Kevin Hottmann, Traffic Engineer, City of Salem; Concurred with by Lani Radtke, Engineering Division Manager, Marion County. The city is requesting 25 mph, City Council made a motion for staff to request ODOT reduce the speed limit based on numerous pedestrian fatalities in the community.

There is one investigated section on this roadbed. The investigated section is 0.98 mile in length and moderate residential in density and culture, a suburban residential context and has an ADT of 5700. This road is classified as an urban collector. Two spot speed checks showed the 85% speed to be 39 mph and the 50% speed to be 35 mph. Eighty-three percent of the cars are traveling within the pace limits of 31 - 40 mph. There were 12 reported crashes between 01/01/16 and 12/31/18. There are no reported injury A or fatal crashes between 1/1/10 and 12/31/19.

The majority of the segment is within the incorporated City of Salem. The recommended speed zoning for this section is to be established under OAR 734-020-0015 (2)(d) The 50th percentile speed is 35 or greater. We are recommending to establish a 30 mph zone for this section based on 50th percentile speeds.

If you concur with this recommendation, please note your concurrence on the attached report.

OREGON DEPARTMENT OF TRANSPORTATION
 Report of Speed Zone Investigation
45TH AVENUE NE
 Center Street NE to Sunnyview Road NE
 City of Salem / Marion County
 November 9, 2020

Approved by _____
 State Traffic-Roadway Engineer

Recommendation: Rescind existing SSCB Order 3157, dated February 28, 1979 and SSCB Order 3158, dated February 28, 1979 to establish the speed zoning as shown below:

<u>Section Investigated</u>	<u>Existing</u>	<u>Recommended</u>
Section A From: Center Street NE To: 50 feet south of Beth Street NE (2020 Salem SCL)	35 mph	30 mph <u>1/</u>
From: 50 feet south of Beth Street NE (2020 Salem SCL) To: Sunnyview Road NE	35 mph	30 mph <u>2/</u>

1/ Marion County
2/ City of Salem

Historical Background:

Investigation Requested by: Kevin Hottmann, Traffic Engineer, City of Salem; Concurred with by Lani Radtke, Engineering Division Manager, Marion County
 Requested Speed: 25 mph, City Council made a motion for staff to request ODOT reduce the speed limit based on numerous pedestrian fatalities in the community.

Previous Action: Existing SSCB Order 3157, dated February 28, 1979 and SSCB Order 3158, dated February 28, 1979

<u>Investigation:</u>	<u>Section</u>
Section Length	0.98 mile
85% Speed	39 mph
50% Speed	35 mph
2016-2018 Section Crash Rate	1.96
2018 Average Daily Traffic	5700
Context	Suburban Residential
Culture Type & Density	Moderate Residential
Horizontal Alignment	0 curves
Vertical Alignment	Level
Curve Signs & Speed Riders	None
Existing Posted Speed	35 mph <u>5/</u>
Recommended Speed	30 mph

<u>Roadway Data:</u>	<u>Section</u>
Surface	AC
Lanes	2 <u>4/</u>
Width	34'6" – 38' curb to curb (12'-14' travel lanes)
Parking	None (bike lanes)
Shoulders	0' paved - curb
Intersecting Streets	10
Paved	10
Stopped	9
Signalized and Other	1
Pedestrian Activity	High
Bicycle Activity	High
Bicycle Lanes	100%
Sidewalks	100%
Marked Crosswalks	5 (3 school)
Enhanced Crosswalks	1
Transit	No

<u>Crash Data:</u>	
Study Period	1/1/2016 – 12/31/2018
2016-2018 Total Crashes	12
2016-2018 Fatal K Crashes	0
2016-2018 Serious Injury A Crashes	0
2016-2018 Injury B and C Crashes	4
2016-2018 No Injury O Crashes	8
2016-2018 Section Crash Rate (R)	1.96
2018 Comparable Crash Rate (r) <u>1/</u>	2.11
Deviation (R-r)	0

<u>Spot Speed Data:</u>	
85% Speed	39 mph
50% Speed	35 mph
Pace Limits <u>2/</u>	31 – 40 mph
% in Pace	83%
Maximum Speed	55 mph
Posted Speed	35 mph <u>5/</u>
% Exceeding Posted Speed	48%
Computed 85% Speed <u>3/</u>	39 mph
Recommended Speed	30 mph

- 1/ Urban Collector (City - Salem (Marion County))
- 2/ Ten mile-per-hour range containing the largest number of sample vehicles
- 3/ 85% speed minus deviation/85% speed (if Deviation is zero or negative)
- 4/ LTL at each end and at Swegle Rd / Market St signal
- 5/ Posted 20 mph when flashing school zone from 300 feet south of Swegle Rd to 150' north of Country Lane

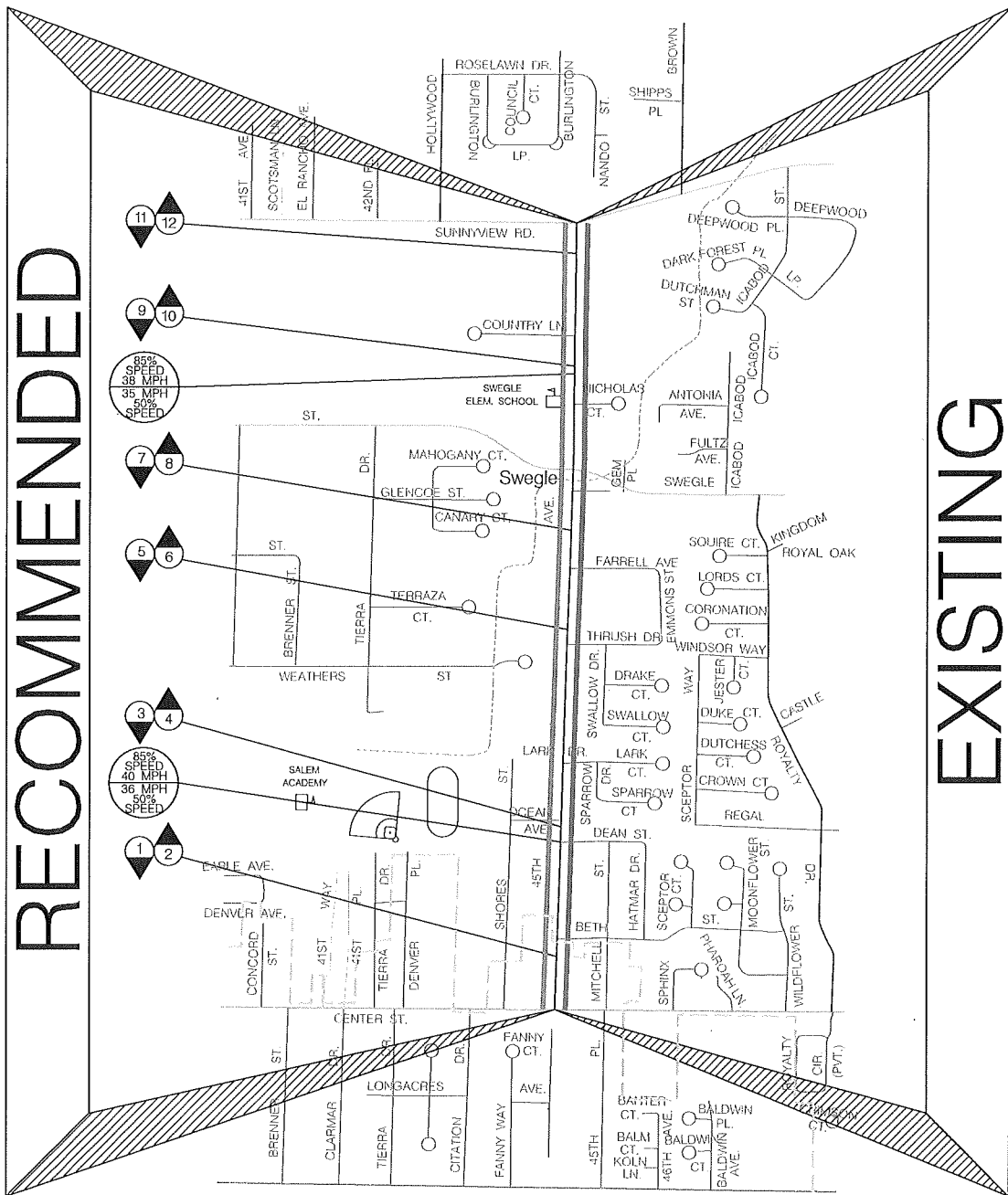
Factors Influencing Recommendation: 50th percentile speed, context, crashes.

OAR 734-020-0015 (2)(d) The 50th percentile speed is 35 or greater

SPEED ZONE INVESTIGATION

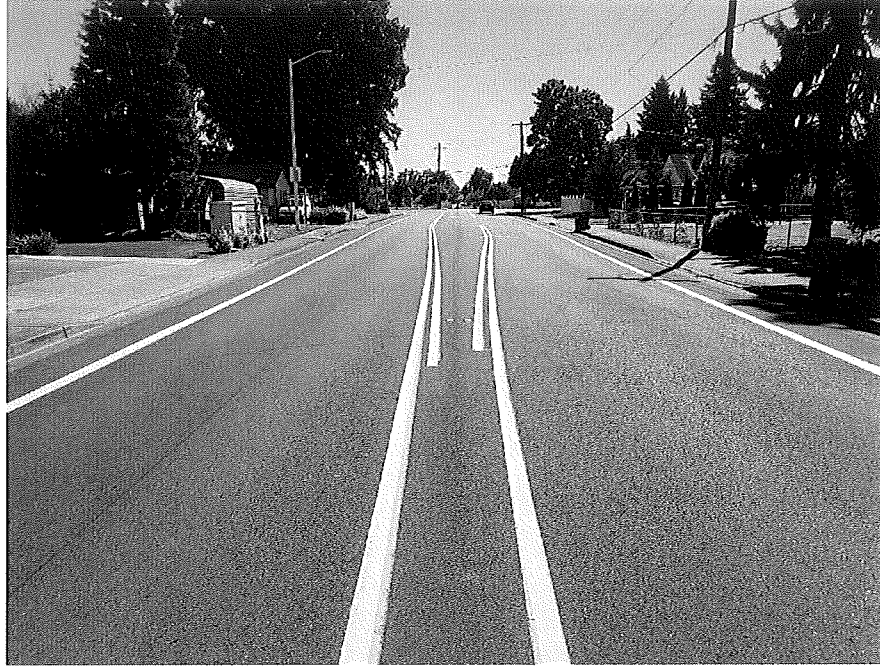
45TH AVENUE NE

CITY OF SALEM / MARION COUNTY



LEGEND	
	20 MPH
	25 MPH
	30 MPH
	35 MPH
	40 MPH
	45 MPH
	50 MPH
	55 MPH (STAT)
	CITY LIMITS

TYPICAL VIEWS
45TH AVENUE NE
MARION COUNTY
SEPTEMBER 2, 2020



1. Looking south from 100 feet south of Beth Street.



2. Looking north from 100 feet south of Beth Street.

TYPICAL VIEWS
45TH AVENUE NE
CITY OF SALEM
SEPTEMBER 2, 2020



3. Looking south from 100 feet north of Dean Street.



4. Looking north from 100 feet north of Dean Street.

TYPICAL VIEWS
45TH AVENUE NE
CITY OF SALEM
SEPTEMBER 2, 2020



5. Looking south from 100 feet north of Thrush Drive.



6. Looking north from 100 feet north of Thrush Drive.

TYPICAL VIEWS
45TH AVENUE NE
CITY OF SALEM
SEPTEMBER 2, 2020



7. Looking south from 250 feet north of Farrell Avenue.



8. Looking north from 250 feet north of Farrell Avenue.

TYPICAL VIEWS
45TH AVENUE NE
CITY OF SALEM
SEPTEMBER 2, 2020



9. Looking south from 200 feet south of Country Lane.



10. Looking north from 200 feet south of Country Lane.

TYPICAL VIEWS
45TH AVENUE NE
CITY OF SALEM
SEPTEMBER 2, 2020



11. Looking south from 200 feet south of Sunnyview Road.



12. Looking north from 200 feet south of Sunnyview Road.

Crash Listing

Roadway 45th Ave NE
 Route Number _____
 City Salem
 County Marion From _____
 To Sunnyview Road
 Years 2016 To 2018

Year	Collision Type											Classification						
	Angle	Head-On	Rear-End	Sideswipe Meeting	Sideswipe Overtaking	Turning Movements	Parking Maneuver	Non-Collision	Fixed-Other Object	Pedestrian	Backing	Other	Bicycle Crashes*	All Crashes*	Fatal K	Serious Injury A	Injury B and C	No Injury O
2016						1								1				
2017	1		2			1			2					6			1	
2018	2		1			2							1	5			3	
Total	3	0	3	0	0	3	1	0	2	0	0	0	1	12	0	0	4	8
Total																		
Total																		
Total																		
Total																		
Total																		
Total																		
Total																		
Total																		
Total																		

Date: 10/15/2020

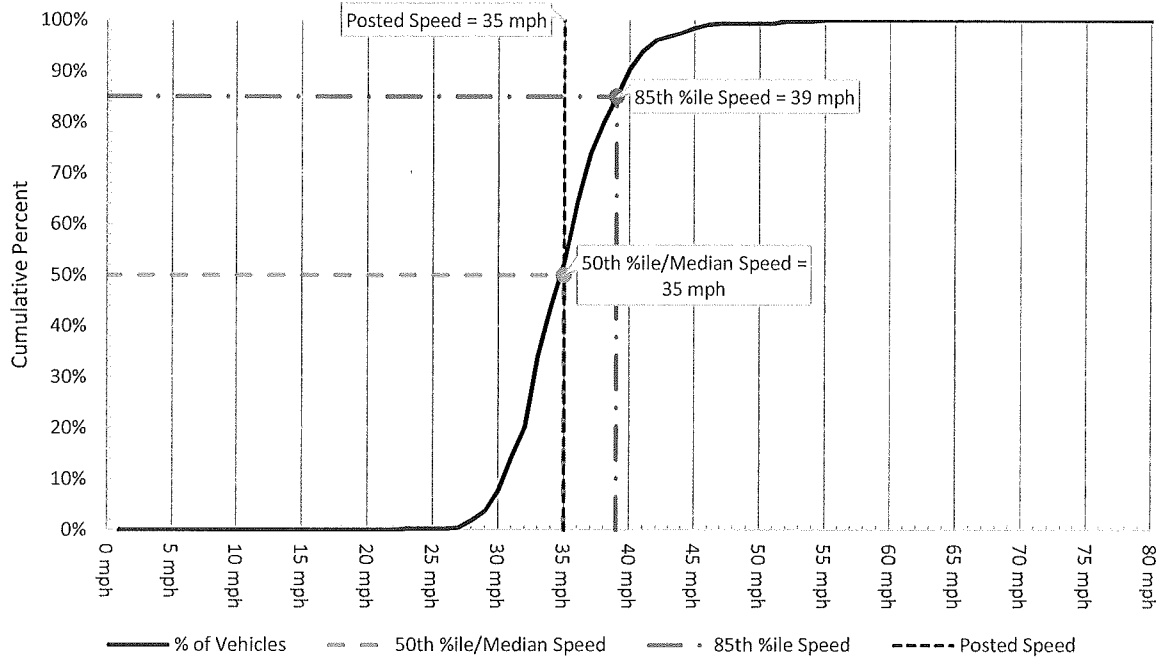
Compiled By: Weldon Ryan

*Bicycle Crashes are included in other collision types, do not count twice

Spot Speed Measurement Report - Corridor Summary

Roadway	45th Ave NE	Start of First Spot Speed Study	September 01, 2020 12:41 PM
City	Salem	End of Last Spot Speed Study	September 02, 2020 11:53 AM
County	Marion	Weather	SUNNY
Location	Center Street to Sunnyview Road	Investigator	WR
Direction of Travel	Southbound & Northbound	Agency/Company	ODOT

Combined Direction Speed Profile



Summary Statistics (2 Spot Speed Studies)

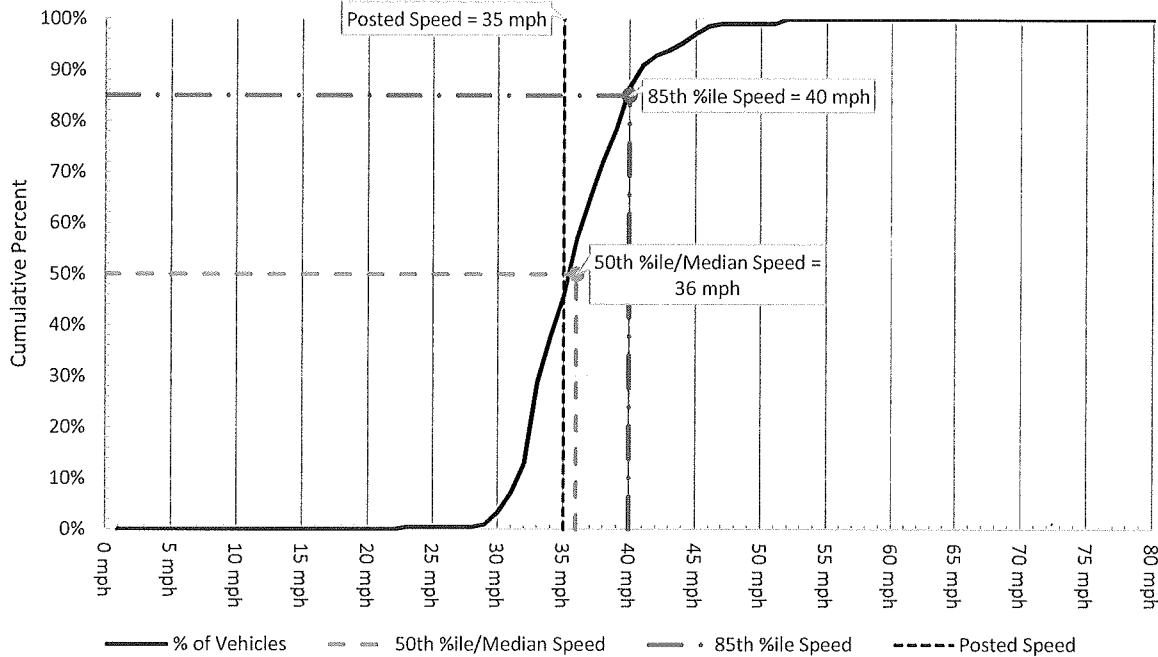
Direction	Southbound	Combined	Northbound
Total # of Vehicles	200 vehicles	427 vehicles	227 vehicles
50th %ile/Median Speed	35 mph	35 mph	36 mph
85th %ile Speed	38 mph	39 mph	40 mph
Mean Speed	35 mph	35 mph	36 mph
Standard Deviation	3.7 mph	4.0 mph	4.1 mph
Pace Limits*	31 mph - 40 mph	31 mph - 40 mph	31 mph - 40 mph
% In Pace	85%	83%	81%
Max Speed	52 mph	55 mph	55 mph
Posted Speed	35 mph	35 mph	35 mph
% Exceeding Posted Speed	42%	48%	53%

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

Roadway	45th Ave NE	Date	September 01, 2020
City	Salem	Time	12:41 PM - 02:21 PM
County	Marion	Weather	SUNNY
Location	At DEAN ST NE	Investigator	WR
Direction of Travel	Southbound & Northbound	Agency/Company	ODOT

Combined Direction Speed Profile



Summary Statistics

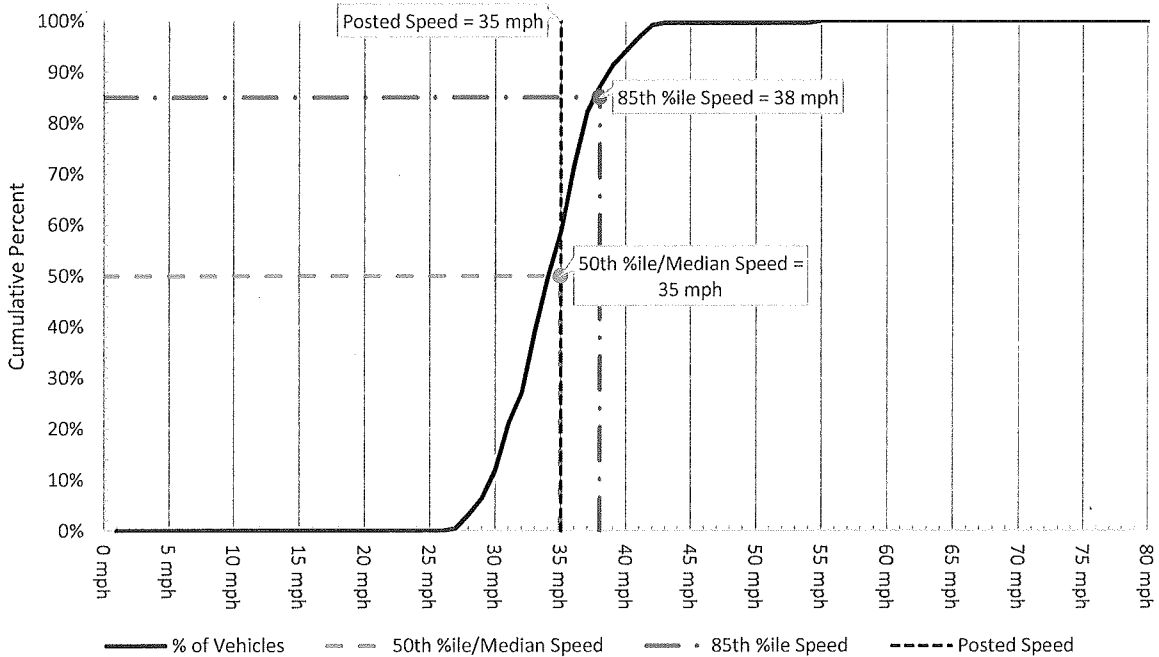
Direction	Southbound	Combined	Northbound
Total # of Vehicles	103 vehicles	209 vehicles	106 vehicles
50th %ile/Median Speed	36 mph	36 mph	36 mph
85th %ile Speed	40 mph	40 mph	41 mph
Mean Speed	36 mph	36 mph	37 mph
Standard Deviation	4.1 mph	4.1 mph	4.0 mph
Pace Limits*	31 mph - 40 mph	32 mph - 41 mph	32 mph - 41 mph
% In Pace	84%	84%	84%
Max Speed	52 mph	52 mph	52 mph
Posted Speed	35 mph	35 mph	35 mph
% Exceeding Posted Speed	50%	54%	58%

*10 mph range containing the largest number of sampled vehicles.

Spot Speed Measurement Report

Roadway	45th Ave NE	Date	September 02, 2020
City	Salem	Time	09:28 AM - 11:53 AM
County	Marion	Weather	SUNNY
Location	250' south of COUNTRY LN	Investigator	WR
Direction of Travel	Northbound & Southbound	Agency/Company	ODOT

Combined Direction Speed Profile



Summary Statistics

Direction	Northbound	Combined	Southbound
Total # of Vehicles	121 vehicles	218 vehicles	97 vehicles
50th %ile/Median Speed	35 mph	35 mph	34 mph
85th %ile Speed	39 mph	38 mph	37 mph
Mean Speed	35 mph	35 mph	34 mph
Standard Deviation	4.0 mph	3.6 mph	3.0 mph
Pace Limits*	30 mph - 39 mph	30 mph - 39 mph	30 mph - 39 mph
% In Pace	81%	85%	90%
Max Speed	55 mph	55 mph	42 mph
Posted Speed	35 mph	35 mph	35 mph
% Exceeding Posted Speed	49%	41%	32%

*10 mph range containing the largest number of sampled vehicles.

From: [Ken Adams](#)
To: [CityRecorder](#)
Cc: [citycouncil](#)
Subject: Agenda item 3.3.a
Date: Monday, March 8, 2021 12:43:30 PM

Dear City Council members and Mayor,

Many of you have heard my complaints about problem drivers on 17th Street, and I certainly agree with reducing the speed limit from State Street to Silverton Road to 25 MPH. But unless there is enforcement drivers will continue to speed along 17th Street as ODOT has pointed out.

As someone who has a front row seat, I can say that 70% to 90% of the vehicles that use 17th Street have only a single occupant. So why are we giving one person wrapped in one ton+ of metal priority over the safety of pedestrians, bicyclists and skate boarders?

The more unsafe pedestrians, bicyclist and skaters are the less inclined they are to take these ways of getting about which is compounded by a transit system that is insufficient which increases vehicle traffic and will not help in any carbon reduction.

Several years ago a pedestrian was hit at 17th Street at Chemeketa Street and as he laid in the crosswalk drivers kept on going through the intersection. I had to go out and stand in the street to prevent drivers from doing so. How he survived I don't know. From a study AAA in 2011 they found the following: "The average risk of death for a pedestrian reaches 10% at an impact speed of 23 mph, 25% at 32 mph, 50% at 42 mph, 75% at 50 mph, and 90% at 58 mph. Risks vary significantly by age. For example, the average risk of severe injury or death for a 70-year old pedestrian struck by a car traveling at 25 mph is similar to the risk for a 30-year-old pedestrian struck at 35 mph."

I find it unlikely that Salem Police Department will enforce the new speed limit since they don't enforce the current speed limit. So what is to be done? Well I think it calls for traffic calming throughout the City of Salem. As streets come up for maintenance they should be safe for all those that use city streets by using traffic calming methods. I would be happy to discuss these methods for members that are interested.

Thank you,

Ken Adams
1695 Chemeketa Street NE
Salem 97301
Ward 1

From: [Margaret Stephens](#)
To: [CityRecorder](#)
Subject: 17th Street speed limit considerations
Date: Saturday, March 6, 2021 8:49:06 AM

I understand that ODOT plans/would like to increase speed on the portion of 17th that has 25 mph speed (Mission to State). I urge a rejection of this request.

I also understand that ODOT rejected the City's request to lower the speed of the rest of 17th (from 30 mph to 25 mph). I urge Council to continue to pursue lowering the speed. If you are hit by a vehicle going 30 mph your chances of dying are 50/50. If you are hit by a vehicle going 40 mph, only one in 10 survive. It's even higher for children and elderly people. The cars on 17th are going even faster than 30 mph - they don't need more encouragement.

Please continue to pursue ensuring the speed on 17th from Mission to Silverton Road remains or is reduced to 25 mph. I urge monitoring speeds on this stretch and if cars keep exceeding 25 mph, then traffic calming can be pursued.

Thanks,

Margaret Stephens

1830 23rd St NE

Salem, OR

From: noreply@cityofsalem.net on behalf of sarahjrohrs@gmail.com
To: [CityRecorder](#)
Subject: City meeting public comment
Date: Sunday, March 7, 2021 11:59:47 AM
Attachments: [ATT00001.bin](#)

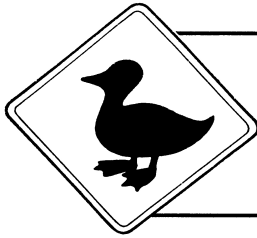
Your Name	Sarah June Rohrs
Your Email	sarahjrohrs@gmail.com
Your Phone	5035453159
Street	260 23rd St. NE
City	Salem
State	OR
Zip	97301
Message	I am providing a comment on Agenda Item 3.3a on the Monday, March 8 City Council agenda. This is in regards to speed limit review and recommendations Speed limit review of 17th Street SE/NE from Mission Street SE to Silverton Road NE. I am in favor of the city's original request to lower speeds to 25 mph along the full stretch of 17th between Mission and Silverton Rd. The lower speed would make for safer conditions, particularly for pedestrians. Thank you.

This email was generated by the dynamic web forms contact us form on 3/7/2021.

From: noreply@cityofsalem.net on behalf of buhll@yahoo.com
To: [CityRecorder](#)
Subject: City meeting public comment
Date: Monday, March 8, 2021 3:30:52 PM
Attachments: [17th-st speeds NEN-letter.pdf](#)

Your Name	Laura Buhl
Your Email	buhll@yahoo.com
Your Phone	(541) 340-9841
Street	695 16th Street NE
City	Salem
State	OR
Zip	97301
Message	public comment from NEN for mar. 8 City Council meeting

This email was generated by the dynamic web forms contact us form on 3/8/2021.



NEN

NORTHEAST NEIGHBORS
555 Liberty Street SE, Rm 305
Salem, OREGON 97301

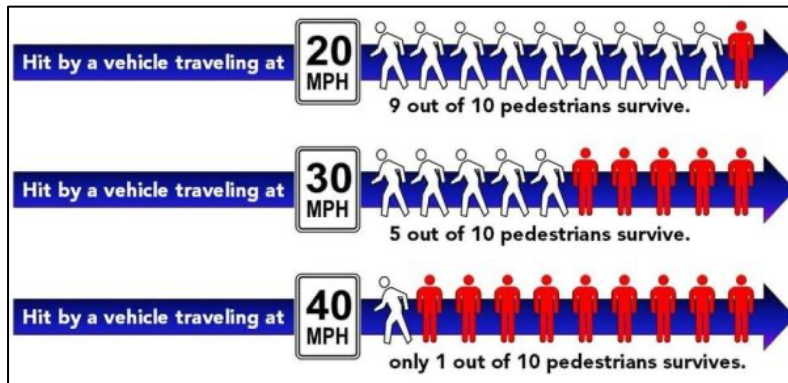
(503) 588-6207
www.salemnenn.org

March 1, 2021

Dear Salem City Council,

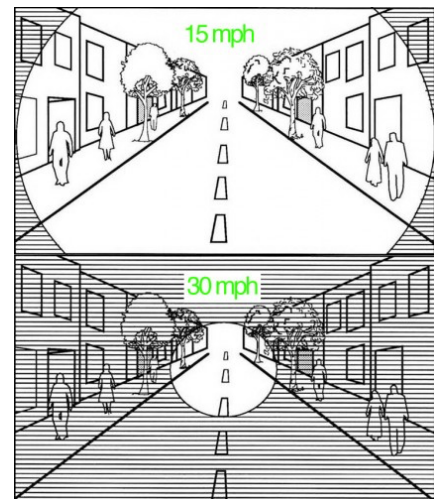
Northeast Neighbors neighborhood association (NEN) applauds City of Salem Public Works Department staff for pursuing a reduction of the speed limit for the portion of 17th Street from Mission Street to Silverton Road from 30 to 25 miles per hour (mph). The request (which triggered an ODOT speed study) was made because of the tragic number of pedestrian fatalities throughout Salem, including in NEN. In fact, in 2015, David McGregor was killed in a crosswalk by someone driving a van in a 30 mph zone at the intersection of 18th and Center Streets, *just one block* from the 17th Street segment that is the subject of this speed reduction request. We can only wonder, might he have lived had the van been going more slowly? These fatalities make NEN residents afraid to walk in our own neighborhood, as we ask ourselves if we'll be the next victim of traffic violence.

The link between speed and death is well documented. At a higher speed, the damage to a person's body at impact is greater, drivers are less likely to see other people in the street, and it takes longer to stop.



At 30 mph, the chances of survival for an adult hit by a sedan are only 50%. For youth, the elderly, or people hit by the increasingly common large trucks and SUVs, the survival rate is even lower.

Image source: <https://www.theurbanist.org/2014/11/11/icymi-new-york-city-implements-vision-zero/>



Not only is someone who is driving fast more likely to kill a pedestrian or cyclist, but that driver is less likely to see the pedestrian or cyclist in the first place because speed narrows the field of vision.

Image source: nycc.org

Based on ample evidence of the fatal consequences of high automobile speeds and our own lived experience as pedestrians on Salem's dangerous streets, the NEN Board has voted to support the City's efforts to lower the speed on 17th Street from Mission to Silverton Road from 30 mph to 25 mph, and maintain the 25 mph speed limit on the portion of 17th that already has it.

ODOT's speed study, dated November 16, 2020, bases its recommendation to retain the 30 mph speed limit (and increase the speed to 30 mph where it is currently already 25 mph) on "the percent of people exceeding the existing posted speeds" and on the lack of enough injuries and deaths to meet the number of injuries and deaths ODOT considers enough to justify lowering the speeds. In other words, they propose to allow people who are breaking the law to set the standard for maintaining fatal speeds. In addition, there is no mention in the study of the fact that high speeds are proven to cause more death and injury. This approach to traffic management is appalling. Traffic calming measures, not capitulation to scofflaws, are what is needed.

NEN urges the City of Salem to appeal this speed study to the Oregon Speed Control Board and continue to fight for the right to set speeds that protect the health and safety of Salem citizens.

Sincerely,

Laura Buhl (on behalf of the NEN Board)
NEN Co-Land Use Chair