



# Oregon

Tina Kotek, Governor

## Department of Transportation

### *Region 5 Traffic*

3012 Island Avenue  
La Grande, OR 97850  
Phone 541-231-5530

## TECHNICAL MEMORANDUM

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

**FROM:** Marlow Stanton, P.E.  
Region 5 Traffic Engineer

Region 5 Traffic Engineer

Rick Stanton  
Region 5 Traffic Investigator

**SUBJECT:** Speed Zone Investigation #13173  
Mt Glen Road  
175 feet south of May Lane to Lizabeth Lane  
Union County

Per Request I.D. No. 13173, a speed zone investigation has been completed at the subject location and a report thereof is attached for your review and approval. This investigation was conducted on the request of Doug Wright, Union County Public Works Director. Mt Glen Road is a multi-use road consisting of farm, residential and recreational vehicles and is a signed bicycle route. There is a significant amount of bicycle activity, and the road width is narrow and without paved shoulders. The county would like to see the speed limit reduced along this roadway to improve the safety of all users.

Section A, from 175 feet south of May Lane to 0.18 mile north of Gaertner Lane was not investigated. From 0.18 mile north of Gaertner Lane to 0.26 mile southwest of Rock Ridge Road was investigated for a minor adjustment.

The minor adjustment is to extend the 35-mph speed zone five hundred feet to the north. Recommendation was determined using OAR 734-020-0015 (8)(d).

Section B, from 0.26 mile southwest of Rock Ridge Road to Lizabeth Lane is 1.81 mile in length. The context and culture are rural, and the functional classification is a rural major collector. Three speed checks were taken yielding a 50<sup>th</sup> percentile speed of 49 mph and an 85<sup>th</sup> percentile speed of 56 mph with pace limits of 45 mph to 54 mph.

There are two 10-foot travel lanes with no paved shoulder. The shoulders are 2 to 4 feet of gravel. There are three paved intersecting streets, two are stop controlled and one is controlled with a yield sign.

This office recommends establishing a 45 MPH speed zone in this section. The recommendation was determined using OAR 734-020-0015(3)(b)(C), the speed data, road widths, type of road users and the safety concerns of the county and public.

#### Attachments

Cc: Doug Wright, Union County Public Works Director  
Dan Fine, Region 5 Traffic/Roadway Manager

RBS/rbs

OREGON DEPARTMENT OF TRANSPORTATION  
Report of Speed Zone Investigation  
**Spruce Street / Mt Glen Road**  
175 feet south of May Lane to Lizabeth Lane  
Union County  
June 7, 2023

Approved by  
State Traffic-Roadway Engineer

**Recommendation:** Rescind SSCB Order No. 2874 dated August 24, 1977 and establish the following speed zoning as listed below:

**Section:**

<b><u>Not Investigated</u></b>	<b><u>On Spruce Street</u></b>	<b><u>Existing</u></b>	<b><u>Recommended</u></b>
<b>A</b>	<b><u>From:</u></b> 175 feet south of May Lane (La Grande City Limits) <b><u>To:</u></b> Fruitdale Lane	35 MPH	35 MPH
	<b><u>On Mt Glen Road</u></b>		
	<b><u>From:</u></b> Fruitdale Lane <b><u>To:</u></b> 0.18 mile north of Gaertner Lane (0.32 mile north of Black Hawk Trail)	35 MPH	35 MPH
<b><u>Minor Adjustment</u></b>			
	<b><u>From:</u></b> 0.18 mile north of Gaertner Lane <b><u>To:</u></b> 0.26 mile southwest of Rock Ridge Road	55 MPH Stat. (35 MPH Unest.)	35 MPH
<b><u>Investigated</u></b>			
<b>B</b>	<b><u>From:</u></b> 0.26 mile southwest of Rock Ridge Road <b><u>To:</u></b> Lizabeth Lane	55 MPH Stat. (45 MPH Unest.)	45 MPH

**Historical Background:**

Investigation Requested by: Doug Wright, Union County Public Works Director  
Requested Speed: 40 mph  
Previous Action: Established SZ Order No. 2874, dated August 24, 1977

<b><u>Investigation:</u></b>	<b><u>Not Investigated</u></b> <b><u>Section A</u></b>	<b><u>Investigated</u></b> <b><u>Section B</u></b>
Section Length	•	1.81 mile
50% Speed	•	49 MPH
85% Speed	•	56 MPH
2018-2020 Section Crash Rate*	•	0.00
2019 Average Daily Traffic	•	1,200
Context	•	Rural
Culture Type and Density	•	Rural
Horizontal Alignment	•	1 Curve
Vertical Alignment	•	Mostly Level
Curve Signs & Speed Riders	•	In Place
Existing Posted Speed	•	45 MPH (Unest.)
Recommended Speed	•	45 MPH
	•	

\*Crashes per Million Vehicle Miles

<b><u>Roadway Data:</u></b>	<b><u>Not Investigated Section A</u></b>	<b><u>Investigated Section B</u></b>
Surface	•	AC
Width	•	20-22 ft. (EP to EP)
Lanes	•	2
Parking	•	Not Prohibited
Shoulders	•	2-4 ft. graveled
Intersecting Streets	•	3
Paved	•	3
Stopped	•	2
Signalized and Other	•	0
Pedestrian Activity	•	Low
Bicycle Activity	•	High
Bicycle Lanes	•	0%
Sidewalk	•	0%
Marked Crosswalks	•	0
Enhanced Crosswalks	•	0
Transit	•	No

#### **Crash Data:**

Study Period	•	1/1/18 - 12/31/20
2018-2020 Total Crashes	•	0
2018-2020 Fatal K Crashes	•	0
2018-2020 Serious Injury A Crashes	•	0
2018-2020 Injury B and C Crashes	•	0
2018-2020 No Injury O Crashes	•	0
2018-2020 Section Crash Rate (R)	•	0.00
2018-2020 Comparable Crash Rate ( r ) <u>1/</u>	•	0.58
Deviation (R-r)	•	0.00

#### **Spot Speed Data:**

50% Speed	•	49 MPH
85% Speed	•	56 MPH
Pace Limits <u>2/</u>	•	45-54 MPH
% in Pace	•	65%
Maximum Speed	•	73 MPH
Posted Speed	•	45 MPH (Unest.)
% Exceeding Posted Speed	•	78%
Computed 85th Speed <u>3/</u>	•	56 MPH
Recommended Speed	•	45 MPH
OAR For Recommendation	•	See in Factors Section

1/ Rural Major Collector

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)

#### **Factors Influencing Recommendation:**

##### **Section: B**

- |                        |  |
|------------------------|--|
| 1) Fiftieth percentile | 5) County request and concerns                                       |
| 2) Pace limits         | 6) OAR 734-020-0015 (3)(b)(C)  |
| 3) Percentage in pace  | 7) Signed as a bike route. There are a large number of               |
| 4) Context             | commuter and recreational cyclists that use this section of roadway. |

# Recommended

## Section A

Not Investigated

Minor Adjustment

## Section B

Investigated

Existing

# Mt Glen Road Union County



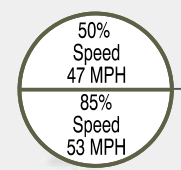
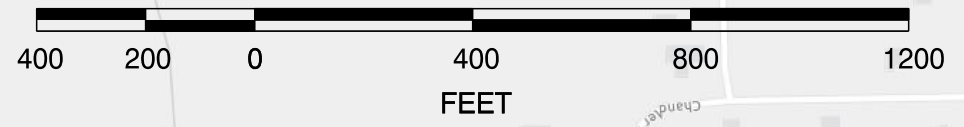
**LEGEND**

	20 MPH
	25 MPH
	30 MPH
	35 MPH
	40 MPH
	45 MPH
	50 MPH
	55 MPH
	60 MPH
	65 MPH
	70 MPH
	City Limits



Photo's

SCALE



# Recommended

Section B  
Investigated

Mt Glen Road

Leffel Road  
Leffel Rd

Mt Glen Rd

9

10

50%  
Speed  
48 MPH  
85%  
Speed  
55 MPH

11

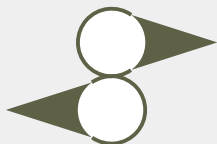
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# Existing

## LEGEND

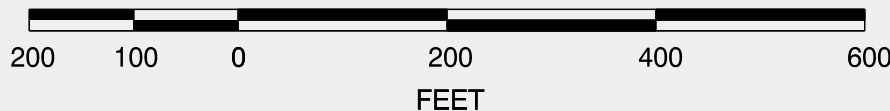
	20 MPH
	25 MPH
	30 MPH
	35 MPH
	40 MPH
	45 MPH
	50 MPH
	55 MPH
	60 MPH
	65 MPH
	70 MPH

City Limits 

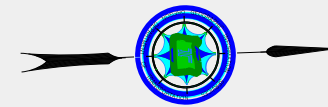


Photo's

## SCALE



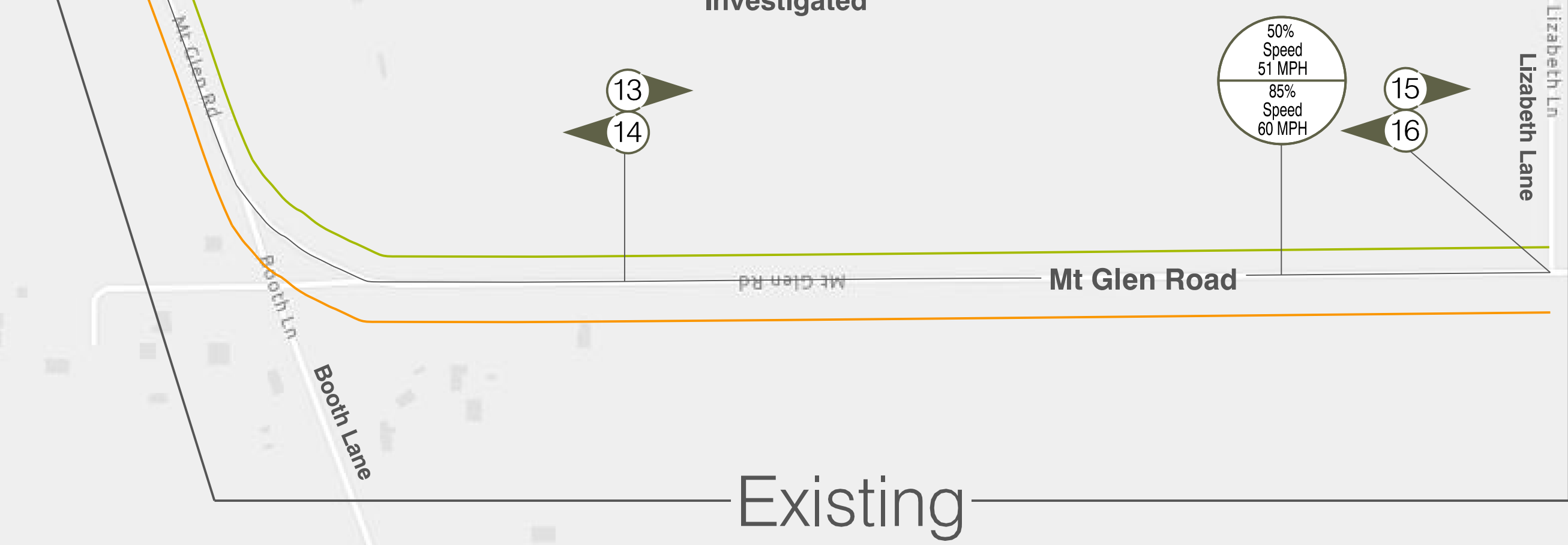
Mt Glen Road  
Union County



# Recommended

## Section B

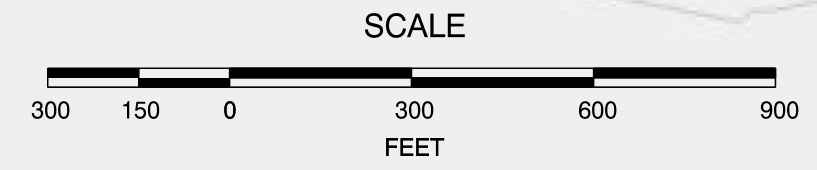
Investigated



LEGEND	
	20 MPH
	25 MPH
	30 MPH
	35 MPH
	40 MPH
	45 MPH
	50 MPH
	55 MPH
	60 MPH
	65 MPH
	70 MPH
	City Limits



Mt Glen Road  
Union County





Typical Views  
**MT GLEN ROAD**  
**UNION COUNTY**

June 6, 2023



**(1) Looking northbound from Fruitdale Lane**



**(2) Looking southbound from Fruitdale Lane**



Typical Views  
**MT GLEN ROAD**  
**UNION COUNTY**

June 6, 2023



**(3)** Looking northbound from 50' south of Blackhawk Trail Lane



**(4)** Looking southbound from 50' north of Blackhawk Trail Lane



Typical Views  
**MT GLEN ROAD**  
**UNION COUNTY**

June 6, 2023



**(5) Looking northbound from 0.13 mile north of Gaertner Lane**



**(6) Looking southbound from 0.13 mile north of Gaertner Lane**



Typical Views  
**MT GLEN ROAD**  
**UNION COUNTY**

June 6, 2023



**(7) Looking northbound from 0.13 mile south of Rock Ridge Road**



**(8) Looking southbound from 0.13 mile south of Rock Ridge Road**



Typical Views  
**MT GLEN ROAD**  
**UNION COUNTY**

June 6, 2023



**(9)** Looking northbound from Leffel Road



**(10)** Looking southbound from Leffel Road



Typical Views  
**MT GLEN ROAD**  
**UNION COUNTY**

June 6, 2023



**(11) Looking northbound from Booth Lane**



**(12) Looking southbound from Booth Lane**



Typical Views  
**MT GLEN ROAD**  
**UNION COUNTY**

June 6, 2023



**(13)** Looking northbound from 0.20 mile north of Booth Lane



**(14)** Looking southbound from 0.20 mile north of Booth Lane



Typical Views  
**MT GLEN ROAD**  
**UNION COUNTY**

June 6, 2023



**(15)** Looking northbound from Lizabeth Lane



**(16)** Looking southbound from Lizabeth Lane

## CRASH LISTING

<b>Roadway</b> <u>Mt Glen Road</u> <b>Route Number</b> _____ <b>City</b> _____ <b>County</b> <u>Union County</u> <b>From</b> <u>175 feet south of May Lane</u> <b>To</b> <u>Lizabeth Lane</u> <b>Years</b> <u>1/1/2018</u> to <u>12/31/2020</u>		<b>Collision Type</b>		<b>Classification</b>														
		<div style="display: flex; justify-content: space-between;"> <div>Angle</div> <div>Head-on</div> <div>Rear-end</div> <div>Sideswipe Meeting</div> <div>Sideswipe Overtaking</div> <div>Turning Movements</div> <div>Parking Maneuver</div> <div>Non-Collision</div> <div>Fixed-Other Object</div> <div>Pedestrian</div> <div>Backing</div> <div>Other</div> <div>Bicycle Crashes*</div> <div>All Crashes*</div> <div>Fatal K</div> <div>Serious Injury A</div> <div>Injury B and C</div> <div>No Injury O</div> </div>																
<b>Section A</b>	Year																	
<b>From</b> <u>175 feet south of May Lane</u>	2020	Not Investigated																
<b>To</b> <u>0.26 mile north of Gaertner Lane</u>	2018																	
<b>Total</b>																		
<b>Section B</b>	2020	No Reported Crashes																
<b>From</b> <u>0.26 mile north of Gaertner Lane</u>	2019																	
<b>To</b> <u>Lizabeth Lane</u>	2018																	
<b>Total</b>																		
<b>Section C</b>	2020																	
<b>From</b> _____	2019																	
<b>To</b> _____	2018																	
<b>Total</b>																		
<b>Section D</b>	2020																	
<b>From</b> _____	2019																	
<b>To</b> _____	2018																	
<b>Total</b>																		
<b>Section E</b>	2020																	
<b>From</b> _____	2019																	
<b>To</b> _____	2018																	
<b>Total</b>																		
<b>Section F</b>	2020																	
<b>From</b> _____	2019																	
<b>To</b> _____	2018																	
<b>Total</b>																		
<b>Section G</b>	2020																	
<b>From</b> _____	2019																	
<b>To</b> _____	2018																	
<b>Total</b>																		

Compiled By: Rick Stanton

Date: June 7, 2023

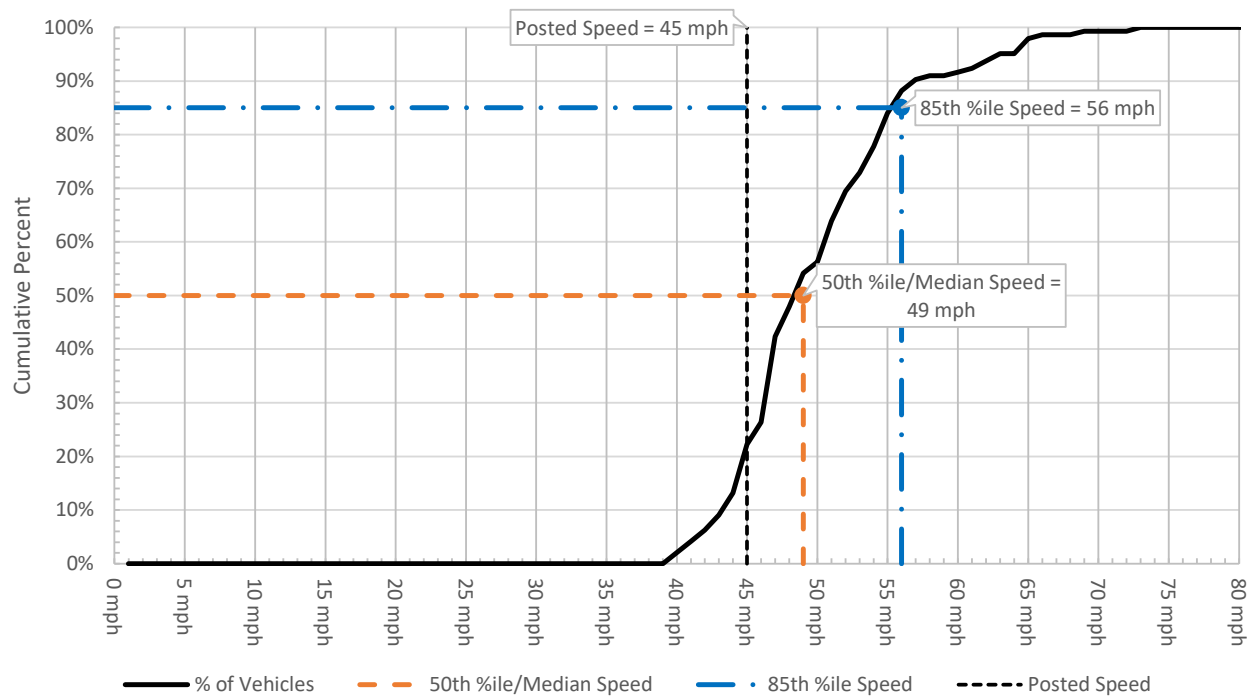
\*Bicycle Crashes are included within the other collision types and are not added twice.



## Spot Speed Measurement Report - Corridor Summary

<b>Roadway</b>	Mt. Glen Rd	<b>Start of First Spot Speed Study</b>	June 07, 2023 08:00 AM
<b>City</b>	La Grande	<b>End of Last Spot Speed Study</b>	June 08, 2023 11:00 AM
<b>County</b>	Union	<b>Weather</b>	Cloudy
<b>Location</b>	**DESCRIBE CORRIDOR LIMITS**	<b>Investigator</b>	Kelly Emery
<b>Direction of Travel</b>	Southbound & Northbound	<b>Agency/Company</b>	Oregon Department of Transportation

### Combined Direction Speed Profile



### Summary Statistics (3 Spot Speed Studies)

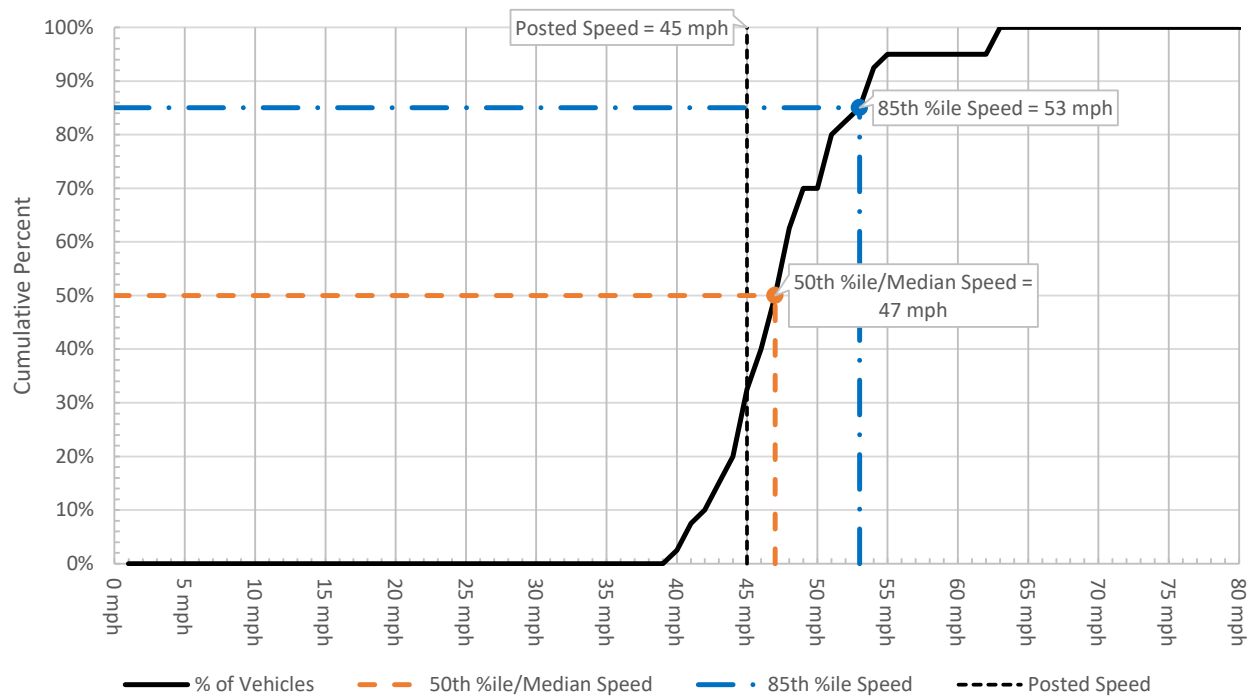
Direction	Southbound	Combined	Northbound
Total # of Vehicles	79 vehicles	144 vehicles	65 vehicles
50th %ile/Median Speed	50 mph	49 mph	48 mph
85th %ile Speed	57 mph	56 mph	55 mph
Mean Speed	51 mph	50 mph	49 mph
Standard Deviation	6.7 mph	6.2 mph	5.6 mph
Pace Limits*	45 mph - 54 mph	45 mph - 54 mph	43 mph - 52 mph
% In Pace	63%	65%	68%
Max Speed	73 mph	73 mph	65 mph
Posted Speed	45 mph	45 mph	45 mph
% Exceeding Posted Speed	80%	78%	75%

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

## Spot Speed Measurement Report

<b>Roadway</b>	Mt. Glen Rd	<b>Date</b>	June 07, 2023
<b>City</b>	La Grande	<b>Time</b>	09:00 AM - 10:00 AM
<b>County</b>	Union	<b>Weather</b>	Cloudy
<b>Location</b>	Mt. Glen Rd 400' S of Leffel Road	<b>Investigator</b>	Kelly Emery
<b>Direction of Travel</b>	Southbound & Northbound	<b>Agency/Company</b>	Oregon Department of Transportation

### Combined Direction Speed Profile



### Summary Statistics

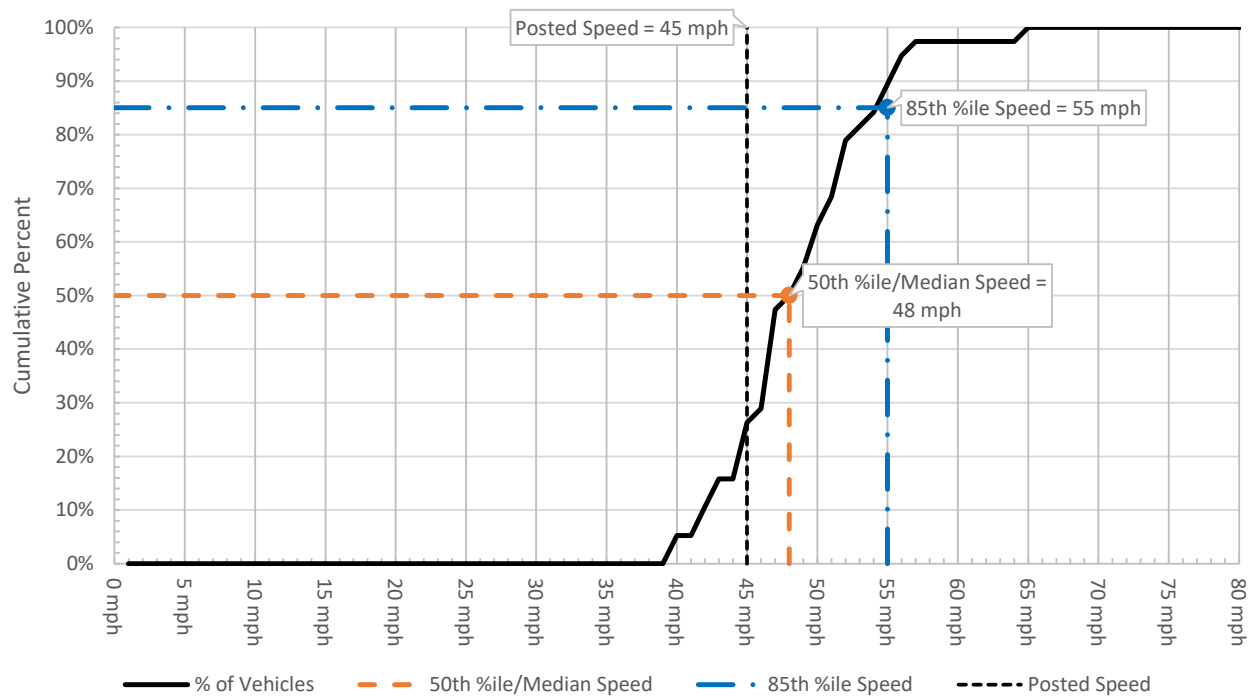
Direction	Southbound	Combined	Northbound
Total # of Vehicles	21 vehicles	40 vehicles	19 vehicles
50th %ile/Median Speed	48 mph	47 mph	47 mph
85th %ile Speed	52 mph	53 mph	54 mph
Mean Speed	49 mph	48 mph	48 mph
Standard Deviation	5.0 mph	5.1 mph	5.4 mph
Pace Limits*	45 mph - 54 mph	42 mph - 51 mph	40 mph - 49 mph
% In Pace	81%	73%	79%
Max Speed	63 mph	63 mph	63 mph
Posted Speed	45 mph	45 mph	45 mph
% Exceeding Posted Speed	71%	68%	63%

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

## Spot Speed Measurement Report

<b>Roadway</b>	Mt. Glen Rd	<b>Date</b>	June 07, 2023
<b>City</b>	La Grande	<b>Time</b>	08:00 AM - 09:00 AM
<b>County</b>	Union	<b>Weather</b>	Cloudy
<b>Location</b>	Mt. Glen Rd 0.14 mile north of Leffel Rd	<b>Investigator</b>	Kelly Emery
<b>Direction of Travel</b>	Southbound & Northbound	<b>Agency/Company</b>	Oregon Department of Transportation

### Combined Direction Speed Profile



### Summary Statistics

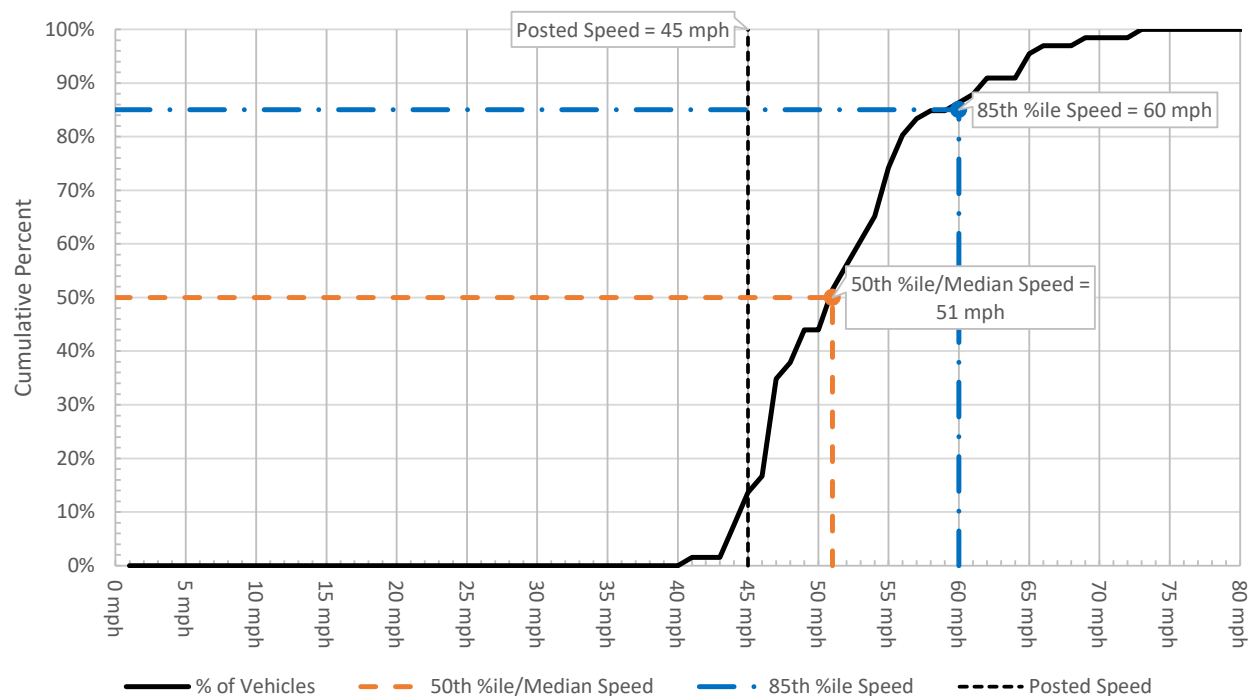
Direction	Southbound	Combined	Northbound
Total # of Vehicles	19 vehicles	38 vehicles	19 vehicles
50th %ile/Median Speed	50 mph	48 mph	47 mph
85th %ile Speed	55 mph	55 mph	56 mph
Mean Speed	49 mph	49 mph	49 mph
Standard Deviation	4.4 mph	5.2 mph	6.1 mph
Pace Limits*	46 mph - 55 mph	43 mph - 52 mph	43 mph - 52 mph
% In Pace	84%	68%	68%
Max Speed	57 mph	65 mph	65 mph
Posted Speed	45 mph	45 mph	45 mph
% Exceeding Posted Speed	89%	74%	58%

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

## Spot Speed Measurement Report

<b>Roadway</b>	Mt. Glen Rd	<b>Date</b>	June 08, 2023
<b>City</b>	La Grande	<b>Time</b>	09:00 AM - 11:00 AM
<b>County</b>	Union	<b>Weather</b>	Cloudy
<b>Location</b>	Mt. Glen Rd 0.14 mile south of Lizabeth Lane	<b>Investigator</b>	Kelly Emery
<b>Direction of Travel</b>	Southbound & Northbound	<b>Agency/Company</b>	Oregon Department of Transportation

### Combined Direction Speed Profile



### Summary Statistics

Direction	Southbound	Combined	Northbound
Total # of Vehicles	39 vehicles	66 vehicles	27 vehicles
50th %ile/Median Speed	53 mph	51 mph	51 mph
85th %ile Speed	62 mph	60 mph	55 mph
Mean Speed	53 mph	52 mph	51 mph
Standard Deviation	7.8 mph	6.8 mph	4.9 mph
Pace Limits*	44 mph - 53 mph	47 mph - 56 mph	47 mph - 56 mph
% In Pace	54%	64%	85%
Max Speed	73 mph	73 mph	65 mph
Posted Speed	45 mph	45 mph	45 mph
% Exceeding Posted Speed	79%	86%	96%

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