

**NOTICE OF PUBLIC MEETING & AGENDA
TRAFFIC SAFETY COMMISSION
7:00 PM, **MONDAY**, July 12, 2021**

VIA Zoom

Join from a PC, Mac, iPad, iPhone or Android device:
Please click this URL to join. <https://zoom.us/j/92664796344>

Or One tap mobile:

+12532158782,,92664796344# US (Tacoma)

+13462487799,,92664796344# US (Houston)

Or join by phone:

Dial(for higher quality, dial a number based on your current location):

US: +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833 or +1 301 715 8592 or
+1 312 626 6799 or +1 929 205 6099

Webinar ID: 926 6479 6344

International numbers available: <https://zoom.us/u/ak46WSiLK>

To request documents in Spanish please email

lacey.dykgraaf@newbergoregon.gov or trafficsafety@newbergoregon.gov

“Mission Statement: To give the residents of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community.”

I. CALL MEETING TO ORDER

II. ROLL CALL

Tony Roos	Sarah Sand	Roger Kuhlman	Jeff Grider
Mark Carleton	Neal Klein	Lesley Woodruff	Robert Sherry
John Ehrlich	Kasper Czuk		

III. PLEDGE OF ALLEGIANCE

IV. PUBLIC COMMENTS

ACCOMMODATION OF PHYSICAL IMPAIRMENTS: In order to accommodate persons with impairments, please notify the Engineering Department of any accommodations you may need as far in advance of the meeting as possible, and no later than two business days prior to the meeting. Contact the Engineering Department at (503) 537-1273.

For TTY services please dial 711.



V. CONSENT CALENDAR

- a. Traffic Safety Commission Meeting Minutes April 12, 2021

VI. STAFF REPORTS & GENERAL INFORMATION

- a. Police
- b. Engineering
 - i. Active Issues Log - attached
 - ii. General Information
 - 1. Project Updates
 - 2. County Road projects – maps attached

VII. NEW BUSINESS

- a. TSC 21-001 – Hancock Parking
- b. Sidewalk Update – Council Presentation
- c. ADA Training Class? – R Gathercoal

VIII. OLD BUSINESS

- a. Roadway Safety Class – M Takallou
- b. Updated TSC 20-005 – Meridian Street No Parking
 - i. Letter of Objection received – Minthorne
- c. Worst Intersection List – Attached

IX. COMMISSIONER COMMENTS

X. ADJOURNMENT – October 11, 2021 - hybrid

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CITY OF NEWBERG TRAFFIC SAFETY COMMISSION MINUTES
MONDAY, April 12, 2021 7:00 PM
Zoom Meeting

“Mission Statement: To give the citizens of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community.”

I. CALL MEETING TO ORDER

Chair Roos called the meeting to order at 7:00 PM.

II. ROLL CALL

Members Present:	Tony Roos	Mark Carleton	Neal Klein
	Lesley Woodruff	Roger Kuhlman	Robert Sherry
	Jeff Grider	Kasper Czuk	

Members Absent: John Ehrlich and Sarah Sand

Staff Present: Kaaren Hofmann, City Engineer
Doug Rux, Community Development Director

III. PLEDGE OF ALLEGIANCE

The pledge of allegiance was performed.

IV. PUBLIC COMMENTS

Nancy Laughland, Newberg resident, said her family owned property on Meridian and she was concerned about the intersection of Meridian and Sheridan.

V. CONSENT CALENDAR

A. Traffic Safety Commission Meeting Minutes January 11, 2021

Commissioner Grider pointed out a misspelling.

MOTION: Woodruff/Kuhlman moved to approve the Traffic Safety Commission Meeting Minutes from January 11, 2021 as amended. Motion carried (7 Yes/0 No).

VI. PRESENTATIONS

A. Dorothy Upton—ODOT Region 2 Traffic Engineer

Ms. Upton discussed three locations of concern: OR 219 (1st Street) at Everest Road, OR 219 (College Street) at Sheridan Street, and OR 240 (Main Street) at Illinois Street. OR 219 at Everest was a 4-legged intersection with Everest stop-controlled. It was a 3-lane cross section with bike lanes (24 feet wide) on the highway. The posted speed was 35 mph with average daily traffic of 11,300 vehicles. There was a wig-wag style pedestrian activated system on the west leg. The intersection often queued from OR 99W at Villa’s signal and side streets.

Chair Roos said one of the biggest concerns was the visibility of the wig-wag sign.

Ms. Upton discussed the crash information for OR 219 and Everest. For 2015-2019, there were 28 crashes—2 severe, 4 at Villa, and 24 at Everest—1 pedestrian crash, and 1 bike crash. There was 1 pedestrian crash not at the enhanced crossing. Most crashes had minor street movement proceeding after

stopping. There was nothing about critical crash rates and no unusual trends. The intersection did not meet signal warrants. It was last evaluated in January 2020 using data from October 15, 2019. She did not think they should pursue movement restrictions or rerouting movements. They could consider upgrading the wig-wag activated system to a full RRFB, however it might need other features.

There was discussion regarding the RRFB option, putting stop signs on 219 and Villa going east and west bound that might slow traffic at Everest, missing sidewalk from Everest across Villa, and concerns from residents about Everest and 219.

Ms. Upton stated OR 219 at Sheridan was a 4-legged intersection with Sheridan stop-controlled and a part-time restriction from 3-6 p.m. Monday through Friday to a right turn only. It was a 2-lane cross section with no parking (24 feet wide). The posted speed was 25 mph with average daily traffic of 7,100 vehicles. The intersection often queued from the OR 99W signal and side streets. From 2015 to 2019, there were 48 crashes on Sherman to OR 99W with no fatal or severe injuries. The intersection did not meet signal warrants. Options to consider were to enforce the movement restriction or put in a physical barrier (traffic separator).

There was discussion regarding the impact of a barrier to garbage collection, emergency access, and private driveways as well as locations for the barrier and getting citizen input.

Ms. Upton said for OR 240 at Illinois, it was a 3-legged intersection on a corner with a side street that was stop-controlled. The side streets were all stop-controlled approaching the highway. There was a left turn lane on the highway and a 30-foot width south of the intersection. The posted speed was 25 mph and no parking on the highway. The average daily traffic was 8,900 vehicles on the west approach, 10,300 on the south approach, and 2,300 on the east approach. From 2015-2019, there were 6 crashes. The intersection was not investigated for signal warrants. There were no trends in the crash data and there was already a turn lane on OR 240.

There was discussion regarding the complaints about the backups on Main and Illinois, pedestrian crossing on Illinois, turning left onto Main from Illinois, speeding eastbound on 240, plans for more development in the area, and roundabout options.

Jenna Marmon, ODOT Active Transportation Liaison, said there were ADA projects coming to Newberg in 2024-2027. They were looking at what potentially could be added to leverage those projects such as the RRFB, illumination, and sidewalk infill.

B. Andrew Walker—ODOT Region 2 Project Manager

Mr. Walker gave a presentation on the design of Phase 2 of the OR 18 Newberg Dundee Bypass.

Kaitlyn Dorr, DEA Roadway, discussed the proposed intersection and sidewalk improvements for the north, south, and OR 219/Wynooski/Wilsonville intersections.

Community Development Director Rux discussed how critical the Wynooski Road realignment was to the new industrial development at the old mill site. He wanted to make sure they would not have to signalize the existing Wynooski Road because of traffic volumes as it would end up being a throw away at a huge expense and would severely impede the redevelopment.

Mr. Walker said this portion of the Bypass was ODOT's number one priority and they were currently seeking funding for it.

There was discussion regarding a left hand turn going north on 219 onto the new Wynooski intersection, bike and pedestrian access, and tying into the CPRD pathway.

Ms. Dorr explained the proposed design for Fernwood Bridge.

There was discussion regarding use of golf carts in this area, making the bridge look aesthetically pleasing, and increased noise levels.

Ms. Dorr explained the proposed OR 99W connection and intersection, Corral Creek Road connection, and Corral Creek Road/Veritas Lane connection and bike/pedestrian connection.

There was discussion regarding the proposed u-turns on the Corral Creek connection, Herbert Hoover historical marker on 99W, estimated timeline for the improvements, and signage to direct people to downtown, truck traffic, right-of-way acquisition, sound walls, and lessons learned from Phase 1.

VII. STAFF REPORTS & GENERAL INFORMATION

City Engineer Hofmann said Elliott Road was still moving forward as well as paving on North Street, Franklin Street, Willamette, and 6th as part of the Transportation Utility Fee. The City received the grant for the Safe Routes to Schools project. The Budget Committee would begin to meet next week. The next sidewalk project would be sidewalks around Scott Leavitt Park.

VIII. NEW BUSINESS – None

IX. OLD BUSINESS – These items would be discussed at the next meeting.

A. Updated TSC 20-005 – Meridian Street No Parking

B. Friendsview University Village – Decision from Planning

C. Worst Intersection List

X. COMMISSIONER COMMENTS

Commissioner Carleton said there was still a pothole on College and Mountain View. CE Hofmann said that was an ODOT road and it was a center line marker that had sunk.

Commissioner Klein suggested improving communications on projects.

The Commission thanked ODOT for the presentations.

The next Traffic Safety Commission meeting would be held on July 12, 2021.

XI. ADJOURNMENT

The meeting was adjourned at 9:10 PM.

Approved by the Newberg Traffic Safety Commission on this 12th day of July, 2021.

Minutes Recorder

Tony Roos
Traffic Safety Commission Chair



TRAFFIC SAFETY COMMISSION
CITIZEN ISSUE LOG

City Engineer's Office
 Tel: 503.537.1273
 www.newbergoregon.gov

Date Received	Issue Description	Comments	Status
2/14/2019	Resident has asked to consider adding marked crosswalks on Meridian in front GFU.	Informed resident that this is similar to other requests received previously. Issues to resolve include avoiding a congestion of marked crosswalks. Potential locations identified as Sherman or North. Consultant's recommendation was forwarded onto GFU personnel. When appropriate a meeting will be held to discuss options/recommendations.	Limited Decision Issued - TSC didn't agree. New decision issued 3/18/2021 - Objection received - will hear at 7/12/2021 TSC
10/17/2019	Resident has expressed concerns regarding the width, vegetation, utility poles, road side ditches and lack of sidewalks along Sierra Vista between N College Street and N Meridian Street.	Looking into issues. Code Enforcement asked to review the area for enforcement actions. Vegetation was cut back. Other things being considered include evaluation of existing street lighting and potentially striping to delineate travel lanes.	Ongoing
5/19/2020	Resident requested an crosswalk and ramp immediately across from the Professional Center driveway on Villa Road.	Looking into this issue.	Ongoing
5/13/2020	Resident requested a crosswalk at E First Street and OR 219.	She was directed to ODOT. ODOT responded.	No further action at this time. Staff will be reminding ODOT to have traffic counts taken in the fall to determine if signal warrants are met.



TRAFFIC SAFETY COMMISSION
CITIZEN ISSUE LOG

City Engineer's Office
 Tel: 503.537.1273
www.newbergoregon.gov

10/1/2020	Resident requested a marked crosswalk on Main Street, additional lighting and to address the path into Jaquith Park.	Working with CPRD on the path, the existing street light will be replaced with an LED light in the next couple of months. A marked crosswalk is not warranted at this location. Staff is following up.	Ongoing.
1/12/2021	Fence at Park & Villa	In the hands of Code Enforcement	On hold due to COVID
4/1/2021	Stop sign request at Crater Ln & Edgewood to slow traffic	Email sent back for more information and to fill out petition	Traffic Speeds show no consistent speeding. No further action at this time.
4/22/2021	Speeding on Wyooski, possibility of stop sign at Wyooski & 7th	Email sent back for more information and to fill out petition; requested the installation of a the radar trailer on Wyooski	Ongoing.

2021 MIP Projects

Chip, Crack, and Fog Seal

FC - A - Arterial >2000, C-Collector 2000-400, R-Rural <400

No.	Road Name	FC	Begin	End	Length (FT)	Width	Area (SF)	Area (SY)
1	Hendricks Road	A	Mineral Springs	Kuehne Road	13,452.0	22.0	295,944.0	32,883
2	Abbey Road	A	Co. Jurisdiction	Kuehne/Hendricks Int.	18,324.0	20.0	366,480.0	40,720
3	Christensen Road	C	Hwy 18	Dejong Road	3,680.0	21.5	79,120.0	8,791
4	Christensen Road	C	Dejong Road	Dejong Road	7,514.0	21.0	157,794.0	17,533
5	Springhill Road	A	Laughlin Road	Fleet Road	5,102.0	20.0	102,040.0	11,338
6	Flett Road	A	Springhill Road	Hwy 47	7,471.0	20.0	149,420.0	16,602
7	Wilsonville Road	A	350' E of Daybreak Ct	Renne Road	8,276.0	22.0	182,072.0	20,230
8	Wilsonville Road	A	Renne Rd	35505 Wilsonville Rd	17,750.0	22.0	390,500.0	43,389
9	Wilsonville Road	A	35505 Wilsonville Rd	County Line	4,660.0	20.0	93,200.0	10,356
10	Red Hills Road	C	Hidden Springs Road	Sunnycrest Road	2,033.0	20.0	40,660.0	4,518
11	Hawn Creek Road	R	Gun Club Road	Hwy 99W	7,791.0	20.0	155,820.0	17,313
12	Laughlin Road	C	Woodland Loop	Ridge Road	8,154.0	20.0	163,080.0	18,120
13	Foster Road**	R	Fletcher Rd	State Hwy 18	4,634.0	20.5	94,997.0	10,555

Scope: County to provide Rock chips near projects, pre-sweep roads, and clean roadway edges and provide 2 brooms and operators after chips are applied if requested

Estimated Costs:

108,841.0 Ft

252,347

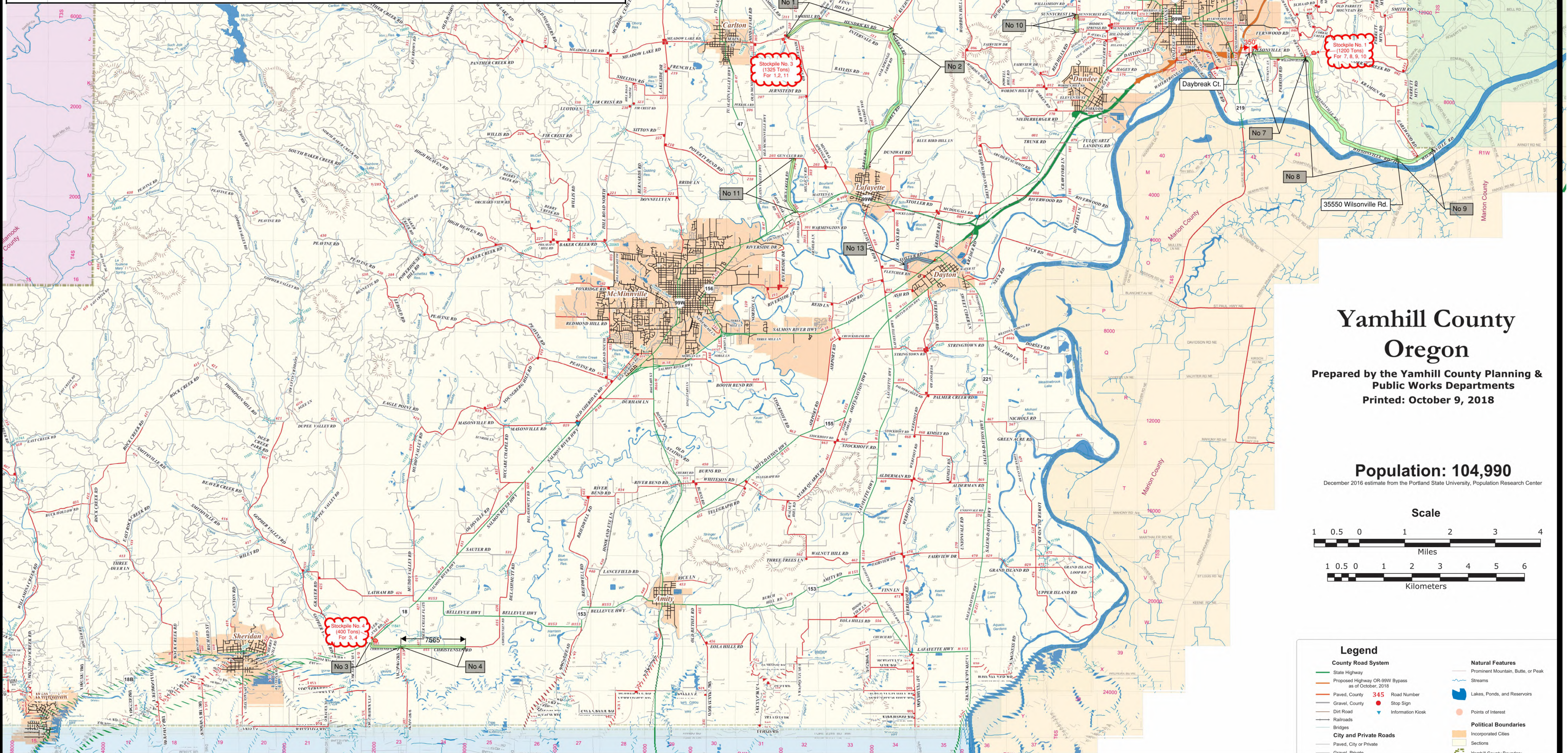
20.6 CL Miles

41.2 Lane Miles

** Requires Prime Coat

2021 Chipseal Projects 4-6-2021

OIL, CHIP, AND FOG SEAL (No. 1 - 12)
MicroCoat (13)
Stockpile Location (Tons Required)

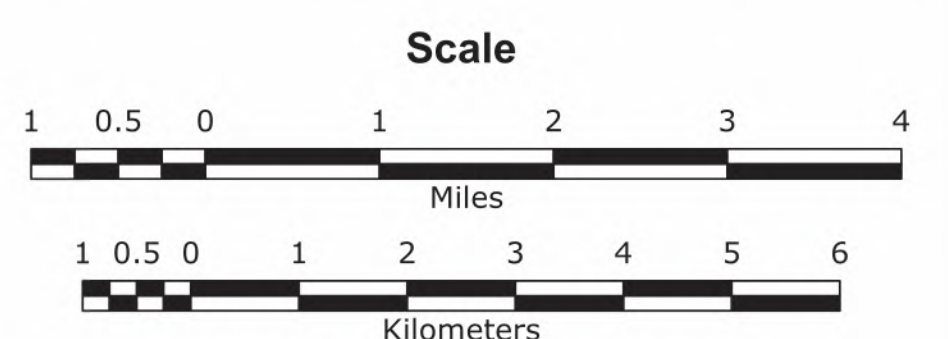


Yamhill County Oregon

Prepared by the Yamhill County Planning & Public Works Departments
Printed: October 9, 2018

Population: 104,990

December 2016 estimate from the Portland State University, Population Research Center



Legend

- County Road System
 - State Highway
 - Proposed Highway OR-99W Bypass as of October, 2018
 - Paved, County
 - Gravel, County
 - Dirt Road
 - Railroads
 - Bridges
 - City and Private Roads
 - Paved, City or Private
 - Gravel, Private
- Natural Features
 - Prominent Mountain, Butte, or Peak
 - Streams
 - Lakes, Ponds, and Reservoirs
 - Points of Interest
- Political Boundaries
 - Incorporated Cities
 - Sectors
- Road Number
- Stop Sign
- Information Kiosk

2" Overlays - 2021 CIP Projects

No.	Road Name	Begin	End	Length (FT)	Ave Width	Area (SF)	Tons at 143 PCF	Per Ton \$85
1	Albertson Road	MP 1.65	Balk Peak Road	6,744.0	24.0	161,856.0	1,986.3	\$ 168,837.33
2	Bald Peak Road	Chehalem Drive	MP 6.07 Hwy 219	5,361.0	21.0	112,581.0	1,389.4	\$ 118,100.87
3	Kuehne Road	Abbey/Hendrick	Hwy 240	8,544.0	25.0	213,600.0	2,612.4	\$ 222,049.97
4	SE Lafayette Hwy	Co. Jurisdiction	State Hwy 18	9,992.0	24.0	239,808.0	2,914.9	\$ 247,763.63
5	Hendricks Road	North 6th St.	Mineral Springs Road	5,560.0	23.0	127,880.0	1,554.4	\$ 132,122.42
6	Red Prairie Road	Polk Co. Line	Mill Creek Road	5,275.0	20.0	105,500.0	1,282.4	\$ 108,999.96
7	Briedwell Road	Box #19050	Box Hwy 153	3,678.0	20.0	73,560.0	894.1	\$ 76,000.35
8	Fort Hill Road	Box 40015 (MP 2.076)	Box 42200 (MP 3.690)	8,502.0	20.0	170,040.0	2,066.8	\$ 175,681.08
9	Columbia Dr.	Chehalem Drive	Main/Crater St Intersection	1,260.0	20.6	25,956.0	315.5	\$ 26,817.09
10	Bell Road	Hwy 219	Zimri Drive	5,316.0	22.0	116,952.0	1,421.6	\$ 120,831.88
Total For AC - Tons				60,232.0 Ft			16,437.7	\$ 1,397,204.59
Total for Cold Plane - SY's								\$ 49,364.47
Extra for Intersections								\$ 29,000.00
Subtotal								\$ 1,475,569.05

3" Overlays - 2021 CIP Projects

No.	Road Name	Begin	End	Length (FT)	Ave Width	Area (SF)	Tons 143 PCF	Per Ton \$85
11	Hopewell Highway	Hwy 153	Polk Co. Line	8,930.0	24.0	214,320.0	3,914.0	\$ 332,687.45
Total For AC - Tons							3,914.0	\$ 332,687.45
Total for Cold Plane - SY's								\$ 6,321.47
Extra for Intersections								\$ 4,000.00
Subtotal								\$ 343,008.92
Base Bid Total								\$ 1,818,577.97

IGA with City of Carlton - Waterline Project

7	Panther Creek	Meadowlake Rd	Water Plant	16,667.0	12.0	200,004.0	2,431.0	\$ 206,639.13
Base Bid + Carlton WL								\$ 2,025,217.10

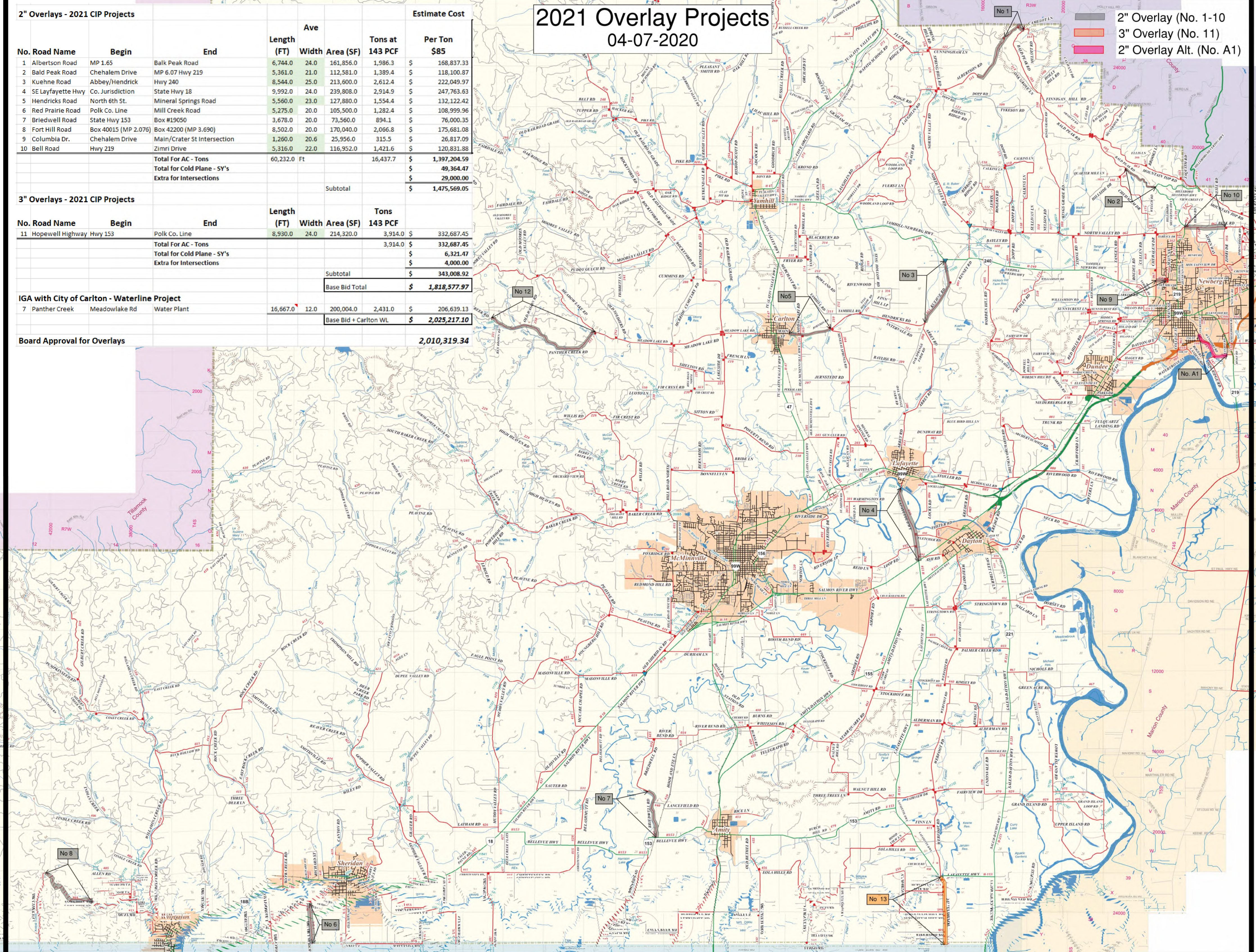
Board Approval for Overlays

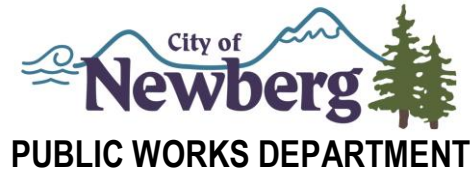
2,010,319.34

2021 Overlay Projects

04-07-2020

- 2" Overlay (No. 1-10)
- 3" Overlay (No. 11)
- 2" Overlay Alt. (No. A1)





May 18, 2021

Heidi Jackson-Brown
3214 E Hancock Street
Newberg, OR 97132

RE: Parking Change Request
Limited Traffic Decision 21-001

Dear Ms. Jackson-Brown-

Thank you for reaching out on your concerns about parking on E Hancock Street.

The Newberg Municipal Code authorizes the City Engineer to make limited traffic decisions:

2.15.410 Authority.

A. Limited Traffic Decisions. Limited traffic decisions are traffic decisions which affect and are confined to one particular location.

1. The city engineer will make an initial decision based on city policies. Notice of the decision will be mailed to property owner(s) within 300 feet of the subject location if more than one property owner is affected by the decision. The notice will include information on how to appeal the decision.

2. Request for Public Hearing. A public hearing will be held before the traffic safety commission upon written request by two or more affected property owners. Notice of the hearing will be given to property owners within 300 feet of the subject location in a manner reasonably calculated to notify affected property owners.

3. Notice of the decision by the traffic safety commission will be mailed to all property owners within 300 feet of the subject location within 10 business days of the decision.

4. Appeal. Limited traffic decisions of the traffic safety commission may be appealed to the Newberg city council within 30 days of the notice of the decision. A notice of appeal and council hearing date will be mailed to property owners within 300 feet of the subject location as provided in NMC [2.15.450](#).

2.15.470 Authority of city engineer.

The city engineer will have the authority to make traffic decisions as follows:

PUBLIC WORKS DEPARTMENT: Engineering@newbergoregon.gov | Phone (503) 537-1273



PUBLIC WORKS DEPARTMENT

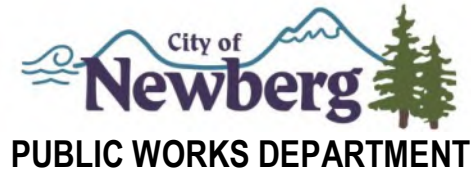
A. General Authority. The city engineer will have the authority to establish, maintain, remove or alter any traffic control device. Such orders of the city engineer will designate the findings as to reasons for taking such action, will make entry into the schedule of decisions, and submit a report and findings as to reasons for taking such action to the traffic safety commission.

Unfortunately, we are unable to grant your request to allow parking on both sides of the street or to allow driveway ramps at each residence.

- The existing pavement width in this location is between 20 and 24' wide. The width required for firefighting apparatus is 20' wide. Allowing parking on one side as the roadway currently does narrows the width available to 12' to 16'. To allow for parking on the other side of the street will not allow for adequate access. When the street is fully developed, parking may be allowed on the north side of the street.
- NMC 15.505 requires that any driveway be 150' from an intersection with an arterial roadway. S. Springbrook Road is an arterial roadway. The existing driveway is less than 150' from the intersection but as far away as possible. Another driveway closer to the intersection will not be allowed.



PUBLIC WORKS DEPARTMENT: Engineering@newbergoregon.gov | Phone (503) 537-1273



Written comments on this Limited Traffic Decision can be submitted within thirty (30) days of the date of this letter to:

Newberg Traffic Safety Commission
P.O. Box 970, 401 E. Third Street
Newberg, OR 97132

The appeal process is explained in [2.15.450 Appeals of decisions](#) of the Newberg Municipal City Code, you may access it at the city website: www.newbergoregon.gov.

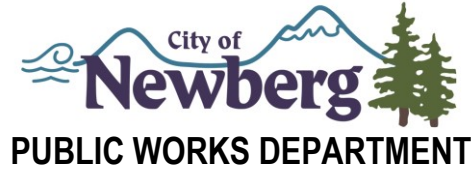
Please call 503.537.1223 if you have any questions or need additional information.

Regards,

Kaaren Hofmann

Kaaren Hofmann, PE
City Engineer

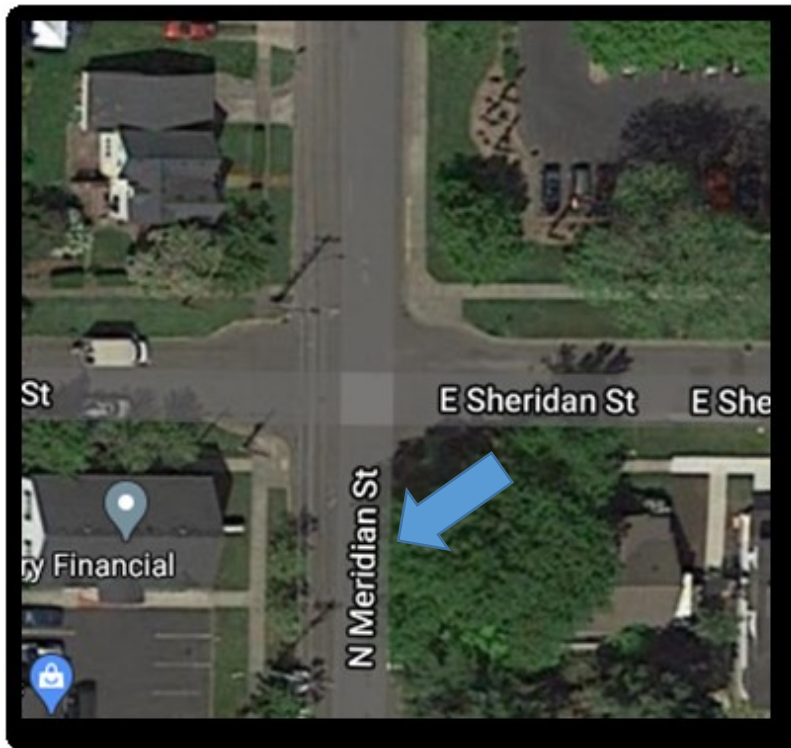
C: Traffic Safety Commission
Sgt. Hagen, NDPD



MEMORANDUM TRAFFIC SAFETY DECISION

To: Newberg Traffic Safety Commission
Cc: Jeff Kosmicki, PD Chief
From: Kaaren Hofmann, PE, City Engineer
RE: ***UPDATED*** TSC-20-005/ Meridian Street & Sheridan Street Intersection Pedestrian Safety Issue

After the Traffic Safety Commission in January, GFU agreed that a lesser amount of area could be designated as a “no parking zone” and still provide the safety improvements. The revised request asked for “no parking” yellow curb painting on the east side of Meridian (south of Sheridan) be extended another 20’ for a total of 40’ from the existing ADA ramp. This will allow for visibility and increase safety in this corridor.



AUTHORITY OF THE CITY ENGINEER

The Newberg Municipal Code authorizes the City Engineer to make limited traffic decisions:

PUBLIC WORKS DEPARTMENT: Engineering@newbergoregon.gov | Phone (503) 537-1273



PUBLIC WORKS DEPARTMENT

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2. Request for Public Hearing. A public hearing will be held before the traffic safety commission upon written request by two or more affected property owners. Notice of the hearing will be given to property owners within 300 feet of the subject location in a manner reasonably calculated to notify affected property owners.

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FISCAL IMPACT

The installation of paint will cost the City approximately \$100 initially, and will be required to be maintained periodically. The funds will come from 02-5120-541000.

ENGINEERING DECISION

Install additional "no parking" yellow curb painting as noted above.

NEXT STEPS

1. Notice of this Limited Traffic Decision will be mailed to property owner(s) within 300 feet of the subject location. The notice to include information on how to appeal the decision.

2. Engineering will work with Public Works Maintenance for the indicated modifications for "no parking" yellow curb painting.

Attachments: Original TSC20-005 Decision
Greenlight Engineering Report
Email agreement from GFU

PUBLIC WORKS DEPARTMENT: Engineering@newbergoregon.gov | Phone (503) 537-1273



MEMORANDUM

ENGINEERING SERVICES

P.O. Box 970 • 414 E. First Street • Newberg, Oregon
97132

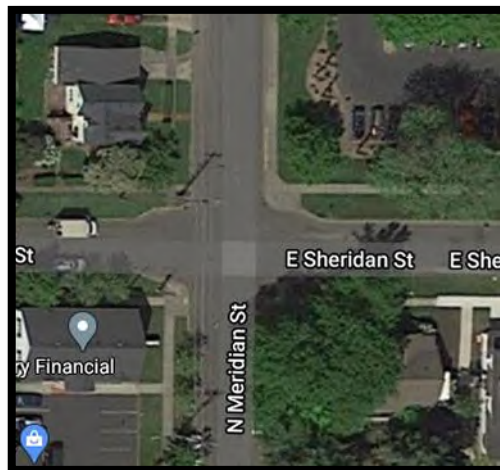
Tel 503.537.1240 • Fax 503.537.1277

November 24, 2020

To: Newberg Traffic Safety Commission
Cc: Jeff Kosmicki, PD Chief
From: Kaaren Hofmann, PE, City Engineer
RE: TSC-20-005/ Meridian Street & Sheridan Street Intersection Pedestrian Safety Issue

City of Newberg Engineering staff has been working with George Fox University about pedestrian safety crossing Meridian Street. In 2019, Staff hired Greenlight Engineering to take traffic counts and make a recommendation about a crosswalk location or other improvements. Their final memorandum and recommendations are attached.

After field reviews and follow up discussions with the University it appears all parties are in agreement to not pursue adding a marked crosswalk at this time. The University requested that safety could be improved by increasing sight distance at the intersection of Meridian and Sheridan. The submitted request asked for “no parking” yellow curb painting on the east side of Meridian (south of Sheridan) be extended another 35’ and for a similar extension on the west side (north of Sheridan). This will allow for visibility and increase safety in this corridor. A petition was submitted making this request. The petition and emails are also attached.



“Working Together for a Better Community – Serious About Service”

“Traffic Safety Mission Statement: To give the citizens of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community.”

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A. General Authority. *The city engineer will have the authority to establish, maintain, remove or alter any traffic control device. Such orders of the city engineer will designate the findings as to reasons for taking such action, will make entry into the schedule of decisions, and submit a report and findings as to reasons for taking such action to the traffic safety commission.*

FISCAL IMPACT

The installation of paint will cost the City approximately \$200 initially, and will be required to be maintained periodically. The funds will come from 02-5120-541000.

ENGINEERING DECISION

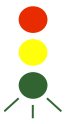
Install additional “no parking” yellow curb painting as noted above.

NEXT STEPS

1. Notice of this Limited Traffic Decision will be mailed to property owner(s) within 300 feet of the subject location. The notice to include information on how to appeal the decision.
2. Engineering will work with Public Works Maintenance for the indicated modifications for “no parking” yellow curb painting.

“Working Together for a Better Community – Serious About Service”

“Traffic Safety Mission Statement: To give the citizens of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community.”



February 26, 2020

Brett Musick, P.E.
Senior Engineer
City of Newberg
414 E. First Street
PO Box 970
Newberg OR 97132
Delivered via email to Brett.Musick@newbergoregon.gov

RE: N Meridian Street Pedestrian Study

Mr. Musick,

The City of Newberg has requested a review of the pedestrian crossing activity and adequacy of the crossing environment on N Meridian Street between E North Street and E Sheridan Street adjacent to George Fox University (“GFU”).

The need for marked east/west crosswalks was evaluated as part of this analysis. This report provides an analysis of existing pedestrian crossing behavior, traffic control and the built environment as well as develop recommendations for potential modifications to the infrastructure along N Meridian Street.

Executive Summary

- N Meridian Street, a minor collector street, is not a high volume or high speed facility in the study area between E North Street and E Sheridan Street. The intersecting roadways are also not high volume roadways. There are minimal delays for pedestrians and ample gaps for pedestrian movements throughout the day.
- There are no reported pedestrian crashes from 2009 through 2018 along this section of N Meridian Street.
- There is not evidence that would suggest that marking a crosswalk along N Meridian Street would be a safety enhancement or a detriment.
- The City of Newberg has adopted guidelines that encourage the improvement of pedestrian crossings.
- This report presents two options as traffic control suggestions:
 - **Option 1:** Install pedestrian signage at the northern and southern boundaries of the corridor and pedestrian signage at the N Meridian Street/E Sherman Street intersection.
 - **Option 2:** Install pedestrian signage at the northern and southern boundaries of the corridor and mark a crosswalk across the northern leg of the N Meridian Street/E Sherman Street intersection with complementary pedestrian signage.

Existing Conditions & Background

The purpose of this report is to evaluate the pedestrian crossing behavior and environment along N Meridian Street between E North Street and E Sheridan Street. N Meridian Street is oriented in a north/south direction and is located on the western boundary of the George Fox University Newberg campus.



Figure 1: Vicinity Map

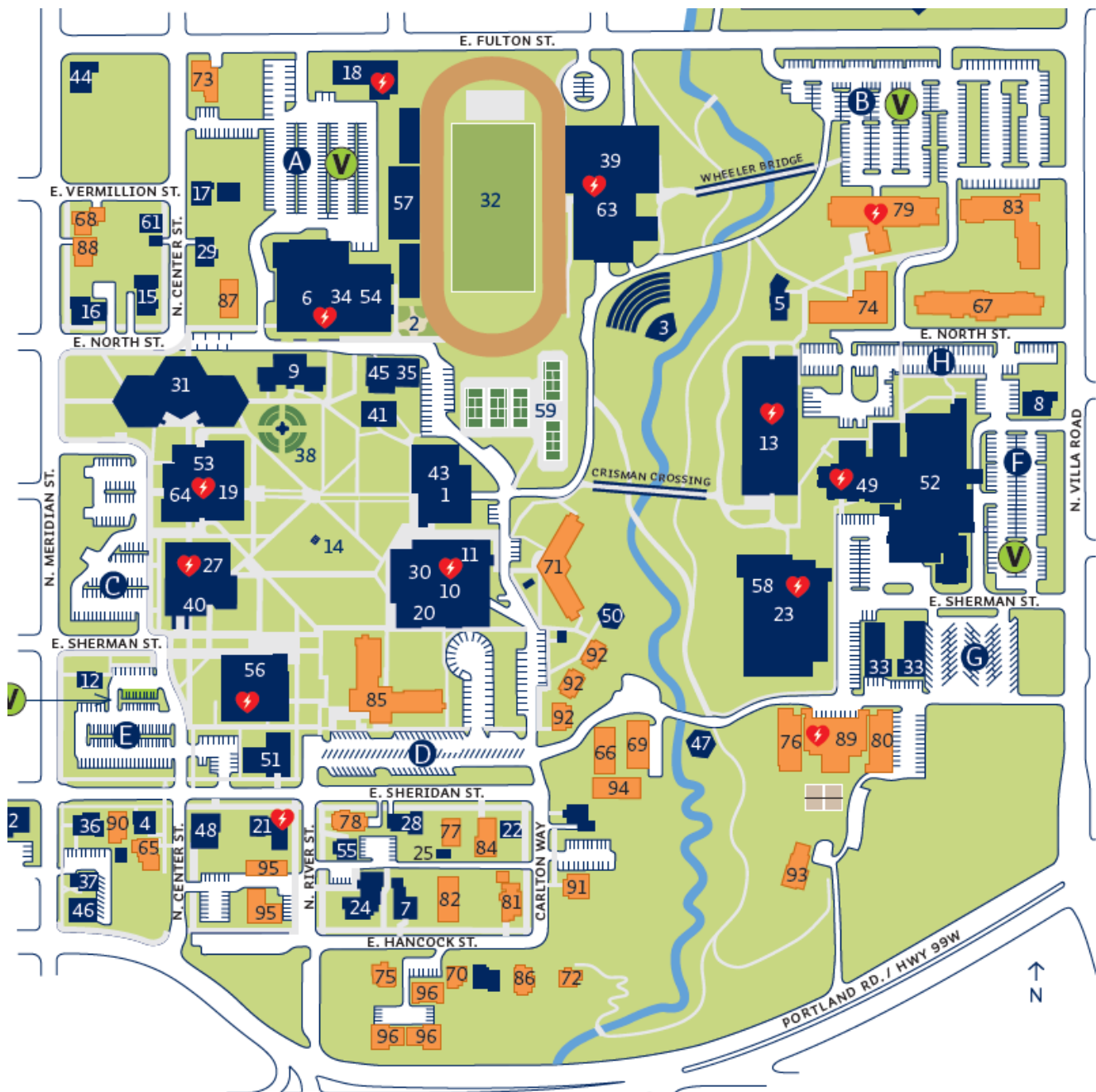


Figure 2: GVU Campus Map

N Meridian Street has an approximate paved width of 36 feet, which is slightly narrower than the adopted City of Newberg minor collector paved width of 40 feet. The street includes one northbound and one southbound travel lane. On-street parallel parking is allowed on both sides of N Meridian Street. Parking has been eliminated via yellow curb markings in short sections along N Meridian Street in locations near several of the study intersections. N Meridian Street is marked with a normal broken yellow line, which permits passing. There is adequate sight distance required for passing. The street is also marked with bicycle sharrows which indicates a shared environment for motor vehicles and bicycles. The use of sharrows is consistent with the adopted TSP cross section for a minor

collector. The speed limit is 25 MPH. There are continuous sidewalks on both sides of N Meridian Street. Curb ramps are not provided consistently at the study intersections as addressed below. Several of the existing curb ramps do not appear to comply with ADA requirements.

Yamhill County Transit Area Route 5 operates along N Meridian Street with one hour headways on weekdays only. There is one northbound bus stop located between E North Street and the northern GFU driveway.

Route 5
Newberg Foothills Drive



Routes 5 & 7 Newberg

Route 5 Newberg Foothills Drive								
1st and Main (Newberg Naps Thriftway)	Meridain & E Franklin	The Oaks Apts. (near Sierra Vista Dr)	Foothills Drive & Main (Senior Center)	Main & Columbia	E 9th & Blaine	Woodview Village Apts	E 5th & Main	1st and Main (Newberg Naps Thriftway)
7:30	7:33	7:34	7:39	7:42	7:49	7:50	7:53	7:55
8:30	8:33	8:34	8:39	8:42	8:49	8:50	8:53	8:55
9:30	9:33	9:34	9:39	9:42	9:49	9:50	9:53	9:55
10:30	10:33	10:34	10:39	10:42	10:49	10:50	10:53	10:55
11:30	11:33	11:34	11:39	11:42	11:49	11:50	11:53	11:55
12:30	12:33	12:34	12:39	12:42	12:49	12:50	12:53	12:55
1:30	1:33	1:34	1:39	1:42	1:49	1:50	1:53	1:55
2:30	2:33	2:34	2:39	2:42	2:49	2:50	2:53	2:55
3:30	3:33	3:34	3:39	3:42	3:49	3:50	3:53	3:55
4:30	4:33	4:34	4:39	4:42	4:49	4:50	4:53	4:55
5:30	5:33	5:34	5:39	5:42	5:49	5:50	5:53	5:55

Weekday Service Only

PM times in bold

Figure 3: Yamhill County Transit, Route 5

There are currently no marked crosswalks across any legs of any of the study intersections. It should be noted that per ORS 801.220, a crosswalk does not need to be marked in order to be considered a crosswalk. Drivers are responsible for yielding the right-of-way for pedestrians per ORS 811.028.

According to the City of Newberg Transportation System Plan (“TSP”), N Meridian Street is functionally classified as a minor collector street. All of the intersecting streets within the study area are classified as local/residential streets per the TSP.

There are sporadic streetlights along N Meridian Street that have been attached to utility poles at strategic intersection locations. The streetlights are located as referenced in Table 1.

Table 1. N. Meridian Street Intersection Details (from north to south)

Intersection	Configuration	Control	Illumination
E. North Street	4 legged	TWSC on E. North Street	NW quadrant and oriented SE toward the center of the intersection
GFU north driveway	3 legged	Stop control on GFU north driveway	None
E. Franklin Street	3 legged	Stop control on E. Franklin Street	NW quadrant and oriented to the east
E. Sherman Street/ GFU south driveway	4 legged	TWSC on E. Sherman Street & GFU south driveway	NW quadrant and oriented to the east
E. Sheridan Street	4 legged	TWSC on E. Sheridan Street	NW quadrant and oriented SE toward the center of the intersection.

TWSC = Two way stop control

A photometric analysis to determine the adequacy of existing street lighting has not been conducted as part of this evaluation.



N Meridian Street/E North Street looking to the west from the southeast quadrant; Illumination is provided only on the northeast quadrant of the intersection



N Meridian Street/E. Frankin Street looking to the west from the southeast quadrant; Illumination is provided only on the northeast quadrant of the intersection



N Meridian Street/E Sherman Street looking to the west from the northeast quadrant; Illumination is provided only on the northeast quadrant of the intersection



N Meridian Street/E Sheridan Street looking to the west from the northeast quadrant; Illumination is provided only on the northeast quadrant of the intersection

Curb Ramps

Intersection locations not constructed with pedestrian curb ramps or clearly not compliant with ADA requirements for curb ramps are noted below. There has been no detailed evaluation to determine if any existing curb ramps are compliant with ADA standards.

- **N Meridian Street/E North Street** – The northwest quadrant and the east/west crossing of the northeast quadrant are not constructed with curb ramps. Additionally, it is clear that the southeast quadrant is not compliant with ADA standards.
- **N Meridian Street/GFU Northern Site Driveway** – Curb ramps crossing N Meridian Street are not required here according to ORS as this is not an intersection. However, any north/south oriented curb ramps need to be compliant with ADA.
- **N Meridian Street/E Franklin Street** – The northeast quadrant is not constructed with an east/west curb ramp. Additionally, it is clear that the northwest and southeast quadrants are not compliant with ADA standards.
- **N Meridian Street/E Sherman Street/GFU Southern Site Driveway** - The southwest quadrant is not constructed with curb ramps. Additionally, it is clear that the northeast and southeast quadrants are not compliant with ADA standards.
- **N Meridian Street/E Sheridan Street** – Three of the four quadrants are constructed with curb ramps, while the northwest quadrant is not constructed with curb ramps. Additionally, it is clear that the southeast and northeast quadrants are not compliant with ADA standards.

Traffic Volumes

Several traffic counts were conducted via pneumatic tube counters on Tuesday, November 19, 2019. Table 1 presents the location of the traffic counts along with the collected approximate average daily traffic (“ADT”) in both directions.

Table 2. N. Meridian Street – Average Daily Traffic

Location	Approximate ADT
Between E. Vermillion Street & E. North Street	2850
Between E. North Street & E. Franklin Street	2950
Between E. Franklin Street & E. Sherman Street	3050
Between E. Sherman Street & E. Sheridan Street	2600

ADT = Average Daily Traffic

Table 3. Other Locations – Average Daily Traffic

Location	Approximate ADT
South GFU Driveway east of N. Meridian Street	200
E. Sherman Street west of N. Meridian Street	200
E. North Street east of N. Meridian Street	200
E. North Street west of N. Meridian Street	150

ADT = Average Daily Traffic

Based on the collected traffic volume data, it is clear that N Meridian Street carries far higher traffic volumes than the side streets and the GFU driveway in the study area. The traffic volumes are consistent with the functional classification of each roadway per the TSP. Tube count data is provided in Appendix A, which also includes the hourly directional traffic volumes as well as vehicle classifications.

Based on the speed data collected on N Meridian Street, 85th percentile speeds (the speed at which 85% of drivers travel at or below) ranged from 27-28 MPH. This data indicates good compliance with the posted speed limit of 25 MPH.

Turning movement counts were conducted on November 19, 2019 at the intersections of N Meridian Street/E North Street and N Meridian Street/E Sherman Street during the weekday AM peak hours (7 AM-9 AM) and weekday PM peak hours (2 PM–6 PM). The turning movement counts illustrated that there was little side street traffic at the selected intersections. Based upon the collected traffic volumes, it is clear that there are no intersection capacity related issues at these study intersections.

Turning movement count data is provided in Appendix B.

The volume of pedestrians crossing N Meridian Street was collected at various locations also on November 19, 2019 from 7 AM-6 PM. Quality Counts, a local transportation data collection service, initially observed and documented the volume of pedestrians at various locations along the N Meridian Street corridor. That data resulted in the summary presented in Table 4. Full results are presented in Appendix C.

**Table 4. N. Meridian Street East/West Pedestrian Crossing Volumes
November 10, 2019, 7 AM – 6 PM**

Location	East/West Crossing Volume
South of E. North Street	124
North of E. Franklin Street	159
South of E. Franklin Street	49
North of E. Sherman Street	142
South of E. Sherman Street	70
North of E. Sheridan Street	113

In addition to the above table, additional review of the video collected on November 19, 2019 was conducted by our staff to better understand the crossing locations of pedestrians. It should be noted that the locations presented in Table 4 are generalized and many crossing movements were observed not crossing at an intersection, but at mid-block locations. For instance, it was observed that many pedestrians crossed N Meridian Street mid-block, south of E North Street near the north GFU driveway. This mid-block crossing behavior occurred at a variety of locations. This volume is reflected in the table as either “South of E North Street” or “North of E Franklin Street.” Additionally, given the parking supply on the west side of N Meridian Street, many pedestrians were observed crossing N Meridian Street from their vehicles to the GFU campus and vice versa, not at an intersection along the corridor.

Generally, crossings near E North Street and E Franklin Street tended towards more mid-block crossing maneuvers and more varied in location than crossings near E Sherman Street and E Sheridan Street, which tended to occur more at intersections.

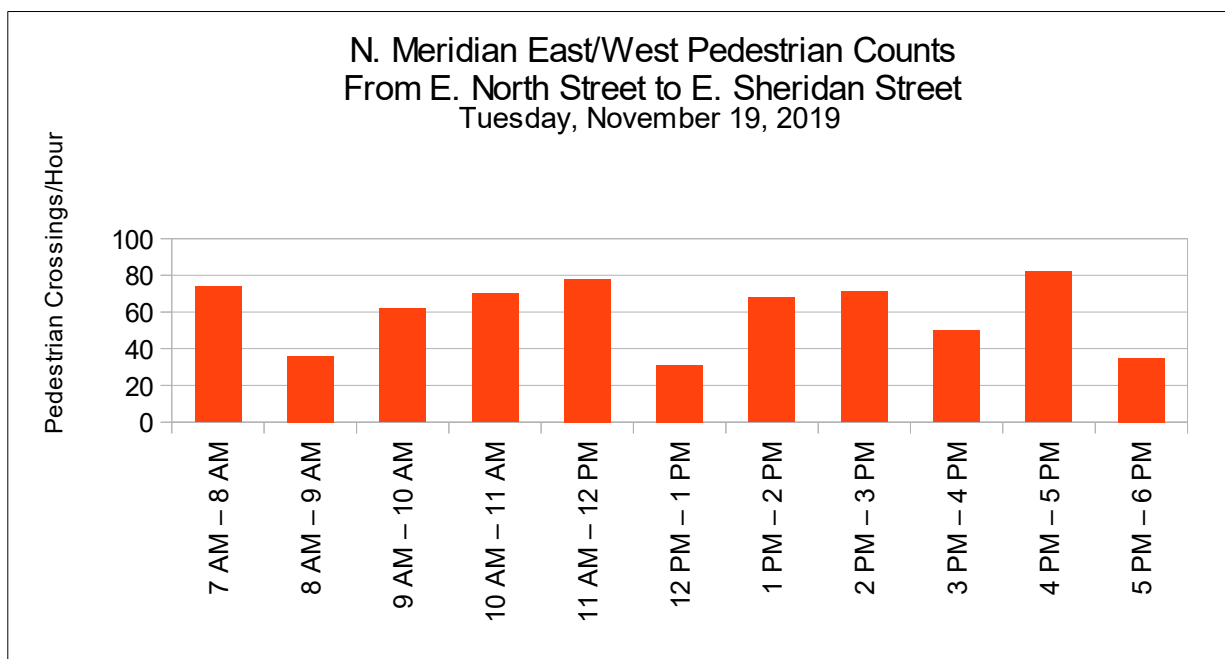


Figure 4: Pedestrian activity along N Meridian Street by hour

Parking Observations

Field observations were conducted on Tuesday, January 14, 2020 from 7 AM-10:30 AM. Based on these observations, on-street parking along N Meridian Street was well utilized. By approximately 8 AM, the on-street parking supply between E Sherman Street and E North Street was mostly occupied and remained mostly occupied during our visit with little turnover. There was still on-street parking available in the northern and southern ends of the study area along N Meridian Street. It was observed that many people parked on N Meridian Street and crossed mid-block or parked along the side streets west of N Meridian Street, then walked across the street to GFU.

Along the east side of N Meridian Street at the E Franklin Street intersection, parking is not restricted

near the location of pedestrian crossings. Additionally, there is no curb ramp constructed on the northeast quadrant of the intersection. At both of these locations, unmarked crosswalks exist.



N Meridian Street/E Franklin Street, southeast quadrant; Parking is not restricted near this crossing



N Meridian Street/E Franklin Street looking east from the northwest quadrant; No curb ramp is provided on the east side & parking is not restricted

Sight Distance

At some locations along N Meridian Street, parking has been removed near intersections via yellow curb markings. There are multiple benefits to such treatment. First, by limiting parking near intersections, intersection sight distance is enhanced as N Meridian Street traffic has the right-of-way over vehicular traffic emerging from side streets onto N Meridian Street. Each side street is controlled by a stop sign at its intersection with N Meridian Street. Second, the removal of parking near intersections improves visibility for pedestrians attempting to cross N Meridian Street or the side streets of N Meridian Street. At the same time, this improves the ability of drivers to see pedestrians waiting to cross Meridian Street or the side streets. The removal of parking additionally helps keep vehicles from blocking pedestrian curb ramps. Lastly, the removal of parking may provide benefits to large vehicles in making their turning movements at these intersections.

It should be noted that the use of yellow curb is not addressed in Oregon law and the use of yellow curb requires the adoption of a local ordinance to enforce yellow curb as a no parking zone. It is not clear that the City of Newberg has adopted such an ordinance.

Aside from the potential impacts of parking there did not appear to be any limitations to sight distance at any of the study intersections.

Discussion with GFU staff

A meeting with GFU employees Brad Lau, Vice President for Student Life & Title IX Coordinator, and Ed Gierok, Director of Campus Public Safety & Emergency Management was conducted on January 14, 2020.

Based on this conversation, it was noted that there are approximately 2600 students at the GFU Newberg campus. Approximately 1300 students live on campus, while the remainder live off campus. There are approximately 300-400 GFU employees at the Newberg campus. Tuesdays are known to have the greatest amount of activity on N Meridian Street.

Mr. Lau and Mr. Gierok report that they have heard of concerns related to traffic safety along N Meridian Street as well as personal safety at night under limited visibility conditions due to lack of lighting. They are not aware of crashes involving pedestrians, but have observed pedestrian behavior where pedestrians start to cross the road then step back to the curb due to conflicting vehicular traffic. They have not heard from pedestrians that there is a visibility issue along N Meridian Street, but they have heard concerns of drivers having difficulty with visibility related to the on-street parking along N Meridian Street. They do report that there have been auto related crashes.

Regardless of the outcome of this report, GFU intends to provide educational messages to students and staff via various communication messages regarding pedestrian safety along N Meridian Street.

Mr. Lau indicated that there is a substantial amount of student housing west of N Meridian Street and there is pedestrian crossing activity related to businesses towards downtown, which is located to the south and west of GFU. Additionally, Mr. Lau and Gierok report that students park west of N Meridian Street and walk to GFU. There is a modest semester fee of \$100 to park on-campus. They report that under normal circumstances, there is ample parking supply on-site and that it is encouraged that students not park in adjacent neighborhoods.

Mr. Lau suggested that if an enhanced crosswalk were to be marked, the N Meridian Street/E Sherman Street intersection may be the best location based on his observations.

Crash History

The City of Newberg's *Public Works Design and Construction Standards* provides no specific methodology for the review of safety within the City of Newberg. However, the TSP states that "Collisions at intersections are typically proportional to the number of vehicles entering it. Therefore, a crash rate describing the frequency of crashes per million entering vehicles is used to compare locations and assess if the number of crashes should be considered high. Further, a critical crash rate, a threshold value that allows for a relative comparison among intersections with similar characteristics, is computed for each intersection."

Based on this discussion, a review of the critical crash rate of each of the study intersections was evaluated based upon the procedures of ODOT's *Analysis Procedures Manual*.

A review of the recent crash history of the study intersections along N Meridian Street does not indicate that there is an existing safety problem at any of the study intersections.

Additionally, a review of the safety along N Meridian Street beyond the intersections did not illustrate a robust history of crashes.

The crash data and crash rates for the subject intersections and critical crash rates for similar intersections per the ODOT critical crash calculator are provided in Appendix D. Since the crash rates are below the critical crash rates, there is not reason to analyze the intersections further.

City of Newberg Policies

The *Newberg ADA/Pedestrian/Bike Route Improvement Plan*¹ presents “Roadway Crossing Policies and Treatments.” Below are excerpts of that plan that are germane to this analysis.

“ODOT Crosswalk Policy

An engineering study is required before establishing marked crosswalks at locations other than signalized approaches at intersections, stop signs or at roundabouts. Marked crosswalks should only be considered at uncontrolled approaches when an engineering study demonstrates their need. These include criteria and considerations for the determination of when a pedestrian crossing should be marked with a parallel crosswalk and when it is appropriate to consider using continental (ladder) style crosswalks.”

Criteria for Marking Crosswalks @ Mid-Block Locations

Generally mid-block crosswalks are discouraged for the same reasons as uncontrolled approaches. Mid-block crosswalks often do not generate good compliance from motorists. Mid-block crosswalks should only be considered when an engineering study demonstrates their need and the location meets specific criteria outlined in the ODOT Traffic Manual.

Intersection Treatments

Several design and operational treatments could be implemented to improve the pedestrian environment at intersections. Attributes associated with good intersection design include the following: Clarity: It should be obvious to motorists that there will be pedestrians present; it should be obvious to pedestrians where to cross.

Predictability: The placement of crosswalks should be predictable. Additionally, the frequency of crossings should increase where pedestrian volumes are greater.

Visibility: The location and illumination of the crosswalk allows pedestrians to see and be seen by approaching traffic while crossing.

- Short wait: The pedestrian does not have to wait unreasonably long for an opportunity to cross.
- Limited exposure: Conflict points with traffic are few, and the distance to cross is short or is divided into shorter segments with crossing islands.
- Clear crossing: The crosswalk is free of barriers, obstacles, and hazards and is accessible to all users. Pedestrian crossing information is available in accessible locations.

Crosswalks

Newberg currently uses a variety of crosswalk treatments, including “transverse” (also called “parallel bar”) markings consisting of two bars crossing an intersection; “longitudinal” (also called

1 <https://www.newbergoregon.gov/planning/page/adapedestrianbike-route-improvement-plan>

“ladder style”) markings; and combinations of these marking styles.

Type 1: Marked/Unsignalized Crossings

A marked/unsignalized crossing (Type 1) consists of a crosswalk, signage, and often no other devices to slow or stop traffic...The following thresholds recommend where unsignalized crossings may be acceptable:

Maximum traffic volumes: $\leq 9,000$ -12,000 Average Daily Traffic (ADT)volumes

Maximum travel speed: 35 MPH

Minimum line of sight: 25 MPH zone: 155 feet

On two-lane residential and collector roads below 15,000 ADT with average vehicle speeds of 35 MPH or less, crosswalks and warning signs (“Path Xing”) should be provided to warn motorists, with engineering judgment used to determine the appropriate level of traffic control and design.

Summary of At-Grade Crossing Recommendations

Table IV-2. provides guidance on how to implement at-grade path/roadway crossings in Newberg.

Table IV-2. Summary of At-Grade Crossing Recommendations

Roadway Type (Number of Travel Lanes and Median Type)	Vehicle ADT □ 9,000			Vehicle ADT > 9,000 to 12,000			Vehicle ADT > 12,000 to 15,000			Vehicle ADT > 15,000		
	Speed Limit **											
	30 mi/h	35 mi/h	40 mi/h	30 mi/h	35 mi/h	40 mi/h	30 mi/h	35 mi/h	40 mi/h	30 mi/h	35 mi/h	40 mi/h
2 Lanes	1	1	1/1+	1	1	1/1+	1	1	1+/3	1	1/1+	1+/3
3 Lanes	1	1	1/1+	1	1/1+	1/1+	1/1+	1/1+	1+/3	1/1+	1+/3	1+/3
Multi-Lane (4 or more lanes) with raised median ***	1	1	1/1+	1	1/1+	1+/3	1/1+	1/1+	1+/3	1+/3	1+/3	1+/3
Multi-Lane (4 or more lanes) without raised median	1	1/1+	1+/3	1/1+	1/1+	1+/3	1+/3	1+/3	1+/3	1+/3	1+/3	1+/3
<p>*General Notes: Crosswalks should not be installed at locations that could present an increased risk to pedestrians, such as where there is poor sight distance, complex or confusing designs, a substantial volume of heavy trucks, or other dangers, without first providing adequate design features and/or traffic control devices. Adding crosswalks alone will not make crossings safer, nor will they necessarily result in more vehicles stopping for pedestrians. Whether or not marked crosswalks are installed, it is important to consider other pedestrian facility enhancements (e.g., raised median, traffic signal, roadway narrowing, enhanced overhead lighting, traffic-calming measures, curb extensions), as needed, to improve the safety of the crossing. These are general recommendations; good engineering judgment should be used in individual cases for deciding which treatment to use.</p> <p>For each pathway-roadway crossing, an engineering study is needed to determine the proper location. For each engineering study, a site review may be sufficient at some locations, while a more in-depth study of pedestrian volume, vehicle speed, sight distance, vehicle mix, etc. may be needed at other sites.</p>												
<p>** Where the speed limit exceeds 40 mi/h (64.4 km/h), marked crosswalks alone should not be used at unsignalized locations.</p>												
<p>*** The raised median or crossing island must be at least four ft (1.2 m) wide and six ft (1.8 m) long to adequately serve as a refuge area for pedestrians in accordance with MUTCD and AASHTO guidelines. A two-way center turn lane is not considered a median.</p>												
<p>1= Type 1 Crossings. Ladder-style crosswalks with appropriate signage should be used.</p>												
<p>1/1+ = With the higher volumes and speeds, enhanced treatments should be used, including marked ladder style crosswalks, median refuge, flashing beacons, and/or in-pavement flashers. Ensure there are sufficient gaps through signal timing, as well as sight distance.</p>												
<p>1+/3 = Carefully analyze signal warrants using a combination of Warrant 2 or 5 (depending on school presence) and EAU factoring. Make sure to project pathway usage based on future potential demand. Consider Pelican, Puffin, or Hawk signals in lieu of full signals. For those intersections not meeting warrants or where engineering judgment or cost recommends against signalization, implement Type 1 enhanced crosswalk markings with marked ladder style crosswalks, median refuge, flashing beacons, and/or in-pavement flashers. Ensure there are sufficient gaps through signal timing, as well as sight distance.</p>												

The *Newberg ADA/Pedestrian/Bike Route Improvement Plan* references the *ODOT Traffic Manual* in making determinations for marked crosswalks. Relevant excerpts of the *ODOT Traffic Manual* are provided below:

“6.6.2.3 Criteria for Marking Crosswalks at Uncontrolled Approaches of Intersections

Generally marked crosswalks are discouraged at uncontrolled approaches due to a concern that they may not improve safety and may, if inappropriate, put a pedestrian more at risk. The criteria are primarily restrictions on marking crosswalks in locations that would be potentially hazardous. In situations where the pedestrian volumes justify marking crosswalks (well above minimum threshold levels) additional safety measures (i.e., pedestrian refuges) should be considered above and beyond marking. Installation of a marked crosswalk will not, in and of itself, increase the level of safety for pedestrians. Marked crosswalks should only be considered at uncontrolled approaches when an engineering study demonstrates their need and the location meets the following criteria:

Required

- There is good visibility of the crosswalk from all directions, or it can be obtained. Stopping sight distance is a minimum.
- There is no reasonable alternative crossing location.
- There is established pedestrian usage. Considerations include: volume of pedestrians, opportunity for safe crossing (i.e., sufficient gaps in traffic), percentage of elderly or young children, and the nature of the attraction (See ITE suggested pedestrian volume thresholds in Section 6.6.2.11). Lower pedestrian volumes would be acceptable for areas where there is greater proportion of less experienced and less agile pedestrians (e.g., near schools and/or elderly housing areas)
- Posted speeds should be 40 mph or less.
- Traffic Volumes should be 10,000 or less ADT. If above 10,000 ADT raised median islands should be included.

6.6.2.4 Criteria for Marking Crosswalks at Mid-Block Locations

Installations of mid-block crosswalks are discouraged for the same reasons uncontrolled approaches are discouraged. Mid-block crosswalks often do not get good compliance from motorists. Only consider mid-block crosswalks when an engineering study demonstrates their need and the location meets the following criteria:

Required

- There is good visibility of the crosswalk from all directions or it can be obtained. Stopping sight distance is a minimum.
- Posted vehicular speeds should be 40 mph or less.
- There is not a reasonable alternative at a stop-controlled intersection.
- There is established pedestrian usage. Considerations include: volume of pedestrians, opportunity for safe crossing (i.e., sufficient gaps in traffic), percentage of elderly or young children, and the nature of the attraction (see ITE suggested pedestrian volume thresholds in Section 6.6.2.11). Lower pedestrian volumes would be acceptable for areas where there is greater proportion of less experienced and less agile pedestrians (e.g. near schools and/or elderly housing areas).
- Locations should be more than 300 feet to nearest crossing or marked crosswalk.
- Traffic Volumes should be less than 10,000 ADT or if above 10,000 ADT raised median islands should be included.
- Pedestrian crossing enhancements (curb extensions and/or pedestrian refuges) should be considered.

Optional

- Where a marked crosswalk can concentrate or channelize multiple pedestrian crossings to a single location.
- Free turning movements or other operational considerations inhibit pedestrian crossing opportunities at the nearest intersection.

- Established bus stops where riders need access to the opposite side of road from the bus stop where the stop can't be relocated.

6.6.2.6 Marking Styles

Continental crosswalk markings (referred to as “Longitudinal” markings in the MUTCD) should be used for all marked crosswalks on uncontrolled approaches, yield controlled approaches, midblock locations roundabouts, unsignalized approaches of channelized right turn lanes, and all crossings employing rectangular rapid flashing beacons.

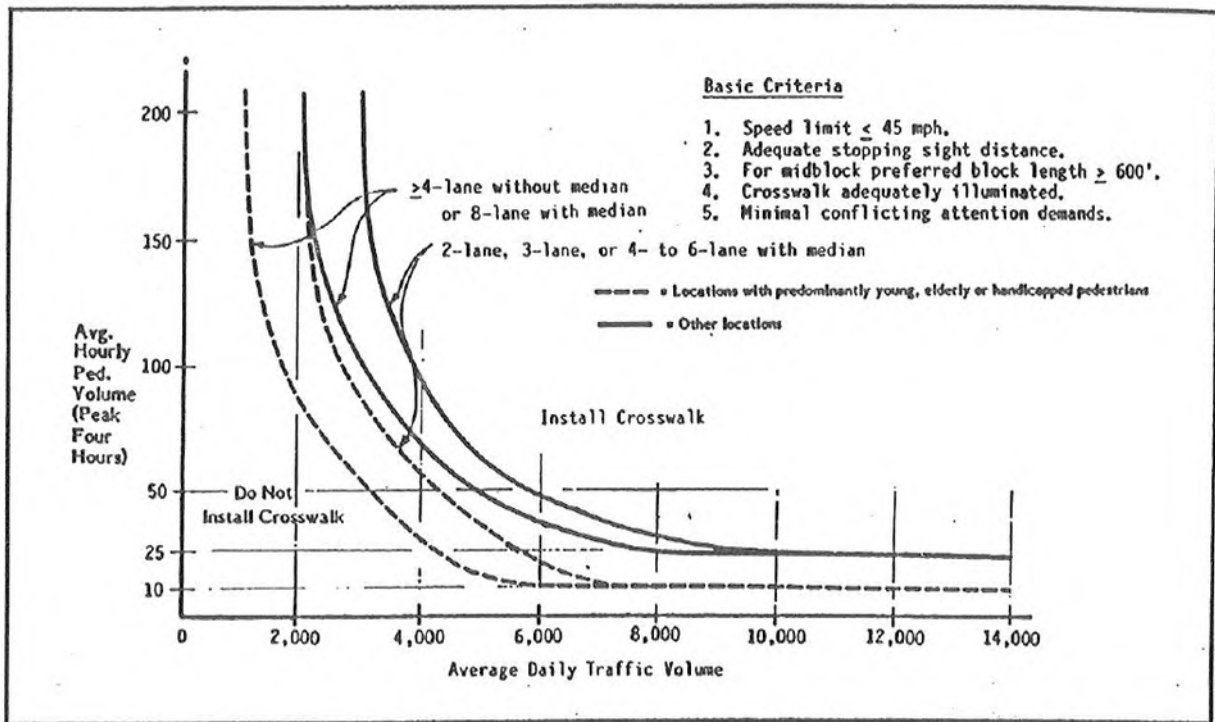
Continental crosswalk markings are the preferred style on uncontrolled approaches because they have been shown to be visible from a significantly greater distance than transverse crosswalk markings. (Crosswalk Marking Field Visibility Study, FHWA Publications No. HRT-10-068.) The added visibility of continental markings can help address the vulnerability of pedestrians at uncontrolled crosswalks where drivers are not already required to stop like they would at an intersection controlled by a traffic signal or stop sign....

6.6.2.11 Considerations for Marking Crosswalks

Engineering Study

The following considerations should be addressed in an Engineering Study:

1. Marked crosswalks at other than signalized intersections or stop-controlled approaches should be used selectively. Allowing a proliferation of marked crosswalks may reduce the overall effectiveness of marking crosswalks.
2. Consideration must be given to concerned citizens, civic groups, and neighborhood organizations; balancing engineering judgment with perceived public need.
3. The roadway design features that influence the pedestrians' ability to cross the street, e.g., street width, presence of a median, one-way versus two-way operation, and geometrics of the highway or intersection being crossed, all need to be included in the planning of the crosswalk. Other pedestrian design improvements such as curb extensions and pedestrian refuges should be encouraged to increase the safety of the crossing.
4. A three to five-year pedestrian crash history should be obtained.
5. The walking path of the pedestrian. Will marking crosswalks encourage pedestrians to use a single point of crossing rather than choosing random crossing points?
6. There should be opportunities for crossing (sufficient gaps in traffic)
7. Uncontrolled marked crosswalks may be continental crosswalk marking and should be accompanied by other enhancements such as pedestrian refuge islands, bulb-outs, pedestrian signs etc.
8. There should be adequate sight distance for the motorist and the pedestrian, or it can be obtained. This includes examination of on-street parking, street furniture (e.g., mailboxes, utility poles, newspaper stands), and landscaping. Corrective measures should be taken wherever possible.
9. All crosswalk locations should be investigated for adequate illumination where there is prevalent nighttime pedestrian activity.
10. Mid-block and school crossings must be supplemented with crosswalk signs
11. Mid-block crosswalks should not be located immediately down-stream from bus stops.
12. For mid-block crosswalks: are there more reasonable locations pedestrians could cross, i.e., no more than a block (300 feet) from a location being considered?



ITE Guidelines for Crosswalk Installation, August 1989

6.6.5 Crosswalk Safety

There is conflicting evidence as to the effectiveness of marked crosswalks on motorist behavior and pedestrian safety. ODOT has followed a practice of reluctance to mark crosswalks at locations other than controlled locations (i.e., signals and stop signs) and school crossings. Numerous studies (San Diego, 1972, Long Beach, 1986, Brigham Young, 1996, Santa Anna, 1999) have shown that marking crosswalks at uncontrolled locations can increase crash risk for pedestrians. In contrast some studies show higher rates of motor vehicle yielding to pedestrians at marked crosswalks.

Recent studies (Zegeer, 2000) suggest that wider (multi-lane) or higher volumes (above 10,000 ADT) contribute to higher crash risk for marked crosswalk vs. unmarked crosswalks. The study also found that the presence of a raised median was associated with a lower crash risk. Another study (Knoblauch, 1999) documented that pedestrians and motorists did not exhibit observable unsafe behaviors in marked crosswalks, in fact observable pedestrian behavior actually improved. The previous study commented that one possible explanation to higher crash rates in marked crosswalks is that a marked crosswalk may attract a higher percentage at-risk pedestrians, children and older adults (Zegeer, 2000).

From the pedestrian's point of view, a crosswalk is large and clearly marked. Crosswalks are far less visible to the drivers than to the pedestrians. At speeds greater than 45 mph, crosswalks are indiscernible at the distance a driver needs to begin braking to safely stop for pedestrians. It is important to ensure that the crosswalk markings and pedestrians are highly visible to motorists.

Marked crosswalks are routinely requested to increase the safety of crossing the highway. The function of the marked crosswalk is to provide guidance to the proper crossing location and to serve to alert motorists of a pedestrian crossing point. But unjustified or poorly located crosswalks may not increase safety. Marking crosswalks unnecessarily or in locations where there are few pedestrians may lead motorists to disrespect the marking.

A driver who passes over crosswalks marked at every intersection or a location that rarely has pedestrians may be conditioned to not expect pedestrians and thus loses respect for crosswalk marking. These crosswalks may increase the crash risk to pedestrians and motorists alike.

Most experts agree that on a busy highway, marking a crosswalk alone is rarely an effective safety

measure and in some cases may actually increase the pedestrian's crash risk. Other measures such as median refuge islands, curb extensions and illumination should be considered before a crosswalk is marked. Other improvements include improving sight distance, better access management to reduce conflicts with driveways, pedestrian signs, etc. Consideration should also be given to the overall environment in which the pedestrian crossing occurs, beyond the immediate vicinity of the proposed crosswalk, i.e. sign clutter and visual distractions. (See also Crossing Strategies)

MUTCD

All jurisdictions within the State of Oregon must comply with the *Manual on Uniform Traffic Control Devices*. The installation of crosswalks is addressed in Section 3B.18 of the *MUTCD* states:

Crosswalk lines should not be used indiscriminately. An engineering study should be performed before a marked crosswalk is installed at a location away from a traffic control signal or an approach controlled by a STOP or YIELD sign. The engineering study should consider the number of lanes, the presence of a median, the distance from adjacent signalized intersections, the pedestrian volumes and delays, the average daily traffic (ADT), the posted or statutory speed limit or 85th-percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.

New marked crosswalks alone, without other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of pedestrian presence, should not be installed across uncontrolled roadways where the speed limit exceeds 40 mph and either:

A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or

B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.

The *MUTCD* does not directly address a situation like N Meridian Street other than suggesting an engineering study to determine the need for marked crosswalks. The *MUTCD* guidance is based largely on a document entitled *Safety Effects of Marked vs Unmarked Crosswalks at Uncontrolled Locations* by Charles Zegeer, et al.

In addition to the information provided in the *MUTCD* and the *ODOT Traffic Manual*, Zegeer notes that "In some situations (e.g., low-speed, two-lane streets in downtown areas), installing a marked crosswalk may help consolidate multiple crossing points. Engineering judgment should be used to install crosswalks at preferred crossing locations (e.g., at a crossing location at a streetlight as opposed to an unlit crossing point nearby). While overuse of marked crossings at uncontrolled locations should be avoided, higher priority should be placed on providing crosswalk markings where pedestrian volume exceeds about 20 per peak hour (or 15 or more elderly pedestrians and/or children per peak hour)."

Discussion

While there is a fair amount of pedestrian activity along N Meridian Street, there is not evidence that marking crosswalks in the study area will necessarily enhance safety for pedestrians nor is there

evidence that providing marked crosswalks would be a safety detriment. This conclusion aligns with adopted City of Newberg crosswalk guidance. N Meridian Street is not a high volume or high speed roadway. Pedestrians will find ample gaps in the traffic stream to cross N Meridian Street with little to no delay. There is no evidence of any recent vehicle/pedestrian traffic crashes. GFU staff indicates that they are not aware of pedestrian related crashes, although they have concerns about pedestrian safety along the corridor.

At the northern end of the corridor near E North Street, the northern GFU driveway and E Franklin Street, the locations where pedestrians choose to cross varies widely. Pedestrians will tend not to, especially in locations where there are ample gaps in the traffic stream, go out of their way to cross at intersections or marked crosswalk locations. This was regularly observed on N Meridian Street with many pedestrians crossing at locations that were most convenient for them. It can be determined that marking a crosswalk would not likely significantly change pedestrian behavior on the north end of the corridor and that pedestrians would continue to likely cross in a varied nature as they do currently.

At the southern end of the corridor near E Sherman Street and E Sheridan Street, crossings tend to occur more consistently at intersections. There was noticeably more order to the location of pedestrian crossings at the N Meridian Street/E Sherman Street intersection, with several hours exceeding 20 pedestrians per hour, which aligns with the minimum volumes presented in the Zegeer study.

Recommendations

Option 1:

1. Install a W11-2 “Pedestrian” sign on N Meridian Street between E Hancock Street and E Sheridan Street facing northbound traffic and on N Meridian Street between E Vermillion Street and E North Street facing southbound traffic. Given the varied location of pedestrian crossings in the corridor, especially at the northern end of the corridor, this signage would bring general awareness to drivers that they are entering an area with higher than usual pedestrian crossing activity.



W11-2*

2. Install W11-2 and W16-7P (diagonal downward pointing arrow) signage at the N Meridian Street/E Sherman Street intersection. This intersection was observed to have the greatest amount of pedestrians crossing at the intersection. In order to best take advantage of the

intersection configuration, it would be recommended to place this sign on the southeast quadrant of the intersection facing the northbound traffic and the northwest quadrant of the intersection facing southbound traffic. This signage would bring awareness to the crossings that occur both across the north and south legs of the intersection.



Option 2:

1. Install signage per Option 1.a.
2. Install a marked “continental” or “ladder” style crosswalk across the northern leg of the N Meridian Street/E Sherman Street intersection. The location of this marked crosswalk would take advantage of the placement of the overhead illumination provided on the northwest quadrant of this intersection. Complement the marked crosswalk with W11-2 and W16-7P signage on the northwest quadrant facing southbound traffic and on the northeast quadrant facing northbound traffic.

ORS 801.220 states that “Whenever marked crosswalks have been indicated, such crosswalks and no other shall be deemed lawful across such roadway at that intersection.” By marking the northern crossing, but not the southern crossing, this would effectively close the southern crossing of the intersection, a noted disadvantage of this option. Given the low traffic volumes, low traffic speeds and ample gaps in the traffic stream, it is unlikely that pedestrians that would normally cross the southern leg of the intersection would relocate to the northern crosswalk.

Other possible future considerations:

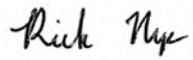
1. Reconstruction of crossings to provide or upgrade curb ramps to better facilitate crossings for all users as well as provide better channelization of the preferred crossing locations. Evaluate compliance with ADA at each crossing location and prioritize reconstruction of those ramps. A possible priority would be to start with construction at the locations that have no curb ramps at all then reconstruct ramps that are not compliant with ADA standards.
2. With curb ramp reconstruction, consider the installation of curb extensions to improve visibility for pedestrians to see oncoming traffic as well as improve the visibility of pedestrians to drivers.
3. Evaluate and improve street illumination, especially at intersections, although improved

illumination along the corridor would also provide public safety benefits.

4. Ensure that parking removal at crossings provides sufficient stopping sight distance of 155 feet.

Should you have any questions, feel free to contact me at rick@greenlightengineering.com or by phone at 503-317-4559.

Sincerely,



Rick Nys, P.E.
Principal Traffic Engineer



RENEWS: 12/31/2020

Appendix A

Traffic Count, Vehicle Classification & Speed Data

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn Vermilion & North **QC JOB #:** 15124309
SPECIFIC LOCATION: **DIRECTION:** NB
CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	3	2	1	0	0	0	0	0	0	0	0	0	6	21-30	5
01:00 AM	0	1	2	3	0	0	0	0	0	0	0	0	0	0	6	21-30	5
02:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	21-30	3
03:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	21-30	2
04:00 AM	0	0	5	2	0	0	0	0	0	0	0	0	0	0	7	21-30	7
05:00 AM	0	0	7	11	1	0	0	0	0	0	0	0	0	0	19	21-30	18
06:00 AM	0	4	8	14	4	0	0	0	0	0	0	0	0	0	30	21-30	22
07:00 AM	0	9	47	23	0	0	0	0	0	0	0	0	0	0	79	21-30	70
08:00 AM	0	5	37	19	2	0	0	0	0	0	0	0	0	0	63	21-30	56
09:00 AM	0	13	40	27	1	1	0	0	0	0	0	0	0	0	82	21-30	67
10:00 AM	0	14	37	12	0	0	0	0	0	0	0	0	0	0	63	16-25	51
11:00 AM	0	16	32	23	2	0	0	0	0	0	0	0	0	0	73	21-30	55
12:00 PM	0	17	55	24	2	1	0	0	1	0	0	0	0	0	100	21-30	79
01:00 PM	0	18	46	30	3	0	0	0	0	0	0	0	0	0	97	21-30	76
02:00 PM	0	12	48	16	0	0	0	0	0	0	0	0	0	0	76	21-30	64
03:00 PM	0	14	57	44	4	0	0	0	0	0	0	0	0	0	119	21-30	101
04:00 PM	0	19	78	22	1	0	0	0	0	0	0	0	0	0	120	21-30	100
05:00 PM	0	23	82	49	5	0	0	0	0	0	0	0	0	0	159	21-30	131
06:00 PM	0	8	32	36	5	0	0	0	0	0	0	0	0	0	81	21-30	68
07:00 PM	0	10	32	32	0	0	0	0	0	0	0	0	0	0	74	21-30	64
08:00 PM	0	5	26	26	3	0	0	0	0	0	0	0	0	0	60	21-30	52
09:00 PM	0	3	23	23	2	1	0	0	0	0	0	0	0	0	52	21-30	46
10:00 PM	0	4	11	7	2	0	0	0	0	0	0	0	0	0	24	21-30	18
11:00 PM	0	1	4	12	0	0	0	0	0	0	0	0	0	0	17	21-30	16
Day Total	0	196	714	460	38	3	0	0	1	0	0	0	0	0	1412	21-30	1174
Percent	0%	13.9%	50.6%	32.6%	2.7%	0.2%	0%	0%	0.1%	0%	0%	0%	0%	0%			
AM Peak Volume	12:00 AM	11:00 AM	7:00 AM	9:00 AM	6:00 AM	9:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	9:00 AM		
	0	16	47	27	4	1	0	0	0	0	0	0	0	0	82		
PM Peak Volume	12:00 PM	5:00 PM	5:00 PM	5:00 PM	5:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	5:00 PM		
	0	23	82	49	5	1	0	0	1	0	0	0	0	0	159		

Comments:

LOCATION: Meridian btwn Vermilion & North														QC JOB #: 15124309			
SPECIFIC LOCATION:														DIRECTION: NB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	196	714	460	38	3	0	0	1	0	0	0	0	0	1412	21-30	1174
Percent	0%	13.9%	50.6%	32.6%	2.7%	0.2%	0%	0%	0.1%	0%	0%	0%	0%	0%			
Cumulative Percent	0%	13.9%	64.4%	97%	99.7%	99.9%	99.9%	99.9%	100%	100%	100%	100%	100%	100%			
ADT 1412															85th Percentile: 28 MPH Mean Speed(Average): 23 MPH Median: 23 MPH Mode: 23 MPH		
<i>Comments:</i>																	



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn Vermilion & North SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124309 DIRECTION: NB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		6				6			6	
01:00 AM		6				6			6	
02:00 AM		3				3			3	
03:00 AM		2				2			2	
04:00 AM		7				7			7	
05:00 AM		19				19			19	
06:00 AM		30				30			30	
07:00 AM		79				79			79	
08:00 AM		63				63			63	
09:00 AM		82				82			82	
10:00 AM		63				63			63	
11:00 AM		73				73			73	
12:00 PM		100				100			100	
01:00 PM		97				97			97	
02:00 PM		76				76			76	
03:00 PM		119				119			119	
04:00 PM		120				120			120	
05:00 PM		159				159			159	
06:00 PM		81				81			81	
07:00 PM		74				74			74	
08:00 PM		60				60			60	
09:00 PM		52				52			52	
10:00 PM		24				24			24	
11:00 PM		17				17			17	
Day Total		1412				1412			1412	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		9:00 AM 82				9:00 AM 82			9:00 AM 82	
PM Peak Volume		5:00 PM 159				5:00 PM 159			5:00 PM 159	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn Vermilion & North															QC JOB #: 15124309		
SPECIFIC LOCATION:															DIRECTION: NB, SB		
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019		
Start Time	15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	1	5	6	1	0	0	0	0	0	0	0	0	0	13	21-30	11
01:00 AM	0	1	2	3	2	0	0	0	0	0	0	0	0	0	8	23-32	5
02:00 AM	0	0	2	3	0	0	0	0	0	0	0	0	0	0	5	21-30	5
03:00 AM	0	0	3	3	1	1	0	0	0	0	0	0	0	0	8	21-30	6
04:00 AM	0	0	6	4	5	0	0	0	0	0	0	0	0	0	15	21-30	10
05:00 AM	0	0	18	23	3	0	0	0	0	0	0	0	0	0	44	21-30	41
06:00 AM	0	4	21	48	6	0	0	0	0	0	0	0	0	0	79	21-30	69
07:00 AM	0	17	91	65	6	0	0	0	0	0	0	0	0	1	180	21-30	156
08:00 AM	0	21	100	53	5	0	0	0	0	0	0	0	0	0	179	21-30	153
09:00 AM	0	20	81	47	3	2	0	0	0	0	0	0	0	0	153	21-30	128
10:00 AM	0	28	69	42	3	0	0	0	0	0	0	0	0	0	142	21-30	111
11:00 AM	0	33	69	42	3	0	0	0	0	1	0	0	0	0	148	21-30	111
12:00 PM	0	23	94	45	8	2	0	0	1	0	0	0	1	0	174	21-30	139
01:00 PM	0	40	84	54	8	0	0	0	0	0	0	0	0	0	186	21-30	138
02:00 PM	0	27	89	44	3	0	0	0	0	0	0	0	0	0	163	21-30	133
03:00 PM	0	29	128	82	8	0	0	0	0	0	0	0	0	1	248	21-30	210
04:00 PM	0	33	129	65	6	0	0	0	0	0	0	0	0	1	234	21-30	194
05:00 PM	0	31	146	83	7	0	0	0	0	0	0	0	0	1	268	21-30	229
06:00 PM	0	16	67	58	9	0	0	0	1	0	0	0	0	0	151	21-30	125
07:00 PM	0	13	59	63	3	0	0	0	0	0	0	0	0	0	138	21-30	122
08:00 PM	0	6	54	52	5	0	0	0	0	0	0	0	0	0	117	21-30	106
09:00 PM	0	7	36	42	4	1	0	0	0	0	0	0	0	0	90	21-30	78
10:00 PM	0	4	15	15	5	0	0	0	0	0	0	0	0	0	39	21-30	30
11:00 PM	0	1	9	20	1	0	0	0	0	0	0	0	0	0	31	21-30	29
Day Total	0	355	1377	962	105	6	0	0	2	1	0	0	1	4	2813	21-30	2339
Percent	0%	12.6%	49%	34.2%	3.7%	0.2%	0%	0%	0.1%	0%	0%	0%	0%	0.1%			
AM Peak Volume	12:00 AM	1:00 AM	5:00 AM	7:00 AM	8:00 AM	9:00 AM	12:00 AM	12:00 AM	12:00 AM	11:00 AM	12:00 AM	12:00 AM	12:00 AM	7:00 AM	7:00 AM		
	0	33	100	65	6	2	0	0	0	1	0	0	0	1	180		
PM Peak Volume	12:00 PM	1:00 PM	5:00 PM	5:00 PM	6:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	3:00 PM	5:00 PM		
	0	40	146	83	9	2	0	0	1	0	0	0	1	1	268		
<i>Comments:</i>																	

LOCATION: Meridian btwn Vermilion & North														QC JOB #: 15124309			
SPECIFIC LOCATION:														DIRECTION: NB, SB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	355	1377	962	105	6	0	0	2	1	0	0	1	4	2813	21-30	2339
Percent	0%	12.6%	49%	34.2%	3.7%	0.2%	0%	0%	0.1%	0%	0%	0%	0%	0.1%			
Cumulative Percent	0%	12.6%	61.6%	95.8%	99.5%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.9%	100%			
ADT 2813															85th Percentile: 28 MPH Mean Speed(Average): 23 MPH Median: 23 MPH Mode: 23 MPH		
<i>Comments:</i>																	



LOCATION: Meridian btwn Vermilion & North SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124309 DIRECTION: NB, SB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		13				13			13	
01:00 AM		8				8			8	
02:00 AM		5				5			5	
03:00 AM		8				8			8	
04:00 AM		15				15			15	
05:00 AM		44				44			44	
06:00 AM		79				79			79	
07:00 AM		180				180			180	
08:00 AM		179				179			179	
09:00 AM		153				153			153	
10:00 AM		142				142			142	
11:00 AM		148				148			148	
12:00 PM		174				174			174	
01:00 PM		186				186			186	
02:00 PM		163				163			163	
03:00 PM		248				248			248	
04:00 PM		234				234			234	
05:00 PM		268				268			268	
06:00 PM		151				151			151	
07:00 PM		138				138			138	
08:00 PM		117				117			117	
09:00 PM		90				90			90	
10:00 PM		39				39			39	
11:00 PM		31				31			31	
Day Total		2813				2813			2813	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		7:00 AM 180				7:00 AM 180			7:00 AM 180	
PM Peak Volume		5:00 PM 268				5:00 PM 268			5:00 PM 268	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn Vermilion & North															QC JOB #: 15124309		
SPECIFIC LOCATION:															DIRECTION: SB		
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019		
Start Time	15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	1	2	4	0	0	0	0	0	0	0	0	0	0	7	21-30	6
01:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	26-35	2
02:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	21-30	2
03:00 AM	0	0	2	2	1	1	0	0	0	0	0	0	0	0	6	21-30	4
04:00 AM	0	0	1	2	5	0	0	0	0	0	0	0	0	0	8	26-35	7
05:00 AM	0	0	11	12	2	0	0	0	0	0	0	0	0	0	25	21-30	23
06:00 AM	0	0	13	34	2	0	0	0	0	0	0	0	0	0	49	21-30	47
07:00 AM	0	8	44	42	6	0	0	0	0	0	0	0	0	1	101	21-30	86
08:00 AM	0	16	63	34	3	0	0	0	0	0	0	0	0	0	116	21-30	97
09:00 AM	0	7	41	20	2	1	0	0	0	0	0	0	0	0	71	21-30	61
10:00 AM	0	14	32	30	3	0	0	0	0	0	0	0	0	0	79	21-30	62
11:00 AM	0	17	37	19	1	0	0	0	0	1	0	0	0	0	75	21-30	56
12:00 PM	0	6	39	21	6	1	0	0	0	0	0	0	1	0	74	21-30	60
01:00 PM	0	22	38	24	5	0	0	0	0	0	0	0	0	0	89	21-30	62
02:00 PM	0	15	41	28	3	0	0	0	0	0	0	0	0	0	87	21-30	69
03:00 PM	0	15	71	38	4	0	0	0	0	0	0	0	0	1	129	21-30	109
04:00 PM	0	14	51	43	5	0	0	0	0	0	0	0	0	1	114	21-30	94
05:00 PM	0	8	64	34	2	0	0	0	0	0	0	0	0	1	109	21-30	98
06:00 PM	0	8	35	22	4	0	0	0	1	0	0	0	0	0	70	21-30	57
07:00 PM	0	3	27	31	3	0	0	0	0	0	0	0	0	0	64	21-30	58
08:00 PM	0	1	28	26	2	0	0	0	0	0	0	0	0	0	57	21-30	54
09:00 PM	0	4	13	19	2	0	0	0	0	0	0	0	0	0	38	21-30	32
10:00 PM	0	0	4	8	3	0	0	0	0	0	0	0	0	0	15	21-30	12
11:00 PM	0	0	5	8	1	0	0	0	0	0	0	0	0	0	14	21-30	13
Day Total	0	159	663	502	67	3	0	0	1	1	0	0	1	4	1401	21-30	1165
Percent	0%	11.3%	47.3%	35.8%	4.8%	0.2%	0%	0%	0.1%	0.1%	0%	0%	0.1%	0.3%			
AM Peak Volume	12:00 AM	1:00 AM	8:00 AM	7:00 AM	7:00 AM	3:00 AM	12:00 AM	12:00 AM	12:00 AM	11:00 AM	12:00 AM	12:00 AM	12:00 AM	7:00 AM	8:00 AM		
	0	17	63	42	6	1	0	0	0	1	0	0	0	1	116		
PM Peak Volume	12:00 PM	1:00 PM	3:00 PM	4:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	6:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	3:00 PM	3:00 PM		
	0	22	71	43	6	1	0	0	1	0	0	0	1	1	129		
<i>Comments:</i>																	

LOCATION: Meridian btwn Vermilion & North														QC JOB #: 15124309			
SPECIFIC LOCATION:														DIRECTION: SB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	159	663	502	67	3	0	0	1	1	0	0	1	4	1401	21-30	1165
Percent	0%	11.3%	47.3%	35.8%	4.8%	0.2%	0%	0%	0.1%	0.1%	0%	0%	0.1%	0.3%			
Cumulative Percent	0%	11.3%	58.7%	94.5%	99.3%	99.5%	99.5%	99.5%	99.6%	99.6%	99.6%	99.6%	99.7%	100%			
ADT 1401															85th Percentile: 28 MPH Mean Speed(Average): 24 MPH Median: 24 MPH Mode: 23 MPH		
<i>Comments:</i>																	



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn Vermilion & North SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124309 DIRECTION: SB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		7				7			7	
01:00 AM		2				2			2	
02:00 AM		2				2			2	
03:00 AM		6				6			6	
04:00 AM		8				8			8	
05:00 AM		25				25			25	
06:00 AM		49				49			49	
07:00 AM		101				101			101	
08:00 AM		116				116			116	
09:00 AM		71				71			71	
10:00 AM		79				79			79	
11:00 AM		75				75			75	
12:00 PM		74				74			74	
01:00 PM		89				89			89	
02:00 PM		87				87			87	
03:00 PM		129				129			129	
04:00 PM		114				114			114	
05:00 PM		109				109			109	
06:00 PM		70				70			70	
07:00 PM		64				64			64	
08:00 PM		57				57			57	
09:00 PM		38				38			38	
10:00 PM		15				15			15	
11:00 PM		14				14			14	
Day Total		1401				1401			1401	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		8:00 AM 116				8:00 AM 116			8:00 AM 116	
PM Peak Volume		3:00 PM 129				3:00 PM 129			3:00 PM 129	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn North & Franklin															QC JOB #: 15124310			
SPECIFIC LOCATION:															DIRECTION: NB			
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	2	3	1	0	0	0	0	0	0	0	0	0	6	21-30	5	
01:00 AM	0	1	2	2	1	0	0	0	0	0	0	0	0	0	6	21-30	4	
02:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	21-30	3	
03:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	21-30	2	
04:00 AM	0	0	4	3	0	0	0	0	0	0	0	0	0	0	7	21-30	7	
05:00 AM	0	0	3	11	5	0	0	0	0	0	0	0	0	0	19	26-35	16	
06:00 AM	0	5	6	13	6	2	0	0	0	0	0	0	0	0	32	21-30	19	
07:00 AM	0	14	33	30	3	0	0	0	0	0	0	0	0	0	80	21-30	63	
08:00 AM	0	14	28	32	4	0	0	0	0	0	0	0	0	0	78	21-30	60	
09:00 AM	0	16	34	27	4	1	0	0	0	0	0	0	0	0	82	21-30	61	
10:00 AM	0	19	32	16	1	0	0	0	0	0	0	0	0	0	68	16-25	51	
11:00 AM	0	17	34	24	4	0	0	0	0	0	0	0	0	0	79	21-30	58	
12:00 PM	0	14	45	39	4	2	0	0	0	0	0	0	0	0	104	21-30	84	
01:00 PM	0	15	44	34	7	0	0	0	0	0	0	0	0	0	100	21-30	78	
02:00 PM	0	8	43	19	5	0	0	0	0	0	0	0	0	0	75	21-30	62	
03:00 PM	0	10	54	51	5	1	1	0	0	0	0	0	0	0	122	21-30	105	
04:00 PM	0	19	67	31	4	0	0	0	0	0	0	0	0	0	121	21-30	98	
05:00 PM	0	20	68	62	8	2	0	0	0	0	0	0	0	0	160	21-30	130	
06:00 PM	0	10	31	35	9	1	0	0	0	0	0	0	0	0	86	21-30	66	
07:00 PM	0	7	25	35	6	0	0	0	0	0	0	0	0	0	73	21-30	60	
08:00 PM	0	5	20	30	5	0	0	0	0	0	0	0	0	0	60	21-30	50	
09:00 PM	0	1	17	30	3	1	0	0	0	0	0	0	0	0	52	21-30	47	
10:00 PM	0	5	8	11	2	0	0	0	0	0	0	0	0	0	26	21-30	19	
11:00 PM	0	2	2	12	2	0	0	0	0	0	0	0	0	0	18	21-30	14	
Day Total	0	202	603	554	89	10	1	0	0	0	0	0	0	0	1459	21-30	1157	
Percent	0%	13.8%	41.3%	38%	6.1%	0.7%	0.1%	0%	0%	0%	0%	0%	0%	0%				
AM Peak Volume	12:00 AM	10:00 AM	9:00 AM	8:00 AM	6:00 AM	6:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	9:00 AM			
	0	19	34	32	6	2	0	0	0	0	0	0	0	0	82			
PM Peak Volume	12:00 PM	5:00 PM	5:00 PM	5:00 PM	6:00 PM	12:00 PM	3:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	5:00 PM			
	0	20	68	62	9	2	1	0	0	0	0	0	0	0	160			
<i>Comments:</i>																		

LOCATION: Meridian btwn North & Franklin														QC JOB #: 15124310			
SPECIFIC LOCATION:														DIRECTION: NB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	202	603	554	89	10	1	0	0	0	0	0	0	0	1459	21-30	1157
Percent	0%	13.8%	41.3%	38%	6.1%	0.7%	0.1%	0%	0%	0%	0%	0%	0%	0%			
Cumulative Percent	0%	13.8%	55.2%	93.1%	99.2%	99.9%	100%	100%	100%	100%	100%	100%	100%	100%			
ADT 1459															85th Percentile: 28 MPH Mean Speed(Average): 24 MPH Median: 24 MPH Mode: 23 MPH		
<i>Comments:</i>																	



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn North & Franklin SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124310 DIRECTION: NB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		6				6			6	
01:00 AM		6				6			6	
02:00 AM		3				3			3	
03:00 AM		2				2			2	
04:00 AM		7				7			7	
05:00 AM		19				19			19	
06:00 AM		32				32			32	
07:00 AM		80				80			80	
08:00 AM		78				78			78	
09:00 AM		82				82			82	
10:00 AM		68				68			68	
11:00 AM		79				79			79	
12:00 PM		104				104			104	
01:00 PM		100				100			100	
02:00 PM		75				75			75	
03:00 PM		122				122			122	
04:00 PM		121				121			121	
05:00 PM		160				160			160	
06:00 PM		86				86			86	
07:00 PM		73				73			73	
08:00 PM		60				60			60	
09:00 PM		52				52			52	
10:00 PM		26				26			26	
11:00 PM		18				18			18	
Day Total		1459				1459			1459	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		9:00 AM 82				9:00 AM 82			9:00 AM 82	
PM Peak Volume		5:00 PM 160				5:00 PM 160			5:00 PM 160	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn North & Franklin															QC JOB #: 15124310			
SPECIFIC LOCATION:															DIRECTION: NB, SB			
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	5	7	1	0	0	0	0	0	0	0	0	0	13	21-30	12	
01:00 AM	0	2	2	2	3	0	0	0	0	0	0	0	0	0	9	26-35	5	
02:00 AM	0	0	2	3	0	0	0	0	0	0	0	0	0	0	5	21-30	5	
03:00 AM	0	0	3	3	1	1	0	0	0	0	0	0	0	0	8	21-30	6	
04:00 AM	0	1	4	6	4	0	0	0	0	0	0	0	0	0	15	23-32	10	
05:00 AM	0	0	17	19	8	1	0	0	0	0	0	0	0	0	45	21-30	36	
06:00 AM	0	5	25	41	8	2	0	0	0	0	0	0	0	0	81	21-30	66	
07:00 AM	0	28	83	66	9	0	0	0	0	0	0	0	0	0	186	21-30	149	
08:00 AM	0	31	90	64	9	0	0	0	0	0	0	0	0	0	194	21-30	154	
09:00 AM	0	28	76	47	7	2	0	0	0	0	0	0	0	0	160	21-30	123	
10:00 AM	0	35	71	39	5	0	0	0	0	0	0	0	0	0	150	21-30	110	
11:00 AM	0	32	81	41	5	0	0	0	0	0	0	0	0	0	159	21-30	122	
12:00 PM	0	29	84	61	10	3	0	0	0	0	0	0	0	0	187	21-30	145	
01:00 PM	0	44	79	59	13	0	0	0	0	0	0	0	0	0	195	21-30	138	
02:00 PM	0	32	86	46	7	0	0	0	0	0	0	0	0	0	171	21-30	132	
03:00 PM	0	31	127	85	9	1	1	0	0	0	0	0	0	0	254	21-30	212	
04:00 PM	0	43	125	72	10	0	0	0	0	0	0	0	0	0	250	21-30	197	
05:00 PM	0	34	136	90	10	2	0	0	0	0	0	0	0	0	272	21-30	226	
06:00 PM	0	21	70	56	13	1	0	0	0	0	0	0	0	0	161	21-30	126	
07:00 PM	0	12	49	66	10	0	0	0	0	0	0	0	0	0	137	21-30	115	
08:00 PM	0	12	49	54	7	0	0	0	0	0	0	0	0	0	122	21-30	103	
09:00 PM	0	10	29	49	5	1	0	0	0	0	0	0	0	0	94	21-30	78	
10:00 PM	0	8	13	18	5	0	0	0	0	0	0	0	0	0	44	21-30	31	
11:00 PM	0	4	6	21	2	1	0	0	0	0	0	0	0	0	34	21-30	27	
Day Total	0	442	1312	1015	161	15	1	0	0	0	0	0	0	0	2946	21-30	2327	
Percent	0%	15%	44.5%	34.5%	5.5%	0.5%	0%	0%	0%	0%	0%	0%	0%	0%				
AM Peak Volume	12:00 AM	10:00 AM	8:00 AM	7:00 AM	7:00 AM	6:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	8:00 AM			
	0	35	90	66	9	2	0	0	0	0	0	0	0	0	194			
PM Peak Volume	12:00 PM	1:00 PM	5:00 PM	5:00 PM	1:00 PM	12:00 PM	3:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	5:00 PM			
	0	44	136	90	13	3	1	0	0	0	0	0	0	0	272			
<i>Comments:</i>																		

Type of report: Tube Count - Speed Data

SUMMARY - Tube Count - Speed Data

LOCATION: Meridian btwn North & Franklin														QC JOB #: 15124310			
SPECIFIC LOCATION:														DIRECTION: NB, SB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	442	1312	1015	161	15	1	0	0	0	0	0	0	0	2946	21-30	2327
Percent	0%	15%	44.5%	34.5%	5.5%	0.5%	0%	0%	0%	0%	0%	0%	0%	0%			
Cumulative Percent	0%	15%	59.5%	94%	99.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
ADT 2946															85th Percentile: 28 MPH Mean Speed(Average): 23 MPH Median: 23 MPH Mode: 23 MPH		
<i>Comments:</i>																	

Report generated on 11/25/2019 5:20 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn North & Franklin SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124310 DIRECTION: NB, SB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		13				13			13	
01:00 AM		9				9			9	
02:00 AM		5				5			5	
03:00 AM		8				8			8	
04:00 AM		15				15			15	
05:00 AM		45				45			45	
06:00 AM		81				81			81	
07:00 AM		186				186			186	
08:00 AM		194				194			194	
09:00 AM		160				160			160	
10:00 AM		150				150			150	
11:00 AM		159				159			159	
12:00 PM		187				187			187	
01:00 PM		195				195			195	
02:00 PM		171				171			171	
03:00 PM		254				254			254	
04:00 PM		250				250			250	
05:00 PM		272				272			272	
06:00 PM		161				161			161	
07:00 PM		137				137			137	
08:00 PM		122				122			122	
09:00 PM		94				94			94	
10:00 PM		44				44			44	
11:00 PM		34				34			34	
Day Total		2946				2946			2946	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		8:00 AM 194				8:00 AM 194			8:00 AM 194	
PM Peak Volume		5:00 PM 272				5:00 PM 272			5:00 PM 272	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn North & Franklin															QC JOB #: 15124310		
SPECIFIC LOCATION:															DIRECTION: SB		
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019		
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	3	4	0	0	0	0	0	0	0	0	0	0	7	21-30	7
01:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	0	3	26-35	2
02:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	21-30	2
03:00 AM	0	0	3	1	1	1	0	0	0	0	0	0	0	0	6	21-30	4
04:00 AM	0	1	0	3	4	0	0	0	0	0	0	0	0	0	8	26-35	7
05:00 AM	0	0	14	8	3	1	0	0	0	0	0	0	0	0	26	21-30	22
06:00 AM	0	0	19	28	2	0	0	0	0	0	0	0	0	0	49	21-30	47
07:00 AM	0	14	50	36	6	0	0	0	0	0	0	0	0	0	106	21-30	86
08:00 AM	0	17	62	32	5	0	0	0	0	0	0	0	0	0	116	21-30	94
09:00 AM	0	12	42	20	3	1	0	0	0	0	0	0	0	0	78	21-30	62
10:00 AM	0	16	39	23	4	0	0	0	0	0	0	0	0	0	82	21-30	62
11:00 AM	0	15	47	17	1	0	0	0	0	0	0	0	0	0	80	21-30	64
12:00 PM	0	15	39	22	6	1	0	0	0	0	0	0	0	0	83	21-30	61
01:00 PM	0	29	35	25	6	0	0	0	0	0	0	0	0	0	95	16-25	64
02:00 PM	0	24	43	27	2	0	0	0	0	0	0	0	0	0	96	21-30	70
03:00 PM	0	21	73	34	4	0	0	0	0	0	0	0	0	0	132	21-30	107
04:00 PM	0	24	58	41	6	0	0	0	0	0	0	0	0	0	129	21-30	99
05:00 PM	0	14	68	28	2	0	0	0	0	0	0	0	0	0	112	21-30	96
06:00 PM	0	11	39	21	4	0	0	0	0	0	0	0	0	0	75	21-30	60
07:00 PM	0	5	24	31	4	0	0	0	0	0	0	0	0	0	64	21-30	55
08:00 PM	0	7	29	24	2	0	0	0	0	0	0	0	0	0	62	21-30	53
09:00 PM	0	9	12	19	2	0	0	0	0	0	0	0	0	0	42	21-30	31
10:00 PM	0	3	5	7	3	0	0	0	0	0	0	0	0	0	18	21-30	12
11:00 PM	0	2	4	9	0	1	0	0	0	0	0	0	0	0	16	21-30	13
Day Total	0	240	709	461	72	5	0	0	0	0	0	0	0	0	1487	21-30	1170
Percent	0%	16.1%	47.7%	31%	4.8%	0.3%	0%	0%	0%	0%	0%	0%	0%	0%			
AM Peak Volume	12:00 AM	8:00 AM	8:00 AM	7:00 AM	7:00 AM	3:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	8:00 AM		
	0	17	62	36	6	1	0	0	0	0	0	0	0	0	116		
PM Peak Volume	12:00 PM	1:00 PM	3:00 PM	4:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	3:00 PM		
	0	29	73	41	6	1	0	0	0	0	0	0	0	0	132		
<i>Comments:</i>																	

LOCATION: Meridian btwn North & Franklin														QC JOB #: 15124310			
SPECIFIC LOCATION:														DIRECTION: SB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	240	709	461	72	5	0	0	0	0	0	0	0	0	1487	21-30	1170
Percent	0%	16.1%	47.7%	31%	4.8%	0.3%	0%	0%	0%	0%	0%	0%	0%	0%			
Cumulative Percent	0%	16.1%	63.8%	94.8%	99.7%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
ADT 1487															85th Percentile: 28 MPH Mean Speed(Average): 23 MPH Median: 23 MPH Mode: 23 MPH		
<i>Comments:</i>																	



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn North & Franklin SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124310 DIRECTION: SB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		7				7			7	
01:00 AM		3				3			3	
02:00 AM		2				2			2	
03:00 AM		6				6			6	
04:00 AM		8				8			8	
05:00 AM		26				26			26	
06:00 AM		49				49			49	
07:00 AM		106				106			106	
08:00 AM		116				116			116	
09:00 AM		78				78			78	
10:00 AM		82				82			82	
11:00 AM		80				80			80	
12:00 PM		83				83			83	
01:00 PM		95				95			95	
02:00 PM		96				96			96	
03:00 PM		132				132			132	
04:00 PM		129				129			129	
05:00 PM		112				112			112	
06:00 PM		75				75			75	
07:00 PM		64				64			64	
08:00 PM		62				62			62	
09:00 PM		42				42			42	
10:00 PM		18				18			18	
11:00 PM		16				16			16	
Day Total		1487				1487			1487	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		8:00 AM 116				8:00 AM 116			8:00 AM 116	
PM Peak Volume		3:00 PM 132				3:00 PM 132			3:00 PM 132	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn Franklin & Sherman															QC JOB #: 15124311			
SPECIFIC LOCATION:															DIRECTION: NB			
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	3	1	3	0	0	0	0	0	0	0	0	0	7	21-30	4	
01:00 AM	0	0	2	3	0	0	0	0	0	0	0	0	0	0	5	21-30	5	
02:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3	21-30	3	
03:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	21-30	1	
04:00 AM	0	1	5	2	0	0	0	0	0	0	0	0	0	0	8	21-30	7	
05:00 AM	0	3	5	10	2	0	0	0	0	0	0	0	0	0	20	21-30	15	
06:00 AM	0	7	12	10	4	1	0	0	0	0	0	0	0	0	34	21-30	22	
07:00 AM	0	37	59	13	0	0	0	0	0	0	0	0	1	0	110	16-25	96	
08:00 AM	0	18	49	28	2	0	0	0	0	0	0	0	0	0	97	21-30	77	
09:00 AM	0	22	51	31	2	0	0	0	0	0	0	0	0	0	106	21-30	82	
10:00 AM	0	17	37	13	0	0	0	0	0	0	0	0	0	0	67	16-25	54	
11:00 AM	0	23	35	12	0	1	0	0	0	0	0	0	0	0	71	16-25	58	
12:00 PM	0	25	50	21	3	0	0	0	0	0	0	0	0	0	99	16-25	75	
01:00 PM	0	29	52	25	2	0	0	0	1	0	0	0	0	0	109	16-25	81	
02:00 PM	0	13	47	21	0	0	0	0	0	0	0	0	0	0	81	21-30	68	
03:00 PM	0	19	61	30	4	0	0	0	0	0	0	0	0	1	115	21-30	91	
04:00 PM	0	21	62	20	3	0	0	0	0	0	0	0	0	0	106	16-25	83	
05:00 PM	0	28	89	30	6	0	0	0	0	0	0	0	0	0	153	21-30	119	
06:00 PM	0	13	42	38	4	0	0	0	0	0	0	0	0	0	97	21-30	80	
07:00 PM	0	15	33	24	2	0	0	0	0	0	0	0	0	0	74	21-30	57	
08:00 PM	0	12	24	19	0	0	0	0	0	0	0	0	0	0	55	21-30	43	
09:00 PM	0	8	22	17	0	0	0	0	0	0	0	0	0	0	47	21-30	39	
10:00 PM	0	7	11	7	2	0	0	0	0	0	0	0	0	0	27	19-28	18	
11:00 PM	0	1	4	12	1	0	0	0	0	0	0	0	0	0	18	21-30	16	
Day Total	0	319	757	389	40	2	0	0	1	0	0	0	1	1	1510	21-30	1146	
Percent	0%	21.1%	50.1%	25.8%	2.6%	0.1%	0%	0%	0.1%	0%	0%	0%	0.1%	0.1%				
AM Peak Volume	12:00 AM	7:00 AM	7:00 AM	9:00 AM	6:00 AM	6:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	7:00 AM	12:00 AM	7:00 AM		
	0	37	59	31	4	1	0	0	0	0	0	0	0	1	0	110		
PM Peak Volume	12:00 PM	1:00 PM	5:00 PM	6:00 PM	5:00 PM	12:00 PM	12:00 PM	12:00 PM	1:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	3:00 PM	5:00 PM			
	0	29	89	38	6	0	0	0	1	0	0	0	0	1	153			
<i>Comments:</i>																		

LOCATION: Meridian btwn Franklin & Sherman														QC JOB #: 15124311			
SPECIFIC LOCATION:														DIRECTION: NB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	319	757	389	40	2	0	0	1	0	0	0	1	1	1510	21-30	1146
Percent	0%	21.1%	50.1%	25.8%	2.6%	0.1%	0%	0%	0.1%	0%	0%	0%	0.1%	0.1%			
Cumulative Percent	0%	21.1%	71.3%	97%	99.7%	99.8%	99.8%	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	100%			
ADT 1510															85th Percentile: 27 MPH Mean Speed(Average): 22 MPH Median: 22 MPH Mode: 23 MPH		
<i>Comments:</i>																	



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn Franklin & Sherman							QC JOB #: 15124311			
SPECIFIC LOCATION:							DIRECTION: NB			
CITY/STATE: Yamhill, OR							DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		7				7			7	
01:00 AM		5				5			5	
02:00 AM		3				3			3	
03:00 AM		1				1			1	
04:00 AM		8				8			8	
05:00 AM		20				20			20	
06:00 AM		34				34			34	
07:00 AM		110				110			110	
08:00 AM		97				97			97	
09:00 AM		106				106			106	
10:00 AM		67				67			67	
11:00 AM		71				71			71	
12:00 PM		99				99			99	
01:00 PM		109				109			109	
02:00 PM		81				81			81	
03:00 PM		115				115			115	
04:00 PM		106				106			106	
05:00 PM		153				153			153	
06:00 PM		97				97			97	
07:00 PM		74				74			74	
08:00 PM		55				55			55	
09:00 PM		47				47			47	
10:00 PM		27				27			27	
11:00 PM		18				18			18	
Day Total		1510				1510			1510	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		7:00 AM 110				7:00 AM 110			7:00 AM 110	
PM Peak Volume		5:00 PM 153				5:00 PM 153			5:00 PM 153	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn Franklin & Sherman															QC JOB #: 15124311		
SPECIFIC LOCATION:															DIRECTION: NB, SB		
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019		
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	5	5	3	0	0	0	0	0	0	0	0	0	13	21-30	10
01:00 AM	0	1	3	3	2	0	0	0	0	0	0	0	0	0	9	21-30	6
02:00 AM	0	0	3	2	0	0	0	0	0	0	0	0	0	0	5	21-30	5
03:00 AM	0	0	2	4	1	1	0	0	0	0	0	0	0	0	8	21-30	6
04:00 AM	0	1	6	5	3	0	0	0	0	0	0	0	0	0	15	21-30	11
05:00 AM	0	4	13	23	5	1	0	0	0	0	0	0	0	0	46	21-30	36
06:00 AM	0	11	24	40	7	1	0	0	0	0	0	0	0	0	83	21-30	64
07:00 AM	0	52	101	47	3	0	0	0	0	0	0	0	1	3	207	16-25	153
08:00 AM	0	49	95	52	7	0	0	0	0	0	0	0	0	0	203	21-30	147
09:00 AM	0	36	86	51	6	0	0	0	0	0	0	0	0	0	179	21-30	137
10:00 AM	0	36	85	28	2	0	0	0	0	0	0	0	0	0	151	16-25	121
11:00 AM	0	43	76	26	1	1	0	0	1	0	0	0	0	0	148	16-25	119
12:00 PM	0	39	95	40	6	0	0	0	0	0	0	0	0	2	182	21-30	135
01:00 PM	0	50	88	56	3	0	0	0	1	0	0	0	0	0	198	21-30	144
02:00 PM	0	31	100	46	3	0	0	1	0	0	0	0	0	0	181	21-30	146
03:00 PM	0	48	133	60	8	0	0	0	0	0	0	0	0	1	250	21-30	193
04:00 PM	0	47	132	65	6	0	0	0	0	0	0	0	0	1	251	21-30	197
05:00 PM	0	48	165	54	9	0	0	0	0	0	0	0	0	0	276	21-30	219
06:00 PM	0	25	84	62	7	0	0	0	0	0	0	0	0	0	178	21-30	146
07:00 PM	0	20	63	51	5	0	0	0	0	0	0	0	0	0	139	21-30	114
08:00 PM	0	18	53	40	5	0	0	0	0	0	0	0	0	1	117	21-30	93
09:00 PM	0	16	50	38	2	0	0	0	0	0	0	0	0	0	106	21-30	88
10:00 PM	0	7	19	18	3	0	0	0	0	0	0	0	0	0	47	21-30	37
11:00 PM	0	2	10	22	3	0	0	0	0	0	0	0	0	0	37	21-30	32
Day Total	0	584	1491	838	100	4	0	1	2	0	0	0	1	8	3029	21-30	2329
Percent	0%	19.3%	49.2%	27.7%	3.3%	0.1%	0%	0%	0.1%	0%	0%	0%	0%	0.3%			
AM Peak Volume	12:00 AM	7:00 AM	7:00 AM	8:00 AM	6:00 AM	3:00 AM	12:00 AM	12:00 AM	11:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	7:00 AM	7:00 AM	7:00 AM	
	0	52	101	52	7	1	0	0	1	0	0	0	1	3	207		
PM Peak Volume	12:00 PM	1:00 PM	5:00 PM	4:00 PM	5:00 PM	12:00 PM	12:00 PM	2:00 PM	1:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	5:00 PM		
	0	50	165	65	9	0	0	1	1	0	0	0	0	2	276		
<i>Comments:</i>																	

LOCATION: Meridian btwn Franklin & Sherman														QC JOB #: 15124311			
SPECIFIC LOCATION:														DIRECTION: NB, SB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	584	1491	838	100	4	0	1	2	0	0	0	1	8	3029	21-30	2329
Percent	0%	19.3%	49.2%	27.7%	3.3%	0.1%	0%	0%	0.1%	0%	0%	0%	0%	0.3%			
Cumulative Percent	0%	19.3%	68.5%	96.2%	99.5%	99.6%	99.6%	99.6%	99.7%	99.7%	99.7%	99.7%	99.7%	100%			
ADT 3029															85th Percentile: 27 MPH Mean Speed(Average): 23 MPH Median: 23 MPH Mode: 23 MPH		
<i>Comments:</i>																	



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn Franklin & Sherman SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124311 DIRECTION: NB, SB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		13				13			13	
01:00 AM		9				9			9	
02:00 AM		5				5			5	
03:00 AM		8				8			8	
04:00 AM		15				15			15	
05:00 AM		46				46			46	
06:00 AM		83				83			83	
07:00 AM		207				207			207	
08:00 AM		203				203			203	
09:00 AM		179				179			179	
10:00 AM		151				151			151	
11:00 AM		148				148			148	
12:00 PM		182				182			182	
01:00 PM		198				198			198	
02:00 PM		181				181			181	
03:00 PM		250				250			250	
04:00 PM		251				251			251	
05:00 PM		276				276			276	
06:00 PM		178				178			178	
07:00 PM		139				139			139	
08:00 PM		117				117			117	
09:00 PM		106				106			106	
10:00 PM		47				47			47	
11:00 PM		37				37			37	
Day Total		3029				3029			3029	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		7:00 AM 207				7:00 AM 207			7:00 AM 207	
PM Peak Volume		5:00 PM 276				5:00 PM 276			5:00 PM 276	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn Franklin & Sherman															QC JOB #: 15124311		
SPECIFIC LOCATION:															DIRECTION: SB		
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019		
Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in Pace
	15	20	25	30	35	40	45	50	55	60	65	70	75	999			
12:00 AM	0	0	2	4	0	0	0	0	0	0	0	0	0	0	6	21-30	6
01:00 AM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	4	26-35	2
02:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	21-30	2
03:00 AM	0	0	2	3	1	1	0	0	0	0	0	0	0	0	7	21-30	5
04:00 AM	0	0	1	3	3	0	0	0	0	0	0	0	0	0	7	26-35	6
05:00 AM	0	1	8	13	3	1	0	0	0	0	0	0	0	0	26	21-30	21
06:00 AM	0	4	12	30	3	0	0	0	0	0	0	0	0	0	49	21-30	42
07:00 AM	0	15	42	34	3	0	0	0	0	0	0	0	0	3	97	21-30	76
08:00 AM	0	31	46	24	5	0	0	0	0	0	0	0	0	0	106	16-25	77
09:00 AM	0	14	35	20	4	0	0	0	0	0	0	0	0	0	73	21-30	55
10:00 AM	0	19	48	15	2	0	0	0	0	0	0	0	0	0	84	16-25	67
11:00 AM	0	20	41	14	1	0	0	0	1	0	0	0	0	0	77	16-25	61
12:00 PM	0	14	45	19	3	0	0	0	0	0	0	0	0	2	83	21-30	64
01:00 PM	0	21	36	31	1	0	0	0	0	0	0	0	0	0	89	21-30	67
02:00 PM	0	18	53	25	3	0	0	1	0	0	0	0	0	0	100	21-30	78
03:00 PM	0	29	72	30	4	0	0	0	0	0	0	0	0	0	135	21-30	102
04:00 PM	0	26	70	45	3	0	0	0	0	0	0	0	0	1	145	21-30	115
05:00 PM	0	20	76	24	3	0	0	0	0	0	0	0	0	0	123	21-30	100
06:00 PM	0	12	42	24	3	0	0	0	0	0	0	0	0	0	81	21-30	66
07:00 PM	0	5	30	27	3	0	0	0	0	0	0	0	0	0	65	21-30	57
08:00 PM	0	6	29	21	5	0	0	0	0	0	0	0	0	1	62	21-30	50
09:00 PM	0	8	28	21	2	0	0	0	0	0	0	0	0	0	59	21-30	49
10:00 PM	0	0	8	11	1	0	0	0	0	0	0	0	0	0	20	21-30	19
11:00 PM	0	1	6	10	2	0	0	0	0	0	0	0	0	0	19	21-30	16
Day Total	0	265	734	449	60	2	0	1	1	0	0	0	0	7	1519	21-30	1183
Percent	0%	17.4%	48.3%	29.6%	3.9%	0.1%	0%	0.1%	0.1%	0%	0%	0%	0%	0.5%			
AM Peak Volume	12:00 AM	8:00 AM	10:00 AM	7:00 AM	8:00 AM	3:00 AM	12:00 AM	12:00 AM	11:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	7:00 AM	8:00 AM		
	0	31	48	34	5	1	0	0	1	0	0	0	0	3	106		
PM Peak Volume	12:00 PM	3:00 PM	5:00 PM	4:00 PM	8:00 PM	12:00 PM	12:00 PM	2:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	4:00 PM		
	0	29	76	45	5	0	0	1	0	0	0	0	0	2	145		
<i>Comments:</i>																	

LOCATION: Meridian btwn Franklin & Sherman														QC JOB #: 15124311			
SPECIFIC LOCATION:														DIRECTION: SB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	265	734	449	60	2	0	1	1	0	0	0	0	7	1519	21-30	1183
Percent	0%	17.4%	48.3%	29.6%	3.9%	0.1%	0%	0.1%	0.1%	0%	0%	0%	0%	0.5%			
Cumulative Percent	0%	17.4%	65.8%	95.3%	99.3%	99.4%	99.4%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	100%			
ADT 1519															85th Percentile: 28 MPH Mean Speed(Average): 23 MPH Median: 23 MPH Mode: 23 MPH		
<i>Comments:</i>																	



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn Franklin & Sherman SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124311 DIRECTION: SB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		6				6			6	
01:00 AM		4				4			4	
02:00 AM		2				2			2	
03:00 AM		7				7			7	
04:00 AM		7				7			7	
05:00 AM		26				26			26	
06:00 AM		49				49			49	
07:00 AM		97				97			97	
08:00 AM		106				106			106	
09:00 AM		73				73			73	
10:00 AM		84				84			84	
11:00 AM		77				77			77	
12:00 PM		83				83			83	
01:00 PM		89				89			89	
02:00 PM		100				100			100	
03:00 PM		135				135			135	
04:00 PM		145				145			145	
05:00 PM		123				123			123	
06:00 PM		81				81			81	
07:00 PM		65				65			65	
08:00 PM		62				62			62	
09:00 PM		59				59			59	
10:00 PM		20				20			20	
11:00 PM		19				19			19	
Day Total		1519				1519			1519	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		8:00 AM 106				8:00 AM 106			8:00 AM 106	
PM Peak Volume		4:00 PM 145				4:00 PM 145			4:00 PM 145	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn Sherman & Sheridan															QC JOB #: 15124312		
SPECIFIC LOCATION:															DIRECTION: NB		
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019		
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	3	1	2	0	0	0	0	0	0	0	0	0	6	21-30	4
01:00 AM	0	0	1	3	1	0	0	0	0	0	0	0	0	0	5	23-32	4
02:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	21-30	2
03:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	21-30	1
04:00 AM	0	0	5	2	0	0	0	0	0	0	0	0	0	0	7	21-30	7
05:00 AM	0	1	5	9	3	0	0	0	0	0	0	0	0	0	18	21-30	14
06:00 AM	0	3	10	10	5	0	1	0	0	0	0	0	0	0	29	21-30	20
07:00 AM	0	12	53	26	1	0	0	0	0	0	0	0	0	0	92	21-30	79
08:00 AM	0	5	34	35	5	0	0	0	0	0	0	0	0	0	79	21-30	69
09:00 AM	0	7	45	39	5	0	0	0	0	0	0	0	0	0	96	21-30	84
10:00 AM	0	8	38	13	1	0	0	0	0	0	0	0	0	0	60	21-30	51
11:00 AM	0	7	34	14	0	1	0	0	0	0	0	0	0	0	56	21-30	48
12:00 PM	0	10	44	26	5	0	0	0	0	0	0	0	0	0	85	21-30	70
01:00 PM	0	8	48	33	5	0	0	0	0	0	0	0	0	0	94	21-30	81
02:00 PM	0	5	43	29	3	0	0	0	0	0	0	0	0	0	80	21-30	72
03:00 PM	0	4	54	43	5	0	0	0	0	0	0	0	0	0	106	21-30	97
04:00 PM	0	3	57	24	5	0	0	0	0	0	0	0	0	0	89	21-30	81
05:00 PM	0	11	68	45	7	0	0	1	0	0	0	0	0	0	132	21-30	113
06:00 PM	0	4	39	38	9	0	0	0	0	0	0	0	0	0	90	21-30	77
07:00 PM	0	1	33	31	3	0	0	0	0	0	0	0	0	0	68	21-30	64
08:00 PM	0	1	18	18	3	0	0	0	0	0	0	0	0	0	40	21-30	36
09:00 PM	0	4	11	20	1	0	0	0	0	0	0	0	0	0	36	21-30	31
10:00 PM	0	1	4	9	1	0	0	0	0	0	0	0	0	0	15	21-30	13
11:00 PM	0	0	2	10	1	0	0	0	0	0	0	0	0	0	13	21-30	12
Day Total	0	95	650	480	71	1	1	1	0	0	0	0	0	0	1299	21-30	1130
Percent	0%	7.3%	50%	37%	5.5%	0.1%	0.1%	0.1%	0%	0%	0%	0%	0%	0%			
AM Peak Volume	12:00 AM	7:00 AM	7:00 AM	9:00 AM	6:00 AM	11:00 AM	6:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	9:00 AM		
	0	12	53	39	5	1	1	0	0	0	0	0	0	0	96		
PM Peak Volume	12:00 PM	5:00 PM	5:00 PM	5:00 PM	6:00 PM	12:00 PM	12:00 PM	5:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	5:00 PM		
	0	11	68	45	9	0	0	1	0	0	0	0	0	0	132		
<i>Comments:</i>																	

Report generated on 11/25/2019 5:20 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>)

LOCATION: Meridian btwn Sherman & Sheridan														QC JOB #: 15124312			
SPECIFIC LOCATION:														DIRECTION: NB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	95	650	480	71	1	1	1	0	0	0	0	0	0	1299	21-30	1130
Percent	0%	7.3%	50%	37%	5.5%	0.1%	0.1%	0.1%	0%	0%	0%	0%	0%	0%			
Cumulative Percent	0%	7.3%	57.4%	94.3%	99.8%	99.8%	99.9%	100%	100%	100%	100%	100%	100%	100%			
ADT 1299															85th Percentile: 28 MPH Mean Speed(Average): 24 MPH Median: 24 MPH Mode: 23 MPH		
<i>Comments:</i>																	



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn Sherman & Sheridan SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124312 DIRECTION: NB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		6				6			6	
01:00 AM		5				5			5	
02:00 AM		2				2			2	
03:00 AM		1				1			1	
04:00 AM		7				7			7	
05:00 AM		18				18			18	
06:00 AM		29				29			29	
07:00 AM		92				92			92	
08:00 AM		79				79			79	
09:00 AM		96				96			96	
10:00 AM		60				60			60	
11:00 AM		56				56			56	
12:00 PM		85				85			85	
01:00 PM		94				94			94	
02:00 PM		80				80			80	
03:00 PM		106				106			106	
04:00 PM		89				89			89	
05:00 PM		132				132			132	
06:00 PM		90				90			90	
07:00 PM		68				68			68	
08:00 PM		40				40			40	
09:00 PM		36				36			36	
10:00 PM		15				15			15	
11:00 PM		13				13			13	
Day Total		1299				1299			1299	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		9:00 AM 96				9:00 AM 96			9:00 AM 96	
PM Peak Volume		5:00 PM 132				5:00 PM 132			5:00 PM 132	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn Sherman & Sheridan															QC JOB #: 15124312			
SPECIFIC LOCATION:															DIRECTION: NB, SB			
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019			
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace	
12:00 AM	0	0	6	4	2	0	0	0	0	0	0	0	0	0	12	21-30	10	
01:00 AM	0	0	2	3	3	0	0	0	0	0	0	0	0	0	8	26-35	6	
02:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4	21-30	4	
03:00 AM	0	0	3	3	1	1	0	0	0	0	0	0	0	0	8	21-30	6	
04:00 AM	0	0	6	5	3	1	0	0	0	0	0	0	0	0	15	21-30	11	
05:00 AM	0	1	16	19	8	0	0	0	0	0	0	0	0	0	44	21-30	35	
06:00 AM	0	4	23	39	7	0	1	0	0	0	0	0	0	0	74	21-30	62	
07:00 AM	0	16	92	56	5	0	0	0	0	0	0	0	0	0	169	21-30	148	
08:00 AM	0	18	73	62	9	0	0	0	0	0	0	0	0	0	162	21-30	135	
09:00 AM	0	9	80	60	10	0	0	0	0	0	0	0	0	0	159	21-30	140	
10:00 AM	0	20	83	31	1	0	0	0	0	0	0	0	0	0	135	21-30	114	
11:00 AM	0	14	75	31	0	1	0	0	0	0	0	0	0	0	121	21-30	106	
12:00 PM	0	18	86	45	9	0	0	0	0	0	0	0	0	0	158	21-30	131	
01:00 PM	0	23	86	58	7	0	0	0	0	0	0	0	0	0	174	21-30	144	
02:00 PM	0	14	93	60	5	0	0	0	0	0	0	0	0	0	172	21-30	153	
03:00 PM	0	15	123	74	10	0	0	0	0	1	0	0	0	0	223	21-30	197	
04:00 PM	0	23	116	67	7	0	0	0	0	0	0	0	0	0	213	21-30	183	
05:00 PM	0	15	130	72	10	0	1	1	0	0	0	0	0	0	229	21-30	202	
06:00 PM	0	9	78	65	11	0	0	0	0	0	0	0	0	0	163	21-30	143	
07:00 PM	0	4	60	57	8	0	0	0	0	0	0	0	0	0	129	21-30	117	
08:00 PM	0	3	42	40	7	0	0	0	0	0	0	0	0	0	92	21-30	82	
09:00 PM	0	5	30	36	3	0	0	0	0	0	0	0	0	0	74	21-30	66	
10:00 PM	0	1	6	15	2	0	0	0	0	0	0	0	0	0	24	21-30	21	
11:00 PM	0	0	8	14	5	1	0	0	0	0	0	0	0	0	28	21-30	22	
Day Total	0	212	1319	918	133	4	2	1	0	1	0	0	0	0	2590	21-30	2237	
Percent	0%	8.2%	50.9%	35.4%	5.1%	0.2%	0.1%	0%	0%	0%	0%	0%	0%	0%				
AM Peak Volume	12:00 AM	10:00 AM	7:00 AM	8:00 AM	9:00 AM	3:00 AM	6:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	7:00 AM			
	0	20	92	62	10	1	1	0	0	0	0	0	0	0	169			
PM Peak Volume	12:00 PM	1:00 PM	5:00 PM	3:00 PM	6:00 PM	11:00 PM	5:00 PM	5:00 PM	12:00 PM	3:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	5:00 PM			
	0	23	130	74	11	1	1	1	0	1	0	0	0	0	229			
<i>Comments:</i>																		

LOCATION: Meridian btwn Sherman & Sheridan														QC JOB #: 15124312			
SPECIFIC LOCATION:														DIRECTION: NB, SB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	212	1319	918	133	4	2	1	0	1	0	0	0	0	2590	21-30	2237
Percent	0%	8.2%	50.9%	35.4%	5.1%	0.2%	0.1%	0%	0%	0%	0%	0%	0%	0%			
Cumulative Percent	0%	8.2%	59.1%	94.6%	99.7%	99.8%	99.9%	100%	100%	100%	100%	100%	100%	100%			
ADT 2590															85th Percentile: 28 MPH Mean Speed(Average): 24 MPH Median: 24 MPH Mode: 23 MPH		
<i>Comments:</i>																	



Type of report: Tube Count - Volume Data

LOCATION: Meridian btwn Sherman & Sheridan SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124312 DIRECTION: NB, SB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		12				12			12	
01:00 AM		8				8			8	
02:00 AM		4				4			4	
03:00 AM		8				8			8	
04:00 AM		15				15			15	
05:00 AM		44				44			44	
06:00 AM		74				74			74	
07:00 AM		169				169			169	
08:00 AM		162				162			162	
09:00 AM		159				159			159	
10:00 AM		135				135			135	
11:00 AM		121				121			121	
12:00 PM		158				158			158	
01:00 PM		174				174			174	
02:00 PM		172				172			172	
03:00 PM		223				223			223	
04:00 PM		213				213			213	
05:00 PM		229				229			229	
06:00 PM		163				163			163	
07:00 PM		129				129			129	
08:00 PM		92				92			92	
09:00 PM		74				74			74	
10:00 PM		24				24			24	
11:00 PM		28				28			28	
Day Total		2590				2590			2590	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		7:00 AM 169				7:00 AM 169			7:00 AM 169	
PM Peak Volume		5:00 PM 229				5:00 PM 229			5:00 PM 229	

Comments:

Type of report: Tube Count - Speed Data

LOCATION: Meridian btwn Sherman & Sheridan															QC JOB #: 15124312		
SPECIFIC LOCATION:															DIRECTION: SB		
CITY/STATE: Yamhill, OR															DATE: Nov 19 2019		
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Pace Speed	Number in Pace
12:00 AM	0	0	3	3	0	0	0	0	0	0	0	0	0	0	6	21-30	6
01:00 AM	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3	26-35	2
02:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	21-30	2
03:00 AM	0	0	3	2	1	1	0	0	0	0	0	0	0	0	7	21-30	5
04:00 AM	0	0	1	3	3	1	0	0	0	0	0	0	0	0	8	26-35	6
05:00 AM	0	0	11	10	5	0	0	0	0	0	0	0	0	0	26	21-30	21
06:00 AM	0	1	13	29	2	0	0	0	0	0	0	0	0	0	45	21-30	42
07:00 AM	0	4	39	30	4	0	0	0	0	0	0	0	0	0	77	21-30	69
08:00 AM	0	13	39	27	4	0	0	0	0	0	0	0	0	0	83	21-30	66
09:00 AM	0	2	35	21	5	0	0	0	0	0	0	0	0	0	63	21-30	56
10:00 AM	0	12	45	18	0	0	0	0	0	0	0	0	0	0	75	21-30	63
11:00 AM	0	7	41	17	0	0	0	0	0	0	0	0	0	0	65	21-30	58
12:00 PM	0	8	42	19	4	0	0	0	0	0	0	0	0	0	73	21-30	61
01:00 PM	0	15	38	25	2	0	0	0	0	0	0	0	0	0	80	21-30	63
02:00 PM	0	9	50	31	2	0	0	0	0	0	0	0	0	0	92	21-30	81
03:00 PM	0	11	69	31	5	0	0	0	0	1	0	0	0	0	117	21-30	100
04:00 PM	0	20	59	43	2	0	0	0	0	0	0	0	0	0	124	21-30	102
05:00 PM	0	4	62	27	3	0	1	0	0	0	0	0	0	0	97	21-30	89
06:00 PM	0	5	39	27	2	0	0	0	0	0	0	0	0	0	73	21-30	66
07:00 PM	0	3	27	26	5	0	0	0	0	0	0	0	0	0	61	21-30	53
08:00 PM	0	2	24	22	4	0	0	0	0	0	0	0	0	0	52	21-30	46
09:00 PM	0	1	19	16	2	0	0	0	0	0	0	0	0	0	38	21-30	35
10:00 PM	0	0	2	6	1	0	0	0	0	0	0	0	0	0	9	21-30	8
11:00 PM	0	0	6	4	4	1	0	0	0	0	0	0	0	0	15	21-30	10
Day Total	0	117	669	438	62	3	1	0	0	1	0	0	0	0	1291	21-30	1107
Percent	0%	9.1%	51.8%	33.9%	4.8%	0.2%	0.1%	0%	0%	0.1%	0%	0%	0%	0%			
AM Peak Volume	12:00 AM	8:00 AM	10:00 AM	7:00 AM	5:00 AM	3:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	12:00 AM	8:00 AM		
	0	13	45	30	5	1	0	0	0	0	0	0	0	0	83		
PM Peak Volume	12:00 PM	4:00 PM	3:00 PM	4:00 PM	3:00 PM	11:00 PM	5:00 PM	12:00 PM	12:00 PM	3:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM	4:00 PM		
	0	20	69	43	5	1	1	0	0	1	0	0	0	0	124		
<i>Comments:</i>																	

LOCATION: Meridian btwn Sherman & Sheridan														QC JOB #: 15124312			
SPECIFIC LOCATION:														DIRECTION: SB			
CITY/STATE: Yamhill, OR														DATE: Nov 19 2019 -			
Speed Range	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
Grand Total	0	117	669	438	62	3	1	0	0	1	0	0	0	0	1291	21-30	1107
Percent	0%	9.1%	51.8%	33.9%	4.8%	0.2%	0.1%	0%	0%	0.1%	0%	0%	0%	0%			
Cumulative Percent	0%	9.1%	60.9%	94.8%	99.6%	99.8%	99.9%	99.9%	99.9%	100%	100%	100%	100%	100%			
ADT 1291															85th Percentile: 28 MPH Mean Speed(Average): 23 MPH Median: 23 MPH Mode: 23 MPH		
<i>Comments:</i>																	



LOCATION: Meridian btwn Sherman & Sheridan SPECIFIC LOCATION: CITY/STATE: Yamhill, OR							QC JOB #: 15124312 DIRECTION: SB DATE: Nov 19 2019 - Nov 19 2019			
Start Time	Mon 19 Nov 19	Tue	Wed	Thu	Fri	Average Weekday Hourly Traffic	Sat	Sun	Average Week Hourly Traffic	Average Week Profile
12:00 AM		6				6			6	
01:00 AM		3				3			3	
02:00 AM		2				2			2	
03:00 AM		7				7			7	
04:00 AM		8				8			8	
05:00 AM		26				26			26	
06:00 AM		45				45			45	
07:00 AM		77				77			77	
08:00 AM		83				83			83	
09:00 AM		63				63			63	
10:00 AM		75				75			75	
11:00 AM		65				65			65	
12:00 PM		73				73			73	
01:00 PM		80				80			80	
02:00 PM		92				92			92	
03:00 PM		117				117			117	
04:00 PM		124				124			124	
05:00 PM		97				97			97	
06:00 PM		73				73			73	
07:00 PM		61				61			61	
08:00 PM		52				52			52	
09:00 PM		38				38			38	
10:00 PM		9				9			9	
11:00 PM		15				15			15	
Day Total		1291				1291			1291	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak Volume		8:00 AM 83				8:00 AM 83			8:00 AM 83	
PM Peak Volume		4:00 PM 124				4:00 PM 124			4:00 PM 124	

Comments:

LOCATION: E Sherman St east of Meridian
SPECIFIC LOCATION:
CITY/STATE: Yamhill, OR

QC JOB #: 15124305
DIRECTION: EB, WB
DATE: Nov 19 2019



Start Time	EB	WB	Total
12:00 AM	0	0	0
01:00 AM	0	1	1
02:00 AM	0	0	0
03:00 AM	0	1	1
04:00 AM	0	1	1
05:00 AM	0	1	1
06:00 AM	6	0	6
07:00 AM	13	1	14
08:00 AM	14	1	15
09:00 AM	6	3	9
10:00 AM	5	2	7
11:00 AM	5	11	16
12:00 PM	7	8	15
01:00 PM	8	3	11
02:00 PM	8	10	18
03:00 PM	7	11	18
04:00 PM	4	15	19
05:00 PM	10	14	24
06:00 PM	10	3	13
07:00 PM	3	0	3
08:00 PM	3	3	6
09:00 PM	1	3	4
10:00 PM	0	0	0
11:00 PM	1	1	2
Day Total	111	93	204
Percent	54.4%	45.6%	

PEAK HOUR (AM): 11:00 AM

PEAK HOUR (PM): 05:00 PM

AVERAGE SPEED:

MODAL SPEED:

MEDIAN SPEED:

85th PERCENTILE:

POSTED SPEED:

TOTAL TRUCKS:

(Class 4 thru 13)

LOCATION: E Sherman St west of Meridian
SPECIFIC LOCATION:
CITY/STATE: Yamhill, OR

QC JOB #: 15124306
DIRECTION: EB, WB
DATE: Nov 19 2019



Start Time	EB	WB	Total
12:00 AM	1	0	1
01:00 AM	0	1	1
02:00 AM	0	0	0
03:00 AM	0	0	0
04:00 AM	0	0	0
05:00 AM	1	0	1
06:00 AM	4	2	6
07:00 AM	14	4	18
08:00 AM	4	5	9
09:00 AM	3	5	8
10:00 AM	4	7	11
11:00 AM	8	4	12
12:00 PM	10	6	16
01:00 PM	7	9	16
02:00 PM	5	6	11
03:00 PM	8	4	12
04:00 PM	11	7	18
05:00 PM	12	12	24
06:00 PM	8	3	11
07:00 PM	2	1	3
08:00 PM	3	1	4
09:00 PM	4	2	6
10:00 PM	0	1	1
11:00 PM	0	1	1
Day Total	109	81	190
Percent	57.4%	42.6%	

PEAK HOUR (AM): 07:00 AM

PEAK HOUR (PM): 05:00 PM

AVERAGE SPEED:

MODAL SPEED:

MEDIAN SPEED:

85th PERCENTILE:

POSTED SPEED:

TOTAL TRUCKS:

(Class 4 thru 13)

LOCATION: E North St east of Meridian
SPECIFIC LOCATION:
CITY/STATE: Yamhill, OR

QC JOB #: 15124307
DIRECTION: EB, WB
DATE: Nov 19 2019



Start Time	EB	WB	Total
12:00 AM	0	1	1
01:00 AM	1	2	3
02:00 AM	0	0	0
03:00 AM	0	0	0
04:00 AM	1	0	1
05:00 AM	0	0	0
06:00 AM	6	0	6
07:00 AM	8	3	11
08:00 AM	13	1	14
09:00 AM	8	2	10
10:00 AM	2	3	5
11:00 AM	6	4	10
12:00 PM	3	3	6
01:00 PM	8	4	12
02:00 PM	9	5	14
03:00 PM	7	6	13
04:00 PM	5	7	12
05:00 PM	9	7	16
06:00 PM	8	4	12
07:00 PM	3	3	6
08:00 PM	6	6	12
09:00 PM	1	7	8
10:00 PM	5	5	10
11:00 PM	0	2	2
Day Total	109	75	184
Percent	59.2%	40.8%	

PEAK HOUR (AM): 08:00 AM

PEAK HOUR (PM): 05:00 PM

AVERAGE SPEED:

MODAL SPEED:

MEDIAN SPEED:

85th PERCENTILE:

POSTED SPEED:

TOTAL TRUCKS:

(Class 4 thru 13)

LOCATION: E North St west of Meridian
SPECIFIC LOCATION:
CITY/STATE: Yamhill, OR

QC JOB #: 15124308
DIRECTION: EB, WB
DATE: Nov 19 2019



Start Time	EB	WB	Total
12:00 AM	0	2	2
01:00 AM	1	1	2
02:00 AM	0	0	0
03:00 AM	0	0	0
04:00 AM	1	0	1
05:00 AM	0	0	0
06:00 AM	4	1	5
07:00 AM	13	2	15
08:00 AM	4	4	8
09:00 AM	2	4	6
10:00 AM	5	1	6
11:00 AM	3	3	6
12:00 PM	3	6	9
01:00 PM	3	1	4
02:00 PM	11	7	18
03:00 PM	1	6	7
04:00 PM	9	6	15
05:00 PM	7	16	23
06:00 PM	5	5	10
07:00 PM	2	3	5
08:00 PM	1	6	7
09:00 PM	1	3	4
10:00 PM	0	0	0
11:00 PM	0	2	2
Day Total	76	79	155
Percent	49%	51%	

PEAK HOUR (AM): 07:00 AM

PEAK HOUR (PM): 05:00 PM

AVERAGE SPEED:

MODAL SPEED:

MEDIAN SPEED:

85th PERCENTILE:

POSTED SPEED:

TOTAL TRUCKS:

(Class 4 thru 13)

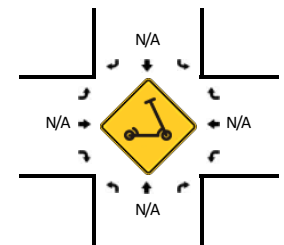
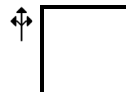
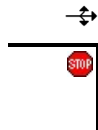
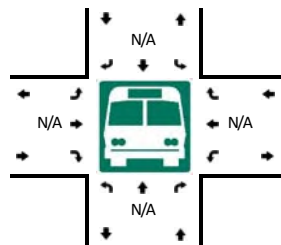
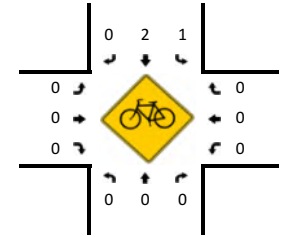
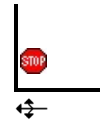
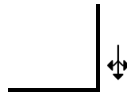
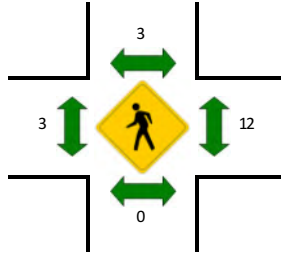
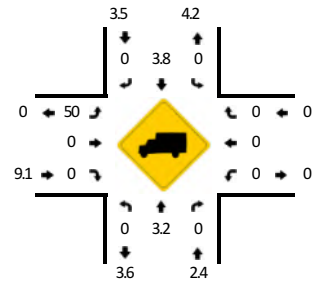
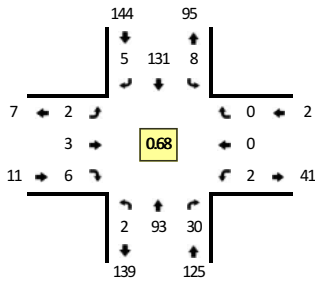
Appendix B

Turning Movement Counts

LOCATION: N Meridian St -- E North St
CITY/STATE: Yamhill, OR

QC JOB #: 15124301
DATE: Tue, Nov 19 2019

Peak-Hour: 7:30 AM -- 8:30 AM
 Peak 15-Min: 7:45 AM -- 8:00 AM

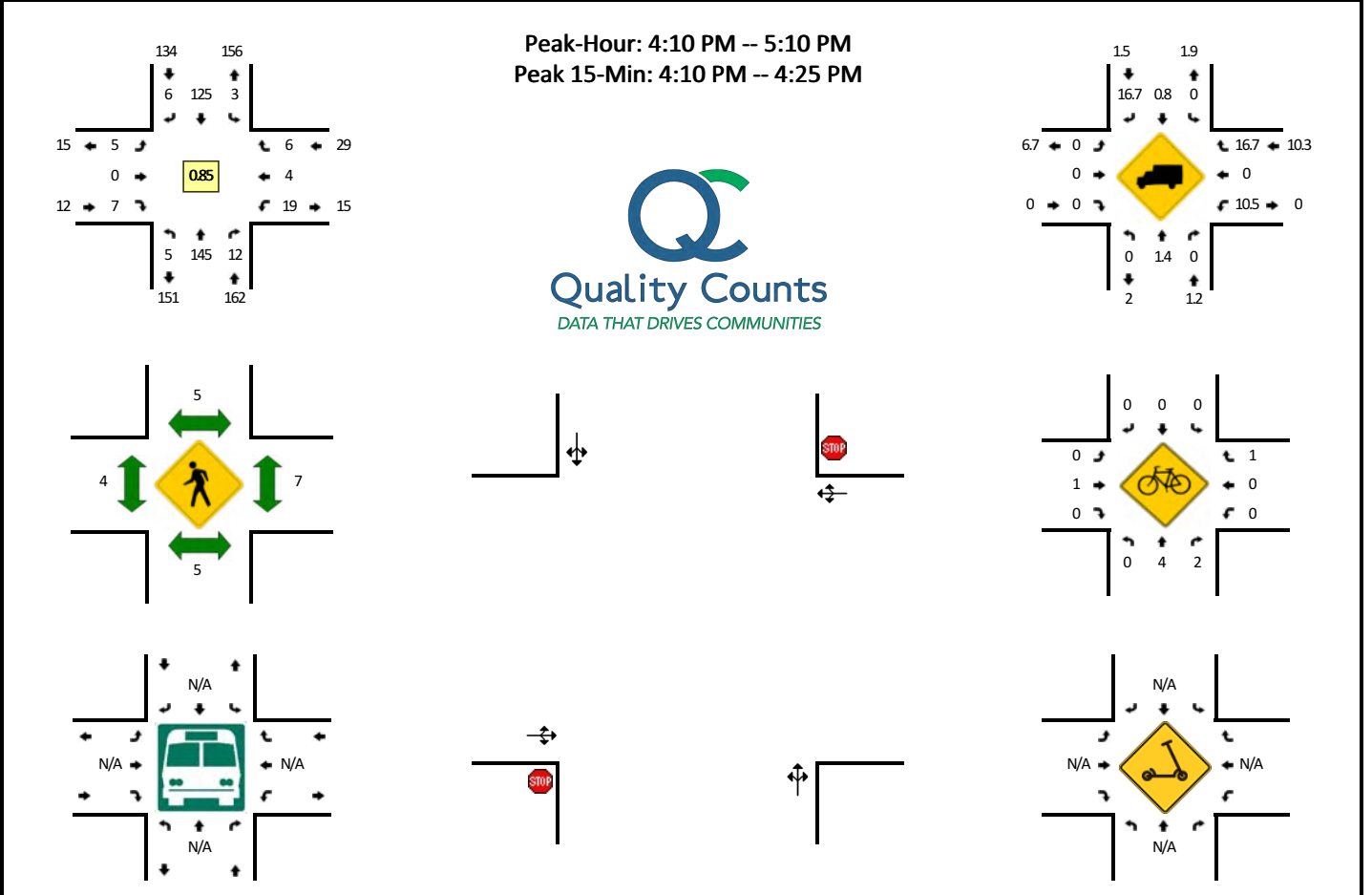


5-Min Count Period Beginning At	N Meridian St (Northbound)				N Meridian St (Southbound)				E North St (Eastbound)				E North St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	3	0	0	0	7	0	0	0	0	0	0	0	0	0	0	10	
7:05 AM	0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	0	14	
7:10 AM	0	6	1	0	0	4	0	0	0	0	0	0	0	0	0	0	11	
7:15 AM	0	2	0	0	0	8	0	0	1	0	2	0	0	0	0	0	13	
7:20 AM	0	5	0	0	0	11	0	0	0	0	0	1	0	0	0	1	18	
7:25 AM	0	3	1	0	0	6	0	0	1	0	1	0	0	0	0	0	12	
7:30 AM	0	3	0	0	2	9	1	0	0	1	1	0	0	0	0	0	17	
7:35 AM	0	7	0	0	2	9	0	0	0	0	0	0	0	0	0	0	18	
7:40 AM	0	7	4	0	0	11	0	0	0	0	0	0	0	0	0	0	22	
7:45 AM	0	10	4	0	0	11	1	0	1	0	1	0	0	0	0	0	28	
7:50 AM	1	19	10	0	1	11	0	0	0	0	1	0	0	0	0	0	43	
7:55 AM	0	12	3	0	1	12	0	0	0	1	3	0	1	0	0	0	33	239
8:00 AM	0	4	4	0	1	11	1	0	0	0	0	0	0	0	0	0	21	250
8:05 AM	0	7	1	0	0	11	0	0	0	0	1	0	0	0	0	0	20	256
8:10 AM	0	9	0	0	0	4	1	0	1	0	0	0	0	0	0	0	15	260
8:15 AM	1	5	3	0	1	12	0	0	0	0	0	0	1	0	0	0	23	270
8:20 AM	0	6	0	0	0	14	1	0	0	0	0	0	0	0	0	0	21	273
8:25 AM	0	4	1	0	0	16	0	0	0	0	0	0	0	0	0	0	21	282
8:30 AM	0	4	0	0	0	9	0	0	0	0	0	0	0	0	0	0	13	278
8:35 AM	0	6	1	0	1	9	0	0	1	0	0	0	1	1	0	0	20	280
8:40 AM	1	4	1	0	1	4	0	0	1	1	0	0	0	0	0	0	13	271
8:45 AM	0	8	4	0	0	6	0	0	0	0	0	0	0	0	0	0	18	261
8:50 AM	0	7	3	0	1	6	0	0	0	1	0	0	1	0	0	0	19	237
8:55 AM	0	5	3	0	1	14	0	1	0	0	0	0	0	0	0	0	24	228
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	164	68	0	8	136	4	0	4	4	20	0	4	0	0	0	416	
Heavy Trucks	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	8	
Buses																		
Pedestrians		0				4				0				24			28	
Bicycles	0	0	0		1	1	0		0	0	0		0	0	0		2	
Scoters																		

Comments:

LOCATION: N Meridian St -- E North St
CITY/STATE: Yamhill, OR

QC JOB #: 15124302
DATE: Tue, Nov 19 2019



5-Min Count Period Beginning At	N Meridian St (Northbound)				N Meridian St (Southbound)				E North St (Eastbound)				E North St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	3	0	0	0	4	0	0	1	1	0	0	2	0	0	0	11	
2:05 PM	1	8	1	0	0	1	0	0	0	1	0	0	1	0	0	0	13	
2:10 PM	1	3	0	0	0	2	1	0	0	0	0	0	0	0	1	0	8	
2:15 PM	0	2	0	0	0	3	0	0	2	0	2	0	1	0	0	0	10	
2:20 PM	1	6	0	0	0	14	0	0	0	0	0	0	0	0	0	0	21	
2:25 PM	1	6	2	0	0	9	0	0	0	0	0	0	0	0	0	0	18	
2:30 PM	1	2	0	0	0	5	1	0	0	0	0	0	0	0	0	0	9	
2:35 PM	0	3	0	0	0	13	0	0	0	0	0	3	0	0	0	0	19	
2:40 PM	0	11	0	0	0	7	0	0	0	1	0	0	1	1	1	0	22	
2:45 PM	0	13	2	0	0	12	0	0	0	0	1	0	0	0	2	0	30	
2:50 PM	0	12	3	0	1	6	1	0	0	0	1	0	3	0	1	0	28	
2:55 PM	2	8	4	0	0	16	0	0	0	1	2	0	0	1	1	0	35	224
3:00 PM	0	12	0	0	0	5	0	0	0	0	0	0	0	2	0	0	19	232
3:05 PM	2	9	2	0	2	5	0	0	0	1	0	0	2	0	3	0	26	245
3:10 PM	0	8	0	0	0	13	1	0	0	0	0	0	1	0	2	0	25	262
3:15 PM	0	16	0	0	0	23	0	0	0	0	0	0	1	0	0	0	40	292
3:20 PM	0	15	1	0	1	19	1	0	0	0	0	0	2	0	1	0	40	311
3:25 PM	0	7	4	0	1	8	0	0	0	0	0	0	0	1	1	0	22	315
3:30 PM	0	6	0	0	0	13	0	0	0	0	0	0	1	0	0	0	20	326
3:35 PM	0	3	1	0	0	7	0	0	0	0	1	0	1	0	0	0	13	320
3:40 PM	1	15	1	0	0	11	0	0	0	0	0	0	1	0	0	0	29	327
3:45 PM	0	6	0	0	0	6	0	0	1	0	0	0	1	0	1	0	15	312
3:50 PM	0	13	0	0	0	9	1	0	0	0	0	0	0	0	0	0	23	307
3:55 PM	0	13	3	0	1	9	1	0	0	0	0	0	0	0	0	0	27	299
4:00 PM	1	11	2	0	1	10	1	0	0	0	0	0	0	1	1	0	28	308
4:05 PM	0	6	2	0	0	9	0	0	0	0	0	0	2	0	0	0	19	301
4:10 PM	1	11	0	0	0	16	1	0	1	0	2	0	3	1	1	0	37	313
4:15 PM	1	14	1	0	0	10	0	0	0	0	1	0	3	0	1	0	31	304
4:20 PM	0	14	5	0	0	11	0	0	1	0	0	0	0	0	0	0	31	295
4:25 PM	0	8	1	0	1	13	0	0	0	0	1	0	1	0	0	0	25	298
4:30 PM	0	9	1	0	0	13	1	0	1	0	0	0	3	1	1	0	30	308
4:35 PM	0	11	0	0	0	4	2	0	0	0	1	0	0	0	0	0	18	313
4:40 PM	0	12	1	0	1	10	2	0	0	0	0	0	0	0	0	0	26	310
4:45 PM	0	9	0	0	0	8	0	0	2	0	0	0	3	1	0	0	23	318
4:50 PM	0	7	0	0	0	11	0	0	0	0	0	0	2	0	1	0	21	316
4:55 PM	2	8	0	0	0	7	0	0	0	0	0	0	1	0	1	0	19	308
5:00 PM	0	18	1	0	1	12	0	0	0	0	1	0	1	1	0	0	35	315
5:05 PM	1	24	2	0	0	10	0	0	0	0	1	0	2	0	1	0	41	337

5-Min Count Period Beginning At	N Meridian St (Northbound)				N Meridian St (Southbound)				E North St (Eastbound)				E North St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
5:10 PM	1	9	0	0	0	8	2	0	1	0	0	0	2	0	0	0	23	323
5:15 PM	0	12	1	0	1	6	1	0	0	0	0	0	0	0	0	0	21	313
5:20 PM	0	20	1	0	0	9	0	0	0	0	0	0	3	2	0	0	35	317
5:25 PM	0	15	0	0	0	10	1	0	1	0	0	0	1	0	0	0	28	320
5:30 PM	1	14	3	0	0	8	1	0	0	0	0	0	0	1	0	0	28	318
5:35 PM	0	8	1	0	0	10	0	0	0	0	1	0	4	0	0	0	24	324
5:40 PM	2	8	0	0	0	10	0	0	1	0	0	0	1	0	0	0	22	320
5:45 PM	0	7	1	0	1	8	0	0	0	0	0	0	0	1	0	0	18	315
5:50 PM	0	12	2	0	0	6	0	0	0	0	0	0	1	0	0	0	21	315
5:55 PM	0	11	3	0	0	10	0	0	1	0	2	0	1	1	1	0	30	326
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	8	156	24	0	0	148	4	0	8	0	12	0	24	4	8	0	396	
Heavy Trucks	0	4	0		0	4	4		0	0	0		0	0	4		16	
Buses																		
Pedestrians		4				4				0				4			12	
Bicycles	0	2	0		0	0	0		0	0	0		0	0	0		2	
Scooters																		

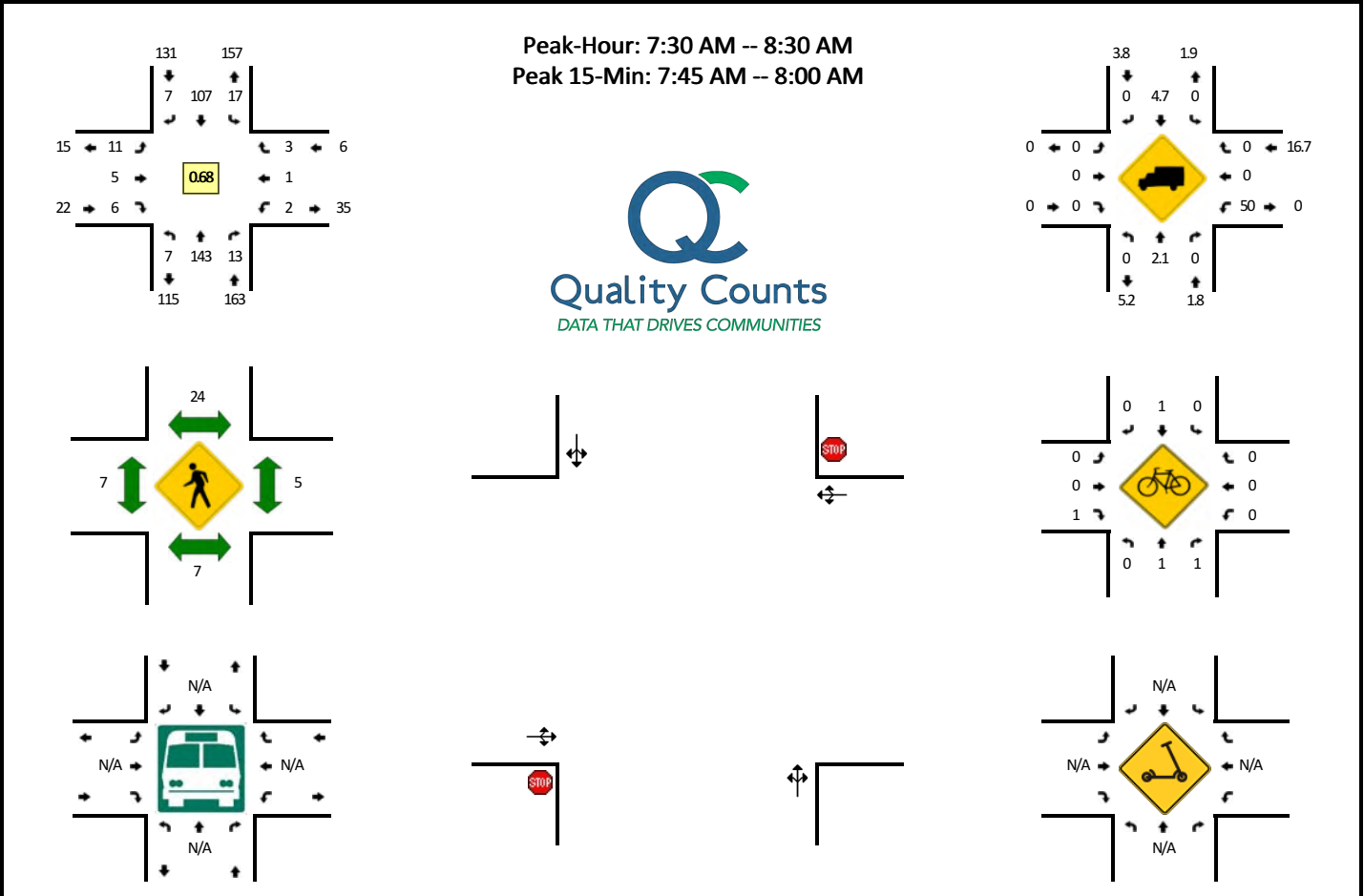
Comments:

Report generated on 11/25/2019 5:21 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

LOCATION: N Meridian St -- E Sherman St
CITY/STATE: Yamhill, OR

QC JOB #: 15124303
DATE: Tue, Nov 19 2019

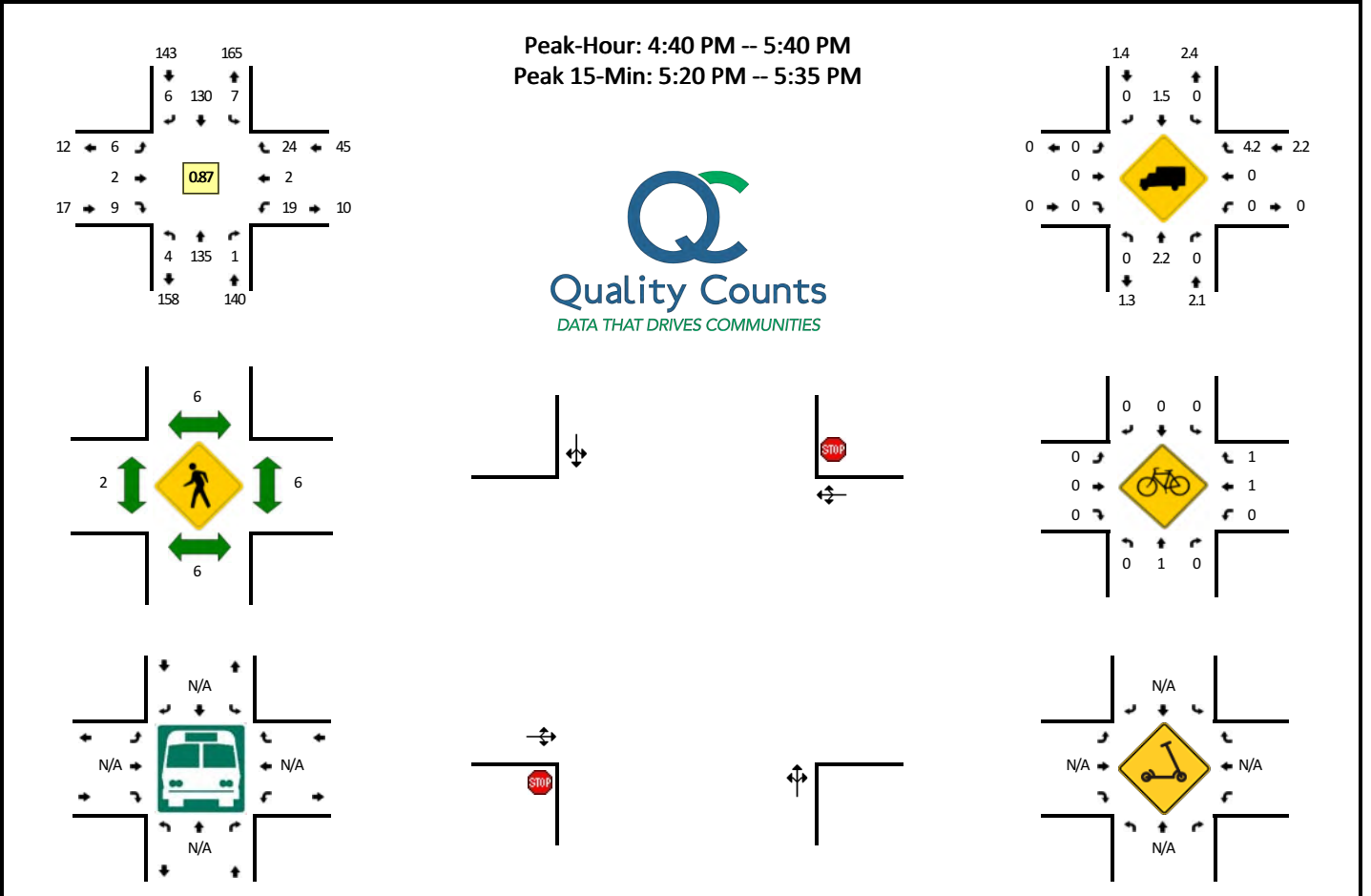


5-Min Count Period Beginning At	N Meridian St (Northbound)				N Meridian St (Southbound)				E Sherman St (Eastbound)				E Sherman St (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
7:00 AM	0	4	0	0	0	6	0	0	0	0	0	2	0	0	0	0	12		
7:05 AM	0	6	0	0	0	9	0	0	0	1	0	0	0	1	0	0	0	17	
7:10 AM	0	9	1	0	0	5	0	0	0	0	0	1	0	1	0	0	0	17	
7:15 AM	0	2	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	10	
7:20 AM	0	5	1	0	1	8	0	1	0	0	0	0	0	0	0	0	0	16	
7:25 AM	0	4	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	14	
7:30 AM	1	7	0	0	1	6	2	0	1	0	0	0	0	0	0	0	0	18	
7:35 AM	0	10	1	0	1	6	0	0	2	0	1	0	1	0	1	0	0	23	
7:40 AM	0	12	2	0	1	11	2	0	0	2	1	0	0	0	0	0	0	31	
7:45 AM	0	17	1	0	0	8	0	0	3	0	0	0	0	0	0	0	0	29	
7:50 AM	1	34	2	0	3	6	0	0	2	0	1	0	1	0	0	0	0	50	
7:55 AM	2	15	1	0	3	14	2	0	1	1	0	0	0	0	1	0	0	40	277
8:00 AM	0	10	2	0	3	7	0	0	0	1	1	0	0	0	0	0	0	24	289
8:05 AM	0	7	2	0	0	9	1	0	0	0	0	0	0	0	0	0	0	19	291
8:10 AM	1	7	0	0	1	5	0	0	1	0	2	0	0	0	1	0	0	18	292
8:15 AM	2	8	0	0	3	10	0	0	0	0	0	0	0	0	0	0	0	23	305
8:20 AM	0	7	0	0	0	12	0	0	1	1	0	0	0	0	0	0	0	21	310
8:25 AM	0	9	2	0	1	13	0	0	0	0	0	0	0	1	0	0	0	26	322
8:30 AM	0	3	1	0	0	9	0	0	0	1	3	0	0	0	0	0	0	17	321
8:35 AM	0	5	1	0	1	7	1	0	1	0	0	0	0	0	0	0	0	16	314
8:40 AM	0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	10	293
8:45 AM	0	15	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	21	285
8:50 AM	0	10	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	18	253
8:55 AM	0	9	0	0	2	14	1	0	0	0	0	0	1	1	0	0	0	28	241
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	12	264	16	0	24	112	8	0	24	4	4	0	4	0	4	0	476		
Heavy Trucks	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	8		
Buses																			
Pedestrians		16				56				4				16			92		
Bicycles	0	1	1		0	0	0		0	0	1		0	0	0		3		
Scoters																			

Comments:

LOCATION: N Meridian St -- E Sherman St
CITY/STATE: Yamhill, OR

QC JOB #: 15124304
DATE: Tue, Nov 19 2019



5-Min Count Period Beginning At	N Meridian St (Northbound)				N Meridian St (Southbound)				E Sherman St (Eastbound)				E Sherman St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	1	2	0	0	0	6	0	0	1	0	0	0	0	0	0	0	10	
2:05 PM	0	10	0	0	0	2	0	0	0	0	0	0	0	0	0	0	12	
2:10 PM	0	6	1	0	0	3	0	0	0	0	0	0	0	0	0	0	10	
2:15 PM	0	2	0	0	1	5	0	0	0	0	1	0	2	0	0	0	11	
2:20 PM	0	5	1	0	0	13	1	0	1	0	1	0	1	0	1	0	24	
2:25 PM	1	9	0	0	0	10	0	0	0	0	0	0	1	0	0	0	21	
2:30 PM	0	4	0	0	1	4	0	0	0	0	0	0	0	0	0	0	9	
2:35 PM	1	2	0	0	0	13	1	0	0	0	1	0	0	0	1	0	19	
2:40 PM	0	9	0	0	0	11	0	0	1	0	0	0	3	1	2	0	27	
2:45 PM	0	14	4	0	0	12	1	0	1	0	1	0	1	0	1	0	35	
2:50 PM	0	12	0	0	2	8	1	0	0	0	0	0	2	0	2	0	27	
2:55 PM	0	11	1	0	2	14	2	0	1	0	0	0	2	0	2	0	35	240
3:00 PM	0	13	1	0	1	4	0	0	0	0	0	0	0	0	1	0	20	250
3:05 PM	0	7	2	0	0	8	0	0	1	0	0	0	3	0	1	0	22	260
3:10 PM	2	9	1	0	1	13	0	0	0	0	0	0	2	0	1	0	29	279
3:15 PM	0	12	2	0	0	24	0	0	1	0	1	0	1	0	1	0	42	310
3:20 PM	0	13	0	0	0	26	0	0	1	0	0	0	4	0	1	0	45	331
3:25 PM	0	6	2	0	0	6	0	0	2	0	0	0	2	1	1	0	20	330
3:30 PM	2	5	0	0	0	13	1	0	0	0	0	0	1	0	0	0	22	343
3:35 PM	0	3	0	0	2	8	0	0	0	1	0	0	0	0	1	0	15	339
3:40 PM	0	14	1	0	1	9	0	0	1	0	2	0	0	0	2	0	30	342
3:45 PM	0	6	0	0	0	8	0	0	0	0	1	0	1	0	0	0	16	323
3:50 PM	0	8	1	0	0	8	2	0	2	0	0	0	0	0	1	0	22	318
3:55 PM	0	17	0	0	1	9	0	0	0	0	1	0	0	0	0	0	28	311
4:00 PM	1	8	0	0	0	12	0	0	0	0	0	0	1	0	1	0	23	314
4:05 PM	0	8	0	0	0	10	0	0	0	0	1	0	3	0	3	0	25	317
4:10 PM	0	5	0	0	0	23	1	0	0	0	0	0	0	0	2	0	31	319
4:15 PM	0	16	1	0	1	14	0	0	1	0	1	0	0	0	0	0	34	311
4:20 PM	0	10	1	0	0	10	0	0	0	0	0	0	3	0	4	0	28	294
4:25 PM	2	10	1	0	2	10	0	0	1	0	2	0	0	0	1	0	29	303
4:30 PM	0	7	0	0	0	15	2	0	4	0	0	0	1	2	0	0	31	312
4:35 PM	0	7	0	0	0	5	0	0	1	0	0	0	1	0	1	0	15	312
4:40 PM	0	9	0	0	0	12	0	0	0	0	0	0	1	0	3	0	25	307
4:45 PM	1	8	0	0	0	14	0	0	1	0	2	0	2	0	1	0	29	320
4:50 PM	0	5	0	0	0	11	0	0	0	0	1	0	1	0	2	0	20	318
4:55 PM	0	9	0	0	1	8	0	0	0	0	0	0	1	0	1	0	20	310
5:00 PM	0	12	0	0	2	15	0	0	1	0	4	0	0	0	4	0	38	325
5:05 PM	1	17	0	0	0	13	1	0	1	0	1	0	1	0	3	0	38	338

5-Min Count Period Beginning At	N Meridian St (Northbound)				N Meridian St (Southbound)				E Sherman St (Eastbound)				E Sherman St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
5:10 PM	1	11	0	0	0	6	1	0	0	0	0	0	0	0	0	0	19	326
5:15 PM	0	10	0	0	0	6	3	0	0	0	0	0	5	0	2	0	26	318
5:20 PM	0	16	1	0	1	14	0	0	1	1	0	0	4	0	4	0	42	332
5:25 PM	0	14	0	0	1	10	0	0	0	0	0	0	0	0	1	0	26	329
5:30 PM	1	18	0	0	0	7	1	0	0	0	0	0	1	2	1	0	31	329
5:35 PM	0	6	0	0	2	14	0	0	2	1	1	0	3	0	2	0	31	345
5:40 PM	0	7	0	0	0	11	1	0	0	0	0	0	2	0	1	0	22	342
5:45 PM	0	10	1	0	0	8	0	0	0	0	1	0	0	0	0	0	20	333
5:50 PM	0	11	0	0	0	8	0	0	0	0	3	0	1	0	1	0	24	337
5:55 PM	0	13	0	0	2	11	0	0	0	0	1	0	0	1	0	0	28	345
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	192	4	0	8	124	4	0	4	4	0	0	20	8	24	0	396	
Heavy Trucks	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
Buses																		
Pedestrians		16				4				0				0			20	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

Report generated on 11/25/2019 5:21 PM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Appendix C

Pedestrian Counts



Location: N Meridian St South of E North St

Date: 11/19/2019

Time: 7:00 AM - 6:00 PM

Site Code: 15124321

Start Time	Pedestrians	
	Eastbound	Westbound
7:00 AM	0	0
7:05 AM	0	0
7:10 AM	0	0
7:15 AM	0	0
7:20 AM	0	0
7:25 AM	0	0
7:30 AM	0	0
7:35 AM	0	1
7:40 AM	0	0
7:45 AM	0	0
7:50 AM	5	0
7:55 AM	4	0
8:00 AM	0	0
8:05 AM	0	0
8:10 AM	0	0
8:15 AM	0	0
8:20 AM	0	0
8:25 AM	0	0
8:30 AM	0	0
8:35 AM	0	0
8:40 AM	0	1
8:45 AM	1	1
8:50 AM	0	0
8:55 AM	0	0
9:00 AM	1	1
9:05 AM	0	0
9:10 AM	1	0
9:15 AM	1	0
9:20 AM	3	0
9:25 AM	2	0
9:30 AM	0	0
9:35 AM	0	0
9:40 AM	0	0
9:45 AM	0	0
9:50 AM	1	0

9:55 AM	1	3
10:00 AM	1	0
10:05 AM	0	0
10:10 AM	0	1
10:15 AM	1	0
10:20 AM	0	0
10:25 AM	0	1
10:30 AM	0	0
10:35 AM	0	1
10:40 AM	0	2
10:45 AM	0	1
10:50 AM	1	3
10:55 AM	1	0
11:00 AM	0	0
11:05 AM	0	0
11:10 AM	2	2
11:15 AM	0	0
11:20 AM	0	0
11:25 AM	3	3
11:30 AM	2	0
11:35 AM	0	0
11:40 AM	0	2
11:45 AM	1	0
11:50 AM	1	0
11:55 AM	0	0
12:00 PM	0	1
12:05 PM	0	0
12:10 PM	0	1
12:15 PM	0	1
12:20 PM	0	0
12:25 PM	0	0
12:30 PM	0	0
12:35 PM	0	0
12:40 PM	0	0
12:45 PM	1	3
12:50 PM	0	0
12:55 PM	1	0
1:00 PM	0	0
1:05 PM	0	1
1:10 PM	0	3
1:15 PM	3	2
1:20 PM	4	0
1:25 PM	3	0
1:30 PM	1	0
1:35 PM	0	0
1:40 PM	0	0
1:45 PM	0	0
1:50 PM	0	0
1:55 PM	0	0

2:00 PM	0	0
2:05 PM	0	0
2:10 PM	0	4
2:15 PM	2	1
2:20 PM	0	0
2:25 PM	0	0
2:30 PM	2	2
2:35 PM	0	1
2:40 PM	0	3
2:45 PM	2	2
2:50 PM	0	0
2:55 PM	0	0
3:00 PM	0	0
3:05 PM	0	0
3:10 PM	0	0
3:15 PM	0	0
3:20 PM	0	0
3:25 PM	0	0
3:30 PM	0	0
3:35 PM	0	3
3:40 PM	0	0
3:45 PM	0	0
3:50 PM	0	0
3:55 PM	0	0
4:00 PM	0	1
4:05 PM	0	3
4:10 PM	0	3
4:15 PM	0	0
4:20 PM	1	0
4:25 PM	0	0
4:30 PM	3	2
4:35 PM	0	2
4:40 PM	0	0
4:45 PM	1	1
4:50 PM	0	1
4:55 PM	0	0
5:00 PM	1	0
5:05 PM	0	0
5:10 PM	0	0
5:15 PM	0	0
5:20 PM	1	0
5:25 PM	0	1
5:30 PM	0	0
5:35 PM	0	0
5:40 PM	0	0
5:45 PM	0	0
5:50 PM	0	0
5:55 PM	0	0
Total	59	65



Location: N Meridian St North of E Franklin St

Date: 11/19/2019

Time: 7:00 AM - 6:00 PM

Site Code: 15124322

Start Time	Pedestrians	
	Eastbound	Westbound
7:00 AM	1	0
7:05 AM	1	0
7:10 AM	0	1
7:15 AM	0	1
7:20 AM	1	1
7:25 AM	1	0
7:30 AM	0	0
7:35 AM	0	1
7:40 AM	1	0
7:45 AM	1	0
7:50 AM	5	0
7:55 AM	4	0
8:00 AM	3	0
8:05 AM	0	0
8:10 AM	0	0
8:15 AM	1	0
8:20 AM	0	0
8:25 AM	1	0
8:30 AM	1	0
8:35 AM	1	0
8:40 AM	0	1
8:45 AM	1	0
8:50 AM	1	0
8:55 AM	0	1
9:00 AM	2	1
9:05 AM	1	0
9:10 AM	1	0
9:15 AM	2	1
9:20 AM	1	0
9:25 AM	1	0
9:30 AM	0	0
9:35 AM	0	0
9:40 AM	0	0
9:45 AM	0	0
9:50 AM	1	0
9:55 AM	3	3
10:00 AM	0	0
10:05 AM	0	0
10:10 AM	0	1

10:15 AM	1	0
10:20 AM	0	0
10:25 AM	0	0
10:30 AM	0	0
10:35 AM	0	0
10:40 AM	1	3
10:45 AM	0	0
10:50 AM	0	3
10:55 AM	1	0
11:00 AM	1	0
11:05 AM	0	0
11:10 AM	2	2
11:15 AM	0	0
11:20 AM	0	0
11:25 AM	2	2
11:30 AM	2	0
11:35 AM	0	0
11:40 AM	1	2
11:45 AM	1	0
11:50 AM	0	0
11:55 AM	0	1
12:00 PM	0	1
12:05 PM	0	0
12:10 PM	0	1
12:15 PM	0	1
12:20 PM	0	0
12:25 PM	0	0
12:30 PM	0	0
12:35 PM	0	0
12:40 PM	0	0
12:45 PM	0	2
12:50 PM	0	0
12:55 PM	1	0
1:00 PM	0	0
1:05 PM	0	0
1:10 PM	0	2
1:15 PM	4	2
1:20 PM	1	0
1:25 PM	0	0
1:30 PM	1	0
1:35 PM	0	0
1:40 PM	0	0
1:45 PM	1	0
1:50 PM	0	0
1:55 PM	0	0
2:00 PM	0	0
2:05 PM	0	0
2:10 PM	1	4
2:15 PM	0	1
2:20 PM	0	0
2:25 PM	0	1
2:30 PM	1	0
2:35 PM	0	0

2:40 PM	0	2
2:45 PM	2	1
2:50 PM	3	1
2:55 PM	1	1
3:00 PM	0	0
3:05 PM	0	0
3:10 PM	0	1
3:15 PM	0	1
3:20 PM	0	1
3:25 PM	0	0
3:30 PM	0	0
3:35 PM	1	5
3:40 PM	1	1
3:45 PM	0	0
3:50 PM	1	1
3:55 PM	0	0
4:00 PM	0	3
4:05 PM	1	4
4:10 PM	0	3
4:15 PM	2	1
4:20 PM	2	0
4:25 PM	0	3
4:30 PM	4	2
4:35 PM	0	2
4:40 PM	0	0
4:45 PM	1	1
4:50 PM	0	1
4:55 PM	0	2
5:00 PM	0	1
5:05 PM	1	0
5:10 PM	0	0
5:15 PM	0	0
5:20 PM	1	0
5:25 PM	0	0
5:30 PM	0	0
5:35 PM	0	0
5:40 PM	0	1
5:45 PM	0	0
5:50 PM	0	0
5:55 PM	0	1
Total	79	80



Location: N Meridian St South of E Franklin St

Date: 11/19/2019

Time: 7:00 AM - 6:00 PM

Site Code: 15124323

Start Time	Pedestrians	
	Eastbound	Westbound
7:00 AM	2	1
7:05 AM	0	0
7:10 AM	0	0
7:15 AM	0	0
7:20 AM	0	0
7:25 AM	0	0
7:30 AM	0	0
7:35 AM	1	0
7:40 AM	1	0
7:45 AM	1	0
7:50 AM	4	0
7:55 AM	0	0
8:00 AM	0	0
8:05 AM	0	0
8:10 AM	0	0
8:15 AM	0	0
8:20 AM	0	0
8:25 AM	0	0
8:30 AM	0	0
8:35 AM	0	0
8:40 AM	0	0
8:45 AM	0	0
8:50 AM	1	0
8:55 AM	0	0
9:00 AM	0	0
9:05 AM	0	0
9:10 AM	0	0
9:15 AM	1	1
9:20 AM	0	0
9:25 AM	0	0
9:30 AM	0	0
9:35 AM	0	0
9:40 AM	0	0
9:45 AM	0	0
9:50 AM	0	0

9:55 AM	0	0
10:00 AM	0	0
10:05 AM	0	0
10:10 AM	0	0
10:15 AM	1	0
10:20 AM	0	2
10:25 AM	0	0
10:30 AM	1	0
10:35 AM	0	0
10:40 AM	0	1
10:45 AM	0	0
10:50 AM	0	0
10:55 AM	0	1
11:00 AM	0	0
11:05 AM	0	0
11:10 AM	0	0
11:15 AM	0	0
11:20 AM	0	0
11:25 AM	0	0
11:30 AM	0	1
11:35 AM	0	1
11:40 AM	0	0
11:45 AM	2	0
11:50 AM	1	0
11:55 AM	1	0
12:00 PM	0	0
12:05 PM	0	0
12:10 PM	0	0
12:15 PM	0	0
12:20 PM	0	1
12:25 PM	0	0
12:30 PM	0	0
12:35 PM	0	1
12:40 PM	0	0
12:45 PM	0	1
12:50 PM	0	0
12:55 PM	0	0
1:00 PM	1	0
1:05 PM	0	0
1:10 PM	1	0
1:15 PM	0	2
1:20 PM	0	1
1:25 PM	1	0
1:30 PM	0	0
1:35 PM	0	0
1:40 PM	0	0
1:45 PM	0	1
1:50 PM	0	0
1:55 PM	0	0

2:00 PM	0	0
2:05 PM	1	0
2:10 PM	0	0
2:15 PM	0	0
2:20 PM	1	0
2:25 PM	0	0
2:30 PM	0	0
2:35 PM	1	0
2:40 PM	0	0
2:45 PM	1	0
2:50 PM	0	0
2:55 PM	1	0
3:00 PM	0	0
3:05 PM	0	0
3:10 PM	0	0
3:15 PM	0	0
3:20 PM	0	0
3:25 PM	0	0
3:30 PM	0	0
3:35 PM	0	1
3:40 PM	0	0
3:45 PM	1	0
3:50 PM	0	0
3:55 PM	0	0
4:00 PM	0	0
4:05 PM	0	2
4:10 PM	0	1
4:15 PM	0	0
4:20 PM	0	0
4:25 PM	0	1
4:30 PM	0	0
4:35 PM	0	0
4:40 PM	0	0
4:45 PM	0	0
4:50 PM	0	0
4:55 PM	0	0
5:00 PM	0	0
5:05 PM	0	1
5:10 PM	0	0
5:15 PM	0	0
5:20 PM	0	0
5:25 PM	0	0
5:30 PM	0	0
5:35 PM	0	0
5:40 PM	0	0
5:45 PM	0	1
5:50 PM	1	0
5:55 PM	0	0
Total	27	22



Location: N Meridian St North of E Sherman St

Date: 11/19/2019

Time: 7:00 AM - 6:00 PM

Site Code: 15124324

Start Time	Pedestrians	
	Eastbound	Westbound
7:00 AM	2	1
7:05 AM	0	0
7:10 AM	1	0
7:15 AM	0	0
7:20 AM	1	0
7:25 AM	0	0
7:30 AM	0	0
7:35 AM	1	0
7:40 AM	1	0
7:45 AM	5	0
7:50 AM	8	1
7:55 AM	3	0
8:00 AM	2	0
8:05 AM	2	0
8:10 AM	1	0
8:15 AM	3	0
8:20 AM	0	0
8:25 AM	0	0
8:30 AM	0	0
8:35 AM	0	0
8:40 AM	0	0
8:45 AM	1	1
8:50 AM	1	0
8:55 AM	1	0
9:00 AM	2	0
9:05 AM	0	0
9:10 AM	0	0
9:15 AM	4	2
9:20 AM	2	0
9:25 AM	3	0
9:30 AM	0	1
9:35 AM	0	0
9:40 AM	0	0
9:45 AM	0	0
9:50 AM	0	1

9:55 AM	0	0
10:00 AM	0	0
10:05 AM	0	0
10:10 AM	0	1
10:15 AM	0	0
10:20 AM	0	0
10:25 AM	2	2
10:30 AM	0	2
10:35 AM	0	1
10:40 AM	3	3
10:45 AM	2	1
10:50 AM	0	1
10:55 AM	0	0
11:00 AM	0	0
11:05 AM	0	0
11:10 AM	0	0
11:15 AM	0	0
11:20 AM	1	1
11:25 AM	0	0
11:30 AM	0	3
11:35 AM	1	0
11:40 AM	0	0
11:45 AM	2	1
11:50 AM	1	0
11:55 AM	1	0
12:00 PM	0	0
12:05 PM	0	0
12:10 PM	0	1
12:15 PM	0	0
12:20 PM	0	1
12:25 PM	0	0
12:30 PM	0	0
12:35 PM	0	1
12:40 PM	0	1
12:45 PM	0	1
12:50 PM	0	0
12:55 PM	0	0
1:00 PM	0	0
1:05 PM	1	1
1:10 PM	0	2
1:15 PM	0	1
1:20 PM	3	3
1:25 PM	0	3
1:30 PM	0	0
1:35 PM	0	0
1:40 PM	0	0
1:45 PM	0	0
1:50 PM	1	0
1:55 PM	2	0

2:00 PM	1	0
2:05 PM	0	0
2:10 PM	0	0
2:15 PM	0	1
2:20 PM	2	1
2:25 PM	0	0
2:30 PM	0	0
2:35 PM	0	0
2:40 PM	1	3
2:45 PM	0	2
2:50 PM	0	0
2:55 PM	0	1
3:00 PM	0	1
3:05 PM	1	1
3:10 PM	0	1
3:15 PM	0	1
3:20 PM	1	0
3:25 PM	0	0
3:30 PM	0	0
3:35 PM	0	0
3:40 PM	0	0
3:45 PM	0	0
3:50 PM	1	0
3:55 PM	1	1
4:00 PM	0	1
4:05 PM	0	2
4:10 PM	0	2
4:15 PM	0	2
4:20 PM	0	1
4:25 PM	0	0
4:30 PM	0	1
4:35 PM	0	0
4:40 PM	0	0
4:45 PM	0	0
4:50 PM	0	0
4:55 PM	0	2
5:00 PM	2	1
5:05 PM	0	0
5:10 PM	0	1
5:15 PM	0	0
5:20 PM	0	0
5:25 PM	0	0
5:30 PM	0	1
5:35 PM	0	0
5:40 PM	0	1
5:45 PM	0	2
5:50 PM	0	0
5:55 PM	0	0
Total	74	68



Location: N Meridian St South of E Sherman St

Date: 11/19/2019

Time: 7:00 AM - 6:00 PM

Site Code: 15124325

Start Time	Pedestrians	
	Eastbound	Westbound
7:00 AM	0	0
7:05 AM	0	0
7:10 AM	0	0
7:15 AM	0	0
7:20 AM	0	0
7:25 AM	0	0
7:30 AM	0	0
7:35 AM	0	0
7:40 AM	1	0
7:45 AM	0	0
7:50 AM	1	0
7:55 AM	3	0
8:00 AM	0	1
8:05 AM	0	0
8:10 AM	0	1
8:15 AM	0	0
8:20 AM	0	0
8:25 AM	0	0
8:30 AM	0	0
8:35 AM	1	0
8:40 AM	0	0
8:45 AM	0	0
8:50 AM	0	0
8:55 AM	0	1
9:00 AM	0	0
9:05 AM	2	0
9:10 AM	0	0
9:15 AM	0	1
9:20 AM	1	0
9:25 AM	0	0
9:30 AM	0	0
9:35 AM	0	0
9:40 AM	0	0
9:45 AM	0	0
9:50 AM	1	1

9:55 AM	1	0
10:00 AM	0	1
10:05 AM	0	3
10:10 AM	0	0
10:15 AM	0	0
10:20 AM	0	0
10:25 AM	0	2
10:30 AM	0	0
10:35 AM	1	1
10:40 AM	1	1
10:45 AM	1	0
10:50 AM	0	0
10:55 AM	0	0
11:00 AM	2	1
11:05 AM	0	0
11:10 AM	0	0
11:15 AM	0	0
11:20 AM	0	0
11:25 AM	0	0
11:30 AM	2	2
11:35 AM	0	2
11:40 AM	0	0
11:45 AM	0	0
11:50 AM	2	0
11:55 AM	1	0
12:00 PM	0	0
12:05 PM	0	0
12:10 PM	0	0
12:15 PM	0	0
12:20 PM	0	0
12:25 PM	0	0
12:30 PM	0	0
12:35 PM	0	0
12:40 PM	0	0
12:45 PM	0	0
12:50 PM	0	0
12:55 PM	0	0
1:00 PM	0	0
1:05 PM	0	1
1:10 PM	0	1
1:15 PM	0	0
1:20 PM	2	1
1:25 PM	0	1
1:30 PM	0	0
1:35 PM	0	0
1:40 PM	1	0
1:45 PM	0	0
1:50 PM	0	0
1:55 PM	0	0

2:00 PM	1	0
2:05 PM	0	0
2:10 PM	0	0
2:15 PM	0	1
2:20 PM	0	0
2:25 PM	0	0
2:30 PM	0	0
2:35 PM	1	0
2:40 PM	0	0
2:45 PM	0	0
2:50 PM	0	0
2:55 PM	0	0
3:00 PM	0	2
3:05 PM	1	0
3:10 PM	0	0
3:15 PM	1	0
3:20 PM	0	0
3:25 PM	0	0
3:30 PM	0	0
3:35 PM	0	0
3:40 PM	0	0
3:45 PM	0	0
3:50 PM	0	0
3:55 PM	2	0
4:00 PM	0	0
4:05 PM	0	0
4:10 PM	3	0
4:15 PM	0	0
4:20 PM	0	0
4:25 PM	0	0
4:30 PM	0	3
4:35 PM	0	0
4:40 PM	0	0
4:45 PM	0	0
4:50 PM	0	1
4:55 PM	0	0
5:00 PM	0	1
5:05 PM	0	0
5:10 PM	0	0
5:15 PM	0	0
5:20 PM	0	1
5:25 PM	0	1
5:30 PM	0	2
5:35 PM	0	0
5:40 PM	1	0
5:45 PM	1	1
5:50 PM	0	0
5:55 PM	0	0
Total	35	35



Location: N Meridian St North of E Sheridan St

Date: 11/19/2019

Time: 7:00 AM - 6:00 PM

Site Code: 15124326

Start Time	Pedestrians	
	Eastbound	Westbound
7:00 AM	0	0
7:05 AM	0	0
7:10 AM	0	0
7:15 AM	0	0
7:20 AM	0	0
7:25 AM	0	0
7:30 AM	1	0
7:35 AM	0	0
7:40 AM	1	0
7:45 AM	0	1
7:50 AM	2	0
7:55 AM	1	0
8:00 AM	0	0
8:05 AM	0	0
8:10 AM	1	0
8:15 AM	0	0
8:20 AM	0	0
8:25 AM	0	0
8:30 AM	0	0
8:35 AM	0	0
8:40 AM	0	0
8:45 AM	0	0
8:50 AM	1	1
8:55 AM	0	2
9:00 AM	0	1
9:05 AM	0	0
9:10 AM	2	0
9:15 AM	1	0
9:20 AM	1	0
9:25 AM	0	0
9:30 AM	0	0
9:35 AM	0	1
9:40 AM	0	0
9:45 AM	0	0
9:50 AM	0	1

9:55 AM	0	0
10:00 AM	2	0
10:05 AM	0	2
10:10 AM	0	0
10:15 AM	0	1
10:20 AM	0	1
10:25 AM	0	1
10:30 AM	1	1
10:35 AM	0	0
10:40 AM	3	0
10:45 AM	0	0
10:50 AM	0	0
10:55 AM	0	0
11:00 AM	2	2
11:05 AM	0	0
11:10 AM	0	1
11:15 AM	2	0
11:20 AM	0	1
11:25 AM	0	1
11:30 AM	1	1
11:35 AM	0	1
11:40 AM	0	1
11:45 AM	0	0
11:50 AM	2	1
11:55 AM	0	1
12:00 PM	0	0
12:05 PM	1	0
12:10 PM	0	0
12:15 PM	0	1
12:20 PM	0	1
12:25 PM	0	0
12:30 PM	2	0
12:35 PM	2	0
12:40 PM	0	0
12:45 PM	0	0
12:50 PM	0	1
12:55 PM	0	1
1:00 PM	0	0
1:05 PM	0	1
1:10 PM	0	1
1:15 PM	3	2
1:20 PM	1	0
1:25 PM	0	0
1:30 PM	0	0
1:35 PM	1	0
1:40 PM	0	0
1:45 PM	0	0
1:50 PM	0	0
1:55 PM	0	0

2:00 PM	0	0
2:05 PM	0	2
2:10 PM	3	0
2:15 PM	0	0
2:20 PM	0	0
2:25 PM	0	1
2:30 PM	1	0
2:35 PM	0	1
2:40 PM	0	1
2:45 PM	0	2
2:50 PM	0	2
2:55 PM	0	0
3:00 PM	0	1
3:05 PM	1	3
3:10 PM	0	0
3:15 PM	0	0
3:20 PM	0	0
3:25 PM	0	1
3:30 PM	0	3
3:35 PM	0	0
3:40 PM	0	3
3:45 PM	2	0
3:50 PM	0	0
3:55 PM	1	2
4:00 PM	0	0
4:05 PM	0	1
4:10 PM	1	1
4:15 PM	2	2
4:20 PM	0	0
4:25 PM	0	0
4:30 PM	0	0
4:35 PM	2	0
4:40 PM	0	0
4:45 PM	0	0
4:50 PM	0	0
4:55 PM	0	1
5:00 PM	2	1
5:05 PM	0	0
5:10 PM	0	0
5:15 PM	0	0
5:20 PM	0	0
5:25 PM	0	2
5:30 PM	0	0
5:35 PM	0	1
5:40 PM	0	2
5:45 PM	0	0
5:50 PM	0	0
5:55 PM	0	0
Total	49	64

Appendix D

Critical Crash Rate Calculations & Crash Data

General & Site Information	
Analyst:	Nys
Agency/Company:	Greenlight Engineering
Date:	2/2/2020
Project Name:	Meridian Pedestrian Study

Intersection Crash Data							
Intersection	Intersection Type	Year					Total
		2014	2015	2016	2017	2018	
Meridian/North	Urban 4ST	0	1	0	1	0	2
Meridian/Franklin	Urban 3ST	0	0	0	0	0	0
Meridian/Sherman	Urban 4ST	0	0	0	2	0	2
Meridian/Sheridan	Urban 4ST	0	0	0	0	0	0
	Total	0	1	0	3	0	4

Intersection Population Type Crash Rate				
Average Crash Rate per intersection type				
Intersection Pop. Type	Sum of Crashes	Sum of 5-year MEV	Avg Crash Rate for Ref Pop.	INT in Pop
Rural 3SG	0	0		
Rural 3ST	0	0		
Rural 4SG	0	0		
Rural 4ST	0	0		
Urban 3ST	0	5	0.0000	1
Urban 3SG	0	0		
Urban 4ST	4	16	0.2435	3
Urban 4SG	0	0		

Critical Rate Calculation								
Intersection	AADT Entering Intersection	5-year MEV	Crash Total	Intersection Population Type	Intersection Crash Rate	Reference Population Crash Rate	Critical Rate	Over Critical
Meridian/North	3,000	5.5	2	Urban 4ST	0.37	APM Exhibit 4-1	0.41	Under
Meridian/Franklin	3,000	5.5	0	Urban 3ST	0.00	0.00	0.29	Under
Meridian/Sherman	3,000	5.5	2	Urban 4ST	0.37	APM Exhibit 4-1	0.41	Under
Meridian/Sheridan	3,000	5.5	0	Urban 4ST	0.00	APM Exhibit 4-1	0.41	Under

OREGON . . DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING

MERIDIAN ST and Intersectional Crashes at MERIDIAN ST, City of Newberg, Yamhill County, 01/01/2009 to 12/31/2018

27 - 31 of 91 Crash records shown.

CITY OF NEWBERG, YAMHILL COUNTY

SER#	P R J S W DATE	CLASS	CITY STREET	RD CHAR	INT-TYPE	INT-REL	OFFRD	WTHR	CRASH	SPCL USE	TRLR QTY	OWNER	A S	PH TYPE	SVRTY	E X RES	LOC	ERROR	ACT EVENT	CAUSE
INVEST	E A U I C O DAY	DIST	FIRST STREET	DIRECT	(MEDIAN)	INT-REL	RDDEBT	SURF	COLL	TRUCK	QTY	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE	TYPE
RD DPT	E L G N H R TIME	FROM	SECOND STREET	LOC	LEGS	TRAF-	DRVMY	LIGHT	SVRTY	VEH TYPE	VEH TYPE	VEH TYPE	VEH TYPE	VEH TYPE	VEH TYPE	VEH TYPE	VEH TYPE	VEH TYPE	VEH TYPE	VEH TYPE
UNLOC?	D C S V L K LAT	LONG	THIRD STREET	LOC	(LANES)	CONTL	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY	DRVMY
00087	N N N N N 01/27/2017	17	MERIDIAN ST	ALLEY	(NONE)	UNKNOWN	N	DRY	TURN	01 NONE	9	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L
CITY	FR	127	HANCOCK ST	S	(NONE)	UNKNOWN	N	DRY	TURN	N/A	N/A	W -N	W -N	W -N	W -N	W -N	W -N	W -N	W -N	W -N
N	1P	-122.58		07	(02)		N	DAY	PDO	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR
N	45 18 2.54	14.16					N	DAY	PDO	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR
01083	N N N N N 10/20/2015	17	MERIDIAN ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE	0	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L
NO RPT	TU	0	NORTH ST	CN	STOP SIGN	STOP SIGN	N	DRY	TURN	PRVTE	PRVTE	W -N	W -N	W -N	W -N	W -N	W -N	W -N	W -N	W -N
N	8A			03	0		N	DAY	INJ	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR
N	45 18 15.97	-122.58					N	DAY	INJ	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR
N	45 18 15.97	13.98					N	DAY	PDO	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW
00986	N N N N N 09/13/2017	17	MERIDIAN ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE	9	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L	TURN-L
NONE	WE	0	NORTH ST	CN	STOP SIGN	STOP SIGN	N	DRY	TURN	N/A	N/A	W -N	W -N	W -N	W -N	W -N	W -N	W -N	W -N	W -N
N	1P			04	0		N	DAY	PDO	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW
N	45 18 15.97	-122.58					N	DAY	PDO	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW
N	45 18 15.97	13.98					N	DAY	PDO	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW	UNKNOW
00628	N N N N N 08/14/2009	17	MERIDIAN ST	STRGHT	CROSS	Y	Y	CLR	PRKD MV	01 NONE	0	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT
NO RPT	FR	30	NORTH ST	S	(NONE)	UNKNOWN	N	DRY	SS-O	PRVTE	PRVTE	S -N	S -N	S -N	S -N	S -N	S -N	S -N	S -N	S -N
N	5P			05	(02)		N	DAY	INJ	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR
N	45 18	-122.58					N	DAY	INJ	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR
N	15.6999999	13.98					N	DAY	INJ	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR
00272	N N N N N 04/13/2011	16	MERIDIAN ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01 NONE	0	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT	STRGHT
NO RPT	WE	0	SHERIDAN ST	CN	STOP SIGN	STOP SIGN	N	DRY	ANGL	PRVTE	PRVTE	E -W	E -W	E -W	E -W	E -W	E -W	E -W	E -W	E -W
N	1P			02	0		N	DAY	PDO	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR
N	45 18	-122.58					N	DAY	PDO	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR
N	7.0601758	14.1164576					N	DAY	PDO	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR	PSNGR CAR

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submission of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

CDS360 01/26/2020 OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT URBAN NON-SYSTEM CRASH LISTING

MERIDIAN ST and Intersectional Crashes at MERIDIAN ST, City of Newberg, Yamhill County, 01/01/2009 to 12/31/2018

32 - 36 of 91 Crash records shown.

Table with columns: SR#, INVEST, RD DPT, UNLOC?, CITY STREET, CLASS, DIST, FROM, LONG, DATE, TIME, LAT, INT-TYPE, RD CHAR, DIRECT, LRS, LOC, INTER, WTHR, DRVWY, LIGHT, SVRTY, VEH TYPE, OFFRD, SURF, COLL, CRASH, TRLR QTY, OWNER, PH TYPE, SVRTY, E X RES, LOC, ERROR, ACT, EVENT, CAUSE.

Disclaimer: The information contained in this report is compiled from individual driver and police crash reports submitted to the Oregon Department of Transportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed to providing the highest quality crash data to customers. However, because submission of crash report forms is the responsibility of the individual driver, the Crash Analysis and Reporting Unit can not guarantee that all qualifying crashes are represented nor can assurances be made that all qualifying crashes are represented nor can assurances be made that all details pertaining to a single crash are accurate. Note: Legislative changes to DMV's vehicle crash reporting requirement, effective 01/01/2004, may result in fewer property damage only crashes being eligible for inclusion in the Statewide Crash Data File.

From: [Bill Buhrow](#)
Sent: Wednesday, January 13, 2021 12:37 AM
To: [Kaaren Hofmann](#); [Ed Gierok](#)
Subject: RE: No Parking Request

This email originated from outside the City of Newberg's organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

That would be fine - thanks

??

Bill Buhrow, Psy.D.
George Fox University
Dean of Student Services
Dir. Health and Counseling
503-554-2340

??

????NOTICE: This e-mail (including attachments) is covered by the Electronic Communications Privacy Act, 18 U.S.C._2510-2521, is confidential and may be privileged. If you are not the intended recipient, please be aware that any retention, dissemination, distribution, or copying of this communication is prohibited. Please reply to the sender that you have received this message in error, then delete it. Thank you for helping to maintain privacy.???

??

??

From: Kaaren Hofmann [mailto:Kaaren.Hofmann@newbergoregon.gov]

Sent: Tuesday, January 12, 2021 8:56 AM

To: Bill Buhrow; Ed Gierok

Subject: No Parking Request

??

Good morning-

??

Based on the TSC meeting last night, the request for an additional 35??? at both locations will not be approved as some of your neighbors objected.?? Are you comfortable with an additional 20??? on your side of Meridian??? We can also set up a meeting to discuss options.

??

Let me know where you think you want to go.

??

Regards,

??

Kaaren Hofmann, PE

City Engineer

City of Newberg

414 E. First Street

Newberg, Oregon 97132

503.537.1223 (desk phone)

971.281.9067 (mobile phone)

kaaren.hofmann@newbergoregon.gov

Pronouns: she ??? her - hers

??



??

Helpful Links:

From: [Ed Gierok](#)
Sent: Tuesday, January 12, 2021 9:17 AM
To: [Kaaren Hofmann](#)
Cc: [Bill Buhrow](#)
Subject: Re: No Parking Request

This email originated from outside the City of Newberg's organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I think that would be fine.

In His Service,
Ed Gierok
Director of Campus Public Safety & Emergency Management

George Fox University

503-554-2090

On Tue, Jan 12, 2021 at 8:55 AM Kaaren Hofmann
<Kaaren.Hofmann@newbergoregon.gov> wrote:

Good morning-

Based on the TSC meeting last night, the request for an additional 35' at both locations will not be approved as some of your neighbors objected. Are you comfortable with an additional 20' on your side of Meridian? We can also set up a meeting to discuss options.

Let me know where you think you want to go.

Regards,

June 18, 2021

To: Traffic Safety Commission

RE: Updated Meridian Street & Sheridan Street Intersection Pedestrian Safety Issue
Traffic Decision (File #TSC-20-005)

My sisters and I own three commercial buildings at the corner of N Meridian Street and E Sheridan Street. The addresses of the buildings are 207, 211 and 215 N Meridian Street.

Our tenants rely on street parking to supplement the parking on our property. We oppose any change to N Meridian Street that reduces street parking.

Elimination of parking on either side of N Meridian Street is detrimental to us. It makes our property less attractive to our tenants and their customers, ultimately taking value from our property.

The City had Greenlight Engineering study pedestrian crossings on N Meridian Street from E North Street to E Sheridan Street. They said there are no reported pedestrian crashes from 2009 through 2018. They recommended installing signage to alert vehicles that there might be pedestrians in the area. No signage has been added. College students are smart and don't need special treatment to cross a minor collector street.

Yellow curbs have been added to Meridian at almost every cross street from E Sheridan Street to E North Street—about sixteen yellow curbs in three blocks. These yellow curbs already improve sight distance at intersections. Increasing yellow curbs another 20 feet is redundant and wasteful of precious parking. It also sets a precedent—that cross walks deserve special treatment.

I don't think a college should be designing Newberg's roads.

Sincerely,

Dwight Minthorne, PE
602 NE Joanne Ct
Hillsboro, OR 97124

WORST INTERSECTION LIST

1. College & Hancock
2. College & First
3. Villa & Mountainview
4. Meridian & Hancock
5. Pedestrian Crossing at Howard & 99W
6. Second & Everest
7. Villa & OR219
8. Springbrook & 99W
9. Hwy 240/Main Street/Illinois Street