

NOTICE OF PUBLIC MEETING & AGENDA TRAFFIC SAFETY COMMISSION 7:00 PM MONDAY April 42, 2024

7:00 PM, MONDAY, April 12, 2021

VIA Zoom

Join from a PC, Mac, iPad, iPhone or Android smart device: Please click this URL to join.

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Webinar ID: 923 9607 5538 Passcode: 998826

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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
- V. CONSENT CALENDAR
 - a. Traffic Safety Commission Meeting Minutes January 11, 2021

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.



VI. PRESENTATIONS

- a. Dorothy Upton –ODOT Region 2 Traffic Engineer
 Intersection Safety Illinois/Main; College/Sheridan;
 219/Everest/1st
- b. Andrew Blair ODOT Region 2 Project Manager
 Phase 2 of the Bypass status, preliminary design, next steps

VII. STAFF REPORTS & GENERAL INFORMATION

- a. Police
- b. Engineering
 - i. Active Issues Log attached
 - ii. General Information
 - 1. Project Updates

VIII. NEW BUSINESS

a. NA

IX. OLD BUSINESS

- a. Updated TSC 20-005 Meridian Street No Parking
- b. Friendsview University Village Decision from Planning
- c. Worst Intersection List Attached
- X. COMMISSIONER COMMENTS
- XI. ADJOURNMENT July 12, 2020

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.

CITY OF NEWBERG TRAFFIC SAFETY COMMISSION MINUTES MONDAY, January 11, 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

Kasper Czuk

Members Absent: John Ehrlich, Sarah Sand, and Jeff Grider

Staff Present: Kaaren Hofmann, City Engineer

Doug Rux, Community Development Director

Russ Thomas, Public Works Director

Brian Hagen, Police Sergeant

III. PLEDGE OF ALLEGIANCE

The pledge of allegiance was performed.

IV. PUBLIC COMMENTS

Ian McDonough, Newberg resident, gave a background on how he had lived on Fulton on the Friendsview Campus and the traffic issues he saw there. The new Friendsview development was planning to put in an underground parking structure where drivers would come out into full daylight, cross a multi-use sidewalk, and try to navigate onto Fulton. There was a George Fox University parking lot right across the street and more development going in the area, which added to the traffic as well. He had told Friendsview this information and they came up with four possible options for the access. Friendsview was still advocating using Fulton, however he thought the access should be on Cherry Street. It had a northern exposure and was a quieter street, dedicated to just the residents of Friendsview. The objection to that option was it might mean less parking and they might have to modify the building footprint. He asked that the Traffic Safety Commission recommend Cherry Street as the access when the application was submitted to the Planning Commission.

Commissioner Klein disclosed that he was friends with Mr. McDonough. They had discussed this previously and walked around the site. He had recommended that Mr. McDonough come to the Commission with this concern. He thought there was already a large amount of traffic on Fulton and several parking lots that accessed Fulton and adding one more entry point was not safe. He suggested adding this item to the agenda and discussing a possible recommendation that could be made tonight.

Community Development Director Rux discussed the master plan for the Friendsview campus and what had been constructed and what was left to construct. An application had already been submitted for Phase 2 and it was currently under review. The applicant had asked for a hold on the decision to evaluate the access. The application did propose access onto Fulton. The decision would not be made by the Planning Commission, but by the Community Development Director.

Chair Roos asked if the access proposed aligned with the master plan.

CDD Rux said the master plan identified the general location of the buildings, and the access came later in the more detailed design.

Chair Roos asked if any safety or sight distance enhancements had been proposed.

CDD Rux said that was currently under review. In the future, Fulton would be two travel lanes and bike lanes with no on street parking.

Ed Gierok, Director of Campus Public Safety at George Fox University, agreed with the comments about the extra access on Fulton right across from a George Fox parking lot. He thought it would be too much vehicle traffic coming out in the same location. The college's track team also frequently ran on the sidewalk as well.

There was consensus to add this issue to the agenda under New Business.

An email was received from John Higley regarding concerns about Illinois Street. CE Hofmann had asked the Police Department to look into the accident data for the location. There was funding in the next fiscal year to look at the intersection of Main/Illinois/Highway 240.

Sergeant Hagen said they had done a search for traffic collisions in this location in the last five years. There were seven crashes in 2018 and none in 2015. There was one crash each in 2019, 2020, and 2021. The average was about two per year. The radar trailer had been placed in this location, but he did not have the data from it yet. He thought speeding was not an issue due to the corner, but it was a combination of the physics of the corner and distracted driving.

CE Hofmann said there was a request to lower the speed limit on Highway 240 in this area, but ODOT said it was not warranted.

Commissioner Carleton was shocked at the low number of crashes as the design of that intersection was unsafe.

Chair Roos said that was for reported crashes. He thought they could ask staff to get a DMV crash report.

Student Commissioner Czuk had seen many near accidents in this area.

CE Hofmann discussed a limited decision made by staff regarding Meridian and Sheridan Streets. Staff had been in discussions with George Fox about the possibility of a marked crosswalk on Meridian to allow for safer pedestrian traffic. Greenlight Engineering did a study, but they could not determine a good location for a crosswalk. George Fox requested extending the no parking on Meridian north and south of E Sheridan for better pedestrian visibility. The decision was written in November to extend the no parking on the east side of Meridian, south of Sheridan another 35 feet and also extend the no parking on the west side, north of Sheridan another 35 feet. No comments were received during the 14 day appeal period.

Chair Roos showed pictures of where the no parking would be located.

Commissioner Kuhlman asked if other areas in the City had 70 feet of site distance for heavy pedestrian traffic.

CE Hofmann said there was not another location that had 70 feet. This came about through discussions with George Fox. In the study there was not one street that people used, they were split between the locations.

Steve Thornton, Newberg resident, thought the proposal was for 35 feet from the corner, not an additional 35 feet. The proposed no parking would eliminate all of the parking in front of his house and visitors would have to park across the street.

Nancy Laughland, Newberg resident, said her family owned buildings on N Meridian. They were allowed to be built with limited parking because there was on street parking. One of the buildings was being used by a daycare provider and there were a lot of parents early in the morning and late in the afternoon dropping off and picking up children. The proposal would eliminate six parking spaces within walking distance from her property. She suggested a time limited no parking with a posted sign instead of striping it to allow for the drop off and pick up. She did not think the visibility would make enough difference to make it worth lowering the property value.

Mr. Gierok thought the cars parking on the side of Meridian that was on the George Fox property created the biggest concern as far as line of sight. There was poor lighting at night as well. He thought putting the no parking on the George Fox side of Meridian would be an improvement.

Commissioner Klein shared the concern about taking away parking in front of Mr. Thornton's house. He did not think they would gain anything by adding no parking to the north side of Meridian since it was residential and not as many students would be coming from that side. He could see adding no parking on the south side near the George Fox buildings.

Commissioner Sherry thought they should not add 35 more feet of no parking, but it should be in the low 20-feet range.

Commissioner Woodruff pointed out these were college students. She liked the idea of shortening the amount of no parking and not the full 35 extra feet.

Commissioner Carleton said there was no one arguing that they needed to add to the no parking. These were college students, not elementary school students.

Commissioner Kuhlman was in support of increasing the no parking on the George Fox property but there needed to be further consideration on the residential property.

Student Commissioner Czuk agreed that there should be less area added to the no parking.

There was consensus for staff to work with Mr. Thornton, George Fox, and Ms. Laughland to modify the no parking area that was proposed.

V. ELECT CHAIR AND VICE CHAIR

MOTION: Woodruff/Carleton moved to nominate Tony Roos as Chair and Leslie Woodruff as Vice Chair. Motion carried (6 Yes/0 No).

VI. CONSENT CALENDAR

A. 2021 Meeting Dates

Chair Roos said the Commission would continue to meet quarterly.

B. Traffic Safety Commission Meeting Minutes October 12, 2020

The October 12, 2020 minutes were approved by consensus.

VII. STAFF REPORTS & GENERAL INFORMATION

Sergeant Hagen discussed the enhanced patrols over the holidays.

CE Hofmann reviewed the Active Issues Log and gave updates on Sheridan Street, Meridian Street crosswalk, crosswalk on Hayes, and Park Lane parking. Staff made a limited decision to install no parking at the intersection of Park Lane and Villa Road and 15 feet on either side of the Chehalem Point Apartments driveway for better pedestrian visibility.

MOTION: Woodruff/Klein moved to approve the limited decision on the Park Lane intersection. Motion carried (6 Yes/0 No).

CE Hofmann also gave updates on Crestview Drive and Crestview Crossing which were under constrcution, Memorial Park sidewalks which were completed, Safe Routes for Schools grant for Edwards Elementary, Elliott Road which was still in design, and an interactive sidewalk trail map on the City's website.

Commissioner Kuhlman asked about coordination of trails that would be interacting with the Bypass.

CDD Rux explained the grant CPRD was applying for was for a new trail that would go from Industrial Parkway to Roger's Landing. This would tie into the Bypass and Riverfront Master Plan. There were many discussions that needed to occur among CPRD, ODOT, and the City.

CE Hofmann said they had one more opportunity to ask ODOT to do traffic counts at Everest and 2nd/1st for a signal. She had been waiting to make the request after Covid restrictions were lifted and they could get more accurate traffic counts.

Public Works Director Thomas discussed the new workforce development program for disadvantaged youth to work on sidewalk replacements.

VIII. NEW BUSINESS

A. Fulton Street Access

CDD Rux said the 120 day deadline for the application expired on February 10 and there was a six week delay as Friendsview was evaluating the access options. The decision had not been issued yet and the application had been referred to other agencies, internal departments, and public comments. The Traffic Safety Commission could provide a recommendation to the Director.

Commissioner Klein thought the submission from Friendsview in 2014 of arguments about reducing on street parking on Fulton due to traffic and safety issues applied to this current situation. He recommended submitting that as part of the argument for using Cherry Street as the access.

Chair Roos asked about the process for the Commission to give a recommendation on this application.

CDD Rux said the Commission would need to come up with a preference and rationale for that preference.

Chair Roos thought the Commission did not want the access on Fulton, but were open to the other options.

Commissioner Klein said there some challenges to the other options, such as removing large, well established trees and emptying the traffic onto private streets. Without doing a traffic study on these

options, he thought they would cause more concerns. Cherry Street was the best option in his opinion as it had two ways to get to Fulton, left on Center Street or right onto the private drive.

Commissioner Woodruff said the rationale for using Cherry Street was Center and Cherry Streets already had established intersections at grade with Fulton that would allow for dispersed ingress and egress, Cherry Street was not directly across from a parking lot, a ramp up to Fulton would be south facing with the sun in drivers' eyes, and Fulton was a busy sidewalk and road.

Student Commissioner Czuk agreed that Fulton was not a good option.

Commissioner Kuhlman was also concerned about the direct access onto Fulton which was across the street from another major parking lot. However, there were issues with the other options and no one stood out to him as the solution.

Commissioner Carleton thought having the parking structure dumping out on a busy street that was already serving the university was not a good option, especially for elderly drivers.

Commissioner Sherry thought the Fulton option was not safe and adding this access would make the conditions on Fulton worse. He thought Cherry Street was safer and provided two easy ways out. The other options had code issues. Cherry Street was his preference.

MOTION: Woodruff/Sherry moved to recommend the Community Development Director consider the Cherry Street option. The primary reasons were: Center and Cherry Streets were established intersections at grade with Fulton and would provide a dispersed ingress and egress that was not across from a parking lot with the auditorium, a ramp up to Fulton would be dangerous because it was south facing and would lead to the sun in drivers' eyes, Fulton was a busy sidewalk and road with multiple types of users, and it would funnel traffic directly across from an existing parking lot onto Fulton. The arguments from Mr. McDonough and from Friendsview from 2014 substantiated these concerns. Motion carried (6 Yes/0 No).

B. Online Training

Chair Roos confirmed the Commission had done the training in order to keep their City email.

All of the Commission had done the training.

IX. OLD BUSINESS

A. Sheridan Street/College Street – Options for Public Input

CE Hofmann said this was in regard to the left turn from Sheridan onto College. There was currently a sign stating no left turns allowed from 4 to 6 p.m., however people were still turning left. It was one of ODOT's top safety issues and they were willing to do some projects there. She asked for direction on how to get public input on the options.

There was discussion regarding the options. The Commission suggested a virtual open house, holding a meeting later on in the summer or fall when Covid restrictions were reduced, sending a letter out to the neighborhood giving them a heads up about the conversation, online survey, short video presentation, and email distribution list.

B. Worst Intersection List

Commissioner Woodruff suggested adding the Main/Illinois intersection to the list.

CE Hofmann wished the Commission a happy birthday. The Commission was established on February 5, 1974.

X. COMMISSIONER COMMENTS

Commissioner Carleton said the pothole on Mountainview and College was still there.

Chair Roos suggested having someone from ODOT Region 2 come to the next meeting to discuss ODOT's process on project selection and prioritization of Illinois/Highway 240.

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

XI. ADJOURNMENT

The meeting was adjourned at 9:28 PM.

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

Minutes Recorder
Tony Roos
Traffic Safety Commission Chair



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
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 enforcment actions. Vegetation was cut back. Other things being considered include evaluation of existing street lighting and potentially striping to delineate travel lanes.	Ongoing
	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.		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.
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	Ongoing.
1/12/2021	Fence at Park & Villa	In the hands of Code Enforcement	On hold due to COVID



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



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.



AUTHORITY OF THE CITY ENGINEER

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:

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

- 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.

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

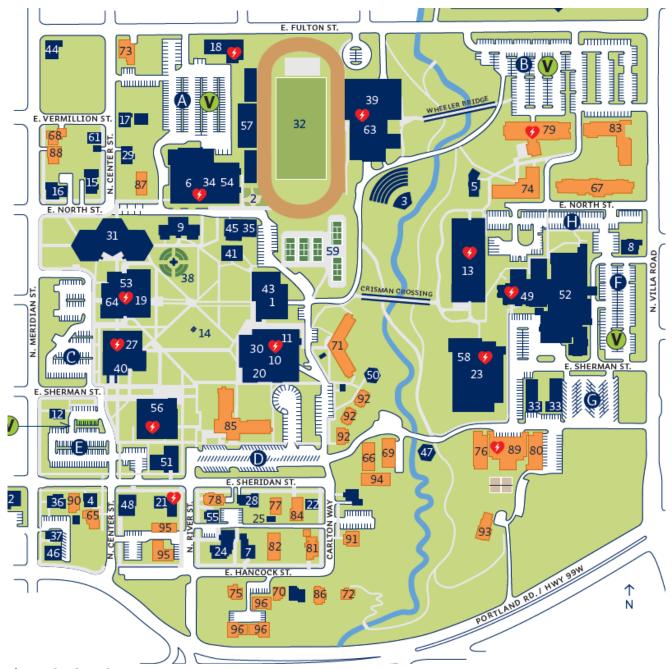


Figure 2: GFU Campus Map

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 ight 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.

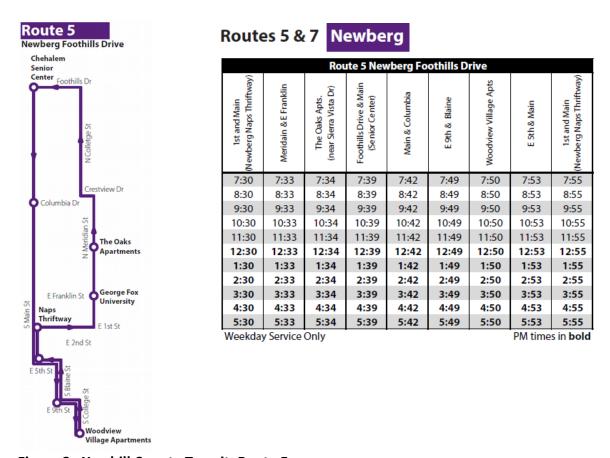


Figure 3: Yamhill County Transit, Route 5

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

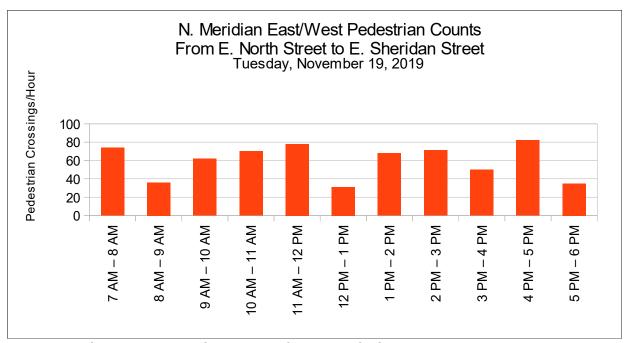


Figure 4: Pedestrian activity along N Meridian Street by hour

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 here 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 Plan¹ 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: ≤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	Vehicle ADT □ 9,000		Vehicle ADT > 9,000 to 12,000		Vehicle ADT > 12,000 to 15,000			Vehicle ADT > 15,000				
Travel Lanes and	Speed Limit **											
Median Type)	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

*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.

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.

^{**} Where the speed limit exceeds 40 mi/h (64.4 km/h), marked crosswalks alone should not be used at unsignalized locations

^{***} 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.

¹⁼ Type 1 Crossings. Ladder-style crosswalks with appropriate signage should be used.

^{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.

^{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.

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.

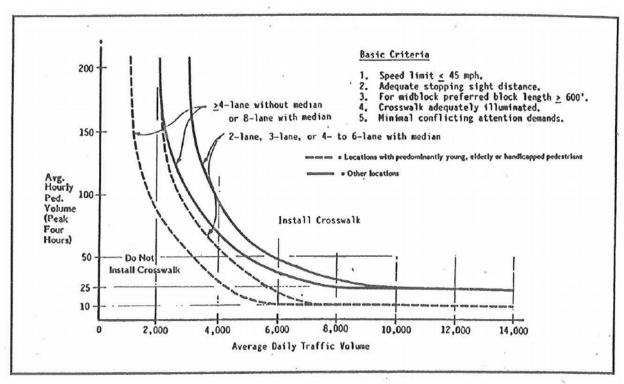
Continental crosswalk markings are the preferred style on uncontrolled approaches because they have been shown to be visible from a significantly greater distance than transverse crosswalk markings. (Crosswalk Marking Field Visibility Study, FHWA Publications No. HRT-10-068.) The added visibility of 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.



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:

- 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,

Rich Nye

Rick Nys, P.E. Principal Traffic Engineer

OREGON

RENEWS: 12/31/2020

<u>Appendix A</u>

Traffic Count, Vehicle Classification & Speed Data

LOCATION: Meridian btwn Vermilion & North QC JOB #: 15124309 **DIRECTION: NB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 21-30 21-30 02:00 AM 03:00 AM 21-30 04:00 AM 21-30 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 21-30 08:00 AM O 21-30 09:00 AM 21-30 10:00 AM 16-25 11:00 AM 21-30 12:00 PM 21-30 01:00 PM 21-30 02:00 PM 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 13.9% 50.6% 32.6% 2.7% 0.2% 0% 0% 0.1% 0% 0% 0% 0% 0% Percent **AM Peak** 12:00 AM 11:00 AM 9:00 AM 12:00 AM 7:00 AM 9:00 AM 6:00 AM 9:00 AM Volume PM Peak 12:00 PM 5:00 PM 5:00 PM 5:00 PM 5:00 PM 12:00 PM 5:00 PM Volume Comments:

,, ,																	
OCATION: M SPECIFIC LOCA CITY/STATE: Y	ATION:		nilion & N	orth												DIF	#: 1512430 RECTION: N ov 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 i Pace
Grand Total Percent	0 0%	196 13.9%	714 50.6%	460 32.6%	38 2.7%	3 0.2%	0 0%	0 0%	1 0.1%	0 0%	0 0%	0 0%	0 0%	0 0%	1412	21-30	1174
Cumulative Percent	0%	13.9%	64.4%	97%	99.7%	99.9%	99.9%	99.9%	100%	100%	100%	100%	100%	100%			
ADT 1412															Me		
Comments:																	



LOCATION: Meridian btwn Vermilion & North

SPECIFIC LOCATION:

QC JOB #: 15124309

DIRECTION: NB

Start Time	Mon	Tue 19 Nov 19	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		In.	81	
07:00 PM		74				74	-U	411	74	
08:00 PM		60				60			60	
09:00 PM		52				52			52	
10:00 PM		24				24	OMM	UNII	24	
11:00 PM		17				17			17	
Day Total		1412				1412			1412	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		9:00 AM				9:00 AM			9:00 AM	
Volume		82				82			82	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		159				159			159	

LOCATION: Meridian btwn Vermilion & North QC JOB #: 15124309 **DIRECTION: NB, SB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 23-32 21-30 02:00 AM 03:00 AM O 21-30 04:00 AM 21-30 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 21-30 08:00 AM O 21-30 09:00 AM 21-30 10:00 AM 21-30 11:00 AM 21-30 12:00 PM 21-30 01:00 PM 21-30 02:00 PM 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 12.6% 49% 34.2% 3.7% 0.2% 0% 0% 0.1% 0% 0% 0% 0% 0.1% Percent **AM Peak** 12:00 AM 11:00 AM 9:00 AM 12:00 AM 7:00 AM 8:00 AM 7:00 AM 6:00 AM 7:00 AM Volume PM Peak 12:00 PM 1:00 PM 5:00 PM 5:00 PM 6:00 PM 12:00 PM 3:00 PM 5:00 PM Volume Comments:

LOCATION: Me	eridian b	twn Verm	ilion & N	orth												QC JOB	#: 15124309
SPECIFIC LOCA	TION:															DIRECT	TION: NB, SB
CITY/STATE: Ya	amhill, O	R														DATE: N	ov 19 2019 -
Speed Range	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in
Speed Name	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	1 ace speed	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%	2813	21-30	2339
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															Mea	an Speed(Avera Med	ntile: 28 MPH age): 23 MPH dian: 23 MPH ode: 23 MPH
Comments:																	



LOCATION: Meridian btwn Vermilion & North

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124309 DIRECTION: NB, SB

Start Time	Mon	Tue 19 Nov 19	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		In	151	
07:00 PM		138				138		411	138	
08:00 PM		117				117			117	
09:00 PM		90				90	0 1 1 1 1		90	
10:00 PM		39				39	DIVIN	UNII	39	
11:00 PM		31				31			31	
Day Total		2813				2813			2813	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		7:00 AM				7:00 AM			7:00 AM	
Volume		180				180			180	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		268				268			268	

QC JOB #: 15124309 LOCATION: Meridian btwn Vermilion & North **DIRECTION: SB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 26-35 21-30 02:00 AM 03:00 AM 21-30 04:00 AM 26-35 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 21-30 08:00 AM O 21-30 09:00 AM 21-30 10:00 AM 21-30 11:00 AM 21-30 12:00 PM 21-30 01:00 PM 21-30 02:00 PM 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 47.3% 35.8% 4.8% 0.2% 0% 0% 0.1% 0.1% 0% 0% 0.1% 0.3% Percent 11.3% **AM Peak** 12:00 AM 11:00 AM 8:00 AM 7:00 AM 7:00 AM 8:00 AM Volume PM Peak 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 Volume Comments:

LOCATION: Me	eridian b	twn Verm	ilion & No	orth												QC JOB	#: 15124309
SPECIFIC LOCA	TION:															DI	RECTION: SB
CITY/STATE: Ya	amhill, O	R														DATE: N	ov 19 2019 -
Speed Range	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in
Speed Range	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	1 ace speed	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%	1101	21 30	1103
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															Mea	an Speed(Avera Med	ntile: 28 MPH age): 24 MPH dian: 24 MPH ode: 23 MPH
Comments:																	



LOCATION: Meridian btwn Vermilion & North

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124309

DIRECTION: SB

Start Time	Mon	Tue 19 Nov 19	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		In.	70	
07:00 PM		64				64	$\cdot \cup \iota$	411	64	
08:00 PM		57				57			57	
09:00 PM		38				38			38	
10:00 PM		15				15	OMIM	UNII	15	
11:00 PM		14				14			14	
Day Total		1401				1401			1401	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		8:00 AM				8:00 AM			8:00 AM	
Volume		116				116			116	
PM Peak		3:00 PM				3:00 PM			3:00 PM	
Volume		129				129			129	

LOCATION: Meridian btwn North & Franklin QC JOB #: 15124310 **DIRECTION: NB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 21-30 02:00 AM 21-30 03:00 AM 21-30 04:00 AM 21-30 05:00 AM 26-35 06:00 AM 21-30 07:00 AM 21-30 08:00 AM O 21-30 09:00 AM 21-30 10:00 AM 16-25 11:00 AM 21-30 12:00 PM 21-30 01:00 PM 21-30 02:00 PM 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 13.8% 41.3% 38% 0.7% 0% 0% 0% 0% 0% 0% 0% Percent 6.1% 0.1% **AM Peak** 12:00 AM 10:00 AM 6:00 AM 12:00 AM 9:00 AM 8:00 AM 6:00 AM 9:00 AM Volume PM Peak 12:00 PM 5:00 PM 5:00 PM 5:00 PM 6:00 PM 12:00 PM 3:00 PM 12:00 PM 5:00 PM Volume Comments:

,, ,		•															
OCATION: MA SPECIFIC LOCA CITY/STATE: Y	TION:		h & Frank	lin												DIF	#: 1512431 RECTION: N ov 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 i Pace
Grand Total Percent	0 0%	202 13.8%	603 41.3%	554 38%	89 6.1%	10 0.7%	1 0.1%	0 0%	1459	21-30	1157						
Cumulative Percent	0%	13.8%	55.2%	93.1%	99.2%	99.9%	100%	100%	100%	100%	100%	100%	100%	100%			
ADT 1459										7					Me		
Comments:																	



LOCATION: Meridian btwn North & Franklin

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124310

DIRECTION: NB

Start Time	Mon	Tue 19 Nov 19	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		In.	86	
07:00 PM		73				73		411	73	
08:00 PM		60				60			60	
09:00 PM		52				52	00 40 4	LIK IIT	52	
10:00 PM		26				26	DIVIIVI	UNII	26	
11:00 PM		18				18			18	
Day Total		1459				1459			1459	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		9:00 AM				9:00 AM			9:00 AM	
Volume		82				82			82	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		160				160			160	

QC JOB #: 15124310 LOCATION: Meridian btwn North & Franklin **DIRECTION: NB, SB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 26-35 21-30 02:00 AM 03:00 AM O 21-30 04:00 AM 23-32 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 21-30 08:00 AM O 21-30 09:00 AM 21-30 10:00 AM 21-30 11:00 AM 21-30 12:00 PM 21-30 01:00 PM 21-30 02:00 PM 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 44.5% 34.5% 5.5% 0.5% 0% 0% 0% 0% 0% 0% 0% 0% Percent 15% **AM Peak** 12:00 AM 10:00 AM 6:00 AM 12:00 AM 8:00 AM 7:00 AM 7:00 AM 8:00 AM Volume PM Peak 12:00 PM 1:00 PM 5:00 PM 5:00 PM 1:00 PM 12:00 PM 3:00 PM 12:00 PM 5:00 PM Volume Comments:

SUMMARY - Tube Count - Speed Data

LOCATION: Me		twn Nort	h & Frankl	lin												-	#: 15124310 FION: NB, SB
CITY/STATE: Ya		R															ov 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 Percent	0 0%	442 15%	1312 44.5%	1015 34.5%	161 5.5%	15 0.5%	1 0%	0 0%	2946	21-30	2327						
Cumulative Percent	0%	15%	59.5%	94%	99.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
ADT 2946															Me	an Speed(Avera Med	ntile: 28 MPH age): 23 MPH dian: 23 MPH ode: 23 MPH
Comments:																	

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



LOCATION: Meridian btwn North & Franklin

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124310 DIRECTION: NB, SB

12:00 AM 01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM	19 Nov 19 13 9 5 8		Hourly Traffic			Hourly Traffic	
01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM	9 5 8		13			13	
02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM	5 8		9			9	
03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM	8		5			5	
05:00 AM 06:00 AM 07:00 AM			8			8	
06:00 AM 07:00 AM	15		15			15	
07:00 AM	45		45			45	
	81		81			81	
08·00 ΔM	186		186			186	
00.0071111	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		In.	161	
07:00 PM	137		137		411	137	
08:00 PM	122		122			122	
09:00 PM	94		94	00000	1 1 K 1 I P	94	
10:00 PM	44		44	DIVIIVI	UNII	44	
11:00 PM	34		34			34	
Day Total	2946		2946			2946	
% Weekday Average	100%						
% Week							
% week Average	100%		100%				
AM Peak	8:00 AM		8:00 AM			8:00 AM	
Volume	194		194			194	
PM Peak	5:00 PM		5:00 PM			5:00 PM	
Volume	272		272			272	

QC JOB #: 15124310 LOCATION: Meridian btwn North & Franklin **DIRECTION: SB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 26-35 21-30 02:00 AM 03:00 AM 21-30 04:00 AM 26-35 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 21-30 08:00 AM O 21-30 09:00 AM 21-30 10:00 AM 21-30 11:00 AM 21-30 12:00 PM 21-30 01:00 PM 16-25 02:00 PM 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 47.7% 31% 4.8% 0.3% 0% 0% 0% 0% 0% 0% 0% 0% Percent 16.1% **AM Peak** 12:00 AM 8:00 AM 8:00 AM 7:00 AM 7:00 AM 8:00 AM Volume PM Peak 12:00 PM 1:00 PM 3:00 PM 4:00 PM 12:00 PM 3:00 PM Volume Comments:

LOCATION: Me	eridian b	twn North	ո & Frank	lin												QC JOB	#: 15124310
SPECIFIC LOCA	TION:															DI	RECTION: SB
CITY/STATE: Ya	amhill, O	R														DATE: N	ov 19 2019 -
Speed Range	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in
Speed Range	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	1 ace Speed	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%	1487	21-30	1170
Cumulative Percent	0%	16.1%	63.8%	94.8%	99.7%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
ADT 1487															Me	an Speed(Avera Med	ntile: 28 MPH age): 23 MPH dian: 23 MPH ode: 23 MPH
Comments:																	



LOCATION: Meridian btwn North & Franklin

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124310

DIRECTION: SB

Start Time	Mon	Tue 19 Nov 19	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	$\cdot \cup \iota$	411	64	
08:00 PM		62				62			62	
09:00 PM		42				42			42	
10:00 PM		18				18	DIVIN	UNII	18	
11:00 PM		16				16			16	
Day Total		1487				1487			1487	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		8:00 AM				8:00 AM			8:00 AM	
Volume		116				116			116	
PM Peak		3:00 PM				3:00 PM			3:00 PM	
Volume		132				132			132	

QC JOB #: 15124311 LOCATION: Meridian btwn Franklin & Sherman **DIRECTION: NB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 21-30 21-30 02:00 AM 03:00 AM 21-30 04:00 AM 21-30 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 16-25 08:00 AM O 21-30 09:00 AM 21-30 10:00 AM 16-25 11:00 AM 16-25 12:00 PM 16-25 01:00 PM 16-25 02:00 PM n 21-30 03:00 PM 21-30 04:00 PM 16-25 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 19-28 11:00 PM 21-30 O **Day Total** 21-30 0% 21.1% 50.1% 25.8% 2.6% 0.1% 0% 0% 0.1% 0% 0% 0% 0.1% 0.1% Percent **AM Peak** 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 7:00 AM 12:00 AM 7:00 AM Volume PM Peak 12:00 PM 1:00 PM 5:00 PM 6:00 PM 5:00 PM 12:00 PM 3:00 PM 5:00 PM Volume Comments:

SUMMARY - Tube Count - Speed Data

LOCATION: Me	eridian b	twn Frank	din & She	rman												QC JOB	#: 15124311
SPECIFIC LOCA	TION:															DIF	RECTION: NB
CITY/STATE: Ya	amhill, O	R														DATE: N	ov 19 2019 -
Speed Range	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in
Speed Range	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	1 ace Speed	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%	1310	21-30	1140
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															Mea	an Speed(Avera Med	ntile: 27 MPH age): 22 MPH dian: 22 MPH ode: 23 MPH
Comments:																	

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



LOCATION: Meridian btwn Franklin & Sherman

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124311

DIRECTION: NB

Start Time	Mon	Tue 19 Nov 19	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	$\cdot \cup \iota$		74	
08:00 PM		55				55			55	
09:00 PM		47				47			47	
10:00 PM		27				27	OMIM	UNII	27	
11:00 PM		18				18			18	
Day Total		1510				1510			1510	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		7:00 AM				7:00 AM			7:00 AM	
Volume		110				110			110	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		153				153			153	

QC JOB #: 15124311 LOCATION: Meridian btwn Franklin & Sherman **DIRECTION: NB, SB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 21-30 21-30 02:00 AM 03:00 AM O 21-30 04:00 AM 21-30 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 16-25 08:00 AM O 21-30 09:00 AM n 21-30 10:00 AM 16-25 11:00 AM 16-25 12:00 PM 21-30 01:00 PM 21-30 02:00 PM n 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 19.3% 49.2% 27.7% 0.1% 0% 0% 0.1% 0% 0% 0% 0% 0.3% Percent 3.3% **AM Peak** 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 7:00 AM 7:00 AM 7:00 AM Volume PM Peak 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 Volume

Comments:

SUMMARY - Tube Count - Speed Data

LOCATION: Me		twn Frank	din & She	rman												-	#: 15124311 FION: NB, SB
CITY/STATE: Ya		R															ov 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 Percent	0 0%	584 19.3%	1491 49.2%	838 27.7%	100 3.3%	4 0.1%	0 0%	1 0%	2 0.1%	0 0%	0 0%	0 0%	1 0%	8 0.3%	3029	21-30	2329
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															Me	an Speed(Avera Med	ntile: 27 MPH nge): 23 MPH dian: 23 MPH ode: 23 MPH
Comments:																	

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



LOCATION: Meridian btwn Franklin & Sherman

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124311

DIRECTION: NB, SB

Start Time	Mon	Tue 19 Nov 19	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	Ī
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		In'	178	
07:00 PM		139				139		411	139	
08:00 PM		117				117			117	
09:00 PM		106				106	0000	C 18 119	106	
10:00 PM		47				47	DIVIN	UNH	47	
11:00 PM		37				37			37	
Day Total		3029				3029			3029	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		7:00 AM				7:00 AM			7:00 AM	
Volume		207				207			207	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		276				276			276	

CITY/STATE:	Yamhill,	OR														DATE: Nov	19 201
Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Numbe
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	iotai	l ace speed	in Pac
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%	1313	21 30	1103
AM Peak	12:00 AM	8:00 AM	10:00 AM	7:00 AM	8:00 AM								12:00 AM		8:00 AM		
Volume	0	31	48	34	5	1	0	0	1	0	0	0	0	3	106		
PM Peak Volume	12:00 PM 0	3:00 PM 29	5:00 PM 76	4:00 PM 45	8:00 PM 5	12:00 PM 0	12:00 PM 0	2:00 PM 1	12:00 PM 0	12:00 PM 2	4:00 PM 145						
volume	U		70	73		- 0		_	- 0	- 0	- 0	- 0	- 0		143		
Comments:	U	29	76	45	5	Ü	U	1	0	0	0	0	U	2	145		

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

LOCATION: Me		twn Frank	lin & She	rman													#: 15124311
SPECIFIC LOCA																	RECTION: SB
CITY/STATE: Ya	amhill, O	R														DATE: N	ov 19 2019 -
Speed Range	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in
speed range	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	race speed	Pace
Grand Total	0	265	734	449	60	2	0	1	1	0	0	0	0	7	1510	21.20	1102
Percent	0%	17.4%	48.3%	29.6%	3.9%	0.1%	0%	0.1%	0.1%	0%	0%	0%	0%	0.5%	1519	21-30	1183
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															Me	an Speed(Avera Med	ntile: 28 MPH nge): 23 MPH nge): 23 MPH ode: 23 MPH
Comments:																	



LOCATION: Meridian btwn Franklin & Sherman

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124311

DIRECTION: SB

Start Time	Mon	Tue 19 Nov 19	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		In.	81	
07:00 PM		65				65		411	65	
08:00 PM		62				62			62	
09:00 PM		59				59			59	
10:00 PM		20				20	DIVIN	UNII	20	
11:00 PM		19				19			19	
Day Total		1519				1519			1519	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		8:00 AM				8:00 AM			8:00 AM	
Volume		106				106			106	
PM Peak		4:00 PM				4:00 PM			4:00 PM	
Volume		145				145			145	

LOCATION: Meridian btwn Sherman & Sheridan QC JOB #: 15124312 **DIRECTION: NB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 23-32 21-30 02:00 AM 03:00 AM 21-30 04:00 AM 21-30 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 21-30 08:00 AM O 21-30 09:00 AM n 21-30 10:00 AM 21-30 11:00 AM 21-30 12:00 PM 21-30 01:00 PM 21-30 02:00 PM 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 7.3% 50% 37% 5.5% 0.1% 0.1% 0% 0% 0% 0% 0% 0% Percent 0.1% **AM Peak** 12:00 AM 6:00 AM 12:00 AM 12:00 AM 12:00 AM 12:00 AM 12:00 AM 12:00 AM 7:00 AM 7:00 AM 9:00 AM 6:00 AM 11:00 AM 9:00 AM Volume PM Peak 12:00 PM 5:00 PM 5:00 PM 5:00 PM 6:00 PM 12:00 PM 12:00 PM 5:00 PM Volume Comments:

LOCATION: Me		twn Sheri	man & Sh	eridan												-	#: 15124312
SPECIFIC LOCA CITY/STATE: Ya		R															RECTION: NB ov 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 Percent	0 0%	95 7.3%	650 50%	480 37%	71 5.5%	1 0.1%	1 0.1%	1 0.1%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1299	21-30	1130
Cumulative Percent	0%	7.3%	57.4%	94.3%	99.8%	99.8%	99.9%	100%	100%	100%	100%	100%	100%	100%			
ADT 1299															Me	an Speed(Avera	ntile: 28 MPH age): 24 MPH dian: 24 MPH ode: 23 MPH
Comments:																	



LOCATION: Meridian btwn Sherman & Sheridan

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124312

DIRECTION: NB

Start Time	Mon	Tue 19 Nov 19	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	00000		36	
10:00 PM		15				15	DIVIN		15	
11:00 PM		13				13			13	
Day Total		1299				1299			1299	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		9:00 AM				9:00 AM			9:00 AM	
Volume		96				96			96	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		132				132			132	
omments:										

LOCATION: Meridian btwn Sherman & Sheridan QC JOB #: 15124312 **DIRECTION: NB, SB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 26-35 21-30 02:00 AM 03:00 AM O 21-30 04:00 AM 21-30 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 21-30 08:00 AM O 21-30 09:00 AM 21-30 10:00 AM 21-30 11:00 AM 21-30 12:00 PM 21-30 01:00 PM 21-30 02:00 PM 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 50.9% 35.4% 0.2% 0% 0% 0% 0% 0% 0% 0% Percent 8.2% 5.1% 0.1% **AM Peak** 12:00 AM 10:00 AM 6:00 AM 12:00 AM 12:00 AM 12:00 AM 12:00 AM 12:00 AM 12:00 AM 7:00 AM 8:00 AM 9:00 AM 3:00 AM 7:00 AM Volume PM Peak 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 Volume Comments:

LOCATION: Me	eridian b	twn Sheri	man & Sh	eridan												QC JOB	#: 15124312
SPECIFIC LOCA	TION:															DIRECT	Γ <mark>ΙΟΝ</mark> : NB, SB
CITY/STATE: Ya	amhill, O	R														DATE: N	ov 19 2019 -
Speed Range	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Pace Speed	Number in
Speed Name	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	race speed	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%	2390	21-30	2237
Cumulative Percent	0%	8.2%	59.1%	94.6%	99.7%	99.8%	99.9%	100%	100%	100%	100%	100%	100%	100%			
ADT 2590															Mea	an Speed(Avera Med	ntile: 28 MPH nge): 24 MPH lian: 24 MPH ode: 23 MPH
Comments:																	



LOCATION: Meridian btwn Sherman & Sheridan

SPECIFIC LOCATION: CITY/STATE: Yamhill, OR QC JOB #: 15124312 DIRECTION: NB, SB

Start Time	Mon	Tue 19 Nov 19	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	0 1 1 1 1		74	
10:00 PM		24				24	DIVIN		24	
11:00 PM		28				28			28	
Day Total		2590				2590			2590	
% Weekday Average		100%								
% Week Average		100%				100%				
AM Peak		7:00 AM				7:00 AM			7:00 AM	
Volume		169				169			169	
PM Peak		5:00 PM				5:00 PM			5:00 PM	
Volume		229				229			229	
omments:										

LOCATION: Meridian btwn Sherman & Sheridan QC JOB #: 15124312 **DIRECTION: SB** SPECIFIC LOCATION: CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Number **Start Time** Total Pace Speed in Pace 12:00 AM 21-30 01:00 AM 26-35 02:00 AM 21-30 03:00 AM 21-30 04:00 AM 26-35 05:00 AM 21-30 06:00 AM 21-30 07:00 AM 21-30 08:00 AM O 21-30 09:00 AM n 21-30 10:00 AM 21-30 11:00 AM 21-30 12:00 PM 21-30 01:00 PM 21-30 02:00 PM 21-30 03:00 PM 21-30 04:00 PM 21-30 05:00 PM 21-30 06:00 PM 21-30 07:00 PM 21-30 08:00 PM 21-30 09:00 PM 21-30 10:00 PM 21-30 11:00 PM 21-30 O **Day Total** 21-30 0% 51.8% 33.9% 4.8% 0.2% 0% 0% 0.1% 0% 0% 0% 0% Percent 9.1% 0.1% **AM Peak** 12:00 AM 8:00 AM 10:00 AM 7:00 AM 5:00 AM 8:00 AM Volume PM Peak 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 Volume Comments:

LOCATION: Me	eridian b	twn Sheri	man & Sh	eridan													#: 15124312
SPECIFIC LOCA	TION:															DI	RECTION: SB
CITY/STATE: Ya	amhill, O	R														DATE: N	ov 19 2019 -
Cnood Dongo	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	Dogo Chood	Number in
Speed Range	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Pace Speed	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%	1291	21-30	1107
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															Me	an Speed(Avera Med	ntile: 28 MPH nge): 23 MPH lian: 23 MPH ode: 23 MPH
Comments:							_										



LOCATION: Meridian btwn Sherman & Sheridan

SPECIFIC LOCATION: CITY/STATE: Yambill, OR QC JOB #: 15124312 DIRECTION: SB

DATE: Nov 19 2019 - Nov 19 2019

Start Time	Mon	Tue	Wed	Thu	Fri	Average Weekday	Sat	Sun	Average Week	Average Week Profile
Start Time		19 Nov 19				Hourly Traffic			Hourly Traffic	Average week i folile
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		In.	73	
07:00 PM		61				61		411	61	
08:00 PM		52				52			52	
09:00 PM		38				38	00000	1.18.119	38	
10:00 PM		9				9 5	DIVIN	UNII	1 5 9	
11:00 PM		15				15			15	
Day Total		1291				1291			1291	
% Weekday		100%								
Average		100%								
% Week		100%				100%				
Average										
AM Peak		8:00 AM				8:00 AM			8:00 AM	
Volume		83				83			83	
PM Peak		4:00 PM				4:00 PM			4:00 PM	
Volume		124				124			124	

LOCATION: E Sherman St east of Meridian QC JOB #: 15124305 **SPECIFIC LOCATION: DIRECTION: EB, WB** CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Start Time Total 12:00 AM 0 0 0 0 0 6 13 14 6 5 5 7 8 8 7 4 10 10 3 3 1 0 01:00 AM 02:00 AM 0 PEAK HOUR (AM): 11:00 AM 03:00 AM 04:00 AM 1 1 1 6 14 15 9 7 16 15 11 18 18 19 24 13 3 6 4 0 2 PEAK HOUR (PM): 05:00 PM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 0 1 AVERAGE SPEED: 3 2 11 09:00 AM 10:00 AM 11:00 AM MODAL SPEED: 8 3 10 11 12:00 PM **MEDIAN SPEED:** 01:00 PM 02:00 PM 03:00 PM 85th PERCENTILE: POSTED SPEED: 04:00 PM 15 05:00 PM 06:00 PM 14 3 07:00 PM **TOTAL TRUCKS:** 08:00 PM 09:00 PM 10:00 PM 3 (Class 4 thru 13) 0 11:00 PM Day Total Percent 204

Report generated on 12/3/2019 2:06 PM

LOCATION: E Sherman St west of Meridian QC JOB #: 15124306 **SPECIFIC LOCATION: DIRECTION: EB, WB** CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Start Time Total 12:00 AM 0 0 0 0 1 4 **14** 4 3 4 8 10 7 5 8 11 **12** 8 2 3 4 0 01:00 AM 02:00 AM 0 0 1 6 18 9 8 11 12 16 16 11 12 12 18 PEAK HOUR (AM): 07:00 AM 03:00 AM 04:00 AM 0 Ö PEAK HOUR (PM): 05:00 PM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 2 4 5 AVERAGE SPEED: 09:00 AM 10:00 AM 11:00 AM MODAL SPEED: 12:00 PM **MEDIAN SPEED:** 01:00 PM 02:00 PM 03:00 PM 85th PERCENTILE: 6 4 7 POSTED SPEED: 04:00 PM 05:00 PM 06:00 PM 12 24 11 3 4 6 07:00 PM **TOTAL TRUCKS:** 08:00 PM 1 2 09:00 PM (Class 4 thru 13) 10:00 PM 1 11:00 PM Day Total Percent 81 42.6% 190

Report generated on 12/3/2019 2:06 PM

LOCATION: E North St east of Meridian QC JOB #: 15124307 **SPECIFIC LOCATION: DIRECTION: EB, WB** CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Start Time Total 12:00 AM 0 1 0 0 1 0 6 8 **13** 8 2 6 3 8 9 7 5 **9** 8 3 6 1 5 01:00 AM 3 02:00 AM 0 0 1 0 6 11 **14** 10 5 10 6 12 14 13 12 6 12 8 10 PEAK HOUR (AM): 08:00 AM 03:00 AM 04:00 AM 0 Ö PEAK HOUR (PM): 05:00 PM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 0 AVERAGE SPEED: 09:00 AM 10:00 AM 11:00 AM MODAL SPEED: 3 **4** 12:00 PM **MEDIAN SPEED:** 01:00 PM 02:00 PM 03:00 PM 85th PERCENTILE: POSTED SPEED: 04:00 PM 05:00 PM 06:00 PM 7 4 3 07:00 PM **TOTAL TRUCKS:** 08:00 PM 09:00 PM (Class 4 thru 13) 10:00 PM 5 11:00 PM Day Total Percent 75 40.8% 184

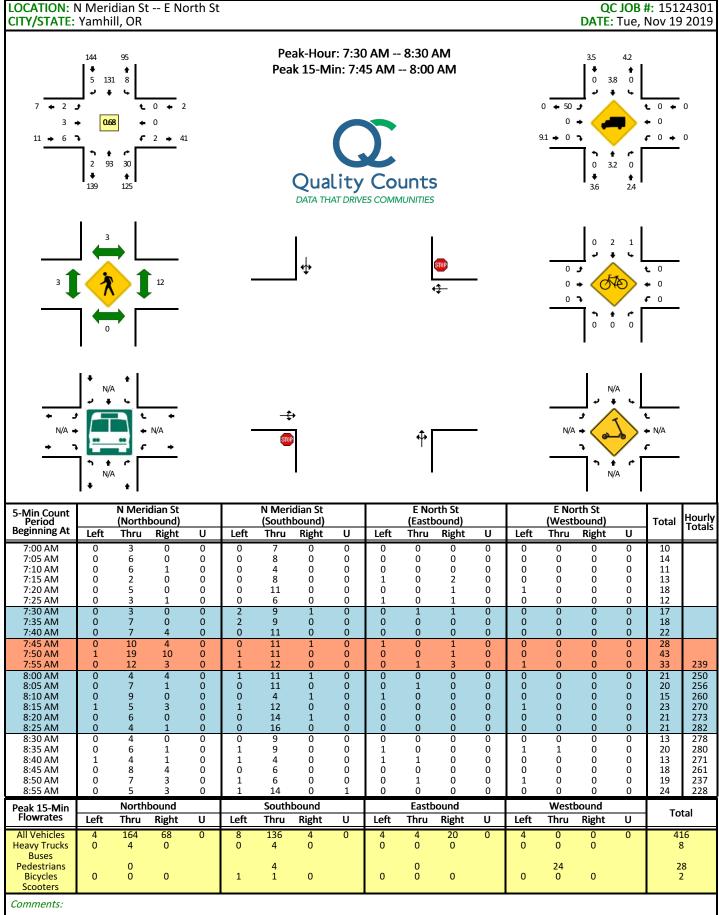
Report generated on 12/3/2019 2:06 PM

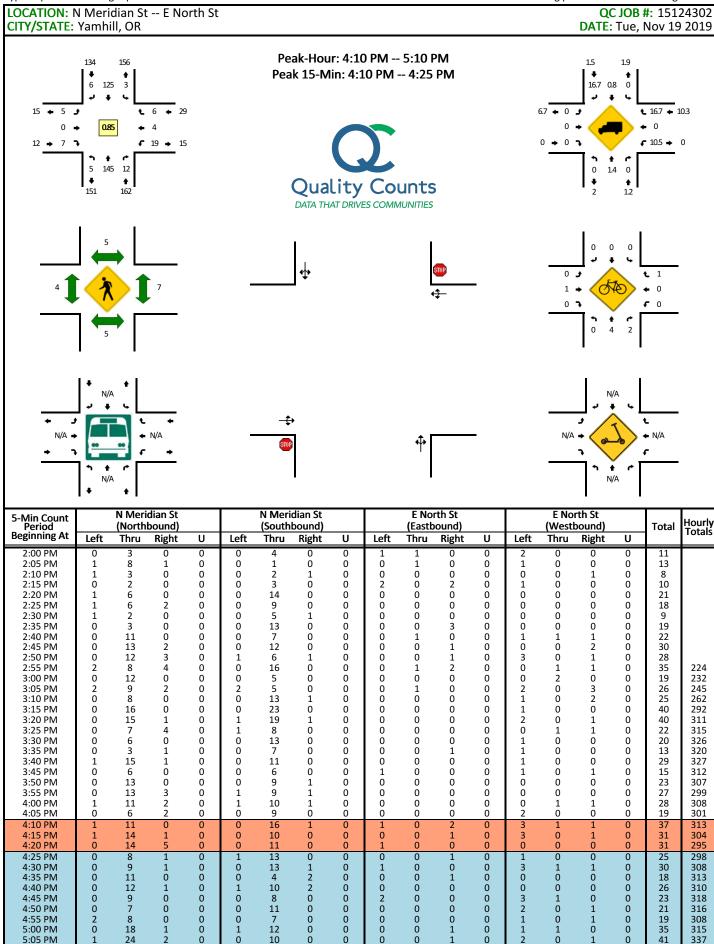
LOCATION: E North St west of Meridian QC JOB #: 15124308 **SPECIFIC LOCATION: DIRECTION: EB, WB** CITY/STATE: Yamhill, OR **DATE:** Nov 19 2019 Start Time Total 12:00 AM 0 1 0 1 0 4 2 5 3 3 11 1 9 7 5 2 01:00 AM 0 0 1 0 5 **15** 8 6 6 6 9 4 18 7 15 02:00 AM PEAK HOUR (AM): 07:00 AM 03:00 AM 04:00 AM 0 PEAK HOUR (PM): 05:00 PM 05:00 AM 06:00 AM 07:00 AM 08:00 AM AVERAGE SPEED: 09:00 AM 10:00 AM 11:00 AM MODAL SPEED: 1 12:00 PM 6 **MEDIAN SPEED:** 01:00 PM 02:00 PM 03:00 PM 85th PERCENTILE: 6 6 POSTED SPEED: 04:00 PM 05:00 PM 06:00 PM 23 10 5 7 4 0 16 5 3 07:00 PM **TOTAL TRUCKS:** 08:00 PM 1 1 0 6 3 0 09:00 PM (Class 4 thru 13) 10:00 PM 11:00 PM Day Total Percent 155

Report generated on 12/3/2019 2:06 PM

<u>Appendix B</u>

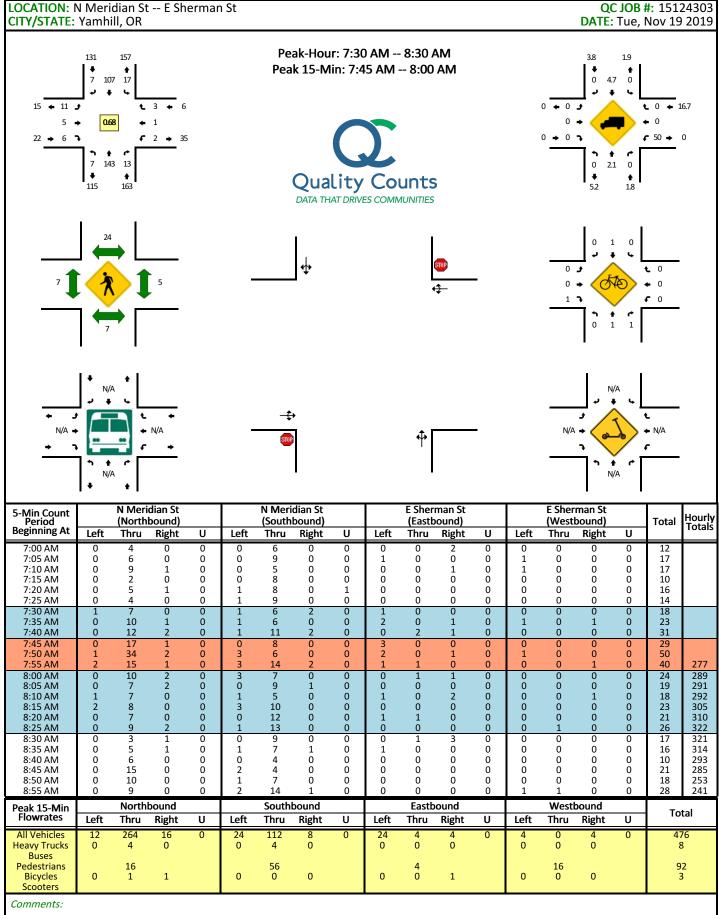
Turning Movement Counts

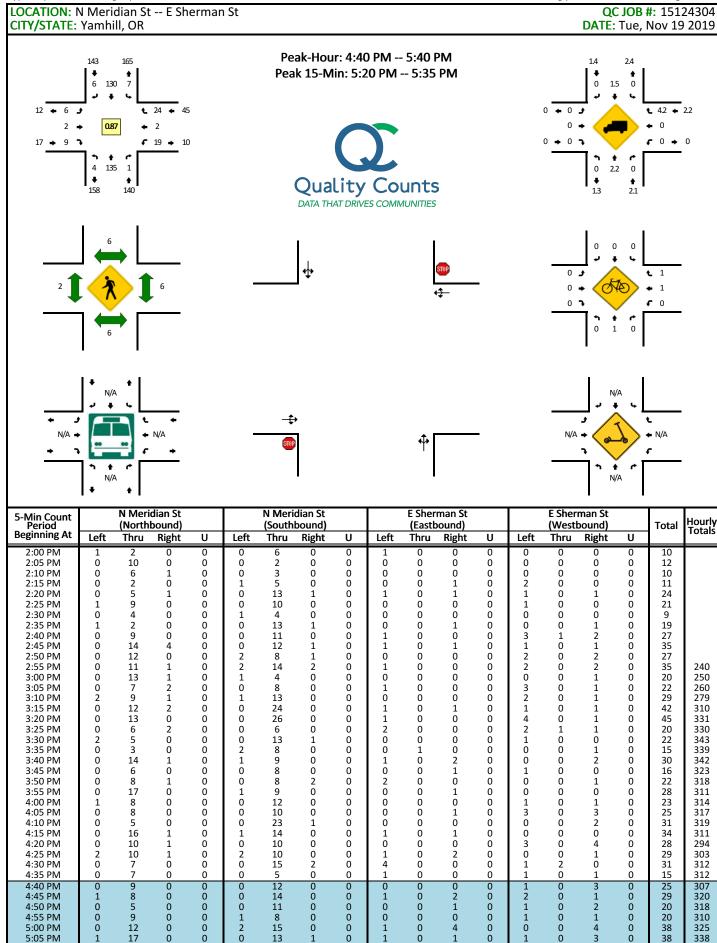




5-Min Count Period			dian St bound)				dian St bound)				rth St ound)				rth St bound)		Total	Hourly Totals
Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		TOLAIS
5:10 PM	1	9	0	0	0	8	2	0	1	0	0	0	2	0	0	0	23	323
5:15 PM	0	12	1	0	1	6	1	0	0	0	0	0	0	0	0	0	21	313
5:20 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		North	bound			South	bound			Eastb	ound			Westl	bound		Т	امدا
Flowrates	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	10	tal
All Vehicles	8	156	24	0	0	148	4	0	8	0	12	0	24	4	8	0	39	96
Heavy Trucks	0	4	0		0	4	4		0	0	0		0	0	4		1	.6
Buses																		
Pedestrians		4				4				0				4			1	.2
Bicycles Scooters	0	2	0		0	0	0		0	0	0		0	0	0		2	2
Comments:																		

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





5-Min Count Period			dian St bound)				dian St bound)				man St ound)				man St bound)		Total	Hourly Totals
Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		Totals
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		North	bound			South	bound			Eastb	ound			Westl	oound		То	tal
Flowrates	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	10	ldi
All Vehicles	4	192	4	0	8	124	4	0	4	4	0	0	20	8	24	0	3:	96
Heavy Trucks	0	12	0		0	0	0		0	0	0		0	0	0		1	.2
Buses																		
Pedestrians		16				4				0				0			2	.0 0
Bicycles Scooters	0	0	0		0	0	0		0	0	0		0	0	0		(0
Comments:																		

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

<u>Appendix C</u>

Pedestrian Counts



Location: N Meridian St South of E North St

Date: 11/19/2019

Time: 7:00 AM - 6:00 PM

ı	Pedestrians				
Start Time	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
11:15 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
1:43 PM 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		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
5:40 PM	0	0
5:45 PM 5:50 PM	0	0
5:50 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					
	Pedestrians					
Start Time	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
10:15 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
11:45 AM 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
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
1:40 PM	0	0
1:45 PM	1	0
1:50 PM		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

	Pedes	trians
Start Time	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
11:43 AW	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
12:45 PM		0
12:50 PM 12:55 PM	0	
	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
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
	2 7	22
Total	L1	22



Location: N Meridian St North of E Sherman St

Date: 11/19/2019

Time: 7:00 AM - 6:00 PM

	Pedestrians					
Start Time	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
12:30 PM		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
1:13 PM 1:20 PM	3	3
1:20 PM	0	3
1:25 PM 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
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

	Pedestrians					
Start Time	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
11:13 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
1:43 PM 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
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

	Pedestrians					
Start Time	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				

		T
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		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
1.55 1 101	·	

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
10(0)	77	_

<u>Appendix D</u>

Critical Crash Rate Calculations & Crash Data

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

Intersection Crash Data							
	Intersection		Year				
Intersection	Type	2014	2015	2016	2017	2018	Total
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 Cra Intersection Pop. Type	Average Crash Rate per intersection type Sum of Sum of 5- Rate for Ref Intersection Pop. Type Crashes year MEV 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 ANAXLYSIS AND REPORTING UNIT

MERIDIAN ST and Intersectional Crashes at MERIDIAN ST, City of Newberg, Yamhill County, 01/01/2009 to 12/31/2018 URBAN NON-SYSTEM CRASH LISTING

CITY OF NEWBERG, YAMHILL COUNTY

CDS380 01/26/2020

of 91 Crash records shown. 27 - 31

				CAUSE	32,02	0.0	00		000	0.2	0.0	0.5		00	0.2	0.0	00		00	27	0.0	7.2	00	03	00	03	00
				ACT EVENT	082	018	000		000		015	000		000		000	000		000		000	000	008	053	000 053	000	000
				ERROR			000		000			028		000			000		000			016,080				021	000
		S	INJ G E TICNS	P# TYPE SVRTY E X RES LOC			01 DRVR NONE 00 Unk UNK		01 DRVR NONE 00 Unk UNK UNK			01 DRVR INJB 42 F OR-Y OR<25		01 DRVR INJC 26 F OR-Y OR<25			01 DRVR NONE 00 Unk UNK		01 DRVR NONE 00 Unk UNK			01 DRVR INJB 56 F OR-Y OR<25				01 DRVR NONE 18 M OR-Y OR<25	01 DRVR NONE 21 F OR-Y
		MOVE	FROM	TO	TURN-L	M -N		STRGHT	s N	TURN-L	W -N		тнрапь	S - N	TURN-L	W -N		STRGHT	N-	STRGHT	N-		PRKD-P S -N	STRGHT	E -W		STRGHT S -N
	SPCL USE	TRLR QTY	OWNER	V# TYPE	01 NONE 9	N/A	PSNGR CAR	02 NONE 9	N/A PSNGR CAR	01 NONE 0	PRVTE	PSNGR CAR	O NONE	E ~	01 NONE 9	N/A	UNKNOWN	02 NONE 9	N/A PSNGR CAR	01 NONE 0	PRVTE	PSNGR CAR	02 NONE 0 PRVTE PSNGR CAR	01 NONE 0	PRVTE	PSNGR CAR	02 NONE PRVTE PSNGR CAR
		CRASH	COLL	SVRTY	ANGL-OTH	TURN	PDO			ANGL-OTH	TURN	INJ			ANGL-OTH	TURN	PDO			PRKD MV	88-0	INJ		ANGL-OTH	ANGL	PDO	
		WTHR	SURF	LIGHT	CLR	DRY	DAY			CLR	DRY	DAY			CLR	DRY	DAY			CLR	DRY	DAY		CLR	DRY	DAY	
		OFFRD	RNDBT	DRVWY	Z	z	Z			z	z	N			z	Z	z			*	Z	z		z	z	Z	
		INT-REL	TRAF-	CONTL	Z	UNKNOMN				Z	STOP SIGN				z	STOP SIGN				¥	UNKNOWN			N	STOP SIGN		
	INT-TYPE	(MEDIAN)	LEGS	(#LANES)		(NONE)	(02)			CROSS		0			CROSS		0				(NONE)	(02)		CROSS		0	
		RD CHAR	DIRECT	LOCTN	ALLEY	Ø	0.7			INTER	S	03			INTER	S	0.4			STRGHT	Ø	0.5		INTER	S	02	
	CITY STREET	FIRST STREET	SECOND STREET	LRS	MERIDIAN ST	HANCOCK ST				MERIDIAN ST	NORTH ST				MERIDIAN ST	NORTH ST				MERIDIAN ST	NORTH ST			MERIDIAN ST	SHERIDAN ST		w
	CLASS	DIST	FROM	LONG	17	127	-122 58	D + - + -		17	0	-122 58	13.98		17	0	-122 58	13.98		17	3.0	-122 58	8 5 7 7	16	0	-122 58	14.116457
	W DATE		R TIME	K LAT	N 01/27/2017	FR	1P 45 18 2.54			10/20/2015	TI	8A 45 18 15.97			09/13/2017	WE	1P 45 18 15.97 -122 58			08/14/2009	FR	5P 45 18	555555 € T	04/13/2011	WE	1P 45 18	
S	D W	INVEST E A U I C	RD DPT E L G N H I	DCSVL	00087 N N N N	CITY	z z			01083 N N N	NO RPT	z z			N N N 98600	NONE	z z			00628 N N N	NO RPT	N N		00272 N N N	NO RPT	22	

Disclaimer. The information contained in this report is committed from individual driver and police crash reports submitted to the Oreson Department of Tran sportation as required in ORS 811.720. The Crash Analysis and Reporting Unit is committed from individual driver and police crash reports submitted to the orest reports submitted from individual driver the Crash Analysis and reports and police crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and expension of the individual driver the Crash Analysis and Expension of the individual driver the Crash Analysis and Expension of the Individual driver the Crash Analysis and Expension of the Individual driver the Crash Analysis and Expension of the Individual driver the Crash Analysis and Expension of the Individual driver the Crash Analysis and Expension of the Individual driver the Crash Analysis and Expension of the Individual driver the Crash Analysis and Expension of the Individual driver t

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

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CITY OF NEWBERG, YAMHILL COUNTY

CDS380 01/26/2020

of 91 Crash records shown. 32 - 36

			CAUSE	27,01	0.0	27,01	00	02	0.0	000		000	02,08	00	000	00		0.5	000	0.5	00	000	0.7	00	000	00
			ACT EVENT		000	017	800		000	000		000		000	000	000			015	000	000	000		000	000	000
			ERROR			047,080				000		000			000	000				028		000			000	000
		CHO SWOTH THE CONTRACT OFFICE	SVRTY E X RES			01 DRVR NONE 17 F OR-Y OR<25				01 DRVR NONE 00 Unk UNK UNK		01 DRVR NONE 00 Unk UNK UNK			01 DRVR NONE 00 Unk UNK UNK	01 DRVR NONE 00 Unk UNK	UNK			01 DRVR NONE 21 F OR-Y OR<25		01 DRVR NONE 73 M OR-Y OR<25			01 DRVR NONE 00 Unk UNK	01 DRVR NONE 00 Unk UNK
	and the same of th	MOVE	OL OL	STRGHT	S-N		PRKD-P N -S	STRGHT	s- z		STRGHT	W -E	TURN-L	S -W		STRGHT N -S		STRGHT	W -E		STRGHT	;	STRGHT	N-S		U-TURN S -S
	SPCL USE	TREE OI'Y	V# TYPE		PRVTE	PSNGR CAR	02 NONE 0 PRVTE PSNGR CAR	01 NONE 9	N/A	PSNGR CAR	02 NONE 9	N/A PSNGR CAR	01 NONE 9	N/A	PSNGR CAR	02 NONE 9 N/A PSNGR CAR		01 NONE 0	PRVTE	PSNGR CAR	02 NONE 0 PRVTE	PSNGR CAR	01 NONE 9	N/A	UNKNOWN	02 NONE 9 N/A PSNGR CAR
	0	CKASH	SVRTY	PRKD MV	SS-0	PDO		ANGL-OTH	ANGL	PDO			O-1 L-TURN 01 NONE	TURN	PDO			ANGL-OTH	ANGL	PDO			S-1TURN	TURN	PDO	
		STIRE			WET	DAWN		CLR	DRY	DAY			CLR	DRY	DAY			CLR	DRY	DLIT			RAIN	WET	DAY	
		DEFED	DRVWY	×	z	z		z	Z	z			z	N	z			z	Z	z			z	z	z	
		TRAF-			UNKNOMN			z	STOP SIGN				z	STOP SIGN				Z	STOP SIGN				Z	STOP SIGN		
	INT-TYPE	(MEDIAN)	(#LANES)		(NONE)	(02)		3-LEG		0			3-LEG		0			CROSS		0			CROSS		0	
	0.00	KD CHAR	LOCIN	STRGHT	S	0.7		INTER	CN	03			INTER	S	0.1			INTER	S	04			INTER	CN	0.2	
	CITY STREET	SECOND STREET	LRS	MERIDIAN ST	SHERIDAN ST			MERIDIAN ST	SHERMAN ST				MERIDIAN ST	SHERMAN ST				MERIDIAN ST	SIERRA VISTA ST				MERIDIAN ST	SIERRA VISTA ST		
		O DAY	K LAT	16/2011	WE 75	8A 45 18 -122 58 6 200051 14 1220066		08/01/2017 17	TU 0	8A 45 18 10.01 -122 58	14.09		N N 08/14/2017 17	MO 0	12P 45 18 10.01 -122 58	5		N N 11/19/2014 19	WE 0	5P 45 18 33.99 -122 58	13.94		06/23/2016 18	TH 0	4P 45 18 34.02 -122 58	49. · 61
S D M	д : В :	PD DPT E L G N H	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	N K	NO RPT	× ×		00800 N N N	CITY	N N			00853 N N N N	CITY	z z			01247 N N N N	CIIX	z z			N N N 86900	NONE	NN	

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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:

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 \$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

From: <u>Bill Buhrow</u>

Sent: Wednesday, January 13, 2021 12:37 AM

To: <u>Kaaren Hofmann</u>; <u>Ed Gierok</u>
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

22

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

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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,

22

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

??



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Helpful Links:

City of Newberg Online GIS Mapping
City of Newberg Municipal Code
City of Newberg Public Works Design and Construction Standards

From:	<u>Ed Gierok</u>										
Sent:	Tuesday, January 12, 2021 9:17 AM										
То:	<u>Kaaren Hofmann</u>										
Cc: Bill Buhrow											
Subject: Re: No Parking Request											
_	m outside the City of Newberg's organization. Do not click links or open 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 Universi	ty										
503-554-2090											
	at 8:55 AM Kaaren Hofmann newbergoregon.gov > wrote:										
Good morning-											
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January 13, 2021

RE: FRIENDSVIEW UNIVERSITY VILLAGE PHASE 2

RECOMMENDATION FROM THE TRAFFIC SAFETY COMMISSION

Dear Mr. Rux:

At the Traffic Safety Commission's January 11, 2021 meeting, we heard testimony on a potential safety hazard in the submitted plans for the above project. The concern is with the proposed location of the garage driveway onto SW Fulton Street. See the attached information provided by Ian McDonough.

The Commission is concerned about the pedestrian conflicts and additional traffic being funneled into a location on SW Fulton that is already heavily congested. After much discussion, the Traffic Safety Commission voted to provide a recommendation to you to consider in your review of the land use application.

The Traffic Safety Commission recommends that the City not approve the proposed garage driveway onto SW Fulton Street but instead require the driveway to be located onto what was SW Cherry Street. This will eliminate the pedestrian conflicts and will allow for the traffic to disperse into existing intersections.

Feel free to contact me with any questions you may have on this recommendation.

Regards,

Tony Roos, Chair

Traffic Safety Commission

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