# NOTICE OF PUBLIC MEETING \& AGENDA <br> TRAFFIC SAFETY COMMISSION <br> 7:00 PM, MONDAY, April 12, 2021 

## VIA Zoom

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Dial(for higher quality, dial a number based on your current location):
US: +1 2532158782 or +13462487799 or +16699006833 or +13017158592
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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 <br> MONDAY, January 11, 2021 7:00 PM <br> 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 <br> Chair Roos called the meeting to order at 7:00 PM.

## II. ROLL CALL

| Members Present: | Tony Roos <br> Lesley Woodruff <br> Kasper Czuk | Mark Carleton <br> Roger Kuhlman | Neal Klein <br> Robert Sherry |
| :--- | :--- | :--- | :--- |
| Members Absent: | John Ehrlich, Sarah Sand, and Jeff Grider |  |  |
| Staff Present: | Kaaren Hofmann, City Engineer <br> Doug Rux, Community Development Director <br> Russ Thomas, Public Works Director <br> 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 <br> A. 2021 Meeting Dates <br> 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 $12^{\text {th }}$ day of April, 2021

## Minutes Recorder

Tony Roos
Traffic Safety Commission Chair

TRAFFIC SAFETY COMMISSION CITIZEN ISSUE LOG

| 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 |
| 5/19/2020 | Resident requested an crosswalk and ramp immediately across from the Professional Center driveway on Villa Road. | Looking into this issue. | Ongoing |
| 5/13/2020 | Resident requested a crosswalk at E First Street and OR 219. | She was directed to ODOT. ODOT responded. | No further action at this time. Staff will be reminding ODOT to have traffic counts taken in the fall to determine if signal warrants are met. |
| 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<br>Cc: Jeff Kosmicki, PD Chief<br>From: Kaaren Hofmann, PE, City Engineer<br>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:

## MEMORANDUM

ENGINEERING SERVICES
P.O. Box $970 \bullet 414$ E. First Street • Newberg, Oregon 97132
Tel 503.537.1240 • Fax 503.537.1277

November 24, 2020

To: Newberg Traffic Safety Commission<br>Cc: Jeff Kosmicki, PD Chief<br>From: Kaaren Hofmann, PE, City Engineer<br>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 $35^{\prime}$ 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.


[^0]
## 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

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.
[^1]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.

Routes 5\& 7 Newberg

| Route 5 Newberg Foothills Drive |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| 7:30 | 7:33 | 7:34 | 7:39 | 7:42 | 7:49 | 7:50 | 7:53 | 7:55 |
| 8:30 | 8:33 | 8:34 | 8:39 | 8:42 | 8:49 | 8:50 | 8:53 | 8:55 |
| 9:30 | 9:33 | 9:34 | 9:39 | 9:42 | 9:49 | 9:50 | 9:53 | 9:55 |
| 10:30 | 10:33 | 10:34 | 10:39 | 10:42 | 10:49 | 10:50 | 10:53 | 10:55 |
| 11:30 | 11:33 | 11:34 | 11:39 | 11:42 | 11:49 | 11:50 | 11:53 | 11:55 |
| 12:30 | 12:33 | 12:34 | 12:39 | 12:42 | 12:49 | 12:50 | 12:53 | 12:55 |
| 1:30 | 1:33 | 1:34 | 1:39 | 1:42 | 1:49 | 1:50 | 1:53 | 1:55 |
| 2:30 | 2:33 | 2:34 | 2:39 | 2:42 | 2:49 | 2:50 | 2:53 | 2:55 |
| 3:30 | 3:33 | 3:34 | 3:39 | 3:42 | 3:49 | 3:50 | 3:53 | 3:55 |
| 4:30 | 4:33 | 4:34 | 4:39 | 4:42 | 4:49 | 4:50 | 4:53 | 4:55 |
| 5:30 | 5:33 | 5:34 | 5:39 | 5:42 | 5:49 | 5:50 | 5:53 | 5:55 |
| Weekda | Service |  |  |  |  |  | M time | in bold |

Figure 3: Yamhill County Transit, Route 5

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

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

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

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

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

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.
- $\mathbf{N}$ 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, $85^{\text {th }}$ 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 <br> 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 Plan ${ }^{1}$ presents "Roadway Crossing Policies and Treatments." Below are excerpts of that plan that are germane to this analysis.

## "ODOT Crosswalk Policy

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

## Criteria for Marking Crosswalks @ Mid-Block Locations

Generally mid-block crosswalks are discouraged for the same reasons as uncontrolled approaches. Midblock 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

[^2]"ladder style") markings; and combinations of these marking styles.

Type 1: Marked/Unsignalized Crossings
A marked/unsignalized crossing (Type 1) consists of a crosswalk, signage, and often no other devices to slow or stop traffic...The following thresholds recommend where unsignalized crossings may be acceptable:
Maximum traffic volumes: $\leq 9,000-12,000$ Average Daily Traffic (ADT)volumes
Maximum travel speed: 35 MPH

Minimum line of sight: 25 MPH zone: 155 feet

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

## Summary of At-Grade Crossing Recommendations

Table IV-2. provides guidance on how to implement at-grade path/roadway crossings in Newberg.
Table IV-2. Summary of At-Grade Crossing Recommendations

| Roadway Type (Number of Travel Lanes and Median Type) | $\begin{gathered} \text { Vehicle ADT } \\ \square 9,000 \end{gathered}$ |  |  | $\begin{gathered} \text { Vehicle ADT } \\ >9,000 \text { to } 12,000 \end{gathered}$ |  |  | $\begin{aligned} & \text { Vehicle ADT } \\ & >12,000 \text { to } \\ & 15,000 \end{aligned}$ |  |  | $\begin{gathered} \text { Vehicle ADT } \\ >15,000 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Speed Limit ** |  |  |  |  |  |  |  |  |  |  |  |
|  | 30 $\mathrm{mi} / \mathrm{h}$ | $\begin{aligned} & 35 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 40 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ | 30 mi/h | $\begin{aligned} & 35 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 40 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 30 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 35 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 40 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 30 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 35 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ | $\begin{aligned} & 40 \\ & \mathrm{mi} / \mathrm{h} \end{aligned}$ |
| 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 $40 \mathrm{mi} / \mathrm{h}(64.4 \mathrm{~km} / \mathrm{h})$, marked crosswalks alone should not be used at unsignalized locations.
*** The raised median or crossing island must be at least four $\mathrm{ft}(1.2 \mathrm{~m})$ wide and six $\mathrm{ft}(1.8 \mathrm{~m})$ 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 midblock 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 <br> 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 85 th-percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.

New marked crosswalks alone, without other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of pedestrian presence, should not be installed across uncontrolled roadways where the speed limit exceeds 40 mph and either:
A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or
B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.

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

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

## Discussion

While there is a fair amount of pedestrian activity along $N$ Meridian Street, there is not evidence that marking crosswalks in the study area will necessarily enhance safety for pedestrians nor is there
evidence that providing marked crosswalks would be a safety detriment. This conclusion aligns with adopted City of Newberg crosswalk guidance. N Meridian Street is not a high volume or high speed roadway. Pedestrians will find ample gaps in the traffic stream to cross N Meridian Street with little to no delay. There is no evidence of any recent vehicle/pedestrian traffic crashes. GFU staff indicates that they are not aware of pedestrian related crashes, although they have concerns about pedestrian safety along the corridor.

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

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

## Recommendations

## Option 1:

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


W11-2*
2. Install W11-2 and W16-7P (diagonal downward pointing arrow) signage at the N Meridian Street/E Sherman Street intersection. This intersection was observed to have the greatest amount of pedestrians crossing at the intersection. In order to best take advantage of the
intersection configuration, it would be recommended to place this sign on the southeast quadrant of the intersection facing the northbound traffic and the northwest quadrant of the intersection facing southbound traffic. This signage would bring awareness to the crossings that occur both across the north and south legs of the intersection.


## Option 2:

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

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

## Other possible future considerations:

1. Reconstruction of crossings to provide or upgrade curb ramps to better facilitate crossings for all users as well as provide better channelization of the preferred crossing locations. Evaluate compliance with ADA at each crossing location and prioritize reconstruction of those ramps. A possible priority would be to start with construction at the locations that have no curb ramps at all then reconstruct ramps that are not compliant with ADA standards.
2. With curb ramp reconstruction, consider the installation of curb extensions to improve visibility for pedestrians to see oncoming traffic as well as improve the visibility of pedestrians to drivers.
3. Evaluate and improve street illumination, especially at intersections, although improved
illumination along the corridor would also provide public safety benefits.
4. Ensure that parking removal at crossings provides sufficient stopping sight distance of 155 feet.

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

Sincerely,

## Risk Ny

Rick Nys, P.E.
Principal Traffic Engineer


## Appendix A

Traffic Count, Vehicle Classification \& Speed Data

Type of report: Tube Count - Speed Data

| LOCATION: Meridian btwn Vermilion \& North SPECIFIC LOCATION: <br> CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QC JOB \#: 15124309 <br> DIRECTION: NB <br> DATE: Nov 192019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| 12:00 AM | 0 | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 21-30 | 5 |
| 01:00 AM | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 21-30 | 5 |
| 02:00 AM | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 21-30 | 3 |
| 03:00 AM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 21-30 | 2 |
| 04:00 AM | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21-30 | 7 |
| 05:00 AM | 0 | 0 | 7 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 21-30 | 18 |
| 06:00 AM | 0 | 4 | 8 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 21-30 | 22 |
| 07:00 AM | 0 | 9 | 47 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 21-30 | 70 |
| 08:00 AM | 0 | 5 | 37 | 19 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 21-30 | 56 |
| 09:00 AM | 0 | 13 | 40 | 27 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | 21-30 | 67 |
| 10:00 AM | 0 | 14 | 37 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 16-25 | 51 |
| 11:00 AM | 0 | 16 | 32 | 23 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 21-30 | 55 |
| 12:00 PM | 0 | 17 | 55 | 24 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 100 | 21-30 | 79 |
| 01:00 PM | 0 | 18 | 46 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 21-30 | 76 |
| 02:00 PM | 0 | 12 | 48 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 21-30 | 64 |
| 03:00 PM | 0 | 14 | 57 | 44 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 21-30 | 101 |
| 04:00 PM | 0 | 19 | 78 | 22 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 21-30 | 100 |
| 05:00 PM | 0 | 23 | 82 | 49 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 159 | 21-30 | 131 |
| 06:00 PM | 0 | 8 | 32 | 36 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 21-30 | 68 |
| 07:00 PM | 0 | 10 | 32 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 21-30 | 64 |
| 08:00 PM | 0 | 5 | 26 | 26 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 21-30 | 52 |
| 09:00 PM | 0 | 3 | 23 | 23 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 21-30 | 46 |
| 10:00 PM | 0 | 4 | 11 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 21-30 | 18 |
| 11:00 PM | 0 | 1 | 4 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 21-30 | 16 |
| Day Total | 0 | 196 | 714 | 460 | 38 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 112 | 1-30 | 117 |
| Percent | 0\% | 13.9\% | 50.6\% | 32.6\% | 2.7\% | 0.2\% | 0\% | 0\% | 0.1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 412 | 1-30 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AM Peak Volume | $\begin{gathered} 12: 00 \text { AM } \\ 0 \end{gathered}$ | $\begin{gathered} \hline 11: 00 \mathrm{AM} \\ 16 \end{gathered}$ | $\begin{gathered} 7: 00 \mathrm{AM} \\ 47 \end{gathered}$ | $\begin{gathered} 9: 00 \mathrm{AM} \\ 27 \end{gathered}$ | $\begin{gathered} 6: 00 \mathrm{AM} \\ 4 \end{gathered}$ | $\begin{gathered} \hline 9: 00 \mathrm{AM} \\ 1 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { AM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 9: 00 \mathrm{AM} \\ 82 \end{gathered}$ |  |  |
| PM Peak Volume | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} 5: 00 \mathrm{PM} \\ 23 \end{gathered}$ | $\begin{gathered} 5: 00 \text { PM } \\ 82 \end{gathered}$ | $\begin{gathered} 5: 00 \mathrm{PM} \\ 49 \end{gathered}$ | $\begin{gathered} 5: 00 \mathrm{PM} \\ 5 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 1 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 1 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 159 \end{gathered}$ |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| LOCATION: M SPECIFIC LOC CITY/STATE: | dian hill, | wn Verm | ion \& N |  |  |  |  |  |  |  |  |  |  |  |  |  | \#: 15124309 <br> ECTION: NB <br> ov 192019 - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Range | $\begin{gathered} \hline 1 \\ 15 \end{gathered}$ | $\begin{aligned} & 16 \\ & 20 \end{aligned}$ | $\begin{aligned} & 21 \\ & 25 \end{aligned}$ | $\begin{aligned} & 26 \\ & 30 \end{aligned}$ | $\begin{aligned} & 31 \\ & 35 \end{aligned}$ | $\begin{aligned} & 36 \\ & 40 \end{aligned}$ | $\begin{aligned} & 41 \\ & 45 \end{aligned}$ | $\begin{aligned} & 46 \\ & 50 \end{aligned}$ | $\begin{aligned} & 51 \\ & 55 \end{aligned}$ | $\begin{aligned} & \hline 56 \\ & 60 \end{aligned}$ | $\begin{aligned} & 61 \\ & 65 \end{aligned}$ | $\begin{aligned} & 66 \\ & 70 \end{aligned}$ | $\begin{aligned} & 71 \\ & 75 \end{aligned}$ | $\begin{aligned} & \hline 76 \\ & 999 \end{aligned}$ | Total | Pace Speed | Number in Pace |
| Grand Total Percent | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} 196 \\ 13.9 \% \end{gathered}$ | $\begin{gathered} \hline 714 \\ 50.6 \% \end{gathered}$ | $\begin{gathered} \hline 460 \\ 32.6 \% \end{gathered}$ | $\begin{gathered} \hline 38 \\ 2.7 \% \end{gathered}$ | $\begin{gathered} 3 \\ 0.2 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} 1 \\ 0.1 \% \end{gathered}$ | $\begin{gathered} 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} 0 \\ 0 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0 \\ 0 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0 \\ 0 \% \\ 0 \% \end{gathered}$ | 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\% |  |  |  |
| $\begin{aligned} & \text { ADT } \\ & 1412 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85th Perce n Speed(Aver | tile: 28 MPH <br> ge): 23 MPH <br> ian: 23 MPH <br> de: 23 MPH |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Volume Data

| LOCATION: <br> SPECIFIC LO <br> CITY/STATE | idian b <br> ON: <br> mhill, | Vermilion | North |  |  |  |  |  |  | QC JOB \#: 15124309 DIRECTION: NB E: Nov 19 2019 - Nov 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Mon | Tue 19 Nov 19 | Wed |  | Fri | Average Weekday Hourly Traffic | Sat | Sun | Average Week Hourly Traffic | Average Week Profile |
| 12:00 AM 01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 09:00 AM 10:00 AM 11:00 AM 12:00 PM 01:00 PM 02:00 PM 03:00 PM 04:00 PM 05:00 PM 06:00 PM 07:00 PM 08:00 PM 09:00 PM 10:00 PM 11:00 PM |  | 6 6 3 2 7 19 30 79 63 82 63 73 100 97 76 119 120 159 81 74 60 52 24 17 |  |  |  | 6 <br> 6 <br> 3 <br> 2 <br> 7 <br> 19 <br> 30 <br> 79 <br> 63 <br> 82 <br> 63 <br> 73 <br> 100 <br> 97 <br> 76 <br> 119 <br> 120 <br> 159 <br> 81 <br> 74 <br> 60 <br> 52 <br> 24 <br> 17 <br> 14 |  |  | 6 6 3 2 7 19 30 79 63 82 63 73 100 97 76 119 120 159 81 74 60 52 24 17 |  |
| Day Total |  | 1412 |  |  |  | 1412 |  |  | 1412 |  |
| \% Weekday <br> Average |  | 100\% |  |  |  |  |  |  |  |  |
| \% Week <br> Average |  | 100\% |  |  |  | 100\% |  |  |  |  |
| AM Peak Volume |  | $\begin{gathered} 9: 00 \mathrm{AM} \\ 82 \end{gathered}$ |  |  |  | $\begin{gathered} 9: 00 \mathrm{AM} \\ 82 \end{gathered}$ |  |  | $\begin{gathered} 9: 00 \mathrm{AM} \\ 82 \end{gathered}$ |  |
| PM Peak Volume |  | $\begin{gathered} \text { 5:00 PM } \\ 159 \\ \hline \end{gathered}$ |  |  |  | $\begin{gathered} \text { 5:00 PM } \\ 159 \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \text { 5:00 PM } \\ 159 \\ \hline \end{gathered}$ |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Speed Data


| LOCATION: M SPECIFIC LOC CITY/STATE: | dian ON: hill, | n Verm | ion \& |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{array}{r} \hline \text { QC JOB } \\ \text { DIREC } \end{array}$ DATE: N | :15124309 <br> ON: NB, SB <br> v 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Range | $\begin{gathered} 1 \\ \hline 15 \end{gathered}$ | $\begin{aligned} & 16 \\ & 20 \end{aligned}$ | $\begin{aligned} & 21 \\ & 25 \end{aligned}$ | $\begin{aligned} & 26 \\ & 30 \end{aligned}$ | $\begin{aligned} & 31 \\ & 35 \end{aligned}$ | $\begin{aligned} & 36 \\ & 40 \end{aligned}$ | $\begin{aligned} & 41 \\ & 45 \end{aligned}$ | $\begin{aligned} & 46 \\ & 50 \end{aligned}$ | $\begin{aligned} & 51 \\ & 55 \end{aligned}$ | $56$ | $\begin{aligned} & 61 \\ & 65 \end{aligned}$ | $\begin{aligned} & 66 \\ & 70 \end{aligned}$ | $\begin{aligned} & 71 \\ & 75 \end{aligned}$ | $\begin{gathered} \hline 76 \\ 999 \end{gathered}$ | Total | Pace Speed | Number in Pace |
| Grand Total Percent | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 355 \\ 12.6 \% \end{gathered}$ | $\begin{aligned} & \hline 1377 \\ & 49 \% \end{aligned}$ | $\begin{gathered} \hline 962 \\ 34.2 \% \end{gathered}$ | $\begin{aligned} & \hline 105 \\ & 3.7 \% \end{aligned}$ | $\begin{gathered} 6 \\ 0.2 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} 2 \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \hline 1 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 1 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 4 \\ 0.1 \% \end{gathered}$ | 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\% |  |  |  |
| $\begin{aligned} & \text { ADT } \\ & 2813 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85th Perce n Speed(Aver Me | tile: 28 MPH <br> e): 23 MPH <br> an: 23 MPH <br> de: 23 MPH |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Volume Data


Type of report: Tube Count - Speed Data

| LOCATION: Meridian btwn Vermilion \& North SPECIFIC LOCATION: <br> CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{array}{r} \hline \text { QC JOB \#: } 15124309 \\ \text { DIRECTION: SB } \\ \text { DATE: Nov } 192019 \end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| 12:00 AM | 0 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21-30 | 6 |
| 01:00 AM | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 26-35 | 2 |
| 02:00 AM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 21-30 | 2 |
| 03:00 AM | 0 | 0 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 21-30 | 4 |
| 04:00 AM | 0 | 0 | 1 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 26-35 | 7 |
| 05:00 AM | 0 | 0 | 11 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 21-30 | 23 |
| 06:00 AM | 0 | 0 | 13 | 34 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 21-30 | 47 |
| 07:00 AM | 0 | 8 | 44 | 42 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 101 | 21-30 | 86 |
| 08:00 AM | 0 | 16 | 63 | 34 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 | 21-30 | 97 |
| 09:00 AM | 0 | 7 | 41 | 20 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 21-30 | 61 |
| 10:00 AM | 0 | 14 | 32 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 21-30 | 62 |
| 11:00 AM | 0 | 17 | 37 | 19 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 75 | 21-30 | 56 |
| 12:00 PM | 0 | 6 | 39 | 21 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 74 | 21-30 | 60 |
| 01:00 PM | 0 | 22 | 38 | 24 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 21-30 | 62 |
| 02:00 PM | 0 | 15 | 41 | 28 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 87 | 21-30 | 69 |
| 03:00 PM | 0 | 15 | 71 | 38 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 129 | 21-30 | 109 |
| 04:00 PM | 0 | 14 | 51 | 43 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 114 | 21-30 | 94 |
| 05:00 PM | 0 | 8 | 64 | 34 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 109 | 21-30 | 98 |
| 06:00 PM | 0 | 8 | 35 | 22 | 4 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 70 | 21-30 | 57 |
| 07:00 PM | 0 | 3 | 27 | 31 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 21-30 | 58 |
| 08:00 PM | 0 | 1 | 28 | 26 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 21-30 | 54 |
| 09:00 PM | 0 | 4 | 13 | 19 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 21-30 | 32 |
| 10:00 PM | 0 | 0 | 4 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 21-30 | 12 |
| 11:00 PM | 0 | 0 | 5 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 21-30 | 13 |
| Day Total | 0 | 159 | 663 | 502 | 67 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 4 | 401 | 1-30 | 116 |
| Percent | 0\% | 11.3\% | 47.3\% | 35.8\% | 4.8\% | 0.2\% | 0\% | 0\% | 0.1\% | 0.1\% | 0\% | 0\% | 0.1\% | 0.3\% | 401 | 1-30 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AM Peak Volume | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \hline 11: 00 \mathrm{AM} \\ 17 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{AM} \\ 63 \end{gathered}$ | $\begin{gathered} 7: 00 \mathrm{AM} \\ 42 \end{gathered}$ | $\begin{gathered} 7: 00 \mathrm{AM} \\ 6 \end{gathered}$ | $\begin{gathered} \hline 3: 00 \mathrm{AM} \\ 1 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \hline 11: 00 \mathrm{AM} \\ 1 \end{gathered}$ | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { AM } \\ 0 \end{gathered}$ | $\begin{gathered} \hline 7: 00 \mathrm{AM} \\ 1 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{AM} \\ 116 \end{gathered}$ |  |  |
| PM Peak Volume | $\begin{array}{\|c} \hline 12: 00 \mathrm{PM} \\ 0 \end{array}$ | $\begin{gathered} 1: 00 \mathrm{PM} \\ 22 \end{gathered}$ | $\begin{gathered} 3: 00 \mathrm{PM} \\ 71 \end{gathered}$ | $\begin{gathered} \hline 4: 00 \text { PM } \\ 43 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 6 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 1 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} \hline 6: 00 \text { PM } \\ 1 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 1 \end{gathered}$ | $\begin{gathered} 3: 00 \text { PM } \\ 1 \end{gathered}$ | $\begin{gathered} \hline 3: 00 \mathrm{PM} \\ 129 \end{gathered}$ |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| LOCATION: M SPECIFIC LOC CITY/STATE: | dian | wn Verm | ion \& |  |  |  |  |  |  |  |  |  |  |  |  | QC JOB D DATE: N | :15124309 <br> ECTION: SB <br> v 192019 - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Range | $\begin{gathered} 1 \\ \hline 15 \end{gathered}$ | $\begin{aligned} & 16 \\ & 20 \end{aligned}$ | $\begin{aligned} & 21 \\ & 25 \end{aligned}$ | $\begin{aligned} & 26 \\ & 30 \end{aligned}$ | $\begin{aligned} & 31 \\ & 35 \end{aligned}$ | $\begin{aligned} & 36 \\ & 40 \end{aligned}$ | $\begin{aligned} & 41 \\ & 45 \end{aligned}$ | $\begin{aligned} & 46 \\ & 50 \end{aligned}$ | $\begin{aligned} & 51 \\ & 55 \end{aligned}$ | 56 60 | $\begin{aligned} & 61 \\ & 65 \end{aligned}$ | $\begin{aligned} & 66 \\ & 70 \end{aligned}$ | $\begin{aligned} & 71 \\ & 75 \end{aligned}$ | $\begin{gathered} \hline 76 \\ 999 \end{gathered}$ | Total | Pace Speed | Number in Pace |
| Grand Total Percent | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 159 \\ 11.3 \% \end{gathered}$ | $\begin{gathered} \hline 663 \\ 47.3 \% \end{gathered}$ | $\begin{gathered} 502 \\ 35.8 \% \end{gathered}$ | $\begin{gathered} \hline 67 \\ 4.8 \% \end{gathered}$ | $\begin{gathered} 3 \\ 0.2 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 1 \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \hline 1 \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 1 \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \hline 4 \\ 0.3 \% \end{gathered}$ | 1401 | 21-30 | 1165 |
| 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\% |  |  |  |
| $\begin{aligned} & \text { ADT } \\ & 1401 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85th Perce Speed(Aver Med | ile: 28 MPH <br> e): 24 MPH <br> an: 24 MPH <br> de: 23 MPH |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Volume Data

| LOCATION: SPECIFIC CITY/STATE: | ON: <br> mhill, | Vermilion | orth |  |  |  |  |  |  | QC JOB \#: 15124309 DIRECTION: SB E: Nov 19 2019 - Nov 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time |  | Tue 19 Nov 19 | Wed |  | Fri | Average Weekday Hourly Traffic | Sat | Sun | Average Week Hourly Traffic | Average Week Profile |
| 12:00 AM 01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 09:00 AM 10:00 AM 11:00 AM 12:00 PM 01:00 PM 02:00 PM 03:00 PM 04:00 PM 05:00 PM 06:00 PM 07:00 PM 08:00 PM 09:00 PM 10:00 PM 11:00 PM |  | 7 7 2 2 6 8 25 49 101 116 71 79 75 74 89 87 129 114 109 70 64 57 38 15 14 |  |  |  | 7 <br> 2 <br> 2 <br> 6 <br> 8 <br> 25 <br> 49 <br> 101 <br> 116 <br> 71 <br> 79 <br> 75 <br> 74 <br> 89 <br> 87 <br> 129 <br> 114 <br> 109 <br> 70 <br> 64 <br> 57 <br> 38 <br> 15 <br> 14 <br> 1401 <br> 74 |  |  | 7 2 2 6 8 25 49 101 116 71 79 75 74 89 87 129 114 109 70 64 57 38 15 14 |  |
| Day Total |  | 1401 |  |  |  | 1401 |  |  | 1401 |  |
| \% Weekday <br> Average |  | 100\% |  |  |  |  |  |  |  |  |
| \% Week <br> Average |  | 100\% |  |  |  | 100\% |  |  |  |  |
| AM Peak Volume |  | $\begin{gathered} 8: 00 \mathrm{AM} \\ 116 \end{gathered}$ |  |  |  | $\begin{gathered} \hline 8: 00 \mathrm{AM} \\ 116 \end{gathered}$ |  |  | $\begin{gathered} \hline 8: 00 \mathrm{AM} \\ 116 \end{gathered}$ |  |
| PM Peak Volume |  | $\begin{gathered} \hline \text { 3:00 PM } \\ 129 \end{gathered}$ |  |  |  | $\begin{gathered} \hline \text { 3:00 PM } \\ 129 \end{gathered}$ |  |  | $\begin{gathered} \hline \text { 3:00 PM } \\ 129 \end{gathered}$ |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Speed Data

| LOCATION: Meridian btwn North \& Franklin SPECIFIC LOCATION: <br> CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{array}{r} \hline \text { QC JOB \#: } 15124310 \\ \text { DIRECTION: NB } \\ \text { DATE: Nov } 192019 \end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| 12:00 AM | 0 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 21-30 | 5 |
| 01:00 AM | 0 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 21-30 | 4 |
| 02:00 AM | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 21-30 | 3 |
| 03:00 AM | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 21-30 | 2 |
| 04:00 AM | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21-30 | 7 |
| 05:00 AM | 0 | 0 | 3 | 11 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 26-35 | 16 |
| 06:00 AM | 0 | 5 | 6 | 13 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 21-30 | 19 |
| 07:00 AM | 0 | 14 | 33 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 21-30 | 63 |
| 08:00 AM | 0 | 14 | 28 | 32 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | 21-30 | 60 |
| 09:00 AM | 0 | 16 | 34 | 27 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | 21-30 | 61 |
| 10:00 AM | 0 | 19 | 32 | 16 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 16-25 | 51 |
| 11:00 AM | 0 | 17 | 34 | 24 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 21-30 | 58 |
| 12:00 PM | 0 | 14 | 45 | 39 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 104 | 21-30 | 84 |
| 01:00 PM | 0 | 15 | 44 | 34 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 21-30 | 78 |
| 02:00 PM | 0 | 8 | 43 | 19 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 21-30 | 62 |
| 03:00 PM | 0 | 10 | 54 | 51 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 21-30 | 105 |
| 04:00 PM | 0 | 19 | 67 | 31 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121 | 21-30 | 98 |
| 05:00 PM | 0 | 20 | 68 | 62 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 160 | 21-30 | 130 |
| 06:00 PM | 0 | 10 | 31 | 35 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 21-30 | 66 |
| 07:00 PM | 0 | 7 | 25 | 35 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 21-30 | 60 |
| 08:00 PM | 0 | 5 | 20 | 30 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 21-30 | 50 |
| 09:00 PM | 0 | 1 | 17 | 30 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 21-30 | 47 |
| 10:00 PM | 0 | 5 | 8 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 21-30 | 19 |
| 11:00 PM | 0 | 2 | 2 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 21-30 | 14 |
| Day Total | 0 | 202 | 603 | 554 | 89 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 459 | 1-30 | 15 |
| Percent | 0\% | 13.8\% | 41.3\% | 38\% | 6.1\% | 0.7\% | 0.1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 459 | 1-30 | 1157 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AM Peak Volume | $\begin{array}{\|c} \hline 12: 00 \mathrm{AM} \\ 0 \end{array}$ | $\begin{gathered} \hline \text { 10:00 AM } \\ 19 \end{gathered}$ | $\begin{gathered} 9: 00 \mathrm{AM} \\ 34 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{AM} \\ 32 \end{gathered}$ | $\begin{gathered} 6: 00 \mathrm{AM} \\ 6 \end{gathered}$ | $\begin{gathered} \text { 6:00 AM } \\ 2 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 9: 00 \mathrm{AM} \\ 82 \end{gathered}$ |  |  |
| PM Peak Volume | $\begin{array}{\|c} \hline 12: 00 \mathrm{PM} \\ 0 \end{array}$ | $\begin{gathered} \text { 5:00 PM } \\ 20 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 68 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 62 \end{gathered}$ | $\begin{gathered} \hline \text { 6:00 PM } \\ 9 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 2 \end{gathered}$ | $\begin{gathered} \hline 3: 00 \text { PM } \\ 1 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 160 \end{gathered}$ |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| CITY/STATE: | ill, |  |  |  |  |  |  |  |  |  |  |  |  |  | DATE: Nov 192019 - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Range | $\begin{gathered} \hline 1 \\ 15 \end{gathered}$ | $\begin{aligned} & 16 \\ & 20 \end{aligned}$ | $\begin{aligned} & 21 \\ & 25 \end{aligned}$ | $\begin{aligned} & 26 \\ & 30 \end{aligned}$ | $\begin{aligned} & 31 \\ & 35 \end{aligned}$ | $\begin{aligned} & 36 \\ & 40 \end{aligned}$ | $\begin{aligned} & 41 \\ & 45 \end{aligned}$ | $\begin{aligned} & 46 \\ & 50 \end{aligned}$ | $\begin{aligned} & 51 \\ & 55 \end{aligned}$ | $\begin{aligned} & \hline 56 \\ & 60 \end{aligned}$ | $\begin{aligned} & \hline 61 \\ & 65 \end{aligned}$ | $\begin{aligned} & \hline 66 \\ & 70 \end{aligned}$ | $\begin{aligned} & 71 \\ & 75 \end{aligned}$ | $\begin{gathered} \hline 76 \\ 999 \end{gathered}$ | Total | Pace Speed | Number in Pace |
| Grand Total Percent | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 202 \\ 13.8 \% \end{gathered}$ | $\begin{gathered} 603 \\ 41.3 \% \end{gathered}$ | $\begin{aligned} & \hline 554 \\ & 38 \% \end{aligned}$ | $\begin{gathered} \hline 89 \\ 6.1 \% \end{gathered}$ | $\begin{gathered} \hline 10 \\ 0.7 \% \end{gathered}$ | $\begin{gathered} 1 \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | 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\% |  |  |  |
| $\begin{aligned} & \text { ADT } \\ & 1459 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85th Perce Speed(Aver | tile: 28 MPH <br> ge): 24 MPH <br> ian: 24 MPH <br> de: 23 MPH |

Type of report: Tube Count - Volume Data


Type of report: Tube Count - Speed Data

| LOCATION: Meridian btwn North \& Franklin SPECIFIC LOCATION: <br> CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{array}{r} \hline \text { QC JOB \#: } 15124310 \\ \text { DIRECTION: NB, SB } \\ \text { DATE: Nov } 192019 \\ \hline \end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| 12:00 AM | 0 | 0 | 5 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 21-30 | 12 |
| 01:00 AM | 0 | 2 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 26-35 | 5 |
| 02:00 AM | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 21-30 | 5 |
| 03:00 AM | 0 | 0 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 21-30 | 6 |
| 04:00 AM | 0 | 1 | 4 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 23-32 | 10 |
| 05:00 AM | 0 | 0 | 17 | 19 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 21-30 | 36 |
| 06:00 AM | 0 | 5 | 25 | 41 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 21-30 | 66 |
| 07:00 AM | 0 | 28 | 83 | 66 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 186 | 21-30 | 149 |
| 08:00 AM | 0 | 31 | 90 | 64 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 194 | 21-30 | 154 |
| 09:00 AM | 0 | 28 | 76 | 47 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 160 | 21-30 | 123 |
| 10:00 AM | 0 | 35 | 71 | 39 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 21-30 | 110 |
| 11:00 AM | 0 | 32 | 81 | 41 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 159 | 21-30 | 122 |
| 12:00 PM | 0 | 29 | 84 | 61 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 187 | 21-30 | 145 |
| 01:00 PM | 0 | 44 | 79 | 59 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 195 | 21-30 | 138 |
| 02:00 PM | 0 | 32 | 86 | 46 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 171 | 21-30 | 132 |
| 03:00 PM | 0 | 31 | 127 | 85 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254 | 21-30 | 212 |
| 04:00 PM | 0 | 43 | 125 | 72 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 21-30 | 197 |
| 05:00 PM | 0 | 34 | 136 | 90 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 272 | 21-30 | 226 |
| 06:00 PM | 0 | 21 | 70 | 56 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 161 | 21-30 | 126 |
| 07:00 PM | 0 | 12 | 49 | 66 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 21-30 | 115 |
| 08:00 PM | 0 | 12 | 49 | 54 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 21-30 | 103 |
| 09:00 PM | 0 | 10 | 29 | 49 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 | 21-30 | 78 |
| 10:00 PM | 0 | 8 | 13 | 18 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 21-30 | 31 |
| 11:00 PM | 0 | 4 | 6 | 21 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 21-30 | 27 |
| Day Total | 0 | 442 | 1312 | 1015 | 161 | 15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Percent | 0\% | 15\% | 44.5\% | 34.5\% | 5.5\% | 0.5\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2946 | 21-30 | 2327 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AM Peak Volume | $\begin{array}{\|c} \hline 12: 00 \mathrm{AM} \\ 0 \end{array}$ | $\begin{gathered} \text { 10:00 AM } \\ 35 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{AM} \\ 90 \end{gathered}$ | $\begin{gathered} \hline 7: 00 \mathrm{AM} \\ 66 \\ \hline \end{gathered}$ | $\begin{gathered} 7: 00 \mathrm{AM} \\ 9 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6: 00 \mathrm{AM} \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8: 00 \mathrm{AM} \\ 194 \\ \hline \end{gathered}$ |  |  |
| PM Peak Volume | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} 1: 00 \mathrm{PM} \\ 44 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 136 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 90 \\ \hline \end{gathered}$ | $\begin{gathered} 1: 00 \text { PM } \\ 13 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 3 \end{gathered}$ | $\begin{gathered} 3: 00 \text { PM } \\ 1 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 272 \end{gathered}$ |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| LOCATION: M SPECIFIC LOC CITY/STATE: | dian <br> ON: <br> hill, | Nor | Fran |  |  |  |  |  |  |  |  |  |  |  |  | QC JOB DIREC DATE: | : 15124310 <br> ON: NB, SB <br> v 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Range | $\begin{gathered} \hline 1 \\ 15 \end{gathered}$ | $\begin{aligned} & 16 \\ & 20 \end{aligned}$ | $\begin{aligned} & 21 \\ & 25 \end{aligned}$ | $\begin{aligned} & 26 \\ & 30 \end{aligned}$ | $\begin{aligned} & 31 \\ & 35 \end{aligned}$ | $\begin{aligned} & 36 \\ & 40 \end{aligned}$ | $\begin{aligned} & 41 \\ & 45 \end{aligned}$ | $\begin{aligned} & 46 \\ & 50 \end{aligned}$ | $\begin{aligned} & 51 \\ & 55 \end{aligned}$ | $\begin{aligned} & \hline 56 \\ & 60 \end{aligned}$ | $\begin{aligned} & \hline 61 \\ & 65 \end{aligned}$ | $\begin{aligned} & \hline 66 \\ & 70 \end{aligned}$ | $\begin{aligned} & 71 \\ & 75 \end{aligned}$ | $\begin{gathered} \hline 76 \\ 999 \end{gathered}$ | Total | Pace Speed | Number in Pace |
| Grand Total Percent | $\begin{gathered} 0 \\ 0 \% \\ 0 \% \end{gathered}$ | $\begin{aligned} & \hline 442 \\ & 15 \% \end{aligned}$ | $\begin{gathered} \hline 1312 \\ 44.5 \% \end{gathered}$ | $\begin{gathered} \hline 1015 \\ 34.5 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline 161 \\ 5.5 \% \end{gathered}$ | $\begin{gathered} \hline 15 \\ 0.5 \% \end{gathered}$ | $\begin{gathered} 1 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} 0 \\ 0 \% \\ 0 \end{gathered}$ | $\begin{gathered} 0 \\ 0 \% \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ 0 \% \\ 0 \% \end{gathered}$ | 2946 | 21-30 | 2327 |
| Cumulative Percent | 0\% | 15\% | 59.5\% | 94\% | 99.5\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |  |  |  |
| $\begin{aligned} & \text { ADT } \\ & 2946 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85th Perce n Speed(Aver | ile: 28 MPH <br> e): 23 MPH <br> an: 23 MPH <br> de: 23 MPH |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Volume Data


Type of report: Tube Count - Speed Data

| LOCATION: Meridian btwn North \& Franklin SPECIFIC LOCATION: <br> CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{array}{r} \hline \text { QC JOB \#: } 15124310 \\ \text { DIRECTION: SB } \\ \text { DATE: Nov } 192019 \end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| 12:00 AM | 0 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21-30 | 7 |
| 01:00 AM | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 26-35 | 2 |
| 02:00 AM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 21-30 | 2 |
| 03:00 AM | 0 | 0 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 21-30 | 4 |
| 04:00 AM | 0 | 1 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 26-35 | 7 |
| 05:00 AM | 0 | 0 | 14 | 8 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 21-30 | 22 |
| 06:00 AM | 0 | 0 | 19 | 28 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 21-30 | 47 |
| 07:00 AM | 0 | 14 | 50 | 36 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 21-30 | 86 |
| 08:00 AM | 0 | 17 | 62 | 32 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 | 21-30 | 94 |
| 09:00 AM | 0 | 12 | 42 | 20 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | 21-30 | 62 |
| 10:00 AM | 0 | 16 | 39 | 23 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 82 | 21-30 | 62 |
| 11:00 AM | 0 | 15 | 47 | 17 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 21-30 | 64 |
| 12:00 PM | 0 | 15 | 39 | 22 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 21-30 | 61 |
| 01:00 PM | 0 | 29 | 35 | 25 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 16-25 | 64 |
| 02:00 PM | 0 | 24 | 43 | 27 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 21-30 | 70 |
| 03:00 PM | 0 | 21 | 73 | 34 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 | 21-30 | 107 |
| 04:00 PM | 0 | 24 | 58 | 41 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 129 | 21-30 | 99 |
| 05:00 PM | 0 | 14 | 68 | 28 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 21-30 | 96 |
| 06:00 PM | 0 | 11 | 39 | 21 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 21-30 | 60 |
| 07:00 PM | 0 | 5 | 24 | 31 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 21-30 | 55 |
| 08:00 PM | 0 | 7 | 29 | 24 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 21-30 | 53 |
| 09:00 PM | 0 | 9 | 12 | 19 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 21-30 | 31 |
| 10:00 PM | 0 | 3 | 5 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 21-30 | 12 |
| 11:00 PM | 0 | 2 | 4 | 9 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 21-30 | 13 |
| Day Total | 0 | 240 | 709 | 461 | 72 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 487 | 1-30 | 117 |
| Percent | 0\% | 16.1\% | 47.7\% | 31\% | 4.8\% | 0.3\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 487 | 1-30 | 1170 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AM Peak Volume | $\begin{gathered} 12: 00 \text { AM } \\ 0 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{AM} \\ 17 \end{gathered}$ | $\begin{gathered} \hline 8: 00 \mathrm{AM} \\ 62 \end{gathered}$ | $\begin{gathered} 7: 00 \mathrm{AM} \\ 36 \end{gathered}$ | $\begin{gathered} 7: 00 \mathrm{AM} \\ 6 \end{gathered}$ | $\begin{gathered} \hline 3: 00 \mathrm{AM} \\ 1 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{AM} \\ 116 \end{gathered}$ |  |  |
| PM Peak Volume | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} 1: 00 \mathrm{PM} \\ 29 \end{gathered}$ | $\begin{gathered} 3: 00 \text { PM } \\ 73 \end{gathered}$ | $\begin{gathered} \hline 4: 00 \text { PM } \\ 41 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 6 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 1 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \hline \text { 3:00 PM } \\ 132 \end{gathered}$ |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



Type of report: Tube Count - Volume Data

| LOCATION: <br> SPECIFIC LO <br> CITY/STATE | idian <br> ON: <br> mhill, | North \& F |  |  |  |  |  |  |  | QC JOB \#: 15124310 DIRECTION: SB E: Nov 19 2019 - Nov 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Mon | Tue 19 Nov 19 | Wed |  | Fri | Average Weekday Hourly Traffic | Sat | Sun | Average Week Hourly Traffic | Average Week Profile |
| 12:00 AM 01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 09:00 AM 10:00 AM 11:00 AM 12:00 PM 01:00 PM 02:00 PM 03:00 PM 04:00 PM 05:00 PM 06:00 PM 07:00 PM 08:00 PM 09:00 PM 10:00 PM 11:00 PM |  | 7 7 3 2 6 8 26 49 106 116 78 82 80 83 95 96 132 129 112 75 64 62 42 18 16 |  |  |  | 7 3 2 6 8 26 49 106 116 78 82 80 83 95 96 132 129 112 75 64 62 42 18 16 |  |  | $\begin{gathered} \hline 7 \\ 3 \\ 2 \\ 6 \\ 8 \\ 26 \\ 49 \\ 106 \\ 116 \\ 78 \\ 82 \\ 80 \\ 83 \\ 95 \\ 96 \\ 132 \\ 129 \\ 112 \\ 75 \\ 64 \\ 62 \\ 42 \\ 18 \\ 18 \\ 16 \end{gathered}$ |  |
| Day Total |  | 1487 |  |  |  | 1487 |  |  | 1487 |  |
| \% Weekday <br> Average |  | 100\% |  |  |  |  |  |  |  |  |
| \% Week <br> Average |  | 100\% |  |  |  | 100\% |  |  |  |  |
| AM Peak Volume |  | $\begin{gathered} 8: 00 \mathrm{AM} \\ 116 \end{gathered}$ |  |  |  | $\begin{gathered} \hline 8: 00 \mathrm{AM} \\ 116 \end{gathered}$ |  |  | $\begin{gathered} \hline 8: 00 \mathrm{AM} \\ 116 \end{gathered}$ |  |
| PM Peak Volume |  | $\begin{gathered} \hline 3: 00 \mathrm{PM} \\ 132 \end{gathered}$ |  |  |  | $\begin{gathered} \hline 3: 00 \mathrm{PM} \\ 132 \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \hline 3: 00 \mathrm{PM} \\ 132 \\ \hline \end{gathered}$ |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Speed Data

| LOCATION: Meridian btwn Franklin \& Sherman SPECIFIC LOCATION: <br> CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QC JOB \#: 15124311 <br> DIRECTION: NB <br> DATE: Nov 192019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| 12:00 AM | 0 | 0 | 3 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21-30 | 4 |
| 01:00 AM | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 21-30 | 5 |
| 02:00 AM | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 21-30 | 3 |
| 03:00 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 21-30 | 1 |
| 04:00 AM | 0 | 1 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 21-30 | 7 |
| 05:00 AM | 0 | 3 | 5 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 21-30 | 15 |
| 06:00 AM | 0 | 7 | 12 | 10 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 21-30 | 22 |
| 07:00 AM | 0 | 37 | 59 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 110 | 16-25 | 96 |
| 08:00 AM | 0 | 18 | 49 | 28 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 21-30 | 77 |
| 09:00 AM | 0 | 22 | 51 | 31 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 21-30 | 82 |
| 10:00 AM | 0 | 17 | 37 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 16-25 | 54 |
| 11:00 AM | 0 | 23 | 35 | 12 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 16-25 | 58 |
| 12:00 PM | 0 | 25 | 50 | 21 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 99 | 16-25 | 75 |
| 01:00 PM | 0 | 29 | 52 | 25 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 109 | 16-25 | 81 |
| 02:00 PM | 0 | 13 | 47 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 21-30 | 68 |
| 03:00 PM | 0 | 19 | 61 | 30 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 115 | 21-30 | 91 |
| 04:00 PM | 0 | 21 | 62 | 20 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 16-25 | 83 |
| 05:00 PM | 0 | 28 | 89 | 30 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 153 | 21-30 | 119 |
| 06:00 PM | 0 | 13 | 42 | 38 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 21-30 | 80 |
| 07:00 PM | 0 | 15 | 33 | 24 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 21-30 | 57 |
| 08:00 PM | 0 | 12 | 24 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 21-30 | 43 |
| 09:00 PM | 0 | 8 | 22 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 21-30 | 39 |
| 10:00 PM | 0 | 7 | 11 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 19-28 | 18 |
| 11:00 PM | 0 | 1 | 4 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 21-30 | 16 |
| Day Total | 0 | 319 | 757 | 389 | 40 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 |  |  |  |
| Percent | 0\% | 21.1\% | 50.1\% | 25.8\% | 2.6\% | 0.1\% | 0\% | 0\% | 0.1\% | 0\% | 0\% | 0\% | 0.1\% | 0.1\% | 1510 | 21-30 | 1146 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AM Peak Volume | $\begin{array}{\|c} \hline 12: 00 \mathrm{AM} \\ 0 \end{array}$ | $\begin{gathered} 7: 00 \mathrm{AM} \\ 37 \end{gathered}$ | $\begin{gathered} \text { 7:00 AM } \\ 59 \end{gathered}$ | $\begin{gathered} 9: 00 \mathrm{AM} \\ 31 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6: 00 \mathrm{AM} \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { 6:00 AM } \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 7: 00 \mathrm{AM} \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { 12:00 AM } \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 7: 00 \mathrm{AM} \\ 110 \\ \hline \end{gathered}$ |  |  |
| PM Peak Volume | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} 1: 00 \mathrm{PM} \\ 29 \end{gathered}$ | $\begin{gathered} 5: 00 \text { PM } \\ 89 \end{gathered}$ | $\begin{gathered} \hline \text { 6:00 PM } \\ 38 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 6 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} 1: 00 \text { PM } \\ 1 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} 3: 00 \text { PM } \\ 1 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 153 \end{gathered}$ |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | DATE: Nov 192019 - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Range | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| Grand Total Percent | 0 | 319 | 757 | 389 | 40 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1510 | 21-30 | 1146 |
|  | 0\% | 21.1\% | 50.1\% | 25.8\% | 2.6\% | 0.1\% | 0\% | 0\% | 0.1\% | 0\% | 0\% | 0\% | 0.1\% | 0.1\% |  |  |  |
| Cumulative Percent | 0\% | 21.1\% | 71.3\% | 97\% | 99.7\% | 99.8\% | 99.8\% | 99.8\% | 99.9\% | 99.9\% | 99.9\% | 99.9\% | 99.9\% | 100\% |  |  |  |
| $\begin{aligned} & \text { ADT } \\ & 1510 \end{aligned}$ |  |  |  | $\square$ |  |  |  |  |  |  |  |  |  |  |  | 85th Percen | tile: 27 MPH |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Speed(Aver | ge): 22 MPH |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Med | ian: 22 MPH |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | de: 23 MPH |  |


| LOCATION: SPECIFIC LO CITY/STATE | ON: <br> mhill, | Franklin \& | rman |  |  |  |  |  |  | $\begin{array}{r} \text { QC JOB \#: } 15124311 \\ \text { DIRECTION: NB } \\ \text { E: Nov } 19 \text { 2019 - Nov } 192019 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Mon | Tue 19 Nov 19 | Wed |  | Fri | Average Weekday Hourly Traffic | Sat | Sun | Average Week Hourly Traffic | Average Week Profile |
| 12:00 AM 01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 09:00 AM 10:00 AM 11:00 AM 12:00 PM 01:00 PM 02:00 PM 03:00 PM 04:00 PM 05:00 PM 06:00 PM 07:00 PM 08:00 PM 09:00 PM 10:00 PM 11:00 PM |  | 7 5 3 3 1 8 20 34 110 97 106 67 71 99 109 81 115 106 153 97 74 55 47 27 18 |  |  |  | 7 <br> 5 <br> 3 <br> 1 <br> 8 <br> 20 <br> 34 <br> 110 <br> 97 <br> 106 <br> 67 <br> 71 <br> 99 <br> 109 <br> 81 <br> 115 <br> 106 <br> 153 <br> 97 <br> 74 <br> 55 <br> 47 <br> 27 <br> 18 <br> 1510 |  |  | 7 5 3 1 8 20 34 110 97 106 67 71 99 109 81 115 106 153 97 74 55 47 27 18 |  |
| Day Total |  | 1510 |  |  |  | 1510 |  |  | 1510 |  |
| \% Weekday <br> Average |  | 100\% |  |  |  |  |  |  |  |  |
| \% Week <br> Average |  | 100\% |  |  |  | 100\% |  |  |  |  |
| AM Peak Volume |  | $\begin{gathered} \text { 7:00 AM } \\ 110 \end{gathered}$ |  |  |  | $\begin{gathered} \hline 7: 00 \mathrm{AM} \\ 110 \end{gathered}$ |  |  | $\begin{gathered} \hline 7: 00 \text { AM } \\ 110 \end{gathered}$ |  |
| PM Peak Volume |  | $\begin{gathered} \hline \text { 5:00 PM } \\ 153 \\ \hline \end{gathered}$ |  |  |  | $\begin{gathered} \hline \text { 5:00 PM } \\ 153 \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \text { 5:00 PM } \\ 153 \\ \hline \end{gathered}$ |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Speed Data


| LOCATION: M SPECIFIC LOC CITY/STATE: | $\begin{aligned} & \text { idian } \\ & \text { ON: } \end{aligned}$ nhill, | Fran | in \& Sh | man |  |  |  |  |  |  |  |  |  |  |  | QC JOB <br> DIREC <br> DATE: N | :15124311 <br> ON: NB, SB <br> v 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Range | $\begin{gathered} 1 \\ \hline 15 \end{gathered}$ | $\begin{aligned} & 16 \\ & 20 \end{aligned}$ | $\begin{aligned} & 21 \\ & 25 \end{aligned}$ | $\begin{aligned} & 26 \\ & 30 \end{aligned}$ | $\begin{aligned} & 31 \\ & 35 \end{aligned}$ | $\begin{aligned} & 36 \\ & 40 \end{aligned}$ | $\begin{aligned} & 41 \\ & 45 \end{aligned}$ | $\begin{aligned} & 46 \\ & 50 \end{aligned}$ | $\begin{aligned} & 51 \\ & 55 \end{aligned}$ | $\begin{aligned} & 56 \\ & 60 \end{aligned}$ | $\begin{aligned} & 61 \\ & 65 \end{aligned}$ | $\begin{aligned} & 66 \\ & 70 \end{aligned}$ | $71$ | $\begin{gathered} \hline 76 \\ 999 \end{gathered}$ | Total | Pace Speed | Number in Pace |
| Grand Total Percent | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 584 \\ 19.3 \% \end{gathered}$ | $\begin{gathered} \hline 1491 \\ 49.2 \% \end{gathered}$ | $\begin{gathered} \hline 838 \\ 27.7 \% \end{gathered}$ | $\begin{gathered} 100 \\ 3.3 \% \end{gathered}$ | $\begin{gathered} 4 \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 1 \\ 0 \% \end{gathered}$ | $\begin{gathered} 2 \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 1 \\ 0 \% \end{gathered}$ | $\begin{gathered} 8 \\ 0.3 \% \end{gathered}$ | 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\% |  |  |  |
| $\begin{aligned} & \text { ADT } \\ & 3029 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85th Perce n Speed(Aver Me | ile: 27 MPH <br> e): 23 MPH <br> an: 23 MPH <br> de: 23 MPH |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Volume Data

| LOCATION: SPECIFIC LO CITY/STATE | ON: <br> mhill, | Franklin \& | rman |  |  |  |  |  |  | $\begin{array}{r} \text { QC JOB \#: } 15124311 \\ \text { DIRECTION: NB, SB } \\ \text { E: Nov } 192019 \text { - Nov } 192019 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Mon | Tue 19 Nov 19 | Wed |  | Fri | Average Weekday Hourly Traffic | Sat | Sun | Average Week Hourly Traffic | Average Week Profile |
| 12:00 AM 01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 09:00 AM 10:00 AM 11:00 AM 12:00 PM 01:00 PM 02:00 PM 03:00 PM 04:00 PM 05:00 PM 06:00 PM 07:00 PM 08:00 PM 09:00 PM 10:00 PM 11:00 PM |  | 13 9 5 8 15 46 83 207 203 179 151 148 182 198 181 250 251 276 178 139 117 106 47 37 |  |  |  | 13 9 5 8 15 46 83 207 203 179 151 148 182 198 181 250 251 276 178 139 117 106 47 37 |  |  | 13 9 5 8 15 46 83 207 203 179 151 148 182 198 181 250 251 276 178 139 117 106 47 37 |  |
| Day Total |  | 3029 |  |  |  | 3029 |  |  | 3029 |  |
| \% Weekday <br> Average |  | 100\% |  |  |  |  |  |  |  |  |
| \% Week <br> Average |  | 100\% |  |  |  | 100\% |  |  |  |  |
| AM Peak Volume |  | $\begin{gathered} \text { 7:00 AM } \\ 207 \end{gathered}$ |  |  |  | $\begin{gathered} \text { 7:00 AM } \\ 207 \end{gathered}$ |  |  | $\begin{gathered} \text { 7:00 AM } \\ 207 \end{gathered}$ |  |
| PM Peak Volume |  | $\begin{gathered} \hline \text { 5:00 PM } \\ 276 \end{gathered}$ |  |  |  | $\begin{gathered} \text { 5:00 PM } \\ 276 \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \hline \text { 5:00 PM } \\ 276 \end{gathered}$ |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Speed Data

| LOCATION: Meridian btwn Franklin \& Sherman SPECIFIC LOCATION: <br> CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QC JOB \#: 15124311 <br> DIRECTION: SB <br> DATE: Nov 192019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| 12:00 AM | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 21-30 | 6 |
| 01:00 AM | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 26-35 | 2 |
| 02:00 AM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 21-30 | 2 |
| 03:00 AM | 0 | 0 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21-30 | 5 |
| 04:00 AM | 0 | 0 | 1 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 26-35 | 6 |
| 05:00 AM | 0 | 1 | 8 | 13 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 21-30 | 21 |
| 06:00 AM | 0 | 4 | 12 | 30 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 21-30 | 42 |
| 07:00 AM | 0 | 15 | 42 | 34 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 97 | 21-30 | 76 |
| 08:00 AM | 0 | 31 | 46 | 24 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 16-25 | 77 |
| 09:00 AM | 0 | 14 | 35 | 20 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 21-30 | 55 |
| 10:00 AM | 0 | 19 | 48 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 16-25 | 67 |
| 11:00 AM | 0 | 20 | 41 | 14 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 77 | 16-25 | 61 |
| 12:00 PM | 0 | 14 | 45 | 19 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 83 | 21-30 | 64 |
| 01:00 PM | 0 | 21 | 36 | 31 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 21-30 | 67 |
| 02:00 PM | 0 | 18 | 53 | 25 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 21-30 | 78 |
| 03:00 PM | 0 | 29 | 72 | 30 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 135 | 21-30 | 102 |
| 04:00 PM | 0 | 26 | 70 | 45 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 145 | 21-30 | 115 |
| 05:00 PM | 0 | 20 | 76 | 24 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 21-30 | 100 |
| 06:00 PM | 0 | 12 | 42 | 24 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 21-30 | 66 |
| 07:00 PM | 0 | 5 | 30 | 27 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 21-30 | 57 |
| 08:00 PM | 0 | 6 | 29 | 21 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 62 | 21-30 | 50 |
| 09:00 PM | 0 | 8 | 28 | 21 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 21-30 | 49 |
| 10:00 PM | 0 | 0 | 8 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 21-30 | 19 |
| 11:00 PM | 0 | 1 | 6 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 21-30 | 16 |
| Day Total | 0 | 265 | 734 | 449 | 60 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 7 | 1519 | 21-30 | 1183 |
| Percent | 0\% | 17.4\% | 48.3\% | 29.6\% | 3.9\% | 0.1\% | 0\% | 0.1\% | 0.1\% | 0\% | 0\% | 0\% | 0\% | 0.5\% |  |  | 1183 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| AM Peak Volume | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{AM} \\ 31 \end{gathered}$ | $\begin{gathered} 10: 00 \mathrm{AM} \\ 48 \end{gathered}$ | $\begin{gathered} 7: 00 \mathrm{AM} \\ 34 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{AM} \\ 5 \end{gathered}$ | $\begin{gathered} \text { 3:00 AM } \\ 1 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \text { 11:00 AM } \\ 1 \end{gathered}$ | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 AM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} 7: 00 \mathrm{AM} \\ 3 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{AM} \\ 106 \end{gathered}$ |  |  |
| PM Peak Volume | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} 3: 00 \mathrm{PM} \\ 29 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 76 \end{gathered}$ | $\begin{gathered} \hline 4: 00 \text { PM } \\ 45 \end{gathered}$ | $\begin{gathered} 8: 00 \mathrm{PM} \\ 5 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 2:00 PM } \\ 1 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{PM} \\ 2 \end{gathered}$ | $\begin{gathered} \hline 4: 00 \mathrm{PM} \\ 145 \end{gathered}$ |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Speed Range | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| Grand Total | 0 | 265 | 734 | 449 | 60 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 7 | 1519 | 21-30 | 1183 |
| Percent | 0\% | 17.4\% | 48.3\% | 29.6\% | 3.9\% | 0.1\% | 0\% | 0.1\% | 0.1\% | 0\% | 0\% | 0\% | 0\% | 0.5\% | 1519 | 21 | 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\% |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| LOCATION: SPECIFIC CITY/STATE: | ON: <br> mhill, | Franklin \& | rman |  |  |  |  |  |  | QC JOB \#: 15124311 DIRECTION: SB E: Nov 19 2019 - Nov 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time |  | Tue 19 Nov 19 | Wed |  | Fri | Average Weekday Hourly Traffic | Sat | Sun | Average Week Hourly Traffic | Average Week Profile |
| 12:00 AM 01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 09:00 AM 10:00 AM 11:00 AM 12:00 PM 01:00 PM 02:00 PM 03:00 PM 04:00 PM 05:00 PM 06:00 PM 07:00 PM 08:00 PM 09:00 PM 10:00 PM 11:00 PM |  | 6 4 2 7 7 26 49 97 106 73 84 77 83 89 100 135 145 123 81 65 62 59 20 19 |  |  |  | 6 <br> 4 <br> 2 <br> 7 <br> 7 <br> 26 <br> 49 <br> 97 <br> 106 <br> 73 <br> 84 <br> 77 <br> 83 <br> 89 <br> 100 <br> 135 <br> 145 <br> 123 <br> 81 <br> 65 <br> 62 <br> 59 <br> 20 <br> 19 <br> 151 |  |  | 6 4 2 7 7 26 49 97 106 73 84 77 83 89 100 135 145 123 81 65 62 59 20 19 |  |
| Day Total |  | 1519 |  |  |  | 1519 |  |  | 1519 |  |
| \% Weekday <br> Average |  | 100\% |  |  |  |  |  |  |  |  |
| \% Week <br> Average |  | 100\% |  |  |  | 100\% |  |  |  |  |
| AM Peak Volume |  | $\begin{gathered} 8: 00 \mathrm{AM} \\ 106 \end{gathered}$ |  |  |  | $\begin{gathered} 8: 00 \mathrm{AM} \\ 106 \end{gathered}$ |  |  | $\begin{gathered} 8: 00 \mathrm{AM} \\ 106 \end{gathered}$ |  |
| PM Peak Volume |  | $\begin{gathered} \hline 4: 00 \mathrm{PM} \\ 145 \end{gathered}$ |  |  |  | $\begin{gathered} \hline 4: 00 \mathrm{PM} \\ 145 \end{gathered}$ |  |  | $\begin{gathered} \hline 4: 00 \mathrm{PM} \\ 145 \end{gathered}$ |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Speed Data

| LOCATION: Meridian btwn Sherman \& Sheridan SPECIFIC LOCATION: <br> CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QC JOB \#: 15124312 <br> DIRECTION: NB <br> DATE: Nov 192019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| 12:00 AM | 0 | 0 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 21-30 | 4 |
| 01:00 AM | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 23-32 | 4 |
| 02:00 AM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 21-30 | 2 |
| 03:00 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 21-30 | 1 |
| 04:00 AM | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21-30 | 7 |
| 05:00 AM | 0 | 1 | 5 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 21-30 | 14 |
| 06:00 AM | 0 | 3 | 10 | 10 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 21-30 | 20 |
| 07:00 AM | 0 | 12 | 53 | 26 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 92 | 21-30 | 79 |
| 08:00 AM | 0 | 5 | 34 | 35 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 21-30 | 69 |
| 09:00 AM | 0 | 7 | 45 | 39 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 21-30 | 84 |
| 10:00 AM | 0 | 8 | 38 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 21-30 | 51 |
| 11:00 AM | 0 | 7 | 34 | 14 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 21-30 | 48 |
| 12:00 PM | 0 | 10 | 44 | 26 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 21-30 | 70 |
| 01:00 PM | 0 | 8 | 48 | 33 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 | 21-30 | 81 |
| 02:00 PM | 0 | 5 | 43 | 29 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 21-30 | 72 |
| 03:00 PM | 0 | 4 | 54 | 43 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 21-30 | 97 |
| 04:00 PM | 0 | 3 | 57 | 24 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 21-30 | 81 |
| 05:00 PM | 0 | 11 | 68 | 45 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 132 | 21-30 | 113 |
| 06:00 PM | 0 | 4 | 39 | 38 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 21-30 | 77 |
| 07:00 PM | 0 | 1 | 33 | 31 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 21-30 | 64 |
| 08:00 PM | 0 | 1 | 18 | 18 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 21-30 | 36 |
| 09:00 PM | 0 | 4 | 11 | 20 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 21-30 | 31 |
| 10:00 PM | 0 | 1 | 4 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 21-30 | 13 |
| 11:00 PM | 0 | 0 | 2 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 21-30 | 12 |
| Day Total | 0 | 95 | 650 | 480 | 71 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Percent | 0\% | 7.3\% | 50\% | 37\% | 5.5\% | 0.1\% | 0.1\% | 0.1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1299 | 21-30 | 1130 |
|  |  |  |  |  |  | - | - |  | - | - | - | - |  |  |  |  |  |
| AM Peak Volume | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 7: 00 \mathrm{AM} \\ 12 \end{gathered}$ | $\begin{gathered} \hline 7: 00 \mathrm{AM} \\ 53 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 9: 00 \mathrm{AM} \\ 39 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6: 00 \mathrm{AM} \\ 5 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 11: 00 \mathrm{AM} \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6: 00 \mathrm{AM} \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 9: 00 \mathrm{AM} \\ 96 \\ \hline \end{gathered}$ |  |  |
| PM Peak Volume | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} 5: 00 \text { PM } \\ 11 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 68 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 45 \end{gathered}$ | $\begin{gathered} \text { 6:00 PM } \\ 9 \end{gathered}$ | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 1 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \hline 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} 5: 00 \mathrm{PM} \\ 132 \end{gathered}$ |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| LOCATION: SPECIFIC CITY/STATE: | ON: <br> mhill, | Sherman | eridan |  |  |  |  |  |  | QC JOB \#: 15124312 DIRECTION: NB E: Nov 19 2019 - Nov 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Mon | Tue 19 Nov 19 | Wed |  | Fri | Average Weekday Hourly Traffic | Sat | Sun | Average Week Hourly Traffic | Average Week Profile |
| 12:00 AM 01:00 AM 02:00 AM 03:00 AM 04:00 AM 05:00 AM 06:00 AM 07:00 AM 08:00 AM 09:00 AM 10:00 AM 11:00 AM 12:00 PM 01:00 PM 02:00 PM 03:00 PM 04:00 PM 05:00 PM 06:00 PM 07:00 PM 08:00 PM 09:00 PM 10:00 PM 11:00 PM |  | 6 5 2 1 7 18 29 92 79 96 60 56 85 94 80 106 89 132 90 68 40 36 15 13 |  |  |  | 6 5 2 1 7 18 29 92 79 96 60 56 85 94 80 106 89 132 90 68 40 36 15 13 |  |  | 6 5 2 1 7 18 29 92 79 96 60 56 85 94 80 106 89 132 90 68 40 36 15 13 |  |
| Day Total |  | 1299 |  |  |  | 1299 |  |  | 1299 |  |
| \% Weekday <br> Average |  | 100\% |  |  |  |  |  |  |  |  |
| \% Week <br> Average |  | 100\% |  |  |  | 100\% |  |  |  |  |
| AM Peak Volume |  | $\begin{gathered} 9: 00 \mathrm{AM} \\ 96 \end{gathered}$ |  |  |  | $\begin{gathered} 9: 00 \mathrm{AM} \\ 96 \end{gathered}$ |  |  | $\begin{gathered} 9: 00 \mathrm{AM} \\ 96 \end{gathered}$ |  |
| PM Peak Volume |  | $\begin{gathered} \text { 5:00 PM } \\ 132 \end{gathered}$ |  |  |  | $\begin{gathered} \hline \text { 5:00 PM } \\ 132 \end{gathered}$ |  |  | $\begin{gathered} \text { 5:00 PM } \\ 132 \end{gathered}$ |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Speed Data


| LOCATION: M SPECIFIC LOC CITY/STATE: | dian ON: hill, | Sher | an \& SF | ridan |  |  |  |  |  |  |  |  |  |  |  | QC JOB DIREC DATE: | :15124312 <br> ON: NB, SB <br> v 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Range | $\begin{gathered} 1 \\ \hline 15 \end{gathered}$ | $\begin{aligned} & 16 \\ & 20 \end{aligned}$ | $\begin{aligned} & 21 \\ & 25 \end{aligned}$ | $\begin{aligned} & 26 \\ & 30 \end{aligned}$ | $\begin{aligned} & 31 \\ & 35 \end{aligned}$ | $\begin{aligned} & 36 \\ & 40 \end{aligned}$ | $\begin{aligned} & 41 \\ & 45 \end{aligned}$ | $\begin{aligned} & 46 \\ & 50 \end{aligned}$ | $\begin{aligned} & 51 \\ & 55 \end{aligned}$ | $56$ | $\begin{aligned} & 61 \\ & 65 \end{aligned}$ | $\begin{aligned} & 66 \\ & 70 \end{aligned}$ | $\begin{aligned} & 71 \\ & 75 \end{aligned}$ | $\begin{gathered} \hline 76 \\ 999 \end{gathered}$ | Total | Pace Speed | Number in Pace |
| Grand Total Percent | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 212 \\ 8.2 \% \end{gathered}$ | $\begin{gathered} 1319 \\ 50.9 \% \end{gathered}$ | $\begin{gathered} \hline 918 \\ 35.4 \% \end{gathered}$ | $\begin{gathered} \hline 133 \\ 5.1 \% \end{gathered}$ | $\begin{gathered} \hline 4 \\ 0.2 \% \end{gathered}$ | $\begin{gathered} 2 \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \hline 1 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 1 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | $\begin{gathered} \hline 0 \\ 0 \% \end{gathered}$ | 2590 | 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\% |  |  |  |
| $\begin{aligned} & \text { ADT } \\ & 2590 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85th Perce n Speed(Aver Me | ile: 28 MPH <br> e): 24 MPH <br> an: 24 MPH <br> de: 23 MPH |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Volume Data

| LOCATION: <br> SPECIFIC L <br> CITY/STATE: | idian b <br> ON: <br> mhill, | Sherman | heridan |  |  |  |  |  |  | QC JOB \#: 15124312 DIRECTION: NB, SB E: Nov 19 2019 - Nov 192019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Mon | Tue 19 Nov 19 | Wed |  | Fri | Average Weekday Hourly Traffic | Sat | Sun | Average Week Hourly Traffic | Average Week Profile |
| $\begin{aligned} & \hline \text { 12:00 AM } \\ & \text { 01:00 AM } \\ & \text { 02:00 AM } \\ & \text { 03:00 AM } \\ & \text { 04:00 AM } \\ & \text { 05:00 AM } \\ & \text { 06:00 AM } \\ & \text { 07:00 AM } \\ & \text { 08:00 AM } \\ & \text { 09:00 AM } \\ & \text { 10:00 AM } \\ & \text { 11:00 AM } \\ & \text { 12:00 PM } \\ & \text { 01:00 PM } \\ & \text { 02:00 PM } \\ & \text { 03:00 PM } \\ & \text { 04:00 PM } \\ & \text { 05:00 PM } \\ & \text { 06:00 PM } \\ & \text { 07:00 PM } \\ & \text { 08:00 PM } \\ & \text { 09:00 PM } \\ & \text { 10:00 PM } \\ & \text { 11:00 PM } \end{aligned}$ |  | 12 8 4 8 15 44 74 169 162 159 135 121 158 174 172 223 213 229 163 129 92 74 24 28 |  |  |  | 12 <br> 8 <br> 4 <br> 8 <br> 15 <br> 44 <br> 74 <br> 169 <br> 162 <br> 159 <br> 135 <br> 121 <br> 158 <br> 174 <br> 172 <br> 223 <br> 213 <br> 229 <br> 163 <br> 129 <br> 92 <br> 74 <br> 24 <br> 28 <br> 290 |  |  | 12 8 4 8 15 44 74 169 162 159 135 121 158 174 172 223 213 229 163 129 92 74 24 28 |  |
| Day Total |  | 2590 |  |  |  | 2590 |  |  | 2590 |  |
| \% Weekday <br> Average |  | 100\% |  |  |  |  |  |  |  |  |
| \% Week Average |  | 100\% |  |  |  | 100\% |  |  |  |  |
| AM Peak Volume |  | $\begin{gathered} \hline \text { 7:00 AM } \\ 169 \end{gathered}$ |  |  |  | $\begin{gathered} \text { 7:00 AM } \\ 169 \end{gathered}$ |  |  | $\begin{gathered} \hline 7: 00 \mathrm{AM} \\ 169 \end{gathered}$ |  |
| PM Peak Volume |  | $\begin{gathered} \hline \text { 5:00 PM } \\ 229 \\ \hline \end{gathered}$ |  |  |  | $\begin{gathered} \hline \text { 5:00 PM } \\ 229 \end{gathered}$ |  |  | $\begin{gathered} \hline \text { 5:00 PM } \\ 229 \\ \hline \end{gathered}$ |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |

Type of report: Tube Count - Speed Data

| LOCATION: Meridian btwn Sherman \& Sheridan SPECIFIC LOCATION: <br> CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QC JOB \#: 15124312 <br> DIRECTION: SB <br> DATE: Nov 192019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| 12:00 AM | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 21-30 | 6 |
| 01:00 AM | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 26-35 | 2 |
| 02:00 AM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 21-30 | 2 |
| 03:00 AM | 0 | 0 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21-30 | 5 |
| 04:00 AM | 0 | 0 | 1 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 26-35 | 6 |
| 05:00 AM | 0 | 0 | 11 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 21-30 | 21 |
| 06:00 AM | 0 | 1 | 13 | 29 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 21-30 | 42 |
| 07:00 AM | 0 | 4 | 39 | 30 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | 21-30 | 69 |
| 08:00 AM | 0 | 13 | 39 | 27 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 21-30 | 66 |
| 09:00 AM | 0 | 2 | 35 | 21 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 21-30 | 56 |
| 10:00 AM | 0 | 12 | 45 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 21-30 | 63 |
| 11:00 AM | 0 | 7 | 41 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 21-30 | 58 |
| 12:00 PM | 0 | 8 | 42 | 19 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 21-30 | 61 |
| 01:00 PM | 0 | 15 | 38 | 25 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 21-30 | 63 |
| 02:00 PM | 0 | 9 | 50 | 31 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 92 | 21-30 | 81 |
| 03:00 PM | 0 | 11 | 69 | 31 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 117 | 21-30 | 100 |
| 04:00 PM | 0 | 20 | 59 | 43 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 124 | 21-30 | 102 |
| 05:00 PM | 0 | 4 | 62 | 27 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 21-30 | 89 |
| 06:00 PM | 0 | 5 | 39 | 27 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 21-30 | 66 |
| 07:00 PM | 0 | 3 | 27 | 26 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 21-30 | 53 |
| 08:00 PM | 0 | 2 | 24 | 22 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 21-30 | 46 |
| 09:00 PM | 0 | 1 | 19 | 16 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 21-30 | 35 |
| 10:00 PM | 0 | 0 | 2 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 21-30 | 8 |
| 11:00 PM | 0 | 0 | 6 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 21-30 | 10 |
| Day Total | 0 | 117 | 669 | 438 | 62 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |  |  |  |
| 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 |
|  |  |  |  |  |  | - | - |  | - | - | - | - |  |  |  |  |  |
| AM Peak Volume | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \end{gathered}$ | $\begin{gathered} \hline 8: 00 \mathrm{AM} \\ 13 \\ \hline \end{gathered}$ | $\begin{gathered} 10: 00 \mathrm{AM} \\ 45 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 7: 00 \text { AM } \\ 30 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5: 00 \mathrm{AM} \\ 5 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3: 00 \text { AM } \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12: 00 \mathrm{AM} \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 12: 00 \text { AM } \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8: 00 \mathrm{AM} \\ 83 \\ \hline \end{gathered}$ |  |  |
| PM Peak Volume | $\begin{gathered} 12: 00 \text { PM } \\ 0 \end{gathered}$ | $\begin{gathered} 4: 00 \text { PM } \\ 20 \end{gathered}$ | $\begin{gathered} \text { 3:00 PM } \\ 69 \end{gathered}$ | $\begin{gathered} \text { 4:00 PM } \\ 43 \end{gathered}$ | $\begin{gathered} 3: 00 \text { PM } \\ 5 \end{gathered}$ | $\begin{gathered} \text { 11:00 PM } \\ 1 \end{gathered}$ | $\begin{gathered} \text { 5:00 PM } \\ 1 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 3:00 PM } \\ 1 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} \text { 12:00 PM } \\ 0 \end{gathered}$ | $\begin{gathered} 12: 00 \mathrm{PM} \\ 0 \end{gathered}$ | $\begin{gathered} \hline 4: 00 \text { PM } \\ 124 \end{gathered}$ |  |  |
| Comments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| CITY/STATE: Yamhill, OR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | DATE: Nov 192019 - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Speed Range | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total | Pace Speed | Number in Pace |
|  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 |  |  |  |
| Grand Total Percent | 0 | 117 | 669 | 438 | 62 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1291 | 21-30 | 1107 |
|  | 0\% | 9.1\% | 51.8\% | 33.9\% | 4.8\% | 0.2\% | 0.1\% | 0\% | 0\% | 0.1\% | 0\% | 0\% | 0\% | 0\% |  |  |  |
| Cumulative Percent | 0\% | 9.1\% | 60.9\% | 94.8\% | 99.6\% | 99.8\% | 99.9\% | 99.9\% | 99.9\% | 100\% | 100\% | 100\% | 100\% | 100\% |  |  |  |
| $\begin{aligned} & \text { ADT } \\ & 1291 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85th Percen | tile: 28 MPH |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Speed(Aver | ge): 23 MPH |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Med | ian: 23 MPH |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | de: 23 MPH |

Type of report: Tube Count - Volume Data


| LOCATION: E Sherman St east of Meridian | QC JOB \#: 15124305 |
| :--- | :---: |
| SPECIFIC LOCATION: | DIRECTION: EB, WB |
| CITY/STATE: Yamhill, OR | DATE: Nov 192019 |

$\square$


Report generated on 12/3/2019 2:06 PM
LOCATION: E Sherman St west of Meridian

| LOCATION: E North St east of Meridian | QC JOB \#: 15124307 |
| :--- | :---: |
| SPECIFIC LOCATION: | DIRECTION: EB, WB |
| CITY/STATE: Yamhill, OR | DATE: Nov 192019 |

$\square$


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

## Appendix B

Turning Movement Counts


Comments:


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



Comments:


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

## Appendix C

## Pedestrian Counts

Location: N Meridian St South of E North St
Date: 11/19/2019
Time: 7:00 AM - 6:00 PM
Site Code: 15124321

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


| $9: 55 \mathrm{AM}$ | 1 | 3 |
| ---: | :--- | :--- |
| $10: 00 \mathrm{AM}$ | 1 | 0 |
| $10: 05 \mathrm{AM}$ | 0 | 0 |
| $10: 10 \mathrm{AM}$ | 0 | 1 |
| $10: 15 \mathrm{AM}$ | 1 | 0 |
| $10: 20 \mathrm{AM}$ | 0 | 0 |
| $10: 25 \mathrm{AM}$ | 0 | 1 |
| $10: 30 \mathrm{AM}$ | 0 | 0 |
| $10: 35 \mathrm{AM}$ | 0 | 1 |
| $10: 40 \mathrm{AM}$ | 0 | 2 |
| $10: 45 \mathrm{AM}$ | 0 | 1 |
| $10: 50 \mathrm{AM}$ | 1 | 3 |
| $10: 55 \mathrm{AM}$ | 1 | 0 |
| $11: 00 \mathrm{AM}$ | 0 | 0 |
| $11: 05 \mathrm{AM}$ | 0 | 0 |
| $11: 10 \mathrm{AM}$ | 2 | 2 |
| $11: 15 \mathrm{AM}$ | 0 | 0 |
| $11: 20 \mathrm{AM}$ | 0 | 0 |
| $11: 25 \mathrm{AM}$ | 3 | 3 |
| $11: 30 \mathrm{AM}$ | 2 | 0 |
| $11: 35 \mathrm{AM}$ | 0 | 0 |
| $11: 40 \mathrm{AM}$ | 0 | 2 |
| $11: 45 \mathrm{AM}$ | 1 | 0 |
| $11: 50 \mathrm{AM}$ | 1 | 0 |
| $11: 55 \mathrm{AM}$ | 0 | 0 |
| $12: 00 \mathrm{PM}$ | 0 | 0 |
| $12: 05 \mathrm{PM}$ | 0 | 0 |
| $12: 10 \mathrm{PM}$ | 0 | 0 |
| $12: 15 \mathrm{PM}$ | 0 | 0 |
| $12: 20 \mathrm{PM}$ | 0 | 0 |
| $12: 25 \mathrm{PM}$ | 0 | 0 |
| $12: 30 \mathrm{PM}$ | 0 | 0 |
| $12: 35 \mathrm{PM}$ | 0 | 0 |
| $12: 40 \mathrm{PM}$ | 0 | 0 |
| $12: 45 \mathrm{PM}$ | 1 | 0 |
| $12: 50 \mathrm{PM}$ | 0 | 0 |
| $12: 55 \mathrm{PM}$ | 1 | 0 |
| $1: 00 \mathrm{PM}$ | 0 | 0 |
| $1: 05 \mathrm{PM}$ | 0 | 0 |
| $1: 10 \mathrm{PM}$ | 0 | 0 |
| $1: 15 \mathrm{PM}$ | 3 | 0 |
| $1: 20 \mathrm{PM}$ | 4 | 0 |
| $1: 25 \mathrm{PM}$ | 3 | 0 |
| $1: 30 \mathrm{PM}$ | 1 | 0 |
| $1: 35 \mathrm{PM}$ | 0 | 0 |
| $1: 40 \mathrm{PM}$ | 0 | 0 |
| $1: 45 \mathrm{PM}$ | 0 | 0 |
| $1: 50 \mathrm{PM}$ | 0 | 0 |
| $1: 55 \mathrm{PM}$ | 0 | 0 |
|  |  | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
| 1 |  |  |


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

## Quality Counts

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 |


| $10: 15 \mathrm{AM}$ | 1 | 0 |
| :---: | :---: | :---: |
| $10: 20 \mathrm{AM}$ | 0 | 0 |
| $10: 25 \mathrm{AM}$ | 0 | 0 |
| $10: 30 \mathrm{AM}$ | 0 | 0 |
| $10: 35 \mathrm{AM}$ | 0 | 0 |
| $10: 40 \mathrm{AM}$ | 1 | 3 |
| $10: 45 \mathrm{AM}$ | 0 | 0 |
| $10: 50 \mathrm{AM}$ | 0 | 3 |
| $10: 55 \mathrm{AM}$ | 1 | 0 |
| $11: 00 \mathrm{AM}$ | 1 | 0 |
| $11: 05 \mathrm{AM}$ | 0 | 0 |
| $11: 10 \mathrm{AM}$ | 2 | 2 |
| $11: 15 \mathrm{AM}$ | 0 | 0 |
| $11: 20 \mathrm{AM}$ | 0 | 0 |
| $11: 25 \mathrm{AM}$ | 2 | 2 |
| $11: 30 \mathrm{AM}$ | 2 | 0 |
| $11: 35 \mathrm{AM}$ | 0 | 0 |
| $11: 40 \mathrm{AM}$ | 1 | 2 |
| $11: 45 \mathrm{AM}$ | 1 | 0 |
| $11: 50 \mathrm{AM}$ | 0 | 0 |
| $11: 55 \mathrm{AM}$ | 0 | 1 |
| $12: 00 \mathrm{PM}$ | 0 | 0 |
| $12: 05 \mathrm{PM}$ | 0 | 0 |
| $12: 10 \mathrm{PM}$ | 0 | 0 |
| $12: 15 \mathrm{PM}$ | 0 | 0 |
| $12: 20 \mathrm{PM}$ | 0 | 0 |
| $12: 25 \mathrm{PM}$ | 0 | 0 |
| $12: 30 \mathrm{PM}$ | 0 | 0 |
| $12: 35 \mathrm{PM}$ | 0 | 0 |
| $12: 40 \mathrm{PM}$ | 0 | 0 |
| $12: 45 \mathrm{PM}$ | 0 | 0 |
| $12: 50 \mathrm{PM}$ | 0 | 0 |
| $12: 55 \mathrm{PM}$ | 1 | 0 |
| $1: 00 \mathrm{PM}$ | 0 | 0 |
| $1: 05 \mathrm{PM}$ | 0 | 0 |
| $1: 10 \mathrm{PM}$ | 0 | 0 |
| $1: 15 \mathrm{PM}$ | 4 | 0 |
| $1: 20 \mathrm{PM}$ | 1 | 0 |
| $1: 25 \mathrm{PM}$ | 0 | 0 |
| $1: 30 \mathrm{PM}$ | 1 | 0 |
| $1: 35 \mathrm{PM}$ | 0 | 0 |
| $1: 40 \mathrm{PM}$ | 0 | 0 |
| $1: 45 \mathrm{PM}$ | 1 | 0 |
| $1: 50 \mathrm{PM}$ | 0 | 0 |
| $1: 55 \mathrm{PM}$ | 0 | 0 |
| $2: 00 \mathrm{PM}$ | 0 | 0 |
| $2: 05 \mathrm{PM}$ | 0 | 0 |
| $2: 10 \mathrm{PM}$ | 1 | 0 |
| $2: 15 \mathrm{PM}$ | 0 | 0 |
| $2: 25 \mathrm{PM}$ | 0 | 0 |
| $2: 35 \mathrm{PM}$ | 0 | 0 |
|  | 0 | 0 |
| 1 | 0 | 0 |
| 1 | 0 | 0 |
| 1 | 0 | 0 |
| 1 | 0 | 0 |
| 1 | 0 | 0 |
| 1 | 0 | 0 |
| 1 |  |  |


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

Location: N Meridian St South of E Franklin St
Date: 11/19/2019
Time: 7:00 AM - 6:00 PM
Site Code: 15124323

|  | Pedestrians |  |
| ---: | :---: | :---: |
| Start Time | Eastbound | Westbound |
| $7: 00 \mathrm{AM}$ | 2 | 1 |
| $7: 05 \mathrm{AM}$ | 0 | 0 |
| $7: 10 \mathrm{AM}$ | 0 | 0 |
| $7: 15 \mathrm{AM}$ | 0 | 0 |
| $7: 20 \mathrm{AM}$ | 0 | 0 |
| $7: 25 \mathrm{AM}$ | 0 | 0 |
| $7: 30 \mathrm{AM}$ | 0 | 0 |
| $7: 35 \mathrm{AM}$ | 1 | 0 |
| $7: 40 \mathrm{AM}$ | 1 | 0 |
| $7: 45 \mathrm{AM}$ | 1 | 0 |
| $7: 50 \mathrm{AM}$ | 4 | 0 |
| $7: 55 \mathrm{AM}$ | 0 | 0 |
| $8: 00 \mathrm{AM}$ | 0 | 0 |
| $8: 05 \mathrm{AM}$ | 0 | 0 |
| $8: 10 \mathrm{AM}$ | 0 | 0 |
| $8: 15 \mathrm{AM}$ | 0 | 0 |
| $8: 20 \mathrm{AM}$ | 0 | 0 |
| $8: 25 \mathrm{AM}$ | 0 | 0 |
| $8: 30 \mathrm{AM}$ | 0 | 0 |
| $8: 35 \mathrm{AM}$ | 0 | 0 |
| $8: 40 \mathrm{AM}$ | 0 | 0 |
| $8: 45 \mathrm{AM}$ | 0 | 0 |
| $8: 50 \mathrm{AM}$ | 1 | 0 |
| $8: 55 \mathrm{AM}$ | 0 | 0 |
| $9: 00 \mathrm{AM}$ | 0 | 0 |
| $9: 05 \mathrm{AM}$ | 0 | 0 |
| $9: 10 \mathrm{AM}$ | 0 | 0 |
| $9: 15 \mathrm{AM}$ | 1 | 1 |
| $9: 20 \mathrm{AM}$ | 0 | 0 |
| $9: 25 \mathrm{AM}$ | 0 | 0 |
| $9: 30 \mathrm{AM}$ | 0 | 0 |
| $9: 35 \mathrm{AM}$ | 0 | 0 |
| $9: 40 \mathrm{AM}$ | 0 | 0 |
| $9: 45 \mathrm{AM}$ | 0 | 0 |
| $9: 50 \mathrm{AM}$ | 0 | 0 |
|  |  |  |
|  | 0 | 0 |


| $9: 55 \mathrm{AM}$ | 0 | 0 |
| ---: | :--- | :--- |
| $10: 00 \mathrm{AM}$ | 0 | 0 |
| $10: 05 \mathrm{AM}$ | 0 | 0 |
| $10: 10 \mathrm{AM}$ | 0 | 0 |
| $10: 15 \mathrm{AM}$ | 1 | 0 |
| $10: 20 \mathrm{AM}$ | 0 | 2 |
| $10: 25 \mathrm{AM}$ | 0 | 0 |
| $10: 30 \mathrm{AM}$ | 1 | 0 |
| $10: 35 \mathrm{AM}$ | 0 | 0 |
| $10: 40 \mathrm{AM}$ | 0 | 1 |
| $10: 45 \mathrm{AM}$ | 0 | 0 |
| $10: 50 \mathrm{AM}$ | 0 | 0 |
| $10: 55 \mathrm{AM}$ | 0 | 1 |
| $11: 00 \mathrm{AM}$ | 0 | 0 |
| $11: 05 \mathrm{AM}$ | 0 | 0 |
| $11: 10 \mathrm{AM}$ | 0 | 0 |
| $11: 15 \mathrm{AM}$ | 0 | 0 |
| $11: 20 \mathrm{AM}$ | 0 | 0 |
| $11: 25 \mathrm{AM}$ | 0 | 0 |
| $11: 30 \mathrm{AM}$ | 0 | 1 |
| $11: 35 \mathrm{AM}$ | 0 | 1 |
| $11: 40 \mathrm{AM}$ | 0 | 0 |
| $11: 45 \mathrm{AM}$ | 2 | 0 |
| $11: 50 \mathrm{AM}$ | 1 | 0 |
| $11: 55 \mathrm{AM}$ | 1 | 0 |
| $12: 00 \mathrm{PM}$ | 0 | 0 |
| $12: 05 \mathrm{PM}$ | 0 | 0 |
| $12: 10 \mathrm{PM}$ | 0 | 0 |
| $12: 15 \mathrm{PM}$ | 0 | 0 |
| $12: 20 \mathrm{PM}$ | 0 | 0 |
| $12: 25 \mathrm{PM}$ | 0 | 0 |
| $12: 30 \mathrm{PM}$ | 0 | 0 |
| $12: 35 \mathrm{PM}$ | 0 | 0 |
| $12: 40 \mathrm{PM}$ | 0 | 0 |
| $12: 45 \mathrm{PM}$ | 0 | 1 |
| $12: 50 \mathrm{PM}$ | 0 | 0 |
| $12: 55 \mathrm{PM}$ | 0 | 0 |
| $1: 00 \mathrm{PM}$ | 1 | 0 |
| $1: 05 \mathrm{PM}$ | 0 | 0 |
| $1: 10 \mathrm{PM}$ | 1 | 0 |
| $1: 15 \mathrm{PM}$ | 0 | 0 |
| $1: 20 \mathrm{PM}$ | 0 | 0 |
| $1: 25 \mathrm{PM}$ | 1 | 0 |
| $1: 30 \mathrm{PM}$ | 0 | 0 |
| $1: 35 \mathrm{PM}$ | 0 | 0 |
| $1: 40 \mathrm{PM}$ | 0 | 0 |
| $1: 45 \mathrm{PM}$ | 0 | 0 |
| $1: 50 \mathrm{PM}$ | 0 | 0 |
| $1: 55 \mathrm{PM}$ | 0 | 0 |
|  |  | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
| 1 |  |  |


| $2: 00 \mathrm{PM}$ | 0 | 0 |
| ---: | :--- | :--- |
| $2: 05 \mathrm{PM}$ | 1 | 0 |
| $2: 10 \mathrm{PM}$ | 0 | 0 |
| $2: 15 \mathrm{PM}$ | 0 | 0 |
| $2: 20 \mathrm{PM}$ | 1 | 0 |
| $2: 25 \mathrm{PM}$ | 0 | 0 |
| $2: 30 \mathrm{PM}$ | 0 | 0 |
| $2: 35 \mathrm{PM}$ | 1 | 0 |
| $2: 40 \mathrm{PM}$ | 0 | 0 |
| $2: 45 \mathrm{PM}$ | 1 | 0 |
| $2: 50 \mathrm{PM}$ | 0 | 0 |
| $2: 55 \mathrm{PM}$ | 1 | 0 |
| $3: 00 \mathrm{PM}$ | 0 | 0 |
| $3: 05 \mathrm{PM}$ | 0 | 0 |
| $3: 10 \mathrm{PM}$ | 0 | 0 |
| $3: 15 \mathrm{PM}$ | 0 | 0 |
| $3: 20 \mathrm{PM}$ | 0 | 0 |
| $3: 25 \mathrm{PM}$ | 0 | 0 |
| $3: 30 \mathrm{PM}$ | 0 | 0 |
| $3: 35 \mathrm{PM}$ | 0 | 1 |
| $3: 40 \mathrm{PM}$ | 0 | 0 |
| $3: 45 \mathrm{PM}$ | 1 | 0 |
| $3: 50 \mathrm{PM}$ | 0 | 0 |
| $3: 55 \mathrm{PM}$ | 0 | 0 |
| $4: 00 \mathrm{PM}$ | 0 | 0 |
| $4: 05 \mathrm{PM}$ | 0 | 0 |
| $4: 10 \mathrm{PM}$ | 0 | 2 |
| $4: 15 \mathrm{PM}$ | 0 | 1 |
| $4: 20 \mathrm{PM}$ | 0 | 0 |
| $4: 25 \mathrm{PM}$ | 0 | 0 |
| $4: 30 \mathrm{PM}$ | 0 | 0 |
| $4: 35 \mathrm{PM}$ | 0 | 0 |
| $4: 40 \mathrm{PM}$ | 0 | 0 |
| $4: 45 \mathrm{PM}$ | 0 | 0 |
| $4: 50 \mathrm{PM}$ | 0 | 0 |
| $4: 55 \mathrm{PM}$ | 0 | 0 |
| $5: 00 \mathrm{PM}$ | 0 | 0 |
| $5: 05 \mathrm{PM}$ | 0 | 0 |
| $5: 10 \mathrm{PM}$ | 0 | 0 |
| $5: 15 \mathrm{PM}$ | 0 | 0 |
| $5: 20 \mathrm{PM}$ | 0 | 0 |
| $5: 25 \mathrm{PM}$ | 0 | 0 |
| $5: 30 \mathrm{PM}$ | 0 | 0 |
| $5: 35 \mathrm{PM}$ | 0 | 0 |
| $5: 40 \mathrm{PM}$ | 0 | 0 |
| $5: 45 \mathrm{PM}$ | 0 | 0 |
| $5: 50 \mathrm{PM}$ | 1 | 0 |
| $5: 55 \mathrm{PM}$ | 0 | 0 |
| Total | $\mathbf{2 7}$ | 0 |
|  |  | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
|  | 0 | 0 |

Location: N Meridian St North of E Sherman St
Date: 11/19/2019
Time: 7:00 AM - 6:00 PM
Site Code: 15124324

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


| $9: 55 \mathrm{AM}$ | 0 | 0 |
| ---: | :--- | :--- |
| $10: 00 \mathrm{AM}$ | 0 | 0 |
| $10: 05 \mathrm{AM}$ | 0 | 0 |
| $10: 10 \mathrm{AM}$ | 0 | 1 |
| $10: 15 \mathrm{AM}$ | 0 | 0 |
| $10: 20 \mathrm{AM}$ | 0 | 0 |
| $10: 25 \mathrm{AM}$ | 2 | 2 |
| $10: 30 \mathrm{AM}$ | 0 | 2 |
| $10: 35 \mathrm{AM}$ | 0 | 1 |
| $10: 40 \mathrm{AM}$ | 3 | 3 |
| $10: 45 \mathrm{AM}$ | 2 | 1 |
| $10: 50 \mathrm{AM}$ | 0 | 1 |
| $10: 55 \mathrm{AM}$ | 0 | 0 |
| $11: 00 \mathrm{AM}$ | 0 | 0 |
| $11: 05 \mathrm{AM}$ | 0 | 0 |
| $11: 10 \mathrm{AM}$ | 0 | 0 |
| $11: 15 \mathrm{AM}$ | 0 | 0 |
| $11: 20 \mathrm{AM}$ | 1 | 1 |
| $11: 25 \mathrm{AM}$ | 0 | 0 |
| $11: 30 \mathrm{AM}$ | 0 | 3 |
| $11: 35 \mathrm{AM}$ | 1 | 0 |
| $11: 40 \mathrm{AM}$ | 0 | 0 |
| $11: 45 \mathrm{AM}$ | 2 | 1 |
| $11: 50 \mathrm{AM}$ | 1 | 0 |
| $11: 55 \mathrm{AM}$ | 1 | 0 |
| $12: 00 \mathrm{PM}$ | 0 | 0 |
| $12: 05 \mathrm{PM}$ | 0 | 0 |
| $12: 10 \mathrm{PM}$ | 0 | 0 |
| $12: 15 \mathrm{PM}$ | 0 | 1 |
| $12: 20 \mathrm{PM}$ | 0 | 0 |
| $12: 25 \mathrm{PM}$ | 0 | 0 |
| $12: 30 \mathrm{PM}$ | 0 | 0 |
| $12: 35 \mathrm{PM}$ | 0 | 0 |
| $12: 40 \mathrm{PM}$ | 0 | 0 |
| $12: 45 \mathrm{PM}$ | 0 | 1 |
| $12: 50 \mathrm{PM}$ | 0 | 1 |
| $12: 55 \mathrm{PM}$ | 0 | 0 |
| $1: 00 \mathrm{PM}$ | 0 | 0 |
| $1: 05 \mathrm{PM}$ | 1 | 0 |
| $1: 10 \mathrm{PM}$ | 0 | 0 |
| $1: 15 \mathrm{PM}$ | 0 | 0 |
| $1: 20 \mathrm{PM}$ | 3 | 0 |
| $1: 25 \mathrm{PM}$ | 0 | 0 |
| $1: 30 \mathrm{PM}$ | 0 | 0 |
| $1: 35 \mathrm{PM}$ | 0 | 0 |
| $1: 40 \mathrm{PM}$ | 0 | 0 |
| $1: 45 \mathrm{PM}$ | 0 | 0 |
| $1: 50 \mathrm{PM}$ | 1 | 0 |
| $1: 55 \mathrm{PM}$ | 2 | 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 | 2 | 1 |
| 2:25 PM | 0 | 0 |
| 2:30 PM | 0 | 0 |
| 2:35 PM | 0 | 0 |
| 2:40 PM | 1 | 3 |
| 2:45 PM | 0 | 2 |
| 2:50 PM | 0 | 0 |
| 2:55 PM | 0 | 1 |
| 3:00 PM | 0 | 1 |
| 3:05 PM | 1 | 1 |
| 3:10 PM | 0 | 1 |
| 3:15 PM | 0 | 1 |
| 3:20 PM | 1 | 0 |
| 3:25 PM | 0 | 0 |
| 3:30 PM | 0 | 0 |
| 3:35 PM | 0 | 0 |
| 3:40 PM | 0 | 0 |
| 3:45 PM | 0 | 0 |
| 3:50 PM | 1 | 0 |
| 3:55 PM | 1 | 1 |
| 4:00 PM | 0 | 1 |
| 4:05 PM | 0 | 2 |
| 4:10 PM | 0 | 2 |
| 4:15 PM | 0 | 2 |
| 4:20 PM | 0 | 1 |
| 4:25 PM | 0 | 0 |
| 4:30 PM | 0 | 1 |
| 4:35 PM | 0 | 0 |
| 4:40 PM | 0 | 0 |
| 4:45 PM | 0 | 0 |
| 4:50 PM | 0 | 0 |
| 4:55 PM | 0 | 2 |
| 5:00 PM | 2 | 1 |
| 5:05 PM | 0 | 0 |
| 5:10 PM | 0 | 1 |
| 5:15 PM | 0 | 0 |
| 5:20 PM | 0 | 0 |
| 5:25 PM | 0 | 0 |
| 5:30 PM | 0 | 1 |
| 5:35 PM | 0 | 0 |
| 5:40 PM | 0 | 1 |
| 5:45 PM | 0 | 2 |
| 5:50 PM | 0 | 0 |
| 5:55 PM | 0 | 0 |
| Total | 74 | 68 |

Location: N Meridian St South of E Sherman St
Date: 11/19/2019
Time: 7:00 AM - 6:00 PM
Site Code: 15124325

|  | Pedestrians |  |
| ---: | :---: | :---: |
| Start Time | Eastbound | Westbound |
| $7: 00 \mathrm{AM}$ | 0 | 0 |
| $7: 05 \mathrm{AM}$ | 0 | 0 |
| $7: 10 \mathrm{AM}$ | 0 | 0 |
| $7: 15 \mathrm{AM}$ | 0 | 0 |
| $7: 20 \mathrm{AM}$ | 0 | 0 |
| $7: 25 \mathrm{AM}$ | 0 | 0 |
| $7: 30 \mathrm{AM}$ | 0 | 0 |
| $7: 35 \mathrm{AM}$ | 0 | 0 |
| $7: 40 \mathrm{AM}$ | 1 | 0 |
| $7: 45 \mathrm{AM}$ | 0 | 0 |
| $7: 50 \mathrm{AM}$ | 1 | 0 |
| $7: 55 \mathrm{AM}$ | 3 | 0 |
| $8: 00 \mathrm{AM}$ | 0 | 1 |
| $8: 05 \mathrm{AM}$ | 0 | 0 |
| $8: 10 \mathrm{AM}$ | 0 | 1 |
| $8: 15 \mathrm{AM}$ | 0 | 0 |
| $8: 20 \mathrm{AM}$ | 0 | 0 |
| $8: 25 \mathrm{AM}$ | 0 | 0 |
| $8: 30 \mathrm{AM}$ | 0 | 0 |
| $8: 35 \mathrm{AM}$ | 1 | 0 |
| $8: 40 \mathrm{AM}$ | 0 | 0 |
| $8: 45 \mathrm{AM}$ | 0 | 0 |
| $8: 50 \mathrm{AM}$ | 0 | 0 |
| $8: 55 \mathrm{AM}$ | 0 | 1 |
| $9: 00 \mathrm{AM}$ | 0 | 0 |
| $9: 05 \mathrm{AM}$ | 2 | 0 |
| $9: 10 \mathrm{AM}$ | 0 | 0 |
| $9: 15 \mathrm{AM}$ | 0 | 1 |
| $9: 20 \mathrm{AM}$ | 1 | 0 |
| $9: 25 \mathrm{AM}$ | 0 | 0 |
| $9: 30 \mathrm{AM}$ | 0 | 0 |
| $9: 35 \mathrm{AM}$ | 0 | 0 |
| $9: 40 \mathrm{AM}$ | 0 | 0 |
| $9: 45 \mathrm{AM}$ | 0 | 0 |
| $9: 50 \mathrm{AM}$ | 1 | 1 |
|  |  |  |
|  | 0 | 0 |


| $9: 55 \mathrm{AM}$ | 1 | 0 |
| ---: | :--- | :--- |
| $10: 00 \mathrm{AM}$ | 0 | 1 |
| $10: 05 \mathrm{AM}$ | 0 | 3 |
| $10: 10 \mathrm{AM}$ | 0 | 0 |
| $10: 15 \mathrm{AM}$ | 0 | 0 |
| $10: 20 \mathrm{AM}$ | 0 | 0 |
| $10: 25 \mathrm{AM}$ | 0 | 2 |
| $10: 30 \mathrm{AM}$ | 0 | 0 |
| $10: 35 \mathrm{AM}$ | 1 | 1 |
| $10: 40 \mathrm{AM}$ | 1 | 1 |
| $10: 45 \mathrm{AM}$ | 1 | 0 |
| $10: 50 \mathrm{AM}$ | 0 | 0 |
| $10: 55 \mathrm{AM}$ | 0 | 0 |
| $11: 00 \mathrm{AM}$ | 2 | 1 |
| $11: 05 \mathrm{AM}$ | 0 | 0 |
| $11: 10 \mathrm{AM}$ | 0 | 0 |
| $11: 15 \mathrm{AM}$ | 0 | 0 |
| $11: 20 \mathrm{AM}$ | 0 | 0 |
| $11: 25 \mathrm{AM}$ | 0 | 0 |
| $11: 30 \mathrm{AM}$ | 2 | 2 |
| $11: 35 \mathrm{AM}$ | 0 | 2 |
| $11: 40 \mathrm{AM}$ | 0 | 0 |
| $11: 45 \mathrm{AM}$ | 0 | 0 |
| $11: 50 \mathrm{AM}$ | 2 | 0 |
| $11: 55 \mathrm{AM}$ | 1 | 0 |
| $12: 00 \mathrm{PM}$ | 0 | 0 |
| $12: 05 \mathrm{PM}$ | 0 | 0 |
| $12: 10 \mathrm{PM}$ | 0 | 0 |
| $12: 15 \mathrm{PM}$ | 0 | 0 |
| $12: 20 \mathrm{PM}$ | 0 | 0 |
| $12: 25 \mathrm{PM}$ | 0 | 0 |
| $12: 30 \mathrm{PM}$ | 0 | 0 |
| $12: 35 \mathrm{PM}$ | 0 | 0 |
| $12: 40 \mathrm{PM}$ | 0 | 0 |
| $12: 45 \mathrm{PM}$ | 0 | 0 |
| $12: 50 \mathrm{PM}$ | 0 | 0 |
| $12: 55 \mathrm{PM}$ | 0 | 0 |
| $1: 00 \mathrm{PM}$ | 0 | 0 |
| $1: 05 \mathrm{PM}$ | 0 | 0 |
| $1: 10 \mathrm{PM}$ | 0 | 0 |
| $1: 15 \mathrm{PM}$ | 0 | 0 |
| $1: 20 \mathrm{PM}$ | 2 | 0 |
| $1: 25 \mathrm{PM}$ | 0 | 0 |
| $1: 30 \mathrm{PM}$ | 0 | 0 |
| $1: 35 \mathrm{PM}$ | 0 | 0 |
| $1: 40 \mathrm{PM}$ | 1 | 0 |
| $1: 45 \mathrm{PM}$ | 0 | 0 |
| $1: 50 \mathrm{PM}$ | 0 | 0 |
| $1: 55 \mathrm{PM}$ | 0 | 0 |
|  |  | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
| 1 |  |  |


| $2: 00 \mathrm{PM}$ | 1 | 0 |
| ---: | :--- | :--- |
| $2: 05 \mathrm{PM}$ | 0 | 0 |
| $2: 10 \mathrm{PM}$ | 0 | 0 |
| $2: 15 \mathrm{PM}$ | 0 | 1 |
| $2: 20 \mathrm{PM}$ | 0 | 0 |
| $2: 25 \mathrm{PM}$ | 0 | 0 |
| $2: 30 \mathrm{PM}$ | 0 | 0 |
| $2: 35 \mathrm{PM}$ | 1 | 0 |
| $2: 40 \mathrm{PM}$ | 0 | 0 |
| $2: 45 \mathrm{PM}$ | 0 | 0 |
| $2: 50 \mathrm{PM}$ | 0 | 0 |
| $2: 55 \mathrm{PM}$ | 0 | 0 |
| $3: 00 \mathrm{PM}$ | 0 | 2 |
| $3: 05 \mathrm{PM}$ | 1 | 0 |
| $3: 10 \mathrm{PM}$ | 0 | 0 |
| $3: 15 \mathrm{PM}$ | 1 | 0 |
| $3: 20 \mathrm{PM}$ | 0 | 0 |
| $3: 25 \mathrm{PM}$ | 0 | 0 |
| $3: 30 \mathrm{PM}$ | 0 | 0 |
| $3: 35 \mathrm{PM}$ | 0 | 0 |
| $3: 40 \mathrm{PM}$ | 0 | 0 |
| $3: 45 \mathrm{PM}$ | 0 | 0 |
| $3: 50 \mathrm{PM}$ | 0 | 0 |
| $3: 55 \mathrm{PM}$ | 2 | 0 |
| $4: 00 \mathrm{PM}$ | 0 | 0 |
| $4: 05 \mathrm{PM}$ | 0 | 0 |
| $4: 10 \mathrm{PM}$ | 3 | 0 |
| $4: 15 \mathrm{PM}$ | 0 | 0 |
| $4: 20 \mathrm{PM}$ | 0 | 0 |
| $4: 25 \mathrm{PM}$ | 0 | 0 |
| $4: 30 \mathrm{PM}$ | 0 | 0 |
| $4: 35 \mathrm{PM}$ | 0 | 0 |
| $4: 40 \mathrm{PM}$ | 0 | 3 |
| $4: 45 \mathrm{PM}$ | 0 | 0 |
| $4: 50 \mathrm{PM}$ | 0 | 0 |
| $4: 55 \mathrm{PM}$ | 0 | 0 |
| $5: 00 \mathrm{PM}$ | 0 | 0 |
| $5: 05 \mathrm{PM}$ | 0 | 0 |
| $5: 10 \mathrm{PM}$ | 0 | 0 |
| $5: 15 \mathrm{PM}$ | 0 | 0 |
| $5: 20 \mathrm{PM}$ | 0 | 0 |
| $5: 25 \mathrm{PM}$ | 0 | 0 |
| $5: 30 \mathrm{PM}$ | 0 | 0 |
| $5: 35 \mathrm{PM}$ | 0 | 0 |
| $5: 40 \mathrm{PM}$ | 1 | 0 |
| $5: 45 \mathrm{PM}$ | 1 | 0 |
| $5: 50 \mathrm{PM}$ | 0 | 0 |
| $5: 55 \mathrm{PM}$ | 0 | 0 |
| Total | 35 | 0 |
|  |  | 0 |

Location: N Meridian St North of E Sheridan St
Date: 11/19/2019
Time: 7:00 AM - 6:00 PM
Site Code: 15124326

|  | Pedestrians |  |
| ---: | :---: | :---: |
| Start Time | Eastbound | Westbound |
| $7: 00 \mathrm{AM}$ | 0 | 0 |
| $7: 05 \mathrm{AM}$ | 0 | 0 |
| $7: 10 \mathrm{AM}$ | 0 | 0 |
| $7: 15 \mathrm{AM}$ | 0 | 0 |
| $7: 20 \mathrm{AM}$ | 0 | 0 |
| $7: 25 \mathrm{AM}$ | 0 | 0 |
| $7: 30 \mathrm{AM}$ | 1 | 0 |
| $7: 35 \mathrm{AM}$ | 0 | 0 |
| $7: 40 \mathrm{AM}$ | 1 | 0 |
| $7: 45 \mathrm{AM}$ | 0 | 1 |
| $7: 50 \mathrm{AM}$ | 2 | 0 |
| $7: 55 \mathrm{AM}$ | 1 | 0 |
| $8: 00 \mathrm{AM}$ | 0 | 0 |
| $8: 05 \mathrm{AM}$ | 0 | 0 |
| $8: 10 \mathrm{AM}$ | 1 | 0 |
| $8: 15 \mathrm{AM}$ | 0 | 0 |
| $8: 20 \mathrm{AM}$ | 0 | 0 |
| $8: 25 \mathrm{AM}$ | 0 | 0 |
| $8: 30 \mathrm{AM}$ | 0 | 0 |
| $8: 35 \mathrm{AM}$ | 0 | 0 |
| $8: 40 \mathrm{AM}$ | 0 | 0 |
| $8: 45 \mathrm{AM}$ | 0 | 0 |
| $8: 50 \mathrm{AM}$ | 1 | 1 |
| $8: 55 \mathrm{AM}$ | 0 | 2 |
| $9: 00 \mathrm{AM}$ | 0 | 1 |
| $9: 05 \mathrm{AM}$ | 0 | 0 |
| $9: 10 \mathrm{AM}$ | 2 | 0 |
| $9: 15 \mathrm{AM}$ | 1 | 0 |
| $9: 20 \mathrm{AM}$ | 1 | 0 |
| $9: 25 \mathrm{AM}$ | 0 | 0 |
| $9: 30 \mathrm{AM}$ | 0 | 0 |
| $9: 35 \mathrm{AM}$ | 0 | 1 |
| $9: 40 \mathrm{AM}$ | 0 | 0 |
| $9: 45 \mathrm{AM}$ | 0 | 0 |
| $9: 50 \mathrm{AM}$ | 0 | 1 |
|  |  |  |
|  | 0 | 0 |


| $9: 55 \mathrm{AM}$ | 0 | 0 |
| ---: | :--- | :--- |
| $10: 00 \mathrm{AM}$ | 2 | 0 |
| $10: 05 \mathrm{AM}$ | 0 | 2 |
| $10: 10 \mathrm{AM}$ | 0 | 0 |
| $10: 15 \mathrm{AM}$ | 0 | 1 |
| $10: 20 \mathrm{AM}$ | 0 | 1 |
| $10: 25 \mathrm{AM}$ | 0 | 1 |
| $10: 30 \mathrm{AM}$ | 1 | 1 |
| $10: 35 \mathrm{AM}$ | 0 | 0 |
| $10: 40 \mathrm{AM}$ | 3 | 0 |
| $10: 45 \mathrm{AM}$ | 0 | 0 |
| $10: 50 \mathrm{AM}$ | 0 | 0 |
| $10: 55 \mathrm{AM}$ | 0 | 0 |
| $11: 00 \mathrm{AM}$ | 2 | 2 |
| $11: 05 \mathrm{AM}$ | 0 | 0 |
| $11: 10 \mathrm{AM}$ | 0 | 1 |
| $11: 15 \mathrm{AM}$ | 2 | 0 |
| $11: 20 \mathrm{AM}$ | 0 | 1 |
| $11: 25 \mathrm{AM}$ | 0 | 1 |
| $11: 30 \mathrm{AM}$ | 1 | 1 |
| $11: 35 \mathrm{AM}$ | 0 | 1 |
| $11: 40 \mathrm{AM}$ | 0 | 1 |
| $11: 45 \mathrm{AM}$ | 0 | 0 |
| $11: 50 \mathrm{AM}$ | 2 | 1 |
| $11: 55 \mathrm{AM}$ | 0 | 0 |
| $12: 00 \mathrm{PM}$ | 0 | 0 |
| $12: 05 \mathrm{PM}$ | 1 | 0 |
| $12: 10 \mathrm{PM}$ | 0 | 0 |
| $12: 15 \mathrm{PM}$ | 0 | 0 |
| $12: 20 \mathrm{PM}$ | 0 | 0 |
| $12: 25 \mathrm{PM}$ | 0 | 1 |
| $12: 30 \mathrm{PM}$ | 2 | 1 |
| $12: 35 \mathrm{PM}$ | 2 | 0 |
| $12: 40 \mathrm{PM}$ | 0 | 0 |
| $12: 45 \mathrm{PM}$ | 0 | 0 |
| $12: 50 \mathrm{PM}$ | 0 | 0 |
| $12: 55 \mathrm{PM}$ | 0 | 0 |
| $1: 00 \mathrm{PM}$ | 0 | 1 |
| $1: 05 \mathrm{PM}$ | 0 | 1 |
| $1: 10 \mathrm{PM}$ | 0 | 0 |
| $1: 15 \mathrm{PM}$ | 3 | 1 |
| $1: 20 \mathrm{PM}$ | 1 | 0 |
| $1: 25 \mathrm{PM}$ | 0 | 0 |
| $1: 30 \mathrm{PM}$ | 0 | 0 |
| $1: 35 \mathrm{PM}$ | 1 | 0 |
| $1: 40 \mathrm{PM}$ | 0 | 0 |
| $1: 45 \mathrm{PM}$ | 0 | 0 |
| $1: 50 \mathrm{PM}$ | 0 | 0 |
| $1: 55 \mathrm{PM}$ | 0 | 0 |
|  |  | 0 |
|  | 0 | 0 |
|  | 0 | 0 |
| 1 |  |  |


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

## Appendix D

Critical Crash Rate Calculations \& Crash Data

General \& Site Information

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



| Intersection Population Type Crash Rate |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Average Crash Rate per intersection type |  |  |  |  |
| Intersection Pop. Type | Sum of <br> Crashes | Sum of 5- <br> year MEV | Avg Crash <br> Rate for Ref <br> 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 <br> Intersection | 5-year MEV | Crash Total | Intersection <br> Population <br> Type | Intersection <br> Crash Rate | Reference <br> Population Crash <br> Rate | Critical <br> Rate | Over <br> 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 |

 | fon |
| :--- |
| hes at MERIDIAN ST, City of Newberg, Y |
| $2.7-31$ of |
| 1 Crash recoras shown |




## PUBLIC WORKS DEPARTMENT

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: | Bill Buhrow |
| :--- | :--- |
| Sent: | Wednesday, January 13, 2021 12:37 AM |
| To: | Kaaren Hofmann; Ed Gierok |
| Subject: | RE: No Parking Request |

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

That would be fine - thanks
??
Bill Buhrow, Psy.D.
George Fox University
Dean of Student Services
Dir. Health and Counseling
503-554-2340
??
?????NOTICE: This e-mail (including attachments) is covered by the Electronic Communications Privacy Act, 18 U.S.C._2510-2521, is confidential and may be privileged. If you are not the intended recipient, please be aware that any retention, dissemination, distribution, or copying of this communication is prohibited. Please reply to the sender that you have received this message in error, then delete it. Thank you for helping to maintain privacy.???
??
??
From: Kaaren Hofmann [mailto:Kaaren.Hofmann@newbergoregon.gov]
Sent: Tuesday, January 12, 2021 8:56 AM
To: Bill Buhrow; Ed Gierok
Subject: No Parking Request
??
Good morning-
??
Based on the TSC meeting last night, the request for an additional 35 ??? at both locations will not be approved as some of your neighbors objected.?? Are you comfortable with an additional 20??? on your side of Meridian??? We can also set up a meeting to discuss options.
??
Let me know where you think you want to go.
??
Regards,
??
Kaaren Hofmann, PE
City Engineer
City of Newberg
414 E. First Street
Newberg, Oregon 97132
503.537.1223 (desk phone)
971.281 .9067 (mobile phone)
kaaren.hofmann@newbergoregon.gov
Pronouns: she ??? her - hers
??

??
Helpful Links:

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

## From:

 Ed Gierok
## Sent:

Tuesday, January 12, 2021 9:17 AM
To:
Kaaren Hofmann

Cc:
Bill Buhrow
Subject: Re: No Parking Request

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

I think that would be fine.

In His Service,
Ed Gierok
Director of Campus Public Safety \& Emergency Management
George Fox University
503-554-2090

On Tue, Jan 12, 2021 at 8:55 AM Kaaren Hofmann
[Kaaren.Hofmann@newbergoregon.gov](mailto:Kaaren.Hofmann@newbergoregon.gov) wrote:
Good morning-

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

Let me know where you think you want to go.

Regards,

## Kaaren Hofmann, PE

## City Engineer

City of Newberg
414 E. First Street
Newberg, Oregon 97132
503.537.1223 (desk phone)
971.281.9067 (mobile phone)
kaaren.hofmann@newbergoregon.gov
Pronouns: she - her - hers


## Helpful Links:

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

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.


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

[^0]:    "Working Together for a Better Community - Serious About Service"
    "Traffic Safety Mission Statement: To give the citizens of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community."

[^1]:    "Working Together for a Better Community - Serious About Service"
    "Traffic Safety Mission Statement: To give the citizens of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community."

[^2]:    1 https://www.newbergoregon.gov/planning/page/adapedestrianbike-route-improvement-plan

