

VERANDA AT PLEASANT VALLEY

TRAFFIC IMPACT STUDY

GRESHAM, OREGON



EXPIRES: 12/31/2021

PREPARED FOR:
Jim Leeper

PREPARED BY:
Michael Ard, PE
Ard Engineering

DATE:
May 12, 2021



TABLE OF CONTENTS

| | |
|--------------------------------------|----|
| Executive Summary | 3 |
| Project Description & Location | 4 |
| Existing Conditions | 5 |
| Site Trips..... | 10 |
| Future Conditions Analysis | 13 |
| Safety Analysis | 20 |
| Conclusions | 22 |
| Appendix | 23 |



EXECUTIVE SUMMARY

1. A property located on the east side of SE 190th Drive south of SE Richey Road in Gresham, Oregon is proposed for development with 183 single-family homes. The site will take access via two street connections to SE 190th Drive.
2. The subject property is projected to generate 135 new site trips during the morning peak hour, 181 trips during the evening peak hour, and 1,728 new daily site trips.
3. Based on the operational analysis, all study intersections will either operate acceptably per City of Gresham standards or operate with reduced delays and increased capacity as compared to background conditions upon completion of the proposed development provided that a southbound right-turn lane is provided for the intersection of SE 190th Drive at SE Richey Road, and a westbound left-turn lane is provided for the intersection of SE Foster Road at SE Richey Road. No other mitigations are recommended in conjunction with the proposed development.
4. Based on a queuing simulation model, the projected 95th percentile queue lengths for the proposed new turn lanes were 105 feet for the southbound right-turn lane serving SE 190th Drive at SE Richey Road, and 161 feet for the westbound left-turn lane serving SE Foster Road at SE Richey Road. Accordingly, the turn lanes provided should accommodate these minimum storage requirements.
5. Based on the crash data, the majority of the study intersections are currently operating acceptably with respect to safety. The intersection of SE 190th Drive at SW Butler Road has a calculated crash rate of 1.34 crashes per million entering vehicle, consisting primarily of angle collisions. However, the traffic signal currently being installed is expected to significantly reduce the frequency of these crashes. Based on the crash data analysis, no other safety mitigations are recommended in conjunction with the proposed development.
6. Intersection sight distance was evaluated for the two new site access intersections on SE 190th Drive. The proposed site access locations are 857 feet and 1,173 feet south of the centerline of Richey Road. From these locations, adequate sight distance is projected to be available for safe and efficient operation of the intersections.



PROJECT DESCRIPTION & LOCATION

INTRODUCTION

The proposed development is located on the east side of SE 190th Drive south of SE Richey Road in Gresham, Oregon. The site is proposed to be developed with 183 single-family dwellings. Access will be taken via two new streets intersecting SE 190th Drive.

This report addresses the impacts of the proposed development on the surrounding street system. Based on the City of Gresham’s code requirements, an operational and safety analysis is required for all intersections projected to experience an increase of 5 percent or more of any approach lane capacity during either the morning or evening peak hours. Accordingly, the analysis scope includes the two proposed site access intersections on SE 190th Drive and the existing public intersections of:

- SE Powell Boulevard at SE 182nd Avenue;
- SW Pleasant View Drive/SE 190th Drive at SE Giese Road/SW Butler Road;
- SE 190th Drive at SE Richey Road; and
- SE Foster Road at SE Richey Road.

The purpose of this analysis is to determine whether the surrounding transportation system is capable of safely and efficiently supporting the proposed use and to identify any necessary improvements and mitigations.

SITE LOCATION AND STUDY AREA DESCRIPTION

The project site totals approximately 38.9 acres and is developed with one single-family home, which is currently vacant. The property is bordered by the Brookside at Pleasant Valley development to the north, and by existing low-density residential uses as well as agricultural and forested lands to the west, east and south.

A description of the streets within the study area is provided in Table 1 below.

Table 1 - Study Area Roadway Descriptions

| Roadway | Functional Classification | Travel Lanes | Bike Lanes | Sidewalks | Speed (mph) |
|------------------------|---------------------------|--------------|------------|-----------|-------------|
| SE Powell Boulevard | Arterial / District Hwy | 5 | Yes | Yes | 40 |
| SE 182nd Avenue | Arterial | 5 | Yes | Yes | 35 |
| SW Pleasant View Drive | Arterial | 2 - 3 | Partial | Partial | 40 |
| SE Giese Road | Minor Arterial | 2 | No | No | 40 |
| SW Butler Road | Minor Arterial | 2 | No | Partial | 25 |
| SE 190th Drive | Arterial | 2 | No | No | 40 |
| SE Richey Road | Collector | 2 | No | No | 35* - 45 |
| SE Foster Road | Minor Arterial | 2 | No | No | 45* |

*20 mph within designated school zone between 7:00 AM and 5:00 PM on school days.



EXISTING CONDITIONS

The intersection of SE Powell Boulevard (US Highway 26) at SE 182nd Avenue/SW Highland Drive is controlled by a traffic signal. The eastbound, westbound, and northbound approaches each have a left-turn lane operating with protected phasing, a dedicated through lane, a shared through/right lane, and a bike lane to the right of the motor vehicle lanes. The southbound approach has a left-turn lane with protected phasing, two dedicated through lanes, a right-turn lane, and a bike lane between the through and right-turn lanes. Marked crosswalks with pedestrian signals are in place crossing all four legs of the intersection.

The intersection of SW Pleasant View Drive/SE 190th Drive at SE Giese Road/SW Butler Road currently operates under all-way stop control, but a traffic signal is currently being installed. The northbound and westbound approaches each have a shared left/through lane and a dedicated right-turn lane. The southbound approach has a left-turn lane and a shared through/right lane. The eastbound approach has a single, shared lane for all turning movements.

The intersection of SE 190th Drive at SE Richey Road is a T-intersection controlled operating under all-way stop control. Each approach has a single, shared lane for all turning movements.

The intersection of SE Foster Road at SE Richey Road is a T-intersection controlled by a stop sign on the westbound Richey Road approach. Through traffic traveling along SE Foster Road does not stop. The southeast-bound and westbound approaches each have a single, shared lane for all turning movements. The northwest-bound approach has a dedicated through lane and a channelized right-turn lane operating under yield control.

A vicinity map displaying the project site, vicinity streets, and the study intersections including lane configurations is provided in Figure 1 on page 6.

TRAFFIC COUNT DATA

SE Richey Road is currently under construction and is closed to through traffic. Accordingly, count data for the study intersections was drawn from prior studies conducted in the site vicinity. The prior traffic counts were collected at the study area intersections on Tuesday May 7, 2019 from 7:00 to 9:00 AM and 4:00 to 6:00 PM. Those volumes were adjusted to account for two years of growth in traffic to determine the current year 2021 traffic volumes. Figures 2 and 3 on pages 7 and 8 show the existing 2021 traffic volumes for the morning and evening peak hours at the study intersections.

FIGURE 1

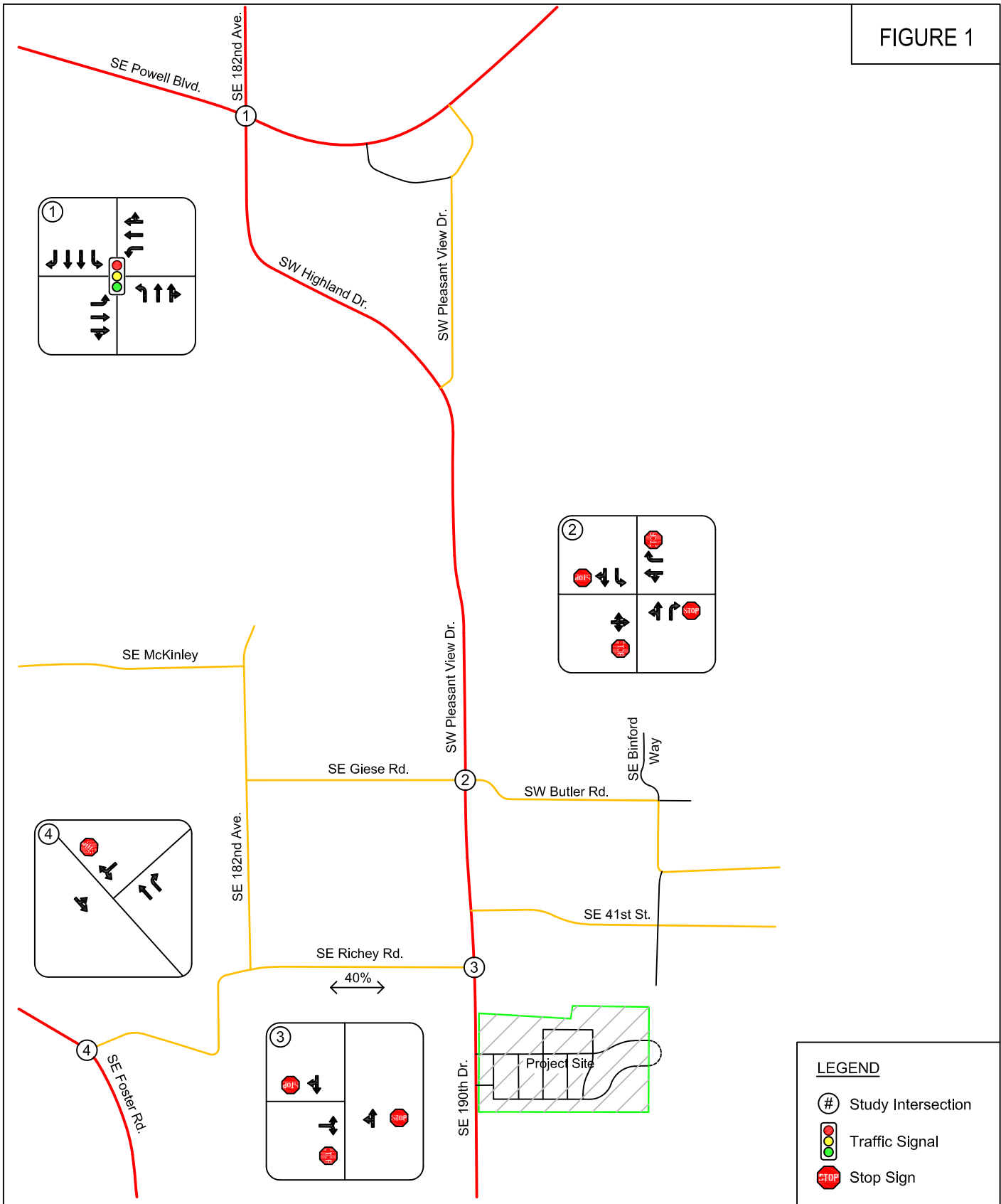


FIGURE 2

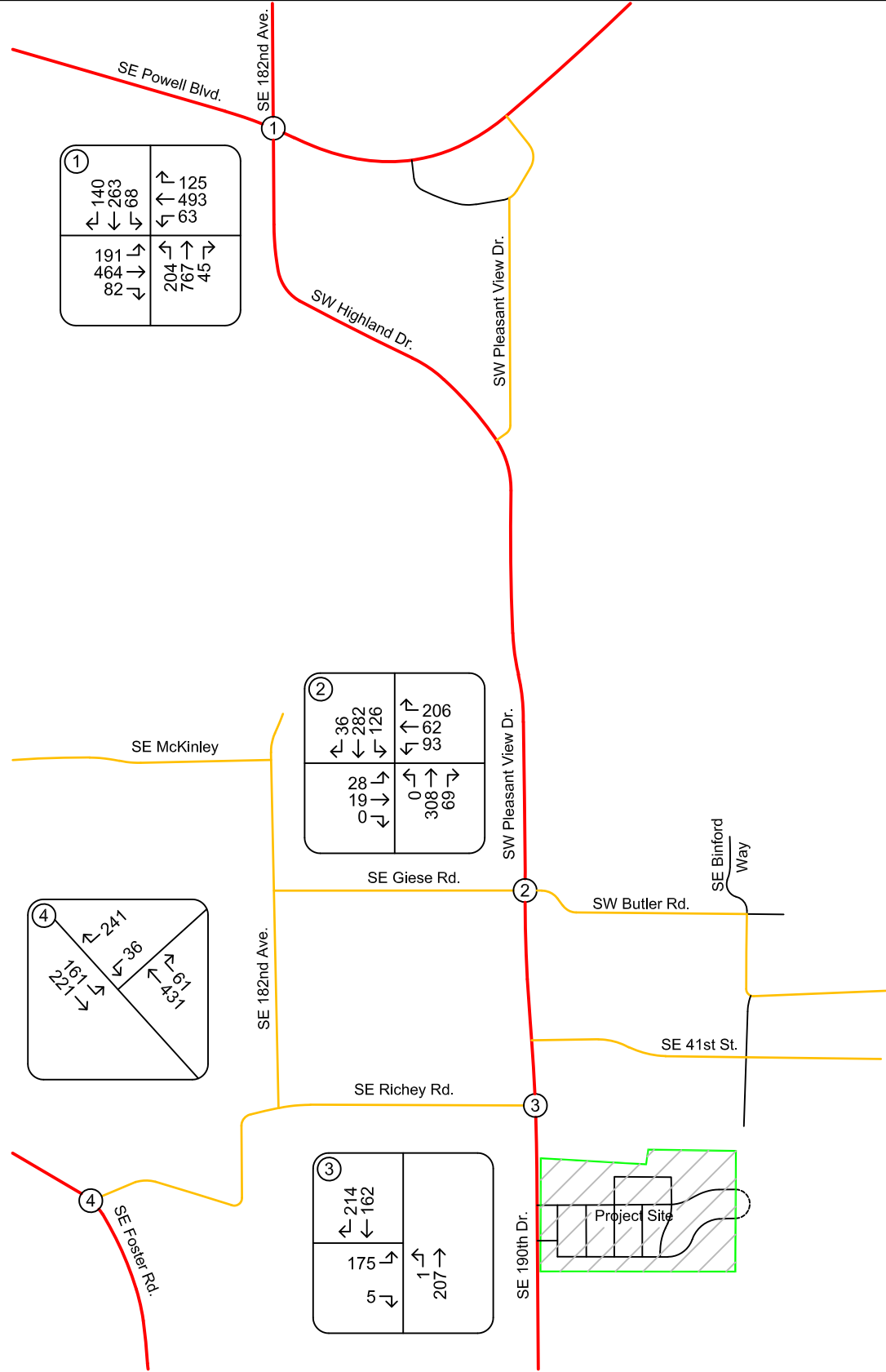
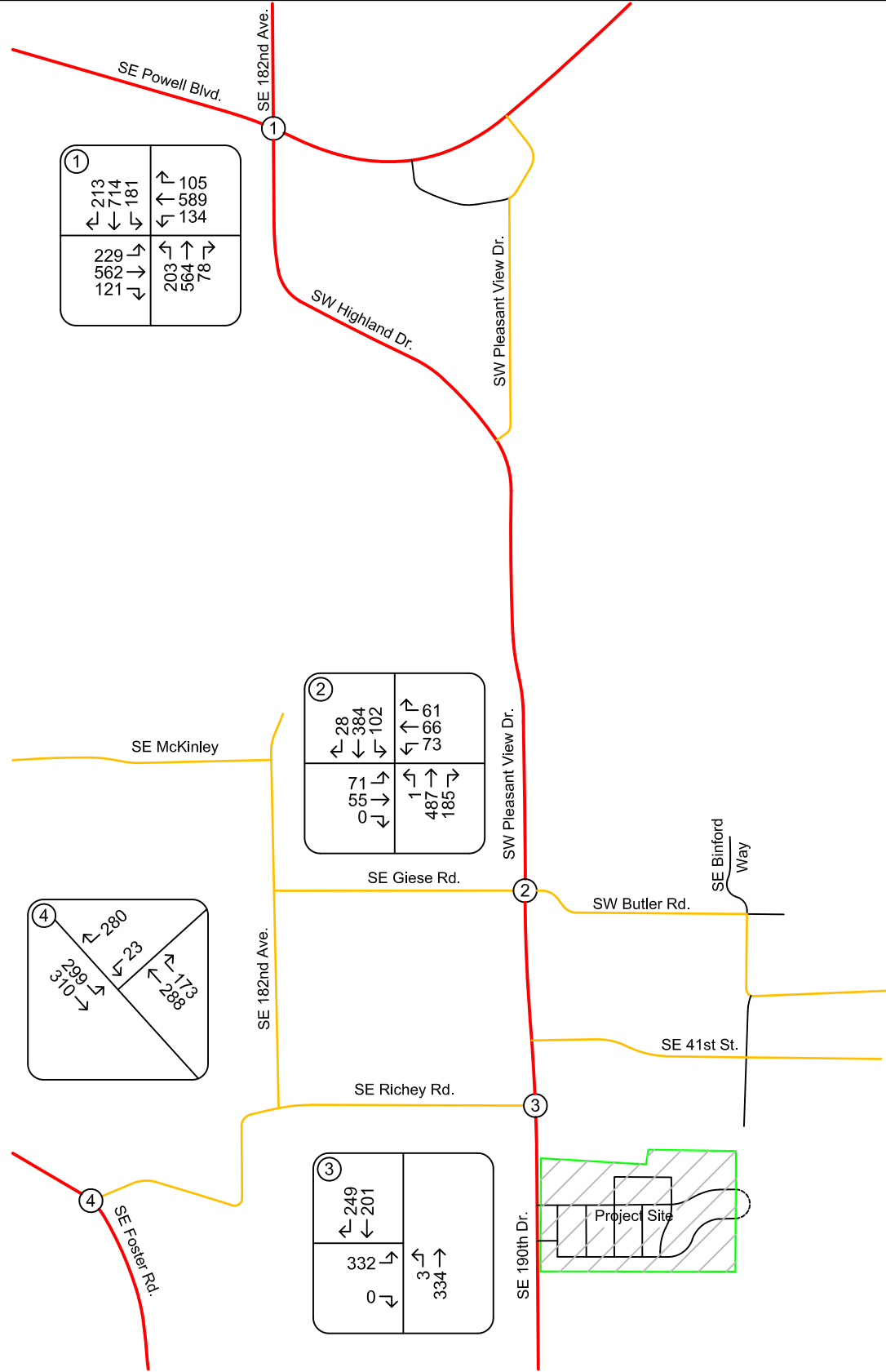


FIGURE 3





OPERATIONAL ANALYSIS

An operational analysis was conducted for the study intersections using Synchro 10 software, with outputs calculated based on the *HIGHWAY CAPACITY MANUAL, 6th Edition*. The analysis was conducted for the weekday morning and evening peak hours.

The purpose of the existing conditions analysis is to establish how the study area intersections operate currently and allow for calibration of the operational analysis if required.

The results of the operational analysis are reported based on delay, Level of Service (LOS), and volume-to-capacity ratio (v/c). Delays are reported in seconds. Level of service is reported as a letter grade and can range from A to F, with level of service A representing nearly free-flow conditions and level of service F representing high delays and severe congestion. A report of level of service D generally indicates moderately high but tolerable delays, and typically occurs prior to reaching intersection capacity. For unsignalized intersections, the v/c represents the portion of the available intersection capacity that is being utilized on the worst intersection approach. For signalized intersections, it indicates the portion of the overall intersection’s capacity that is being used. A v/c ratio of 1.0 would indicate that the intersection is operating at capacity.

The City of Gresham requires that signalized intersections operate with a v/c ratio of 0.90 or less and at level of service D or better during the peak hours. Individual movements at signalized intersections must operate at level of service E or better and with a v/c ratio of 1.0 or less. Unsignalized intersections are required to operate at level of service E or better.

A summary of the existing conditions operational analysis is provided in Table 2 below. For the unsignalized intersections the reported delays and levels-of-service represent the approach lane which experiences the highest delays. The reported v/c ratios represent the highest ratio for any approach lane. For the signalized intersection of SE Powell Boulevard at SE 182nd Avenue the reported delays, levels-of-service and v/c ratios represent the operation of the overall intersection.

Based on the analysis, most study intersections are currently operating acceptably per City of Gresham standards. The intersection of SE 190th Drive at SW Butler Road is currently operating at level of service F and with a v/c ratio of 0.93 during the evening peak hour; however, it is currently being signalized, which will restore acceptable operation. Detailed capacity analysis worksheets are provided in the technical appendix.

Table 2 - Operational Analysis Summary: 2021 Existing Conditions

| Intersection | AM Peak Hour | | | PM Peak Hour | | |
|--|--------------|-----|------|--------------|----------|-------------|
| | Delay | LOS | v/c* | Delay | LOS | v/c* |
| SE Powell Blvd. at SE 182nd Ave. | 35.9 | D | 0.82 | 48.9 | D | 0.78 |
| SE 190th Dr. at SE Giese Rd./SW Butler Rd. | 21.2 | C | 0.64 | 50.7 | F | 0.93 |
| SE 190th Dr. at SE Richey Rd. | 12.3 | B | 0.52 | 19.1 | C | 0.69 |
| SE Foster Rd. at SE Richey Rd. | 17.2 | C | 0.53 | 13.1 | B | 0.42 |



SITE TRIPS

Proposed Development

The proposed new development will consist of 183 single-family dwellings. To estimate the number of trips that will be generated by the proposed development, trip rates from the *TRIP GENERATION MANUAL, 10th EDITION* were used. Data from land-use code 210, *Single-Family Detached* were used. The trip estimates are based on the number of dwelling units.

A summary of the trip generation calculations is provided in Table 3 below. Detailed trip generation worksheets are also included in the technical appendix.

Table 3 - Proposed Development Trip Generation Summary

| | AM Peak Hour | | | PM Peak Hour | | | Daily Total |
|-------------------------|--------------|-----|-------|--------------|-----|-------|-------------|
| | In | Out | Total | In | Out | Total | |
| 183 Single-Family Homes | 34 | 101 | 135 | 114 | 67 | 181 | 1728 |

TRIP DISTRIBUTION

The directional distribution of site trips to and from the project site was estimated based the existing travel patterns in the site vicinity, as well as the locations of likely trip destinations and major transportation routes. Overall, 30 percent of the anticipated site trips are projected to travel to and from the west on SE Foster Road, 20 percent will travel to and from the south on SE 190th Drive, 10 percent will travel to and from the east on SW Butler Road, 10 percent will travel to and from the west on SE Powell Boulevard, 25 percent will travel to and from the north on SE 182nd Avenue, and 5 percent will travel to and from the east on SE Powell Boulevard.

The trip distribution percentages and trip assignment for the proposed development are shown in Figures 4 and 5 on pages 11 and 12.

FIGURE 4

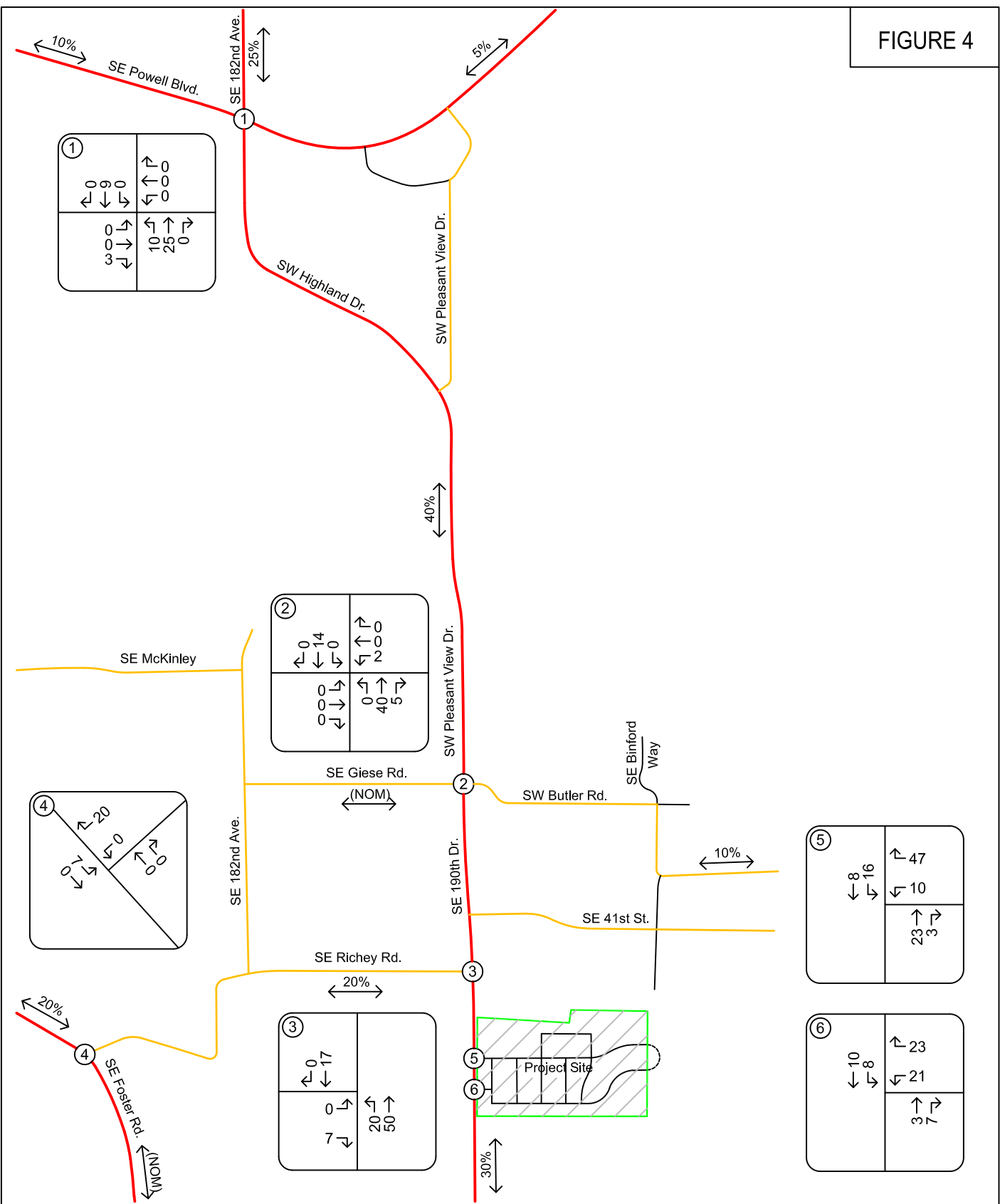
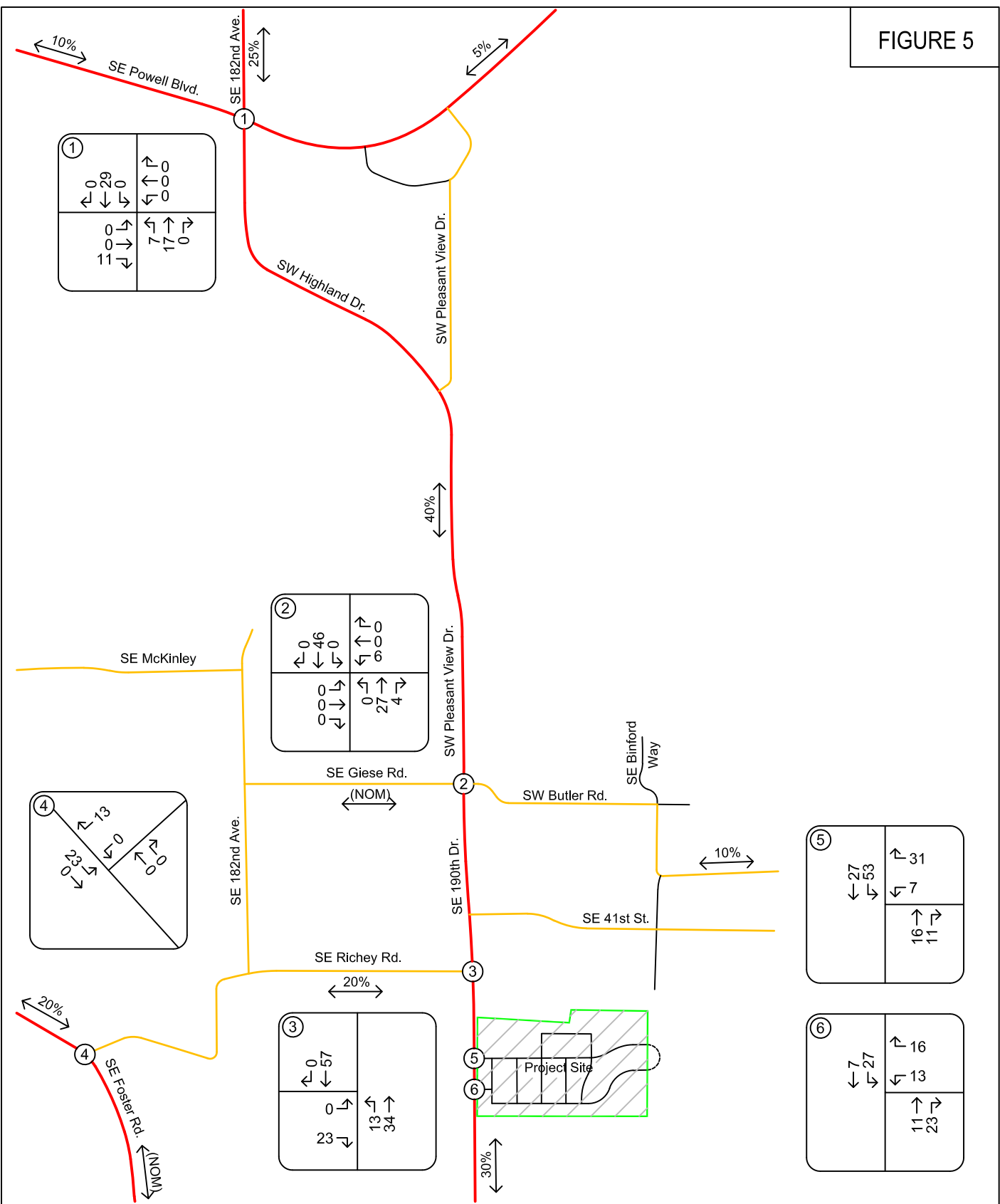


FIGURE 5





FUTURE CONDITIONS ANALYSIS

BACKGROUND VOLUMES

In order to determine the expected impact of site trips on the study area intersections, it is necessary to compare traffic conditions both with and without the addition of the projected traffic from the proposed development. Since the proposed use cannot be constructed and occupied immediately, the comparison is made for future traffic conditions at the time of anticipated project completion. It is expected that the proposed use will be completed and occupied within three years. Accordingly, the analysis was conducted for year 2024 traffic conditions.

To generate the year 2024 background traffic volumes, turning movement data was taken from the prior Brookside at Pleasant Valley (Phases 4, 5 and 6) traffic impact study. Specifically, data was taken from Figures 8 and 9, which showed the year 2022 “Background Plus Site Trips Conditions”. Accordingly, these volumes include in-process trips from the Sunset Village, Sycamore Vista, Del Boca Vista, Brookside Phases 3, 4, 5, and 6, Big Oak, and Homestead developments.

Since the data utilized represented year 2022 traffic conditions, it was necessary to adjust the volumes to account for two additional years of growth to generate the year 2024 background traffic volumes. In accordance with the procedures described in ODOT’s Analysis Procedures Manual and based on data from ODOT’s Future Volume Tables, a linear growth rate of 1.002 was calculated for traffic volumes on SE Powell Boulevard in the site vicinity. Growth rates for all other turning movements were conservatively calculated based on the average growth rate for the Portland Metro area over the most recent three years, which is in excess of the average growth rate for the City of Gresham. This equated to a background growth rate of 1.27 percent per year. The growth rates were applied over a period of two years.

Note that since the year 2022 traffic volumes projected in the prior report assumed completion of all relevant in-process projects (and the Brookside project from which the data was taken), the projected year 2024 traffic volumes also conservatively assume that all in-process developments will be complete by 2024.

Figures 6 and 7 on pages 14 and 15 show the projected year 2024 background traffic volumes at the study intersections during the morning and evening peak hours.

BACKGROUND VOLUMES PLUS SITE TRIPS

Peak hour trips calculated to be generated by the proposed development were added to the projected year 2024 background traffic volumes to obtain the year 2024 total traffic volumes following completion of the proposed residential development.

Figures 8 and 9 on pages 16 and 17 show the projected year 2024 peak hour volumes including background growth and site trips from the proposed development.

FIGURE 6

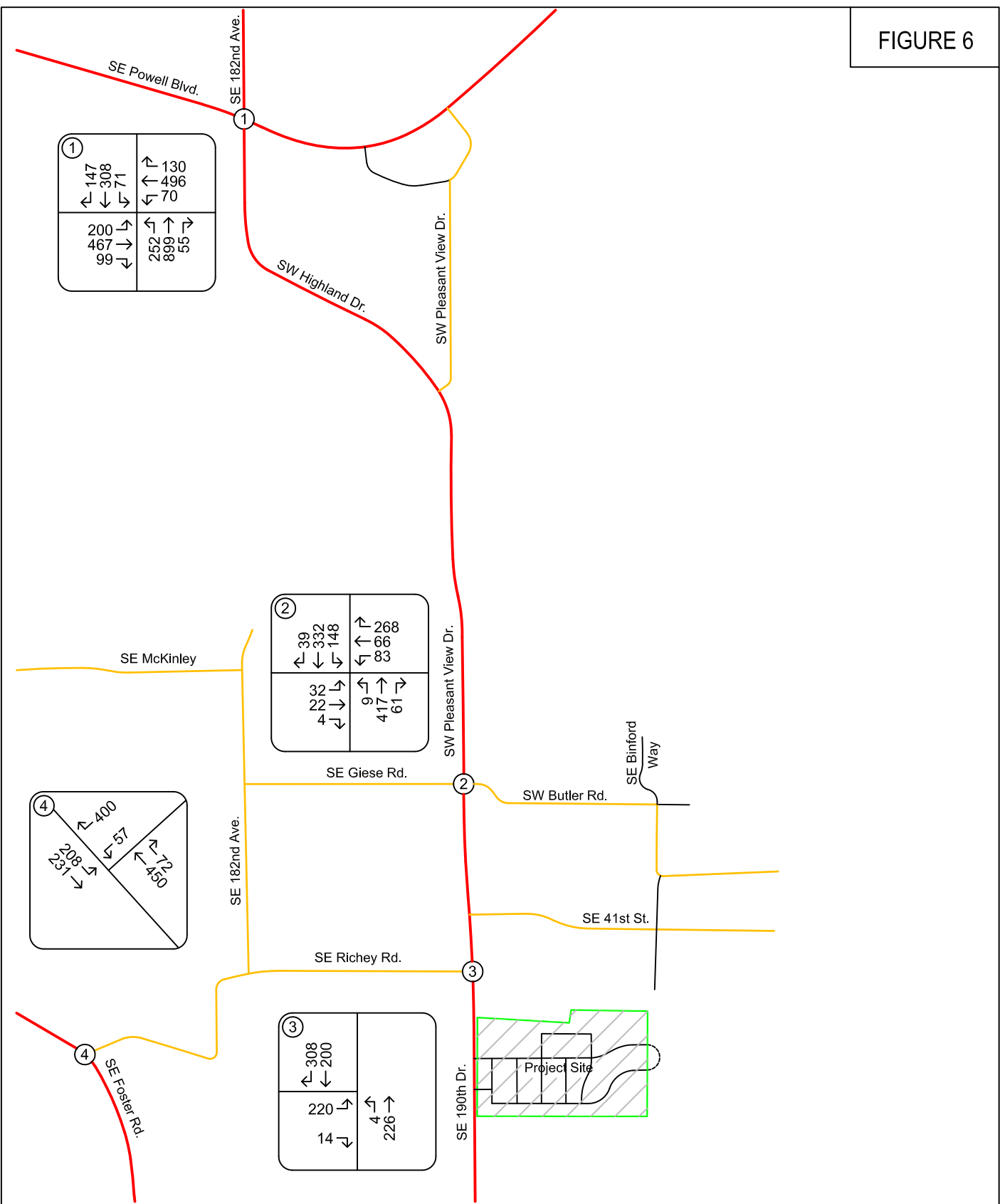


FIGURE 7

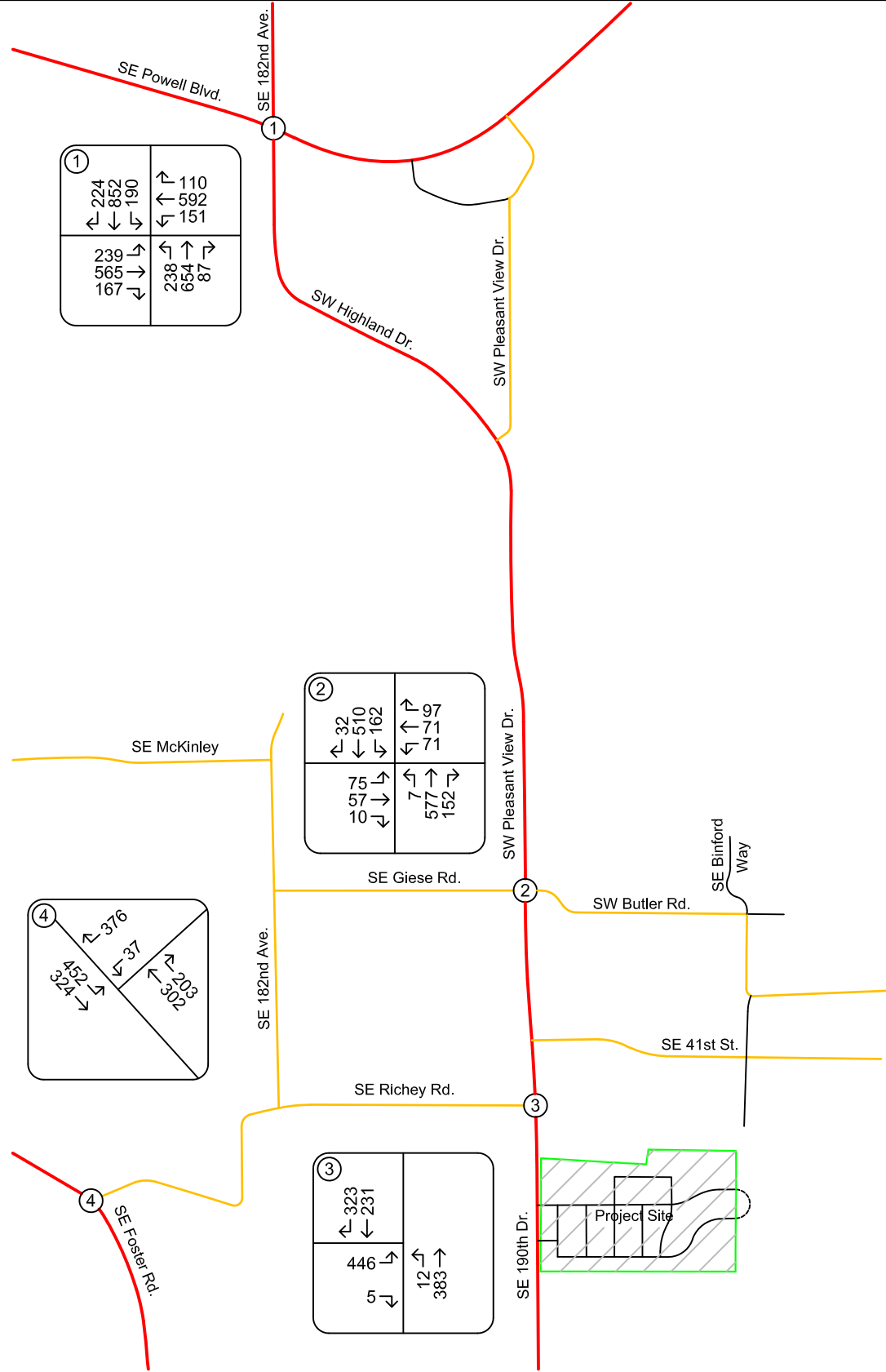


FIGURE 8

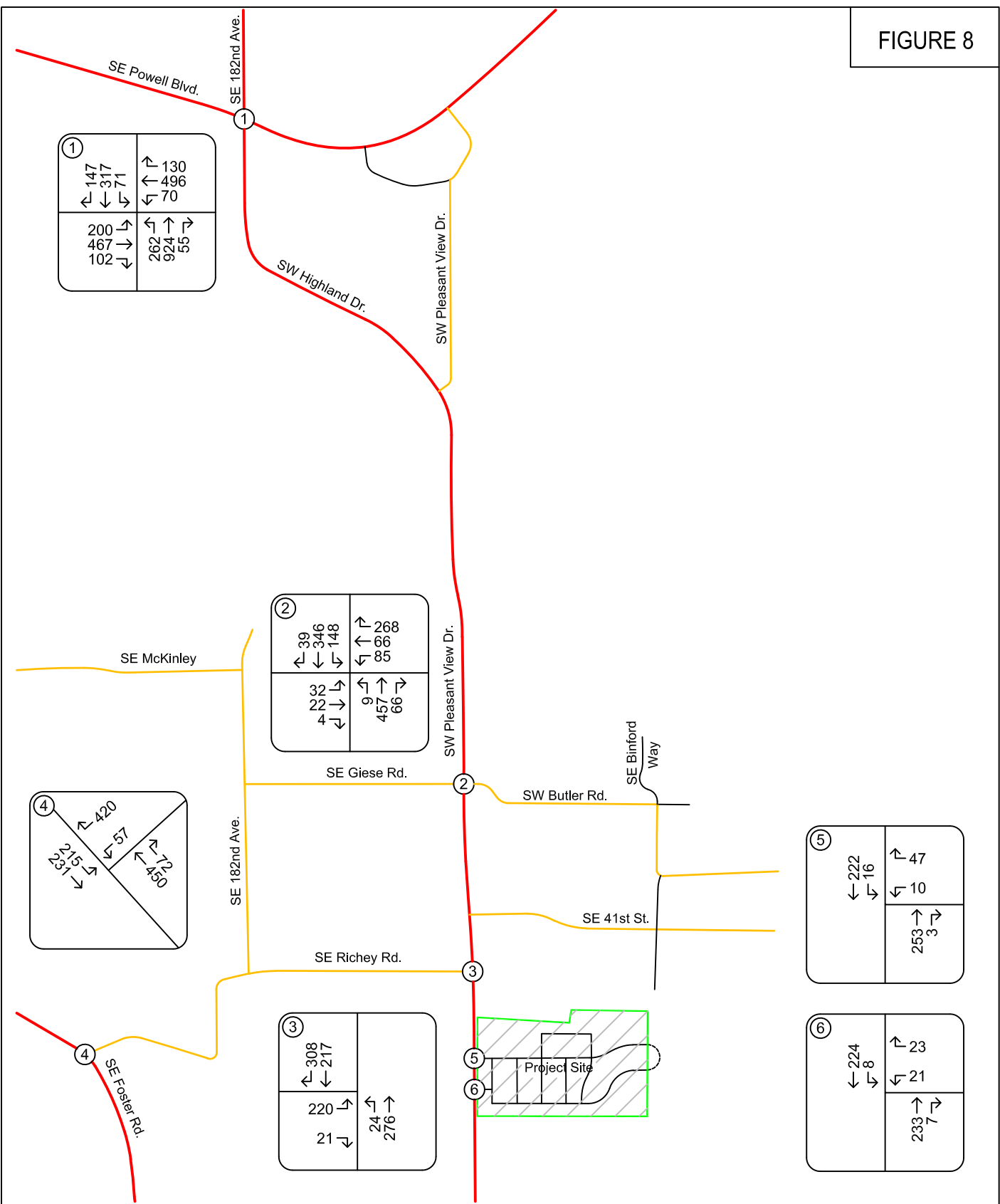
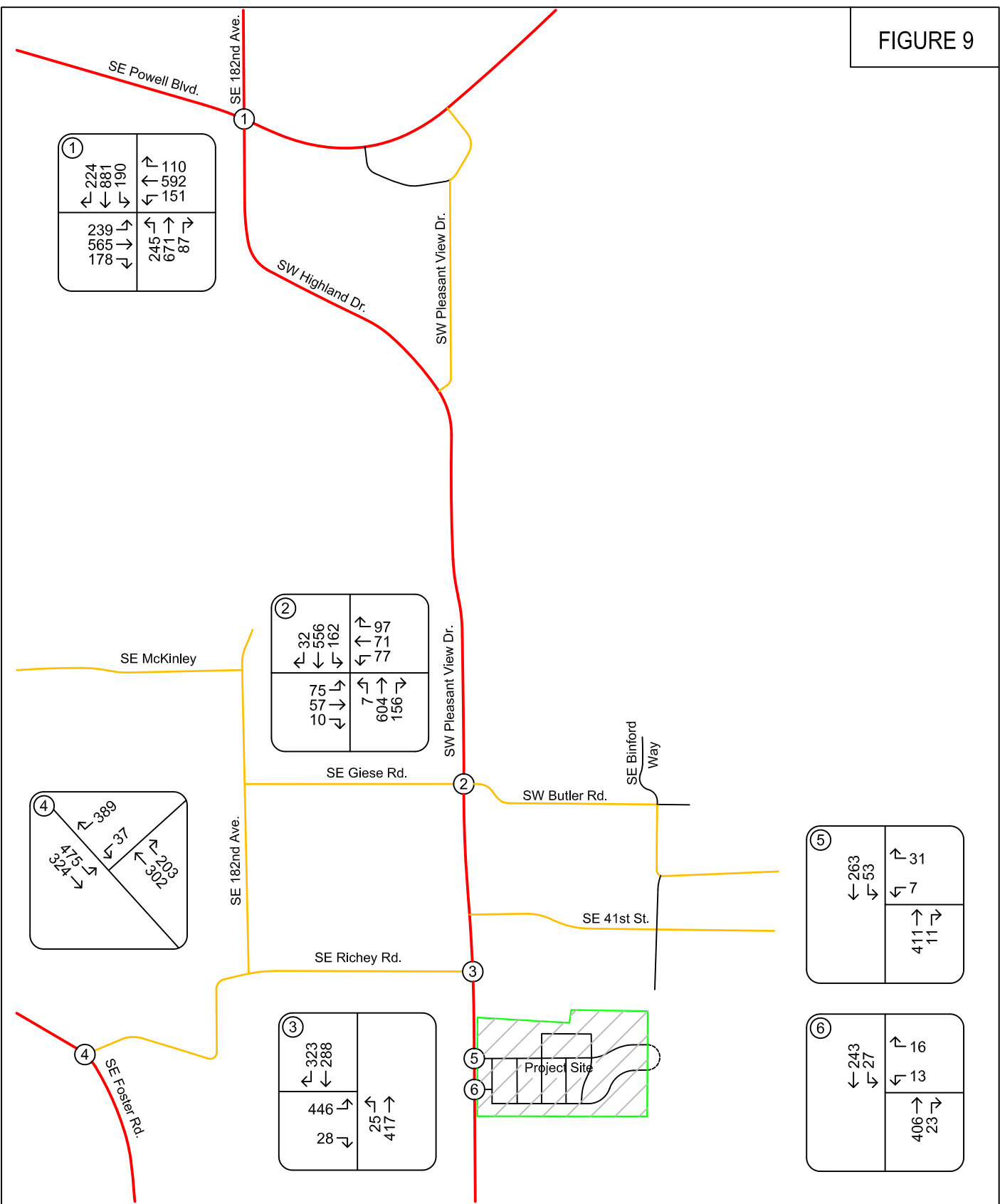


FIGURE 9





OPERATIONAL ANALYSIS

The operational analysis for future traffic conditions was again conducted using Synchro analysis software, with outputs based on the analysis methodologies contained in the *HIGHWAY CAPACITY MANUAL, 6th Edition*. The analysis was prepared for the intersections’ morning and evening peak hours.

The results of the operational analysis are summarized in Table 4 below. Detailed analysis worksheets are also included in the technical appendix.

Table 4 - Operational Analysis Summary: Year 2024 Future Conditions

| Intersection | AM Peak Hour | | | PM Peak Hour | | |
|--|--------------|-----|------|--------------|----------|-------------|
| | Delay | LOS | v/c* | Delay | LOS | v/c* |
| SE Powell Blvd. at SE 182nd Ave. | | | | | | |
| 2024 Background | 41.3 | D | 0.90 | 54.6 | D | 0.86 |
| 2024 Background plus Site | 41.6 | D | 0.91 | 56.5 | E | 0.87 |
| SE 190th Dr. at SE Butler Rd. | | | | | | |
| 2024 Background* | 8.8 | A | 0.49 | 7.3 | A | 0.54 |
| 2024 Background plus Site* | 9.1 | A | 0.52 | 7.5 | A | 0.55 |
| SE 190th Dr. at SE Richey Rd. | | | | | | |
| 2024 Background | 21.4 | C | 0.75 | 59.6 | F | 0.98 |
| 2024 Background plus Site | 26.3 | D | 0.81 | 108.4 | F | 1.12 |
| 2024 Background plus Site w/ SBRT | 14.8 | B | 0.49 | 51.3 | F | 0.93 |
| SE Foster Rd. at SE Richey Rd. | | | | | | |
| 2024 Background | 26.3 | D | 0.76 | 47.8 | E | 0.89 |
| 2024 Background plus Site | 28.7 | D | 0.79 | 63.8 | F | 0.97 |
| 2024 Background plus Site w/ WBLT | 25.8 | D | 0.53 | 36.9 | E | 0.57 |
| SE 190th Drive at North Site Access | | | | | | |
| 2024 Background plus Site | 10.8 | B | 0.09 | 12.6 | B | 0.08 |
| SE 190th Drive at South Site Access | | | | | | |
| 2024 Background plus Site | 11.3 | B | 0.08 | 13.4 | B | 0.07 |

*Assumes completion of the traffic signal currently being installed.

It should be noted that although the intersection of SE Powell Boulevard at SE 182nd Avenue is shown as operating with average delays slightly above 55 seconds (into level of service E) during the evening peak hour, the intersection is expected to operate at level of service D. The intersection utilizes adaptive traffic control software which cannot be accurately modeled in our Synchro analysis. Assuming that the adaptive control software yields even a modest 3 percent reduction in delay, the resulting average intersection delays will be less than 55 seconds and the intersection will operate acceptably per City of Gresham standards. All individual turning movements are also projected to operate at level of service E or better and within capacity.



Based on analysis, the intersections of SE Powell Boulevard at SE 182nd Avenue, SE 190th Drive at SE Butler Road, and the two site access intersections on SE 190th Drive are projected to operate acceptably with no improvements required.

It should be noted that SE Richey Road is being converted from a collector roadway to a local street under the City of Gresham's Pleasant Valley TSP Refinement Plan. Future traffic volumes on this roadway would be projected to decrease upon completion of planned new east/west collector facilities that will be constructed as development within the area proceeds. As such, significant improvements such as construction of traffic signals should not be considered for implementation unless no other alternatives exist which would accommodate safe and efficient traffic flow in the interim. Accordingly, as consideration was given to appropriate operational mitigations for the study intersections on Richey Road, the goal was to meet the legal standard of no further degradation of these intersections.

The intersection of SE 190th Drive at SE Richey Road is projected to operate at level of service F and with volumes near intersection capacity during the evening peak hour under year 2024 background traffic conditions. With the addition of site trips from the proposed development, the intersection is projected to operate with volumes exceeding intersection capacity. If a southbound right-turn lane is provided at the intersection, operation is projected to improve as compared to background traffic conditions, with average delays on the highest-delay approach reduced to 51.5 seconds and all approaches operating at 93 percent of capacity or less. Accordingly, this mitigation is more than sufficient to offset the impacts of the proposed development and result in a net improvement to intersection operation as compared to background conditions.

The intersection of SE Foster Road at SE Richey Road is also projected to operate at level of service F and with volumes near intersection capacity during the evening peak hour under year 2024 background conditions. With the addition of site trips from the proposed development, the intersection is projected to operate with volumes exceeding intersection capacity. If a westbound left-turn lane is provided at the intersection, operation is again projected to improve. Notably, the combined average approach delay for the critical westbound approach is reduced from 63.8 seconds per vehicle to just 18.1 seconds per vehicle, with all intersection approaches operating within capacity. This proposed mitigation is more than sufficient to offset the impacts of the Veranda residential development and will result in a net improvement to intersection operation as compared to background conditions.

Based on the analysis, all study intersections will either operate acceptably per City of Gresham standards or operate with reduced delays and increased capacity as compared to background traffic conditions upon completion of the proposed development provided that a southbound right-turn lane is provided for the intersection of SE 190th Drive at SE Richey Road, and a westbound left-turn lane is provided for the intersection of SE Foster Road at SE Richey Road. No other mitigations are recommended in conjunction with the proposed development.

Based on a queuing simulation model, the projected 95th percentile queue lengths for the proposed new turn lanes were 105 feet for the southbound right-turn lane serving SE 190th Drive at SE Richey Road, and 161 feet for the westbound left-turn lane serving SE Foster Road at SE Richey Road. Accordingly, the turn lanes provided should accommodate these minimum storage requirements.



SAFETY ANALYSIS

CRASH DATA ANALYSIS

Using data obtained from the Oregon Department of Transportation, a review of the five most recent years of available crash history (from January 2015 through December 2019) was performed for the study intersections. The crash data was evaluated based on the number, type, and severity of collisions, as well as the intersection crash rate. Crash rates allow comparison of relative safety risks at intersections with different lane configurations, volumes, and traffic control devices by accounting for both the number of crashes that occur during the study period and the number of vehicles that traveled through the intersection during that period. Crash rates are calculated using the standard assumption that evening peak hour volumes are approximately 10 percent of the average daily traffic volume at an intersection. Crash rates in excess of one crash per million entering vehicle may be indicative of design deficiencies.

The intersection of SE Powell Boulevard at SE 182nd Avenue had 59 reported collisions during the five-year analysis period. These included 30 rear-end collisions, 14 turning-movement collisions, 7 angle collisions, 2 pedestrian collisions, 2 sideswipe-overtaking collisions, 1 backing collision, 1 sideswipe-meeting collision, 1 fixed-object collision, and 1 head-on collision. The crashes resulted in no fatalities; however, there was 1 incapacitating injury along with 5 non-incapacitating injuries and 52 reports of a “possible injury/complaint of pain”. The pedestrian collisions resulted in non-incapacitating injuries to the pedestrians. The incapacitating injury occurred when a westbound motorcycle traveling along SE Powell Boulevard was rear-ended by a westbound vehicle that was following too closely. The crash rate for the intersection was calculated to be 0.88 crashes per million entering vehicles.

The intersection of SW Pleasant View Drive/SE 190th Drive at SE Giese Road/SW Butler Road had 37 reported crashes during the five-year analysis period. These included 27 angle collisions, 5 rear-end collisions, 3 turning-movement collisions and 2 fixed-object collisions. The crashes resulted in no incapacitating injuries or fatalities. There were four non-incapacitating injuries reported, as well as 17 reports of a “possible injury/complaint of pain”. The crash rate for the intersection was calculated to be 1.34 crashes per million entering vehicles.

The intersection of SE 190th Drive at SE Richey Road had ten reported collisions during the five-year analysis period. These included seven turning-movement collisions, one angle collision, one rear-end collision, and one fixed-object collision. The crashes resulted in no fatalities or serious injuries; however, there were two non-incapacitating injuries and five reports of a “possible injury/complaint of pain”. The crash rate for the intersection was calculated to be 0.49 crashes per million entering vehicles.

The intersection of SE Foster Road at SE Richey Road had 17 reported collisions during the five-year analysis period. These included ten turning-movement collisions, six rear-end collisions and one fixed-object collision. The crashes resulted in no fatalities or serious injuries. There were four non-incapacitating injuries and 12 reports of a “possible injury/complaint of pain”. The crash rate for the intersection was calculated to be 0.68 crashes per million entering vehicles.



Based on the crash data, the majority of the study intersections are currently operating acceptably with respect to safety. The intersection of SE 190th Drive at SW Butler Road had an unusually high crash rate primarily consisting of angle collisions. Completion of the traffic signal currently being installed is projected to reduce the incidence of angle collisions since drivers responding appropriately to the signal indications would not experience angle conflicts within the intersection.

INTERSECTION SIGHT DISTANCE ANALYSIS

Intersection sight distance was examined for each of the proposed new site access locations on SE 190th Drive.

Intersection sight distance is a design parameter which is intended to provide sufficient sight distance to allow drivers approaching an intersection on a stop-controlled minor-street approach to choose when to enter the major street without requiring through traffic on the major street to slow significantly. Intersection sight distance is measured from a position 15 feet behind the edge of the traveled way a driver's eye height of 3.5 feet above the roadway to a position 3.5 feet above the surface of the oncoming travel lanes.

In the Pleasant Valley TSP Refinement, SE 190th Drive is planned to have a Major Arterial, with a design speed of 45 mph. Based on this design speed, a minimum of 500 feet of intersection sight distance should be provided in each direction.

From the north site access (857 feet south of the centerline of Richey Road), intersection sight distance was measured to be greater than 800 feet in each direction. Accordingly, adequate sight distance is available in both directions for this proposed site access intersection.

Initially, the south site access was proposed to be located approximately 1,300 feet south of the centerline of Richey Road. However, from this position sight distance was restricted to just 430 feet to the south by a crest vertical curve. Since sight lines to the south were restricted to less than the desired minimum, the south side access was re-aligned to a position where adequate sight lines could be attained in each direction. From a position 1,173 feet south of the centerline of Richey Road, intersection sight distances of at least 500 feet are attainable in both directions.

Based on the sight distance analysis and the revised location for the south site access, adequate sight distance is now projected to be available for safe and efficient operation at both of the proposed site access intersections.



CONCLUSIONS

Based on the operational analysis, all study intersections will either operate acceptably per City of Gresham standards or operate with reduced delays and increased capacity as compared to background conditions upon completion of the proposed development provided that a southbound right-turn lane is provided for the intersection of SE 190th Drive at SE Richey Road, and a westbound left-turn lane is provided for the intersection of SE Foster Road at SE Richey Road. No other mitigations are recommended in conjunction with the proposed development.

Based on a queuing simulation model, the projected 95th percentile queue lengths for the proposed new turn lanes were 105 feet for the southbound right-turn lane serving SE 190th Drive at SE Richey Road, and 161 feet for the westbound left-turn lane serving SE Foster Road at SE Richey Road. Accordingly, the turn lanes provided should accommodate these minimum storage requirements.

Based on the crash data, the majority of the study intersections are currently operating acceptably with respect to safety. The intersection of SE 190th Drive at SW Butler Road has a calculated crash rate of 1.34 crashes per million entering vehicle, consisting primarily of angle collisions. However, the traffic signal currently being installed is expected to significantly reduce the frequency of these crashes. Based on the crash data analysis, no other safety mitigations are recommended in conjunction with the proposed development.

Intersection sight distance was evaluated for the two new site access intersections on SE 190th Drive. The proposed site access locations are 857 feet and 1,173 feet south of the centerline of Richey Road. From these locations, adequate sight distance is projected to be available for safe and efficient operation of the intersections.

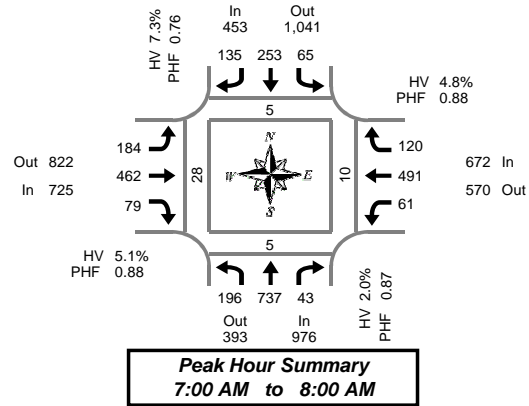


APPENDIX

Total Vehicle Summary



Clay Carney
(503) 833-2740



SE 182nd Ave & SE Powell Blvd

Tuesday, May 07, 2019
7:00 AM to 9:00 AM

5-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-------|-----|-------|-------------------------|-----|-----|-------|--------------------------|-----|-----|-------|--------------------------|-----|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 7:00 AM | 15 | 47 | 6 | 0 | 7 | 22 | 9 | 0 | 11 | 30 | 2 | 0 | 2 | 36 | 11 | 0 | 198 | 0 | 0 | 0 | 2 |
| 7:05 AM | 10 | 51 | 2 | 0 | 4 | 12 | 10 | 0 | 10 | 25 | 8 | 0 | 7 | 56 | 7 | 0 | 202 | 0 | 1 | 1 | 3 |
| 7:10 AM | 27 | 66 | 1 | 0 | 3 | 21 | 16 | 0 | 22 | 35 | 7 | 0 | 3 | 44 | 10 | 0 | 255 | 0 | 1 | 0 | 2 |
| 7:15 AM | 11 | 72 | 4 | 0 | 0 | 12 | 5 | 0 | 10 | 44 | 10 | 0 | 4 | 50 | 10 | 0 | 232 | 0 | 0 | 0 | 0 |
| 7:20 AM | 19 | 76 | 3 | 0 | 8 | 27 | 10 | 0 | 19 | 34 | 10 | 0 | 2 | 33 | 8 | 0 | 249 | 0 | 0 | 0 | 6 |
| 7:25 AM | 13 | 65 | 1 | 0 | 6 | 21 | 9 | 0 | 25 | 41 | 12 | 0 | 10 | 38 | 5 | 0 | 246 | 0 | 0 | 4 | 1 |
| 7:30 AM | 17 | 69 | 3 | 0 | 8 | 31 | 18 | 1 | 14 | 32 | 6 | 0 | 4 | 47 | 17 | 0 | 266 | 0 | 0 | 0 | 4 |
| 7:35 AM | 15 | 68 | 6 | 1 | 3 | 19 | 19 | 0 | 22 | 43 | 4 | 0 | 6 | 35 | 12 | 0 | 252 | 2 | 3 | 4 | 3 |
| 7:40 AM | 21 | 73 | 4 | 0 | 8 | 30 | 13 | 0 | 10 | 43 | 2 | 0 | 1 | 35 | 7 | 0 | 247 | 0 | 0 | 0 | 4 |
| 7:45 AM | 13 | 53 | 2 | 0 | 4 | 16 | 7 | 0 | 11 | 55 | 6 | 0 | 8 | 48 | 11 | 0 | 234 | 0 | 0 | 0 | 0 |
| 7:50 AM | 19 | 56 | 3 | 0 | 3 | 20 | 9 | 0 | 17 | 42 | 7 | 0 | 5 | 25 | 10 | 0 | 216 | 0 | 0 | 1 | 1 |
| 7:55 AM | 16 | 41 | 8 | 0 | 11 | 22 | 10 | 0 | 13 | 38 | 5 | 0 | 9 | 44 | 12 | 0 | 229 | 3 | 0 | 0 | 2 |
| 8:00 AM | 18 | 43 | 5 | 0 | 5 | 18 | 9 | 0 | 18 | 35 | 4 | 0 | 9 | 20 | 9 | 0 | 193 | 1 | 0 | 0 | 0 |
| 8:05 AM | 14 | 41 | 5 | 1 | 7 | 19 | 12 | 0 | 18 | 29 | 5 | 0 | 1 | 36 | 14 | 0 | 201 | 0 | 0 | 0 | 0 |
| 8:10 AM | 10 | 43 | 4 | 0 | 16 | 18 | 9 | 0 | 6 | 33 | 7 | 0 | 10 | 37 | 9 | 0 | 202 | 1 | 0 | 1 | 1 |
| 8:15 AM | 20 | 38 | 4 | 0 | 7 | 16 | 10 | 0 | 11 | 43 | 6 | 0 | 3 | 41 | 11 | 0 | 210 | 0 | 0 | 1 | 2 |
| 8:20 AM | 17 | 35 | 1 | 0 | 7 | 23 | 9 | 0 | 21 | 37 | 4 | 0 | 3 | 42 | 7 | 0 | 206 | 1 | 0 | 2 | 3 |
| 8:25 AM | 15 | 45 | 3 | 0 | 16 | 11 | 6 | 0 | 4 | 45 | 13 | 0 | 4 | 39 | 7 | 0 | 208 | 1 | 0 | 1 | 1 |
| 8:30 AM | 14 | 40 | 9 | 0 | 10 | 24 | 13 | 0 | 14 | 50 | 12 | 0 | 6 | 42 | 11 | 1 | 245 | 0 | 0 | 0 | 1 |
| 8:35 AM | 17 | 53 | 4 | 0 | 12 | 19 | 4 | 0 | 10 | 42 | 13 | 0 | 9 | 25 | 9 | 0 | 217 | 0 | 0 | 0 | 2 |
| 8:40 AM | 7 | 36 | 2 | 0 | 4 | 19 | 3 | 0 | 10 | 43 | 11 | 0 | 9 | 55 | 12 | 0 | 211 | 2 | 0 | 1 | 0 |
| 8:45 AM | 14 | 43 | 11 | 0 | 4 | 18 | 15 | 0 | 10 | 40 | 2 | 0 | 4 | 39 | 7 | 0 | 207 | 0 | 0 | 0 | 1 |
| 8:50 AM | 10 | 38 | 11 | 0 | 15 | 22 | 8 | 0 | 15 | 31 | 4 | 0 | 5 | 35 | 4 | 0 | 198 | 0 | 0 | 0 | 1 |
| 8:55 AM | 16 | 26 | 0 | 0 | 6 | 34 | 13 | 0 | 11 | 37 | 6 | 0 | 5 | 42 | 5 | 0 | 201 | 1 | 0 | 0 | 2 |
| Total Survey | 368 | 1,218 | 102 | 2 | 174 | 494 | 246 | 1 | 332 | 927 | 166 | 0 | 129 | 944 | 225 | 1 | 5,325 | 12 | 5 | 16 | 42 |

15-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-------|-----|-------|-------------------------|-----|-----|-------|--------------------------|-----|-----|-------|--------------------------|-----|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 7:00 AM | 52 | 164 | 9 | 0 | 14 | 55 | 35 | 0 | 43 | 90 | 17 | 0 | 12 | 136 | 28 | 0 | 655 | 0 | 2 | 1 | 7 |
| 7:15 AM | 43 | 213 | 8 | 0 | 14 | 60 | 24 | 0 | 54 | 119 | 32 | 0 | 16 | 121 | 23 | 0 | 727 | 0 | 0 | 4 | 7 |
| 7:30 AM | 53 | 210 | 13 | 1 | 19 | 80 | 50 | 1 | 46 | 118 | 12 | 0 | 11 | 117 | 36 | 0 | 765 | 2 | 3 | 4 | 11 |
| 7:45 AM | 48 | 150 | 13 | 0 | 18 | 58 | 26 | 0 | 41 | 135 | 18 | 0 | 22 | 117 | 33 | 0 | 679 | 3 | 0 | 1 | 3 |
| 8:00 AM | 42 | 127 | 14 | 1 | 28 | 55 | 30 | 0 | 42 | 97 | 16 | 0 | 20 | 93 | 32 | 0 | 596 | 2 | 0 | 1 | 1 |
| 8:15 AM | 52 | 118 | 8 | 0 | 30 | 50 | 25 | 0 | 36 | 125 | 23 | 0 | 10 | 122 | 25 | 0 | 624 | 2 | 0 | 4 | 6 |
| 8:30 AM | 38 | 129 | 15 | 0 | 26 | 62 | 20 | 0 | 34 | 135 | 36 | 0 | 24 | 122 | 32 | 1 | 673 | 2 | 0 | 1 | 3 |
| 8:45 AM | 40 | 107 | 22 | 0 | 25 | 74 | 36 | 0 | 36 | 108 | 12 | 0 | 14 | 116 | 16 | 0 | 606 | 1 | 0 | 0 | 4 |
| Total Survey | 368 | 1,218 | 102 | 2 | 174 | 494 | 246 | 1 | 332 | 927 | 166 | 0 | 129 | 944 | 225 | 1 | 5,325 | 12 | 5 | 16 | 42 |

Peak Hour Summary 7:00 AM to 8:00 AM

| By Approach | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Total | Pedestrians Crosswalk | | | |
|-------------|-------------------------|-----|-------|-------|-------------------------|-------|-------|-------|--------------------------|-----|-------|-------|--------------------------|-----|-------|-------|-------|-----------------------|-------|------|------|
| | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | | North | South | East | West |
| Volume | 976 | 393 | 1,369 | 1 | 453 | 1,041 | 1,494 | 1 | 725 | 822 | 1,547 | 0 | 672 | 570 | 1,242 | 0 | 2,826 | 5 | 5 | 10 | 28 |
| %HV | 2.0% | | | | 7.3% | | | | 5.1% | | | | 4.8% | | | | 4.3% | | | | |
| PHF | 0.87 | | | | 0.76 | | | | 0.88 | | | | 0.88 | | | | 0.92 | | | | |

| By Movement | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Total |
|-------------|-------------------------|------|------|-------|-------------------------|------|-------|-------|--------------------------|------|-------|-------|--------------------------|------|------|-------|-------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| Volume | 196 | 737 | 43 | 976 | 65 | 253 | 135 | 453 | 184 | 462 | 79 | 725 | 61 | 491 | 120 | 672 | 2,826 |
| %HV | 3.6% | 1.5% | 4.7% | 2.0% | 6.2% | 5.9% | 10.4% | 7.3% | 3.8% | 4.8% | 10.1% | 5.1% | 1.6% | 5.7% | 2.5% | 4.8% | 4.3% |
| PHF | 0.86 | 0.86 | 0.83 | 0.87 | 0.74 | 0.79 | 0.68 | 0.76 | 0.75 | 0.82 | 0.62 | 0.88 | 0.69 | 0.82 | 0.83 | 0.88 | 0.92 |

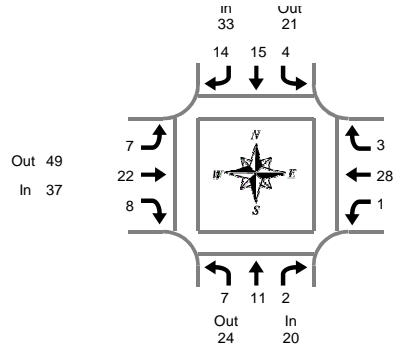
Rolling Hour Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|----|-------|-------------------------|-----|-----|-------|--------------------------|-----|----|-------|--------------------------|-----|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 7:00 AM | 196 | 737 | 43 | 1 | 65 | 253 | 135 | 1 | 184 | 462 | 79 | 0 | 61 | 491 | 120 | 0 | 2,826 | 5 | 5 | 10 | 28 |
| 7:15 AM | 186 | 700 | 48 | 2 | 79 | 253 | 130 | 1 | 183 | 469 | 78 | 0 | 69 | 448 | 124 | 0 | 2,767 | 7 | 3 | 10 | 22 |
| 7:30 AM | 195 | 605 | 48 | 2 | 95 | 243 | 131 | 1 | 165 | 475 | 69 | 0 | 63 | 449 | 126 | 0 | 2,664 | 9 | 3 | 10 | 21 |
| 7:45 AM | 180 | 524 | 50 | 1 | 102 | 225 | 101 | 0 | 153 | 492 | 93 | 0 | 76 | 454 | 122 | 1 | 2,572 | 9 | 0 | 7 | 13 |
| 8:00 AM | 172 | 481 | 59 | 1 | 109 | 241 | 111 | 0 | 148 | 465 | 87 | 0 | 68 | 453 | 105 | 1 | 2,499 | 7 | 0 | 6 | 14 |

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



SE 182nd Ave & SE Powell Blvd

Tuesday, May 07, 2019
7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

Heavy Vehicle 5-Minute Interval Summary

7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total |
|---------------------|-------------------------|----|---|-------|-------------------------|----|----|-------|--------------------------|----|----|-------|--------------------------|----|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 7:00 AM | 2 | 0 | 1 | 3 | 1 | 2 | 3 | 6 | 1 | 2 | 0 | 3 | 0 | 1 | 0 | 1 | 13 |
| 7:05 AM | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 8 | 1 | 3 | 1 | 5 | 0 | 2 | 0 | 2 | 15 |
| 7:10 AM | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 3 | 0 | 4 | 1 | 5 | 0 | 0 | 0 | 0 | 8 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 3 | 4 | 0 | 1 | 0 | 1 | 7 |
| 7:20 AM | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 3 | 0 | 4 | 0 | 4 | 0 | 4 | 10 |
| 7:25 AM | 0 | 3 | 0 | 3 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 3 | 1 | 0 | 0 | 1 | 8 |
| 7:30 AM | 3 | 1 | 0 | 4 | 0 | 0 | 2 | 2 | 1 | 0 | 0 | 1 | 0 | 6 | 0 | 6 | 13 |
| 7:35 AM | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 3 | 0 | 1 | 1 | 2 | 8 |
| 7:40 AM | 0 | 2 | 0 | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 0 | 2 | 0 | 4 | 1 | 5 | 12 |
| 7:45 AM | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 1 | 5 |
| 7:50 AM | 0 | 1 | 0 | 1 | 1 | 4 | 0 | 5 | 0 | 4 | 1 | 5 | 0 | 2 | 1 | 3 | 14 |
| 7:55 AM | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 9 |
| 8:00 AM | 1 | 2 | 0 | 3 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 3 | 0 | 1 | 0 | 1 | 8 |
| 8:05 AM | 1 | 0 | 1 | 2 | 0 | 2 | 2 | 4 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 9 |
| 8:10 AM | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 4 | 0 | 2 | 1 | 3 | 0 | 1 | 0 | 1 | 8 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 4 | 0 | 4 | 0 | 5 | 3 | 8 | 15 |
| 8:20 AM | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 0 | 5 | 0 | 5 | 9 |
| 8:25 AM | 0 | 1 | 1 | 2 | 1 | 1 | 1 | 3 | 0 | 4 | 1 | 5 | 0 | 2 | 1 | 3 | 13 |
| 8:30 AM | 1 | 5 | 0 | 6 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 10 |
| 8:35 AM | 1 | 1 | 0 | 2 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 3 | 8 |
| 8:40 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 1 | 0 | 1 | 5 |
| 8:45 AM | 0 | 2 | 0 | 2 | 0 | 0 | 2 | 2 | 1 | 5 | 0 | 6 | 0 | 5 | 0 | 5 | 15 |
| 8:50 AM | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 6 |
| 8:55 AM | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 4 | 0 | 4 | 9 |
| Total Survey | 12 | 23 | 5 | 40 | 11 | 27 | 21 | 59 | 11 | 49 | 10 | 70 | 1 | 58 | 9 | 68 | 237 |

Heavy Vehicle 15-Minute Interval Summary

7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total |
|---------------------|-------------------------|----|---|-------|-------------------------|----|----|-------|--------------------------|----|----|-------|--------------------------|----|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 7:00 AM | 2 | 0 | 1 | 3 | 2 | 6 | 9 | 17 | 2 | 9 | 2 | 13 | 0 | 3 | 0 | 3 | 36 |
| 7:15 AM | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 2 | 5 | 4 | 11 | 1 | 5 | 0 | 6 | 25 |
| 7:30 AM | 4 | 4 | 0 | 8 | 1 | 1 | 4 | 6 | 3 | 3 | 0 | 6 | 0 | 11 | 2 | 13 | 33 |
| 7:45 AM | 1 | 3 | 1 | 5 | 1 | 4 | 1 | 6 | 0 | 5 | 2 | 7 | 0 | 9 | 1 | 10 | 28 |
| 8:00 AM | 2 | 2 | 1 | 5 | 2 | 4 | 3 | 9 | 2 | 4 | 1 | 7 | 0 | 4 | 0 | 4 | 25 |
| 8:15 AM | 0 | 2 | 1 | 3 | 2 | 4 | 1 | 7 | 1 | 9 | 1 | 11 | 0 | 12 | 4 | 16 | 37 |
| 8:30 AM | 2 | 6 | 0 | 8 | 1 | 1 | 1 | 3 | 0 | 6 | 0 | 6 | 0 | 4 | 2 | 6 | 23 |
| 8:45 AM | 1 | 2 | 1 | 4 | 2 | 3 | 2 | 7 | 1 | 8 | 0 | 9 | 0 | 10 | 0 | 10 | 30 |
| Total Survey | 12 | 23 | 5 | 40 | 11 | 27 | 21 | 59 | 11 | 49 | 10 | 70 | 1 | 58 | 9 | 68 | 237 |

Heavy Vehicle Peak Hour Summary

7:00 AM to 8:00 AM

| By Approach | Northbound SE 182nd Ave | | | Southbound SE 182nd Ave | | | Eastbound SE Powell Blvd | | | Westbound SE Powell Blvd | | | Total |
|-------------|-------------------------|-----|-------|-------------------------|-----|-------|--------------------------|-----|-------|--------------------------|-----|-------|-------|
| | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | |
| Volume | 20 | 24 | 44 | 33 | 21 | 54 | 37 | 49 | 86 | 32 | 28 | 60 | 122 |
| PHF | 0.56 | | | 0.49 | | | 0.66 | | | 0.62 | | | 0.85 |

| By Movement | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Total |
|-------------|-------------------------|------|------|-------|-------------------------|------|------|-------|--------------------------|------|------|-------|--------------------------|------|------|-------|-------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| Volume | 7 | 11 | 2 | 20 | 4 | 15 | 14 | 33 | 7 | 22 | 8 | 37 | 1 | 28 | 3 | 32 | 122 |
| PHF | 0.44 | 0.55 | 0.50 | 0.56 | 0.50 | 0.63 | 0.39 | 0.49 | 0.58 | 0.61 | 0.40 | 0.66 | 0.25 | 0.64 | 0.38 | 0.62 | 0.85 |

Heavy Vehicle Rolling Hour Summary

7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total |
|---------------------|-------------------------|----|---|-------|-------------------------|----|----|-------|--------------------------|----|---|-------|--------------------------|----|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 7:00 AM | 7 | 11 | 2 | 20 | 4 | 15 | 14 | 33 | 7 | 22 | 8 | 37 | 1 | 28 | 3 | 32 | 122 |
| 7:15 AM | 7 | 13 | 2 | 22 | 4 | 13 | 8 | 25 | 7 | 17 | 7 | 31 | 1 | 29 | 3 | 33 | 111 |
| 7:30 AM | 7 | 11 | 3 | 21 | 6 | 13 | 9 | 28 | 6 | 21 | 4 | 31 | 0 | 36 | 7 | 43 | 123 |
| 7:45 AM | 5 | 13 | 3 | 21 | 6 | 13 | 6 | 25 | 3 | 24 | 4 | 31 | 0 | 29 | 7 | 36 | 113 |
| 8:00 AM | 5 | 12 | 3 | 20 | 7 | 12 | 7 | 26 | 4 | 27 | 2 | 33 | 0 | 30 | 6 | 36 | 115 |

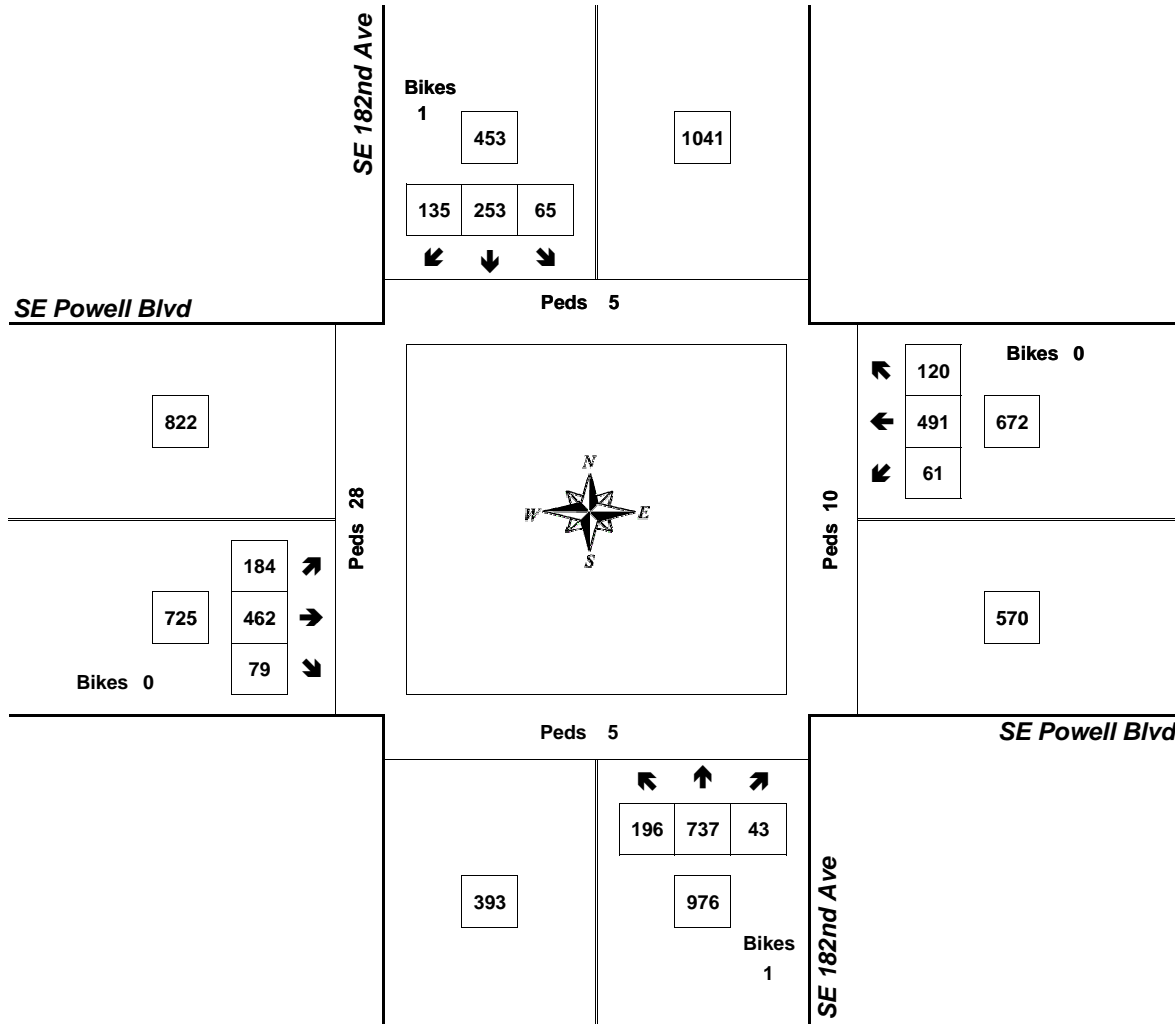
Peak Hour Summary



Clay Carney
(503) 833-2740

SE 182nd Ave & SE Powell Blvd

7:00 AM to 8:00 AM
Tuesday, May 07, 2019



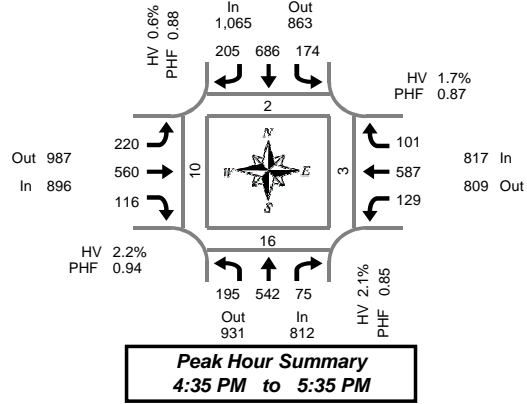
| Approach | PHF | HV% | Volume |
|---------------------|-------------|-------------|--------------|
| EB | 0.88 | 5.1% | 725 |
| WB | 0.88 | 4.8% | 672 |
| NB | 0.87 | 2.0% | 976 |
| SB | 0.76 | 7.3% | 453 |
| Intersection | 0.92 | 4.3% | 2,826 |

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Clay Carney
(503) 833-2740



SE 182nd Ave & SE Powell Blvd

Tuesday, May 07, 2019
4:00 PM to 6:00 PM

5-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-------|-----|-------|-------------------------|-------|-----|-------|--------------------------|-------|-----|-------|--------------------------|-------|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 4:00 PM | 20 | 35 | 2 | 0 | 18 | 46 | 11 | 0 | 17 | 46 | 16 | 0 | 9 | 36 | 8 | 0 | 264 | 0 | 0 | 2 | 1 |
| 4:05 PM | 12 | 38 | 6 | 0 | 14 | 75 | 14 | 0 | 13 | 51 | 15 | 0 | 17 | 54 | 5 | 0 | 314 | 0 | 3 | 1 | 1 |
| 4:10 PM | 21 | 50 | 3 | 0 | 25 | 58 | 19 | 0 | 14 | 46 | 12 | 0 | 9 | 45 | 9 | 0 | 311 | 0 | 0 | 0 | 0 |
| 4:15 PM | 10 | 32 | 5 | 0 | 14 | 71 | 16 | 0 | 10 | 56 | 10 | 0 | 9 | 51 | 12 | 0 | 296 | 1 | 0 | 0 | 0 |
| 4:20 PM | 21 | 30 | 3 | 0 | 15 | 38 | 14 | 0 | 21 | 50 | 12 | 0 | 14 | 50 | 8 | 0 | 276 | 0 | 1 | 0 | 1 |
| 4:25 PM | 11 | 56 | 6 | 0 | 10 | 73 | 18 | 0 | 16 | 35 | 5 | 0 | 14 | 18 | 6 | 0 | 268 | 0 | 0 | 0 | 0 |
| 4:30 PM | 19 | 47 | 1 | 0 | 18 | 56 | 10 | 0 | 11 | 42 | 10 | 0 | 2 | 36 | 10 | 0 | 262 | 1 | 0 | 0 | 1 |
| 4:35 PM | 11 | 38 | 10 | 0 | 17 | 56 | 12 | 0 | 27 | 57 | 11 | 0 | 21 | 47 | 10 | 0 | 317 | 0 | 2 | 1 | 2 |
| 4:40 PM | 15 | 33 | 3 | 0 | 23 | 48 | 13 | 1 | 21 | 54 | 8 | 0 | 3 | 49 | 15 | 0 | 285 | 0 | 0 | 0 | 0 |
| 4:45 PM | 15 | 66 | 8 | 0 | 10 | 60 | 17 | 0 | 20 | 34 | 7 | 0 | 18 | 31 | 7 | 0 | 293 | 0 | 1 | 0 | 0 |
| 4:50 PM | 14 | 34 | 3 | 0 | 16 | 53 | 25 | 0 | 26 | 58 | 11 | 0 | 8 | 46 | 14 | 0 | 308 | 0 | 0 | 0 | 0 |
| 4:55 PM | 21 | 74 | 4 | 0 | 15 | 65 | 15 | 0 | 13 | 42 | 6 | 0 | 8 | 31 | 9 | 0 | 303 | 1 | 2 | 0 | 3 |
| 5:00 PM | 12 | 42 | 7 | 0 | 15 | 59 | 20 | 0 | 21 | 47 | 5 | 1 | 13 | 54 | 8 | 1 | 303 | 1 | 1 | 1 | 0 |
| 5:05 PM | 29 | 38 | 4 | 0 | 12 | 49 | 18 | 0 | 15 | 49 | 16 | 0 | 5 | 65 | 6 | 0 | 306 | 0 | 0 | 0 | 1 |
| 5:10 PM | 13 | 41 | 5 | 0 | 15 | 90 | 26 | 0 | 21 | 30 | 11 | 0 | 15 | 49 | 7 | 0 | 323 | 0 | 3 | 0 | 1 |
| 5:15 PM | 13 | 31 | 5 | 0 | 6 | 49 | 18 | 1 | 12 | 63 | 10 | 0 | 12 | 68 | 7 | 0 | 294 | 0 | 0 | 0 | 0 |
| 5:20 PM | 16 | 64 | 10 | 0 | 18 | 57 | 15 | 0 | 12 | 38 | 8 | 0 | 7 | 46 | 4 | 0 | 295 | 0 | 1 | 0 | 0 |
| 5:25 PM | 16 | 38 | 9 | 0 | 15 | 48 | 11 | 0 | 17 | 54 | 13 | 0 | 11 | 47 | 10 | 0 | 289 | 0 | 6 | 1 | 3 |
| 5:30 PM | 20 | 43 | 7 | 0 | 12 | 52 | 15 | 0 | 15 | 34 | 10 | 0 | 8 | 54 | 4 | 0 | 274 | 0 | 0 | 0 | 0 |
| 5:35 PM | 13 | 43 | 3 | 0 | 11 | 71 | 22 | 0 | 23 | 37 | 6 | 0 | 20 | 38 | 4 | 0 | 291 | 2 | 0 | 0 | 1 |
| 5:40 PM | 12 | 27 | 2 | 0 | 15 | 56 | 13 | 0 | 14 | 66 | 10 | 1 | 9 | 49 | 6 | 0 | 279 | 2 | 0 | 3 | 1 |
| 5:45 PM | 15 | 55 | 4 | 0 | 23 | 66 | 13 | 0 | 14 | 40 | 8 | 0 | 11 | 24 | 8 | 0 | 281 | 2 | 2 | 1 | 3 |
| 5:50 PM | 13 | 50 | 5 | 0 | 8 | 32 | 9 | 0 | 24 | 48 | 8 | 0 | 15 | 45 | 9 | 0 | 266 | 0 | 0 | 0 | 1 |
| 5:55 PM | 16 | 36 | 3 | 0 | 21 | 49 | 21 | 0 | 14 | 60 | 12 | 0 | 7 | 47 | 11 | 0 | 297 | 0 | 3 | 2 | 3 |
| Total Survey | 378 | 1,041 | 118 | 0 | 366 | 1,377 | 385 | 2 | 411 | 1,137 | 240 | 2 | 265 | 1,080 | 197 | 1 | 6,995 | 10 | 25 | 12 | 23 |

15-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-------|-----|-------|-------------------------|-------|-----|-------|--------------------------|-------|-----|-------|--------------------------|-------|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 4:00 PM | 53 | 123 | 11 | 0 | 57 | 179 | 44 | 0 | 44 | 143 | 43 | 0 | 35 | 135 | 22 | 0 | 889 | 0 | 3 | 3 | 2 |
| 4:15 PM | 42 | 118 | 14 | 0 | 39 | 182 | 48 | 0 | 47 | 141 | 27 | 0 | 37 | 119 | 26 | 0 | 840 | 1 | 1 | 0 | 1 |
| 4:30 PM | 45 | 118 | 14 | 0 | 58 | 160 | 35 | 1 | 59 | 153 | 29 | 0 | 26 | 132 | 35 | 0 | 864 | 1 | 2 | 1 | 3 |
| 4:45 PM | 50 | 174 | 15 | 0 | 41 | 178 | 57 | 0 | 59 | 134 | 24 | 0 | 34 | 108 | 30 | 0 | 904 | 1 | 3 | 0 | 3 |
| 5:00 PM | 54 | 121 | 16 | 0 | 42 | 198 | 64 | 0 | 57 | 126 | 32 | 1 | 33 | 168 | 21 | 1 | 932 | 1 | 4 | 1 | 2 |
| 5:15 PM | 45 | 133 | 24 | 0 | 39 | 154 | 44 | 1 | 41 | 155 | 31 | 0 | 30 | 161 | 21 | 0 | 878 | 0 | 7 | 1 | 3 |
| 5:30 PM | 45 | 113 | 12 | 0 | 38 | 179 | 50 | 0 | 52 | 137 | 26 | 1 | 37 | 141 | 14 | 0 | 844 | 4 | 0 | 3 | 2 |
| 5:45 PM | 44 | 141 | 12 | 0 | 52 | 147 | 43 | 0 | 52 | 148 | 28 | 0 | 33 | 116 | 28 | 0 | 844 | 2 | 5 | 3 | 7 |
| Total Survey | 378 | 1,041 | 118 | 0 | 366 | 1,377 | 385 | 2 | 411 | 1,137 | 240 | 2 | 265 | 1,080 | 197 | 1 | 6,995 | 10 | 25 | 12 | 23 |

Peak Hour Summary 4:35 PM to 5:35 PM

| By Approach | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Total | Pedestrians Crosswalk | | | |
|-------------|-------------------------|-----|-------|-------|-------------------------|-----|-------|-------|--------------------------|-----|-------|-------|--------------------------|-----|-------|-------|-------|-----------------------|-------|------|------|
| | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | | North | South | East | West |
| Volume | 812 | 931 | 1,743 | 0 | 1,065 | 863 | 1,928 | 2 | 896 | 987 | 1,883 | 1 | 817 | 809 | 1,626 | 1 | 3,590 | 2 | 16 | 3 | 10 |
| %HV | 2.1% | | | | 0.6% | | | | 2.2% | | | | 1.7% | | | | 1.6% | | | | |
| PHF | 0.85 | | | | 0.88 | | | | 0.94 | | | | 0.87 | | | | 0.96 | | | | |

| By Movement | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Total |
|-------------|-------------------------|------|------|-------|-------------------------|------|------|-------|--------------------------|------|------|-------|--------------------------|------|------|-------|-------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| Volume | 195 | 542 | 75 | 812 | 174 | 686 | 205 | 1,065 | 220 | 571 | 116 | 896 | 129 | 587 | 101 | 817 | 3,590 |
| %HV | 2.6% | 1.8% | 2.7% | 2.1% | 1.1% | 0.1% | 1.5% | 0.6% | 1.8% | 2.9% | 0.0% | 2.2% | 0.0% | 1.9% | 3.0% | 1.7% | 1.6% |
| PHF | 0.79 | 0.78 | 0.72 | 0.85 | 0.87 | 0.87 | 0.80 | 0.88 | 0.81 | 0.90 | 0.78 | 0.94 | 0.77 | 0.81 | 0.70 | 0.87 | 0.96 |

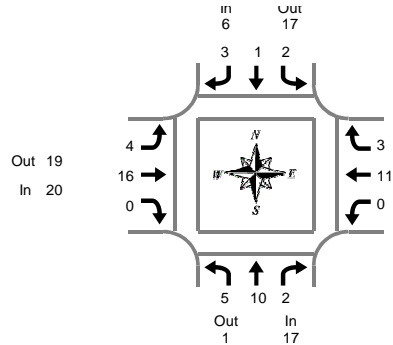
Rolling Hour Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|----|-------|-------------------------|-----|-----|-------|--------------------------|-----|-----|-------|--------------------------|-----|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 4:00 PM | 190 | 533 | 54 | 0 | 195 | 699 | 184 | 1 | 209 | 571 | 123 | 0 | 132 | 494 | 113 | 0 | 3,497 | 3 | 9 | 4 | 9 |
| 4:15 PM | 191 | 531 | 59 | 0 | 180 | 718 | 204 | 1 | 222 | 554 | 112 | 1 | 130 | 527 | 112 | 1 | 3,540 | 4 | 10 | 2 | 9 |
| 4:30 PM | 194 | 546 | 69 | 0 | 180 | 690 | 200 | 2 | 216 | 568 | 116 | 1 | 123 | 569 | 107 | 1 | 3,578 | 3 | 16 | 3 | 11 |
| 4:45 PM | 194 | 541 | 67 | 0 | 160 | 709 | 215 | 1 | 209 | 552 | 113 | 2 | 134 | 578 | 86 | 1 | 3,558 | 6 | 14 | 5 | 10 |
| 5:00 PM | 188 | 508 | 64 | 0 | 171 | 678 | 201 | 1 | 202 | 566 | 117 | 2 | 133 | 586 | 84 | 1 | 3,498 | 7 | 16 | 8 | 14 |

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



Peak Hour Summary
4:35 PM to 5:35 PM

SE 182nd Ave & SE Powell Blvd

Tuesday, May 07, 2019
4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total |
|---------------------|-------------------------|----|---|-------|-------------------------|---|---|-------|--------------------------|----|---|-------|--------------------------|----|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 4:00 PM | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 |
| 4:05 PM | 1 | 2 | 1 | 4 | 2 | 2 | 1 | 5 | 0 | 2 | 1 | 3 | 0 | 1 | 0 | 1 | 13 |
| 4:10 PM | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 8 |
| 4:15 PM | 1 | 2 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 8 |
| 4:20 PM | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 2 | 1 | 3 | 1 | 5 | 0 | 1 | 1 | 2 | 10 |
| 4:25 PM | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| 4:30 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| 4:35 PM | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 3 | 0 | 2 | 1 | 3 | 8 |
| 4:40 PM | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 6 |
| 4:45 PM | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 |
| 4:50 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 4:55 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 4 |
| 5:00 PM | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 3 | 0 | 2 | 0 | 2 | 7 |
| 5:05 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:10 PM | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 6 |
| 5:15 PM | 1 | 2 | 0 | 3 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 7 |
| 5:20 PM | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 5 |
| 5:25 PM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 3 |
| 5:30 PM | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 4 |
| 5:35 PM | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 1 | 0 | 1 | 6 |
| 5:40 PM | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 2 | 1 | 1 | 0 | 2 | 0 | 2 | 0 | 2 | 7 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 3 |
| 5:50 PM | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 4 | 0 | 4 | 7 |
| 5:55 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total Survey | 12 | 23 | 3 | 38 | 7 | 8 | 4 | 19 | 9 | 27 | 3 | 39 | 0 | 29 | 4 | 33 | 129 |

Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total |
|---------------------|-------------------------|----|---|-------|-------------------------|---|---|-------|--------------------------|----|---|-------|--------------------------|----|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 4:00 PM | 3 | 4 | 1 | 8 | 3 | 2 | 1 | 6 | 0 | 5 | 1 | 6 | 0 | 5 | 0 | 5 | 25 |
| 4:15 PM | 2 | 4 | 0 | 6 | 1 | 4 | 0 | 5 | 2 | 4 | 1 | 7 | 0 | 2 | 1 | 3 | 21 |
| 4:30 PM | 1 | 2 | 1 | 4 | 0 | 1 | 1 | 2 | 1 | 4 | 0 | 5 | 0 | 4 | 1 | 5 | 16 |
| 4:45 PM | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 4 | 0 | 1 | 1 | 2 | 10 |
| 5:00 PM | 1 | 2 | 0 | 3 | 1 | 0 | 1 | 2 | 1 | 4 | 0 | 5 | 0 | 4 | 0 | 4 | 14 |
| 5:15 PM | 2 | 3 | 1 | 6 | 1 | 0 | 1 | 2 | 0 | 5 | 0 | 5 | 0 | 1 | 1 | 2 | 15 |
| 5:30 PM | 2 | 3 | 0 | 5 | 1 | 1 | 0 | 2 | 2 | 2 | 1 | 5 | 0 | 5 | 0 | 5 | 17 |
| 5:45 PM | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 7 | 0 | 7 | 11 |
| Total Survey | 12 | 23 | 3 | 38 | 7 | 8 | 4 | 19 | 9 | 27 | 3 | 39 | 0 | 29 | 4 | 33 | 129 |

Heavy Vehicle Peak Hour Summary 4:35 PM to 5:35 PM

| By Approach | Northbound SE 182nd Ave | | | Southbound SE 182nd Ave | | | Eastbound SE Powell Blvd | | | Westbound SE Powell Blvd | | | Total |
|-------------|-------------------------|-----|-------|-------------------------|-----|-------|--------------------------|-----|-------|--------------------------|-----|-------|-------|
| | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | |
| Volume | 17 | 1 | 18 | 6 | 17 | 23 | 20 | 19 | 39 | 14 | 20 | 34 | 57 |
| PHF | 0.71 | | | 0.50 | | | 0.83 | | | 0.88 | | | 0.79 |

| By Movement | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Total |
|-------------|-------------------------|------|------|-------|-------------------------|------|------|-------|--------------------------|------|------|-------|--------------------------|------|------|-------|-------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| Volume | 5 | 10 | 2 | 17 | 2 | 1 | 3 | 6 | 4 | 16 | 0 | 20 | 0 | 11 | 3 | 14 | 57 |
| PHF | 0.63 | 0.63 | 0.50 | 0.71 | 0.25 | 0.25 | 0.38 | 0.50 | 0.33 | 0.80 | 0.00 | 0.83 | 0.00 | 0.69 | 0.75 | 0.88 | 0.79 |

Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 182nd Ave | | | | Southbound SE 182nd Ave | | | | Eastbound SE Powell Blvd | | | | Westbound SE Powell Blvd | | | | Interval Total |
|---------------------|-------------------------|----|---|-------|-------------------------|---|---|-------|--------------------------|----|---|-------|--------------------------|----|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 4:00 PM | 6 | 14 | 2 | 22 | 4 | 7 | 2 | 13 | 5 | 15 | 2 | 22 | 0 | 12 | 3 | 15 | 72 |
| 4:15 PM | 4 | 12 | 1 | 17 | 2 | 5 | 2 | 9 | 6 | 14 | 1 | 21 | 0 | 11 | 3 | 14 | 61 |
| 4:30 PM | 4 | 11 | 2 | 17 | 2 | 1 | 3 | 6 | 4 | 15 | 0 | 19 | 0 | 10 | 3 | 13 | 55 |
| 4:45 PM | 5 | 12 | 1 | 18 | 3 | 1 | 2 | 6 | 5 | 13 | 1 | 19 | 0 | 11 | 2 | 13 | 56 |
| 5:00 PM | 6 | 9 | 1 | 16 | 3 | 1 | 2 | 6 | 4 | 12 | 1 | 17 | 0 | 17 | 1 | 18 | 57 |

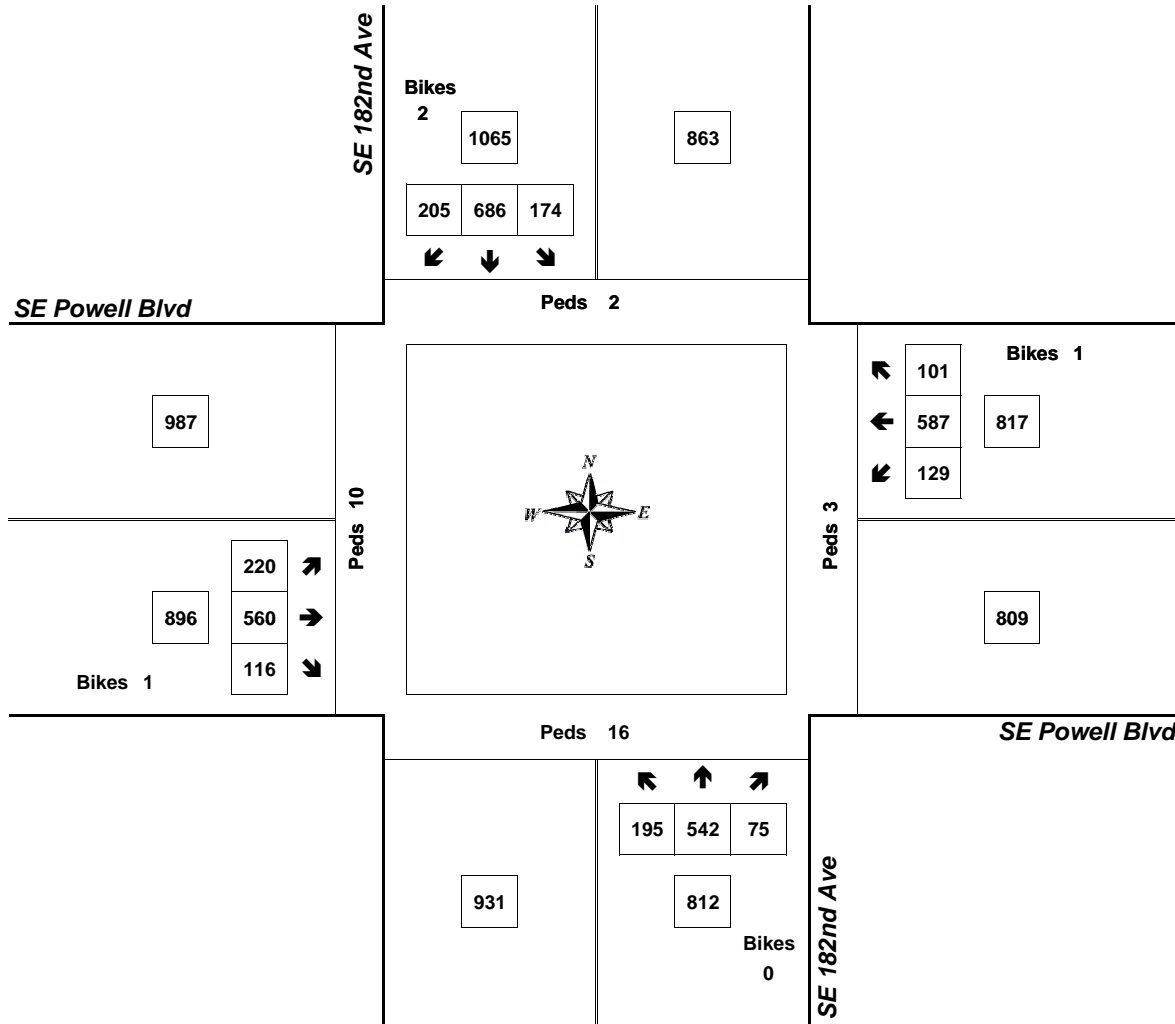
Peak Hour Summary



Clay Carney
(503) 833-2740

SE 182nd Ave & SE Powell Blvd

4:35 PM to 5:35 PM
Tuesday, May 07, 2019



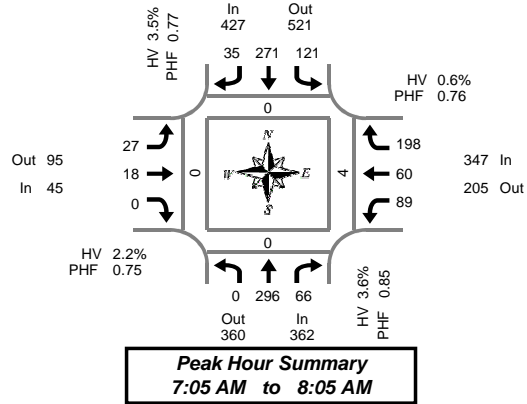
| Approach | PHF | HV% | Volume |
|---------------------|-------------|-------------|--------------|
| EB | 0.94 | 2.2% | 896 |
| WB | 0.87 | 1.7% | 817 |
| NB | 0.85 | 2.1% | 812 |
| SB | 0.88 | 0.6% | 1,065 |
| Intersection | 0.96 | 1.6% | 3,590 |

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Clay Carney
(503) 833-2740



SW Pleasant View Dr & SW Butler Rd

Tuesday, May 07, 2019
7:00 AM to 9:00 AM

5-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|--------------------------------|-----|-----|-------|--------------------------------|-----|----|-------|------------------------|----|---|-------|------------------------|----|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 7:00 AM | 0 | 12 | 3 | 0 | 6 | 24 | 1 | 0 | 0 | 1 | 0 | 0 | 11 | 3 | 8 | 0 | 69 | 0 | 0 | 0 | 0 |
| 7:05 AM | 0 | 15 | 7 | 0 | 5 | 23 | 2 | 0 | 1 | 1 | 0 | 0 | 11 | 6 | 12 | 0 | 83 | 0 | 0 | 0 | 0 |
| 7:10 AM | 0 | 29 | 10 | 0 | 6 | 16 | 3 | 0 | 0 | 1 | 0 | 0 | 10 | 0 | 13 | 0 | 88 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 23 | 3 | 0 | 11 | 22 | 2 | 0 | 6 | 1 | 0 | 0 | 5 | 7 | 14 | 0 | 94 | 0 | 0 | 0 | 0 |
| 7:20 AM | 0 | 26 | 7 | 0 | 11 | 24 | 5 | 0 | 2 | 2 | 0 | 0 | 4 | 4 | 18 | 0 | 103 | 0 | 0 | 0 | 0 |
| 7:25 AM | 0 | 21 | 4 | 0 | 20 | 24 | 7 | 0 | 3 | 1 | 0 | 0 | 7 | 5 | 25 | 0 | 117 | 0 | 0 | 4 | 0 |
| 7:30 AM | 0 | 18 | 5 | 0 | 13 | 32 | 2 | 0 | 0 | 2 | 0 | 0 | 9 | 4 | 24 | 0 | 109 | 0 | 0 | 0 | 0 |
| 7:35 AM | 0 | 37 | 0 | 0 | 14 | 21 | 3 | 0 | 3 | 3 | 0 | 0 | 9 | 9 | 22 | 0 | 121 | 0 | 0 | 0 | 0 |
| 7:40 AM | 0 | 37 | 2 | 0 | 15 | 23 | 1 | 0 | 4 | 1 | 0 | 0 | 5 | 6 | 23 | 0 | 117 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 24 | 6 | 0 | 9 | 25 | 2 | 0 | 3 | 1 | 0 | 0 | 9 | 3 | 22 | 0 | 104 | 0 | 0 | 0 | 0 |
| 7:50 AM | 0 | 19 | 5 | 0 | 6 | 20 | 4 | 0 | 2 | 0 | 0 | 0 | 8 | 8 | 16 | 0 | 88 | 0 | 0 | 0 | 0 |
| 7:55 AM | 0 | 29 | 9 | 0 | 2 | 20 | 2 | 0 | 3 | 1 | 0 | 0 | 7 | 3 | 3 | 0 | 79 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 18 | 8 | 0 | 9 | 21 | 2 | 0 | 0 | 4 | 0 | 0 | 5 | 5 | 6 | 0 | 78 | 0 | 0 | 0 | 0 |
| 8:05 AM | 0 | 18 | 6 | 0 | 5 | 23 | 0 | 0 | 2 | 3 | 0 | 0 | 4 | 3 | 11 | 0 | 75 | 0 | 0 | 0 | 0 |
| 8:10 AM | 0 | 19 | 3 | 0 | 4 | 17 | 4 | 0 | 1 | 0 | 0 | 0 | 3 | 1 | 9 | 0 | 61 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 26 | 8 | 0 | 1 | 18 | 3 | 0 | 1 | 3 | 0 | 0 | 2 | 4 | 7 | 0 | 73 | 0 | 0 | 0 | 0 |
| 8:20 AM | 0 | 26 | 3 | 0 | 2 | 18 | 4 | 0 | 2 | 2 | 0 | 0 | 8 | 8 | 8 | 0 | 81 | 0 | 0 | 0 | 0 |
| 8:25 AM | 0 | 16 | 4 | 0 | 3 | 12 | 1 | 0 | 2 | 2 | 0 | 0 | 4 | 2 | 5 | 0 | 51 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 22 | 9 | 0 | 1 | 15 | 2 | 0 | 5 | 2 | 0 | 0 | 4 | 2 | 10 | 0 | 72 | 0 | 0 | 1 | 0 |
| 8:35 AM | 0 | 20 | 4 | 0 | 7 | 19 | 1 | 0 | 2 | 4 | 0 | 0 | 6 | 2 | 8 | 0 | 73 | 0 | 0 | 0 | 0 |
| 8:40 AM | 0 | 29 | 5 | 0 | 5 | 13 | 4 | 0 | 1 | 4 | 0 | 0 | 3 | 1 | 7 | 0 | 72 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 20 | 5 | 0 | 4 | 21 | 6 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 5 | 0 | 68 | 0 | 0 | 0 | 0 |
| 8:50 AM | 1 | 22 | 2 | 0 | 5 | 13 | 1 | 1 | 4 | 3 | 0 | 0 | 7 | 5 | 6 | 0 | 69 | 0 | 0 | 0 | 0 |
| 8:55 AM | 0 | 14 | 4 | 0 | 3 | 10 | 3 | 0 | 1 | 1 | 0 | 0 | 10 | 0 | 6 | 0 | 52 | 0 | 0 | 0 | 0 |
| Total Survey | 1 | 540 | 122 | 0 | 167 | 474 | 65 | 1 | 48 | 43 | 0 | 0 | 157 | 92 | 288 | 0 | 1,997 | 0 | 0 | 5 | 0 |

15-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|--------------------------------|-----|-----|-------|--------------------------------|-----|----|-------|------------------------|----|---|-------|------------------------|----|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 7:00 AM | 0 | 56 | 20 | 0 | 17 | 63 | 6 | 0 | 1 | 3 | 0 | 0 | 32 | 9 | 33 | 0 | 240 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 70 | 14 | 0 | 42 | 70 | 14 | 0 | 11 | 4 | 0 | 0 | 16 | 16 | 57 | 0 | 314 | 0 | 0 | 4 | 0 |
| 7:30 AM | 0 | 92 | 7 | 0 | 42 | 76 | 6 | 0 | 7 | 6 | 0 | 0 | 23 | 19 | 69 | 0 | 347 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 72 | 20 | 0 | 17 | 65 | 8 | 0 | 8 | 2 | 0 | 0 | 24 | 14 | 41 | 0 | 271 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 55 | 17 | 0 | 18 | 61 | 6 | 0 | 3 | 7 | 0 | 0 | 12 | 9 | 26 | 0 | 214 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 68 | 15 | 0 | 6 | 48 | 8 | 0 | 5 | 7 | 0 | 0 | 14 | 14 | 20 | 0 | 205 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 71 | 18 | 0 | 13 | 47 | 7 | 0 | 8 | 10 | 0 | 0 | 13 | 5 | 25 | 0 | 217 | 0 | 0 | 1 | 0 |
| 8:45 AM | 1 | 56 | 11 | 0 | 12 | 44 | 10 | 1 | 5 | 4 | 0 | 0 | 23 | 6 | 17 | 0 | 189 | 0 | 0 | 0 | 0 |
| Total Survey | 1 | 540 | 122 | 0 | 167 | 474 | 65 | 1 | 48 | 43 | 0 | 0 | 157 | 92 | 288 | 0 | 1,997 | 0 | 0 | 5 | 0 |

Peak Hour Summary 7:05 AM to 8:05 AM

| By Approach | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Total | Pedestrians Crosswalk | | | |
|-------------|--------------------------------|-----|-------|-------|--------------------------------|-----|-------|-------|------------------------|-----|-------|-------|------------------------|-----|-------|-------|-------|-----------------------|-------|------|------|
| | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | | North | South | East | West |
| Volume | 362 | 360 | 722 | 0 | 427 | 521 | 948 | 0 | 45 | 95 | 140 | 0 | 347 | 205 | 552 | 0 | 1,181 | 0 | 0 | 4 | 0 |
| %HV | 3.6% | | | | 3.5% | | | | 2.2% | | | | 0.6% | | | | 2.6% | | | | |
| PHF | 0.85 | | | | 0.77 | | | | 0.75 | | | | 0.76 | | | | 0.85 | | | | |

| By Movement | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Total |
|-------------|--------------------------------|------|------|-------|--------------------------------|------|------|-------|------------------------|------|------|-------|------------------------|------|------|-------|-------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| Volume | 0 | 296 | 66 | 362 | 121 | 271 | 35 | 427 | 27 | 15 | 0 | 45 | 89 | 60 | 198 | 347 | 1,181 |
| %HV | 0.0% | 3.7% | 3.0% | 3.6% | 5.0% | 3.0% | 2.9% | 3.5% | 3.7% | 0.0% | 0.0% | 2.2% | 0.0% | 1.7% | 0.5% | 0.6% | 2.6% |
| PHF | 0.00 | 0.76 | 0.75 | 0.85 | 0.64 | 0.85 | 0.63 | 0.77 | 0.61 | 0.75 | 0.00 | 0.75 | 0.86 | 0.79 | 0.70 | 0.76 | 0.85 |

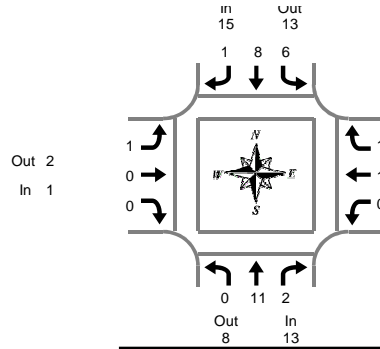
Rolling Hour Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|--------------------------------|-----|----|-------|--------------------------------|-----|----|-------|------------------------|----|---|-------|------------------------|----|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 7:00 AM | 0 | 290 | 61 | 0 | 118 | 274 | 34 | 0 | 27 | 15 | 0 | 0 | 95 | 58 | 200 | 0 | 1,172 | 0 | 0 | 4 | 0 |
| 7:15 AM | 0 | 289 | 58 | 0 | 119 | 272 | 34 | 0 | 29 | 19 | 0 | 0 | 75 | 58 | 193 | 0 | 1,146 | 0 | 0 | 4 | 0 |
| 7:30 AM | 0 | 287 | 59 | 0 | 83 | 250 | 28 | 0 | 23 | 22 | 0 | 0 | 73 | 56 | 156 | 0 | 1,037 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 266 | 70 | 0 | 54 | 221 | 29 | 0 | 24 | 26 | 0 | 0 | 63 | 42 | 112 | 0 | 907 | 0 | 0 | 1 | 0 |
| 8:00 AM | 1 | 250 | 61 | 0 | 49 | 200 | 31 | 1 | 21 | 28 | 0 | 0 | 62 | 34 | 88 | 0 | 825 | 0 | 0 | 1 | 0 |

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



Peak Hour Summary
7:05 AM to 8:05 AM

SW Pleasant View Dr & SW Butler Rd

Tuesday, May 07, 2019
7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary

7:00 AM to 9:00 AM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total | |
|---------------------|--------------------------------|----|---|-------|--------------------------------|----|---|-------|------------------------|---|---|-------|------------------------|---|---|-------|----------------|---|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:05 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:10 AM | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 7:15 AM | 0 | 1 | 0 | 1 | 2 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 7:20 AM | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 7:25 AM | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 5 | |
| 7:30 AM | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | |
| 7:35 AM | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | |
| 7:40 AM | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 7:45 AM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 7:50 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| 7:55 AM | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:05 AM | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | |
| 8:10 AM | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 8:15 AM | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | |
| 8:20 AM | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 8:25 AM | 0 | 2 | 0 | 2 | 1 | 2 | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | |
| 8:35 AM | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 5 | |
| 8:40 AM | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | |
| 8:45 AM | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| 8:50 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 8:55 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| Total Survey | 0 | 17 | 7 | 24 | 7 | 20 | 1 | 28 | 2 | 6 | 0 | 8 | 0 | 1 | 2 | 3 | 63 | |

Heavy Vehicle 15-Minute Interval Summary

7:00 AM to 9:00 AM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total |
|---------------------|--------------------------------|----|---|-------|--------------------------------|----|---|-------|------------------------|---|---|-------|------------------------|---|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 7:00 AM | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 7:15 AM | 0 | 4 | 0 | 4 | 4 | 4 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 14 |
| 7:30 AM | 0 | 4 | 1 | 5 | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 9 |
| 7:45 AM | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| 8:00 AM | 0 | 2 | 2 | 4 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:15 AM | 0 | 2 | 2 | 4 | 1 | 4 | 0 | 5 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 11 |
| 8:30 AM | 0 | 2 | 0 | 2 | 0 | 3 | 0 | 3 | 1 | 4 | 0 | 5 | 0 | 0 | 1 | 1 | 11 |
| 8:45 AM | 0 | 0 | 1 | 1 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total Survey | 0 | 17 | 7 | 24 | 7 | 20 | 1 | 28 | 2 | 6 | 0 | 8 | 0 | 1 | 2 | 3 | 63 |

Heavy Vehicle Peak Hour Summary

7:05 AM to 8:05 AM

| By Approach | Northbound SW Pleasant View Dr | | | Southbound SW Pleasant View Dr | | | Eastbound SW Butler Rd | | | Westbound SW Butler Rd | | | Total |
|-------------|--------------------------------|-----|-------|--------------------------------|-----|-------|------------------------|-----|-------|------------------------|-----|-------|-------|
| | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | |
| Volume | 13 | 8 | 21 | 15 | 13 | 28 | 1 | 2 | 3 | 2 | 8 | 10 | 31 |
| PHF | 0.65 | | | 0.42 | | | 0.25 | | | 0.25 | | | 0.55 |

| By Movement | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Total |
|-------------|--------------------------------|------|------|-------|--------------------------------|------|------|-------|------------------------|------|------|-------|------------------------|------|------|-------|-------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| Volume | 0 | 11 | 2 | 13 | 6 | 8 | 1 | 15 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 31 |
| PHF | 0.00 | 0.69 | 0.50 | 0.65 | 0.38 | 0.50 | 0.25 | 0.42 | 0.25 | 0.00 | 0.00 | 0.25 | 0.00 | 0.25 | 0.25 | 0.25 | 0.55 |

Heavy Vehicle Rolling Hour Summary

7:00 AM to 9:00 AM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total |
|---------------------|--------------------------------|----|---|-------|--------------------------------|----|---|-------|------------------------|---|---|-------|------------------------|---|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 7:00 AM | 0 | 11 | 2 | 13 | 6 | 8 | 1 | 15 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 31 |
| 7:15 AM | 0 | 12 | 3 | 15 | 6 | 8 | 1 | 15 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 33 |
| 7:30 AM | 0 | 10 | 5 | 15 | 3 | 8 | 0 | 11 | 1 | 2 | 0 | 3 | 0 | 1 | 0 | 1 | 30 |
| 7:45 AM | 0 | 8 | 4 | 12 | 2 | 9 | 0 | 11 | 2 | 6 | 0 | 8 | 0 | 0 | 1 | 1 | 32 |
| 8:00 AM | 0 | 6 | 5 | 11 | 1 | 12 | 0 | 13 | 1 | 6 | 0 | 7 | 0 | 0 | 1 | 1 | 32 |

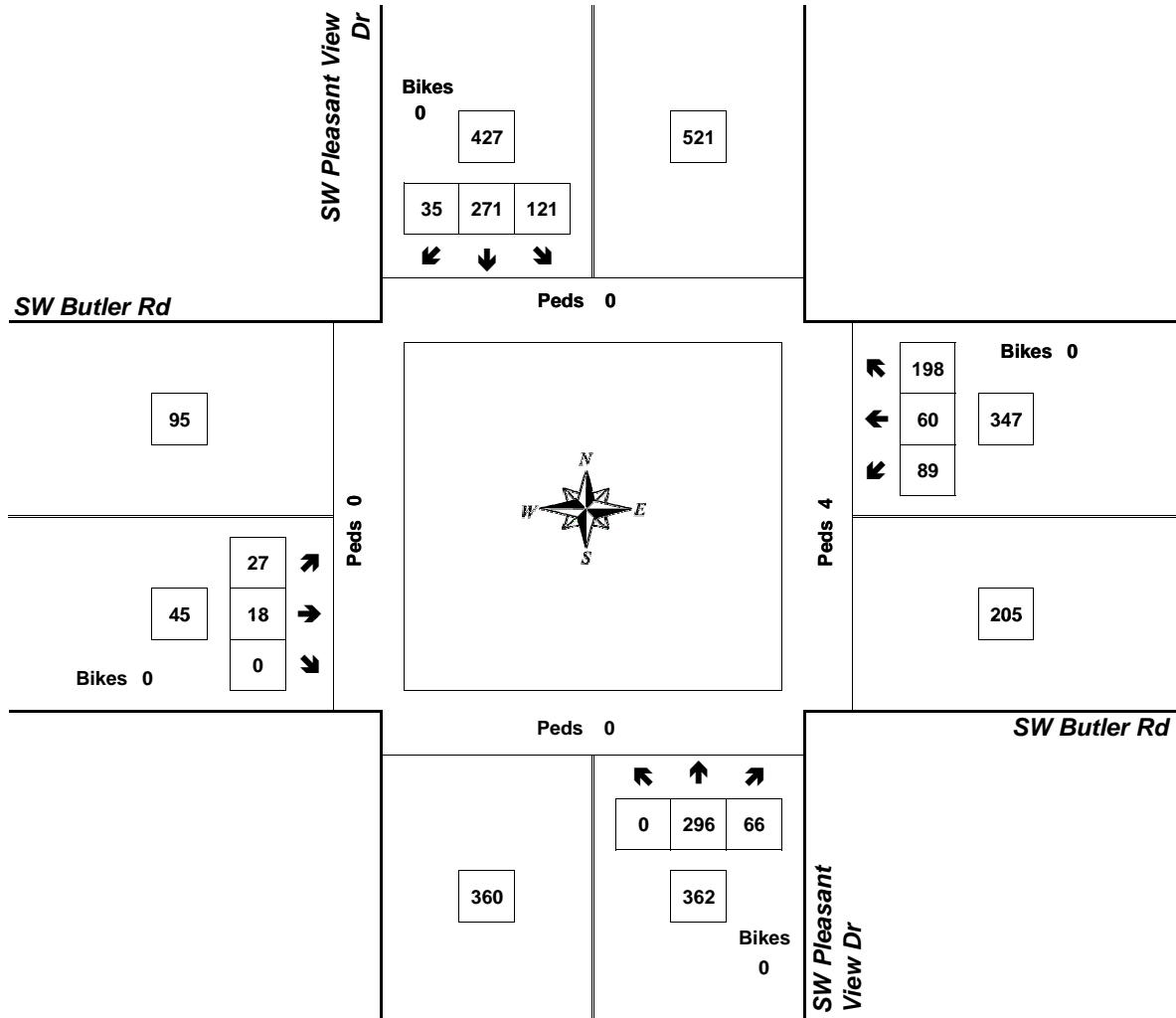
Peak Hour Summary



Clay Carney
(503) 833-2740

SW Pleasant View Dr & SW Butler Rd

7:05 AM to 8:05 AM
Tuesday, May 07, 2019



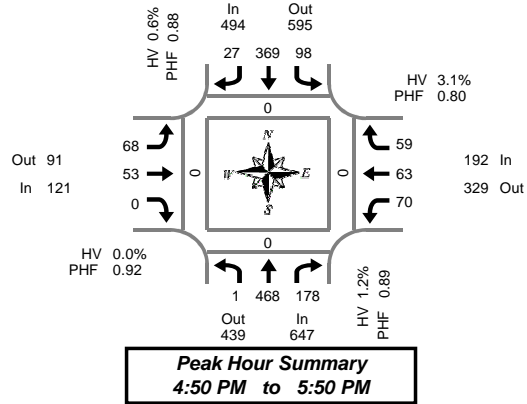
| Approach | PHF | HV% | Volume |
|---------------------|-------------|-------------|--------------|
| EB | 0.75 | 2.2% | 45 |
| WB | 0.76 | 0.6% | 347 |
| NB | 0.85 | 3.6% | 362 |
| SB | 0.77 | 3.5% | 427 |
| Intersection | 0.85 | 2.6% | 1,181 |

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Clay Carney
(503) 833-2740



SW Pleasant View Dr & SW Butler Rd

Tuesday, May 07, 2019
4:00 PM to 6:00 PM

5-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|--------------------------------|-----|-----|-------|--------------------------------|-----|----|-------|------------------------|-----|---|-------|------------------------|-----|-----|-------|----------------|-----------------------|-------|------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 4:00 PM | 0 | 32 | 14 | 0 | 9 | 26 | 0 | 0 | 5 | 3 | 0 | 0 | 2 | 4 | 13 | 0 | 0 | 0 | 0 | 0 | |
| 4:05 PM | 0 | 36 | 17 | 0 | 9 | 19 | 2 | 0 | 4 | 6 | 0 | 0 | 7 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | |
| 4:10 PM | 0 | 38 | 7 | 0 | 12 | 36 | 4 | 0 | 6 | 5 | 0 | 0 | 5 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | |
| 4:15 PM | 0 | 40 | 14 | 0 | 5 | 22 | 2 | 0 | 6 | 3 | 0 | 0 | 6 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 4:20 PM | 0 | 39 | 15 | 0 | 5 | 27 | 4 | 0 | 4 | 4 | 1 | 0 | 7 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | |
| 4:25 PM | 0 | 34 | 17 | 0 | 6 | 34 | 1 | 0 | 7 | 7 | 2 | 0 | 7 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 4:30 PM | 0 | 27 | 12 | 0 | 11 | 37 | 7 | 0 | 1 | 7 | 0 | 0 | 4 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 4:35 PM | 1 | 32 | 13 | 0 | 4 | 36 | 2 | 0 | 5 | 5 | 0 | 0 | 4 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | |
| 4:40 PM | 1 | 45 | 15 | 0 | 9 | 25 | 3 | 0 | 3 | 7 | 0 | 0 | 6 | 4 | 11 | 0 | 0 | 0 | 0 | 0 | |
| 4:45 PM | 0 | 37 | 12 | 0 | 8 | 22 | 2 | 0 | 4 | 10 | 0 | 0 | 4 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | |
| 4:50 PM | 0 | 42 | 13 | 0 | 9 | 33 | 2 | 0 | 4 | 7 | 0 | 0 | 6 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | |
| 4:55 PM | 0 | 34 | 13 | 0 | 5 | 28 | 2 | 0 | 6 | 7 | 0 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5:00 PM | 0 | 30 | 23 | 0 | 5 | 26 | 1 | 0 | 5 | 2 | 0 | 0 | 9 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 5:05 PM | 0 | 37 | 13 | 0 | 11 | 27 | 2 | 0 | 4 | 5 | 0 | 0 | 11 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 5:10 PM | 0 | 41 | 18 | 0 | 4 | 41 | 5 | 0 | 7 | 3 | 0 | 0 | 8 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 5:15 PM | 0 | 36 | 17 | 0 | 13 | 32 | 3 | 0 | 4 | 5 | 0 | 0 | 3 | 8 | 12 | 0 | 0 | 0 | 0 | 0 | |
| 5:20 PM | 0 | 51 | 19 | 0 | 5 | 34 | 3 | 0 | 5 | 5 | 0 | 0 | 2 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | |
| 5:25 PM | 1 | 40 | 13 | 0 | 7 | 30 | 1 | 0 | 6 | 4 | 0 | 0 | 7 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | |
| 5:30 PM | 0 | 35 | 6 | 0 | 10 | 25 | 0 | 0 | 6 | 3 | 0 | 0 | 2 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | |
| 5:35 PM | 0 | 36 | 14 | 0 | 9 | 30 | 2 | 0 | 4 | 4 | 0 | 0 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 5:40 PM | 0 | 39 | 17 | 0 | 10 | 27 | 5 | 0 | 8 | 5 | 0 | 0 | 10 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | |
| 5:45 PM | 0 | 47 | 12 | 0 | 10 | 36 | 1 | 0 | 9 | 3 | 0 | 0 | 4 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | |
| 5:50 PM | 0 | 36 | 7 | 0 | 6 | 24 | 1 | 0 | 5 | 1 | 0 | 0 | 5 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | |
| 5:55 PM | 0 | 32 | 9 | 0 | 7 | 24 | 3 | 0 | 6 | 5 | 0 | 0 | 4 | 2 | 9 | 0 | 0 | 0 | 0 | 0 | |
| Total Survey | 3 | 896 | 330 | 0 | 189 | 701 | 58 | 0 | 124 | 116 | 3 | 0 | 131 | 109 | 141 | 0 | 0 | 0 | 0 | 0 | |

15-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|--------------------------------|-----|-----|-------|--------------------------------|-----|----|-------|------------------------|-----|---|-------|------------------------|-----|-----|-------|----------------|-----------------------|-------|-------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 4:00 PM | 0 | 106 | 38 | 0 | 30 | 81 | 6 | 0 | 15 | 14 | 0 | 0 | 14 | 16 | 26 | 0 | 0 | 0 | 0 | 346 | |
| 4:15 PM | 0 | 113 | 46 | 0 | 16 | 83 | 7 | 0 | 17 | 14 | 3 | 0 | 20 | 10 | 16 | 0 | 0 | 0 | 0 | 345 | |
| 4:30 PM | 2 | 104 | 40 | 0 | 24 | 98 | 12 | 0 | 9 | 19 | 0 | 0 | 14 | 14 | 20 | 0 | 0 | 0 | 0 | 356 | |
| 4:45 PM | 0 | 113 | 38 | 0 | 22 | 83 | 6 | 0 | 14 | 24 | 0 | 0 | 14 | 13 | 13 | 0 | 0 | 0 | 0 | 340 | |
| 5:00 PM | 0 | 108 | 54 | 0 | 20 | 94 | 8 | 0 | 16 | 10 | 0 | 0 | 28 | 16 | 9 | 0 | 0 | 0 | 0 | 363 | |
| 5:15 PM | 1 | 127 | 49 | 0 | 25 | 96 | 7 | 0 | 15 | 14 | 0 | 0 | 12 | 20 | 24 | 0 | 0 | 0 | 0 | 390 | |
| 5:30 PM | 0 | 110 | 37 | 0 | 29 | 82 | 7 | 0 | 18 | 12 | 0 | 0 | 16 | 11 | 13 | 0 | 0 | 0 | 0 | 335 | |
| 5:45 PM | 0 | 115 | 28 | 0 | 23 | 84 | 5 | 0 | 20 | 9 | 0 | 0 | 13 | 9 | 20 | 0 | 0 | 0 | 0 | 326 | |
| Total Survey | 3 | 896 | 330 | 0 | 189 | 701 | 58 | 0 | 124 | 116 | 3 | 0 | 131 | 109 | 141 | 0 | 0 | 0 | 0 | 2,801 | |

Peak Hour Summary 4:50 PM to 5:50 PM

| By Approach | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Total | Pedestrians Crosswalk | | | |
|-------------|--------------------------------|-----|-------|-------|--------------------------------|-----|-------|-------|------------------------|-----|-------|-------|------------------------|-----|-------|-------|-------|-----------------------|-------|------|------|
| | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | | North | South | East | West |
| Volume | 647 | 439 | 1,086 | 0 | 494 | 595 | 1,089 | 0 | 121 | 91 | 212 | 0 | 192 | 329 | 521 | 0 | 1,454 | 0 | 0 | 0 | 0 |
| %HV | 1.2% | | | | 0.6% | | | | 0.0% | | | | 3.1% | | | | 1.2% | | | | |
| PHF | 0.89 | | | | 0.88 | | | | 0.92 | | | | 0.80 | | | | 0.90 | | | | |

| By Movement | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Total |
|-------------|--------------------------------|------|------|-------|--------------------------------|------|------|-------|------------------------|------|------|-------|------------------------|------|------|-------|-------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| Volume | 1 | 468 | 178 | 647 | 98 | 369 | 27 | 494 | 68 | 53 | 0 | 121 | 70 | 63 | 59 | 192 | 1,454 |
| %HV | 0.0% | 1.1% | 1.7% | 1.2% | 0.0% | 0.8% | 0.0% | 0.6% | 0.0% | 0.0% | 0.0% | 0.0% | 7.1% | 0.0% | 1.7% | 3.1% | 1.2% |
| PHF | 0.25 | 0.91 | 0.82 | 0.89 | 0.84 | 0.86 | 0.61 | 0.88 | 0.81 | 0.83 | 0.00 | 0.92 | 0.63 | 0.79 | 0.61 | 0.80 | 0.90 |

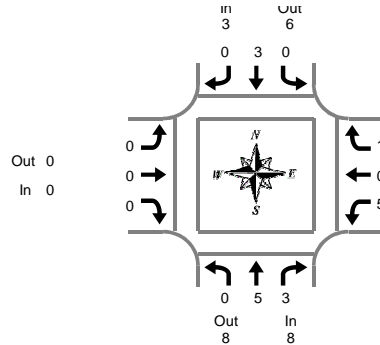
Rolling Hour Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|--------------------------------|-----|-----|-------|--------------------------------|-----|----|-------|------------------------|----|---|-------|------------------------|----|----|-------|----------------|-----------------------|-------|-------|------|
| | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | L | T | R | Bikes | | North | South | East | West |
| 4:00 PM | 2 | 436 | 162 | 0 | 92 | 345 | 31 | 0 | 55 | 71 | 3 | 0 | 62 | 53 | 75 | 0 | 0 | 0 | 0 | 1,387 | |
| 4:15 PM | 2 | 438 | 178 | 0 | 82 | 358 | 33 | 0 | 56 | 67 | 3 | 0 | 76 | 53 | 58 | 0 | 0 | 0 | 0 | 1,404 | |
| 4:30 PM | 3 | 452 | 181 | 0 | 91 | 371 | 33 | 0 | 54 | 67 | 0 | 0 | 68 | 63 | 66 | 0 | 0 | 0 | 0 | 1,449 | |
| 4:45 PM | 1 | 458 | 178 | 0 | 96 | 355 | 28 | 0 | 63 | 60 | 0 | 0 | 70 | 60 | 59 | 0 | 0 | 0 | 0 | 1,428 | |
| 5:00 PM | 1 | 460 | 168 | 0 | 97 | 356 | 27 | 0 | 69 | 45 | 0 | 0 | 69 | 56 | 66 | 0 | 0 | 0 | 0 | 1,414 | |

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



SW Pleasant View Dr & SW Butler Rd

Tuesday, May 07, 2019
4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total |
|---------------------|--------------------------------|----|---|-------|--------------------------------|---|---|-------|------------------------|---|---|-------|------------------------|---|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 4:00 PM | 0 | 2 | 1 | 3 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 6 |
| 4:05 PM | 0 | 2 | 1 | 3 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 6 |
| 4:10 PM | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4:15 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 3 |
| 4:20 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 4 |
| 4:25 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 4 |
| 4:30 PM | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:35 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:40 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 2 |
| 4:50 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:55 PM | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 5:00 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 4 |
| 5:05 PM | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 5:10 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| 5:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 |
| 5:20 PM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:25 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 |
| 5:35 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:40 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:50 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:55 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| Total Survey | 0 | 16 | 6 | 22 | 0 | 7 | 1 | 8 | 2 | 1 | 1 | 4 | 8 | 2 | 6 | 16 | 50 |

Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total |
|---------------------|--------------------------------|----|---|-------|--------------------------------|---|---|-------|------------------------|---|---|-------|------------------------|---|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 4:00 PM | 0 | 6 | 3 | 9 | 0 | 2 | 1 | 3 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 15 |
| 4:15 PM | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 1 | 1 | 3 | 0 | 1 | 4 | 8 |
| 4:30 PM | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 6 | 6 |
| 4:45 PM | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 5 |
| 5:00 PM | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 4 | 7 |
| 5:15 PM | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 |
| 5:30 PM | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 4 |
| 5:45 PM | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| Total Survey | 0 | 16 | 6 | 22 | 0 | 7 | 1 | 8 | 2 | 1 | 1 | 4 | 8 | 2 | 6 | 16 | 50 |

Heavy Vehicle Peak Hour Summary 4:50 PM to 5:50 PM

| By Approach | Northbound SW Pleasant View Dr | | | Southbound SW Pleasant View Dr | | | Eastbound SW Butler Rd | | | Westbound SW Butler Rd | | | Total |
|-------------|--------------------------------|-----|-------|--------------------------------|-----|-------|------------------------|-----|-------|------------------------|-----|-------|-------|
| | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | |
| Volume | 8 | 8 | 16 | 3 | 6 | 9 | 0 | 0 | 0 | 6 | 3 | 9 | 17 |
| PHF | 0.40 | | | 0.38 | | | 0.00 | | | 0.38 | | | 0.53 |

| By Movement | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Total |
|-------------|--------------------------------|------|------|-------|--------------------------------|------|------|-------|------------------------|------|------|-------|------------------------|------|------|-------|-------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| Volume | 0 | 5 | 3 | 8 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 6 | 17 |
| PHF | 0.00 | 0.42 | 0.38 | 0.40 | 0.00 | 0.38 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.42 | 0.00 | 0.25 | 0.38 | 0.53 |

Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SW Pleasant View Dr | | | | Southbound SW Pleasant View Dr | | | | Eastbound SW Butler Rd | | | | Westbound SW Butler Rd | | | | Interval Total |
|---------------------|--------------------------------|----|---|-------|--------------------------------|---|---|-------|------------------------|---|---|-------|------------------------|---|---|-------|----------------|
| | L | T | R | Total | L | T | R | Total | L | T | R | Total | L | T | R | Total | |
| 4:00 PM | 0 | 12 | 4 | 16 | 0 | 4 | 1 | 5 | 2 | 0 | 1 | 3 | 3 | 2 | 5 | 10 | 34 |
| 4:15 PM | 0 | 8 | 2 | 10 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 6 | 1 | 5 | 12 | 26 |
| 4:30 PM | 0 | 7 | 3 | 10 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 1 | 4 | 9 | 20 |
| 4:45 PM | 0 | 5 | 3 | 8 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 1 | 5 | 1 | 1 | 7 | 18 |
| 5:00 PM | 0 | 4 | 2 | 6 | 0 | 3 | 0 | 3 | 0 | 1 | 0 | 1 | 5 | 0 | 1 | 6 | 16 |

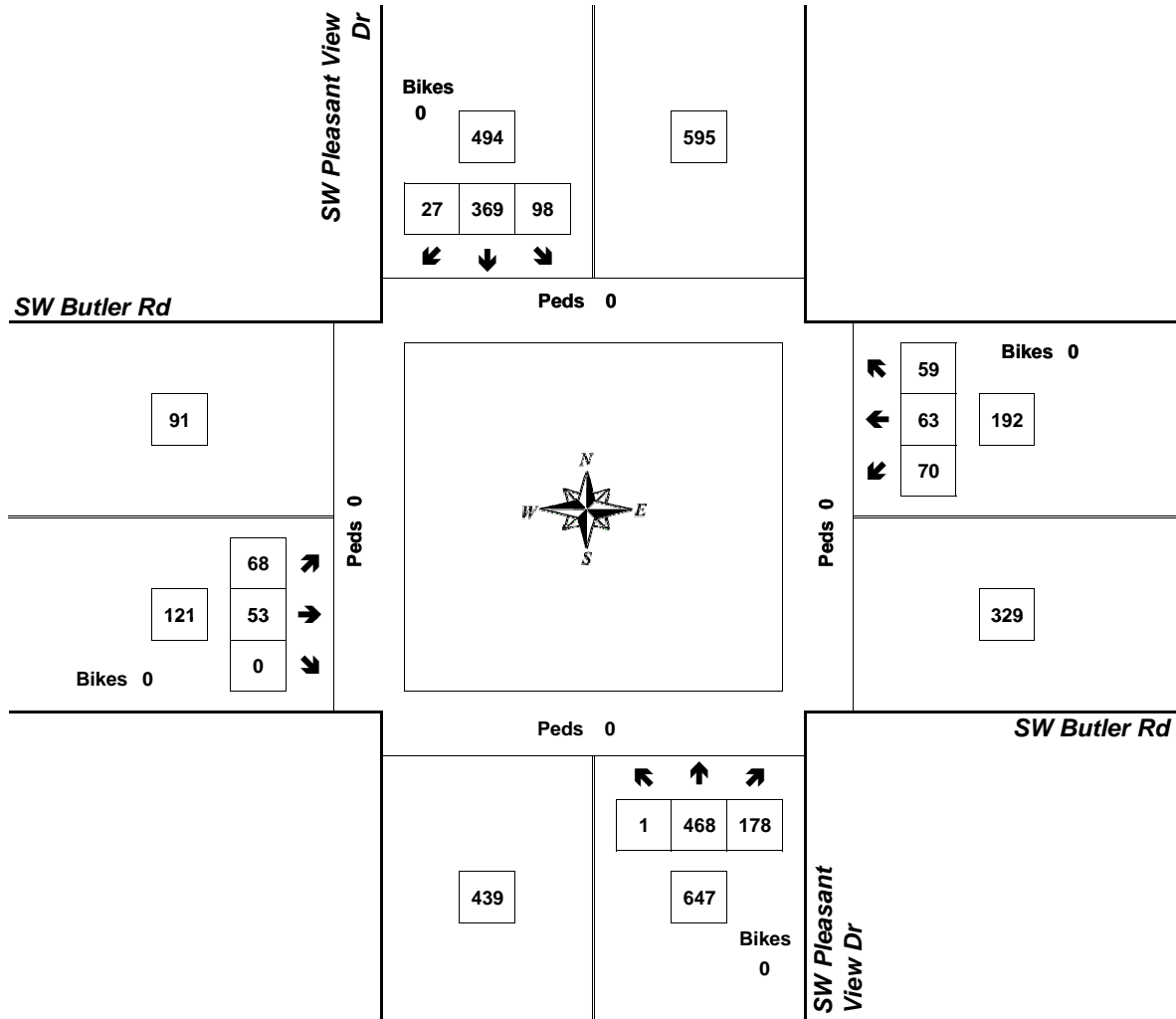
Peak Hour Summary



Clay Carney
(503) 833-2740

SW Pleasant View Dr & SW Butler Rd

4:50 PM to 5:50 PM
Tuesday, May 07, 2019



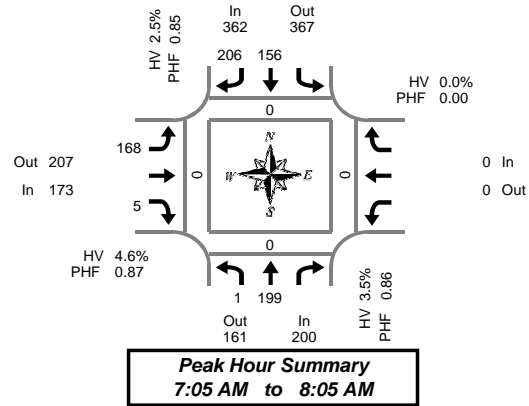
| Approach | PHF | HV% | Volume |
|---------------------|-------------|-------------|--------------|
| EB | 0.92 | 0.0% | 121 |
| WB | 0.80 | 3.1% | 192 |
| NB | 0.89 | 1.2% | 647 |
| SB | 0.88 | 0.6% | 494 |
| Intersection | 0.90 | 1.2% | 1,454 |

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Clay Carney
(503) 833-2740



SE 190th Ave & SE Richey Rd

Tuesday, May 07, 2019
7:00 AM to 9:00 AM

5-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|---|-------|------------------------|---|-------|----------------|-----------------------|-------|------|------|
| | L | T | Bikes | T | R | Bikes | L | R | Bikes | | | Bikes | | North | South | East | West |
| 7:00 AM | 0 | 7 | 0 | 9 | 18 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 0 | 0 | 0 |
| 7:05 AM | 0 | 14 | 0 | 19 | 21 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 62 | 0 | 0 | 0 | 0 |
| 7:10 AM | 0 | 24 | 0 | 10 | 17 | 0 | 15 | 1 | 0 | 0 | 0 | 0 | 67 | 0 | 0 | 0 | 0 |
| 7:15 AM | 0 | 17 | 0 | 6 | 19 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 53 | 0 | 0 | 0 | 0 |
| 7:20 AM | 0 | 17 | 0 | 12 | 15 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 0 | 0 |
| 7:25 AM | 1 | 13 | 0 | 14 | 16 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 15 | 0 | 12 | 28 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 66 | 0 | 0 | 0 | 0 |
| 7:35 AM | 0 | 22 | 0 | 14 | 22 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 79 | 0 | 0 | 0 | 0 |
| 7:40 AM | 0 | 16 | 0 | 15 | 10 | 0 | 14 | 1 | 0 | 0 | 0 | 0 | 56 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 16 | 0 | 15 | 18 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 63 | 0 | 0 | 0 | 0 |
| 7:50 AM | 0 | 13 | 0 | 16 | 13 | 0 | 14 | 1 | 0 | 0 | 0 | 0 | 57 | 0 | 0 | 0 | 0 |
| 7:55 AM | 0 | 17 | 0 | 13 | 16 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 67 | 0 | 0 | 0 | 0 |
| 8:00 AM | 0 | 15 | 0 | 10 | 11 | 0 | 11 | 1 | 0 | 0 | 0 | 0 | 48 | 0 | 0 | 0 | 0 |
| 8:05 AM | 1 | 18 | 0 | 13 | 13 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 0 | 0 | 0 |
| 8:10 AM | 0 | 13 | 0 | 9 | 14 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 16 | 0 | 13 | 10 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 0 | 0 | 0 |
| 8:20 AM | 0 | 22 | 0 | 9 | 15 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 55 | 0 | 0 | 0 | 0 |
| 8:25 AM | 0 | 12 | 0 | 6 | 12 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 19 | 0 | 11 | 8 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 54 | 0 | 0 | 0 | 0 |
| 8:35 AM | 0 | 13 | 0 | 8 | 17 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 47 | 0 | 0 | 0 | 0 |
| 8:40 AM | 0 | 10 | 0 | 7 | 9 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 0 | 0 | 0 |
| 8:45 AM | 0 | 14 | 0 | 11 | 15 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 49 | 0 | 0 | 0 | 0 |
| 8:50 AM | 0 | 11 | 0 | 6 | 16 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 44 | 0 | 0 | 0 | 0 |
| 8:55 AM | 1 | 7 | 0 | 7 | 15 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 0 | 0 | 0 |
| Total Survey | 3 | 361 | 0 | 265 | 368 | 0 | 304 | 5 | 0 | 0 | 0 | 0 | 1,306 | 0 | 0 | 0 | 0 |

15-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|---|-------|------------------------|---|-------|----------------|-----------------------|-------|------|------|
| | L | T | Bikes | T | R | Bikes | L | R | Bikes | | | Bikes | | North | South | East | West |
| 7:00 AM | 0 | 45 | 0 | 38 | 56 | 0 | 30 | 1 | 0 | 0 | 0 | 0 | 170 | 0 | 0 | 0 | 0 |
| 7:15 AM | 1 | 47 | 0 | 32 | 50 | 0 | 39 | 1 | 0 | 0 | 0 | 0 | 170 | 0 | 0 | 0 | 0 |
| 7:30 AM | 0 | 53 | 0 | 41 | 60 | 0 | 46 | 1 | 0 | 0 | 0 | 0 | 201 | 0 | 0 | 0 | 0 |
| 7:45 AM | 0 | 46 | 0 | 44 | 47 | 0 | 49 | 1 | 0 | 0 | 0 | 0 | 187 | 0 | 0 | 0 | 0 |
| 8:00 AM | 1 | 46 | 0 | 32 | 38 | 0 | 24 | 1 | 0 | 0 | 0 | 0 | 142 | 0 | 0 | 0 | 0 |
| 8:15 AM | 0 | 50 | 0 | 28 | 37 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 149 | 0 | 0 | 0 | 0 |
| 8:30 AM | 0 | 42 | 0 | 26 | 34 | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 153 | 0 | 0 | 0 | 0 |
| 8:45 AM | 1 | 32 | 0 | 24 | 46 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 134 | 0 | 0 | 0 | 0 |
| Total Survey | 3 | 361 | 0 | 265 | 368 | 0 | 304 | 5 | 0 | 0 | 0 | 0 | 1,306 | 0 | 0 | 0 | 0 |

Peak Hour Summary 7:05 AM to 8:05 AM

| By Approach | Northbound SE 190th Ave | | | | Southbound SE 190th Ave | | | | Eastbound SE Richey Rd | | | | Westbound SE Richey Rd | | | | Total | Pedestrians Crosswalk | | | | | | | | |
|-------------|-------------------------|-----|-------|-------|-------------------------|-----|-------|-------|------------------------|-----|-------|-------|------------------------|-----|-------|-------|-------|-----------------------|-------|------|------|-----|---|---|---|---|
| | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | | North | South | East | West | | | | | |
| Volume | 200 | 161 | 361 | 0 | 362 | 367 | 729 | 0 | 173 | 207 | 380 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 735 | 0 | 0 | 0 | 0 |
| %HV | 3.5% | | | | 2.5% | | | | 4.6% | | | | 0.0% | | | | 3.3% | | | | | | | | | |
| PHF | 0.86 | | | | 0.85 | | | | 0.87 | | | | 0.00 | | | | 0.90 | | | | | | | | | |

| By Movement | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total | | | | |
|-------------|-------------------------|------|-------|-------------------------|------|-------|------------------------|------|-------|------------------------|------|-------|-------|----|----|------|------|
| | L | T | Total | T | R | Total | L | R | Total | | | Total | | | | | |
| Volume | 1 | 199 | 200 | 156 | 206 | 362 | 168 | 5 | 173 | | | 0 | 735 | | | | |
| %HV | 0.0% | 3.5% | NA | 3.5% | NA | 1.3% | 3.4% | 2.5% | 4.8% | NA | 0.0% | 4.6% | NA | NA | NA | 0.0% | 3.3% |
| PHF | 0.25 | 0.86 | 0.86 | 0.85 | 0.78 | 0.85 | 0.86 | 0.63 | 0.87 | | | 0.00 | 0.90 | | | | |

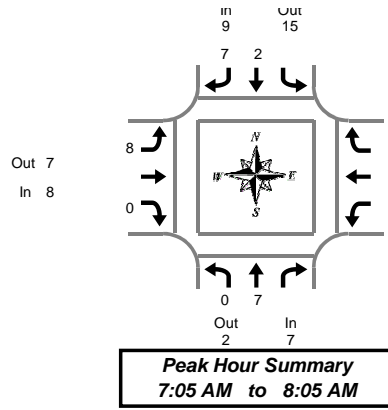
Rolling Hour Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|---|-------|------------------------|---|-------|----------------|-----------------------|-------|------|------|
| | L | T | Bikes | T | R | Bikes | L | R | Bikes | | | Bikes | | North | South | East | West |
| 7:00 AM | 1 | 191 | 0 | 155 | 213 | 0 | 164 | 4 | 0 | 0 | 0 | 0 | 728 | 0 | 0 | 0 | 0 |
| 7:15 AM | 2 | 192 | 0 | 149 | 195 | 0 | 158 | 4 | 0 | 0 | 0 | 0 | 700 | 0 | 0 | 0 | 0 |
| 7:30 AM | 1 | 195 | 0 | 145 | 182 | 0 | 153 | 3 | 0 | 0 | 0 | 0 | 679 | 0 | 0 | 0 | 0 |
| 7:45 AM | 1 | 184 | 0 | 130 | 156 | 0 | 158 | 2 | 0 | 0 | 0 | 0 | 631 | 0 | 0 | 0 | 0 |
| 8:00 AM | 2 | 170 | 0 | 110 | 155 | 0 | 140 | 1 | 0 | 0 | 0 | 0 | 578 | 0 | 0 | 0 | 0 |

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



SE 190th Ave & SE Richey Rd

Tuesday, May 07, 2019
7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|----|-------|-------------------------|----|-------|------------------------|---|-------|------------------------|----|-------|----------------|
| | L | T | Total | T | R | Total | L | R | Total | | | Total | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:05 AM | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 2 |
| 7:10 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| 7:15 AM | 0 | 0 | 0 | 1 | 2 | 3 | 1 | 0 | 1 | 0 | 1 | 0 | 4 |
| 7:20 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 7:25 AM | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 7:30 AM | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 7:35 AM | 0 | 2 | 2 | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 2 | 0 | 5 |
| 7:40 AM | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 2 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| 7:50 AM | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:55 AM | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 2 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:05 AM | 0 | 1 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 8:10 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 8:15 AM | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 2 |
| 8:20 AM | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 8:25 AM | 0 | 0 | 0 | 2 | 1 | 3 | 1 | 0 | 1 | 0 | 1 | 0 | 4 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:35 AM | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 1 | 0 | 1 | 0 | 3 |
| 8:40 AM | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 0 | 3 | 0 | 3 | 0 | 4 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| 8:50 AM | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 8:55 AM | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total Survey | 1 | 13 | 14 | 6 | 15 | 21 | 15 | 0 | 15 | 0 | 15 | 0 | 50 |

Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|----|-------|-------------------------|----|-------|------------------------|---|-------|------------------------|----|-------|----------------|
| | L | T | Total | T | R | Total | L | R | Total | | | Total | |
| 7:00 AM | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 2 | 0 | 3 |
| 7:15 AM | 0 | 3 | 3 | 1 | 3 | 4 | 1 | 0 | 1 | 0 | 1 | 0 | 8 |
| 7:30 AM | 0 | 3 | 3 | 0 | 3 | 3 | 3 | 0 | 3 | 0 | 3 | 0 | 9 |
| 7:45 AM | 0 | 1 | 1 | 1 | 0 | 1 | 2 | 0 | 2 | 0 | 2 | 0 | 4 |
| 8:00 AM | 0 | 3 | 3 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 8:15 AM | 0 | 3 | 3 | 2 | 2 | 4 | 2 | 0 | 2 | 0 | 2 | 0 | 9 |
| 8:30 AM | 0 | 0 | 0 | 2 | 1 | 3 | 4 | 0 | 4 | 0 | 4 | 0 | 7 |
| 8:45 AM | 1 | 0 | 1 | 0 | 3 | 3 | 1 | 0 | 1 | 0 | 1 | 0 | 5 |
| Total Survey | 1 | 13 | 14 | 6 | 15 | 21 | 15 | 0 | 15 | 0 | 15 | 0 | 50 |

Heavy Vehicle Peak Hour Summary 7:05 AM to 8:05 AM

| By Approach | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total |
|-------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|-----|-------|------------------------|-----|-------|-------|
| | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | |
| Volume | 7 | 2 | 9 | 9 | 15 | 24 | 8 | 7 | 15 | 0 | 0 | 0 | 24 |
| PHF | 0.44 | | | 0.56 | | | 0.50 | | | 0.00 | | | 0.67 |

| By Movement | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total |
|-------------|-------------------------|------|-------|-------------------------|------|-------|------------------------|------|-------|------------------------|------|-------|-------|
| | L | T | Total | T | R | Total | L | R | Total | | | Total | |
| Volume | 0 | 7 | 7 | 2 | 7 | 9 | 8 | 0 | 8 | 0 | 0 | 0 | 24 |
| PHF | 0.00 | 0.44 | 0.44 | 0.50 | 0.58 | 0.56 | 0.50 | 0.00 | 0.50 | 0.00 | 0.00 | 0.00 | 0.67 |

Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|----|-------|-------------------------|---|-------|------------------------|---|-------|------------------------|---|-------|----------------|
| | L | T | Total | T | R | Total | L | R | Total | | | Total | |
| 7:00 AM | 0 | 7 | 7 | 2 | 7 | 9 | 8 | 0 | 8 | 0 | 8 | 0 | 24 |
| 7:15 AM | 0 | 10 | 10 | 2 | 8 | 10 | 6 | 0 | 6 | 0 | 6 | 0 | 26 |
| 7:30 AM | 0 | 10 | 10 | 3 | 7 | 10 | 7 | 0 | 7 | 0 | 7 | 0 | 27 |
| 7:45 AM | 0 | 7 | 7 | 5 | 5 | 10 | 8 | 0 | 8 | 0 | 8 | 0 | 25 |
| 8:00 AM | 1 | 6 | 7 | 4 | 8 | 12 | 7 | 0 | 7 | 0 | 7 | 0 | 26 |

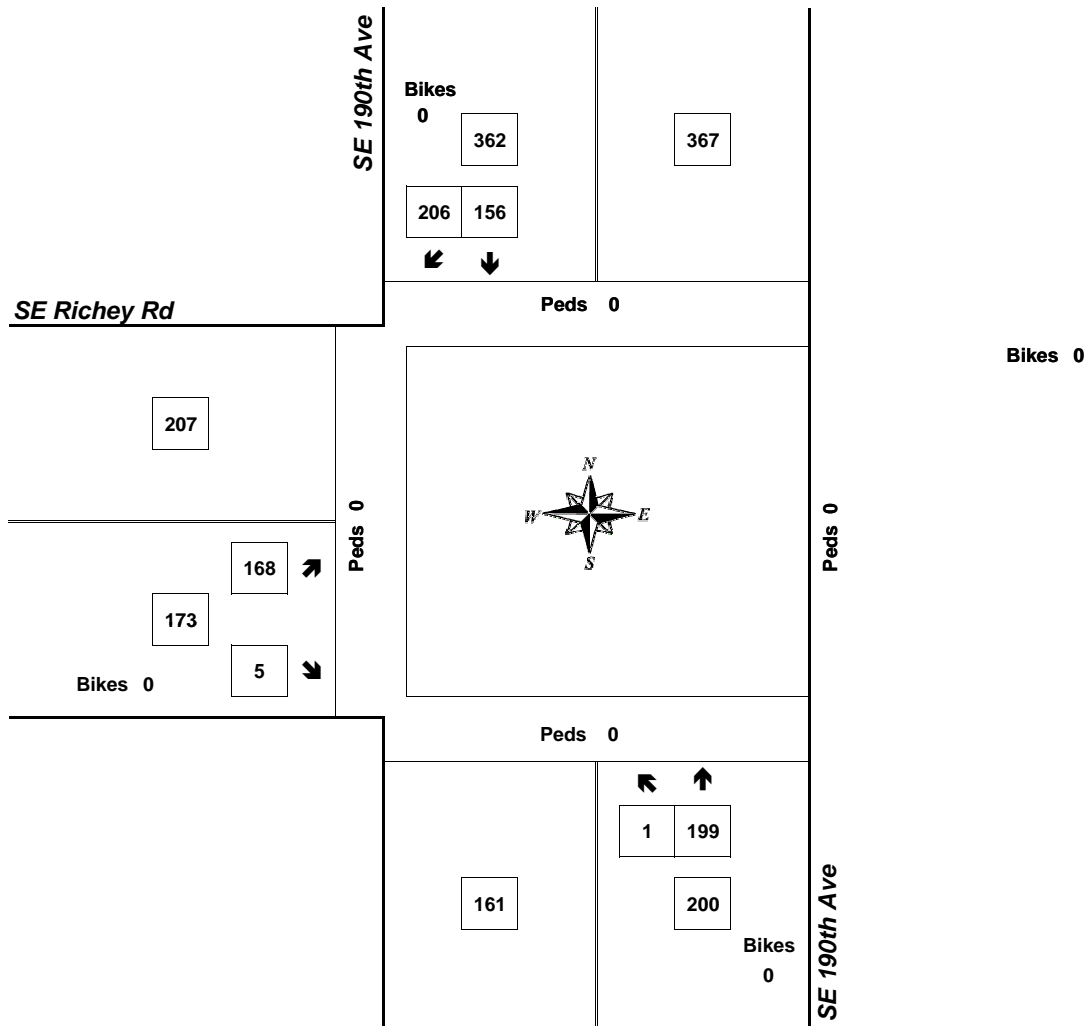
Peak Hour Summary



Clay Carney
(503) 833-2740

SE 190th Ave & SE Richey Rd

7:05 AM to 8:05 AM
Tuesday, May 07, 2019



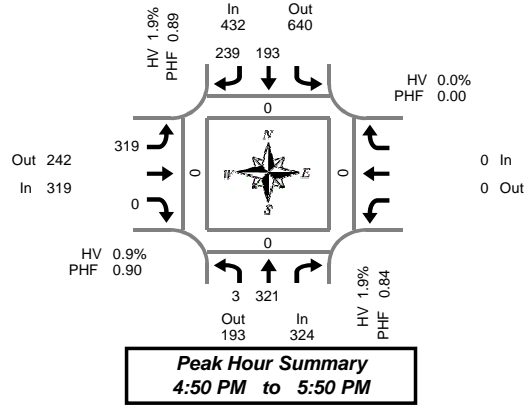
| Approach | PHF | HV% | Volume |
|---------------------|-------------|-------------|------------|
| EB | 0.87 | 4.6% | 173 |
| WB | 0.00 | 0.0% | 0 |
| NB | 0.86 | 3.5% | 200 |
| SB | 0.85 | 2.5% | 362 |
| Intersection | 0.90 | 3.3% | 735 |

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Clay Carney
(503) 833-2740



SE 190th Ave & SE Richey Rd

Tuesday, May 07, 2019
4:00 PM to 6:00 PM

5-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|---|-------|------------------------|---|-------|----------------|-----------------------|-------|------|------|
| | L | T | Bikes | T | R | Bikes | L | R | Bikes | | | Bikes | | North | South | East | West |
| 4:00 PM | 0 | 17 | 0 | 18 | 10 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 76 | 0 | 0 | 0 | 0 |
| 4:05 PM | 0 | 30 | 0 | 12 | 10 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 82 | 0 | 0 | 0 | 0 |
| 4:10 PM | 0 | 23 | 0 | 19 | 23 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 83 | 0 | 0 | 0 | 0 |
| 4:15 PM | 0 | 31 | 0 | 14 | 11 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 81 | 0 | 0 | 0 | 0 |
| 4:20 PM | 1 | 32 | 0 | 14 | 20 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | 0 | 0 | 0 |
| 4:25 PM | 0 | 16 | 0 | 19 | 23 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 81 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 18 | 0 | 23 | 20 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 82 | 0 | 0 | 0 | 0 |
| 4:35 PM | 0 | 29 | 0 | 18 | 21 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 90 | 0 | 0 | 0 | 0 |
| 4:40 PM | 0 | 19 | 0 | 12 | 20 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 71 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 34 | 0 | 11 | 15 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 79 | 0 | 0 | 0 | 0 |
| 4:50 PM | 0 | 23 | 0 | 21 | 19 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 87 | 0 | 0 | 0 | 0 |
| 4:55 PM | 0 | 26 | 0 | 13 | 14 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 77 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 31 | 0 | 16 | 21 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 92 | 0 | 0 | 0 | 0 |
| 5:05 PM | 0 | 21 | 0 | 17 | 19 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 85 | 0 | 0 | 0 | 0 |
| 5:10 PM | 0 | 27 | 0 | 25 | 22 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 101 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 32 | 0 | 12 | 26 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 0 |
| 5:20 PM | 2 | 35 | 0 | 17 | 20 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 106 | 0 | 0 | 0 | 0 |
| 5:25 PM | 0 | 26 | 0 | 15 | 19 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 84 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 26 | 0 | 10 | 19 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 0 | 0 | 0 |
| 5:35 PM | 1 | 27 | 0 | 16 | 16 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 83 | 0 | 0 | 0 | 0 |
| 5:40 PM | 0 | 25 | 0 | 14 | 22 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 94 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 22 | 0 | 17 | 22 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 91 | 0 | 0 | 0 | 0 |
| 5:50 PM | 0 | 29 | 0 | 18 | 15 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 73 | 0 | 0 | 0 | 0 |
| 5:55 PM | 0 | 26 | 0 | 9 | 17 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 0 | 0 | 0 |
| Total Survey | 4 | 625 | 0 | 380 | 444 | 0 | 583 | 0 | 0 | 0 | 0 | 0 | 2,036 | 0 | 0 | 0 | 0 |

15-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|---|-------|------------------------|---|-------|----------------|-----------------------|-------|------|------|
| | L | T | Bikes | T | R | Bikes | L | R | Bikes | | | Bikes | | North | South | East | West |
| 4:00 PM | 0 | 70 | 0 | 49 | 43 | 0 | 79 | 0 | 0 | 0 | 0 | 0 | 241 | 0 | 0 | 0 | 0 |
| 4:15 PM | 1 | 79 | 0 | 47 | 54 | 0 | 72 | 0 | 0 | 0 | 0 | 0 | 253 | 0 | 0 | 0 | 0 |
| 4:30 PM | 0 | 66 | 0 | 53 | 61 | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 243 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 83 | 0 | 45 | 48 | 0 | 67 | 0 | 0 | 0 | 0 | 0 | 243 | 0 | 0 | 0 | 0 |
| 5:00 PM | 0 | 79 | 0 | 58 | 62 | 0 | 79 | 0 | 0 | 0 | 0 | 0 | 278 | 0 | 0 | 0 | 0 |
| 5:15 PM | 2 | 93 | 0 | 44 | 65 | 0 | 86 | 0 | 0 | 0 | 0 | 0 | 290 | 0 | 0 | 0 | 0 |
| 5:30 PM | 1 | 78 | 0 | 40 | 57 | 0 | 76 | 0 | 0 | 0 | 0 | 0 | 252 | 0 | 0 | 0 | 0 |
| 5:45 PM | 0 | 77 | 0 | 44 | 54 | 0 | 61 | 0 | 0 | 0 | 0 | 0 | 236 | 0 | 0 | 0 | 0 |
| Total Survey | 4 | 625 | 0 | 380 | 444 | 0 | 583 | 0 | 0 | 0 | 0 | 0 | 2,036 | 0 | 0 | 0 | 0 |

Peak Hour Summary 4:50 PM to 5:50 PM

| By Approach | Northbound SE 190th Ave | | | | Southbound SE 190th Ave | | | | Eastbound SE Richey Rd | | | | Westbound SE Richey Rd | | | | Total | Pedestrians Crosswalk | | | |
|-------------|-------------------------|-----|-------|-------|-------------------------|-----|-------|-------|------------------------|-----|-------|-------|------------------------|-----|-------|-------|-------|-----------------------|-------|------|------|
| | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | | North | South | East | West |
| Volume | 324 | 193 | 517 | 0 | 432 | 640 | 1,072 | 0 | 319 | 242 | 561 | 0 | 0 | 0 | 0 | 0 | 1,075 | 0 | 0 | 0 | 0 |
| %HV | 1.9% | | | | 1.9% | | | | 0.9% | | | | 0.0% | | | | 1.6% | | | | |
| PHF | 0.84 | | | | 0.89 | | | | 0.90 | | | | 0.00 | | | | 0.88 | | | | |

| By Movement | Northbound SE 190th Ave | | | | Southbound SE 190th Ave | | | | Eastbound SE Richey Rd | | | | Westbound SE Richey Rd | | | | Total |
|-------------|-------------------------|------|----|-------|-------------------------|------|------|-------|------------------------|----|------|-------|------------------------|----|----|-------|-------|
| | L | T | | Total | T | R | | Total | L | R | | Total | | | | Total | |
| Volume | 3 | 321 | | 324 | 193 | 239 | | 432 | 319 | 0 | | 319 | | | | 0 | 1,075 |
| %HV | 0.0% | 1.9% | NA | 1.9% | NA | 1.0% | 2.5% | 1.9% | 0.9% | NA | 0.0% | 0.9% | NA | NA | NA | 0.0% | 1.6% |
| PHF | 0.38 | 0.85 | | 0.84 | 0.83 | 0.88 | | 0.89 | 0.90 | | 0.00 | 0.90 | | | | 0.00 | 0.88 |

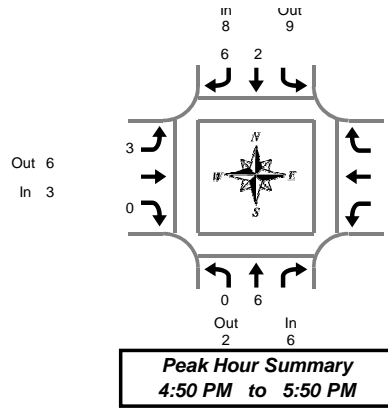
Rolling Hour Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|---|-------|------------------------|---|-------|----------------|-----------------------|-------|------|------|
| | L | T | Bikes | T | R | Bikes | L | R | Bikes | | | Bikes | | North | South | East | West |
| 4:00 PM | 1 | 298 | 0 | 194 | 206 | 0 | 281 | 0 | 0 | 0 | 0 | 0 | 980 | 0 | 0 | 0 | 0 |
| 4:15 PM | 1 | 307 | 0 | 203 | 225 | 0 | 281 | 0 | 0 | 0 | 0 | 0 | 1,017 | 0 | 0 | 0 | 0 |
| 4:30 PM | 2 | 321 | 0 | 200 | 236 | 0 | 295 | 0 | 0 | 0 | 0 | 0 | 1,054 | 0 | 0 | 0 | 0 |
| 4:45 PM | 3 | 333 | 0 | 187 | 232 | 0 | 308 | 0 | 0 | 0 | 0 | 0 | 1,063 | 0 | 0 | 0 | 0 |
| 5:00 PM | 3 | 327 | 0 | 186 | 238 | 0 | 302 | 0 | 0 | 0 | 0 | 0 | 1,056 | 0 | 0 | 0 | 0 |

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



SE 190th Ave & SE Richey Rd

Tuesday, May 07, 2019
4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|----|-------|-------------------------|----|-------|------------------------|---|-------|------------------------|---|-------|----------------|
| | L | T | Total | T | R | Total | L | R | Total | | | Total | |
| 4:00 PM | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 4 |
| 4:05 PM | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 3 |
| 4:10 PM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:15 PM | 0 | 0 | 0 | 2 | 1 | 3 | 1 | 0 | 1 | 0 | 1 | 0 | 4 |
| 4:20 PM | 0 | 0 | 0 | 1 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 4:25 PM | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 2 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:35 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| 4:40 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:50 PM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:55 PM | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 3 |
| 5:00 PM | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:05 PM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 5:10 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 2 |
| 5:20 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:25 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:35 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:40 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:45 PM | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 5:50 PM | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:55 PM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total Survey | 0 | 10 | 10 | 7 | 14 | 21 | 9 | 0 | 9 | 0 | 0 | 0 | 40 |

Heavy Vehicle 15-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|----|-------|-------------------------|----|-------|------------------------|---|-------|------------------------|---|-------|----------------|
| | L | T | Total | T | R | Total | L | R | Total | | | Total | |
| 4:00 PM | 0 | 3 | 3 | 1 | 2 | 3 | 3 | 0 | 3 | 0 | 0 | 0 | 9 |
| 4:15 PM | 0 | 0 | 0 | 3 | 6 | 9 | 2 | 0 | 2 | 0 | 0 | 0 | 11 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| 4:45 PM | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 4 |
| 5:00 PM | 0 | 2 | 2 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 5:15 PM | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| 5:30 PM | 0 | 1 | 1 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5:45 PM | 0 | 2 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Total Survey | 0 | 10 | 10 | 7 | 14 | 21 | 9 | 0 | 9 | 0 | 0 | 0 | 40 |

Heavy Vehicle Peak Hour Summary 4:50 PM to 5:50 PM

| By Approach | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total |
|-------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|-----|-------|------------------------|-----|-------|-------|
| | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | |
| Volume | 6 | 2 | 8 | 8 | 9 | 17 | 3 | 6 | 9 | 0 | 0 | 0 | 17 |
| PHF | 0.50 | | | 0.67 | | | 0.38 | | | 0.00 | | | 0.53 |

| By Movement | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total |
|-------------|-------------------------|------|-------|-------------------------|------|-------|------------------------|------|-------|------------------------|--|-------|-------|
| | L | T | Total | T | R | Total | L | R | Total | | | Total | |
| Volume | 0 | 6 | 6 | 2 | 6 | 8 | 3 | 0 | 3 | | | 0 | 17 |
| PHF | 0.00 | 0.50 | 0.50 | 0.50 | 0.50 | 0.67 | 0.38 | 0.00 | 0.38 | | | 0.00 | 0.53 |

Heavy Vehicle Rolling Hour Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE 190th Ave | | | Southbound SE 190th Ave | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|---|-------|-------------------------|---|-------|------------------------|---|-------|------------------------|---|-------|----------------|
| | L | T | Total | T | R | Total | L | R | Total | | | Total | |
| 4:00 PM | 0 | 5 | 5 | 4 | 8 | 12 | 8 | 0 | 8 | 0 | 0 | 0 | 25 |
| 4:15 PM | 0 | 4 | 4 | 3 | 9 | 12 | 5 | 0 | 5 | 0 | 0 | 0 | 21 |
| 4:30 PM | 0 | 4 | 4 | 0 | 4 | 4 | 4 | 0 | 4 | 0 | 0 | 0 | 12 |
| 4:45 PM | 0 | 5 | 5 | 1 | 6 | 7 | 3 | 0 | 3 | 0 | 0 | 0 | 15 |
| 5:00 PM | 0 | 5 | 5 | 3 | 6 | 9 | 1 | 0 | 1 | 0 | 0 | 0 | 15 |

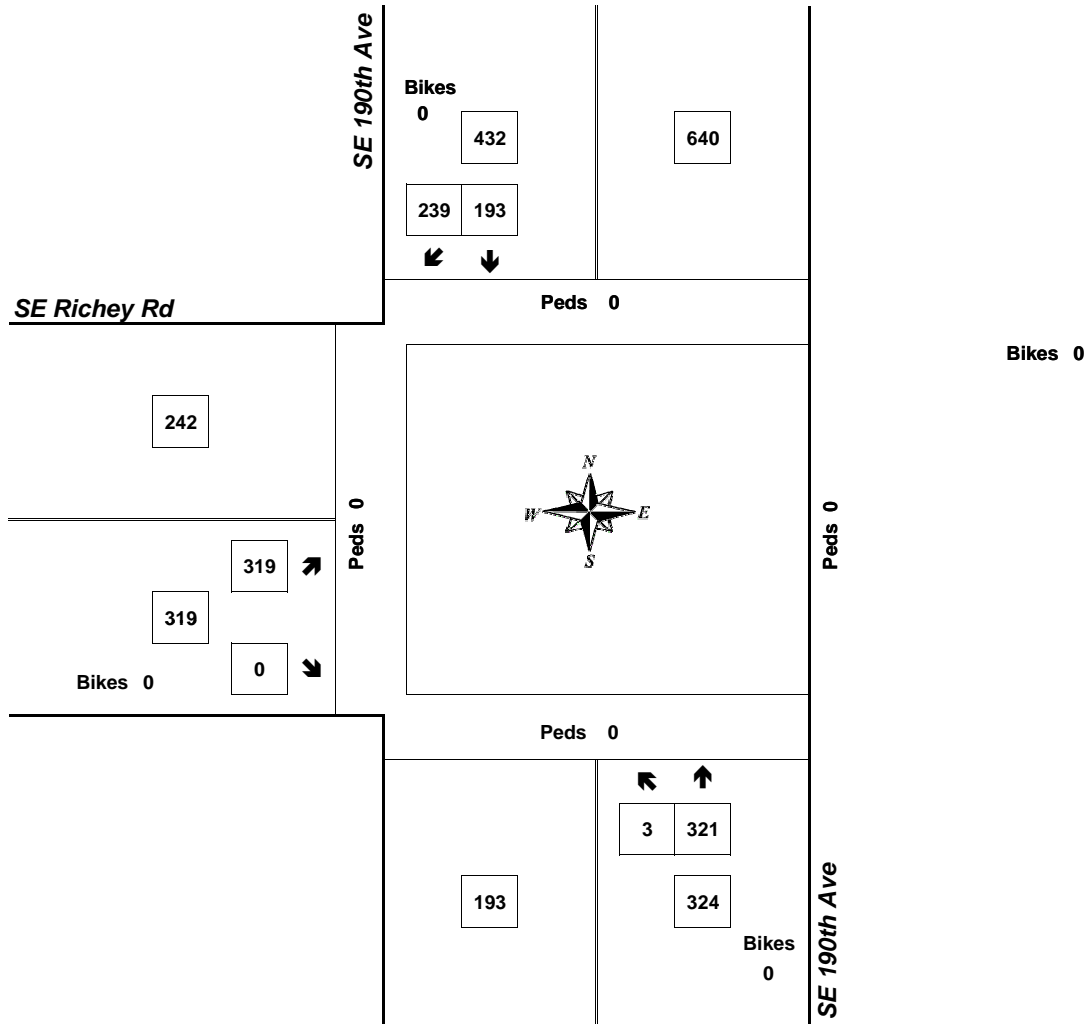
Peak Hour Summary



Clay Carney
(503) 833-2740

SE 190th Ave & SE Richey Rd

4:50 PM to 5:50 PM
Tuesday, May 07, 2019



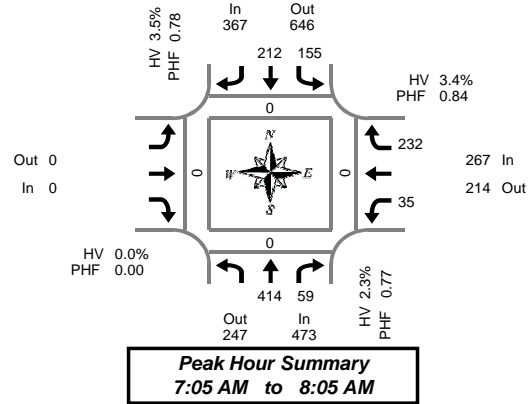
| Approach | PHF | HV% | Volume |
|---------------------|-------------|-------------|--------------|
| EB | 0.90 | 0.9% | 319 |
| WB | 0.00 | 0.0% | 0 |
| NB | 0.84 | 1.9% | 324 |
| SB | 0.89 | 1.9% | 432 |
| Intersection | 0.88 | 1.6% | 1,075 |

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Clay Carney
(503) 833-2740



SE Foster Rd & SE Richey Rd

Tuesday, May 07, 2019
7:00 AM to 9:00 AM

5-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|----|-------|-------------------------|-----|-------|------------------------|--|-------|------------------------|-----|-------|----------------|-----------------------|-------|------|------|
| | T | R | Bikes | L | T | Bikes | | | Bikes | L | R | Bikes | | North | South | East | West |
| 7:00 AM | 24 | 3 | 0 | 7 | 7 | 0 | | | 0 | 2 | 26 | 0 | 69 | 0 | 0 | 0 | 0 |
| 7:05 AM | 35 | 0 | 0 | 9 | 12 | 0 | | | 0 | 5 | 16 | 0 | 77 | 0 | 0 | 0 | 0 |
| 7:10 AM | 32 | 2 | 0 | 16 | 14 | 0 | | | 0 | 2 | 21 | 0 | 87 | 0 | 0 | 0 | 0 |
| 7:15 AM | 33 | 6 | 0 | 12 | 15 | 0 | | | 0 | 2 | 19 | 0 | 87 | 0 | 0 | 0 | 0 |
| 7:20 AM | 38 | 2 | 0 | 15 | 12 | 0 | | | 0 | 2 | 21 | 0 | 90 | 0 | 0 | 0 | 0 |
| 7:25 AM | 32 | 8 | 0 | 10 | 12 | 0 | | | 0 | 2 | 17 | 0 | 81 | 0 | 0 | 0 | 0 |
| 7:30 AM | 37 | 7 | 0 | 15 | 21 | 0 | | | 0 | 3 | 22 | 0 | 105 | 0 | 0 | 0 | 0 |
| 7:35 AM | 52 | 10 | 0 | 12 | 26 | 0 | | | 0 | 5 | 20 | 0 | 125 | 0 | 0 | 0 | 0 |
| 7:40 AM | 38 | 9 | 0 | 11 | 30 | 0 | | | 0 | 5 | 24 | 0 | 117 | 0 | 0 | 0 | 0 |
| 7:45 AM | 34 | 4 | 0 | 16 | 22 | 0 | | | 0 | 2 | 16 | 0 | 94 | 0 | 0 | 0 | 0 |
| 7:50 AM | 33 | 5 | 0 | 11 | 18 | 0 | | | 0 | 2 | 20 | 0 | 89 | 0 | 0 | 0 | 0 |
| 7:55 AM | 26 | 5 | 0 | 18 | 13 | 0 | | | 0 | 2 | 14 | 0 | 78 | 0 | 0 | 0 | 0 |
| 8:00 AM | 24 | 1 | 0 | 10 | 17 | 0 | | | 0 | 3 | 22 | 0 | 77 | 0 | 0 | 0 | 0 |
| 8:05 AM | 26 | 1 | 0 | 10 | 17 | 0 | | | 0 | 2 | 14 | 0 | 70 | 0 | 0 | 0 | 0 |
| 8:10 AM | 16 | 2 | 0 | 1 | 13 | 0 | | | 0 | 1 | 12 | 0 | 45 | 0 | 0 | 0 | 0 |
| 8:15 AM | 14 | 3 | 0 | 15 | 18 | 0 | | | 0 | 1 | 17 | 0 | 68 | 0 | 0 | 0 | 0 |
| 8:20 AM | 35 | 3 | 0 | 9 | 11 | 0 | | | 0 | 2 | 14 | 0 | 74 | 0 | 0 | 0 | 0 |
| 8:25 AM | 21 | 5 | 0 | 10 | 20 | 0 | | | 0 | 2 | 20 | 0 | 78 | 0 | 0 | 0 | 0 |
| 8:30 AM | 22 | 2 | 0 | 14 | 13 | 0 | | | 0 | 3 | 14 | 0 | 68 | 0 | 0 | 0 | 0 |
| 8:35 AM | 27 | 3 | 0 | 10 | 11 | 0 | | | 0 | 1 | 16 | 0 | 68 | 0 | 0 | 0 | 0 |
| 8:40 AM | 25 | 3 | 0 | 17 | 4 | 0 | | | 0 | 3 | 16 | 0 | 68 | 0 | 0 | 0 | 0 |
| 8:45 AM | 24 | 3 | 0 | 7 | 14 | 0 | | | 0 | 0 | 12 | 0 | 60 | 0 | 0 | 0 | 0 |
| 8:50 AM | 19 | 4 | 0 | 9 | 10 | 0 | | | 0 | 2 | 22 | 0 | 66 | 0 | 0 | 0 | 0 |
| 8:55 AM | 18 | 2 | 0 | 9 | 14 | 0 | | | 0 | 1 | 10 | 0 | 54 | 0 | 0 | 0 | 0 |
| Total Survey | 685 | 93 | 0 | 273 | 364 | 0 | | | 0 | 55 | 425 | 0 | 1,895 | 0 | 0 | 0 | 0 |

15-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|----|-------|-------------------------|-----|-------|------------------------|--|-------|------------------------|-----|-------|----------------|-----------------------|-------|------|------|
| | T | R | Bikes | L | T | Bikes | | | Bikes | L | R | Bikes | | North | South | East | West |
| 7:00 AM | 91 | 5 | 0 | 32 | 33 | 0 | | | 0 | 9 | 63 | 0 | 233 | 0 | 0 | 0 | 0 |
| 7:15 AM | 103 | 16 | 0 | 37 | 39 | 0 | | | 0 | 6 | 57 | 0 | 258 | 0 | 0 | 0 | 0 |
| 7:30 AM | 127 | 26 | 0 | 38 | 77 | 0 | | | 0 | 13 | 66 | 0 | 347 | 0 | 0 | 0 | 0 |
| 7:45 AM | 93 | 14 | 0 | 45 | 53 | 0 | | | 0 | 6 | 50 | 0 | 261 | 0 | 0 | 0 | 0 |
| 8:00 AM | 66 | 4 | 0 | 21 | 47 | 0 | | | 0 | 6 | 48 | 0 | 192 | 0 | 0 | 0 | 0 |
| 8:15 AM | 70 | 11 | 0 | 34 | 49 | 0 | | | 0 | 5 | 51 | 0 | 220 | 0 | 0 | 0 | 0 |
| 8:30 AM | 74 | 8 | 0 | 41 | 28 | 0 | | | 0 | 7 | 46 | 0 | 204 | 0 | 0 | 0 | 0 |
| 8:45 AM | 61 | 9 | 0 | 25 | 38 | 0 | | | 0 | 3 | 44 | 0 | 180 | 0 | 0 | 0 | 0 |
| Total Survey | 685 | 93 | 0 | 273 | 364 | 0 | | | 0 | 55 | 425 | 0 | 1,895 | 0 | 0 | 0 | 0 |

Peak Hour Summary 7:05 AM to 8:05 AM

| By Approach | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total | Pedestrians Crosswalk | | | |
|-------------|-------------------------|-----|-------|-------------------------|------|-----|------------------------|-------|------|------------------------|-------|-------|-------|-----------------------|-------|------|-------|
| | In | Out | Total | Bikes | In | Out | Total | Bikes | In | Out | Total | Bikes | | North | South | East | West |
| Volume | 473 | 247 | 720 | 0 | 367 | 646 | 1,013 | 0 | 0 | 0 | 0 | 0 | 267 | 214 | 481 | 0 | 1,107 |
| %HV | 2.3% | | | | 3.5% | | | | 0.0% | | | | 3.4% | | | 3.0% | |
| PHF | 0.77 | | | | 0.78 | | | | 0.00 | | | | 0.84 | | | 0.80 | |

| By Movement | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total | | | | |
|-------------|-------------------------|------|-------|-------------------------|------|-------|------------------------|------|-------|------------------------|------|-------|-------|----|------|------|------|
| | T | R | Total | L | T | Total | | | Total | L | R | Total | | | | | |
| Volume | 414 | 59 | 473 | 155 | 212 | 367 | | | 0 | 35 | 232 | 267 | 1,107 | | | | |
| %HV | NA | 2.2% | 3.4% | 2.3% | 2.6% | 4.2% | NA | 3.5% | NA | NA | NA | 0.0% | 5.7% | NA | 3.0% | 3.4% | 3.0% |
| PHF | 0.81 | 0.57 | 0.77 | 0.86 | 0.68 | 0.78 | | | 0.00 | 0.67 | 0.88 | 0.84 | 0.80 | | | | |

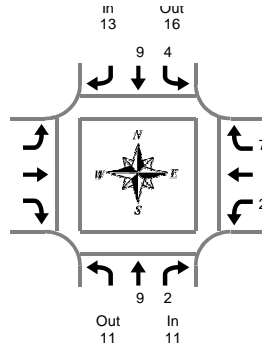
Rolling Hour Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|----|-------|-------------------------|-----|-------|------------------------|--|-------|------------------------|-----|-------|----------------|-----------------------|-------|------|------|
| | T | R | Bikes | L | T | Bikes | | | Bikes | L | R | Bikes | | North | South | East | West |
| 7:00 AM | 414 | 61 | 0 | 152 | 202 | 0 | | | 0 | 34 | 236 | 0 | 1,099 | 0 | 0 | 0 | 0 |
| 7:15 AM | 389 | 60 | 0 | 141 | 216 | 0 | | | 0 | 31 | 221 | 0 | 1,058 | 0 | 0 | 0 | 0 |
| 7:30 AM | 356 | 55 | 0 | 138 | 226 | 0 | | | 0 | 30 | 215 | 0 | 1,020 | 0 | 0 | 0 | 0 |
| 7:45 AM | 303 | 37 | 0 | 141 | 177 | 0 | | | 0 | 24 | 195 | 0 | 877 | 0 | 0 | 0 | 0 |
| 8:00 AM | 271 | 32 | 0 | 121 | 162 | 0 | | | 0 | 21 | 189 | 0 | 796 | 0 | 0 | 0 | 0 |

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



Peak Hour Summary
7:05 AM to 8:05 AM

SE Foster Rd & SE Richey Rd

Tuesday, May 07, 2019
7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|---|-------|-------------------------|----|-------|------------------------|--|-------|------------------------|----|-------|----------------|
| | T | R | Total | L | T | Total | | | Total | L | R | Total | |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 |
| 7:05 AM | 2 | 0 | 2 | 0 | 0 | 0 | | | 0 | 0 | 1 | 1 | 3 |
| 7:10 AM | 0 | 0 | 0 | 1 | 0 | 1 | | | 0 | 0 | 0 | 0 | 1 |
| 7:15 AM | 0 | 1 | 1 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 1 |
| 7:20 AM | 2 | 0 | 2 | 0 | 1 | 1 | | | 0 | 0 | 0 | 0 | 3 |
| 7:25 AM | 0 | 0 | 0 | 0 | 4 | 4 | | | 0 | 0 | 0 | 0 | 4 |
| 7:30 AM | 0 | 0 | 0 | 0 | 4 | 4 | | | 0 | 0 | 1 | 1 | 5 |
| 7:35 AM | 2 | 0 | 2 | 1 | 0 | 1 | | | 0 | 0 | 0 | 0 | 3 |
| 7:40 AM | 0 | 0 | 0 | 1 | 0 | 1 | | | 0 | 0 | 3 | 3 | 4 |
| 7:45 AM | 1 | 0 | 1 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 1 |
| 7:50 AM | 2 | 0 | 2 | 0 | 0 | 0 | | | 0 | 0 | 1 | 1 | 3 |
| 7:55 AM | 0 | 1 | 1 | 1 | 0 | 1 | | | 0 | 2 | 0 | 2 | 4 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 1 | 1 | 1 |
| 8:05 AM | 0 | 0 | 0 | 1 | 0 | 1 | | | 0 | 0 | 2 | 2 | 3 |
| 8:10 AM | 0 | 0 | 0 | 0 | 1 | 1 | | | 0 | 0 | 0 | 0 | 1 |
| 8:15 AM | 0 | 0 | 0 | 2 | 2 | 4 | | | 0 | 0 | 0 | 0 | 4 |
| 8:20 AM | 0 | 1 | 1 | 0 | 0 | 0 | | | 0 | 0 | 1 | 1 | 2 |
| 8:25 AM | 0 | 1 | 1 | 2 | 2 | 4 | | | 0 | 0 | 0 | 0 | 5 |
| 8:30 AM | 1 | 0 | 1 | 1 | 0 | 1 | | | 0 | 0 | 1 | 1 | 3 |
| 8:35 AM | 0 | 0 | 0 | 3 | 0 | 3 | | | 0 | 0 | 0 | 0 | 3 |
| 8:40 AM | 2 | 0 | 2 | 1 | 0 | 1 | | | 0 | 0 | 1 | 1 | 4 |
| 8:45 AM | 1 | 0 | 1 | 1 | 1 | 2 | | | 0 | 0 | 1 | 1 | 4 |
| 8:50 AM | 1 | 0 | 1 | 0 | 0 | 0 | | | 0 | 0 | 1 | 1 | 2 |
| 8:55 AM | 1 | 0 | 1 | 0 | 1 | 1 | | | 0 | 0 | 1 | 1 | 3 |
| Total Survey | 15 | 4 | 19 | 15 | 16 | 31 | | | 0 | 2 | 15 | 17 | 67 |

Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|---|-------|-------------------------|----|-------|------------------------|--|-------|------------------------|----|-------|----------------|
| | T | R | Total | L | T | Total | | | Total | L | R | Total | |
| 7:00 AM | 2 | 0 | 2 | 1 | 0 | 1 | | | 0 | 0 | 1 | 1 | 4 |
| 7:15 AM | 2 | 1 | 3 | 0 | 5 | 5 | | | 0 | 0 | 0 | 0 | 8 |
| 7:30 AM | 2 | 0 | 2 | 2 | 4 | 6 | | | 0 | 0 | 4 | 4 | 12 |
| 7:45 AM | 3 | 1 | 4 | 1 | 0 | 1 | | | 0 | 2 | 1 | 3 | 8 |
| 8:00 AM | 0 | 0 | 0 | 1 | 1 | 2 | | | 0 | 0 | 3 | 3 | 5 |
| 8:15 AM | 0 | 2 | 2 | 4 | 4 | 8 | | | 0 | 0 | 1 | 1 | 11 |
| 8:30 AM | 3 | 0 | 3 | 5 | 0 | 5 | | | 0 | 0 | 2 | 2 | 10 |
| 8:45 AM | 3 | 0 | 3 | 1 | 2 | 3 | | | 0 | 0 | 3 | 3 | 9 |
| Total Survey | 15 | 4 | 19 | 15 | 16 | 31 | | | 0 | 2 | 15 | 17 | 67 |

Heavy Vehicle Peak Hour Summary 7:05 AM to 8:05 AM

| By Approach | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total |
|-------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|-----|-------|------------------------|-----|-------|-------|
| | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | |
| Volume | 11 | 11 | 22 | 13 | 16 | 29 | 0 | 0 | 0 | 9 | 6 | 15 | 33 |
| PHF | 0.69 | | | 0.36 | | | 0.00 | | | 0.56 | | | 0.69 |

| By Movement | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total |
|-------------|-------------------------|------|-------|-------------------------|------|-------|------------------------|--|-------|------------------------|------|-------|-------|
| | T | R | Total | L | T | Total | | | Total | L | R | Total | |
| Volume | 9 | 2 | 11 | 4 | 9 | 13 | | | 0 | 2 | 7 | 9 | 33 |
| PHF | 0.75 | 0.50 | 0.69 | 0.50 | 0.25 | 0.36 | | | 0.00 | 0.25 | 0.44 | 0.56 | 0.69 |

Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|---|-------|-------------------------|----|-------|------------------------|--|-------|------------------------|---|-------|----------------|
| | T | R | Total | L | T | Total | | | Total | L | R | Total | |
| 7:00 AM | 9 | 2 | 11 | 4 | 9 | 13 | | | 0 | 2 | 6 | 8 | 32 |
| 7:15 AM | 7 | 2 | 9 | 4 | 10 | 14 | | | 0 | 2 | 8 | 10 | 33 |
| 7:30 AM | 5 | 3 | 8 | 8 | 9 | 17 | | | 0 | 2 | 9 | 11 | 36 |
| 7:45 AM | 6 | 3 | 9 | 11 | 5 | 16 | | | 0 | 2 | 7 | 9 | 34 |
| 8:00 AM | 6 | 2 | 8 | 11 | 7 | 18 | | | 0 | 0 | 9 | 9 | 35 |

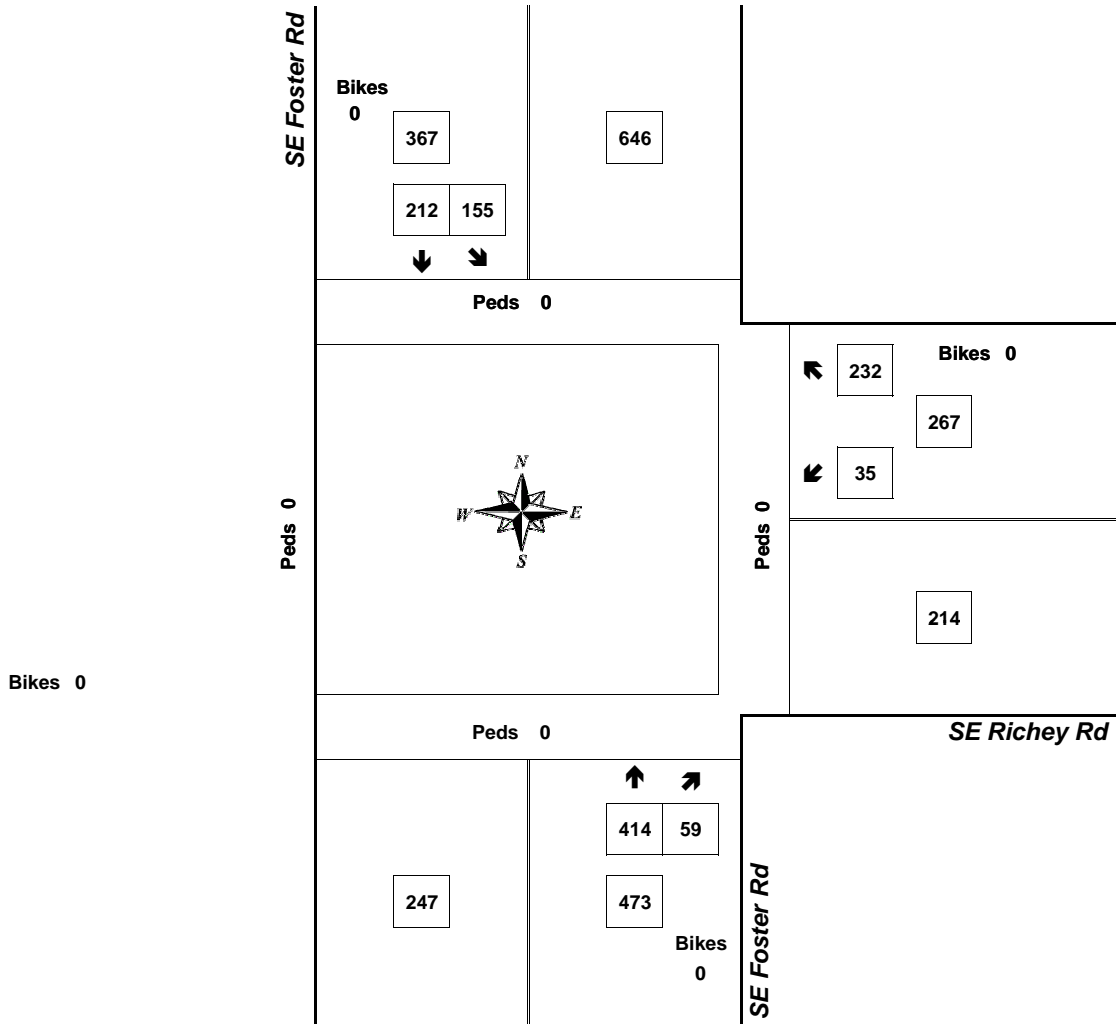
Peak Hour Summary



Clay Carney
(503) 833-2740

SE Foster Rd & SE Richey Rd

7:05 AM to 8:05 AM
Tuesday, May 07, 2019



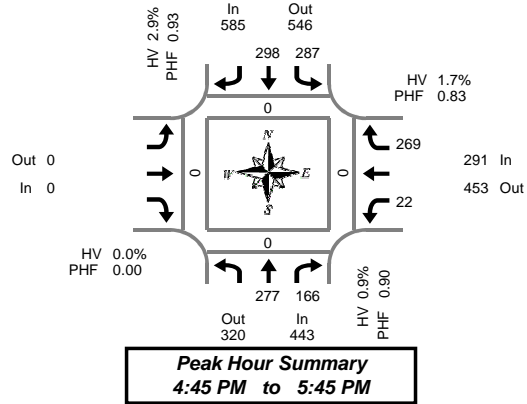
| Approach | PHF | HV% | Volume |
|---------------------|-------------|-------------|--------------|
| EB | 0.00 | 0.0% | 0 |
| WB | 0.84 | 3.4% | 267 |
| NB | 0.77 | 2.3% | 473 |
| SB | 0.78 | 3.5% | 367 |
| Intersection | 0.80 | 3.0% | 1,107 |

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Clay Carney
(503) 833-2740



SE Foster Rd & SE Richey Rd

Tuesday, May 07, 2019
4:00 PM to 6:00 PM

5-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|-------|----|------------------------|-------|-------|----------------|-----------------------|------|------|---|
| | T | R | Bikes | L | T | Bikes | | Bikes | L | R | Bikes | North | | South | East | West | |
| 4:00 PM | 36 | 14 | 0 | 27 | 29 | 0 | | 0 | 15 | 0 | 15 | 0 | 123 | 0 | 0 | 0 | 0 |
| 4:05 PM | 25 | 10 | 0 | 24 | 24 | 0 | | 0 | 2 | 12 | 0 | 97 | 0 | 0 | 0 | 0 | 0 |
| 4:10 PM | 25 | 8 | 0 | 17 | 21 | 0 | | 0 | 4 | 17 | 0 | 92 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 34 | 11 | 0 | 20 | 22 | 0 | | 0 | 2 | 20 | 0 | 109 | 0 | 0 | 0 | 0 | 0 |
| 4:20 PM | 20 | 9 | 0 | 30 | 19 | 0 | | 0 | 3 | 16 | 0 | 97 | 0 | 0 | 0 | 0 | 0 |
| 4:25 PM | 28 | 12 | 0 | 22 | 29 | 0 | | 0 | 1 | 19 | 0 | 111 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 19 | 8 | 0 | 19 | 28 | 1 | | 0 | 5 | 22 | 0 | 101 | 0 | 0 | 0 | 0 | 0 |
| 4:35 PM | 27 | 4 | 0 | 27 | 13 | 1 | | 0 | 3 | 20 | 0 | 94 | 0 | 0 | 0 | 0 | 0 |
| 4:40 PM | 22 | 16 | 0 | 20 | 25 | 1 | | 0 | 4 | 21 | 0 | 108 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 23 | 11 | 0 | 26 | 29 | 0 | | 0 | 3 | 23 | 0 | 115 | 0 | 0 | 0 | 0 | 0 |
| 4:50 PM | 32 | 9 | 0 | 30 | 18 | 0 | | 0 | 0 | 13 | 0 | 102 | 0 | 0 | 0 | 0 | 0 |
| 4:55 PM | 21 | 16 | 0 | 16 | 28 | 0 | | 0 | 1 | 29 | 0 | 111 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 18 | 18 | 0 | 16 | 20 | 0 | | 0 | 3 | 13 | 0 | 88 | 0 | 0 | 0 | 0 | 0 |
| 5:05 PM | 16 | 8 | 0 | 33 | 23 | 0 | | 0 | 1 | 27 | 0 | 108 | 0 | 0 | 0 | 0 | 0 |
| 5:10 PM | 28 | 18 | 0 | 29 | 17 | 0 | | 0 | 3 | 18 | 0 | 113 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 27 | 9 | 0 | 25 | 27 | 0 | | 0 | 0 | 29 | 0 | 117 | 0 | 0 | 0 | 0 | 0 |
| 5:20 PM | 24 | 17 | 0 | 32 | 27 | 0 | | 0 | 2 | 29 | 0 | 131 | 0 | 0 | 0 | 0 | 0 |
| 5:25 PM | 17 | 15 | 0 | 11 | 27 | 0 | | 0 | 6 | 22 | 0 | 98 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 25 | 10 | 0 | 18 | 35 | 0 | | 0 | 1 | 23 | 0 | 112 | 0 | 0 | 0 | 0 | 0 |
| 5:35 PM | 21 | 17 | 0 | 19 | 27 | 0 | | 0 | 1 | 23 | 0 | 108 | 0 | 0 | 0 | 0 | 0 |
| 5:40 PM | 25 | 18 | 0 | 32 | 20 | 0 | | 0 | 1 | 20 | 0 | 116 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 32 | 16 | 0 | 23 | 16 | 0 | | 0 | 5 | 23 | 0 | 115 | 0 | 0 | 0 | 0 | 0 |
| 5:50 PM | 24 | 3 | 0 | 13 | 35 | 0 | | 0 | 2 | 21 | 0 | 98 | 0 | 0 | 0 | 0 | 0 |
| 5:55 PM | 31 | 11 | 0 | 20 | 26 | 0 | | 0 | 4 | 15 | 0 | 107 | 0 | 0 | 0 | 0 | 0 |
| Total Survey | 600 | 288 | 0 | 549 | 585 | 3 | | 0 | 59 | 490 | 0 | 2,571 | 0 | 0 | 0 | 0 | 0 |

15-Minute Interval Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|-------|----|------------------------|-------|-------|----------------|-----------------------|------|------|---|
| | T | R | Bikes | L | T | Bikes | | Bikes | L | R | Bikes | North | | South | East | West | |
| 4:00 PM | 86 | 32 | 0 | 68 | 74 | 0 | | 0 | 8 | 44 | 0 | 312 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 82 | 32 | 0 | 72 | 70 | 0 | | 0 | 6 | 55 | 0 | 317 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 68 | 28 | 0 | 66 | 66 | 3 | | 0 | 12 | 63 | 0 | 303 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 76 | 36 | 0 | 72 | 75 | 0 | | 0 | 4 | 65 | 0 | 328 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 62 | 44 | 0 | 78 | 60 | 0 | | 0 | 7 | 58 | 0 | 309 | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 68 | 41 | 0 | 68 | 81 | 0 | | 0 | 8 | 80 | 0 | 346 | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 71 | 45 | 0 | 69 | 82 | 0 | | 0 | 3 | 66 | 0 | 336 | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | 87 | 30 | 0 | 56 | 77 | 0 | | 0 | 11 | 59 | 0 | 320 | 0 | 0 | 0 | 0 | 0 |
| Total Survey | 600 | 288 | 0 | 549 | 585 | 3 | | 0 | 59 | 490 | 0 | 2,571 | 0 | 0 | 0 | 0 | 0 |

Peak Hour Summary 4:45 PM to 5:45 PM

| By Approach | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total | Pedestrians Crosswalk | | | | | | |
|-------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|-----|-------|------------------------|-----|-------|-------|-----------------------|-------|-------|------|---|---|---|
| | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | | North | South | East | West | | | |
| Volume | 443 | 320 | 763 | 0 | 585 | 546 | 1,131 | 0 | 0 | 0 | 0 | 291 | 453 | 744 | 0 | 1,319 | 0 | 0 | 0 | 0 |
| %HV | 0.9% | | | 2.9% | | | 0.0% | | | 1.7% | | | 2.0% | | | | | | | |
| PHF | 0.90 | | | 0.93 | | | 0.00 | | | 0.83 | | | 0.91 | | | | | | | |

| By Movement | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total |
|-------------|-------------------------|------|-------|-------------------------|------|-------|------------------------|-------|------|------------------------|-------|-------|-------|
| | T | R | Total | L | T | Total | | Total | L | R | Total | | |
| Volume | 277 | 166 | 443 | 287 | 298 | 585 | | 0 | 22 | 269 | 291 | 1,319 | |
| %HV | NA | 1.1% | 0.6% | 0.9% | 1.7% | 4.0% | NA | 2.9% | NA | NA | NA | 2.0% | |
| PHF | 0.88 | 0.92 | 0.90 | 0.82 | 0.84 | 0.93 | | 0.00 | 0.61 | 0.84 | 0.83 | 0.91 | |

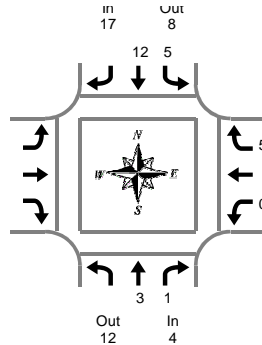
Rolling Hour Summary 4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total | Pedestrians Crosswalk | | | |
|---------------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|-------|----|------------------------|-------|-------|----------------|-----------------------|------|------|---|
| | T | R | Bikes | L | T | Bikes | | Bikes | L | R | Bikes | North | | South | East | West | |
| 4:00 PM | 312 | 128 | 0 | 278 | 285 | 3 | | 0 | 30 | 227 | 0 | 1,260 | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | 288 | 140 | 0 | 288 | 271 | 3 | | 0 | 29 | 241 | 0 | 1,257 | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | 274 | 149 | 0 | 284 | 282 | 3 | | 0 | 31 | 266 | 0 | 1,286 | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | 277 | 166 | 0 | 287 | 298 | 0 | | 0 | 22 | 269 | 0 | 1,319 | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | 288 | 160 | 0 | 271 | 300 | 0 | | 0 | 29 | 263 | 0 | 1,311 | 0 | 0 | 0 | 0 | 0 |

Heavy Vehicle Summary



Clay Carney
(503) 833-2740



Out 0
In 0

Peak Hour Summary
4:45 PM to 5:45 PM

SE Foster Rd & SE Richey Rd

Tuesday, May 07, 2019
4:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary

4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|---|-------|-------------------------|----|-------|------------------------|--|-------|------------------------|----|-------|----------------|
| | T | R | Total | L | T | Total | | | Total | L | R | Total | |
| 4:00 PM | 2 | 1 | 3 | 1 | 1 | 2 | | | 0 | 0 | 0 | 0 | 5 |
| 4:05 PM | 1 | 1 | 2 | 1 | 0 | 1 | | | 0 | 0 | 1 | 1 | 4 |
| 4:10 PM | 1 | 0 | 1 | 1 | 0 | 1 | | | 0 | 0 | 2 | 2 | 4 |
| 4:15 PM | 2 | 0 | 2 | 1 | 0 | 1 | | | 0 | 0 | 0 | 0 | 3 |
| 4:20 PM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 2 | 2 | 2 |
| 4:25 PM | 1 | 0 | 1 | 1 | 2 | 3 | | | 0 | 0 | 2 | 2 | 6 |
| 4:30 PM | 1 | 0 | 1 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 1 |
| 4:35 PM | 1 | 0 | 1 | 1 | 0 | 1 | | | 0 | 0 | 0 | 0 | 2 |
| 4:40 PM | 0 | 1 | 1 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 1 |
| 4:45 PM | 1 | 0 | 1 | 0 | 2 | 2 | | | 0 | 0 | 0 | 0 | 3 |
| 4:50 PM | 0 | 0 | 0 | 0 | 1 | 1 | | | 0 | 0 | 0 | 0 | 1 |
| 4:55 PM | 0 | 1 | 1 | 1 | 3 | 4 | | | 0 | 0 | 0 | 0 | 5 |
| 5:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 1 | 1 | 1 |
| 5:05 PM | 0 | 0 | 0 | 1 | 0 | 1 | | | 0 | 0 | 2 | 2 | 3 |
| 5:10 PM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | 1 | 0 | 1 | 1 | 2 | 3 | | | 0 | 0 | 1 | 1 | 5 |
| 5:20 PM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 |
| 5:25 PM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | 0 | 0 | 0 | 1 | 1 | 2 | | | 0 | 0 | 0 | 0 | 2 |
| 5:35 PM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 1 | 1 | 1 |
| 5:40 PM | 1 | 0 | 1 | 1 | 3 | 4 | | | 0 | 0 | 0 | 0 | 5 |
| 5:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 1 | 1 | 1 |
| 5:50 PM | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 |
| 5:55 PM | 2 | 1 | 3 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 3 |
| Total Survey | 14 | 5 | 19 | 11 | 15 | 26 | | | 0 | 0 | 13 | 13 | 58 |

Heavy Vehicle 15-Minute Interval Summary

4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|---|-------|-------------------------|----|-------|------------------------|--|-------|------------------------|----|-------|----------------|
| | T | R | Total | L | T | Total | | | Total | L | R | Total | |
| 4:00 PM | 4 | 2 | 6 | 3 | 1 | 4 | | | 0 | 0 | 3 | 3 | 13 |
| 4:15 PM | 3 | 0 | 3 | 2 | 2 | 4 | | | 0 | 0 | 4 | 4 | 11 |
| 4:30 PM | 2 | 1 | 3 | 1 | 0 | 1 | | | 0 | 0 | 0 | 0 | 4 |
| 4:45 PM | 1 | 1 | 2 | 1 | 6 | 7 | | | 0 | 0 | 0 | 0 | 9 |
| 5:00 PM | 0 | 0 | 0 | 1 | 0 | 1 | | | 0 | 0 | 3 | 3 | 4 |
| 5:15 PM | 1 | 0 | 1 | 1 | 2 | 3 | | | 0 | 0 | 1 | 1 | 5 |
| 5:30 PM | 1 | 0 | 1 | 2 | 4 | 6 | | | 0 | 0 | 1 | 1 | 8 |
| 5:45 PM | 2 | 1 | 3 | 0 | 0 | 0 | | | 0 | 0 | 1 | 1 | 4 |
| Total Survey | 14 | 5 | 19 | 11 | 15 | 26 | | | 0 | 0 | 13 | 13 | 58 |

Heavy Vehicle Peak Hour Summary

4:45 PM to 5:45 PM

| By Approach | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total |
|-------------|-------------------------|-----|-------|-------------------------|-----|-------|------------------------|-----|-------|------------------------|-----|-------|-------|
| | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total | |
| Volume | 4 | 12 | 16 | 17 | 8 | 25 | 0 | 0 | 0 | 5 | 6 | 11 | 26 |
| PHF | 0.50 | | | 0.61 | | | 0.00 | | | 0.42 | | | 0.72 |

| By Movement | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Total |
|-------------|-------------------------|------|-------|-------------------------|------|-------|------------------------|--|-------|------------------------|------|-------|-------|
| | T | R | Total | L | T | Total | | | Total | L | R | Total | |
| Volume | 3 | 1 | 4 | 5 | 12 | 17 | | | 0 | 0 | 5 | 5 | 26 |
| PHF | 0.75 | 0.25 | 0.50 | 0.63 | 0.50 | 0.61 | | | 0.00 | 0.00 | 0.42 | 0.42 | 0.72 |

Heavy Vehicle Rolling Hour Summary

4:00 PM to 6:00 PM

| Interval Start Time | Northbound SE Foster Rd | | | Southbound SE Foster Rd | | | Eastbound SE Richey Rd | | | Westbound SE Richey Rd | | | Interval Total |
|---------------------|-------------------------|---|-------|-------------------------|----|-------|------------------------|--|-------|------------------------|---|-------|----------------|
| | T | R | Total | L | T | Total | | | Total | L | R | Total | |
| 4:00 PM | 10 | 4 | 14 | 7 | 9 | 16 | | | 0 | 0 | 7 | 7 | 37 |
| 4:15 PM | 6 | 2 | 8 | 5 | 8 | 13 | | | 0 | 0 | 7 | 7 | 28 |
| 4:30 PM | 4 | 2 | 6 | 4 | 8 | 12 | | | 0 | 0 | 4 | 4 | 22 |
| 4:45 PM | 3 | 1 | 4 | 5 | 12 | 17 | | | 0 | 0 | 5 | 5 | 26 |
| 5:00 PM | 4 | 1 | 5 | 4 | 6 | 10 | | | 0 | 0 | 6 | 6 | 21 |

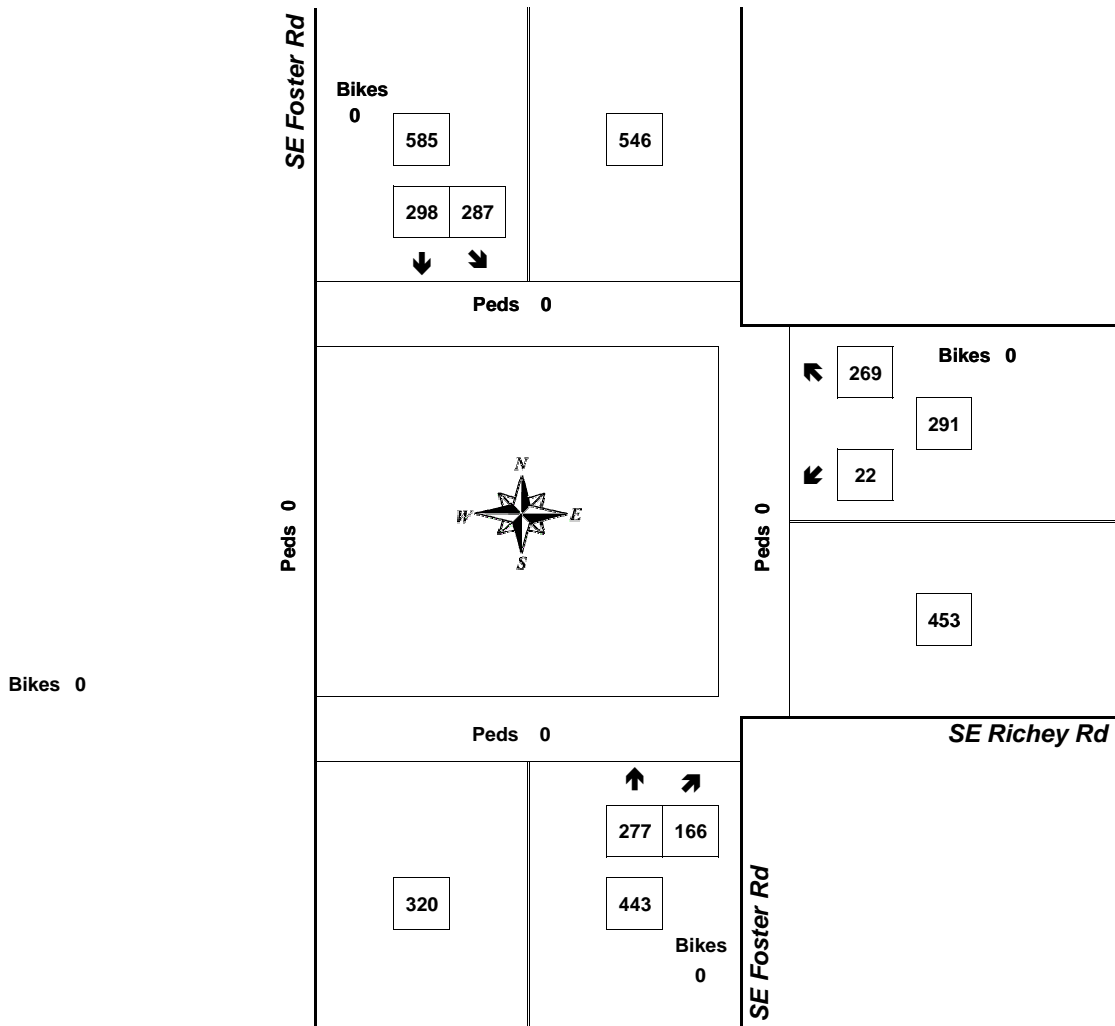
Peak Hour Summary



Clay Carney
(503) 833-2740

SE Foster Rd & SE Richey Rd

4:45 PM to 5:45 PM
Tuesday, May 07, 2019



| Approach | PHF | HV% | Volume |
|---------------------|-------------|-------------|--------------|
| EB | 0.00 | 0.0% | 0 |
| WB | 0.83 | 1.7% | 291 |
| NB | 0.90 | 0.9% | 443 |
| SB | 0.93 | 2.9% | 585 |
| Intersection | 0.91 | 2.0% | 1,319 |

Count Period: 4:00 PM to 6:00 PM

HCM Signalized Intersection Capacity Analysis

1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

04/21/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------------|-------|------|-------|------|-------|------|-------|-------|------|------|------|------|
| Lane Configurations | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | ↗ |
| Traffic Volume (vph) | 191 | 464 | 82 | 63 | 493 | 125 | 204 | 767 | 45 | 68 | 263 | 140 |
| Future Volume (vph) | 191 | 464 | 82 | 63 | 493 | 125 | 204 | 767 | 45 | 68 | 263 | 140 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | 1.00 |
| Frbp, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 0.95 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.98 | | 1.00 | 0.97 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1719 | 3351 | | 1719 | 3321 | | 1770 | 3505 | | 1687 | 3374 | 1436 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1719 | 3351 | | 1719 | 3321 | | 1770 | 3505 | | 1687 | 3374 | 1436 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 208 | 504 | 89 | 68 | 536 | 136 | 222 | 834 | 49 | 74 | 286 | 152 |
| RTOR Reduction (vph) | 0 | 19 | 0 | 0 | 29 | 0 | 0 | 6 | 0 | 0 | 0 | 119 |
| Lane Group Flow (vph) | 208 | 574 | 0 | 68 | 643 | 0 | 222 | 877 | 0 | 74 | 286 | 33 |
| Confl. Peds. (#/hr) | | | 5 | | | 5 | | | 10 | | | 28 |
| Heavy Vehicles (%) | 5% | 5% | 5% | 5% | 5% | 5% | 2% | 2% | 2% | 7% | 7% | 7% |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm |
| Protected Phases | 5 | 2 | | 1 | 6 | | 7 | 4 | | 3 | 8 | |
| Permitted Phases | | | | | | | | | | | | 8 |
| Actuated Green, G (s) | 14.7 | 22.8 | | 10.1 | 18.2 | | 12.6 | 24.7 | | 4.8 | 17.2 | 17.2 |
| Effective Green, g (s) | 14.7 | 22.8 | | 10.1 | 18.2 | | 12.6 | 24.7 | | 4.8 | 17.2 | 17.2 |
| Actuated g/C Ratio | 0.18 | 0.29 | | 0.13 | 0.23 | | 0.16 | 0.31 | | 0.06 | 0.21 | 0.21 |
| Clearance Time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 315 | 955 | | 217 | 755 | | 278 | 1082 | | 101 | 725 | 308 |
| v/s Ratio Prot | c0.12 | 0.17 | | 0.04 | c0.19 | | c0.13 | c0.25 | | 0.04 | 0.08 | |
| v/s Ratio Perm | | | | | | | | | | | | 0.02 |
| v/c Ratio | 0.66 | 0.60 | | 0.31 | 0.85 | | 0.80 | 0.81 | | 0.73 | 0.39 | 0.11 |
| Uniform Delay, d1 | 30.3 | 24.7 | | 31.8 | 29.6 | | 32.5 | 25.5 | | 37.0 | 26.9 | 25.2 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 10.4 | 2.8 | | 3.7 | 11.7 | | 14.7 | 4.7 | | 23.7 | 0.4 | 0.2 |
| Delay (s) | 40.7 | 27.5 | | 35.5 | 41.3 | | 47.2 | 30.2 | | 60.7 | 27.3 | 25.4 |
| Level of Service | D | C | | D | D | | D | C | | E | C | C |
| Approach Delay (s) | | 30.9 | | | 40.8 | | | 33.6 | | | 31.6 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 34.3 | | | | | | | | | C |
| HCM 2000 Volume to Capacity ratio | | | 0.82 | | | | | | | | | |
| Actuated Cycle Length (s) | | | 80.0 | | | | | | 17.6 | | | |
| Intersection Capacity Utilization | | | 69.8% | | | | | | | | | C |
| ICU Level of Service | | | | | | | | | | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

c Critical Lane Group

HCM 6th Signalized Intersection Summary
 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

04/21/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | ↗ |
| Traffic Volume (veh/h) | 191 | 464 | 82 | 63 | 493 | 125 | 204 | 767 | 45 | 68 | 263 | 140 |
| Future Volume (veh/h) | 191 | 464 | 82 | 63 | 493 | 125 | 204 | 767 | 45 | 68 | 263 | 140 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.99 | 1.00 | | 0.96 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1870 | 1870 | 1870 | 1796 | 1796 | 1796 |
| Adj Flow Rate, veh/h | 208 | 504 | 89 | 68 | 536 | 136 | 222 | 834 | 49 | 74 | 286 | 152 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 5 | 5 | 5 | 5 | 5 | 5 | 2 | 2 | 2 | 7 | 7 | 7 |
| Cap, veh/h | 239 | 1060 | 186 | 139 | 828 | 209 | 261 | 974 | 57 | 94 | 662 | 282 |
| Arrive On Green | 0.14 | 0.36 | 0.36 | 0.08 | 0.30 | 0.30 | 0.15 | 0.29 | 0.29 | 0.05 | 0.19 | 0.19 |
| Sat Flow, veh/h | 1739 | 2947 | 518 | 1739 | 2740 | 692 | 1781 | 3408 | 200 | 1711 | 3413 | 1456 |
| Grp Volume(v), veh/h | 208 | 296 | 297 | 68 | 339 | 333 | 222 | 435 | 448 | 74 | 286 | 152 |
| Grp Sat Flow(s),veh/h/ln | 1739 | 1735 | 1730 | 1739 | 1735 | 1697 | 1781 | 1777 | 1832 | 1711 | 1706 | 1456 |
| Q Serve(g_s), s | 9.4 | 10.5 | 10.6 | 3.0 | 13.5 | 13.7 | 9.7 | 18.5 | 18.5 | 3.4 | 5.9 | 7.5 |
| Cycle Q Clear(g_c), s | 9.4 | 10.5 | 10.6 | 3.0 | 13.5 | 13.7 | 9.7 | 18.5 | 18.5 | 3.4 | 5.9 | 7.5 |
| Prop In Lane | 1.00 | | 0.30 | 1.00 | | 0.41 | 1.00 | | 0.11 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 239 | 624 | 622 | 139 | 524 | 513 | 261 | 508 | 523 | 94 | 662 | 282 |
| V/C Ratio(X) | 0.87 | 0.47 | 0.48 | 0.49 | 0.65 | 0.65 | 0.85 | 0.86 | 0.86 | 0.79 | 0.43 | 0.54 |
| Avail Cap(c_a), veh/h | 239 | 624 | 622 | 139 | 524 | 513 | 292 | 566 | 584 | 124 | 789 | 337 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.8 | 19.8 | 19.8 | 35.2 | 24.2 | 24.2 | 33.3 | 27.0 | 27.0 | 37.4 | 28.4 | 29.0 |
| Incr Delay (d2), s/veh | 32.4 | 2.6 | 2.6 | 11.8 | 6.0 | 6.3 | 19.1 | 11.4 | 11.1 | 21.7 | 0.4 | 1.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 5.9 | 4.3 | 4.4 | 1.7 | 6.0 | 5.9 | 5.4 | 9.0 | 9.2 | 1.9 | 2.3 | 2.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 66.2 | 22.4 | 22.4 | 47.0 | 30.3 | 30.5 | 52.4 | 38.4 | 38.1 | 59.1 | 28.8 | 30.6 |
| LnGrp LOS | E | C | C | D | C | C | D | D | D | E | C | C |
| Approach Vol, veh/h | | 801 | | | 740 | | | 1105 | | | 512 | |
| Approach Delay, s/veh | | 33.8 | | | 31.9 | | | 41.1 | | | 33.7 | |
| Approach LOS | | C | | | C | | | D | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 10.4 | 33.6 | 8.4 | 27.7 | 15.0 | 29.0 | 15.7 | 20.3 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | * 4.8 | | | | |
| Max Green Setting (Gmax), s | 6.4 | 24.7 | 5.8 | 25.5 | 11.0 | 20.1 | 13.1 | * 19 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.0 | 12.6 | 5.4 | 20.5 | 11.4 | 15.7 | 11.7 | 9.5 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.7 | 0.0 | 2.3 | 0.0 | 1.6 | 0.1 | 1.5 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 35.9 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection

Intersection Delay, s/veh 17.1

Intersection LOS C

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕ | ↕ | ↕ | ↕ | |
| Traffic Vol, veh/h | 28 | 19 | 0 | 93 | 62 | 206 | 0 | 308 | 69 | 126 | 282 | 36 |
| Future Vol, veh/h | 28 | 19 | 0 | 93 | 62 | 206 | 0 | 308 | 69 | 126 | 282 | 36 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 |
| Mvmt Flow | 30 | 21 | 0 | 101 | 67 | 224 | 0 | 335 | 75 | 137 | 307 | 39 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|------|------|------|------|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 2 | 1 | 2 | 2 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 2 | 2 | 1 | 2 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 2 | 2 | 2 | 1 |
| HCM Control Delay | 12.4 | 13.9 | 19.1 | 18.6 |
| HCM LOS | B | B | C | C |

| Lane | NBLn1 | NBLn2 | EBLn1 | WBLn1 | WBLn2 | SBLn1 | SBLn2 |
|------------------------|-------|-------|-------|-------|-------|-------|-------|
| Vol Left, % | 0% | 0% | 60% | 60% | 0% | 100% | 0% |
| Vol Thru, % | 100% | 0% | 40% | 40% | 0% | 0% | 89% |
| Vol Right, % | 0% | 100% | 0% | 0% | 100% | 0% | 11% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 308 | 69 | 47 | 155 | 206 | 126 | 318 |
| LT Vol | 0 | 0 | 28 | 93 | 0 | 126 | 0 |
| Through Vol | 308 | 0 | 19 | 62 | 0 | 0 | 282 |
| RT Vol | 0 | 69 | 0 | 0 | 206 | 0 | 36 |
| Lane Flow Rate | 335 | 75 | 51 | 168 | 224 | 137 | 346 |
| Geometry Grp | 7 | 7 | 6 | 7 | 7 | 7 | 7 |
| Degree of Util (X) | 0.642 | 0.129 | 0.117 | 0.353 | 0.406 | 0.278 | 0.645 |
| Departure Headway (Hd) | 6.9 | 6.188 | 8.261 | 7.542 | 6.52 | 7.306 | 6.714 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 526 | 580 | 434 | 478 | 553 | 493 | 539 |
| Service Time | 4.637 | 3.921 | 6.317 | 5.261 | 4.239 | 5.028 | 4.436 |
| HCM Lane V/C Ratio | 0.637 | 0.129 | 0.118 | 0.351 | 0.405 | 0.278 | 0.642 |
| HCM Control Delay | 21.2 | 9.8 | 12.4 | 14.3 | 13.6 | 12.8 | 20.9 |
| HCM Lane LOS | C | A | B | B | B | B | C |
| HCM 95th-tile Q | 4.5 | 0.4 | 0.4 | 1.6 | 2 | 1.1 | 4.6 |

HCM 6th AWSC
 3: SE 190th Avenue & SE Richey Road

04/21/2021

Intersection

Intersection Delay, s/veh 11.6

Intersection LOS B

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---------------------|------|------|------|------|------|------|
| Lane Configurations | Y | | | Y | Y | |
| Traffic Vol, veh/h | 175 | 5 | 1 | 207 | 162 | 214 |
| Future Vol, veh/h | 175 | 5 | 1 | 207 | 162 | 214 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 5 | 5 | 4 | 4 | 3 | 3 |
| Mvmt Flow | 194 | 6 | 1 | 230 | 180 | 238 |
| Number of Lanes | 1 | 0 | 0 | 1 | 1 | 0 |

| Approach | EB | NB | SB |
|-------------------------------|------|------|------|
| Opposing Approach | | SB | NB |
| Opposing Lanes | 0 | 1 | 1 |
| Conflicting Approach Left SB | | EB | |
| Conflicting Lanes Left | 1 | 1 | 0 |
| Conflicting Approach Right NB | | | EB |
| Conflicting Lanes Right | 1 | 0 | 1 |
| HCM Control Delay | 11.2 | 10.5 | 12.3 |
| HCM LOS | B | B | B |

| Lane | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, % | 0% | 97% | 0% |
| Vol Thru, % | 100% | 0% | 43% |
| Vol Right, % | 0% | 3% | 57% |
| Sign Control | Stop | Stop | Stop |
| Traffic Vol by Lane | 208 | 180 | 376 |
| LT Vol | 1 | 175 | 0 |
| Through Vol | 207 | 0 | 162 |
| RT Vol | 0 | 5 | 214 |
| Lane Flow Rate | 231 | 200 | 418 |
| Geometry Grp | 1 | 1 | 1 |
| Degree of Util (X) | 0.321 | 0.311 | 0.518 |
| Departure Headway (Hd) | 5.004 | 5.591 | 4.467 |
| Convergence, Y/N | Yes | Yes | Yes |
| Cap | 712 | 636 | 802 |
| Service Time | 3.083 | 3.691 | 2.53 |
| HCM Lane V/C Ratio | 0.324 | 0.314 | 0.521 |
| HCM Control Delay | 10.5 | 11.2 | 12.3 |
| HCM Lane LOS | B | B | B |
| HCM 95th-tile Q | 1.4 | 1.3 | 3 |

HCM 6th TWSC
4: SE Foster Road & SE Richey Road

04/21/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|-------|------|------|
| Int Delay, s/veh | 5.4 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Y | | ↑ | ↑ | | ↓ |
| Traffic Vol, veh/h | 36 | 241 | 431 | 61 | 161 | 221 |
| Future Vol, veh/h | 36 | 241 | 431 | 61 | 161 | 221 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Yield | - | None |
| Storage Length | 0 | - | - | 50 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 3 | 3 | 2 | 2 | 4 | 4 |
| Mvmt Flow | 42 | 284 | 507 | 72 | 189 | 260 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 1145 | 507 | 0 | 0 | 507 | 0 |
| Stage 1 | 507 | - | - | - | - | - |
| Stage 2 | 638 | - | - | - | - | - |
| Critical Hdwy | 6.2 | 6.23 | - | - | 4.14 | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - | - |
| Follow-up Hdwy | 2.2 | 2.2 | - | - | 2.236 | - |
| Pot Cap-1 Maneuver | 317 | 791 | - | - | 1048 | - |
| Stage 1 | 886 | - | - | - | - | - |
| Stage 2 | 755 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 250 | 791 | - | - | 1048 | - |
| Mov Cap-2 Maneuver | 250 | - | - | - | - | - |
| Stage 1 | 886 | - | - | - | - | - |
| Stage 2 | 596 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 17.2 | 0 | 3.9 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 617 | 1048 |
| HCM Lane V/C Ratio | - | - | 0.528 | 0.181 |
| HCM Control Delay (s) | - | - | 17.2 | 9.2 |
| HCM Lane LOS | - | - | C | A |
| HCM 95th %tile Q(veh) | - | - | 3.1 | 0.7 |

HCM Signalized Intersection Capacity Analysis

1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

04/21/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|-------|------|------|------|-------|------|-------|------|------|------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 229 | 562 | 121 | 134 | 589 | 105 | 203 | 564 | 78 | 181 | 714 | 213 |
| Future Volume (vph) | 229 | 562 | 121 | 134 | 589 | 105 | 203 | 564 | 78 | 181 | 714 | 213 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | 1.00 |
| Frpb, ped/bikes | 1.00 | 0.99 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 0.97 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.97 | | 1.00 | 0.98 | | 1.00 | 0.98 | | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3418 | | 1770 | 3450 | | 1770 | 3467 | | 1787 | 3574 | 1546 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3418 | | 1770 | 3450 | | 1770 | 3467 | | 1787 | 3574 | 1546 |
| Peak-hour factor, PHF | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 239 | 585 | 126 | 140 | 614 | 109 | 211 | 588 | 81 | 189 | 744 | 222 |
| RTOR Reduction (vph) | 0 | 16 | 0 | 0 | 12 | 0 | 0 | 10 | 0 | 0 | 0 | 119 |
| Lane Group Flow (vph) | 239 | 695 | 0 | 140 | 711 | 0 | 211 | 659 | 0 | 189 | 744 | 103 |
| Confl. Peds. (#/hr) | | | 16 | | | 2 | | | 3 | | | 10 |
| Confl. Bikes (#/hr) | | | 1 | | | 1 | | | | | | 2 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 1% | 1% | 1% |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm |
| Protected Phases | 5 | 2 | | 1 | 6 | | 7 | 4 | | 3 | 8 | |
| Permitted Phases | | | | | | | | | | | | 8 |
| Actuated Green, G (s) | 26.6 | 34.8 | | 20.0 | 28.2 | | 18.2 | 31.8 | | 15.8 | 29.7 | 29.7 |
| Effective Green, g (s) | 26.6 | 34.8 | | 20.0 | 28.2 | | 18.2 | 31.8 | | 15.8 | 29.7 | 29.7 |
| Actuated g/C Ratio | 0.22 | 0.29 | | 0.17 | 0.23 | | 0.15 | 0.27 | | 0.13 | 0.25 | 0.25 |
| Clearance Time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 392 | 991 | | 295 | 810 | | 268 | 918 | | 235 | 884 | 382 |
| v/s Ratio Prot | c0.14 | 0.20 | | 0.08 | c0.21 | | c0.12 | 0.19 | | 0.11 | c0.21 | |
| v/s Ratio Perm | | | | | | | | | | | | 0.07 |
| v/c Ratio | 0.61 | 0.70 | | 0.47 | 0.88 | | 0.79 | 0.72 | | 0.80 | 0.84 | 0.27 |
| Uniform Delay, d1 | 42.0 | 38.0 | | 45.2 | 44.2 | | 49.0 | 40.0 | | 50.6 | 42.9 | 36.4 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 6.9 | 4.1 | | 5.4 | 12.9 | | 14.1 | 2.7 | | 17.8 | 7.3 | 0.4 |
| Delay (s) | 48.9 | 42.1 | | 50.6 | 57.1 | | 63.2 | 42.7 | | 68.4 | 50.2 | 36.8 |
| Level of Service | D | D | | D | E | | E | D | | E | D | D |
| Approach Delay (s) | | 43.8 | | | 56.1 | | | 47.6 | | | 50.6 | |
| Approach LOS | | D | | | E | | | D | | | D | |

Intersection Summary

| | | | |
|-----------------------------------|-------|---------------------------|------|
| HCM 2000 Control Delay | 49.5 | HCM 2000 Level of Service | D |
| HCM 2000 Volume to Capacity ratio | 0.78 | | |
| Actuated Cycle Length (s) | 120.0 | Sum of lost time (s) | 17.6 |
| Intersection Capacity Utilization | 77.7% | ICU Level of Service | D |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM 6th Signalized Intersection Summary
 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

04/21/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 229 | 562 | 121 | 134 | 589 | 105 | 203 | 564 | 78 | 181 | 714 | 213 |
| Future Volume (veh/h) | 229 | 562 | 121 | 134 | 589 | 105 | 203 | 564 | 78 | 181 | 714 | 213 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 0.97 | 1.00 | | 0.99 | 1.00 | | 1.00 | 1.00 | | 0.97 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1885 | 1885 | 1885 |
| Adj Flow Rate, veh/h | 239 | 585 | 126 | 140 | 614 | 109 | 211 | 588 | 81 | 189 | 744 | 222 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 |
| Cap, veh/h | 312 | 1043 | 224 | 214 | 918 | 163 | 240 | 791 | 109 | 217 | 853 | 371 |
| Arrive On Green | 0.17 | 0.36 | 0.36 | 0.12 | 0.31 | 0.31 | 0.13 | 0.25 | 0.25 | 0.12 | 0.24 | 0.24 |
| Sat Flow, veh/h | 1781 | 2895 | 621 | 1781 | 3009 | 533 | 1781 | 3137 | 431 | 1795 | 3582 | 1556 |
| Grp Volume(v), veh/h | 239 | 358 | 353 | 140 | 362 | 361 | 211 | 332 | 337 | 189 | 744 | 222 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1739 | 1781 | 1777 | 1765 | 1781 | 1777 | 1791 | 1795 | 1791 | 1556 |
| Q Serve(g_s), s | 15.3 | 19.4 | 19.5 | 9.0 | 21.3 | 21.4 | 13.9 | 20.7 | 20.8 | 12.4 | 24.0 | 15.2 |
| Cycle Q Clear(g_c), s | 15.3 | 19.4 | 19.5 | 9.0 | 21.3 | 21.4 | 13.9 | 20.7 | 20.8 | 12.4 | 24.0 | 15.2 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.30 | 1.00 | | 0.24 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 312 | 640 | 627 | 214 | 542 | 539 | 240 | 448 | 452 | 217 | 853 | 371 |
| V/C Ratio(X) | 0.77 | 0.56 | 0.56 | 0.65 | 0.67 | 0.67 | 0.88 | 0.74 | 0.75 | 0.87 | 0.87 | 0.60 |
| Avail Cap(c_a), veh/h | 312 | 640 | 627 | 214 | 542 | 539 | 310 | 518 | 522 | 256 | 940 | 408 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 47.2 | 30.8 | 30.8 | 50.4 | 36.4 | 36.4 | 50.9 | 41.3 | 41.3 | 51.8 | 43.9 | 40.6 |
| Incr Delay (d2), s/veh | 16.4 | 3.5 | 3.6 | 14.6 | 6.4 | 6.5 | 19.8 | 4.9 | 4.9 | 23.5 | 8.4 | 2.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 8.1 | 8.7 | 8.6 | 4.8 | 10.0 | 10.0 | 7.5 | 9.5 | 9.7 | 6.9 | 11.4 | 5.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 63.6 | 34.3 | 34.4 | 65.0 | 42.8 | 42.9 | 70.7 | 46.1 | 46.3 | 75.3 | 52.4 | 42.7 |
| LnGrp LOS | E | C | C | E | D | D | E | D | D | E | D | D |
| Approach Vol, veh/h | | 950 | | | 863 | | | 880 | | | 1155 | |
| Approach Delay, s/veh | | 41.7 | | | 46.4 | | | 52.1 | | | 54.3 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 18.4 | 48.0 | 18.5 | 35.1 | 25.0 | 41.4 | 20.2 | 33.4 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | * 4.8 | | | | |
| Max Green Setting (Gmax), s | 14.4 | 35.9 | 17.1 | 35.0 | 21.0 | 29.3 | 20.9 | * 32 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.0 | 21.5 | 14.4 | 22.8 | 17.3 | 23.4 | 15.9 | 26.0 | | | | |
| Green Ext Time (p_c), s | 0.1 | 3.6 | 0.1 | 3.2 | 0.2 | 2.1 | 0.2 | 2.6 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 48.9 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection

Intersection Delay, s/veh30.7

Intersection LOS D

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕ | ↕ | ↕ | ↕ | |
| Traffic Vol, veh/h | 71 | 55 | 0 | 73 | 66 | 61 | 1 | 487 | 185 | 102 | 384 | 28 |
| Future Vol, veh/h | 71 | 55 | 0 | 73 | 66 | 61 | 1 | 487 | 185 | 102 | 384 | 28 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Mvmt Flow | 72 | 56 | 0 | 74 | 67 | 62 | 1 | 492 | 187 | 103 | 388 | 28 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|-------------------------------|------|------|----|------|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 2 | 1 | 2 | 2 |
| Conflicting Approach Left SB | | NB | EB | WB |
| Conflicting Lanes Left | 2 | 2 | 1 | 2 |
| Conflicting Approach Right NB | | SB | WB | EB |
| Conflicting Lanes Right | 2 | 2 | 2 | 1 |
| HCM Control Delay | 15.3 | 14.1 | 40 | 28.8 |
| HCM LOS | C | B | E | D |

| Lane | NBLn1 | NBLn2 | EBLn1 | WBLn1 | WBLn2 | SBLn1 | SBLn2 |
|------------------------|-------|-------|-------|-------|-------|-------|-------|
| Vol Left, % | 0% | 0% | 56% | 53% | 0% | 100% | 0% |
| Vol Thru, % | 100% | 0% | 44% | 47% | 0% | 0% | 93% |
| Vol Right, % | 0% | 100% | 0% | 0% | 100% | 0% | 7% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 488 | 185 | 126 | 139 | 61 | 102 | 412 |
| LT Vol | 1 | 0 | 71 | 73 | 0 | 102 | 0 |
| Through Vol | 487 | 0 | 55 | 66 | 0 | 0 | 384 |
| RT Vol | 0 | 185 | 0 | 0 | 61 | 0 | 28 |
| Lane Flow Rate | 493 | 187 | 127 | 140 | 62 | 103 | 416 |
| Geometry Grp | 7 | 7 | 6 | 7 | 7 | 7 | 7 |
| Degree of Util (X) | 0.935 | 0.317 | 0.301 | 0.331 | 0.128 | 0.216 | 0.806 |
| Departure Headway (Hd) | 6.832 | 6.115 | 8.527 | 8.475 | 7.482 | 7.533 | 6.972 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 532 | 587 | 420 | 424 | 478 | 476 | 520 |
| Service Time | 4.585 | 3.867 | 6.599 | 6.236 | 5.242 | 5.288 | 4.727 |
| HCM Lane V/C Ratio | 0.927 | 0.319 | 0.302 | 0.33 | 0.13 | 0.216 | 0.8 |
| HCM Control Delay | 50.7 | 11.7 | 15.3 | 15.4 | 11.3 | 12.4 | 32.8 |
| HCM Lane LOS | F | B | C | C | B | B | D |
| HCM 95th-tile Q | 11.6 | 1.4 | 1.2 | 1.4 | 0.4 | 0.8 | 7.7 |

Intersection

Intersection Delay, s/veh 17.8

Intersection LOS C

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---------------------|------|------|------|------|------|------|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 332 | 0 | 3 | 334 | 201 | 249 |
| Future Vol, veh/h | 332 | 0 | 3 | 334 | 201 | 249 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles, % | 1 | 1 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 342 | 0 | 3 | 344 | 207 | 257 |
| Number of Lanes | 1 | 0 | 0 | 1 | 1 | 0 |

| Approach | EB | NB | SB |
|-------------------------------|----|------|------|
| Opposing Approach | | SB | NB |
| Opposing Lanes | 0 | 1 | 1 |
| Conflicting Approach Left SB | | EB | |
| Conflicting Lanes Left | 1 | 1 | 0 |
| Conflicting Approach Right NB | | | EB |
| Conflicting Lanes Right | 1 | 0 | 1 |
| HCM Control Delay | 18 | 15.9 | 19.1 |
| HCM LOS | C | C | C |

| Lane | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, % | 1% | 100% | 0% |
| Vol Thru, % | 99% | 0% | 45% |
| Vol Right, % | 0% | 0% | 55% |
| Sign Control | Stop | Stop | Stop |
| Traffic Vol by Lane | 337 | 332 | 450 |
| LT Vol | 3 | 332 | 0 |
| Through Vol | 334 | 0 | 201 |
| RT Vol | 0 | 0 | 249 |
| Lane Flow Rate | 347 | 342 | 464 |
| Geometry Grp | 1 | 1 | 1 |
| Degree of Util (X) | 0.557 | 0.591 | 0.683 |
| Departure Headway (Hd) | 5.771 | 6.217 | 5.299 |
| Convergence, Y/N | Yes | Yes | Yes |
| Cap | 622 | 578 | 677 |
| Service Time | 3.843 | 4.283 | 3.366 |
| HCM Lane V/C Ratio | 0.558 | 0.592 | 0.685 |
| HCM Control Delay | 15.9 | 18 | 19.1 |
| HCM Lane LOS | C | C | C |
| HCM 95th-tile Q | 3.4 | 3.8 | 5.4 |

HCM 6th TWSC
 4: SE Foster Road & SE Richey Road

04/21/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|-------|------|------|
| Int Delay, s/veh | 4.8 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Y | | ↑ | ↑ | | ↓ |
| Traffic Vol, veh/h | 23 | 280 | 288 | 173 | 299 | 310 |
| Future Vol, veh/h | 23 | 280 | 288 | 173 | 299 | 310 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Yield | - | None |
| Storage Length | 0 | - | - | 50 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 1 | 1 | 3 | 3 |
| Mvmt Flow | 24 | 295 | 303 | 182 | 315 | 326 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 1259 | 303 | 0 | 0 | 303 |
| Stage 1 | 303 | - | - | - | - |
| Stage 2 | 956 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.13 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 2.2 | 2.2 | - | - | 2.227 |
| Pot Cap-1 Maneuver | 248 | 1062 | - | - | 1252 |
| Stage 1 | 1136 | - | - | - | - |
| Stage 2 | 512 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 172 | 1062 | - | - | 1252 |
| Mov Cap-2 Maneuver | 172 | - | - | - | - |
| Stage 1 | 1136 | - | - | - | - |
| Stage 2 | 355 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 13.1 | 0 | 4.3 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 763 | 1252 |
| HCM Lane V/C Ratio | - | - | 0.418 | 0.251 |
| HCM Control Delay (s) | - | - | 13.1 | 8.8 |
| HCM Lane LOS | - | - | B | A |
| HCM 95th %tile Q(veh) | - | - | 2.1 | 1 |

Trip Generation Calculation Worksheet



Land Use Description: Single-Family Detached Housing
ITE Land Use Code: 210
Independent Variable: Dwelling Units
Quantity: 183 Dwelling Units

Summary of ITE Trip Generation Data

AM Peak Hour of Adjacent Street Traffic

Trip Rate: 0.74 trips per dwelling unit
Directional Distribution: 25% Entering 75% Exiting

PM Peak Hour of Adjacent Street Traffic

Trip Rate: 0.99 trips per dwelling unit
Directional Distribution: 63% Entering 37% Exiting

Total Weekday Traffic

Trip Rate: 9.44 trips per dwelling unit
Directional Distribution: 50% Entering 50% Exiting

Site Trip Generation Calculations

183 Dwelling Units

| | Entering | Exiting | Total |
|--------------|----------|---------|-------|
| AM Peak Hour | 34 | 101 | 135 |
| PM Peak Hour | 114 | 67 | 181 |
| Weekday | 864 | 864 | 1728 |

| Site id | HWY | MP | DIR | HS | Description | 2017 | 2018 | 2019 | 2039 | RSQ |
|---------|-----|-------|-----|----|---|------|-------|------|-------|-------|
| 1743 | 026 | 3.41 | 1 | | 0.05 mile west of SE Foster Road | | 43700 | | 44400 | MODEL |
| 1744 | 026 | 3.55 | 1 | | 0.02 mile west of SE 52nd Avenue | | 25200 | | 30600 | MODEL |
| 1745 | 026 | 3.59 | 1 | | 0.02 mile east of SE 52nd Avenue | | 26200 | | 29500 | MODEL |
| 1746 | 026 | 4.06 | 1 | | 0.02 mile east of SE 62nd Avenue | | 27100 | | 29900 | MODEL |
| 1747 | 026 | 4.56 | 1 | | 0.02 mile east of SE 72nd Avenue | | 26800 | | 31400 | MODEL |
| 1748 | 026 | 5.02 | 1 | | 0.02 mile west of Cascade Highway North (OR213) | | 27100 | | 32100 | MODEL |
| 1749 | 026 | 5.16 | 1 | | 0.05 mile west of SE 84th Avenue | | 26900 | | 29400 | MODEL |
| 1750 | 026 | 5.67 | 1 | | 0.07 mile west of East Portland Freeway (I-205) | | 39600 | | 43200 | MODEL |
| 1751 | 026 | 5.82 | 1 | | 0.08 mile east of East Portland Freeway (I-205) | | 22200 | | 23100 | MODEL |
| 1752 | 026 | 6.69 | 1 | | 0.02 mile west of SE 112th Avenue | | 19400 | | 20800 | MODEL |
| 1753 | 026 | 6.73 | 1 | | 0.02 mile east of SE 112th Avenue | | 20300 | | 21800 | MODEL |
| 1754 | 026 | 7.19 | 1 | | 0.02 mile west of SE 122nd Avenue | | 16200 | | 17300 | MODEL |
| 1755 | 026 | 7.23 | 1 | | 0.02 mile east of SE 122nd Avenue | | 21500 | | 23600 | MODEL |
| 1756 | 026 | 7.92 | 1 | | 0.02 mile east of SE 136th Avenue | | 21500 | | 25900 | MODEL |
| 1757 | 026 | 8.34 | 1 | | 0.02 mile west of SE 144th Avenue | | 21200 | | 25500 | MODEL |
| 1758 | 026 | 8.42 | 1 | | 0.02 mile east of SE 145th Avenue | | 20200 | | 24300 | MODEL |
| 1759 | 026 | 9.37 | 1 | | 0.02 mile east of SE 164th Avenue | | 20800 | | 26200 | MODEL |
| 1760 | 026 | 9.96 | 1 | | 0.09 mile east of SE 174th Avenue, west city limits of Gresham | | 20100 | | 20900 | MODEL |
| 26003 | 026 | 14.36 | 1 | | Gresham Automatic Traffic Recorder, Sta. 26-003, 0.18 mile southeast of SE Powell Valley Road | | 33400 | | 42900 | MODEL |
| 1774 | 026 | 14.80 | 1 | | 0.05 mile south of SE Palmquist Road | | 28500 | | 36100 | MODEL |
| 1775 | 026 | 18.30 | 1 | | 0.05 mile northwest of SE Haley Road | | 25600 | | 37100 | MODEL |
| 1776 | 026 | 19.24 | 1 | | 0.30 mile northwest of Clackamas-Boring Highway (OR212) | | 25500 | | 36900 | MODEL |
| 22590 | 026 | 20.60 | 1 | | 0.50 mile northwest of SE Kelso Road | | 30300 | | 43400 | MODEL |
| 1777 | 026 | 21.40 | 1 | | 0.30 mile southeast of SE Kelso Road | | 30300 | | 42500 | MODEL |
| 1778 | 026 | 22.72 | 1 | | 0.02 mile northwest of SE 362nd Drive, west city limits of Sandy | | 33700 | | 47300 | MODEL |
| 1779 | 026 | 23.85 | 1 | | 0.02 mile west of Bluff Road | | 33300 | | 47100 | MODEL |
| 1780 | 026 | 23.89 | 1 | | 0.02 mile east of Bluff Road | | 15700 | | 22400 | MODEL |

HCM Signalized Intersection Capacity Analysis

1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

05/06/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------------|-------|------|-------|------|-------|------|-------|-------|------|------|------|------|
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | ↖ |
| Traffic Volume (vph) | 200 | 467 | 99 | 70 | 496 | 130 | 252 | 899 | 55 | 71 | 308 | 147 |
| Future Volume (vph) | 200 | 467 | 99 | 70 | 496 | 130 | 252 | 899 | 55 | 71 | 308 | 147 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | 1.00 |
| Frbp, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 0.95 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.97 | | 1.00 | 0.97 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1719 | 3337 | | 1719 | 3318 | | 1770 | 3503 | | 1687 | 3374 | 1436 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1719 | 3337 | | 1719 | 3318 | | 1770 | 3503 | | 1687 | 3374 | 1436 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 217 | 508 | 108 | 76 | 539 | 141 | 274 | 977 | 60 | 77 | 335 | 160 |
| RTOR Reduction (vph) | 0 | 23 | 0 | 0 | 30 | 0 | 0 | 5 | 0 | 0 | 0 | 125 |
| Lane Group Flow (vph) | 217 | 593 | 0 | 76 | 650 | 0 | 274 | 1032 | 0 | 77 | 335 | 35 |
| Confl. Peds. (#/hr) | | | 5 | | | 5 | | | 10 | | | 28 |
| Heavy Vehicles (%) | 5% | 5% | 5% | 5% | 5% | 5% | 2% | 2% | 2% | 7% | 7% | 7% |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm |
| Protected Phases | 5 | 2 | | 1 | 6 | | 7 | 4 | | 3 | 8 | |
| Permitted Phases | | | | | | | | | | | | 8 |
| Actuated Green, G (s) | 13.5 | 22.8 | | 8.8 | 18.1 | | 13.6 | 26.1 | | 4.7 | 17.5 | 17.5 |
| Effective Green, g (s) | 13.5 | 22.8 | | 8.8 | 18.1 | | 13.6 | 26.1 | | 4.7 | 17.5 | 17.5 |
| Actuated g/C Ratio | 0.17 | 0.29 | | 0.11 | 0.23 | | 0.17 | 0.33 | | 0.06 | 0.22 | 0.22 |
| Clearance Time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 290 | 951 | | 189 | 750 | | 300 | 1142 | | 99 | 738 | 314 |
| v/s Ratio Prot | c0.13 | 0.18 | | 0.04 | c0.20 | | c0.15 | c0.29 | | 0.05 | 0.10 | |
| v/s Ratio Perm | | | | | | | | | | | | 0.02 |
| v/c Ratio | 0.75 | 0.62 | | 0.40 | 0.87 | | 0.91 | 0.90 | | 0.78 | 0.45 | 0.11 |
| Uniform Delay, d1 | 31.6 | 24.9 | | 33.2 | 29.8 | | 32.6 | 25.7 | | 37.1 | 27.1 | 25.0 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 16.1 | 3.1 | | 6.3 | 12.8 | | 30.4 | 10.1 | | 31.0 | 0.4 | 0.2 |
| Delay (s) | 47.8 | 28.0 | | 39.4 | 42.6 | | 63.0 | 35.8 | | 68.1 | 27.6 | 25.2 |
| Level of Service | D | C | | D | D | | E | D | | E | C | C |
| Approach Delay (s) | | 33.1 | | | 42.3 | | | 41.5 | | | 32.4 | |
| Approach LOS | | C | | | D | | | D | | | C | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 38.1 | | | | | | | | | D |
| HCM 2000 Volume to Capacity ratio | | | 0.90 | | | | | | | | | |
| Actuated Cycle Length (s) | | | 80.0 | | | | | | | 17.6 | | |
| Intersection Capacity Utilization | | | 74.5% | | | | | | | | | D |
| Analysis Period (min) | | | 15 | | | | | | | | | |

c Critical Lane Group

HCM 6th Signalized Intersection Summary
 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

05/06/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | ↗ |
| Traffic Volume (veh/h) | 200 | 467 | 99 | 70 | 496 | 130 | 252 | 899 | 55 | 71 | 308 | 147 |
| Future Volume (veh/h) | 200 | 467 | 99 | 70 | 496 | 130 | 252 | 899 | 55 | 71 | 308 | 147 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 0.99 | 1.00 | | 0.99 | 1.00 | | 0.96 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1870 | 1870 | 1870 | 1796 | 1796 | 1796 |
| Adj Flow Rate, veh/h | 217 | 508 | 108 | 76 | 539 | 141 | 274 | 977 | 60 | 77 | 335 | 160 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 5 | 5 | 5 | 5 | 5 | 5 | 2 | 2 | 2 | 7 | 7 | 7 |
| Cap, veh/h | 241 | 935 | 198 | 139 | 734 | 191 | 298 | 1069 | 66 | 97 | 696 | 298 |
| Arrive On Green | 0.14 | 0.33 | 0.33 | 0.08 | 0.27 | 0.27 | 0.17 | 0.31 | 0.31 | 0.06 | 0.20 | 0.20 |
| Sat Flow, veh/h | 1739 | 2847 | 602 | 1739 | 2720 | 709 | 1781 | 3399 | 209 | 1711 | 3413 | 1460 |
| Grp Volume(v), veh/h | 217 | 309 | 307 | 76 | 343 | 337 | 274 | 511 | 526 | 77 | 335 | 160 |
| Grp Sat Flow(s),veh/h/ln | 1739 | 1735 | 1714 | 1739 | 1735 | 1694 | 1781 | 1777 | 1830 | 1711 | 1706 | 1460 |
| Q Serve(g_s), s | 9.8 | 11.6 | 11.7 | 3.4 | 14.4 | 14.5 | 12.1 | 22.1 | 22.1 | 3.6 | 6.9 | 7.8 |
| Cycle Q Clear(g_c), s | 9.8 | 11.6 | 11.7 | 3.4 | 14.4 | 14.5 | 12.1 | 22.1 | 22.1 | 3.6 | 6.9 | 7.8 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 0.42 | 1.00 | | 0.11 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 241 | 570 | 563 | 139 | 468 | 457 | 298 | 559 | 576 | 97 | 696 | 298 |
| V/C Ratio(X) | 0.90 | 0.54 | 0.55 | 0.55 | 0.73 | 0.74 | 0.92 | 0.91 | 0.91 | 0.79 | 0.48 | 0.54 |
| Avail Cap(c_a), veh/h | 241 | 570 | 563 | 139 | 468 | 457 | 298 | 573 | 590 | 124 | 789 | 338 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.9 | 21.9 | 22.0 | 35.4 | 26.6 | 26.6 | 32.8 | 26.4 | 26.4 | 37.3 | 28.1 | 28.5 |
| Incr Delay (d2), s/veh | 36.8 | 3.7 | 3.8 | 14.5 | 9.8 | 10.2 | 31.7 | 19.0 | 18.6 | 22.8 | 0.5 | 1.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.4 | 4.9 | 4.9 | 1.9 | 6.8 | 6.7 | 7.6 | 11.6 | 11.9 | 2.0 | 2.7 | 2.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 70.7 | 25.6 | 25.8 | 49.9 | 36.3 | 36.8 | 64.5 | 45.4 | 45.0 | 60.0 | 28.6 | 30.0 |
| LnGrp LOS | E | C | C | D | D | D | E | D | D | E | C | C |
| Approach Vol, veh/h | | 833 | | | 756 | | | 1311 | | | 572 | |
| Approach Delay, s/veh | | 37.4 | | | 37.9 | | | 49.2 | | | 33.2 | |
| Approach LOS | | D | | | D | | | D | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 10.4 | 31.1 | 8.6 | 30.0 | 15.1 | 26.4 | 17.4 | 21.1 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | * 4.8 | | | | |
| Max Green Setting (Gmax), s | 6.4 | 24.4 | 5.8 | 25.8 | 11.1 | 19.7 | 13.4 | * 19 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.4 | 13.7 | 5.6 | 24.1 | 11.8 | 16.5 | 14.1 | 9.8 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.6 | 0.0 | 1.0 | 0.0 | 1.2 | 0.0 | 1.7 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 41.3 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis

2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

05/06/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕ | ↕ | ↕ | ↕ | ↕ |
| Traffic Volume (vph) | 32 | 22 | 4 | 83 | 66 | 268 | 9 | 417 | 61 | 148 | 332 | 39 |
| Future Volume (vph) | 32 | 22 | 4 | 83 | 66 | 268 | 9 | 417 | 61 | 148 | 332 | 39 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frbp, ped/bikes | | 1.00 | | | 1.00 | 0.99 | | 1.00 | 0.98 | 1.00 | 1.00 | |
| Flpb, ped/bikes | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | | 0.99 | | | 1.00 | 0.85 | | 1.00 | 0.85 | 1.00 | 0.98 | |
| Flt Protected | | 0.97 | | | 0.97 | 1.00 | | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | | 1797 | | | 1827 | 1576 | | 1825 | 1516 | 1732 | 1798 | |
| Flt Permitted | | 0.79 | | | 0.79 | 1.00 | | 0.99 | 1.00 | 0.43 | 1.00 | |
| Satd. Flow (perm) | | 1462 | | | 1490 | 1576 | | 1808 | 1516 | 788 | 1798 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 35 | 24 | 4 | 90 | 72 | 291 | 10 | 453 | 66 | 161 | 361 | 42 |
| RTOR Reduction (vph) | 0 | 3 | 0 | 0 | 0 | 208 | 0 | 0 | 36 | 0 | 8 | 0 |
| Lane Group Flow (vph) | 0 | 60 | 0 | 0 | 162 | 83 | 0 | 463 | 30 | 161 | 395 | 0 |
| Confl. Peds. (#/hr) | | | | 4 | | 4 | | | 4 | 4 | | |
| Heavy Vehicles (%) | 2% | 2% | 2% | 1% | 1% | 1% | 4% | 4% | 4% | 4% | 4% | 4% |
| Turn Type | Perm | NA | | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | | 10.1 | | | 10.1 | 10.1 | | 16.3 | 16.3 | 16.3 | 16.3 | |
| Effective Green, g (s) | | 10.1 | | | 10.1 | 10.1 | | 16.3 | 16.3 | 16.3 | 16.3 | |
| Actuated g/C Ratio | | 0.29 | | | 0.29 | 0.29 | | 0.46 | 0.46 | 0.46 | 0.46 | |
| Clearance Time (s) | | 4.5 | | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | | 417 | | | 425 | 449 | | 832 | 698 | 362 | 827 | |
| v/s Ratio Prot | | | | | | | | | | | | 0.22 |
| v/s Ratio Perm | | 0.04 | | | 0.11 | 0.05 | | 0.26 | 0.02 | 0.20 | | |
| v/c Ratio | | 0.14 | | | 0.38 | 0.18 | | 0.56 | 0.04 | 0.44 | 0.48 | |
| Uniform Delay, d1 | | 9.4 | | | 10.1 | 9.5 | | 6.9 | 5.3 | 6.5 | 6.6 | |
| Progression Factor | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | | 0.2 | | | 0.6 | 0.2 | | 0.8 | 0.0 | 0.9 | 0.4 | |
| Delay (s) | | 9.6 | | | 10.7 | 9.7 | | 7.7 | 5.3 | 7.4 | 7.0 | |
| Level of Service | | A | | | B | A | | A | A | A | A | |
| Approach Delay (s) | | 9.6 | | | 10.1 | | | 7.4 | | | 7.1 | |
| Approach LOS | | A | | | B | | | A | | | A | |

| Intersection Summary | | |
|-----------------------------------|-------|---------------------------|
| HCM 2000 Control Delay | 8.2 | HCM 2000 Level of Service |
| HCM 2000 Volume to Capacity ratio | 0.49 | A |
| Actuated Cycle Length (s) | 35.4 | Sum of lost time (s) |
| Intersection Capacity Utilization | 64.1% | 9.0 |
| Analysis Period (min) | 15 | ICU Level of Service |
| | | C |

c Critical Lane Group

HCM 6th Signalized Intersection Summary

2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

05/06/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↔ | | | ↔ | ↔ | | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Volume (veh/h) | 32 | 22 | 4 | 83 | 66 | 268 | 9 | 417 | 61 | 148 | 332 | 39 |
| Future Volume (veh/h) | 32 | 22 | 4 | 83 | 66 | 268 | 9 | 417 | 61 | 148 | 332 | 39 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1885 | 1885 | 1885 | 1841 | 1841 | 1841 | 1841 | 1841 | 1841 |
| Adj Flow Rate, veh/h | 35 | 24 | 4 | 90 | 72 | 291 | 10 | 453 | 66 | 161 | 361 | 42 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 |
| Cap, veh/h | 296 | 171 | 21 | 357 | 242 | 424 | 109 | 873 | 745 | 467 | 776 | 90 |
| Arrive On Green | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 |
| Sat Flow, veh/h | 519 | 642 | 79 | 745 | 908 | 1590 | 11 | 1821 | 1553 | 867 | 1618 | 188 |
| Grp Volume(v), veh/h | 63 | 0 | 0 | 162 | 0 | 291 | 463 | 0 | 66 | 161 | 0 | 403 |
| Grp Sat Flow(s),veh/h/ln | 1240 | 0 | 0 | 1653 | 0 | 1590 | 1831 | 0 | 1553 | 867 | 0 | 1806 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.8 | 0.0 | 0.0 | 0.8 | 5.6 | 0.0 | 5.3 |
| Cycle Q Clear(g_c), s | 2.5 | 0.0 | 0.0 | 2.5 | 0.0 | 5.8 | 6.2 | 0.0 | 0.8 | 11.8 | 0.0 | 5.3 |
| Prop In Lane | 0.56 | | 0.06 | 0.56 | | 1.00 | 0.02 | | 1.00 | 1.00 | | 0.10 |
| Lane Grp Cap(c), veh/h | 489 | 0 | 0 | 599 | 0 | 424 | 982 | 0 | 745 | 467 | 0 | 866 |
| V/C Ratio(X) | 0.13 | 0.00 | 0.00 | 0.27 | 0.00 | 0.69 | 0.47 | 0.00 | 0.09 | 0.34 | 0.00 | 0.47 |
| Avail Cap(c_a), veh/h | 810 | 0 | 0 | 999 | 0 | 828 | 1768 | 0 | 1421 | 844 | 0 | 1652 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 9.9 | 0.0 | 0.0 | 10.4 | 0.0 | 11.7 | 6.4 | 0.0 | 5.0 | 10.5 | 0.0 | 6.2 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 2.0 | 0.4 | 0.0 | 0.1 | 0.4 | 0.0 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 0.0 | 0.0 | 0.9 | 0.0 | 1.9 | 1.2 | 0.0 | 0.1 | 0.7 | 0.0 | 1.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 10.0 | 0.0 | 0.0 | 10.7 | 0.0 | 13.7 | 6.8 | 0.0 | 5.1 | 11.0 | 0.0 | 6.6 |
| LnGrp LOS | B | A | A | B | A | B | A | A | A | B | A | A |
| Approach Vol, veh/h | | 63 | | | 453 | | | 529 | | | 564 | |
| Approach Delay, s/veh | | 10.0 | | | 12.6 | | | 6.6 | | | 7.8 | |
| Approach LOS | | B | | | B | | | A | | | A | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 21.5 | | 14.0 | | 21.5 | | 14.0 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 32.5 | | 18.5 | | 32.5 | | 18.5 | | | | |
| Max Q Clear Time (g_c+I1), s | | 8.2 | | 4.5 | | 13.8 | | 7.8 | | | | |
| Green Ext Time (p_c), s | | 3.0 | | 0.2 | | 3.2 | | 1.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 8.8 | | | | | | | | |
| HCM 6th LOS | | | | A | | | | | | | | |

Intersection

Intersection Delay, s/veh 17.5
 Intersection LOS C

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---------------------|------|------|------|------|------|------|
| Lane Configurations | Y | | | Y | Y | |
| Traffic Vol, veh/h | 220 | 14 | 4 | 226 | 200 | 308 |
| Future Vol, veh/h | 220 | 14 | 4 | 226 | 200 | 308 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 5 | 5 | 4 | 4 | 3 | 3 |
| Mvmt Flow | 244 | 16 | 4 | 251 | 222 | 342 |
| Number of Lanes | 1 | 0 | 0 | 1 | 1 | 0 |

| Approach | EB | NB | SB |
|-------------------------------|----|------|------|
| Opposing Approach | | SB | NB |
| Opposing Lanes | 0 | 1 | 1 |
| Conflicting Approach Left SB | | EB | |
| Conflicting Lanes Left | 1 | 1 | 0 |
| Conflicting Approach Right NB | | | EB |
| Conflicting Lanes Right | 1 | 0 | 1 |
| HCM Control Delay | 14 | 12.3 | 21.4 |
| HCM LOS | B | B | C |

| Lane | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, % | 2% | 94% | 0% |
| Vol Thru, % | 98% | 0% | 39% |
| Vol Right, % | 0% | 6% | 61% |
| Sign Control | Stop | Stop | Stop |
| Traffic Vol by Lane | 230 | 234 | 508 |
| LT Vol | 4 | 220 | 0 |
| Through Vol | 226 | 0 | 200 |
| RT Vol | 0 | 14 | 308 |
| Lane Flow Rate | 256 | 260 | 564 |
| Geometry Grp | 1 | 1 | 1 |
| Degree of Util (X) | 0.396 | 0.444 | 0.757 |
| Departure Headway (Hd) | 5.574 | 6.142 | 4.825 |
| Convergence, Y/N | Yes | Yes | Yes |
| Cap | 644 | 585 | 751 |
| Service Time | 3.622 | 4.188 | 2.864 |
| HCM Lane V/C Ratio | 0.398 | 0.444 | 0.751 |
| HCM Control Delay | 12.3 | 14 | 21.4 |
| HCM Lane LOS | B | B | C |
| HCM 95th-tile Q | 1.9 | 2.3 | 7.1 |

HCM 6th TWSC
4: SE Foster Road & SE Richey Road

05/06/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|-------|------|------|
| Int Delay, s/veh | 9.8 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Y | | ↑ | ↑ | | ↑ |
| Traffic Vol, veh/h | 57 | 400 | 450 | 72 | 208 | 231 |
| Future Vol, veh/h | 57 | 400 | 450 | 72 | 208 | 231 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Yield | - | None |
| Storage Length | 0 | - | - | 50 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 3 | 3 | 2 | 2 | 4 | 4 |
| Mvmt Flow | 60 | 421 | 474 | 76 | 219 | 243 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 1155 | 474 | 0 | 0 | 474 |
| Stage 1 | 474 | - | - | - | - |
| Stage 2 | 681 | - | - | - | - |
| Critical Hdwy | 6.2 | 6.23 | - | - | 4.14 |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - |
| Follow-up Hdwy | 2.2 | 2.2 | - | - | 2.236 |
| Pot Cap-1 Maneuver | 312 | 830 | - | - | 1078 |
| Stage 1 | 922 | - | - | - | - |
| Stage 2 | 716 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 239 | 830 | - | - | 1078 |
| Mov Cap-2 Maneuver | 239 | - | - | - | - |
| Stage 1 | 922 | - | - | - | - |
| Stage 2 | 548 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 26.3 | 0 | 4.4 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 634 | 1078 |
| HCM Lane V/C Ratio | - | - | 0.759 | 0.203 |
| HCM Control Delay (s) | - | - | 26.3 | 9.2 |
| HCM Lane LOS | - | - | D | A |
| HCM 95th %tile Q(veh) | - | - | 6.9 | 0.8 |

HCM Signalized Intersection Capacity Analysis

1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

05/06/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | |
|-----------------------------------|-------|------|-------|------|-------|------|-------|-------|------|------|-------|---------------------------|------|
| Lane Configurations | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | ↗ | |
| Traffic Volume (vph) | 239 | 565 | 167 | 151 | 592 | 110 | 238 | 654 | 87 | 190 | 852 | 224 | |
| Future Volume (vph) | 239 | 565 | 167 | 151 | 592 | 110 | 238 | 654 | 87 | 190 | 852 | 224 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Total Lost time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 | |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | 1.00 | |
| Frbp, ped/bikes | 1.00 | 0.99 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 0.97 | |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Frt | 1.00 | 0.97 | | 1.00 | 0.98 | | 1.00 | 0.98 | | 1.00 | 1.00 | 0.85 | |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | |
| Satd. Flow (prot) | 1770 | 3384 | | 1770 | 3447 | | 1770 | 3469 | | 1787 | 3574 | 1546 | |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 | |
| Satd. Flow (perm) | 1770 | 3384 | | 1770 | 3447 | | 1770 | 3469 | | 1787 | 3574 | 1546 | |
| Peak-hour factor, PHF | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | |
| Adj. Flow (vph) | 249 | 589 | 174 | 157 | 617 | 115 | 248 | 681 | 91 | 198 | 888 | 233 | |
| RTOR Reduction (vph) | 0 | 23 | 0 | 0 | 13 | 0 | 0 | 9 | 0 | 0 | 0 | 102 | |
| Lane Group Flow (vph) | 249 | 740 | 0 | 157 | 719 | 0 | 248 | 763 | 0 | 198 | 888 | 131 | |
| Confl. Peds. (#/hr) | | | 16 | | | 2 | | | 3 | | | 10 | |
| Confl. Bikes (#/hr) | | | 1 | | | 1 | | | | | | 2 | |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 1% | 1% | 1% | |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm | |
| Protected Phases | 5 | 2 | | 1 | 6 | | 7 | 4 | | 3 | 8 | | |
| Permitted Phases | | | | | | | | | | | | 8 | |
| Actuated Green, G (s) | 22.1 | 34.6 | | 16.8 | 29.3 | | 19.2 | 34.6 | | 16.4 | 32.1 | 32.1 | |
| Effective Green, g (s) | 22.1 | 34.6 | | 16.8 | 29.3 | | 19.2 | 34.6 | | 16.4 | 32.1 | 32.1 | |
| Actuated g/C Ratio | 0.18 | 0.29 | | 0.14 | 0.24 | | 0.16 | 0.29 | | 0.14 | 0.27 | 0.27 | |
| Clearance Time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | 325 | 975 | | 247 | 841 | | 283 | 1000 | | 244 | 956 | 413 | |
| v/s Ratio Prot | c0.14 | 0.22 | | 0.09 | c0.21 | | c0.14 | c0.22 | | 0.11 | c0.25 | | |
| v/s Ratio Perm | | | | | | | | | | | | 0.08 | |
| v/c Ratio | 0.77 | 0.76 | | 0.64 | 0.86 | | 0.88 | 0.76 | | 0.81 | 0.93 | 0.32 | |
| Uniform Delay, d1 | 46.5 | 38.9 | | 48.7 | 43.3 | | 49.2 | 39.0 | | 50.3 | 42.8 | 35.2 | |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | 15.8 | 5.5 | | 11.9 | 10.8 | | 24.7 | 3.5 | | 18.2 | 14.7 | 0.4 | |
| Delay (s) | 62.3 | 44.4 | | 60.6 | 54.2 | | 74.0 | 42.5 | | 68.5 | 57.5 | 35.6 | |
| Level of Service | E | D | | E | D | | E | D | | E | E | D | |
| Approach Delay (s) | | 48.8 | | | 55.3 | | | 50.1 | | | 55.3 | | |
| Approach LOS | | D | | | E | | | D | | | E | | |
| Intersection Summary | | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 52.5 | | | | | | | | | HCM 2000 Level of Service | D |
| HCM 2000 Volume to Capacity ratio | | | 0.86 | | | | | | | | | | |
| Actuated Cycle Length (s) | | | 120.0 | | | | | | | | | Sum of lost time (s) | 17.6 |
| Intersection Capacity Utilization | | | 84.3% | | | | | | | | | ICU Level of Service | E |
| Analysis Period (min) | | | 15 | | | | | | | | | | |
| c Critical Lane Group | | | | | | | | | | | | | |

HCM 6th Signalized Intersection Summary
 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

05/06/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | ↗ |
| Traffic Volume (veh/h) | 239 | 565 | 167 | 151 | 592 | 110 | 238 | 654 | 87 | 190 | 852 | 224 |
| Future Volume (veh/h) | 239 | 565 | 167 | 151 | 592 | 110 | 238 | 654 | 87 | 190 | 852 | 224 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 0.97 | 1.00 | | 0.99 | 1.00 | | 1.00 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1885 | 1885 | 1885 |
| Adj Flow Rate, veh/h | 249 | 589 | 174 | 157 | 617 | 115 | 248 | 681 | 91 | 198 | 888 | 233 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 |
| Cap, veh/h | 297 | 846 | 249 | 218 | 807 | 150 | 275 | 914 | 122 | 226 | 937 | 408 |
| Arrive On Green | 0.17 | 0.31 | 0.31 | 0.12 | 0.27 | 0.27 | 0.15 | 0.29 | 0.29 | 0.13 | 0.26 | 0.26 |
| Sat Flow, veh/h | 1781 | 2687 | 791 | 1781 | 2983 | 555 | 1781 | 3150 | 420 | 1795 | 3582 | 1558 |
| Grp Volume(v), veh/h | 249 | 389 | 374 | 157 | 367 | 365 | 248 | 384 | 388 | 198 | 888 | 233 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1701 | 1781 | 1777 | 1761 | 1781 | 1777 | 1793 | 1795 | 1791 | 1558 |
| Q Serve(g_s), s | 16.3 | 23.0 | 23.2 | 10.2 | 22.8 | 22.9 | 16.4 | 23.5 | 23.5 | 13.0 | 29.2 | 15.6 |
| Cycle Q Clear(g_c), s | 16.3 | 23.0 | 23.2 | 10.2 | 22.8 | 22.9 | 16.4 | 23.5 | 23.5 | 13.0 | 29.2 | 15.6 |
| Prop In Lane | 1.00 | | 0.47 | 1.00 | | 0.32 | 1.00 | | 0.23 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 297 | 559 | 536 | 218 | 481 | 476 | 275 | 515 | 520 | 226 | 937 | 408 |
| V/C Ratio(X) | 0.84 | 0.70 | 0.70 | 0.72 | 0.76 | 0.77 | 0.90 | 0.74 | 0.75 | 0.88 | 0.95 | 0.57 |
| Avail Cap(c_a), veh/h | 297 | 559 | 536 | 218 | 481 | 476 | 297 | 515 | 520 | 266 | 940 | 409 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 48.4 | 36.1 | 36.1 | 50.7 | 40.2 | 40.3 | 49.8 | 38.6 | 38.6 | 51.5 | 43.5 | 38.5 |
| Incr Delay (d2), s/veh | 23.8 | 7.0 | 7.4 | 18.5 | 11.0 | 11.2 | 27.5 | 5.8 | 5.8 | 23.5 | 18.0 | 1.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 9.0 | 10.8 | 10.4 | 5.6 | 11.2 | 11.1 | 9.3 | 10.9 | 11.0 | 7.2 | 14.9 | 6.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 72.2 | 43.1 | 43.5 | 69.1 | 51.2 | 51.5 | 77.3 | 44.4 | 44.4 | 75.0 | 61.4 | 40.4 |
| LnGrp LOS | E | D | D | E | D | D | E | D | D | E | E | D |
| Approach Vol, veh/h | | 1012 | | | 889 | | | 1020 | | | 1319 | |
| Approach Delay, s/veh | | 50.4 | | | 54.5 | | | 52.4 | | | 59.8 | |
| Approach LOS | | D | | | D | | | D | | | E | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 18.7 | 42.6 | 19.1 | 39.6 | 24.0 | 37.3 | 22.5 | 36.2 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | * 4.8 | | | | |
| Max Green Setting (Gmax), s | 14.7 | 36.5 | 17.8 | 33.4 | 20.0 | 31.2 | 20.0 | * 32 | | | | |
| Max Q Clear Time (g_c+I1), s | 12.2 | 25.2 | 15.0 | 25.5 | 18.3 | 24.9 | 18.4 | 31.2 | | | | |
| Green Ext Time (p_c), s | 0.1 | 3.5 | 0.1 | 2.9 | 0.1 | 2.3 | 0.1 | 0.2 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 54.6 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis

2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

05/06/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|-------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | | ↔ | | | ↔ | ↔ | | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Volume (vph) | 75 | 57 | 10 | 71 | 71 | 97 | 7 | 577 | 152 | 162 | 510 | 32 |
| Future Volume (vph) | 75 | 57 | 10 | 71 | 71 | 97 | 7 | 577 | 152 | 162 | 510 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | | 0.99 | | | 1.00 | 0.85 | | 1.00 | 0.85 | 1.00 | 0.99 | |
| Flt Protected | | 0.97 | | | 0.98 | 1.00 | | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | | 1834 | | | 1800 | 1568 | | 1880 | 1599 | 1787 | 1865 | |
| Flt Permitted | | 0.76 | | | 0.83 | 1.00 | | 0.99 | 1.00 | 0.37 | 1.00 | |
| Satd. Flow (perm) | | 1428 | | | 1529 | 1568 | | 1870 | 1599 | 689 | 1865 | |
| Peak-hour factor, PHF | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Adj. Flow (vph) | 76 | 58 | 10 | 72 | 72 | 98 | 7 | 583 | 154 | 164 | 515 | 32 |
| RTOR Reduction (vph) | 0 | 5 | 0 | 0 | 0 | 78 | 0 | 0 | 67 | 0 | 3 | 0 |
| Lane Group Flow (vph) | 0 | 139 | 0 | 0 | 144 | 20 | 0 | 590 | 87 | 164 | 544 | 0 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 3% | 3% | 3% | 1% | 1% | 1% | 1% | 1% | 1% |
| Turn Type | Perm | NA | | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | | 8.0 | | | 8.0 | 8.0 | | 22.2 | 22.2 | 22.2 | 22.2 | |
| Effective Green, g (s) | | 8.0 | | | 8.0 | 8.0 | | 22.2 | 22.2 | 22.2 | 22.2 | |
| Actuated g/C Ratio | | 0.20 | | | 0.20 | 0.20 | | 0.57 | 0.57 | 0.57 | 0.57 | |
| Clearance Time (s) | | 4.5 | | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | | 291 | | | 312 | 320 | | 1059 | 905 | 390 | 1056 | |
| v/s Ratio Prot | | | | | | | | | | | | 0.29 |
| v/s Ratio Perm | | c0.10 | | | 0.09 | 0.01 | | c0.32 | 0.05 | 0.24 | | |
| v/c Ratio | | 0.48 | | | 0.46 | 0.06 | | 0.56 | 0.10 | 0.42 | 0.51 | |
| Uniform Delay, d1 | | 13.8 | | | 13.7 | 12.6 | | 5.4 | 3.9 | 4.8 | 5.2 | |
| Progression Factor | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | | 1.2 | | | 1.1 | 0.1 | | 0.6 | 0.0 | 0.7 | 0.4 | |
| Delay (s) | | 15.0 | | | 14.8 | 12.7 | | 6.0 | 3.9 | 5.6 | 5.6 | |
| Level of Service | | B | | | B | B | | A | A | A | A | |
| Approach Delay (s) | | 15.0 | | | 13.9 | | | 5.6 | | | 5.6 | |
| Approach LOS | | B | | | B | | | A | | | A | |

Intersection Summary

| | | | |
|-----------------------------------|-------|---------------------------|-----|
| HCM 2000 Control Delay | 7.4 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.54 | | |
| Actuated Cycle Length (s) | 39.2 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 85.2% | ICU Level of Service | E |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM 6th Signalized Intersection Summary

2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

05/06/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↔ | | | ↔ | ↔ | | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Volume (veh/h) | 75 | 57 | 10 | 71 | 71 | 97 | 7 | 577 | 152 | 162 | 510 | 32 |
| Future Volume (veh/h) | 75 | 57 | 10 | 71 | 71 | 97 | 7 | 577 | 152 | 162 | 510 | 32 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1900 | 1900 | 1856 | 1856 | 1856 | 1885 | 1885 | 1885 | 1885 | 1885 | 1885 |
| Adj Flow Rate, veh/h | 76 | 58 | 10 | 72 | 72 | 98 | 7 | 583 | 154 | 164 | 515 | 32 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cap, veh/h | 243 | 127 | 16 | 277 | 192 | 290 | 105 | 1055 | 899 | 466 | 988 | 61 |
| Arrive On Green | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 | 0.56 |
| Sat Flow, veh/h | 482 | 687 | 87 | 680 | 1044 | 1572 | 5 | 1875 | 1598 | 727 | 1756 | 109 |
| Grp Volume(v), veh/h | 144 | 0 | 0 | 144 | 0 | 98 | 590 | 0 | 154 | 164 | 0 | 547 |
| Grp Sat Flow(s),veh/h/ln | 1256 | 0 | 0 | 1724 | 0 | 1572 | 1879 | 0 | 1598 | 727 | 0 | 1866 |
| Q Serve(g_s), s | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 | 1.7 | 6.6 | 0.0 | 6.5 |
| Cycle Q Clear(g_c), s | 4.2 | 0.0 | 0.0 | 2.5 | 0.0 | 1.9 | 7.1 | 0.0 | 1.7 | 13.7 | 0.0 | 6.5 |
| Prop In Lane | 0.53 | | 0.07 | 0.50 | | 1.00 | 0.01 | | 1.00 | 1.00 | | 0.06 |
| Lane Grp Cap(c), veh/h | 386 | 0 | 0 | 470 | 0 | 290 | 1160 | 0 | 899 | 466 | 0 | 1050 |
| V/C Ratio(X) | 0.37 | 0.00 | 0.00 | 0.31 | 0.00 | 0.34 | 0.51 | 0.00 | 0.17 | 0.35 | 0.00 | 0.52 |
| Avail Cap(c_a), veh/h | 857 | 0 | 0 | 966 | 0 | 795 | 1838 | 0 | 1481 | 731 | 0 | 1730 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 13.5 | 0.0 | 0.0 | 12.8 | 0.0 | 12.6 | 5.0 | 0.0 | 3.8 | 9.3 | 0.0 | 4.8 |
| Incr Delay (d2), s/veh | 0.6 | 0.0 | 0.0 | 0.4 | 0.0 | 0.7 | 0.3 | 0.0 | 0.1 | 0.5 | 0.0 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 0.0 | 0.0 | 0.9 | 0.0 | 0.6 | 1.0 | 0.0 | 0.2 | 0.7 | 0.0 | 0.9 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 14.1 | 0.0 | 0.0 | 13.2 | 0.0 | 13.3 | 5.3 | 0.0 | 3.9 | 9.8 | 0.0 | 5.2 |
| LnGrp LOS | B | A | A | B | A | B | A | A | A | A | A | A |
| Approach Vol, veh/h | | 144 | | | 242 | | | 744 | | | 711 | |
| Approach Delay, s/veh | | 14.1 | | | 13.2 | | | 5.0 | | | 6.3 | |
| Approach LOS | | B | | | B | | | A | | | A | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 24.5 | | 11.1 | | 24.5 | | 11.1 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 33.0 | | 18.0 | | 33.0 | | 18.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 9.1 | | 6.2 | | 15.7 | | 4.5 | | | | |
| Green Ext Time (p_c), s | | 4.3 | | 0.5 | | 4.3 | | 0.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 7.3 | | | | | | | | |
| HCM 6th LOS | | | | A | | | | | | | | |

Intersection

Intersection Delay, s/veh 46.6

Intersection LOS E

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---------------------|------|------|------|------|------|------|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 446 | 5 | 12 | 383 | 231 | 323 |
| Future Vol, veh/h | 446 | 5 | 12 | 383 | 231 | 323 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles, % | 1 | 1 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 460 | 5 | 12 | 395 | 238 | 333 |
| Number of Lanes | 1 | 0 | 0 | 1 | 1 | 0 |

| Approach | EB | NB | SB |
|-------------------------------|------|------|------|
| Opposing Approach | | SB | NB |
| Opposing Lanes | 0 | 1 | 1 |
| Conflicting Approach Left SB | | EB | |
| Conflicting Lanes Left | 1 | 1 | 0 |
| Conflicting Approach Right NB | | | EB |
| Conflicting Lanes Right | 1 | 0 | 1 |
| HCM Control Delay | 45.4 | 29.7 | 59.6 |
| HCM LOS | E | D | F |

| Lane | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, % | 3% | 99% | 0% |
| Vol Thru, % | 97% | 0% | 42% |
| Vol Right, % | 0% | 1% | 58% |
| Sign Control | Stop | Stop | Stop |
| Traffic Vol by Lane | 395 | 451 | 554 |
| LT Vol | 12 | 446 | 0 |
| Through Vol | 383 | 0 | 231 |
| RT Vol | 0 | 5 | 323 |
| Lane Flow Rate | 407 | 465 | 571 |
| Geometry Grp | 1 | 1 | 1 |
| Degree of Util (X) | 0.774 | 0.9 | 0.988 |
| Departure Headway (Hd) | 6.843 | 6.967 | 6.226 |
| Convergence, Y/N | Yes | Yes | Yes |
| Cap | 525 | 521 | 583 |
| Service Time | 4.918 | 5.032 | 4.292 |
| HCM Lane V/C Ratio | 0.775 | 0.893 | 0.979 |
| HCM Control Delay | 29.7 | 45.4 | 59.6 |
| HCM Lane LOS | D | E | F |
| HCM 95th-tile Q | 7 | 10.3 | 14.1 |

HCM 6th TWSC
 4: SE Foster Road & SE Richey Road

05/06/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|-------|------|------|
| Int Delay, s/veh | 14.3 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Y | | ↑ | ↑ | | ↑ |
| Traffic Vol, veh/h | 37 | 376 | 302 | 203 | 452 | 324 |
| Future Vol, veh/h | 37 | 376 | 302 | 203 | 452 | 324 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Yield | - | None |
| Storage Length | 0 | - | - | 50 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 1 | 1 | 3 | 3 |
| Mvmt Flow | 39 | 396 | 318 | 214 | 476 | 341 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 1611 | 318 | 0 | 0 | 318 |
| Stage 1 | 318 | - | - | - | - |
| Stage 2 | 1293 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.13 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 2.2 | 2.2 | - | - | 2.227 |
| Pot Cap-1 Maneuver | 145 | 1039 | - | - | 1236 |
| Stage 1 | 1116 | - | - | - | - |
| Stage 2 | 338 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 76 | 1039 | - | - | 1236 |
| Mov Cap-2 Maneuver | 76 | - | - | - | - |
| Stage 1 | 1116 | - | - | - | - |
| Stage 2 | 177 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 47.8 | 0 | 5.7 |
| HCM LOS | E | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 487 | 1236 |
| HCM Lane V/C Ratio | - | - | 0.893 | 0.385 |
| HCM Control Delay (s) | - | - | 47.8 | 9.7 |
| HCM Lane LOS | - | - | E | A |
| HCM 95th %tile Q(veh) | - | - | 9.9 | 1.8 |

HCM Signalized Intersection Capacity Analysis

1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

05/07/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------------|-------|------|-------|------|-------|---------------------------|-------|-------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 200 | 467 | 102 | 70 | 496 | 130 | 262 | 924 | 55 | 71 | 317 | 147 |
| Future Volume (vph) | 200 | 467 | 102 | 70 | 496 | 130 | 262 | 924 | 55 | 71 | 317 | 147 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | 1.00 |
| Frbp, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 0.95 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.97 | | 1.00 | 0.97 | | 1.00 | 0.99 | | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1719 | 3334 | | 1719 | 3318 | | 1770 | 3504 | | 1687 | 3374 | 1436 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1719 | 3334 | | 1719 | 3318 | | 1770 | 3504 | | 1687 | 3374 | 1436 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 217 | 508 | 111 | 76 | 539 | 141 | 285 | 1004 | 60 | 77 | 345 | 160 |
| RTOR Reduction (vph) | 0 | 24 | 0 | 0 | 30 | 0 | 0 | 5 | 0 | 0 | 0 | 125 |
| Lane Group Flow (vph) | 217 | 595 | 0 | 76 | 650 | 0 | 285 | 1059 | 0 | 77 | 345 | 35 |
| Confl. Peds. (#/hr) | | | 5 | | | 5 | | | 10 | | | 28 |
| Heavy Vehicles (%) | 5% | 5% | 5% | 5% | 5% | 5% | 2% | 2% | 2% | 7% | 7% | 7% |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm |
| Protected Phases | 5 | 2 | | 1 | 6 | | 7 | 4 | | 3 | 8 | |
| Permitted Phases | | | | | | | | | | | | 8 |
| Actuated Green, G (s) | 13.4 | 22.4 | | 8.7 | 17.7 | | 14.1 | 26.7 | | 4.6 | 17.5 | 17.5 |
| Effective Green, g (s) | 13.4 | 22.4 | | 8.7 | 17.7 | | 14.1 | 26.7 | | 4.6 | 17.5 | 17.5 |
| Actuated g/C Ratio | 0.17 | 0.28 | | 0.11 | 0.22 | | 0.18 | 0.33 | | 0.06 | 0.22 | 0.22 |
| Clearance Time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 287 | 933 | | 186 | 734 | | 311 | 1169 | | 97 | 738 | 314 |
| v/s Ratio Prot | c0.13 | 0.18 | | 0.04 | c0.20 | | c0.16 | c0.30 | | 0.05 | 0.10 | |
| v/s Ratio Perm | | | | | | | | | | | | 0.02 |
| v/c Ratio | 0.76 | 0.64 | | 0.41 | 0.89 | | 0.92 | 0.91 | | 0.79 | 0.47 | 0.11 |
| Uniform Delay, d1 | 31.7 | 25.2 | | 33.3 | 30.2 | | 32.4 | 25.4 | | 37.2 | 27.2 | 25.0 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 16.9 | 3.3 | | 6.5 | 14.8 | | 30.1 | 10.0 | | 34.6 | 0.5 | 0.2 |
| Delay (s) | 48.6 | 28.6 | | 39.8 | 45.0 | | 62.5 | 35.5 | | 71.9 | 27.7 | 25.2 |
| Level of Service | D | C | | D | D | | E | D | | E | C | C |
| Approach Delay (s) | | 33.8 | | | 44.5 | | | 41.2 | | | 32.8 | |
| Approach LOS | | C | | | D | | | D | | | C | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 38.8 | | | HCM 2000 Level of Service | | | | D | | |
| HCM 2000 Volume to Capacity ratio | | | 0.91 | | | | | | | | | |
| Actuated Cycle Length (s) | | | 80.0 | | | Sum of lost time (s) | | | | 17.6 | | |
| Intersection Capacity Utilization | | | 75.2% | | | ICU Level of Service | | | | D | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |

c Critical Lane Group

HCM 6th Signalized Intersection Summary
 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

05/07/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | ↗ |
| Traffic Volume (veh/h) | 200 | 467 | 102 | 70 | 496 | 130 | 262 | 924 | 55 | 71 | 317 | 147 |
| Future Volume (veh/h) | 200 | 467 | 102 | 70 | 496 | 130 | 262 | 924 | 55 | 71 | 317 | 147 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 0.99 | 1.00 | | 0.99 | 1.00 | | 0.96 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1826 | 1826 | 1826 | 1826 | 1870 | 1870 | 1870 | 1796 | 1796 | 1796 |
| Adj Flow Rate, veh/h | 217 | 508 | 111 | 76 | 539 | 141 | 285 | 1004 | 60 | 77 | 345 | 160 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 5 | 5 | 5 | 5 | 5 | 5 | 2 | 2 | 2 | 7 | 7 | 7 |
| Cap, veh/h | 241 | 909 | 198 | 139 | 713 | 186 | 312 | 1097 | 66 | 97 | 696 | 298 |
| Arrive On Green | 0.14 | 0.32 | 0.32 | 0.08 | 0.26 | 0.26 | 0.17 | 0.32 | 0.32 | 0.06 | 0.20 | 0.20 |
| Sat Flow, veh/h | 1739 | 2831 | 615 | 1739 | 2720 | 708 | 1781 | 3405 | 203 | 1711 | 3413 | 1460 |
| Grp Volume(v), veh/h | 217 | 310 | 309 | 76 | 343 | 337 | 285 | 524 | 540 | 77 | 345 | 160 |
| Grp Sat Flow(s),veh/h/ln | 1739 | 1735 | 1712 | 1739 | 1735 | 1694 | 1781 | 1777 | 1831 | 1711 | 1706 | 1460 |
| Q Serve(g_s), s | 9.8 | 11.8 | 12.0 | 3.4 | 14.5 | 14.7 | 12.6 | 22.7 | 22.7 | 3.6 | 7.2 | 7.8 |
| Cycle Q Clear(g_c), s | 9.8 | 11.8 | 12.0 | 3.4 | 14.5 | 14.7 | 12.6 | 22.7 | 22.7 | 3.6 | 7.2 | 7.8 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.42 | 1.00 | | 0.11 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 241 | 557 | 549 | 139 | 455 | 444 | 312 | 572 | 590 | 97 | 696 | 298 |
| V/C Ratio(X) | 0.90 | 0.56 | 0.56 | 0.55 | 0.75 | 0.76 | 0.91 | 0.92 | 0.92 | 0.79 | 0.50 | 0.54 |
| Avail Cap(c_a), veh/h | 241 | 557 | 549 | 139 | 455 | 444 | 312 | 586 | 604 | 124 | 789 | 338 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 33.9 | 22.5 | 22.5 | 35.4 | 27.1 | 27.2 | 32.4 | 26.1 | 26.1 | 37.3 | 28.2 | 28.5 |
| Incr Delay (d2), s/veh | 36.8 | 4.0 | 4.1 | 14.5 | 11.0 | 11.5 | 30.0 | 18.9 | 18.5 | 22.8 | 0.5 | 1.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.4 | 5.1 | 5.1 | 1.9 | 7.0 | 6.9 | 7.8 | 11.9 | 12.2 | 2.0 | 2.8 | 2.7 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 70.7 | 26.5 | 26.6 | 49.9 | 38.2 | 38.7 | 62.4 | 45.0 | 44.6 | 60.0 | 28.7 | 30.0 |
| LnGrp LOS | E | C | C | D | D | D | E | D | D | E | C | C |
| Approach Vol, veh/h | | 836 | | | 756 | | | 1349 | | | 582 | |
| Approach Delay, s/veh | | 38.0 | | | 39.6 | | | 48.5 | | | 33.2 | |
| Approach LOS | | D | | | D | | | D | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 10.4 | 30.5 | 8.6 | 30.6 | 15.1 | 25.8 | 18.0 | 21.1 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | * 4.8 | | | | |
| Max Green Setting (Gmax), s | 6.4 | 23.8 | 5.8 | 26.4 | 11.1 | 19.1 | 14.0 | * 19 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.4 | 14.0 | 5.6 | 24.7 | 11.8 | 16.7 | 14.6 | 9.8 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.5 | 0.0 | 1.1 | 0.0 | 1.0 | 0.0 | 1.8 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 41.6 |
| HCM 6th LOS | D |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis

2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

05/07/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------------|------|------|-------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕ | ↕ | ↕ | ↕ | |
| Traffic Volume (vph) | 32 | 22 | 4 | 85 | 66 | 268 | 9 | 457 | 66 | 148 | 346 | 39 |
| Future Volume (vph) | 32 | 22 | 4 | 85 | 66 | 268 | 9 | 457 | 66 | 148 | 346 | 39 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frbp, ped/bikes | | 1.00 | | | 1.00 | 0.99 | | 1.00 | 0.98 | 1.00 | 1.00 | |
| Flpb, ped/bikes | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | | 0.99 | | | 1.00 | 0.85 | | 1.00 | 0.85 | 1.00 | 0.98 | |
| Flt Protected | | 0.97 | | | 0.97 | 1.00 | | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | | 1797 | | | 1826 | 1576 | | 1825 | 1516 | 1732 | 1799 | |
| Flt Permitted | | 0.79 | | | 0.79 | 1.00 | | 0.99 | 1.00 | 0.39 | 1.00 | |
| Satd. Flow (perm) | | 1463 | | | 1486 | 1576 | | 1809 | 1516 | 716 | 1799 | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 35 | 24 | 4 | 92 | 72 | 291 | 10 | 497 | 72 | 161 | 376 | 42 |
| RTOR Reduction (vph) | 0 | 3 | 0 | 0 | 0 | 209 | 0 | 0 | 38 | 0 | 8 | 0 |
| Lane Group Flow (vph) | 0 | 60 | 0 | 0 | 164 | 82 | 0 | 507 | 34 | 161 | 410 | 0 |
| Confl. Peds. (#/hr) | | | | 4 | | 4 | | | 4 | 4 | | |
| Heavy Vehicles (%) | 2% | 2% | 2% | 1% | 1% | 1% | 4% | 4% | 4% | 4% | 4% | 4% |
| Turn Type | Perm | NA | | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | | 10.4 | | | 10.4 | 10.4 | | 17.5 | 17.5 | 17.5 | 17.5 | |
| Effective Green, g (s) | | 10.4 | | | 10.4 | 10.4 | | 17.5 | 17.5 | 17.5 | 17.5 | |
| Actuated g/C Ratio | | 0.28 | | | 0.28 | 0.28 | | 0.47 | 0.47 | 0.47 | 0.47 | |
| Clearance Time (s) | | 4.5 | | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | |
| Lane Grp Cap (vph) | | 412 | | | 418 | 444 | | 857 | 718 | 339 | 853 | |
| v/s Ratio Prot | | | | | | | | | | | | 0.23 |
| v/s Ratio Perm | | 0.04 | | | 0.11 | 0.05 | | 0.28 | 0.02 | 0.23 | | |
| v/c Ratio | | 0.15 | | | 0.39 | 0.18 | | 0.59 | 0.05 | 0.47 | 0.48 | |
| Uniform Delay, d1 | | 9.9 | | | 10.7 | 10.0 | | 7.1 | 5.2 | 6.6 | 6.6 | |
| Progression Factor | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Incremental Delay, d2 | | 0.2 | | | 0.6 | 0.2 | | 1.1 | 0.0 | 1.1 | 0.4 | |
| Delay (s) | | 10.1 | | | 11.3 | 10.2 | | 8.2 | 5.2 | 7.6 | 7.0 | |
| Level of Service | | B | | | B | B | | A | A | A | A | |
| Approach Delay (s) | | 10.1 | | | 10.6 | | | 7.8 | | | 7.2 | |
| Approach LOS | | B | | | B | | | A | | | A | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 8.5 | | | | | | | | | A |
| HCM 2000 Volume to Capacity ratio | | | 0.52 | | | | | | | | | |
| Actuated Cycle Length (s) | | | 36.9 | | | | | | | | | 9.0 |
| Intersection Capacity Utilization | | | 67.1% | | | | | | | | | C |
| Analysis Period (min) | | | 15 | | | | | | | | | |

c Critical Lane Group

HCM 6th Signalized Intersection Summary

2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

05/07/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↔ | | | ↔ | ↔ | | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Volume (veh/h) | 32 | 22 | 4 | 85 | 66 | 268 | 9 | 457 | 66 | 148 | 346 | 39 |
| Future Volume (veh/h) | 32 | 22 | 4 | 85 | 66 | 268 | 9 | 457 | 66 | 148 | 346 | 39 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1885 | 1885 | 1885 | 1841 | 1841 | 1841 | 1841 | 1841 | 1841 |
| Adj Flow Rate, veh/h | 35 | 24 | 4 | 92 | 72 | 291 | 10 | 497 | 72 | 161 | 376 | 42 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | 4 |
| Cap, veh/h | 284 | 165 | 20 | 350 | 234 | 417 | 103 | 907 | 773 | 446 | 809 | 90 |
| Arrive On Green | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Sat Flow, veh/h | 512 | 628 | 77 | 762 | 891 | 1590 | 10 | 1822 | 1554 | 828 | 1626 | 182 |
| Grp Volume(v), veh/h | 63 | 0 | 0 | 164 | 0 | 291 | 507 | 0 | 72 | 161 | 0 | 418 |
| Grp Sat Flow(s),veh/h/ln | 1217 | 0 | 0 | 1654 | 0 | 1590 | 1832 | 0 | 1554 | 828 | 0 | 1807 |
| Q Serve(g_s), s | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 6.2 | 0.0 | 0.0 | 0.9 | 6.3 | 0.0 | 5.7 |
| Cycle Q Clear(g_c), s | 2.7 | 0.0 | 0.0 | 2.7 | 0.0 | 6.2 | 7.2 | 0.0 | 0.9 | 13.4 | 0.0 | 5.7 |
| Prop In Lane | 0.56 | | 0.06 | 0.56 | | 1.00 | 0.02 | | 1.00 | 1.00 | | 0.10 |
| Lane Grp Cap(c), veh/h | 469 | 0 | 0 | 584 | 0 | 417 | 1009 | 0 | 773 | 446 | 0 | 899 |
| V/C Ratio(X) | 0.13 | 0.00 | 0.00 | 0.28 | 0.00 | 0.70 | 0.50 | 0.00 | 0.09 | 0.36 | 0.00 | 0.46 |
| Avail Cap(c_a), veh/h | 761 | 0 | 0 | 947 | 0 | 785 | 1676 | 0 | 1347 | 752 | 0 | 1566 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 10.6 | 0.0 | 0.0 | 11.2 | 0.0 | 12.5 | 6.5 | 0.0 | 5.0 | 11.2 | 0.0 | 6.2 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 2.1 | 0.4 | 0.0 | 0.1 | 0.5 | 0.0 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 0.0 | 0.0 | 0.9 | 0.0 | 2.0 | 1.4 | 0.0 | 0.2 | 0.8 | 0.0 | 1.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 10.7 | 0.0 | 0.0 | 11.4 | 0.0 | 14.6 | 6.9 | 0.0 | 5.0 | 11.7 | 0.0 | 6.5 |
| LnGrp LOS | B | A | A | B | A | B | A | A | A | B | A | A |
| Approach Vol, veh/h | | 63 | | | 455 | | | 579 | | | | 579 |
| Approach Delay, s/veh | | 10.7 | | | 13.5 | | | 6.7 | | | | 8.0 |
| Approach LOS | | B | | | B | | | A | | | | A |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 23.2 | | 14.3 | | 23.2 | | 14.3 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 32.5 | | 18.5 | | 32.5 | | 18.5 | | | | |
| Max Q Clear Time (g_c+I1), s | | 9.2 | | 4.7 | | 15.4 | | 8.2 | | | | |
| Green Ext Time (p_c), s | | 3.3 | | 0.2 | | 3.2 | | 1.5 | | | | |

Intersection Summary

| | |
|--------------------|-----|
| HCM 6th Ctrl Delay | 9.1 |
| HCM 6th LOS | A |

Intersection

| | |
|---------------------------|------|
| Intersection Delay, s/veh | 20.6 |
| Intersection LOS | C |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---------------------|------|------|------|------|------|------|
| Lane Configurations | Y | | | Y | Y | |
| Traffic Vol, veh/h | 220 | 21 | 24 | 276 | 217 | 308 |
| Future Vol, veh/h | 220 | 21 | 24 | 276 | 217 | 308 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 5 | 5 | 4 | 4 | 3 | 3 |
| Mvmt Flow | 244 | 23 | 27 | 307 | 241 | 342 |
| Number of Lanes | 1 | 0 | 0 | 1 | 1 | 0 |

| Approach | EB | NB | SB |
|-------------------------------|------|----|------|
| Opposing Approach | | SB | NB |
| Opposing Lanes | 0 | 1 | 1 |
| Conflicting Approach Left SB | | EB | |
| Conflicting Lanes Left | 1 | 1 | 0 |
| Conflicting Approach Right NB | | | EB |
| Conflicting Lanes Right | 1 | 0 | 1 |
| HCM Control Delay | 15.1 | 15 | 26.3 |
| HCM LOS | C | B | D |

| Lane | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, % | 8% | 91% | 0% |
| Vol Thru, % | 92% | 0% | 41% |
| Vol Right, % | 0% | 9% | 59% |
| Sign Control | Stop | Stop | Stop |
| Traffic Vol by Lane | 300 | 241 | 525 |
| LT Vol | 24 | 220 | 0 |
| Through Vol | 276 | 0 | 217 |
| RT Vol | 0 | 21 | 308 |
| Lane Flow Rate | 333 | 268 | 583 |
| Geometry Grp | 1 | 1 | 1 |
| Degree of Util (X) | 0.528 | 0.475 | 0.814 |
| Departure Headway (Hd) | 5.704 | 6.386 | 5.025 |
| Convergence, Y/N | Yes | Yes | Yes |
| Cap | 630 | 562 | 718 |
| Service Time | 3.765 | 4.447 | 3.078 |
| HCM Lane V/C Ratio | 0.529 | 0.477 | 0.812 |
| HCM Control Delay | 15 | 15.1 | 26.3 |
| HCM Lane LOS | B | C | D |
| HCM 95th-tile Q | 3.1 | 2.5 | 8.6 |

HCM 6th TWSC
 4: SE Foster Road & SE Richey Road

05/07/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|-------|------|------|
| Int Delay, s/veh | 10.8 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Y | | ↑ | ↑ | | ↑ |
| Traffic Vol, veh/h | 57 | 420 | 450 | 72 | 215 | 231 |
| Future Vol, veh/h | 57 | 420 | 450 | 72 | 215 | 231 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Yield | - | None |
| Storage Length | 0 | - | - | 50 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 3 | 3 | 2 | 2 | 4 | 4 |
| Mvmt Flow | 60 | 442 | 474 | 76 | 226 | 243 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 1169 | 474 | 0 | 0 | 474 | 0 |
| Stage 1 | 474 | - | - | - | - | - |
| Stage 2 | 695 | - | - | - | - | - |
| Critical Hdwy | 6.2 | 6.23 | - | - | 4.14 | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - | - |
| Follow-up Hdwy | 2.2 | 2.2 | - | - | 2.236 | - |
| Pot Cap-1 Maneuver | 306 | 830 | - | - | 1078 | - |
| Stage 1 | 922 | - | - | - | - | - |
| Stage 2 | 704 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 232 | 830 | - | - | 1078 | - |
| Mov Cap-2 Maneuver | 232 | - | - | - | - | - |
| Stage 1 | 922 | - | - | - | - | - |
| Stage 2 | 534 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 28.7 | 0 | 4.4 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|------|
| Capacity (veh/h) | - | - | 635 | 1078 |
| HCM Lane V/C Ratio | - | - | 0.791 | 0.21 |
| HCM Control Delay (s) | - | - | 28.7 | 9.2 |
| HCM Lane LOS | - | - | D | A |
| HCM 95th %tile Q(veh) | - | - | 7.7 | 0.8 |

HCM 6th TWSC
5: SE 190th Avenue & North Site Access

05/07/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.3 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | W | T | | | T |
| Traffic Vol, veh/h | 10 | 47 | 253 | 3 | 16 | 222 |
| Future Vol, veh/h | 10 | 47 | 253 | 3 | 16 | 222 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 4 | 2 | 2 | 3 |
| Mvmt Flow | 11 | 52 | 281 | 3 | 18 | 247 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 566 | 283 | 0 | 0 | 284 |
| Stage 1 | 283 | - | - | - | - |
| Stage 2 | 283 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 |
| Pot Cap-1 Maneuver | 486 | 756 | - | - | 1278 |
| Stage 1 | 765 | - | - | - | - |
| Stage 2 | 765 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 478 | 756 | - | - | 1278 |
| Mov Cap-2 Maneuver | 478 | - | - | - | - |
| Stage 1 | 765 | - | - | - | - |
| Stage 2 | 753 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 10.8 | 0 | 0.5 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 686 | 1278 |
| HCM Lane V/C Ratio | - | - | 0.092 | 0.014 |
| HCM Control Delay (s) | - | - | 10.8 | 7.9 |
| HCM Lane LOS | - | - | B | A |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 0 |

HCM 6th TWSC
6: SE 190th Avenue & South Site Access

05/07/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.1 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 21 | 23 | 233 | 7 | 8 | 224 |
| Future Vol, veh/h | 21 | 23 | 233 | 7 | 8 | 224 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 4 | 2 | 2 | 3 |
| Mvmt Flow | 23 | 26 | 259 | 8 | 9 | 249 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 530 | 263 | 0 | 0 | 267 |
| Stage 1 | 263 | - | - | - | - |
| Stage 2 | 267 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 |
| Pot Cap-1 Maneuver | 510 | 776 | - | - | 1297 |
| Stage 1 | 781 | - | - | - | - |
| Stage 2 | 778 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 506 | 776 | - | - | 1297 |
| Mov Cap-2 Maneuver | 506 | - | - | - | - |
| Stage 1 | 781 | - | - | - | - |
| Stage 2 | 772 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 11.3 | 0 | 0.3 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 618 | 1297 |
| HCM Lane V/C Ratio | - | - | 0.079 | 0.007 |
| HCM Control Delay (s) | - | - | 11.3 | 7.8 |
| HCM Lane LOS | - | - | B | A |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 0 |

HCM Signalized Intersection Capacity Analysis

1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

05/07/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-----------------------------------|-------|------|-------|------|-------|------|---------------------------|-------|------|------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 239 | 565 | 178 | 151 | 592 | 110 | 245 | 671 | 87 | 190 | 881 | 224 |
| Future Volume (vph) | 239 | 565 | 178 | 151 | 592 | 110 | 245 | 671 | 87 | 190 | 881 | 224 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Lane Util. Factor | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | | 1.00 | 0.95 | 1.00 |
| Frbp, ped/bikes | 1.00 | 0.99 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 0.97 |
| Flpb, ped/bikes | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Frt | 1.00 | 0.96 | | 1.00 | 0.98 | | 1.00 | 0.98 | | 1.00 | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 3376 | | 1770 | 3447 | | 1770 | 3471 | | 1787 | 3574 | 1546 |
| Flt Permitted | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | | 0.95 | 1.00 | 1.00 |
| Satd. Flow (perm) | 1770 | 3376 | | 1770 | 3447 | | 1770 | 3471 | | 1787 | 3574 | 1546 |
| Peak-hour factor, PHF | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph) | 249 | 589 | 185 | 157 | 617 | 115 | 255 | 699 | 91 | 198 | 918 | 233 |
| RTOR Reduction (vph) | 0 | 26 | 0 | 0 | 13 | 0 | 0 | 8 | 0 | 0 | 0 | 98 |
| Lane Group Flow (vph) | 249 | 748 | 0 | 157 | 719 | 0 | 255 | 782 | 0 | 198 | 918 | 135 |
| Confl. Peds. (#/hr) | | | 16 | | | 2 | | | 3 | | | 10 |
| Confl. Bikes (#/hr) | | | 1 | | | 1 | | | | | | 2 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 1% | 1% | 1% |
| Turn Type | Prot | NA | | Prot | NA | | Prot | NA | | Prot | NA | Perm |
| Protected Phases | 5 | 2 | | 1 | 6 | | 7 | 4 | | 3 | 8 | |
| Permitted Phases | | | | | | | | | | | | 8 |
| Actuated Green, G (s) | 21.4 | 34.6 | | 16.1 | 29.3 | | 19.5 | 35.3 | | 16.4 | 32.5 | 32.5 |
| Effective Green, g (s) | 21.4 | 34.6 | | 16.1 | 29.3 | | 19.5 | 35.3 | | 16.4 | 32.5 | 32.5 |
| Actuated g/C Ratio | 0.18 | 0.29 | | 0.13 | 0.24 | | 0.16 | 0.29 | | 0.14 | 0.27 | 0.27 |
| Clearance Time (s) | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.8 | | 4.0 | 4.5 | 4.5 |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| Lane Grp Cap (vph) | 315 | 973 | | 237 | 841 | | 287 | 1021 | | 244 | 967 | 418 |
| v/s Ratio Prot | c0.14 | 0.22 | | 0.09 | c0.21 | | c0.14 | c0.23 | | 0.11 | c0.26 | |
| v/s Ratio Perm | | | | | | | | | | | | 0.09 |
| v/c Ratio | 0.79 | 0.77 | | 0.66 | 0.86 | | 0.89 | 0.77 | | 0.81 | 0.95 | 0.32 |
| Uniform Delay, d1 | 47.2 | 39.0 | | 49.4 | 43.3 | | 49.2 | 38.6 | | 50.3 | 42.9 | 35.0 |
| Progression Factor | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 |
| Incremental Delay, d2 | 18.1 | 5.8 | | 13.7 | 10.8 | | 26.4 | 3.5 | | 18.2 | 17.7 | 0.5 |
| Delay (s) | 65.2 | 44.9 | | 63.0 | 54.2 | | 75.6 | 42.1 | | 68.5 | 60.7 | 35.4 |
| Level of Service | E | D | | E | D | | E | D | | E | E | D |
| Approach Delay (s) | | 49.8 | | | 55.7 | | | 50.2 | | | 57.5 | |
| Approach LOS | | D | | | E | | | D | | | E | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 53.5 | | | | HCM 2000 Level of Service | | | | D | |
| HCM 2000 Volume to Capacity ratio | | | 0.87 | | | | | | | | | |
| Actuated Cycle Length (s) | | | 120.0 | | | | Sum of lost time (s) | | | 17.6 | | |
| Intersection Capacity Utilization | | | 85.5% | | | | ICU Level of Service | | | E | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |
| c Critical Lane Group | | | | | | | | | | | | |

HCM 6th Signalized Intersection Summary
 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

05/07/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | | ↗ | ↗↘ | ↗ |
| Traffic Volume (veh/h) | 239 | 565 | 178 | 151 | 592 | 110 | 245 | 671 | 87 | 190 | 881 | 224 |
| Future Volume (veh/h) | 239 | 565 | 178 | 151 | 592 | 110 | 245 | 671 | 87 | 190 | 881 | 224 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 0.97 | 1.00 | | 0.98 | 1.00 | | 1.00 | 1.00 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1870 | 1885 | 1885 | 1885 |
| Adj Flow Rate, veh/h | 249 | 589 | 185 | 157 | 617 | 115 | 255 | 699 | 91 | 198 | 918 | 233 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 |
| Cap, veh/h | 297 | 820 | 257 | 218 | 794 | 148 | 282 | 931 | 121 | 226 | 940 | 409 |
| Arrive On Green | 0.17 | 0.31 | 0.31 | 0.12 | 0.27 | 0.27 | 0.16 | 0.29 | 0.29 | 0.13 | 0.26 | 0.26 |
| Sat Flow, veh/h | 1781 | 2642 | 828 | 1781 | 2983 | 555 | 1781 | 3161 | 411 | 1795 | 3582 | 1558 |
| Grp Volume(v), veh/h | 249 | 396 | 378 | 157 | 367 | 365 | 255 | 393 | 397 | 198 | 918 | 233 |
| Grp Sat Flow(s),veh/h/ln | 1781 | 1777 | 1693 | 1781 | 1777 | 1761 | 1781 | 1777 | 1795 | 1795 | 1791 | 1558 |
| Q Serve(g_s), s | 16.3 | 23.7 | 23.8 | 10.2 | 22.9 | 23.0 | 16.9 | 24.0 | 24.1 | 13.0 | 30.5 | 15.6 |
| Cycle Q Clear(g_c), s | 16.3 | 23.7 | 23.8 | 10.2 | 22.9 | 23.0 | 16.9 | 24.0 | 24.1 | 13.0 | 30.5 | 15.6 |
| Prop In Lane | 1.00 | | 0.49 | 1.00 | | 0.32 | 1.00 | | 0.23 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 297 | 551 | 525 | 218 | 473 | 469 | 282 | 523 | 529 | 226 | 940 | 409 |
| V/C Ratio(X) | 0.84 | 0.72 | 0.72 | 0.72 | 0.78 | 0.78 | 0.91 | 0.75 | 0.75 | 0.88 | 0.98 | 0.57 |
| Avail Cap(c_a), veh/h | 297 | 551 | 525 | 218 | 473 | 469 | 297 | 523 | 529 | 266 | 940 | 409 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 48.4 | 36.7 | 36.8 | 50.7 | 40.7 | 40.8 | 49.6 | 38.3 | 38.3 | 51.5 | 43.9 | 38.4 |
| Incr Delay (d2), s/veh | 23.8 | 7.8 | 8.3 | 18.5 | 11.8 | 12.1 | 28.6 | 6.0 | 6.0 | 23.5 | 23.6 | 1.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 9.0 | 11.2 | 10.8 | 5.6 | 11.3 | 11.3 | 9.7 | 11.2 | 11.3 | 7.2 | 16.2 | 6.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 72.2 | 44.5 | 45.0 | 69.1 | 52.5 | 52.8 | 78.2 | 44.3 | 44.3 | 75.0 | 67.5 | 40.3 |
| LnGrp LOS | E | D | D | E | D | D | E | D | D | E | E | D |
| Approach Vol, veh/h | | 1023 | | | 889 | | | 1045 | | | 1349 | |
| Approach Delay, s/veh | | 51.4 | | | 55.6 | | | 52.6 | | | 63.9 | |
| Approach LOS | | D | | | E | | | D | | | E | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 18.7 | 42.0 | 19.1 | 40.1 | 24.0 | 36.7 | 23.0 | 36.3 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | 4.8 | 4.0 | * 4.8 | | | | |
| Max Green Setting (Gmax), s | 14.7 | 36.5 | 17.8 | 33.4 | 20.0 | 31.2 | 20.0 | * 32 | | | | |
| Max Q Clear Time (g_c+I1), s | 12.2 | 25.8 | 15.0 | 26.1 | 18.3 | 25.0 | 18.9 | 32.5 | | | | |
| Green Ext Time (p_c), s | 0.1 | 3.4 | 0.1 | 2.8 | 0.1 | 2.2 | 0.1 | 0.0 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 56.5 |
| HCM 6th LOS | E |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis

2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

05/07/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕ | ↕ | ↕ | ↕ | |
| Traffic Volume (vph) | 75 | 57 | 10 | 77 | 71 | 97 | 7 | 604 | 156 | 162 | 556 | 32 |
| Future Volume (vph) | 75 | 57 | 10 | 77 | 71 | 97 | 7 | 604 | 156 | 162 | 556 | 32 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | | 4.5 | | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | 4.5 | |
| Lane Util. Factor | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | |
| Frt | | 0.99 | | | 1.00 | 0.85 | | 1.00 | 0.85 | 1.00 | 0.99 | |
| Flt Protected | | 0.97 | | | 0.97 | 1.00 | | 1.00 | 1.00 | 0.95 | 1.00 | |
| Satd. Flow (prot) | | 1834 | | | 1798 | 1568 | | 1880 | 1599 | 1787 | 1866 | |
| Flt Permitted | | 0.76 | | | 0.82 | 1.00 | | 0.99 | 1.00 | 0.35 | 1.00 | |
| Satd. Flow (perm) | | 1423 | | | 1519 | 1568 | | 1870 | 1599 | 651 | 1866 | |
| Peak-hour factor, PHF | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Adj. Flow (vph) | 76 | 58 | 10 | 78 | 72 | 98 | 7 | 610 | 158 | 164 | 562 | 32 |
| RTOR Reduction (vph) | 0 | 5 | 0 | 0 | 0 | 78 | 0 | 0 | 68 | 0 | 3 | 0 |
| Lane Group Flow (vph) | 0 | 139 | 0 | 0 | 150 | 20 | 0 | 617 | 90 | 164 | 591 | 0 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 3% | 3% | 3% | 1% | 1% | 1% | 1% | 1% | 1% |
| Turn Type | Perm | NA | | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | 6 |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | 2 | 6 | | |
| Actuated Green, G (s) | | 8.2 | | | 8.2 | 8.2 | | 22.7 | 22.7 | 22.7 | | 22.7 |
| Effective Green, g (s) | | 8.2 | | | 8.2 | 8.2 | | 22.7 | 22.7 | 22.7 | | 22.7 |
| Actuated g/C Ratio | | 0.21 | | | 0.21 | 0.21 | | 0.57 | 0.57 | 0.57 | | 0.57 |
| Clearance Time (s) | | 4.5 | | | 4.5 | 4.5 | | 4.5 | 4.5 | 4.5 | | 4.5 |
| Vehicle Extension (s) | | 3.0 | | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | | 3.0 |
| Lane Grp Cap (vph) | | 292 | | | 312 | 322 | | 1063 | 909 | 370 | | 1061 |
| v/s Ratio Prot | | | | | | | | | | | | 0.32 |
| v/s Ratio Perm | | 0.10 | | | 0.10 | 0.01 | | 0.33 | 0.06 | 0.25 | | |
| v/c Ratio | | 0.48 | | | 0.48 | 0.06 | | 0.58 | 0.10 | 0.44 | | 0.56 |
| Uniform Delay, d1 | | 14.0 | | | 14.0 | 12.8 | | 5.5 | 3.9 | 5.0 | | 5.4 |
| Progression Factor | | 1.00 | | | 1.00 | 1.00 | | 1.00 | 1.00 | 1.00 | | 1.00 |
| Incremental Delay, d2 | | 1.2 | | | 1.2 | 0.1 | | 0.8 | 0.0 | 0.8 | | 0.6 |
| Delay (s) | | 15.2 | | | 15.1 | 12.8 | | 6.3 | 4.0 | 5.8 | | 6.1 |
| Level of Service | | B | | | B | B | | A | A | A | | A |
| Approach Delay (s) | | 15.2 | | | 14.2 | | | 5.9 | | | | 6.0 |
| Approach LOS | | B | | | B | | | A | | | | A |

Intersection Summary

| | | | |
|-----------------------------------|-------|---------------------------|-----|
| HCM 2000 Control Delay | 7.7 | HCM 2000 Level of Service | A |
| HCM 2000 Volume to Capacity ratio | 0.55 | | |
| Actuated Cycle Length (s) | 39.9 | Sum of lost time (s) | 9.0 |
| Intersection Capacity Utilization | 89.1% | ICU Level of Service | E |
| Analysis Period (min) | 15 | | |
| c Critical Lane Group | | | |

HCM 6th Signalized Intersection Summary

2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

05/07/2021



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↔ | | | ↔ | ↔ | | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Volume (veh/h) | 75 | 57 | 10 | 77 | 71 | 97 | 7 | 604 | 156 | 162 | 556 | 32 |
| Future Volume (veh/h) | 75 | 57 | 10 | 77 | 71 | 97 | 7 | 604 | 156 | 162 | 556 | 32 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1900 | 1900 | 1856 | 1856 | 1856 | 1885 | 1885 | 1885 | 1885 | 1885 | 1885 |
| Adj Flow Rate, veh/h | 76 | 58 | 10 | 78 | 72 | 98 | 7 | 610 | 158 | 164 | 562 | 32 |
| Peak Hour Factor | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 | 0.99 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cap, veh/h | 234 | 126 | 16 | 280 | 184 | 290 | 100 | 1077 | 918 | 452 | 1015 | 58 |
| Arrive On Green | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 |
| Sat Flow, veh/h | 468 | 683 | 86 | 723 | 999 | 1572 | 5 | 1875 | 1598 | 706 | 1766 | 101 |
| Grp Volume(v), veh/h | 144 | 0 | 0 | 150 | 0 | 98 | 617 | 0 | 158 | 164 | 0 | 594 |
| Grp Sat Flow(s),veh/h/ln | 1237 | 0 | 0 | 1722 | 0 | 1572 | 1879 | 0 | 1598 | 706 | 0 | 1867 |
| Q Serve(g_s), s | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 1.7 | 7.1 | 0.0 | 7.4 |
| Cycle Q Clear(g_c), s | 4.5 | 0.0 | 0.0 | 2.7 | 0.0 | 2.0 | 7.7 | 0.0 | 1.7 | 14.9 | 0.0 | 7.4 |
| Prop In Lane | 0.53 | | 0.07 | 0.52 | | 1.00 | 0.01 | | 1.00 | 1.00 | | 0.05 |
| Lane Grp Cap(c), veh/h | 375 | 0 | 0 | 464 | 0 | 290 | 1177 | 0 | 918 | 452 | 0 | 1073 |
| V/C Ratio(X) | 0.38 | 0.00 | 0.00 | 0.32 | 0.00 | 0.34 | 0.52 | 0.00 | 0.17 | 0.36 | 0.00 | 0.55 |
| Avail Cap(c_a), veh/h | 811 | 0 | 0 | 920 | 0 | 758 | 1751 | 0 | 1411 | 670 | 0 | 1649 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 14.2 | 0.0 | 0.0 | 13.5 | 0.0 | 13.2 | 5.0 | 0.0 | 3.8 | 9.7 | 0.0 | 5.0 |
| Incr Delay (d2), s/veh | 0.6 | 0.0 | 0.0 | 0.4 | 0.0 | 0.7 | 0.4 | 0.0 | 0.1 | 0.5 | 0.0 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 0.0 | 0.0 | 1.0 | 0.0 | 0.7 | 1.1 | 0.0 | 0.2 | 0.7 | 0.0 | 1.1 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 14.8 | 0.0 | 0.0 | 13.9 | 0.0 | 13.9 | 5.4 | 0.0 | 3.8 | 10.2 | 0.0 | 5.4 |
| LnGrp LOS | B | A | A | B | A | B | A | A | A | B | A | A |
| Approach Vol, veh/h | | 144 | | | 248 | | | 775 | | | | 758 |
| Approach Delay, s/veh | | 14.8 | | | 13.9 | | | 5.1 | | | | 6.4 |
| Approach LOS | | B | | | B | | | A | | | | A |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 26.0 | | 11.4 | | 26.0 | | 11.4 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 33.0 | | 18.0 | | 33.0 | | 18.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 9.7 | | 6.5 | | 16.9 | | 4.7 | | | | |
| Green Ext Time (p_c), s | | 4.6 | | 0.5 | | 4.6 | | 1.0 | | | | |

Intersection Summary

| | |
|--------------------|-----|
| HCM 6th Ctrl Delay | 7.5 |
| HCM 6th LOS | A |

Intersection

Intersection Delay, s/veh 72.3
 Intersection LOS F

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---------------------|------|------|------|------|------|------|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 446 | 28 | 25 | 417 | 288 | 323 |
| Future Vol, veh/h | 446 | 28 | 25 | 417 | 288 | 323 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles, % | 1 | 1 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 460 | 29 | 26 | 430 | 297 | 333 |
| Number of Lanes | 1 | 0 | 0 | 1 | 1 | 0 |

| Approach | EB | NB | SB |
|-------------------------------|------|------|-------|
| Opposing Approach | | SB | NB |
| Opposing Lanes | 0 | 1 | 1 |
| Conflicting Approach Left SB | | EB | |
| Conflicting Lanes Left | 1 | 1 | 0 |
| Conflicting Approach Right NB | | | EB |
| Conflicting Lanes Right | 1 | 0 | 1 |
| HCM Control Delay | 54.9 | 41.1 | 108.4 |
| HCM LOS | F | E | F |

| Lane | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, % | 6% | 94% | 0% |
| Vol Thru, % | 94% | 0% | 47% |
| Vol Right, % | 0% | 6% | 53% |
| Sign Control | Stop | Stop | Stop |
| Traffic Vol by Lane | 442 | 474 | 611 |
| LT Vol | 25 | 446 | 0 |
| Through Vol | 417 | 0 | 288 |
| RT Vol | 0 | 28 | 323 |
| Lane Flow Rate | 456 | 489 | 630 |
| Geometry Grp | 1 | 1 | 1 |
| Degree of Util (X) | 0.866 | 0.944 | 1.144 |
| Departure Headway (Hd) | 7.222 | 7.323 | 6.54 |
| Convergence, Y/N | Yes | Yes | Yes |
| Cap | 506 | 498 | 561 |
| Service Time | 5.222 | 5.323 | 4.54 |
| HCM Lane V/C Ratio | 0.901 | 0.982 | 1.123 |
| HCM Control Delay | 41.1 | 54.9 | 108.4 |
| HCM Lane LOS | E | F | F |
| HCM 95th-tile Q | 9.2 | 11.6 | 21.1 |

HCM 6th TWSC
 4: SE Foster Road & SE Richey Road

05/07/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|-------|------|------|
| Int Delay, s/veh | 18.4 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Y | | ↑ | ↑ | | ↑ |
| Traffic Vol, veh/h | 37 | 389 | 302 | 203 | 475 | 324 |
| Future Vol, veh/h | 37 | 389 | 302 | 203 | 475 | 324 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Yield | - | None |
| Storage Length | 0 | - | - | 50 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 1 | 1 | 3 | 3 |
| Mvmt Flow | 39 | 409 | 318 | 214 | 500 | 341 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 1659 | 318 | 0 | 0 | 318 |
| Stage 1 | 318 | - | - | - | - |
| Stage 2 | 1341 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.13 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 2.2 | 2.2 | - | - | 2.227 |
| Pot Cap-1 Maneuver | 135 | 1039 | - | - | 1236 |
| Stage 1 | 1116 | - | - | - | - |
| Stage 2 | 318 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 68 | 1039 | - | - | 1236 |
| Mov Cap-2 Maneuver | 68 | - | - | - | - |
| Stage 1 | 1116 | - | - | - | - |
| Stage 2 | 159 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 63.8 | 0 | 5.9 |
| HCM LOS | F | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 464 | 1236 |
| HCM Lane V/C Ratio | - | - | 0.966 | 0.405 |
| HCM Control Delay (s) | - | - | 63.8 | 9.9 |
| HCM Lane LOS | - | - | F | A |
| HCM 95th %tile Q(veh) | - | - | 12 | 2 |

HCM 6th TWSC
5: SE 190th Avenue & North Site Access

05/07/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.2 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 31 | 411 | 11 | 53 | 263 |
| Future Vol, veh/h | 7 | 31 | 411 | 11 | 53 | 263 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 8 | 34 | 447 | 12 | 58 | 286 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 855 | 453 | 0 | 0 | 459 |
| Stage 1 | 453 | - | - | - | - |
| Stage 2 | 402 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 |
| Pot Cap-1 Maneuver | 329 | 607 | - | - | 1102 |
| Stage 1 | 640 | - | - | - | - |
| Stage 2 | 676 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 308 | 607 | - | - | 1102 |
| Mov Cap-2 Maneuver | 308 | - | - | - | - |
| Stage 1 | 640 | - | - | - | - |
| Stage 2 | 633 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 12.6 | 0 | 1.4 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|------|-------|
| Capacity (veh/h) | - | - | 515 | 1102 |
| HCM Lane V/C Ratio | - | - | 0.08 | 0.052 |
| HCM Control Delay (s) | - | - | 12.6 | 8.4 |
| HCM Lane LOS | - | - | B | A |
| HCM 95th %tile Q(veh) | - | - | 0.3 | 0.2 |

HCM 6th TWSC
6: SE 190th Avenue & South Site Access

05/07/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | W | T | T | T | T |
| Traffic Vol, veh/h | 13 | 16 | 406 | 23 | 27 | 243 |
| Future Vol, veh/h | 13 | 16 | 406 | 23 | 27 | 243 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 17 | 441 | 25 | 29 | 264 |

| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 776 | 454 | 0 | 0 | 466 |
| Stage 1 | 454 | - | - | - | - |
| Stage 2 | 322 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 |
| Pot Cap-1 Maneuver | 366 | 606 | - | - | 1095 |
| Stage 1 | 640 | - | - | - | - |
| Stage 2 | 735 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 355 | 606 | - | - | 1095 |
| Mov Cap-2 Maneuver | 355 | - | - | - | - |
| Stage 1 | 640 | - | - | - | - |
| Stage 2 | 712 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 13.4 | 0 | 0.8 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 460 | 1095 |
| HCM Lane V/C Ratio | - | - | 0.069 | 0.027 |
| HCM Control Delay (s) | - | - | 13.4 | 8.4 |
| HCM Lane LOS | - | - | B | A |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0.1 |

Intersection

Intersection Delay, s/veh 13.7

Intersection LOS B

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---------------------|------|------|------|------|------|------|
| Lane Configurations | Y | | | Y | Y | Y |
| Traffic Vol, veh/h | 220 | 21 | 24 | 276 | 217 | 308 |
| Future Vol, veh/h | 220 | 21 | 24 | 276 | 217 | 308 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 5 | 5 | 4 | 4 | 3 | 3 |
| Mvmt Flow | 244 | 23 | 27 | 307 | 241 | 342 |
| Number of Lanes | 1 | 0 | 0 | 1 | 1 | 1 |

| Approach | EB | NB | SB |
|-------------------------------|------|------|------|
| Opposing Approach | | SB | NB |
| Opposing Lanes | 0 | 2 | 1 |
| Conflicting Approach Left SB | | EB | |
| Conflicting Lanes Left | 2 | 1 | 0 |
| Conflicting Approach Right NB | | | EB |
| Conflicting Lanes Right | 1 | 0 | 1 |
| HCM Control Delay | 14.5 | 14.8 | 12.7 |
| HCM LOS | B | B | B |

| Lane | NBLn1 | EBLn1 | SBLn1 | SBLn2 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 8% | 91% | 0% | 0% |
| Vol Thru, % | 92% | 0% | 100% | 0% |
| Vol Right, % | 0% | 9% | 0% | 100% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 300 | 241 | 217 | 308 |
| LT Vol | 24 | 220 | 0 | 0 |
| Through Vol | 276 | 0 | 217 | 0 |
| RT Vol | 0 | 21 | 0 | 308 |
| Lane Flow Rate | 333 | 268 | 241 | 342 |
| Geometry Grp | 5 | 2 | 7 | 7 |
| Degree of Util (X) | 0.525 | 0.461 | 0.394 | 0.492 |
| Departure Headway (Hd) | 5.672 | 6.197 | 5.885 | 5.175 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 637 | 581 | 610 | 695 |
| Service Time | 3.712 | 4.236 | 3.625 | 2.915 |
| HCM Lane V/C Ratio | 0.523 | 0.461 | 0.395 | 0.492 |
| HCM Control Delay | 14.8 | 14.5 | 12.4 | 12.9 |
| HCM Lane LOS | B | B | B | B |
| HCM 95th-tile Q | 3.1 | 2.4 | 1.9 | 2.7 |

HCM 6th TWSC
4: SE Foster Road & SE Richey Road

05/09/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|-------|------|------|
| Int Delay, s/veh | 6.5 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | ↗ | ↑ | ↗ | | ↘ |
| Traffic Vol, veh/h | 57 | 420 | 450 | 72 | 215 | 231 |
| Future Vol, veh/h | 57 | 420 | 450 | 72 | 215 | 231 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Yield | - | None |
| Storage Length | 200 | 0 | - | 50 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 3 | 3 | 2 | 2 | 4 | 4 |
| Mvmt Flow | 60 | 442 | 474 | 76 | 226 | 243 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 1169 | 474 | 0 | 0 | 474 | 0 |
| Stage 1 | 474 | - | - | - | - | - |
| Stage 2 | 695 | - | - | - | - | - |
| Critical Hdwy | 6.2 | 6.23 | - | - | 4.14 | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.43 | - | - | - | - | - |
| Follow-up Hdwy | 2.2 | 2.2 | - | - | 2.236 | - |
| Pot Cap-1 Maneuver | 306 | 830 | - | - | 1078 | - |
| Stage 1 | 922 | - | - | - | - | - |
| Stage 2 | 704 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 232 | 830 | - | - | 1078 | - |
| Mov Cap-2 Maneuver | 232 | - | - | - | - | - |
| Stage 1 | 922 | - | - | - | - | - |
| Stage 2 | 534 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 15.6 | 0 | 4.4 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|-------|-------|------|-----|
| Capacity (veh/h) | - | - | 232 | 830 | 1078 | - |
| HCM Lane V/C Ratio | - | - | 0.259 | 0.533 | 0.21 | - |
| HCM Control Delay (s) | - | - | 25.8 | 14.2 | 9.2 | 0 |
| HCM Lane LOS | - | - | D | B | A | A |
| HCM 95th %tile Q(veh) | - | - | 1 | 3.2 | 0.8 | - |

Intersection

Intersection Delay, s/veh 36
 Intersection LOS E

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---------------------|------|------|------|------|------|------|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 446 | 28 | 25 | 417 | 288 | 323 |
| Future Vol, veh/h | 446 | 28 | 25 | 417 | 288 | 323 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles, % | 1 | 1 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 460 | 29 | 26 | 430 | 297 | 333 |
| Number of Lanes | 1 | 0 | 0 | 1 | 1 | 1 |

| Approach | EB | NB | SB |
|-------------------------------|------|------|------|
| Opposing Approach | | SB | NB |
| Opposing Lanes | 0 | 2 | 1 |
| Conflicting Approach Left SB | | EB | |
| Conflicting Lanes Left | 2 | 1 | 0 |
| Conflicting Approach Right NB | | | EB |
| Conflicting Lanes Right | 1 | 0 | 1 |
| HCM Control Delay | 51.3 | 41.3 | 20.4 |
| HCM LOS | F | E | C |

| Lane | NBLn1 | EBLn1 | SBLn1 | SBLn2 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 6% | 94% | 0% | 0% |
| Vol Thru, % | 94% | 0% | 100% | 0% |
| Vol Right, % | 0% | 6% | 0% | 100% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 442 | 474 | 288 | 323 |
| LT Vol | 25 | 446 | 0 | 0 |
| Through Vol | 417 | 0 | 288 | 0 |
| RT Vol | 0 | 28 | 0 | 323 |
| Lane Flow Rate | 456 | 489 | 297 | 333 |
| Geometry Grp | 5 | 2 | 7 | 7 |
| Degree of Util (X) | 0.875 | 0.935 | 0.61 | 0.618 |
| Departure Headway (Hd) | 6.913 | 6.891 | 7.398 | 6.678 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 524 | 528 | 487 | 539 |
| Service Time | 4.96 | 4.932 | 5.157 | 4.436 |
| HCM Lane V/C Ratio | 0.87 | 0.926 | 0.61 | 0.618 |
| HCM Control Delay | 41.3 | 51.3 | 21.1 | 19.7 |
| HCM Lane LOS | E | F | C | C |
| HCM 95th-tile Q | 9.6 | 11.5 | 4 | 4.2 |

HCM 6th TWSC
 4: SE Foster Road & SE Richey Road

05/09/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|-------|------|------|
| Int Delay, s/veh | 7.2 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | ↘ | ↗ | ↑ | ↗ | | ↘ |
| Traffic Vol, veh/h | 37 | 389 | 302 | 203 | 475 | 324 |
| Future Vol, veh/h | 37 | 389 | 302 | 203 | 475 | 324 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Yield | - | None |
| Storage Length | 200 | 0 | - | 50 | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 1 | 1 | 3 | 3 |
| Mvmt Flow | 39 | 409 | 318 | 214 | 500 | 341 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|-------|---|
| Conflicting Flow All | 1659 | 318 | 0 | 0 | 318 | 0 |
| Stage 1 | 318 | - | - | - | - | - |
| Stage 2 | 1341 | - | - | - | - | - |
| Critical Hdwy | 5.7 | 6.22 | - | - | 4.13 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 2 | 3.318 | - | - | 2.227 | - |
| Pot Cap-1 Maneuver | 199 | 723 | - | - | 1236 | - |
| Stage 1 | 1217 | - | - | - | - | - |
| Stage 2 | 339 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 100 | 723 | - | - | 1236 | - |
| Mov Cap-2 Maneuver | 151 | - | - | - | - | - |
| Stage 1 | 1217 | - | - | - | - | - |
| Stage 2 | 170 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 18.1 | 0 | 5.9 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | WBLn2 | SBL | SBT |
|-----------------------|-----|-----|-------|-------|-------|-----|
| Capacity (veh/h) | - | - | 151 | 723 | 1236 | - |
| HCM Lane V/C Ratio | - | - | 0.258 | 0.566 | 0.405 | - |
| HCM Control Delay (s) | - | - | 36.9 | 16.3 | 9.9 | 0 |
| HCM Lane LOS | - | - | E | C | A | A |
| HCM 95th %tile Q(veh) | - | - | 1 | 3.6 | 2 | - |

Queuing and Blocking Report
 2024 Background plus Site Trips Mitigated - AM Peak

05/09/2021

Intersection: 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | NB | SB | SB | SB |
|-----------------------|-----|------|------|-----|-----|-----|-----|------|------|-----|-----|-----|
| Directions Served | L | T | TR | L | T | TR | L | T | TR | L | T | T |
| Maximum Queue (ft) | 267 | 234 | 200 | 133 | 264 | 268 | 266 | 327 | 328 | 94 | 182 | 145 |
| Average Queue (ft) | 128 | 110 | 93 | 44 | 151 | 135 | 143 | 192 | 203 | 34 | 97 | 52 |
| 95th Queue (ft) | 245 | 197 | 169 | 106 | 238 | 233 | 241 | 298 | 301 | 77 | 154 | 116 |
| Link Distance (ft) | | 1207 | 1207 | | 790 | 790 | | 2255 | 2255 | | 752 | 752 |
| Upstream Blk Time (%) | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | |
| Storage Bay Dist (ft) | 325 | | | 240 | | | 260 | | | 240 | | |
| Storage Blk Time (%) | 1 | 0 | | | 1 | | 2 | 1 | | | | 0 |
| Queuing Penalty (veh) | 3 | 0 | | | 1 | | 8 | 2 | | | | 0 |

Intersection: 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

| Movement | SB |
|-----------------------|-----|
| Directions Served | R |
| Maximum Queue (ft) | 103 |
| Average Queue (ft) | 48 |
| 95th Queue (ft) | 85 |
| Link Distance (ft) | |
| Upstream Blk Time (%) | |
| Queuing Penalty (veh) | |
| Storage Bay Dist (ft) | 146 |
| Storage Blk Time (%) | 0 |
| Queuing Penalty (veh) | 0 |

Intersection: 2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

| Movement | EB | WB | WB | NB | NB | SB | SB |
|-----------------------|-----|-----|-----|-----|-----|-----|------|
| Directions Served | LTR | LT | R | LT | R | L | TR |
| Maximum Queue (ft) | 76 | 114 | 120 | 177 | 93 | 162 | 252 |
| Average Queue (ft) | 25 | 57 | 61 | 87 | 24 | 69 | 86 |
| 95th Queue (ft) | 59 | 98 | 106 | 145 | 68 | 135 | 176 |
| Link Distance (ft) | 586 | 461 | | 718 | | | 3808 |
| Upstream Blk Time (%) | | | | | | | |
| Queuing Penalty (veh) | | | | | | | |
| Storage Bay Dist (ft) | | | 105 | | 145 | 140 | |
| Storage Blk Time (%) | | 0 | 0 | 0 | 0 | 1 | 1 |
| Queuing Penalty (veh) | | 1 | 1 | 0 | 0 | 4 | 2 |

Intersection: 3: SE 190th Avenue & SE Richey Road

| Movement | EB | NB | SB | SB |
|-----------------------|------|-----|-----|-----|
| Directions Served | LR | LT | T | R |
| Maximum Queue (ft) | 100 | 104 | 139 | 114 |
| Average Queue (ft) | 46 | 60 | 53 | 59 |
| 95th Queue (ft) | 80 | 95 | 96 | 90 |
| Link Distance (ft) | 1984 | 833 | 500 | |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | 200 |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Intersection: 4: SE Foster Road & SE Richey Road

| Movement | WB | WB | NB | NB | SB |
|-----------------------|-----|-----|-----|----|------|
| Directions Served | L | R | T | R | LT |
| Maximum Queue (ft) | 202 | 378 | 65 | 65 | 184 |
| Average Queue (ft) | 59 | 160 | 7 | 50 | 65 |
| 95th Queue (ft) | 161 | 300 | 36 | 74 | 133 |
| Link Distance (ft) | | 937 | 835 | | 1150 |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | 200 | | | 50 | |
| Storage Blk Time (%) | 0 | 10 | 0 | 1 | |
| Queuing Penalty (veh) | 0 | 6 | 0 | 3 | |

Intersection: 5: SE 190th Avenue & North Site Access

| Movement | WB | SB |
|-----------------------|-----|-----|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 64 | 43 |
| Average Queue (ft) | 28 | 3 |
| 95th Queue (ft) | 53 | 19 |
| Link Distance (ft) | 603 | 833 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

Intersection: 6: SE 190th Avenue & South Site Access

| Movement | WB | SB |
|-----------------------|-----|-----|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 54 | 36 |
| Average Queue (ft) | 26 | 2 |
| 95th Queue (ft) | 48 | 15 |
| Link Distance (ft) | 598 | 394 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

Network Summary

Network wide Queuing Penalty: 29

Queuing and Blocking Report
 2024 Background plus Site Trips Mitigated - PM Peak

05/09/2021

Intersection: 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | NB | SB | SB | SB |
|-----------------------|-----|------|------|-----|-----|-----|-----|------|------|-----|-----|-----|
| Directions Served | L | T | TR | L | T | TR | L | T | TR | L | T | T |
| Maximum Queue (ft) | 291 | 283 | 321 | 249 | 342 | 350 | 285 | 424 | 395 | 265 | 711 | 688 |
| Average Queue (ft) | 160 | 193 | 210 | 107 | 219 | 198 | 189 | 231 | 236 | 221 | 490 | 460 |
| 95th Queue (ft) | 267 | 265 | 294 | 213 | 316 | 299 | 300 | 363 | 349 | 334 | 772 | 731 |
| Link Distance (ft) | | 1207 | 1207 | | 790 | 790 | | 2255 | 2255 | | 752 | 752 |
| Upstream Blk Time (%) | | | | | | | | | | | 4 | 2 |
| Queuing Penalty (veh) | | | | | | | | | | | 0 | 0 |
| Storage Bay Dist (ft) | 325 | | | 240 | | | 260 | | | 240 | | |
| Storage Blk Time (%) | 0 | 0 | | 0 | 5 | | 5 | 4 | | 5 | 42 | 52 |
| Queuing Penalty (veh) | 0 | 0 | | 0 | 8 | | 16 | 9 | | 22 | 79 | 117 |

Intersection: 1: SE Highland Drive/SE 182nd Avenue & SE Powell Blvd

| Movement | SB |
|-----------------------|-----|
| Directions Served | R |
| Maximum Queue (ft) | 171 |
| Average Queue (ft) | 133 |
| 95th Queue (ft) | 225 |
| Link Distance (ft) | |
| Upstream Blk Time (%) | |
| Queuing Penalty (veh) | |
| Storage Bay Dist (ft) | 146 |
| Storage Blk Time (%) | 0 |
| Queuing Penalty (veh) | 2 |

Intersection: 2: SE 190th Avenue/SW Pleasant View Dr & SE Giese Road/SW Butler Road

| Movement | EB | WB | WB | NB | NB | SB | SB | B15 | B15 |
|-----------------------|-----|-----|-----|-----|-----|-----|------|------|------|
| Directions Served | LTR | LT | R | LT | R | L | TR | T | |
| Maximum Queue (ft) | 118 | 124 | 90 | 275 | 165 | 153 | 368 | 390 | 129 |
| Average Queue (ft) | 55 | 61 | 36 | 108 | 38 | 79 | 120 | 14 | 4 |
| 95th Queue (ft) | 98 | 107 | 68 | 206 | 98 | 146 | 270 | 165 | 87 |
| Link Distance (ft) | 586 | 431 | | 717 | | | 3808 | 2255 | 2255 |
| Upstream Blk Time (%) | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | |
| Storage Bay Dist (ft) | | | 105 | | 145 | 140 | | | |
| Storage Blk Time (%) | | 1 | 0 | 2 | 0 | 3 | 2 | | |
| Queuing Penalty (veh) | | 1 | 0 | 3 | 0 | 15 | 3 | | |

Intersection: 3: SE 190th Avenue & SE Richey Road

| Movement | EB | B16 | NB | SB | SB |
|-----------------------|------|-----|-----|-----|-----|
| Directions Served | LR | T | LT | T | R |
| Maximum Queue (ft) | 351 | 391 | 288 | 146 | 124 |
| Average Queue (ft) | 137 | 13 | 119 | 73 | 69 |
| 95th Queue (ft) | 277 | 201 | 216 | 118 | 105 |
| Link Distance (ft) | 1984 | 937 | 863 | 510 | |
| Upstream Blk Time (%) | | 0 | | | |
| Queuing Penalty (veh) | | 0 | | | |
| Storage Bay Dist (ft) | | | | | 200 |
| Storage Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |

Intersection: 4: SE Foster Road & SE Richey Road

| Movement | WB | WB | NB | NB | SB |
|-----------------------|-----|-----|-----|----|------|
| Directions Served | L | R | T | R | LT |
| Maximum Queue (ft) | 124 | 206 | 66 | 65 | 303 |
| Average Queue (ft) | 38 | 96 | 20 | 56 | 107 |
| 95th Queue (ft) | 88 | 168 | 61 | 62 | 224 |
| Link Distance (ft) | | 937 | 835 | | 1150 |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | 200 | | | 50 | |
| Storage Blk Time (%) | | 0 | 0 | 2 | |
| Queuing Penalty (veh) | | 0 | 1 | 6 | |

Intersection: 5: SE 190th Avenue & North Site Access

| Movement | WB | SB |
|-----------------------|-----|-----|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 53 | 53 |
| Average Queue (ft) | 23 | 15 |
| 95th Queue (ft) | 49 | 43 |
| Link Distance (ft) | 677 | 863 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

Intersection: 6: SE 190th Avenue & South Site Access

| Movement | WB | SB |
|-----------------------|-----|-----|
| Directions Served | LR | LT |
| Maximum Queue (ft) | 49 | 54 |
| Average Queue (ft) | 20 | 8 |
| 95th Queue (ft) | 47 | 33 |
| Link Distance (ft) | 672 | 354 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

Network Summary

Network wide Queuing Penalty: 283

CDS380
05/05/2021

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

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019

CITY OF GRESHAM, MULTNOMAH COUNTY

1 - 5 of 59 Crash records shown.

| SER# | P E R J S W DATE | CLASS | CITY STREET | RD CHAR | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | OWNER | MOVE | FROM | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT | EVENT | CAUSE | | |
|--------|------------------|------------|---------------|---------------|---------------|------------|-------|-------|---------|----------|----------|-------|---------|---------|---------|---------|---------|-------|-------|-------|----------|-------|-----|--------|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | RD CHAR | (MEDIAN) | INT-REL | OFFRD | WTHR | CRASH | TRLR QTY | OWNER | MOVE | FROM | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT | EVENT | CAUSE | | | |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | RD CHAR | LESS | TRAF- | RNDBT | SURF | COLL | DRVWY | LIGHT | SVRTY | VH TYPE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT | EVENT | CAUSE | | | |
| UNLOC? | D C S V L K LAT | LONG | LSR | LOCIN | (#LANES) | CONTL | DRVWY | LIGHT | SVRTY | UNKN | S-1STOP | 0 | STRGHT | 01 | UNKN | 0 | STRGHT | 01 | DRVR | NONE | 0 | M | UNK | UNK |
| 12145 | N N N | 11/03/2015 | 14 | W POWELL BLVD | INTER | CROSS | N | UNK | S-1STOP | 01 | UNKN | 0 | STRGHT | 01 | DRVR | NONE | 0 | M | UNK | UNK | 026 | 000 | 00 | 29 |
| NONE | TU | 0 | | 182ND AVE | UN | 0 | | UNK | REAR | UNKN | UNKN | UN-UN | UN-UN | 01 | DRVR | NONE | 0 | M | UNK | UNK | 026 | 000 | 00 | 29 |
| N | UNK | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | | |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | | |
| 02800 | N N N | 02/23/2016 | 14 | W POWELL BLVD | INTER | CROSS | N | UNK | S-1STOP | 01 | NONE | 9 | STRGHT | 01 | DRVR | INJC | 24 | M | OR-Y | OR<25 | 000 | 000 | 00 | 29 |
| NONE | TU | 0 | | 182ND AVE | UN | TRF SIGNAL | N | UNK | REAR | N/A | UN-UN | UN-UN | UN-UN | 01 | DRVR | NONE | 0 | 0 | UNK | UNK | 000 | 000 | 00 | 00 |
| N | 6A | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | | |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | | |
| 03448 | N N N | 04/26/2018 | 14 | W POWELL BLVD | INTER | CROSS | N | UNK | S-1STOP | 01 | NONE | 9 | STRGHT | 01 | DRVR | NONE | 0 | 0 | UNK | UNK | 000 | 000 | 00 | 29 |
| NONE | TH | 0 | | 182ND AVE | UN | TRF SIGNAL | N | UNK | REAR | N/A | UN-UN | UN-UN | UN-UN | 01 | DRVR | NONE | 0 | 0 | UNK | UNK | 000 | 000 | 00 | 00 |
| N | 4P | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | | |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | | |
| 10781 | N N N | 11/21/2018 | 14 | W POWELL BLVD | INTER | CROSS | N | UNK | S-1STOP | 01 | NONE | 9 | STRGHT | 01 | DRVR | NONE | 0 | 0 | UNK | UNK | 000 | 000 | 00 | 29 |
| NONE | WE | 0 | | 182ND AVE | UN | TRF SIGNAL | N | UNK | REAR | N/A | UN-UN | UN-UN | UN-UN | 01 | DRVR | NONE | 0 | 0 | UNK | UNK | 000 | 000 | 00 | 00 |
| N | 6P | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | | |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | | |
| 03048 | Y Y N | N N | 03/22/2015 | 14 | W POWELL BLVD | INTER | CROSS | N | O-1STOP | 01 | NONE | 0 | STRGHT | 01 | DRVR | NONE | 0 | 0 | UNK | UNK | 000 | 000 | 00 | 05, 01 |
| NONE | SU | 0 | | 182ND AVE | N | TRF SIGNAL | N | DRY | SS-M | PRVTE | S-N | UN-UN | UN-UN | 01 | DRVR | NONE | 32 | M | OR-Y | OR<25 | 044, 047 | 000 | 00 | 00 |
| N | 1A | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | | |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | | |

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

CITY OF GRESHAM, MULTNOMAH COUNTY

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019

URBAN NON-SYSTEM CRASH LISTING

6 - 9 of 59 Crash records shown.

| SER# | P R J S W DATE | CLASS | CITY STREET | RD CHAR | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | OWNER | MOVE | FROM | PH | TYPE | SVRTY | E X RES | LOC | ERROR | ACT | EVENT | CAUSE |
|--------|----------------|------------|-------------|---------------|----------|---------|------------|------|----------|----------|----------|-----------|--------|---------|------|------|-------|---------|-------|-------|-----|-------|-------|
| 04239 | N N N | 04/22/2015 | 14 | W POWELL BLVD | INTER | CROSS | N | CLR | S-1STOP | 01 NONE | 0 | STRGHT | N -S | 01 DRVR | NONE | 00 M | OR-Y | OR<25 | | 026 | 000 | 000 | 29 |
| NONE | WE | 0 | | | N | | TRF SIGNAL | N | DRY | REAR | PRVTE | PSNGR CAR | N -S | | | | | | | | | | 00 |
| N | 5P | | | | 06 | 0 | | | N | DAY | PDO | | | | | | | | | | | | 29 |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | 00 |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | 00 |
| 06946 | N N N | 06/30/2015 | 14 | W POWELL BLVD | INTER | CROSS | N | CLR | ANGL-STP | 01 NONE | 0 | TURN-L | TURN-N | 01 DRVR | NONE | 20 M | OR-Y | OR<25 | | | 000 | 000 | 08 |
| NO RPT | TU | 0 | | | N | | TRF SIGNAL | N | DRY | TURN | PRVTE | PSNGR CAR | NW-N | | | | | | | | | | 00 |
| N | 9A | | | | 06 | 0 | | | N | DAY | PDO | | | | | | | | | | | | 08 |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | 00 |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | 00 |
| 00051 | N N N | 01/03/2016 | 14 | W POWELL BLVD | INTER | CROSS | N | SNOW | S-1STOP | 01 NONE | 0 | STRGHT | STRGHT | 01 DRVR | NONE | 49 M | OR-Y | OR<25 | | | 000 | 000 | 29 |
| NONE | SU | 0 | | | N | | TRF SIGNAL | N | ICE | REAR | PRVTE | PSNGR CAR | N -S | | | | | | | | | | 00 |
| N | 2P | | | | 06 | 0 | | | N | DAY | INJ | | | | | | | | | | | | 29 |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | 00 |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | 00 |
| 00051 | N N N | 12/16/2016 | 14 | W POWELL BLVD | INTER | CROSS | N | CLD | S-1STOP | 01 NONE | 0 | STRGHT | STRGHT | 01 DRVR | NONE | 17 M | NONE | NONE | OR<25 | | | 000 | 32,29 |
| CITY | FR | 0 | | | N | | TRF SIGNAL | N | ICE | REAR | UNKN | PSNGR CAR | N -S | | | | | | | | | | 00 |
| N | 12P | | | | 06 | 0 | | | N | DAY | INJ | | | | | | | | | | | | 00 |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | 32,29 |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | 00 |
| 15312 | N N N | 12/16/2016 | 14 | W POWELL BLVD | INTER | CROSS | N | CLD | S-1STOP | 01 NONE | 0 | STRGHT | STRGHT | 01 DRVR | NONE | 17 M | NONE | NONE | OR<25 | | | 000 | 32,29 |
| CITY | FR | 0 | | | N | | TRF SIGNAL | N | ICE | REAR | UNKN | PSNGR CAR | N -S | | | | | | | | | | 00 |
| N | 12P | | | | 06 | 0 | | | N | DAY | INJ | | | | | | | | | | | | 00 |
| N | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | | | | | | | | 32,29 |
| N | 31.97 | | | | | | | | | | | | | | | | | | | | | | 00 |

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

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING
CITY OF GRESHAM, MULTNOMAH COUNTY
POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
10 - 13 of 59 Crash records shown.

| SR# | P E R I O D | D A Y | C L A S S | C I T Y | C I T Y | C I T Y | I N T - T Y P E | R D | C H A R | C R A S H | C O L L | S P C L | A S | E L I C N S | P E D | C A U S E | | | | | | | | | |
|-------|-------------|-------------|-----------|---------|-----------|-------------|-----------------|-------|---------|-----------|---------|---------|-------|-------------|---------|-----------|------|-----|-----|-------|---------|-----|----|-------------|-------|
| Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | Y N N | | | | | | | | | |
| 15860 | Y | N | N | 14 | W | POWELL BLVD | CROSS | N | INTER | N | SNOW | 01 | NONE | 0 | STRGHT | 013 | 01 | | | | | | | | |
| NONE | NONE | TH | 0 | | 182ND AVE | | TRF SIGNAL | N | N | ICE | REAR | PRVTE | N | -S | 01 | DRVR | INJC | 19 | F | OR-Y | 000 | 00 | 00 | | |
| N | N | 45 29 25.22 | -122.28 | 31.97 | | | | 06 | 06 | N | DAY | INJ | PSNGR | CAR | 026,047 | OR<25 | | | | | 000 | 00 | 00 | | |
| NONE | NONE | | | | | | | | | 02 | NONE | 0 | STOP | | 01 | DRVR | NONE | 00 | M | UNK | 000 | 00 | 00 | | |
| N | N | | | | | | | | | PRVTE | N | -S | PSNGR | CAR | 011 | 013 | | | | | 000 | 00 | 00 | | |
| N | N | | | | | | | | | 03 | NONE | 0 | STOP | | 01 | DRVR | INJC | 44 | M | OTH-Y | 000 | 00 | 00 | | |
| N | N | | | | | | | | | PRVTE | N | -S | PSNGR | CAR | 022 | | | | | | 000 | 00 | 00 | | |
| N | N | | | | | | | | | 03 | NONE | 0 | STOP | | 02 | PSNG | INJC | 58 | F | OR<25 | 000 | 00 | 00 | | |
| N | N | | | | | | | | | PRVTE | N | -S | PSNGR | CAR | 022 | | | | | | 000 | 00 | 00 | | |
| 05416 | Y | N | N | 14 | W | POWELL BLVD | CROSS | N | INTER | N | CLR | O-1STOP | 01 | NONE | 9 | BACK | | | | | | | | 10 | |
| NONE | NONE | TU | 0 | | 182ND AVE | | TRF SIGNAL | N | N | DRY | BACK | N/A | S | -N | 01 | DRVR | NONE | 00 | UNK | UNK | 000 | 00 | 00 | | |
| N | N | 45 29 25.22 | -122.28 | 31.97 | | | | 06 | 06 | N | DAY | PDO | PSNGR | CAR | | | | | | | 000 | 00 | 00 | | |
| N | N | | | | | | | | | 02 | NONE | 9 | STOP | | 01 | DRVR | NONE | 00 | UNK | UNK | | | | | |
| N | N | | | | | | | | | N/A | N | -S | PSNGR | CAR | 011 | | | | | | 000 | 00 | 00 | | |
| N | N | | | | | | | | | 02 | NONE | 9 | STOP | | 01 | DRVR | NONE | 00 | UNK | UNK | 000 | 00 | 00 | | |
| N | N | | | | | | | | | N/A | N | -S | PSNGR | CAR | 000 | | | | | | 000 | 00 | 00 | | |
| 12397 | Y | N | N | 14 | W | POWELL BLVD | CROSS | N | INTER | N | RAIN | S-1STOP | 01 | NONE | 9 | STRGHT | | | | | | | | 29 | |
| NONE | NONE | FR | 0 | | 182ND AVE | | TRF SIGNAL | N | N | WET | REAR | N/A | S | -N | 01 | DRVR | NONE | 00 | UNK | UNK | 000 | 00 | 00 | | |
| N | N | 45 29 25.22 | -122.28 | 31.97 | | | | 05 | 05 | N | DUSK | PDO | PSNGR | CAR | | | | | | | 000 | 00 | 00 | | |
| N | N | | | | | | | | | 02 | NONE | 9 | STOP | | 01 | DRVR | NONE | 00 | UNK | UNK | | | | | |
| N | N | | | | | | | | | N/A | N | -S | PSNGR | CAR | 011 | | | | | | 000 | 00 | 00 | | |
| N | N | | | | | | | | | OTH | BUS | 01 | DRVR | NONE | 00 | UNK | UNK | UNK | | | 000 | 00 | 00 | | |
| 00337 | Y | N | N | 14 | W | POWELL BLVD | CROSS | N | INTER | N | SNOW | FIX OBJ | 01 | NONE | 0 | TURN-R | | | | | | | | 124,044,013 | 08,01 |
| NONE | NONE | WE | 0 | | 182ND AVE | | TRF SIGNAL | N | N | ICE | FIX | PRVTE | SE | -N | 01 | DRVR | NONE | 33 | M | OR-Y | 000 | 00 | 00 | | |
| N | N | 10A | | | | | | 05 | 05 | N | DAY | INJ | PSNGR | CAR | | | | | | | 000,047 | 000 | 00 | 00 | |
| N | N | | | | | | | | | 02 | NONE | 0 | STOP | | 01 | DRVR | INJC | 55 | M | OR-Y | 000 | 00 | 00 | | |
| N | N | | | | | | | | | PRVTE | N | -S | PSNGR | CAR | 022 | | | | | | 000 | 00 | 00 | | |
| N | N | | | | | | | | | 02 | NONE | 0 | STOP | | 01 | DRVR | INJC | 55 | M | OR-Y | 000 | 00 | 00 | | |
| N | N | | | | | | | | | PSNGR | CAR | 022 | | | | | | | | | 000 | 00 | 00 | | |

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

OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019

14 - 16 of 59 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | INVEST | RD DFT | UNLOC? | Y N N N | DATE | CLASS | CITY STREET | RD CHAR | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | OWNER | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT_EVENT | CAUSE |
|-------|--------|--------|--------|---------|------------|-------|---------------|---------|------------|---------|-------|------|---------|-----------|----------|-------|---------|-------|---------|------|---------|-----------|-------|
| 05228 | N | N | N | N | 06/13/2019 | 14 | W POWELL BLVD | N | CROSS | N | N | CLR | S-1STOP | 01 NONE | 0 | | 01 | | | | 013 | 01 | |
| | | | | | | | 182ND AVE | N | TRF SIGNAL | N | N | DRY | REAR | PRVTE | N -S | | 01 | DRVR | NONE | 46 M | OR-Y | 000 | 00 |
| | | | | | | | | 06 | 0 | | N | DLIT | INJ | PSNGR CAR | | | | | | | 047,026 | 000 | 01 |
| | | | | | | | | | | | | | | 02 NONE | 0 | | | | | | 000 | 00 | |
| | | | | | | | | | | | | | | PRVTE | N -S | | 01 | DRVR | INJC | 57 M | OR-Y | 011 | 013 |
| | | | | | | | | | | | | | | PSNGR CAR | | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | 03 NONE | 0 | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | PRVTE | N -S | | 01 | DRVR | INJC | 36 M | OR-Y | 022 | 013 |
| | | | | | | | | | | | | | | PSNGR CAR | | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | 03 NONE | 0 | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | PRVTE | N -S | | 02 | PSNG | INJC | 27 F | OR-Y | 022 | 013 |
| | | | | | | | | | | | | | | PSNGR CAR | | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | 04 NONE | 0 | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | PRVTE | N -S | | 01 | DRVR | NONE | 42 M | OR-Y | 022 | 000 |
| | | | | | | | | | | | | | | PSNGR CAR | | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | 01 NONE | 9 | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | N/A | N -S | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | PSNGR CAR | | | | | | | | | |
| | | | | | | | | | | | | | | 02 NONE | 9 | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | N/A | N -S | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | PSNGR CAR | | | | | | | | | |
| | | | | | | | | | | | | | | 01 NONE | 0 | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | TURN-R | | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | E -NW | | | | | | | 046 | 000 | 00 |
| | | | | | | | | | | | | | | PSNGR CAR | | | | | | | 029 | 000 | 02 |
| | | | | | | | | | | | | | | 01 | DRVR | NONE | 48 F | NONE | OR<25 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | STRGHT | 01 | PED | INJB | 26 F | I XWLK | 000 | 035 | 000 | 00 |
| | | | | | | | | | | | | | | NW | SE | | | | | | | | |
| | | | | | | | | | | | | | | 01 NONE | 0 | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | STRGHT | | | | | | | | | |
| | | | | | | | | | | | | | | E -W | | | | | | | 000 | 000 | 00 |
| | | | | | | | | | | | | | | PSNGR CAR | | | | | | | 043,026 | 000 | 07,29 |
| | | | | | | | | | | | | | | 01 | DRVR | NONE | 35 M | SUSP | OR<25 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |

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

OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT
URBAN NON-SYSTEM CRASH LISTING
POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
17 - 21 of 59 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | RD CHAR | RD DFT | E A U I C O DAY | RD DFT | FROM | LONG | UNLOC? | D C S V L K LAT | LOCIN | TRAFFIC | CONTL | DRVMV | DRVMV | LIGHT | SVRTY | VEH TYPE | SPCL USE | TRLR QTY | OWNER | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT_EVENT | CAUSE | | |
|-------|----------------|-------|-------------|----------|---------------|---------|--------|-----------------|--------|---------|------|--------|-----------------|--------|---------|-------|-------|-------|-------|-------|----------|----------|----------|-------|---------|-------|---------|-----|-------|-----------|-------|--|-------|
| 06151 | N N N | N N | 07/01/2019 | 14 | W POWELL BLVD | INTER | CROSS | N | CL | S-1STOP | 01 | NONE | 9 | STRGHT | | | | | | | | | | | | | | | | | | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| 05461 | N N N | N N | 05/28/2015 | 14 | W POWELL BLVD | INTER | CROSS | N | CL | S-1STOP | 01 | NONE | 0 | STRGHT | | | | | | | | | | | | | | | | | | | 29 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 29 |
| 10338 | N N N | N N | 09/23/2015 | 14 | W POWELL BLVD | INTER | CROSS | N | CL | S-1STOP | 01 | NONE | 0 | STRGHT | | | | | | | | | | | | | | | | | | | 07,27 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 07,27 |
| 08529 | N N N | N N | 08/07/2017 | 14 | W POWELL BLVD | INTER | CROSS | N | CL | S-1STOP | 01 | NONE | 9 | STRGHT | | | | | | | | | | | | | | | | | | | 29 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| 11342 | N N N | N N | 10/15/2017 | 14 | W POWELL BLVD | INTER | CROSS | N | CL | S-1STOP | 01 | NONE | 9 | STRGHT | | | | | | | | | | | | | | | | | | | 29 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 00 |

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

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

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
22 - 24 of 59 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| S SER# | D P INVEST RD DPT | M R E LE D | J U L C | S A E | W I O N H R | DATE | CLASS DIST FROM | CITY STREET FIRST STREET SECOND STREET LRS | RD CHAR DIRECT LRS | INT-TYPE (MEDIAN) LESS (LANES) | INT-REL TRAF- CONTL | OFFRD RNDBT | WTHR SURF | CRASH COLL | DRVMY LIGHT | SVRTY | VH TYPE 02 N/A SE-NW PSNGR CAR | SPLC USE TRLR QTY OWNER | MOVE FROM | TO STOP SE-NW | PH TYPE 01 01 01 01 02 02 04 | SVRTY DRVR DRVR DRVR PSNG PSNG PSNG | E NONE NONE NONE NONE NONE NONE | X 0 0 0 0 0 0 | RES UNK UNK UNK UNK UNK UNK | LOC UNK UNK UNK UNK UNK UNK | ERROR 000 026 000 000 000 000 | ACT EVENT 011 000 011 000 011 000 011 000 | CAUSE 00 00 00 00 00 00 00 |
|-----------|----------------------------|------------------------|------------------|-------------|----------------------------|-------|-----------------------|---|--------------------------|---|---------------------------|----------------|--------------|---------------|----------------|-------|--|-------------------------------|--------------|---------------------|---|---|---|---------------------------------|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 00479 | N | N | N | 01/19 | 2018 | 14 | W POWELL BLVD | INTER | CROSS | N | N | N | RAIN | S-1STOP | 01 | NONE | 0 | STRGHT | 01 | DRVR | NONE | 00 | Unk | UNK | 000 | 000 | 011 | 00 | |
| | N | | | FR | | 0 | 182ND AVE | SE | | TRF SIGNAL | N | WET | REAR | | UNKN | | SE-NW | | | | | | | | | | | 000 | 00 |
| | N | | | 8P | | 45:29 | 25.22 | -122 | 28 | 06 | 0 | N | DLIT | INJ | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk | UNK | 026 | 000 | 000 | 000 | 000 | 000 | 29 |
| | N | | | 45:29 | | 31.97 | | | | | | | | | 02 | NONE | 0 | STOP | 02 | DRVR | INJC | 47 | M | OR-Y | OR<25 | | | 011 | 00 |
| | N | | | | | | | | | | | | | | 02 | NONE | 0 | STOP | 02 | PSNG | INJC | 44 | F | | | | | 000 | 00 |
| 00519 | N | N | N | 01/20 | 2018 | 14 | W POWELL BLVD | INTER | CROSS | N | N | N | CLR | S-1STOP | 01 | NONE | 0 | STRGHT | 01 | DRVR | NONE | 26 | M | OR-Y | OR<25 | | | 004 | 29 |
| | N | | | SA | | 0 | 182ND AVE | SE | | TRF SIGNAL | N | DRY | REAR | | PRVTE | | SE-NW | | | | | | | | | | | 000 | 00 |
| | N | | | 12P | | 45:29 | 25.22 | -122 | 28 | 06 | 0 | N | DAY | INJ | PSNGR CAR | | 01 | DRVR | NONE | 00 | OR-Y | OR<25 | 026 | 000 | 000 | 000 | 000 | 000 | 29 |
| | N | | | 45:29 | | 31.95 | | | | | | | | | 02 | NONE | 0 | STOP | 02 | DRVR | NONE | 32 | M | OR-Y | OR<25 | | | 011 | 004 |
| | N | | | | | | | | | | | | | | 02 | NONE | 0 | STOP | 02 | PSNG | INJC | 25 | F | | | | | 000 | 00 |
| | N | | | | | | | | | | | | | | 02 | NONE | 0 | STOP | 03 | PSNG | NONE | 01 | M | | | | | 011 | 004 |
| | N | | | | | | | | | | | | | | 02 | NONE | 0 | STOP | 04 | PSNG | NONE | 04 | M | | | | | 000 | 00 |
| 03202 | N | N | N | 04/19 | 2018 | 14 | W POWELL BLVD | INTER | CROSS | N | N | N | CLR | S-1STOP | 01 | NONE | 0 | STRGHT | 01 | DRVR | NONE | 62 | M | OR-Y | OR<25 | | | 013 | 07 |
| | N | | | TH | | 0 | 182ND AVE | SE | | TRF SIGNAL | N | DRY | REAR | | PRVTE | | SE-NW | | | | | | | | | | | 000 | 00 |
| | N | | | 6A | | 45:29 | 25.22 | -122 | 28 | 06 | 0 | N | DAY | INJ | PSNGR CAR | | 01 | DRVR | NONE | 00 | OR-Y | OR<25 | 026 | 000 | 000 | 000 | 000 | 000 | 07 |
| | N | | | 45:29 | | 31.97 | | | | | | | | | 02 | NONE | 0 | STOP | 01 | DRVR | INJC | 43 | M | OR-Y | OR<25 | | | 011 | 013 |
| | N | | | | | | | | | | | | | | 02 | NONE | 0 | STOP | 01 | DRVR | INJC | 43 | M | OR-Y | OR<25 | | | 000 | 00 |

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

CDS380 05/05/2021 OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019

25 - 29 of 59 Crash records shown.

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | RD CHAR | RD CHAR | INT-TYPE | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | A S | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | |
|--------|------------------|-------------|---------------|---------------|------------|---------|---------|----------|-------|----------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | DRY | TURN | N/A | TURN | DRY | TURN | TRNGR CAR | PSNGR CAR | PSNGR CAR | PSNGR CAR | PSNGR CAR | PSNGR CAR | PSNGR CAR | PSNGR CAR | PSNGR CAR | PSNGR CAR | |
| RD DFT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVMY | LIGHT | SVRTY | DRVMY | LIGHT | SVRTY | 03 NONE | 04 NONE | 05 NONE | 06 NONE | 07 NONE | 08 NONE | 09 NONE | 10 NONE | 11 NONE | 12 NONE | |
| UNLOC? | D C S V L K LAT | LONG | LR | (#LANES) | CONTL | LOCIN | LOCIN | LOCIN | LOCIN | LOCIN | LOCIN | 01 NONE | 02 NONE | 03 NONE | 04 NONE | 05 NONE | 06 NONE | 07 NONE | 08 NONE | 09 NONE | 10 NONE | |
| 03813 | N N N | 04/17/2018 | 14 | W POWELL BLVD | INTER | CROSS | N | N | CLR | O-OTHER | 01 NONE | 9 | TURN-L | 01 DRVR | INJC | 59 F | OR-Y | OR<25 | 000 | 022 | 00 | |
| NONE | TU | 0 | 182ND AVE | SE | TRF SIGNAL | N | DRY | TURN | N | -SE | N | N/A | TURN | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |
| N | 7A | 45 29 25.22 | -122 28 | 05 | 0 | 0 | DAY | PDO | N | DAY | PDO | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |
| N | 45 29 25.22 | -122 28 | 31.97 | 05 | 0 | 0 | DAY | PDO | N | DAY | PDO | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |
| 13036 | N N N | 07/21/2017 | 14 | W POWELL BLVD | INTER | CROSS | N | N | CLR | ANGL-OTH | 01 NONE | 0 | TURN-R | 01 DRVR | INJC | 28 M | OR-Y | OR<25 | 000 | 000 | 00 | |
| NONE | FR | 0 | 182ND AVE | S | TRF SIGNAL | N | DRY | TURN | N | NW-S | PRVTE | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 40 M | OR-Y | OR<25 | 028 | 000 | 00 | |
| N | 9P | 45 29 25.22 | -122 28 | 05 | 0 | 0 | DUSK | INJ | N | DUSK | INJ | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |
| N | 45 29 25.22 | -122 28 | 31.97 | 05 | 0 | 0 | DUSK | INJ | N | DUSK | INJ | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |
| 06535 | N N N | 07/27/2018 | 14 | W POWELL BLVD | INTER | CROSS | N | N | CLR | S-1STOP | 01 NONE | 0 | STRGHT | 01 DRVR | INJC | 40 F | OR-Y | OR<25 | 000 | 011 | 00 | |
| CITY | FR | 0 | 182ND AVE | S | TRF SIGNAL | N | DRY | REAR | N | S-N | PRVTE | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 57 F | SUSP | OR<25 | 043,026 | 000 | 00 | |
| N | 8A | 45 29 25.22 | -122 28 | 06 | 0 | 0 | DAY | INJ | N | DAY | INJ | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |
| N | 45 29 25.22 | -122 28 | 31.97 | 06 | 0 | 0 | DAY | INJ | N | DAY | INJ | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |
| 04295 | N N N | 05/16/2019 | 14 | W POWELL BLVD | INTER | CROSS | N | N | CLR | S-STRGHT | 01 NONE | 0 | STRGHT | 01 DRVR | INJC | 46 F | OR-Y | OR<25 | 000 | 000 | 00 | |
| COUNTY | TH | 0 | 182ND AVE | S | UNKNOWN | N | DRY | SS-O | N | S-N | PRVTE | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 M | Unk | Unk | 045 | 000 | 13 | |
| N | 7P | 45 29 25.23 | -122 28 | 06 | 0 | 0 | DUSK | INJ | N | DUSK | INJ | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 13 | |
| N | 45 29 25.23 | -122 28 | 32.01 | 06 | 0 | 0 | DUSK | INJ | N | DUSK | INJ | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |
| 06878 | N N N | 06/14/2016 | 14 | W POWELL BLVD | INTER | CROSS | N | N | CLR | CLD | PED | 01 NONE | 0 | TURN-R | 01 DRVR | INJC | 36 M | OR-Y | OR<25 | 000 | 000 | 00 |
| CITY | TU | 0 | 182ND AVE | W | TRF SIGNAL | N | DRY | PED | N | -NW | PRVTE | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 16 M | N-VAL | OR<25 | 029 | 000 | 00 | |
| N | 10A | 45 29 25.22 | -122 28 | 05 | 0 | 0 | DAY | INJ | N | DAY | INJ | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |
| N | 45 29 25.22 | -122 28 | 31.97 | 05 | 0 | 0 | DAY | INJ | N | DAY | INJ | PSNGR CAR | PSNGR CAR | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 00 | |

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

CDS380
05/05/2021

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

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
30 - 33 of 59 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | |
|--------|---------------------|-------|---------------|----------|------------|-------|-------|---------|-----------|----------|--------|---------|-----------|---------|---------|-------|-----------|-------|----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | RNDBT | SURF | COLL | OWNER | FROM | PRTC | INJ | G E LICNS | PED | | | | | |
| RD DFT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVMY | LIGHT | SVRTY | VH TYPE | TO | | | | | | | | | |
| UNLOC# | D C S V L K LAT | LONG | LRS | (#LANES) | CONTL | LOCIN | | | | | | | | | | | | | |
| 13060 | N N N 10/31/2016 | 14 | W POWELL BLVD | CROSS | N | N | UNK | S-1STOP | 01 NONE | 9 | STRGHT | 01 PED | INJB | 00 M | I XWLK | 000 | 000 | 00 | |
| | NO RPT | 0 | 182ND AVE | W | TRF SIGNAL | N | UNK | REAR | N/A | | N S | | | | | | | | |
| N | 11A | | | 0 | | N | DAY | PDO | PSNGR CAR | | | 01 DRVR | NONE | 00 | Unk UNK | 000 | 000 | 00 | |
| N | 45 29 25.22 -122.28 | 31.97 | | | | | | | 02 NONE | 9 | STOP | | | | | | | | |
| | | | | | | | | | N/A | | NW-SE | | | | | | | | |
| | | | | | | | | | PSNGR CAR | | | 01 DRVR | NONE | 00 | Unk UNK | 000 | 000 | 00 | 00 |
| 04969 | N N N 05/12/2015 | 14 | W POWELL BLVD | CROSS | N | N | RAIN | S-1STOP | 01 NONE | 0 | STRGHT | | | | | | | | 29 |
| | NONE | 0 | 182ND AVE | NW | TRF SIGNAL | N | WET | REAR | PRVTE | | NW-SE | | | | | | | | 00 |
| N | 10A | | | 0 | | N | DAY | INJ | PSNGR CAR | | | 01 DRVR | NONE | 20 F | OR-Y | 026 | 000 | 000 | 29 |
| N | 45 29 25.22 -122.28 | 31.97 | | | | | | | 02 NONE | 0 | STOP | | | | | | | | |
| | | | | | | | | | PRVTE | | NW-SE | | | | | | | | 00 |
| | | | | | | | | | PSNGR CAR | | | 01 DRVR | INJC | 45 F | OR-Y | 000 | 000 | 000 | 00 |
| 05593 | N N N 06/01/2015 | 14 | W POWELL BLVD | CROSS | N | N | RAIN | S-1STOP | 01 NONE | 0 | STRGHT | | | | | | | | 29 |
| | NONE | 0 | 182ND AVE | NW | TRF SIGNAL | N | WET | REAR | PRVTE | | NW-SE | | | | | | | | 00 |
| N | 7A | | | 0 | | N | DAY | INJ | PSNGR CAR | | | 01 DRVR | INJC | 52 M | OR-Y | 026 | 000 | 000 | 29 |
| N | 45 29 25.22 -122.28 | 31.97 | | | | | | | 02 NONE | 0 | STOP | | | | | | | | |
| | | | | | | | | | PRVTE | | NW-SE | | | | | | | | 00 |
| | | | | | | | | | PSNGR CAR | | | 01 DRVR | NONE | 48 F | OR-Y | 000 | 000 | 000 | 00 |
| 12504 | N N N 11/10/2015 | 14 | W POWELL BLVD | CROSS | N | N | CLR | S-1STOP | 01 NONE | 0 | STRGHT | | | | | | | | 29 |
| | NONE | 0 | 182ND AVE | NW | TRF SIGNAL | N | DRY | REAR | PRVTE | | W -E | | | | | | | | 00 |
| N | 7P | | | 0 | | N | DLIT | PDO | PSNGR CAR | | | 01 DRVR | NONE | 24 M | OR-Y | 026 | 000 | 000 | 29 |
| N | 45 29 25.22 -122.28 | 31.97 | | | | | | | 03 NONE | 0 | STOP | | | | | | | | |
| | | | | | | | | | PRVTE | | NW-SE | | | | | | | | 00 |
| | | | | | | | | | PSNGR CAR | | | 01 DRVR | NONE | 41 F | OR-Y | 000 | 000 | 000 | 00 |

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

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

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
34 - 37 of 59 Crash records shown.

| SER# | P R J S W DATE | CLASS | CITY STREET | RD CHAR | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | | |
|--------|------------------|-------------|---------------|---------------|----------|---------|------------|-------|-------|-----------|-----------|--------|---------|---------|---------|-------|-------|-----------|-------|-------|----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | DIRECT | (MEDIAN) | INT-REL | TRF SIGNAL | DRY | REAR | PRVTE | NW-SE | STRGHT | DRVR | NONE | 52 M | OR-Y | OR<25 | 011 | 006 | | |
| RD DFT | E L G N H R TIME | FROM | SECOND STREET | LOCIN | (#LANES) | CONTL | DRVMY | LIGHT | SVRTY | 02 NONE | 0 | STOP | DRVR | NONE | OR-Y | OR<25 | 000 | 000 | 00 | | |
| UNLOC? | D C S V L K LAT | LONG | LRS | | | | | | | PSNGR CAR | | W -E | DRVR | NONE | OR-Y | OR<25 | 000 | 000 | 00 | | |
| 04353 | N N N | 04/14/2017 | 14 | W POWELL BLVD | INTER | CROSS | N | N | CLR | S-STRGHT | 01 NONE | 0 | STRGHT | 01 DRVR | NONE | 52 M | OR-Y | 000 | 000 | 00 | |
| NONE | | FR | 0 | 182ND AVE | NW | | TRF SIGNAL | N | DRY | REAR | PRVTE | NW-SE | | | | | | | | 00 | |
| N | 6A | 45 29 25.22 | -122 28 | | 06 | 0 | | N | DAY | INJ | PSNGR CAR | | 01 DRVR | NONE | 20 M | OR-Y | 042 | 025 | 025 | 16,29 | |
| N | | 31.97 | | | | | | | | | 02 NONE | 0 | STRGHT | | | | | | | 00 | |
| | | | | | | | | | | | PRVTE | NW-SE | | | | | | | | 00 | |
| | | | | | | | | | | | PSNGR CAR | | 01 DRVR | INJC | 61 F | OR-Y | 000 | 000 | 000 | 00 | |
| 05353 | N N N | 06/23/2018 | 14 | W POWELL BLVD | INTER | CROSS | N | N | CLR | S-1STOP | 01 NONE | 0 | STRGHT | 01 DRVR | NONE | 54 M | OR-Y | 000 | 000 | 00 | |
| NONE | | SA | 0 | 182ND AVE | NW | | TRF SIGNAL | N | DRY | REAR | PRVTE | NW-SE | | | | | | | | 00 | |
| N | 11A | 45 29 25.22 | -122 28 | | 06 | 0 | | N | DAY | INJ | PSNGR CAR | | 01 DRVR | NONE | 32 M | OR-Y | 026 | 000 | 000 | 29 | |
| N | | 31.97 | | | | | | | | | 02 NONE | 0 | STOP | | | | | | | 00 | |
| | | | | | | | | | | | PRVTE | NW-SE | | | | | | | | 00 | |
| | | | | | | | | | | | PSNGR CAR | | 01 DRVR | INJC | 54 M | OR-Y | 000 | 000 | 000 | 00 | |
| 11335 | N N N | 12/07/2018 | 14 | W POWELL BLVD | INTER | CROSS | N | N | CLR | S-1STOP | 01 NONE | 0 | STRGHT | 01 DRVR | NONE | 31 F | OTH-Y | 026 | 000 | 000 | 29 |
| CITY | | FR | 0 | 182ND AVE | NW | | TRF SIGNAL | N | DRY | REAR | PRVTE | NW-SE | | | | | | | | 00 | |
| N | 7P | 45 29 25.22 | -122 28 | | 06 | 0 | | N | DLIT | INJ | PSNGR CAR | | 01 DRVR | NONE | 31 F | OTH-Y | 026 | 000 | 000 | 00 | |
| N | | 31.97 | | | | | | | | | 02 NONE | 0 | STOP | | | | | | | 00 | |
| | | | | | | | | | | | PRVTE | NW-SE | | | | | | | | 00 | |
| | | | | | | | | | | | PSNGR CAR | | 01 DRVR | NONE | 67 M | OR-Y | 000 | 000 | 000 | 00 | |
| | | | | | | | | | | | 02 NONE | 0 | STOP | | | | | | | 00 | |
| | | | | | | | | | | | PRVTE | NW-SE | | | | | | | | 00 | |
| | | | | | | | | | | | PSNGR CAR | | 02 PSNG | INJC | 64 F | OR-Y | 000 | 000 | 000 | 00 | |
| | | | | | | | | | | | 03 NONE | 0 | STOP | | | | | | | 00 | |
| | | | | | | | | | | | PRVTE | NW-SE | | | | | | | | 00 | |
| | | | | | | | | | | | PSNGR CAR | | 01 DRVR | NONE | 18 F | OR-Y | 000 | 000 | 000 | 00 | |
| 00604 | N N N | 01/22/2019 | 14 | W POWELL BLVD | INTER | CROSS | N | N | CLR | O-STRGHT | 01 NONE | 0 | STRGHT | 01 DRVR | NONE | 44 M | OR-Y | 039 | 000 | 000 | 15 |
| CITY | | TU | 0 | 182ND AVE | NW | | TRF SIGNAL | N | DRY | HEAD | PRVTE | SE-NW | | | | | | | | 00 | |
| N | 7A | 45 29 25.22 | -122 28 | | 05 | 0 | | N | DAY | INJ | PSNGR CAR | | 01 DRVR | NONE | 44 M | OR-Y | 039 | 000 | 000 | 00 | |
| N | | 31.97 | | | | | | | | | 02 NONE | 0 | STOP | | | | | | | 00 | |

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

CDS380
05/05/2021

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

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
38 - 40 of 59 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P E A U I C O D E | R J S W DATE | CLASS | CITY STREET | INT-TYPE (MEDIAN) | INT-REL | RD CHAR | RD DIRECT | LOCIN | DRVWY | LIGHT | SVRTY | CRASH COLL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | OWNER | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | | | |
|--------|-------------------|--------------|---------|---------------|-------------------|------------|---------|-----------|-------|-------|-------|-------|------------|-------|------|-------|----------|----------|-------|---------|-------|---------|-----|-------|-----------|-------|-----|----|--|
| NO RPT | N N N | 12/19/2019 | 14 | W POWELL BLVD | CROSS | N | N | N | 06 | 0 | DAY | INJ | REAR | WET | WET | REAR | 0 | 0 | 0 | 01 | DRVR | INJC | 17 | F | OR-Y | OR-25 | 000 | 00 | |
| N | N | TH | 0 | 182ND AVE | INTER | TRF SIGNAL | N | N | NW | 0 | DAY | INJ | REAR | WET | WET | REAR | 0 | 0 | 0 | 01 | DRVR | NONE | 19 | F | OR-Y | OR-25 | 000 | 00 | |
| N | N | 9A | -122.28 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | 45 29 25.22 | 31.97 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12232 | N N N | 12/29/2019 | 14 | W POWELL BLVD | CROSS | N | N | N | 06 | 0 | DLIT | INJ | REAR | DRY | DRY | REAR | 0 | 0 | 0 | 01 | DRVR | NONE | 22 | F | OR-Y | OR-25 | 043 | 07 | |
| N | N | 8P | -122.28 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | 45 29 25.22 | 31.97 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 08016 | N N N | 07/27/2015 | 14 | W POWELL BLVD | CROSS | N | N | N | 03 | 0 | DLIT | INJ | TURN | DRY | DRY | TURN | 0 | 0 | 0 | 01 | DRVR | NONE | 42 | F | OR-Y | OR-25 | 000 | 00 | |
| N | N | 11P | -122.28 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | N | 45 29 25.22 | 31.97 | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

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

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
41 - 44 of 59 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P | R | J | S | W | DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | RD CHAR | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | |
|--------|---|---|---|---|---|-------------|---------|---------------|------------|---------|---------|-------|-------|------------|-----------|----------|---------|-------|---------|-------|---------|------------|-------|-------|
| INVEST | E | A | U | I | C | O | D | FIRST STREET | (MEDIAN) | INT-REL | DIRECT | RNDBT | SURF | COLL | OWNER | MOVE | FROM | INJ | G | E | LICNS | PED | | |
| RD DPT | E | L | G | N | H | R | T | SECOND STREET | LESS | TRAF- | LOCIN | DRVMY | LIGHT | SVRTY | VH TYPE | TO | TURN-L | SVRTY | E | X | RES | LOC | | |
| UNLOC? | D | C | S | V | L | K | LAT | LONG | (LANES) | CONTL | | | | | | SE-S | OR<25 | | | | | | | |
| 13595 | N | N | N | N | N | 12/03/2015 | 14 | W POWELL BLVD | CROSS | N | INTER | N | RAIN | ANGL-OTH | 01 NONE | 0 | 01 DRVR | INJC | 29 M | OR-Y | OR<25 | 000 | 00 | |
| NONE | | | | | | | | | | | CN | WET | ANGL | PRVTE | | | | | | | 028,004 | 000 | 02 | |
| N | | | | | | 7A | | 182ND AVE | TRF SIGNAL | N | 02 | N | DAMN | INJ | PSNGR CAR | | 01 DRVR | NONE | 40 F | OR-Y | OR<25 | 038 | 04,27 | |
| N | | | | | | 45 29 25.22 | -122 28 | | | | | | | | | | | | | | 020,016 | 000 | 00 | |
| N | | | | | | 31.97 | | | | | | | | | | | 01 DRVR | INJC | 18 F | OR-Y | OR<25 | 000 | 00 | |
| | | | | | | | | | | | | | | | | | | | | | | | 00 | |
| | | | | | | | | | | | | | | | | | 01 DRVR | NONE | 38 M | OR-Y | OR<25 | 000 | 00 | |
| 09708 | N | N | N | N | N | 09/08/2015 | 14 | W POWELL BLVD | CROSS | N | INTER | N | CLR | ANGL-OTH | 01 NONE | 0 | 01 DRVR | NONE | 88 F | OTH-Y | N-RES | 000 | 00 | |
| CITY | | | | | | TU | | 182ND AVE | TRF SIGNAL | N | CN | DRY | ANGL | PRVTE | | | | | | | 020 | 000 | 04 | |
| N | | | | | | 7P | | | | | 03 | DAY | PDO | PSNGR CAR | | | 01 DRVR | NONE | 88 F | OTH-Y | N-RES | 000 | 00 | |
| N | | | | | | 45 29 25.22 | -122 28 | | | | | | | | | | | | | | | | 00 | |
| N | | | | | | 31.97 | | | | | | | | | | | 01 DRVR | NONE | 47 F | OR-Y | OR<25 | 000 | 00 | |
| | | | | | | | | | | | | | | | | | | | | | | | 00 | |
| | | | | | | | | | | | | | | | | | 01 DRVR | NONE | 47 F | OR-Y | OR<25 | 000 | 00 | |
| 15265 | Y | N | N | N | N | 12/15/2016 | 14 | W POWELL BLVD | CROSS | N | INTER | N | SNOW | ANGL-OTH | 01 NONE | 0 | 01 DRVR | NONE | 00 | Unk | UNK | 020,047 | 000 | 04,01 |
| CITY | | | | | | TH | | 182ND AVE | TRF SIGNAL | N | CN | SNO | ANGL | UNKN | | | | | | | | 000 | 00 | |
| N | | | | | | 12A | | | | | 03 | DLIT | INJ | PSNGR CAR | | | 01 DRVR | NONE | 00 | Unk | UNK | 000 | 04,01 | |
| N | | | | | | 45 29 25.22 | -122 28 | | | | | | | | | | | | | | | | 00 | |
| N | | | | | | 31.97 | | | | | | | | | | | 01 DRVR | INJC | 58 M | OR-Y | OR<25 | 000 | 00 | |
| | | | | | | | | | | | | | | | | | | | | | | | 00 | |
| | | | | | | | | | | | | | | | | | 01 DRVR | NONE | 56 M | OR-Y | OR<25 | 000 | 00 | |
| 15168 | N | N | N | N | N | 12/14/2016 | 14 | W POWELL BLVD | CROSS | N | INTER | N | SNOW | O-1 L-TURN | 01 NONE | 0 | 01 DRVR | NONE | 60 M | OR-Y | OR<25 | 000 | 00 | |
| CITY | | | | | | WE | | 182ND AVE | TRF SIGNAL | N | CN | SNO | TURN | PRVTE | | | | | | | | 000 | 00 | |
| N | | | | | | 6P | | | | | 01 | DLIT | INJ | PSNGR CAR | | | 01 DRVR | NONE | 56 M | OR-Y | OR<25 | 097 | 00 | |
| N | | | | | | 45 29 25.22 | -122 28 | | | | | | | | | | | | | | | | 00 | |
| N | | | | | | 31.97 | | | | | | | | | | | 01 DRVR | INJC | 60 M | OR-Y | OR<25 | 097 | 00 | |
| | | | | | | | | | | | | | | | | | | | | | | | 00 | |
| | | | | | | | | | | | | | | | | | 01 DRVR | INJC | 60 M | OR-Y | OR<25 | 097 | 00 | |

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

CDS380
05/05/2021

OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING
POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019

53 - 55 of 59 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P E R I O D | D A Y | C L A S S | C I T Y | R D | I N T - T Y P E | C R A S H | W T H R | O F F R D | R N D B T | D R V W Y | L I G H T | S V R T Y | V H | T Y P E | M O V E | P H | T Y P E | S V R T Y | E | X | R E S | L O C | E R R O R | A C T | E V E N T | C A U S E |
|-------|-------------|-------------|-----------|---------------|-------|-----------------|-----------|---------|------------|-----------|-----------|-----------|-----------|-------|---------|---------|------|---------|-----------|------|-------|---------|-------|-----------|--------|-----------|-----------|
| 02632 | N N N | 03/15/2018 | 14 | W POWELL BLVD | INTER | CROSS | N | RAIN | O-1 L-TURN | 01 | NONE | 9 | STRGHT | SE-NW | 01 | DRVR | NONE | 00 | Unk | UNK | 000 | 000 | 000 | 000 | 000 | 000 | 02 |
| NONE | TH | 0 | | 182ND AVE | CN | TRF SIGNAL | N | WET | TURN | N/A | FSNGR | CAR | | | | | | | | | | | | | | | 00 |
| N | 8P | 45 29 25.24 | -122.28 | | 02 | 0 | | DARK | PDO | | | | | | | | | | | | | | | | | | 00 |
| N | 45 29 25.22 | -122.28 | 31.98 | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| 03445 | N N N | 04/23/2019 | 14 | W POWELL BLVD | INTER | CROSS | N | CLR | ANGL-OTH | 01 | NONE | 0 | STRGHT | NW-SE | 01 | DRVR | NONE | 64 | M | OR-Y | OR<25 | 020,016 | 038 | 044,013 | 044,27 | 00 | |
| CITY | TU | 0 | | 182ND AVE | CN | TRF SIGNAL | N | DRY | ANGL | | PRVTE | | | | | | | | | | | | | | | | 00 |
| N | 12A | 45 29 25.22 | -122.28 | | 03 | 0 | | DLIT | INJ | | FSNGR | CAR | | | | | | | | | | | | | | | 00 |
| N | 45 29 25.22 | -122.28 | 31.97 | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| 00757 | N N N | 01/28/2019 | 14 | W POWELL BLVD | INTER | CROSS | N | CLR | O-1 L-TURN | 01 | NONE | 0 | STRGHT | SE-NW | 02 | PSNG | INJC | 30 | M | OR-Y | OR<25 | 000 | 000 | 000 | 000 | 00 | |
| NONE | MO | 0 | | 182ND AVE | CN | TRF SIGNAL | N | DRY | TURN | | PRVTE | | | | | | | | | | | | | | | | 00 |
| N | 6P | 45 29 25.22 | -122.28 | | 04 | 0 | | DLIT | INJ | | FSNGR | CAR | | | | | | | | | | | | | | | 04 |
| N | 45 29 25.22 | -122.28 | 31.97 | | | | | | | | | | | | | | | | | | | | | | | | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 00 |

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

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

POWELL BLVD at 182ND AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
 56 - 59 of 59 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE |
|--------|----------------|---------|-------------|----------|---------------|-------|-------|-------|------------|----------|---------|-------|---------|-----|---------|-------------|----------|
| NO RPT | TH | 0 | 182ND AVE | CN | TRF SIGNAL | N | DRY | ANGL | PRVTE | NW-SE | 01 | DRVR | NONE | 65 | F | OR-Y | 00 |
| | 6A | | | 03 | | | DAWN | INJ | PSNGR CAR | | | | OR<25 | | | 000 | 00 |
| | 45 29 25.22 | -122.28 | | | | | | | | | | | | | | 000 | 04 |
| | 31.97 | | | | | | | | | | | | | | | | |
| 11853 | N N N N | N N | 12/18/2019 | 14 | W POWELL BLVD | INTER | CROSS | N | BAIN | O-OTHER | 01 | DRVR | NONE | 0 | TURN-L | | 02,08,04 |
| | WE | 0 | 182ND AVE | CN | TRF SIGNAL | N | WET | TURN | UNKN | NW-N | | | | | | 000 | 00 |
| | 11P | | | 02 | | | DLIT | INJ | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk UNK | 028,001,020 | 000 |
| | 45 29 25.22 | -122.28 | | | | | | | | | | | | | UNK | | 02,08,04 |
| | 31.97 | | | | | | | | | | | | | | | | |
| 11765 | N N N N | N N | 11/21/2019 | 14 | W POWELL BLVD | INTER | CROSS | N | O-1 L-TURN | 01 | DRVR | NONE | 19 | M | OTH-Y | | 00 |
| | TH | 0 | 182ND AVE | CN | TRF SIGNAL | N | DRY | TURN | N/A | W -N | | | | | | 000 | 00 |
| | 6P | | | 02 | | | DLIT | PDO | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk UNK | 000 | 00 |
| | 45 29 25.25 | -122.28 | | | | | | | | | | | | | UNK | | 00 |
| | 31.96 | | | | | | | | | | | | | | | | 00 |
| 84391 | N N N N | N N | 12/06/2019 | 14 | W POWELL BLVD | INTER | CROSS | N | BAIN | ANGL-OTH | 01 | DRVR | NONE | 00 | Unk UNK | | 00 |
| | FR | 0 | 182ND AVE | CN | TRF SIGNAL | N | WET | TURN | N/A | E -N | | | | | | 016 | 00 |
| | 8P | | | 02 | | | DLIT | PDO | PSNGR CAR | | 01 | DRVR | NONE | 00 | Unk UNK | 000 | 00 |
| | 45 29 25.22 | -122.28 | | | | | | | | | | | | | UNK | | 00 |
| | 31.97 | | | | | | | | | | | | | | | | 00 |
| | | | | | | | | | | | | | | | | | 00 |

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

CDS380
05/05/2021

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING
190TH DR at BUTLER RD, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
1 - 5 of 23 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | RD CHAR | RD LOC | INT-REL | CRASH | WTHR | OFFRD | CRASH | TRLR QTY | SPCL USE | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE |
|--------|---------------------|---------------------|-----------------|------------|---------|---------|-----------------|------------|-------|-------|----------|-----------|----------|----------|---------|---------|-----------|---------|-------|-----------|-----------|----------|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | DIRECT | LOCN | CONTL | DRVWY | LIGHT | SVRTY | OWNER | A S | | FROM | INJ | G E LICNS | PED | | | | |
| RD DFT | E L G N H R TIME | FROM | SECOND STREET | LEGS | TRAF- | LOCN | LOCN | CONTL | DRVWY | LIGHT | SVRTY | OWNER | A S | | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | |
| UNLOC | D C S V L K LAT | LONG | LR | (#LANES) | CONTL | LOCN | LOCN | CONTL | DRVWY | LIGHT | SVRTY | OWNER | A S | | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | |
| 11697 | Y N N | 10/03/2016 | 16 SE BUTLER RD | CROSS | N | INTER | 16 SE BUTLER RD | CROSS | N | CLR | S-STRGHT | 01 NONE | 9 | STRGHT | 01 | DRVR | NONE | 00 | Unk | Unk | 00 | 01,27,29 |
| NONE | MO | 0 | SE 190TH DR | STOP SIGN | N | N | SE 190TH DR | STOP SIGN | N | DRY | REAR | N/A | N | N-S | 01 | DRVR | NONE | 00 | Unk | Unk | 000 | 00 |
| N | 5P | 45 28 20.93 -122 28 | | 0 | | 06 | | | N | DAY | PDO | PSNGR CAR | | | | | | | | | 000 | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | 006 | 00 |
| | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | 006 | 00 |
| 14479 | N N N | 12/25/2017 | 16 SE BUTLER RD | CROSS | N | INTER | 16 SE BUTLER RD | CROSS | N | RAIN | S-1STOP | 01 NONE | 9 | STRGHT | 01 | DRVR | NONE | 00 | Unk | Unk | 124,129 | 29 |
| NONE | MO | 0 | SE 190TH DR | TRF SIGNAL | N | N | SE 190TH DR | TRF SIGNAL | N | ICE | REAR | N/A | N | N-S | 01 | DRVR | NONE | 00 | Unk | Unk | 000 | 00 |
| N | 9P | 45 28 20.93 -122 28 | | 0 | | 06 | | | N | DLIT | PDO | PSNGR CAR | | | | | | | | | 000 | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | 011 | 00 |
| 10273 | Y N N | 08/30/2016 | 16 SE BUTLER RD | CROSS | N | INTER | 16 SE BUTLER RD | CROSS | N | UNK | FIX OBJ | 01 NONE | 9 | TURN-L | 01 | DRVR | NONE | 00 | Unk | Unk | 040,058 | 32,01,08 |
| NONE | TU | 0 | SE 190TH DR | STOP SIGN | N | E | SE 190TH DR | STOP SIGN | N | DRY | FIX | N/A | N | N-E | 01 | DRVR | NONE | 00 | Unk | Unk | 000 | 00 |
| N | 2A | 45 28 20.93 -122 28 | | 0 | | 05 | | | N | DLIT | PDO | PSNGR CAR | | | | | | | | | 000 | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| 10909 | N N N | 08/06/2015 | 16 SE BUTLER RD | CROSS | N | INTER | 16 SE BUTLER RD | CROSS | N | CLR | S-STRGHT | 01 NONE | 0 | STRGHT | 01 | DRVR | NONE | 00 | Unk | Unk | 000 | 07 |
| NONE | TH | 0 | SE 190TH DR | STOP SIGN | N | S | SE 190TH DR | STOP SIGN | N | DRY | REAR | PRVTE | S-N | S-N | 01 | DRVR | NONE | 24 | F | OR-Y | 000 | 00 |
| N | 4P | 45 28 20.93 -122 28 | | 0 | | 06 | | | N | DAY | PDO | PSNGR CAR | | | | | | | | | 000 | 08 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| 11098 | Y N N | 10/10/2015 | 17 SE BUTLER RD | CROSS | N | INTER | 17 SE BUTLER RD | CROSS | N | RAIN | ANGL-OTH | 01 NONE | 0 | STRGHT | 01 | DRVR | NONE | 00 | OR-Y | OR-25 | 124 | 01,02 |
| NONE | SA | 0 | SE 190TH DR | STOP SIGN | N | CN | SE 190TH DR | STOP SIGN | N | WET | ANGL | PRVTE | S-N | S-N | 01 | DRVR | INJC | 45 | F | OR-Y | 000 | 00 |
| N | 3P | 45 28 20.93 -122 28 | | 0 | | 04 | | | N | DAY | INJ | PSNGR CAR | | | | | | | | | 000 | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | 000 | 00 |

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

CDS380
05/05/2021

OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

190TH DR at BUTLER RD, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019

6 - 10 of 23 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | OWNER | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | | | | | | | | | | | | | |
|--------|------------------|-------------|-----------------|----------|---------|-------|-------|----------|-----------|----------|--------|---------|---------|---------|--------|----------|------------|-------|--------|------|------|---------|-------|---------|-----|-------|------------|-------|-----|-----|-----|-----|-----|-----|-----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | ANDBT | SURF | COLL | TRAF- | LESS | TRAF- | CONTL | CROSS | N | CLR | ANGL-OTH | 01 NONE | 0 | STRGHT | MOVE | FROM | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | | | |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | DIRCT | LOCIN | DRVMY | LIGHT | SVRTY | VH TYPE | 01 NONE | 0 | STRGHT | S -N | 01 DRVR | NONE | 62 F | OR-Y | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | | | | | |
| UNLOC# | D C S V L K LAT | LONG | SE BUTLER RD | INTER | INTER | DRY | DAY | PDO | PSNGR CAR | 02 NONE | 0 | STRGHT | W -E | 01 DRVR | NONE | 18 F | OR-Y | OR<25 | 028 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | | | | | |
| 09129 | N N N | 08/24/2015 | 16 SE BUTLER RD | INTER | CROSS | N | CLR | ANGL-OTH | 01 NONE | 0 | STRGHT | S -N | 01 DRVR | NONE | 62 F | OR-Y | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 02 | | | | |
| NONE | MO | 0 | SE 190TH DR | CN | 0 | DRY | DAY | PDO | PSNGR CAR | 02 NONE | 0 | STRGHT | W -E | 01 DRVR | NONE | 18 F | OR-Y | OR<25 | 028 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | | |
| N | 1P | 45 28 20.93 | -122 28 | 04 | 0 | DRY | DAY | PDO | PSNGR CAR | 02 NONE | 0 | STRGHT | W -E | 01 DRVR | NONE | 18 F | OR-Y | OR<25 | 028 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | |
| N | 45 28 20.93 | -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 09208 | N N N | 08/26/2015 | 16 SE BUTLER RD | INTER | CROSS | N | CLR | ANGL-OTH | 01 NONE | 0 | STRGHT | S -N | 01 DRVR | NONE | 68 F | OR-Y | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | |
| NONE | WE | 0 | SE 190TH DR | CN | 0 | DRY | DAY | PDO | PSNGR CAR | 02 NONE | 0 | STRGHT | E -W | 01 DRVR | NONE | 16 M | OR-Y | OR<25 | 028 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | |
| N | 8A | 45 28 20.93 | -122 28 | 01 | 0 | DRY | DAY | PDO | PSNGR CAR | 02 NONE | 0 | STRGHT | E -W | 01 DRVR | NONE | 16 M | OR-Y | OR<25 | 028 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | |
| N | 45 28 20.93 | -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11222 | N N N | 09/21/2016 | 16 SE BUTLER RD | INTER | CROSS | N | CLR | ANGL-OTH | 01 NONE | 0 | STRGHT | S -N | 01 DRVR | NONE | 41 M | OTH-Y | N-RES | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | |
| NONE | WE | 0 | SE 190TH DR | CN | 0 | DRY | DAY | INJ | PSNGR CAR | 02 NONE | 0 | STRGHT | W -E | 01 DRVR | INJC | 24 M | OR-Y | OR<25 | 028 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | |
| N | 3P | 45 28 20.93 | -122 28 | 04 | 0 | DRY | DAY | INJ | PSNGR CAR | 02 NONE | 0 | STRGHT | W -E | 01 DRVR | INJC | 24 M | OR-Y | OR<25 | 028 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| N | 45 28 20.93 | -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15838 | N N N | 12/31/2016 | 16 SE BUTLER RD | INTER | CROSS | N | CLR | ANGL-OTH | 01 NONE | 0 | STRGHT | S -N | 01 DRVR | NONE | 43 F | OR-Y | OR<25 | 021 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| NONE | SA | 0 | SE 190TH DR | CN | 0 | DRY | DLIT | INJ | PSNGR CAR | 02 NONE | 0 | STRGHT | W -E | 01 DRVR | INJC | 32 M | SUSP | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| N | 5P | 45 28 20.93 | -122 28 | 01 | 0 | DRY | DLIT | INJ | PSNGR CAR | 02 NONE | 0 | STRGHT | W -E | 01 DRVR | INJC | 32 M | SUSP | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| N | 45 28 20.93 | -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 09949 | N N N | 08/22/2016 | 16 SE BUTLER RD | INTER | CROSS | N | CLR | ANGL-OTH | 01 NONE | 9 | STRGHT | S -N | 01 DRVR | NONE | 00 UNK | UNK | UNK | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| NONE | MO | 0 | SE 190TH DR | CN | 0 | DRY | DAY | PDO | PSNGR CAR | 02 NONE | 9 | STRGHT | E -W | 01 DRVR | NONE | 00 UNK | UNK | UNK | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| N | 10A | 45 28 20.93 | -122 28 | 01 | 0 | DRY | DAY | PDO | PSNGR CAR | 02 NONE | 9 | STRGHT | E -W | 01 DRVR | NONE | 00 UNK | UNK | UNK | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 |
| N | 45 28 20.93 | -122 28 | 1.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

CDS380 05/05/2021 OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION

TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING

190TH DR at BUTLER RD, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019

11 - 14 of 23 Crash records shown.

| SER# | INVEST | RD DPT | UNLOC? | D C S V L K LAT | LONG | CLASS | CITY STREET | RD CHAR | INT-TYPE | (MEDIAN) | INT-REL | OFFRD | WTHR | CRASH | COLL | DRVWY | LIGHT | SVRTY | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE |
|--------|--------|--------|------------|-----------------|--------------|-------|--------------|---------|----------|----------|---------|-------|------|-------|------|-------|-------|-------|---------|-------|---------|-----|-------|------------|-------|
| 06248 | N N N | N N N | 06/13/2017 | 16 | SE BUTLER RD | 0 | SE BUTLER RD | 04 | CN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 03 | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13404 | N N N | N N N | 12/02/2017 | 16 | SE BUTLER RD | 0 | SE BUTLER RD | 02 | CN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 02 | |
| CITY | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | | | | |
| 05573 | N N N | N N N | 05/26/2017 | 16 | SE BUTLER RD | 0 | SE BUTLER RD | 02 | CN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 02 | |
| NO RPT | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | | | | |
| 08027 | N N N | N N N | 07/26/2017 | 16 | SE BUTLER RD | 0 | SE BUTLER RD | 04 | CN | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 03 | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | | | | |
| N | | | | | | | | | | | | | | | | | | | | | | | | | |

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

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

190TH DR at BUTLER RD, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
15 - 17 of 23 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | SPCL USE | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | | |
|--------|------------------|------------|---------------|--------------|----------|-------|---------|-------|----------|----------|-------|------------|---------|------|-----------|-----|-----|-----|-----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | OFFRD | WTHR | CRASH | COLL | TRLR QTY | OWNER | FROM | PRTC | INJ | G E LICNS | PED | | | |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVWY | LIGHT | SVRTY | VH TYPE | 01 NONE | 9 | STRGHT | | | | | | | |
| UNLOC? | D C S V L K LAT | LONG | LR | (#LANES) | CONTL | CROSS | N | RAIN | ANGL-OTH | 01 NONE | 9 | STRGHT | | | | | | | |
| 14121 | N N N | 12/18/2017 | 16 | SE BUTLER RD | INTER | CN | 0 | WET | ANGL | N/A | N/A | N -S | 01 DRVR | NONE | 00 | Unk | UNK | 00 | |
| NONE | MO | 0 | | SE 190TH DR | CN | 0 | | DUSK | PDO | PSNGR | CAR | | | | | | | 000 | 000 |
| N | 4P | | | | | | | | | | | | | | | | | 000 | 000 |
| N | 45 28 20.93 | -122 28 | | | | | | | | | | | | | | | | 000 | 000 |
| | | 1.3 | | | | | | | | | | | | | | | | 000 | 000 |

| SER# | P R J S W DATE | CLASS | CITY STREET <th>INT-TYPE</th> <th>SPCL USE</th> <th>MOVE</th> <th>PH TYPE</th> <th>SVRTY</th> <th>E X RES</th> <th>LOC</th> <th>ERROR</th> <th>ACT. EVENT</th> <th>CAUSE</th> | INT-TYPE | SPCL USE | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | |
|--------|------------------|------------|---|--------------|----------|-------|---------|-------|----------|----------|-------|------------|-------|-----|-----------|-----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | OFFRD | WTHR | CRASH | COLL | TRLR QTY | OWNER | FROM | PRTC | INJ | G E LICNS | PED |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVWY | LIGHT | SVRTY | VH TYPE | 01 NONE | 9 | STRGHT | | | | |
| UNLOC? | D C S V L K LAT | LONG | LR | (#LANES) | CONTL | CROSS | N | RAIN | ANGL-OTH | 01 NONE | 0 | STRGHT | | | | |
| 00523 | N N N | 01/20/2018 | 16 | SE BUTLER RD | INTER | CN | 0 | WET | ANGL | PRVTE | 0 | STRGHT | | | | |
| NONE | SA | 0 | | SE 190TH DR | CN | 0 | | | | PSNGR | CAR | | | | | |
| N | 4P | | | | | | | | | | | | | | | |
| N | 45 28 20.93 | -122 28 | | | | | | | | | | | | | | |
| | | 1.3 | | | | | | | | | | | | | | |

| SER# | P R J S W DATE | CLASS | CITY STREET <th>INT-TYPE</th> <th>SPCL USE</th> <th>MOVE</th> <th>PH TYPE</th> <th>SVRTY</th> <th>E X RES</th> <th>LOC</th> <th>ERROR</th> <th>ACT. EVENT</th> <th>CAUSE</th> | INT-TYPE | SPCL USE | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | |
|--------|------------------|------------|---|--------------|----------|-------|---------|-------|----------|----------|-------|------------|-------|-----|-----------|-----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | OFFRD | WTHR | CRASH | COLL | TRLR QTY | OWNER | FROM | PRTC | INJ | G E LICNS | PED |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVWY | LIGHT | SVRTY | VH TYPE | 01 NONE | 9 | STRGHT | | | | |
| UNLOC? | D C S V L K LAT | LONG | LR | (#LANES) | CONTL | CROSS | N | RAIN | ANGL-OTH | 01 NONE | 0 | STRGHT | | | | |
| 05939 | N N N | 07/11/2018 | 17 | SE BUTLER RD | INTER | CN | 0 | CLR | ANGL-OTH | 01 NONE | 0 | STRGHT | | | | |
| NONE | WE | 0 | | SE 190TH DR | CN | 0 | | DRY | ANGL | PRVTE | 0 | STRGHT | | | | |
| N | 3P | | | | | | | | | PSNGR | CAR | | | | | |
| N | 45 28 20.93 | -122 28 | | | | | | | | | | | | | | |
| | | 1.3 | | | | | | | | | | | | | | |

| SER# | P R J S W DATE | CLASS | CITY STREET <th>INT-TYPE</th> <th>SPCL USE</th> <th>MOVE</th> <th>PH TYPE</th> <th>SVRTY</th> <th>E X RES</th> <th>LOC</th> <th>ERROR</th> <th>ACT. EVENT</th> <th>CAUSE</th> | INT-TYPE | SPCL USE | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | |
|--------|------------------|------------|---|--------------|----------|-------|---------|-------|----------|----------|-------|------------|-------|-----|-----------|-----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | OFFRD | WTHR | CRASH | COLL | TRLR QTY | OWNER | FROM | PRTC | INJ | G E LICNS | PED |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVWY | LIGHT | SVRTY | VH TYPE | 01 NONE | 9 | STRGHT | | | | |
| UNLOC? | D C S V L K LAT | LONG | LR | (#LANES) | CONTL | CROSS | N | RAIN | ANGL-OTH | 01 NONE | 0 | STRGHT | | | | |
| 05939 | N N N | 07/11/2018 | 17 | SE BUTLER RD | INTER | CN | 0 | CLR | ANGL-OTH | 01 NONE | 0 | STRGHT | | | | |
| NONE | WE | 0 | | SE 190TH DR | CN | 0 | | DRY | ANGL | PRVTE | 0 | STRGHT | | | | |
| N | 3P | | | | | | | | | PSNGR | CAR | | | | | |
| N | 45 28 20.93 | -122 28 | | | | | | | | | | | | | | |
| | | 1.3 | | | | | | | | | | | | | | |

| SER# | P R J S W DATE | CLASS | CITY STREET <th>INT-TYPE</th> <th>SPCL USE</th> <th>MOVE</th> <th>PH TYPE</th> <th>SVRTY</th> <th>E X RES</th> <th>LOC</th> <th>ERROR</th> <th>ACT. EVENT</th> <th>CAUSE</th> | INT-TYPE | SPCL USE | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | |
|--------|------------------|------------|---|--------------|----------|-------|---------|-------|----------|----------|-------|------------|-------|-----|-----------|-----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | OFFRD | WTHR | CRASH | COLL | TRLR QTY | OWNER | FROM | PRTC | INJ | G E LICNS | PED |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVWY | LIGHT | SVRTY | VH TYPE | 01 NONE | 9 | STRGHT | | | | |
| UNLOC? | D C S V L K LAT | LONG | LR | (#LANES) | CONTL | CROSS | N | RAIN | ANGL-OTH | 01 NONE | 0 | STRGHT | | | | |
| 05939 | N N N | 07/11/2018 | 17 | SE BUTLER RD | INTER | CN | 0 | CLR | ANGL-OTH | 01 NONE | 0 | STRGHT | | | | |
| NONE | WE | 0 | | SE 190TH DR | CN | 0 | | DRY | ANGL | PRVTE | 0 | STRGHT | | | | |
| N | 3P | | | | | | | | | PSNGR | CAR | | | | | |
| N | 45 28 20.93 | -122 28 | | | | | | | | | | | | | | |
| | | 1.3 | | | | | | | | | | | | | | |

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

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

190TH DR at BUTLER RD, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
18 - 22 of 23 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | OWNER | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | | | | | |
|--------|------------------|-------------|---------------|--------------|---------|-------|-------|-----------|----------|----------|--------|---------|-------|---------|------|--------|------------|-------|--------|-----|-----|-----|-----|-----|----|------------|--|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | ANDBT | SURF | COLL | TRUCK | TRUCK | OWNER | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | | | | | |
| RD DFT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVMY | LIGHT | SVRTY | VEH TYPE | VEH TYPE | OWNER | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | | | | | |
| UNLOC# | D C S V L K LAT | LONG | LR | (#LANES) | CONTL | N | CLR | ANGL-OTH | 01 NONE | 9 | STRGHT | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 02, 03 | | | | | | | | |
| 04941 | N N N | 06/11/2018 | 16 | SE BUTLER RD | INTER | CROSS | N | STOP SIGN | N | DRY | ANG | DRY | ANG | N/A | S -N | STRGHT | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 000 | 00 | | |
| NONE | MO | 0 | | SE 190TH DR | CN | 0 | | | | | | | | | | | | | | | | | | | | | |
| N | 11A | 45 28 20.93 | -122.28 | | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 28 20.93 | -122.28 | 1.29 | | | | | | | | | | | | | | | | | | | | | | | | |
| 05220 | N N N | 06/19/2018 | 16 | SE BUTLER RD | INTER | CROSS | N | STOP SIGN | N | DRY | TURN | DRY | TURN | N/A | W -N | TURN-L | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 000 | 00 | 02, 03 | |
| NONE | TU | 0 | | SE 190TH DR | CN | 0 | | | | | | | | | | | | | | | | | | | | | |
| N | 12P | 45 28 20.92 | -122.28 | | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 28 20.92 | -122.28 | 1.31 | | | | | | | | | | | | | | | | | | | | | | | | |
| 00359 | N N N | 01/10/2019 | 16 | SE BUTLER RD | INTER | CROSS | N | STOP SIGN | N | WET | TURN | DRY | TURN | N/A | W -N | TURN-L | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 000 | 00 | 02, 04 | |
| NONE | TH | 0 | | SE 190TH DR | CN | 0 | | | | | | | | | | | | | | | | | | | | | |
| N | 7A | 45 28 20.93 | -122.28 | | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 28 20.93 | -122.28 | 1.3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 04056 | N N N | 05/10/2019 | 16 | SE BUTLER RD | INTER | CROSS | N | STOP SIGN | N | DRY | ANG | DRY | ANG | N/A | S -N | STRGHT | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 000 | 00 | 03 | |
| CITY | FR | 0 | | SE 190TH DR | CN | 0 | | | | | | | | | | | | | | | | | | | | | |
| N | 11A | 45 28 20.93 | -122.28 | | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 28 20.93 | -122.28 | 1.3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 11848 | N N N | 12/18/2019 | 17 | SE BUTLER RD | INTER | CROSS | N | STOP SIGN | N | RAIN | ANG | DRY | ANG | N/A | S -N | STRGHT | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 000 | 000 | 00 | 27, 02, 03 | |
| CITY | WE | 0 | | SE 190TH DR | CN | 0 | | | | | | | | | | | | | | | | | | | | | |
| N | 5P | 45 28 20.93 | -122.28 | | | | | | | | | | | | | | | | | | | | | | | | |
| N | 45 28 20.93 | -122.28 | 1.3 | | | | | | | | | | | | | | | | | | | | | | | | |

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

CDS380
05/05/2021

OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING
GIESE RD at 190TH AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
1 - 4 of 7 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P E R M I T | D A T E | C L A S S | C I T Y | R D | C H A R | I N T - T Y P E | W E T | C L R | A N G L - O T H | S P C L | T R L R | Q T Y | A S | P H | T Y P E | S V R T Y | E X | R E S | L O C | E R R O R | A C T | E V E N T | C A U S E | |
|-------|-------------|----------------|-----------|---------------------|-------|---------|-----------------|-----------|-------|-----------------|----------|---------|-------|-----|--------|---------|-----------|------|-------|-------|-----------|-------|-----------|-----------|----|
| 12094 | N N N | N N 11/02/2015 | 19 | SE GIESE RD | INTER | CROSS | N | STOP SIGN | N | CLD | S-LSTOP | 01 | NONE | 0 | STRGHT | W -E | 01 | DRVR | NONE | 00 | Unk | UNK | 026,043 | 000 | 07 |
| | | | | SE 190TH AVE | W | 06 | 0 | | | | | | | | | | | | | | | | | 00 | |
| | | | | 45 28 20.93 -122 28 | | | | | | | | | | | | | | | | | | | | 00 | |
| | | | | 1.3 | | | | | | | | | | | | | | | | | | | | 00 | |
| 06259 | N N N | 06/15/2015 | 16 | SE GIESE RD | INTER | CROSS | N | STOP SIGN | N | CLR | ANGL-OTH | 01 | NONE | 0 | STRGHT | W -E | 01 | DRVR | INJC | 46 | M | OR-Y | OR<25 | 011 | 00 |
| | | | | SE 190TH AVE | CN | 04 | 0 | | | | | | | | | | | | | | | | | 00 | |
| | | | | 45 28 20.93 -122 28 | | | | | | | | | | | | | | | | | | | | 00 | |
| | | | | 1.3 | | | | | | | | | | | | | | | | | | | | 00 | |
| 08897 | N N N | 08/17/2015 | 17 | SE GIESE RD | INTER | CROSS | N | STOP SIGN | N | CLR | ANGL-OTH | 01 | NONE | 0 | STRGHT | W -E | 01 | DRVR | NONE | 26 | M | OR-Y | OR<25 | 015 | 00 |
| | | | | SE 190TH AVE | CN | 04 | 0 | | | | | | | | | | | | | | | | | 00 | |
| | | | | 45 28 20.93 -122 28 | | | | | | | | | | | | | | | | | | | | 00 | |
| | | | | 1.3 | | | | | | | | | | | | | | | | | | | | 00 | |
| 11511 | N N N | 10/19/2017 | 16 | SE GIESE RD | INTER | CROSS | N | STOP SIGN | N | RAIN | ANGL-OTH | 01 | NONE | 0 | STRGHT | W -E | 01 | DRVR | NONE | 34 | F | OR-Y | OR<25 | 015 | 00 |
| | | | | SE 190TH AVE | CN | 02 | 0 | | | | | | | | | | | | | | | | | 000 | |
| | | | | 45 28 20.93 -122 28 | | | | | | | | | | | | | | | | | | | | 00 | |
| | | | | 1.3 | | | | | | | | | | | | | | | | | | | | 00 | |

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

CDS380
05/05/2021

OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING
GIESE RD at 190TH AVE, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
5 - 7 of 7 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT | EVENT | CAUSE |
|--------|------------------|-------------|----------------|-----------|---------|-------|-------|----------|-----------|----------|---------|-----------|---------|-----|-------|------|-------|--------|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | ANDBT | SURF | COLL | TRLR QTY | FROM | INJ | G E LICNS | PED | | | | | |
| RD DFT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVMY | LIGHT | SVRTY | OWNER | TO | | | | | | | | |
| UNLOC# | D C S V L K LAT | LONG | LR | (#LANES) | CONTL | DRVMY | DRVMY | SVRTY | VH TYPE | STRTGHT | | | | | | | | |
| 01677 | N N N | 02/15/2017 | 16 SE GIESE RD | CROSS | N | N | RAIN | ANGL-OTH | 01 NONE | 9 STRGHT | | | | | | | | 02 |
| NO RPT | WE | 0 | SE 190TH AVE | STOP SIGN | N | N | WET | ANGL | N/A | S -N | 01 DRVR | NONE | 00 Unk | UNK | 000 | 0.15 | 00 | 00 |
| N | 7P | 45 28 20.93 | | 0 | | N | DLIT | PDO | PSNGR CAR | | | | | | | 0.00 | 00 | 00 |
| N | 45 28 20.93 | -122 28 | | | | N | | | | | | | | | | 0.15 | 000 | 00 |
| | | 1.3 | | | | | | | 02 NONE | 9 STRGHT | 01 DRVR | NONE | 00 Unk | UNK | 000 | 0.00 | 00 | 00 |
| | | | | | | | | | N/A | W -E | | | | | | | | |
| | | | | | | | | | PSNGR CAR | | | | | | | | | |
| 03152 | N N N | 04/17/2018 | 16 SE GIESE RD | CROSS | N | N | CLR | ANGL-OTH | 01 NONE | 9 STRGHT | | | | | | | | 02, 03 |
| NONE | TU | 0 | SE 190TH AVE | STOP SIGN | N | N | DRY | ANGL | N/A | N -S | | | | | | | | 00 |
| N | 3P | 45 28 20.93 | | 0 | | N | DAY | PDO | PSNGR CAR | | 01 DRVR | NONE | 00 Unk | UNK | 000 | 0.00 | 00 | 00 |
| N | 45 28 20.93 | -122 28 | | | | N | | | | | | | | | | 0.00 | 000 | 00 |
| | | 1.3 | | | | | | | 02 NONE | 9 STRGHT | 01 DRVR | NONE | 00 Unk | UNK | 000 | 0.00 | 00 | 00 |
| | | | | | | | | | N/A | W -E | | | | | | | | |
| | | | | | | | | | PSNGR CAR | | | | | | | | | |
| 06994 | N N N | 08/08/2018 | 16 SE GIESE RD | CROSS | N | N | CLR | ANGL-OTH | 01 NONE | 9 STRGHT | | | | | | | | 02 |
| NONE | WE | 0 | SE 190TH AVE | STOP SIGN | N | N | DRY | ANGL | N/A | N -S | | | | | | | | 00 |
| N | 5P | 45 28 20.93 | | 0 | | N | DAY | PDO | PSNGR CAR | | 01 DRVR | NONE | 00 Unk | UNK | 000 | 0.00 | 00 | 00 |
| N | 45 28 20.93 | -122 28 | | | | N | | | | | | | | | | 0.00 | 000 | 00 |
| | | 1.3 | | | | | | | 02 NONE | 9 STRGHT | 01 DRVR | NONE | 00 Unk | UNK | 000 | 0.00 | 00 | 00 |
| | | | | | | | | | N/A | W -E | | | | | | | | |
| | | | | | | | | | PSNGR CAR | | | | | | | | | |

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

CDS380
05/05/2021

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

BUTLER RD at PLEASANT VIEW DR, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
1 - 5 of 5 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE |
|--------|---------------------|---------------------|---------------------|----------|-----------|-------|--------|----------|-----------|------|---------|-----------|---------|-----|-------|-----------|----------|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | ANDBT | SURF | COLL | TRLR QTY | FROM | INJ | G E LICNS | PED | | | | |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVMY | LIGHT | SVRTY | OWNER | TO | | | | | | | |
| UNLOC# | D C S V L K LAT | LONG | FRS | (#LANES) | CONTL | CLR | S-STOP | 01 NONE | 01 NONE | 9 | STRGHT | | | | | | |
| 07636 | Y N N N | N N 07/01/2016 | 16 SW BUTLER RD | CROSS | N | N | CLR | S-STOP | 01 NONE | 9 | STRGHT | | | | | | 07,01 |
| CITY | FR | 0 | SW PLEASANT VIEW DR | E | STOP SIGN | N | DRY | REAR | N/A | W -E | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 00 |
| N | 2P | 45 28 20.93 -122 28 | | 0 | | N | DAY | PDO | PSNGR CAR | | | | | | | | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | N | | | 02 NONE | 9 | STOP | | | | | | 00 |
| | | | | | | N | | | N/A | W -E | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 00 |
| | | | | | | N | | | PSNGR CAR | | | | | | | | 00 |
| 01700 | Y N N N | N N 02/08/2017 | 16 SW BUTLER RD | CROSS | N | Y | RAIN | FIX OBJ | 01 NONE | 9 | TURN-L | | | | 040 | | 32,01,08 |
| NO RPT | WE | 0 | SW PLEASANT VIEW DR | E | STOP SIGN | N | WET | FIX | N/A | N -E | | | | | | | 00 |
| N | 1A | 45 28 20.93 -122 28 | | 0 | | N | DLIT | PDO | PSNGR CAR | | | | | | | | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | N | | | 01 DRVR | NONE | 00 | Unk | Unk | Unk | 000 | 000 | 00 |
| 04744 | N N N N | N N 04/24/2016 | 17 SW BUTLER RD | CROSS | N | N | RAIN | ANGL-OTH | 01 NONE | 0 | STRGHT | | | | | | 02 |
| CITY | SU | 0 | SW PLEASANT VIEW DR | CN | STOP SIGN | N | WET | ANGL | PRVTE | W -E | 01 DRVR | INJ | 18 | F | OR-Y | 028 | 00 |
| N | 3P | 45 28 20.93 -122 28 | | 0 | | N | DAY | INJ | PSNGR CAR | | | | | | | | 02 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | N | | | 02 NONE | 0 | STRGHT | | | | | | 00 |
| | | | | | | N | | | PRVTE | S -N | 01 DRVR | INJC | 56 | F | OR-Y | 000 | 00 |
| | | | | | | N | | | PSNGR CAR | | | | | | | | 00 |
| 80968 | N N N N | N N 02/29/2016 | 16 SW BUTLER RD | CROSS | N | N | RAIN | ANGL-OTH | 01 NONE | 9 | STRGHT | | | | | | 02 |
| NONE | MO | 0 | SW PLEASANT VIEW DR | CN | STOP SIGN | N | WET | ANGL | N/A | S -N | | | | | | | 00 |
| N | 8A | 45 28 20.93 -122 28 | | 0 | | N | DAY | PDO | PSNGR CAR | | | | | | | | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | N | | | 02 NONE | 9 | STRGHT | | | | | | 00 |
| | | | | | | N | | | N/A | W -E | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 00 |
| | | | | | | N | | | PSNGR CAR | | | | | | | | 00 |
| 06156 | N N N N | N N 05/27/2016 | 16 SW BUTLER RD | CROSS | N | N | CLR | ANGL-OTH | 01 NONE | 9 | STRGHT | | | | | | 02 |
| NONE | FR | 0 | SW PLEASANT VIEW DR | CN | STOP SIGN | N | UNK | ANGL | N/A | S -N | | | | | | | 00 |
| N | 5P | 45 28 20.93 -122 28 | | 0 | | N | DAY | PDO | PSNGR CAR | | | | | | | | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | N | | | 02 NONE | 9 | STRGHT | | | | | | 00 |
| | | | | | | N | | | N/A | E -W | 01 DRVR | NONE | 00 | Unk | Unk | 000 | 00 |
| | | | | | | N | | | PSNGR CAR | | | | | | | | 00 |

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

CDS380
05/05/2021

OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

URBAN NON-SYSTEM CRASH LISTING
GIBSE RD at PLEASANT VIEW DR, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
1 - 4 of 4 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | RD CHAR | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | A S | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | |
|--------|---------------------|---------------------|---------------------|---------|-----------|---------|-------|-------|----------|-----------|----------|---------|---------|---------|---------|---------|------------|------------|-------|----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | RD CHAR | (MEDIAN) | INT-REL | ANDBT | SURF | COLL | OWNER | FROM | INJ | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | DIRCT | LESS | TRAF- | DRVMY | LIGHT | SVRTY | VH TYPE | TO | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | |
| UNLOC? | D C S V L K LAT | LONG | LR | LOC | (LANES) | CONTL | DRVMY | LIGHT | SVRTY | VH TYPE | TO | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | |
| 09166 | N N N N 08/06/2016 | 16 | SE GIBSE RD | INTER | CROSS | N | N | CLR | ANGL-OTH | 01 NONE | 9 | STRGHT | 01 DRVR | NONE | 00 | Unk UNK | 000 | 000 | 02 | |
| CITY | SA | 0 | SE PLEASANT VIEW DR | CN | STOP SIGN | N | N | DAY | PDO | PSNGR CAR | N/A | S -N | 01 DRVR | NONE | 00 | Unk UNK | 000 | 000 | 00 | |
| N | 3P | 45 28 20.93 -122 28 | | 02 | 0 | | | | | | | | | | | | | | | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | | | | | | | | | | | | | | | 00 |
| 09195 | N N N 08/06/2016 | 16 | SE GIBSE RD | INTER | CROSS | N | N | CLR | ANGL-OTH | 01 NONE | 9 | STRGHT | 01 DRVR | NONE | 00 | Unk UNK | 000 | 000 | 03 | |
| NO RPT | SA | 0 | SE PLEASANT VIEW DR | CN | STOP SIGN | N | N | DAY | PDO | PSNGR CAR | N/A | W -E | 01 DRVR | NONE | 00 | Unk UNK | 000 | 000 | 00 | |
| N | 3P | 45 28 20.93 -122 28 | | 04 | 0 | | | | | | | | | | | | | | | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | | | | | | | | | | | | | | | 00 |
| 11176 | N N N 09/20/2016 | 17 | SE GIBSE RD | INTER | CROSS | N | N | CLR | ANGL-OTH | 01 NONE | 9 | STRGHT | 01 DRVR | NONE | 00 | Unk UNK | 000 | 000 | 03 | |
| NONE | TU | 0 | SE PLEASANT VIEW DR | CN | STOP SIGN | N | N | DAY | PDO | PSNGR CAR | N/A | S -N | 01 DRVR | NONE | 00 | Unk UNK | 000 | 000 | 00 | |
| N | 6P | 45 28 20.93 -122 28 | | 04 | 0 | | | | | | | | | | | | | | | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | | | | | | | | | | | | | | | 00 |
| 94329 | N N N 09/20/2016 | 19 | SE GIBSE RD | INTER | CROSS | N | N | CLR | ANGL-OTH | 01 NONE | 9 | STRGHT | 01 DRVR | NONE | 00 | Unk UNK | 000 | 000 | 02 | |
| NONE | TU | 0 | SE PLEASANT VIEW DR | CN | STOP SIGN | N | N | DAY | PDO | PSNGR CAR | N/A | S -N | 01 DRVR | NONE | 00 | Unk UNK | 000 | 015 | 00 | |
| N | 5P | 45 28 20.93 -122 28 | | 04 | 0 | | | | | | | | | | | | | | | 00 |
| N | 45 28 20.93 -122 28 | 1.3 | | | | | | | | | | | | | | | | | | 00 |

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

CDS380
05/05/2021

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

RICHEY RD at 190TH DR, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
1 - 4 of 10 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | SPCL USE | TRLR QTY | A S | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | |
|--------|------------------|--------------|---------------|--------------|----------|----------|-----------|----------|-----------|-----------|---------|-------|------------|-------|---------|-----|-----|-----|----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | INT-REL | OFFRD | WTHR | CRASH | MOVE | FROM | PRTC | INJ | G E LICNS | PED | | | | | |
| RD DPT | E L G N H R TIME | FROM | SECOND STREET | LESS | TRAF- | DRVWY | LIGHT | SVRTY | TO | OWNER | PH TYPE | SVRTY | E X RES | LOC | | | | | |
| UNLOC? | D C S V L K LAT | LONG | LSR | (#LANES) | CONTL | N | CLR | S-STRGHT | 01 UNKN | 0 | STRGHT | | | | | | | | |
| 15576 | Y N N | 01/03/2016 | 17 | SE RICHEY RD | 3-LEG | N | STOP SIGN | N | ICE | REAR | DARK | INJ | 01 DRVR | NONE | 00 | Unk | UNK | 013 | 01 |
| CITY | SU | 0 | SE 190TH DR | W | INTER | W | 06 | 0 | 02 NONE | 0 | STRGHT | W -E | 000 | 000 | 042,047 | 000 | 000 | 000 | 00 |
| N | 5P | 45 28 2.73 | -122 28 | | | | | | 02 NONE | 0 | STRGHT | W -E | 000 | 000 | 000 | 000 | 000 | 000 | 00 |
| N | 45 28 2.73 | -122 28 | .09 | | | | | | PRVTE | PSNGR CAR | OR<25 | | | | | | | | 00 |
| | | | | | | | | | 02 NONE | 0 | STRGHT | W -E | 000 | 000 | 000 | 000 | 000 | 000 | 00 |
| | | | | | | | | | 02 NONE | 0 | STRGHT | W -E | 000 | 000 | 000 | 000 | 000 | 000 | 00 |
| | | | | | | | | | 03 NONE | 0 | PRKD-P | W -E | 008 | 000 | 000 | 000 | 000 | 000 | 00 |
| | | | | | | | | | PRVTE | PSNGR CAR | OR<25 | | | | | | | | 00 |
| | | | | | | | | | PSNGR CAR | | | | | | | | | | 00 |
| 04047 | N N N | N 05/10/2019 | 17 | SE RICHEY RD | 3-LEG | N | STOP SIGN | N | CLR | ANGL-STP | 01 NONE | 9 | TURN-R | 08 | | | | | |
| CITY | FR | 0 | SE 190TH DR | W | INTER | W | 06 | 0 | 01 NONE | N/A | N -W | | 000 | 000 | 000 | 000 | 000 | 000 | 00 |
| N | 9P | 45 28 2.73 | -122 28 | | | | | | 02 NONE | 9 | STOP | W -E | 012 | 000 | 000 | 000 | 000 | 000 | 00 |
| N | 45 28 2.73 | -122 28 | .09 | | | | | | N/A | PSNGR CAR | UNK | | | | | | | | 00 |
| | | | | | | | | | 02 NONE | 9 | STOP | W -E | 012 | 000 | 000 | 000 | 000 | 000 | 00 |
| | | | | | | | | | PSNGR CAR | | | | | | | | | | 00 |
| | | | | | | | | | 01 DRVR | NONE | 00 | Unk | UNK | | | | | | 00 |
| | | | | | | | | | 01 DRVR | NONE | 00 | Unk | UNK | | | | | | 00 |
| 10090 | N N N | N 09/17/2015 | 17 | SE RICHEY RD | 3-LEG | N | STOP SIGN | N | RAIN | ANGL-OTH | 01 NONE | 0 | STRGHT | 02 | | | | | |
| NONE | TH | 0 | SE 190TH DR | CN | INTER | CN | 03 | 0 | 01 NONE | 0 | STRGHT | N -S | 000 | 000 | 000 | 000 | 000 | 000 | 00 |
| N | 6P | 45 28 2.73 | -122 28 | | | | | | 02 NONE | 0 | STRGHT | W -E | 028 | 000 | 000 | 000 | 000 | 000 | 00 |
| N | 45 28 2.73 | -122 28 | .09 | | | | | | PRVTE | PSNGR CAR | OR<25 | | | | | | | | 00 |
| | | | | | | | | | PSNGR CAR | | | | | | | | | | 00 |
| | | | | | | | | | 01 DRVR | NONE | 25 | M | OR-Y | 000 | 000 | 000 | 000 | 000 | 00 |
| | | | | | | | | | OR<25 | | | | | | | | | | 00 |
| 11752 | N N N | N 10/27/2015 | 17 | SE RICHEY RD | 3-LEG | N | STOP SIGN | N | CLR | ANGL-OTH | 01 NONE | 0 | STRGHT | 02 | | | | | |
| NONE | TU | 0 | SE 190TH DR | CN | INTER | CN | 04 | 0 | 01 NONE | 0 | STRGHT | S -N | 015 | 000 | 000 | 000 | 000 | 000 | 00 |
| N | 5P | 45 28 2.73 | -122 28 | | | | | | 02 NONE | 0 | TURN-L | W -N | 015 | 000 | 000 | 000 | 000 | 000 | 00 |
| N | 45 28 2.73 | -122 28 | .09 | | | | | | PRVTE | PSNGR CAR | OR<25 | | | | | | | | 00 |
| | | | | | | | | | PSNGR CAR | | | | | | | | | | 02 |
| | | | | | | | | | 01 DRVR | NONE | 30 | F | OR-Y | 015 | 000 | 000 | 000 | 000 | 00 |
| | | | | | | | | | OR<25 | | | | | | | | | | 02 |

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

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

RICHEY RD at 190TH DR, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
5 - 7 of 10 Crash records shown.

CDS380
05/05/2021

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | SPCL USE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE |
|--------|------------------|------------|-----------------|------------|----------|-----------|-------|---------|-----------|---------|-----------|--------|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | TRLR QTY | OWNER | FROM | INJ | G E LICNS | PED | | |
| RD DFT | E L G N H R TIME | FROM | SECOND STREET | LESS TRAF- | DRY | WET | DRY | DAY | INJ | PDO | DAY | INJ |
| UNLOC? | D C S V L K LAT | LONG | LRN | (#LANES) | CONTL | 3-LEG | N | CLR | ANGL-OTH | 01 NONE | 0 | TURN-L |
| 08153 | N N N | 07/14/2016 | 17 SE RICHEY RD | INTER | | | | | | | | 03 |
| | TH | 0 | SE 190TH DR | STOP SIGN | PRVTE | PSNGR CAR | | | | | | 00 |
| | 2P | -122 28 | | | | | | | | | | 00 |
| | 45 28 2.73 | .09 | | | | | | | | | | 00 |
| 02802 | N N N | 03/02/2016 | 17 SE RICHEY RD | INTER | | | | | | | | 03 |
| | WE | 0 | SE 190TH DR | STOP SIGN | N/A | | | | | | | 00 |
| | UNK | -122 28 | | | | | | | | | | 00 |
| | 45 28 2.73 | .09 | | | | | | | | | | 00 |
| 04167 | N N N | 05/18/2018 | 17 SE RICHEY RD | INTER | | | | | | | | 02,03 |
| | FR | 0 | SE 190TH DR | STOP SIGN | PRVTE | PSNGR CAR | | | | | | 00 |
| | 2P | -122 28 | | | | | | | | | | 02,03 |
| | 45 28 2.75 | .09 | | | | | | | | | | 00 |
| 05667 | N N N | 07/02/2018 | 17 SE RICHEY RD | INTER | | | | | | | | 02,03 |
| | MO | 0 | SE 190TH DR | STOP SIGN | UNKN | | | | | | | 00 |
| | 7A | -122 28 | | | | | | | | | | 02,03 |
| | 45 28 2.73 | .09 | | | | | | | | | | 00 |

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

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

RICHEY RD at 190TH DR, City of Gresham, Multnomah County, 01/01/2015 to 12/31/2019
 8 - 10 of 10 Crash records shown.

CITY OF GRESHAM, MULTNOMAH COUNTY

| SER# | P R J S W DATE | CLASS | CITY STREET | INT-TYPE | SPCL USE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | |
|--------|------------------|------------|---------------|--------------|----------|---------|---------|-----------|----------|---------|-----------|--------|----|
| INVEST | E A U I C O DAY | DIST | FIRST STREET | (MEDIAN) | TRLR QTY | FROM | INJ | G E LICNS | PED | | | | |
| RD DFT | E L G N H R TIME | FROM | SECOND STREET | LEGS | OWNER | PRTC | INJ | G E LICNS | PED | | | | |
| UNLOC# | D C S V L K LAT | LONG | LRS | (#LANES) | 02 NONE | 02 NONE | 02 NONE | 02 NONE | 02 NONE | | | | |
| | | | | CONTL | PRVTE | DRVMY | LIGHT | SVRTY | 02 NONE | | | | |
| | | | | | SCHL BUS | DRVMY | LIGHT | SVRTY | 02 NONE | | | | |
| | | | | | PRVTE | DRVMY | LIGHT | SVRTY | 02 NONE | | | | |
| | | | | | SCHL BUS | DRVMY | LIGHT | SVRTY | 02 NONE | | | | |
| | | | | | PRVTE | DRVMY | LIGHT | SVRTY | 02 NONE | | | | |
| | | | | | SCHL BUS | DRVMY | LIGHT | SVRTY | 02 NONE | | | | |
| 82642 | N N N | 07/29/2018 | 17 | SE RICHEY RD | INT-REL | 3-LEG | N | CLR | ANGL-OTH | 01 NONE | 9 | TURN-L | 03 |
| NONE | SU | 0 | SE 190TH DR | STOP SIGN | N | DRY | TURN | N/A | | | | | 00 |
| N | 9A | 2.73 | | | | | | | | | | | 00 |
| N | 45 28 | -122 28 | | | | | | | | | | | 00 |
| | | .09 | | | | | | | | | | | 00 |
| 08794 | N N N | 09/28/2018 | 17 | SE RICHEY RD | INT-REL | 3-LEG | N | CLR | FIX OBJ | 01 NONE | 9 | TURN-L | 08 |
| CITY | FR | 0 | SE 190TH DR | STOP SIGN | N | DRY | FIX | N/A | | | | | 00 |
| N | 7P | 2.73 | | | | | | | | | | | 00 |
| N | 45 28 | -122 28 | | | | | | | | | | | 00 |
| | | .09 | | | | | | | | | | | 00 |

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

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

COUNTY ROAD CRASH LISTING
RICHEY RD at FOSTER RD, City of Outside City Limits, Multnomah County, 01/01/2015 to 12/31/2019
1 - 4 of 17 Crash records shown.

MULTNOMAH COUNTY

| SER# | P R J S W DATE | MILEPNT | COUNTY ROADS | INT-TYPE | INT-REL | RD CHAR | RD CHA | INT-TYPE | SPCL USE | TRLR QTY | OWNER | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | |
|--------|--------------------|-----------|---------------|----------|-----------|---------|--------|----------|----------|----------|-------|--------|---------|-------|---------|------|-------------|------------|---------|-----|---------|-----|-----|----|
| INVEST | E A U I C O DAY | DIST FROM | FIRST STREET | (MEDIAN) | INT-REL | RD CHAR | RD CHA | INT-TYPE | SPCL USE | TRLR QTY | OWNER | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | |
| RD DPT | E L G N H R TIME | INTERSECT | SECOND STREET | LESS | TRAF- | LOCNTN | LOCNTN | INT-TYPE | SPCL USE | TRLR QTY | OWNER | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | |
| UNLOC? | D C S V L K LAT | LONG | SE FOSTER RD | 3-LEG | N | INTER | INTER | INT-TYPE | SPCL USE | TRLR QTY | OWNER | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | | | |
| 04358 | N N N N 04/25/2015 | 0 | SE FOSTER RD | 3-LEG | N | INTER | INTER | 0 | 0 | 0 | 0 | STRGHT | 01 DRVR | INJB | 27 M | OR-Y | 050,079,081 | 000 | 00 | | | | | |
| COUNTY | SA | | SE RICHEY RD | 0 | CURVE | N | N | 0 | 0 | 0 | 0 | S -N | | | | | | | 128,062 | 30 | | | | |
| N | 11P | | | | | | | | | | | | | | | | | | | 000 | 128,062 | 00 | | |
| N | 45 27 54.37 | -122 28 | | | | | | | | | | | | | | | | | | | | 000 | 30 | |
| N | 54.4 | | | | | | | | | | | | | | | | | | | | | | | |
| 05738 | N N N N 05/31/2017 | 0 | SE FOSTER RD | 3-LEG | N | INTER | INTER | 0 | 0 | 0 | 0 | STRGHT | 01 DRVR | NONE | 52 M | OR-Y | 026 | 000 | 00 | 29 | | | | |
| NONE | WE | | SE RICHEY RD | 0 | STOP SIGN | N | N | 0 | 0 | 0 | 0 | N -S | | | | | | | | 000 | 00 | 00 | 00 | |
| N | 4P | | | | | | | | | | | | | | | | | | | | 000 | 000 | 29 | |
| N | 45 27 54.37 | -122 28 | | | | | | | | | | | | | | | | | | | | 026 | 000 | |
| N | 54.4 | | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| 08111 | N N N N 09/08/2018 | 0 | SE FOSTER RD | 3-LEG | N | INTER | INTER | 9 | 9 | 9 | 9 | STRGHT | 01 DRVR | INJC | 55 F | OR-Y | 000 | 000 | 00 | 00 | | | | |
| NONE | SA | | SE RICHEY RD | 0 | STOP SIGN | N | N | 0 | 0 | 0 | 0 | N -S | | | | | | | | | 011 | 000 | 00 | |
| N | 4P | | | | | | | | | | | | | | | | | | | | 000 | 000 | 00 | |
| N | 45 27 54.37 | -122 28 | | | | | | | | | | | | | | | | | | | | 000 | 000 | |
| N | 54.4 | | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| 82557 | N N N N 07/11/2018 | 0 | SE FOSTER RD | 3-LEG | N | INTER | INTER | 0 | 0 | 0 | 0 | STRGHT | 01 DRVR | NONE | 33 M | OR-Y | 026 | 000 | 00 | 29 | | | | |
| NONE | WE | | SE RICHEY RD | 0 | STOP SIGN | N | N | 0 | 0 | 0 | 0 | NE-SW | | | | | | | | | 000 | 000 | 00 | 00 |
| N | 4P | | | | | | | | | | | | | | | | | | | | 000 | 000 | 000 | 29 |
| N | 45 27 54.34 | -122 28 | | | | | | | | | | | | | | | | | | | | 026 | 000 | 00 |
| N | 54.35 | | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| 82557 | N N N N 07/11/2018 | 0 | SE FOSTER RD | 3-LEG | N | INTER | INTER | 0 | 0 | 0 | 0 | STRGHT | 01 DRVR | INJC | 26 F | OR-Y | 000 | 000 | 00 | 00 | | | | |
| NONE | WE | | SE RICHEY RD | 0 | STOP SIGN | N | N | 0 | 0 | 0 | 0 | NE-SW | | | | | | | | | 011 | 000 | 00 | 00 |
| N | 4P | | | | | | | | | | | | | | | | | | | | 000 | 000 | 000 | 00 |
| N | 45 27 54.34 | -122 28 | | | | | | | | | | | | | | | | | | | | 000 | 000 | 00 |
| N | 54.35 | | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| 03934 | N N N N 04/16/2017 | 0 | SE FOSTER RD | 3-LEG | N | INTER | INTER | 0 | 0 | 0 | 0 | TURN-R | 01 DRVR | NONE | 57 M | OR-Y | 028 | 000 | 00 | 02 | | | | |
| NO RPT | SU | | SE RICHEY RD | 0 | UNKNOWN | N | N | 0 | 0 | 0 | 0 | S -E | | | | | | | | | 000 | 000 | 00 | 00 |
| N | 2P | | | | | | | | | | | | | | | | | | | | 000 | 000 | 000 | 02 |
| N | 45 27 54.37 | -122 28 | | | | | | | | | | | | | | | | | | | | 028 | 000 | 00 |
| N | 54.4 | | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| 03934 | N N N N 04/16/2017 | 0 | SE FOSTER RD | 3-LEG | N | INTER | INTER | 0 | 0 | 0 | 0 | TURN-R | 01 DRVR | NONE | 85 F | OR-Y | 000 | 000 | 00 | 00 | | | | |
| NO RPT | SU | | SE RICHEY RD | 0 | UNKNOWN | N | N | 0 | 0 | 0 | 0 | S -E | | | | | | | | | 000 | 000 | 000 | 00 |
| N | 2P | | | | | | | | | | | | | | | | | | | | 000 | 000 | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | | | | | | | | | | | | | | 000 | 000 | 00 |
| N | 54.4 | | | | | | | | | | | | | | | | | | | | | | 000 | 00 |
| 03934 | N N N N 04/16/2017 | 0 | SE FOSTER RD | 3-LEG | N | INTER | INTER | 0 | 0 | 0 | 0 | TURN-R | 01 DRVR | INJC | 57 F | OR-Y | 000 | 000 | 00 | 00 | | | | |
| NO RPT | SU | | SE RICHEY RD | 0 | UNKNOWN | N | N | 0 | 0 | 0 | 0 | S -E | | | | | | | | | 000 | 000 | 000 | 00 |
| N | 2P | | | | | | | | | | | | | | | | | | | | 000 | 000 | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | | | | | | | | | | | | | | 000 | 000 | 00 |
| N | 54.4 | | | | | | | | | | | | | | | | | | | | | | 000 | 00 |

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

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

COUNTY ROAD CRASH LISTING
RICHEY RD at FOSTER RD, City of Outside City Limits, Multnomah County, 01/01/2015 to 12/31/2019
5 - 9 of 17 Crash records shown.

MULTNOMAH COUNTY

| SER# | P R J S W DATE | MILEPNT | COUNTY ROADS | INT-TYPE | INT-REL | RD CHAR | RD CHAR | 3-LEG | CLR | WTHR | CRASH | SPCL USE | TRLR QTY | OWNER | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | | | | | | | | |
|--------|------------------|-------------|---------------|----------|-----------|---------|---------|------------|-----------|---------|--------|-----------|-----------|-----------|---------|---------|-------|---------|-----------|-------|-----------|---------|---------|--------|---------|-----------|--------|---------|-----|--|
| INVEST | E A U I C O DAY | DIST FROM | FIRST STREET | (MEDIAN) | INT-REL | OFFRBD | WTHR | CRASH | TRAF- | LESS | TRAF- | CONTL | DRVMY | LIGHT | SVRTY | 02 NONE | 0 | STRGHT | W -E | PRVTE | PSNGR CAR | 02 PSNG | INJC | 20 F | A S | G E LICNS | PED | | | |
| RD DFT | E L G N H R TIME | INTERSECT | SECOND STREET | (#LANES) | CONTL | DRVMY | LIGHT | SVRTY | 02 NONE | 0 | STRGHT | W -E | PRVTE | PSNGR CAR | 02 PSNG | INJC | 20 F | A S | G E LICNS | PED | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | | | |
| UNLOC? | D C S V L K LAT | LONG | LOCIN | 3-LEG | N | CLR | S-1STOP | 01 NONE | 0 | STRGHT | E -W | PRVTE | PSNGR CAR | 01 DRVR | NONE | 62 M | OR-Y | OR<25 | OR<25 | 026 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | |
| 82227 | N N N | 06/07/2017 | SE FOSTER RD | INTER | 3-LEG | N | CLR | S-1STOP | 01 NONE | 0 | STRGHT | W -E | PRVTE | PSNGR CAR | 02 PSNG | INJC | 20 F | A S | G E LICNS | PED | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | | | |
| NONE | | 0 | SE RICHEY RD | E | STOP SIGN | N | DRY | REAR | PRVTE | E -W | PRVTE | PSNGR CAR | 01 DRVR | NONE | 62 M | OR-Y | OR<25 | 026 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | |
| N | 4P | 45 27 54.37 | -122 28 | 06 | 0 | N | DAY | INJ | PSNGR CAR | 02 NONE | 0 | STOP | PRVTE | PSNGR CAR | 01 DRVR | NONE | 46 F | OR-Y | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | |
| N | 45 27 54.37 | -122 28 | 54.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 06677 | N N N | 06/23/2017 | SE FOSTER RD | INTER | 3-LEG | N | CLR | S-1STOP | 01 NONE | 0 | STRGHT | W -E | PRVTE | PSNGR CAR | 02 PSNG | INJC | 20 F | A S | G E LICNS | PED | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE | | | |
| NONE | | 0 | SE RICHEY RD | E | STOP SIGN | N | DRY | REAR | PRVTE | E -W | PRVTE | PSNGR CAR | 01 DRVR | NONE | 62 M | OR-Y | OR<25 | 026 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | |
| N | 5P | 45 27 54.37 | -122 28 | 06 | 0 | N | DAY | INJ | PSNGR CAR | 02 NONE | 0 | STOP | PRVTE | PSNGR CAR | 01 DRVR | NONE | 46 F | OR-Y | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | | |
| N | 45 27 54.37 | -122 28 | 54.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 01542 | Y N N | 02/20/2019 | SE FOSTER RD | INTER | 3-LEG | N | SNOW | ANGL-STP | 01 NONE | 9 | TURN-R | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | |
| NONE | | 0 | SE RICHEY RD | E | STOP SIGN | N | ICE | TURN | N/A | S -E | S -E | N/A | N/A | N/A | S -E | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N | 5P | 45 27 54.37 | -122 28 | 06 | 0 | N | DUSK | PDO | PSNGR CAR | 02 NONE | 9 | STOP | PRVTE | PSNGR CAR | 01 DRVR | NONE | 50 M | OR-Y | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | |
| N | 45 27 54.37 | -122 28 | 54.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 04752 | N N N | 05/30/2019 | SE FOSTER RD | INTER | 3-LEG | N | CLR | S-1STOP | 01 NONE | 9 | STRGHT | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | TURN-R | 01 NONE | 9 | |
| NONE | | 0 | SE RICHEY RD | E | STOP SIGN | N | DRY | REAR | N/A | E -W | E -W | N/A | N/A | N/A | E -W | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N | 8A | 45 27 54.37 | -122 28 | 06 | 0 | N | DAY | PDO | PSNGR CAR | 02 NONE | 9 | STOP | PRVTE | PSNGR CAR | 01 DRVR | NONE | 50 M | OR-Y | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | |
| N | 45 27 54.37 | -122 28 | 54.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10418 | N N N | 09/02/2016 | SE FOSTER RD | INTER | 3-LEG | N | RAIN | O-1 L-TURN | 01 NONE | 9 | TURN-L | TURN-L | 01 NONE | 9 | TURN-L | 01 NONE | 9 | TURN-L | 01 NONE | 9 | TURN-L | 01 NONE | 9 | TURN-L | 01 NONE | 9 | TURN-L | 01 NONE | 9 | |
| NONE | | 0 | SE RICHEY RD | KN | UNKNOWN | N | WET | TURN | N/A | N -E | N -E | N/A | N/A | N/A | N -E | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| N | UNK | 45 27 54.37 | -122 28 | 04 | 1 | N | DAY | PDO | UNKNOWN | 02 NONE | 9 | STOP | PRVTE | PSNGR CAR | 01 DRVR | NONE | 50 M | OR-Y | OR<25 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | 000 | |
| N | 45 27 54.37 | -122 28 | 54.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

COUNTY ROAD CRASH LISTING

RICHEY RD at FOSTER RD, City of Outside City Limits, Multnomah County, 01/01/2015 to 12/31/2019

10 - 13 of 17 Crash records shown.

MULTNOMAH COUNTY

| SER# | P R J S W DATE | MILEPNT | COUNTY ROADS | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | MOVE | FROM | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE |
|--------|------------------|------------|---------------|------------|----------|--------|----------|----------|----------|---------|--------|---------|---------|---------|-----|-------|-----------|-------|
| INVEST | E A U I C O DAY | DIST FROM | FIRST STREET | (MEDIAN) | INT-REL | RDNDBT | SURF | COLL | TRLR QTY | OWNER | TO | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE |
| RD DPT | E L G N H R TIME | INTERSECT | SECOND STREET | LESS TRAF- | (#LANES) | CONTL | DRVMY | LIGHT | 02 NONE | 9 | STRGHT | 01 DRVR | NONE | 00 | Unk | UNK | 000 | 00 |
| UNLOC? | D C S V L K LAT | LONG | LOCIN | 3-LEG | N | RAIN | ANGL-OTH | 01 NONE | 0 | TURN-R | S -N | 01 DRVR | NONE | 00 | Unk | UNK | 000 | 00 |
| 02815 | N N N | 03/18/2017 | SE FOSTER RD | INTER | 3-LEG | N | RAIN | ANGL-OTH | 01 NONE | 0 | TURN-R | 01 DRVR | NONE | 00 | Unk | UNK | 000 | 00 |
| NO RPT | SA | 0 | SE RICHEY RD | CN | STOP | SIGN | N | WET | TURN | PRVTE | E -N | 01 DRVR | NONE | 22 | M | OTH-Y | 015 | 00 |
| N | 10A | | | 01 | 0 | N | DAY | INJ | PSNGR | CAR | E -N | 01 DRVR | NONE | 22 | M | OTH-Y | 000 | 02 |
| N | 45 27 54.37 | -122 28 | | | | | | | 01 NONE | 0 | TURN-R | 02 PSNG | NONE | 24 | F | | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PRVTE | | E -N | 02 PSNG | NONE | 24 | F | | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | 01 NONE | 0 | TURN-R | 03 PSNG | NONE | 24 | F | | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PRVTE | | E -N | 03 PSNG | NONE | 24 | F | | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | 02 NONE | 0 | STRGHT | 01 DRVR | INJC | 44 | M | OR-Y | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PRVTE | | S -N | 01 DRVR | INJC | 44 | M | OR-Y | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PSNGR | CAR | S -N | 01 DRVR | INJC | 44 | M | OR-Y | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | 02 NONE | 0 | STRGHT | 02 PSNG | NONE | 13 | M | | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PRVTE | | S -N | 02 PSNG | NONE | 13 | M | | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PSNGR | CAR | S -N | 02 PSNG | NONE | 13 | M | | 000 | 00 |
| 05729 | N N N | 05/24/2017 | SE FOSTER RD | INTER | 3-LEG | N | CLR | O-1 | L-TURN | 01 NONE | 0 | TURN-L | 01 DRVR | NONE | 00 | Unk | UNK | 087 |
| COUNTY | WE | 0 | SE RICHEY RD | CN | UNKNOWN | N | DRY | TURN | UNKN | N -E | | 01 DRVR | NONE | 00 | Unk | UNK | 000 | 00 |
| N | 6P | | | 04 | 0 | N | DAY | INJ | PSNGR | CAR | N -E | 01 DRVR | NONE | 00 | Unk | UNK | 000 | 02 |
| N | 45 27 54.37 | -122 28 | | | | | | | 02 NONE | 0 | STRGHT | 01 DRVR | NONE | 00 | Unk | UNK | 028,004 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PRVTE | | S -N | 01 DRVR | NONE | 00 | Unk | UNK | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PSNGR | CAR | S -N | 01 DRVR | INJB | 44 | F | OR-Y | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | 02 NONE | 0 | STRGHT | 01 DRVR | INJB | 44 | F | OR-Y | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PRVTE | | S -N | 01 DRVR | INJB | 44 | F | OR-Y | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PSNGR | CAR | S -N | 01 DRVR | INJB | 44 | F | OR-Y | 000 | 00 |
| 11503 | N N N | 10/19/2017 | SE FOSTER RD | INTER | 3-LEG | N | RAIN | O-1 | L-TURN | 01 NONE | 0 | TURN-L | 01 DRVR | NONE | 00 | Unk | UNK | 087 |
| COUNTY | TH | 0 | SE RICHEY RD | CN | UNKNOWN | N | WET | TURN | PRVTE | N -E | | 01 DRVR | NONE | 00 | Unk | UNK | 000 | 00 |
| N | 5P | | | 04 | 1 | N | DAY | INJ | PSNGR | CAR | N -E | 01 DRVR | INJC | 32 | M | OR-Y | 000 | 02 |
| N | 45 27 54.37 | -122 28 | | | | | | | 02 NONE | 0 | STRGHT | 01 DRVR | INJC | 32 | M | OR-Y | 028,004 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PRVTE | | S -N | 01 DRVR | INJC | 32 | M | OR-Y | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PSNGR | CAR | S -N | 01 DRVR | INJC | 32 | M | OR-Y | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | 02 NONE | 0 | STRGHT | 01 DRVR | INJB | 38 | M | SUSP | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PRVTE | | S -N | 01 DRVR | INJB | 38 | M | SUSP | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PSNGR | CAR | S -N | 01 DRVR | INJB | 38 | M | SUSP | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | 02 NONE | 0 | STRGHT | 01 DRVR | INJB | 38 | M | SUSP | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PRVTE | | S -N | 01 DRVR | INJB | 38 | M | SUSP | 000 | 00 |
| N | 45 27 54.37 | -122 28 | | | | | | | PSNGR | CAR | S -N | 01 DRVR | INJB | 38 | M | SUSP | 000 | 00 |

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

OREGON... DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
 COUNTY ROAD CRASH LISTING

RICHEY RD at FOSTER RD, City of Outside City Limits, Multnomah County, 01/01/2015 to 12/31/2019
 14 - 16 of 17 Crash records shown.

MULTNOMAH COUNTY

| SER# | P R J S W DATE | MILEPNT | COUNTY ROADS | RD CHAR | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | SPCL USE | TRLR QTY | OWNER | MOVE | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT. EVENT | CAUSE | | | |
|--------|------------------|------------|---------------|---------|----------|-----------|-------|-------|------------|----------|----------|--------|-------|---------|-------|---------|----------|---------|------------|--------|--|---------|----|
| INVEST | E A U I C O DAY | DIST FROM | FIRST STREET | RD CHAR | (MEDIAN) | INT-REL | ANDBT | WTHR | COLL | TRAF- | LESS | TRAF- | CONTL | 3-LEG | N | CLR | ANGL-OTH | 01 NONE | 0 | TURN-R | | | |
| RD DFT | E L G N H R TIME | INTERSECT | SECOND STREET | LOCIN | (#LANES) | CONTL | DRVMY | LIGHT | SVRTY | VH TYPE | | | | | | | | | | | | | |
| UNLOC? | D C S V L K LAT | LONG | SE FOSTER RD | INTER | | | | | | | | | | | | | | | | | | | |
| 13563 | N N N | 11/30/2017 | SE FOSTER RD | INTER | 3-LEG | N | N | CLR | ANGL-OTH | 01 NONE | 0 | TURN-R | | | | | | | | | | 02 | |
| NO RPT | TH | 0 | SE RICHEY RD | CN | | STOP SIGN | N | DRY | TURN | PRVTE | | | E -N | | | | | | | | | 00 | |
| N | 4P | | | | | | | | | | | | | 01 DRVR | INJC | 18 F | OR-Y | | | | | 028 | 00 |
| N | 45 27 54.37 | -122.28 | | | 1 | | | | | | | | | | | | | | | | | | 02 |
| | | 54.4 | | | | | | | | | | | | | | | | | | | | | |
| 01072 | N N N | 02/11/2018 | SE FOSTER RD | INTER | 3-LEG | N | N | CLR | O-1 L-TURN | 01 NONE | 0 | STRGHT | | | | | | | | | | | 04 |
| COUNTY | SU | 0 | SE RICHEY RD | CN | | STOP SIGN | N | DRY | TURN | PRVTE | | | S -N | | | | | | | | | | 00 |
| N | 4P | | | | | | | | | | | | | 01 DRVR | INJB | 40 F | OR-Y | | | | | 000 | 00 |
| N | 45 27 54.37 | -122.28 | | | 0 | | | | | | | | | | | | | | | | | | 00 |
| | | 54.4 | | | | | | | | | | | | | | | | | | | | | 00 |
| 02848 | N N N | 04/04/2019 | SE FOSTER RD | INTER | 3-LEG | N | N | CLR | O-1 L-TURN | 01 NONE | 0 | TURN-L | | | | | | | | | | | 02 |
| NO RPT | TH | 0 | SE RICHEY RD | CN | | STOP SIGN | N | DRY | TURN | PRVTE | | | N -E | | | | | | | | | | 00 |
| N | 5P | | | | | | | | | | | | | 01 DRVR | NONE | 20 F | OR-Y | | | | | 028,004 | 02 |
| N | 45 27 54.37 | -122.28 | | | 1 | | | | | | | | | | | | | | | | | | 00 |
| | | 54.4 | | | | | | | | | | | | | | | | | | | | | 00 |
| 10595 | N N N | 11/13/2019 | SE FOSTER RD | INTER | 3-LEG | N | N | CLD | O-1 L-TURN | 01 NONE | 0 | TURN-L | | | | | | | | | | | 02 |
| COUNTY | WE | 0 | SE RICHEY RD | CN | | STOP SIGN | N | DRY | TURN | PRVTE | | | N -E | | | | | | | | | | 00 |
| N | 6P | | | | | | | | | | | | | 01 DRVR | NONE | 17 F | OR-Y | | | | | 028,004 | 02 |
| N | 45 27 54.37 | -122.28 | | | 1 | | | | | | | | | | | | | | | | | | 00 |
| | | 54.4 | | | | | | | | | | | | | | | | | | | | | 00 |
| | | | | | | | | | | | | | | 01 DRVR | NONE | 22 M | OR-Y | | | | | 000 | 00 |
| | | | | | | | | | | | | | | | | | | | | | | | 00 |

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

OREGON.. DEPARTMENT OF TRANSPORTATION - TRANSPORTATION DEVELOPMENT DIVISION
TRANSPORTATION DATA SECTION - CRASH ANALYSIS AND REPORTING UNIT

COUNTY ROAD CRASH LISTING
RICHEY RD at FOSTER RD, City of Outside City Limits, Multnomah County, 01/01/2015 to 12/31/2019
17 - 17 of 17 Crash records shown.

CDS380
05/05/2021

MULTNOMAH COUNTY

| SER# | P R J S W DATE | MILEPNT | COUNTY ROADS | INT-TYPE | INT-REL | RD CHAR | RD CHAR | INT-TYPE | INT-REL | OFFRD | WTHR | CRASH | TRLR QTY | SPCL USE | MOVE | FROM | PRTC | INJ | G E LICNS | PED | PH TYPE | SVRTY | E X RES | LOC | ERROR | ACT EVENT | CAUSE |
|--------|-----------------|---------|--------------|---------------|------------|----------|---------|----------|---------|-------|---------|-------|----------|----------|---------|------|------|-----|-----------|-----|---------|-------|---------|-----|-------|-----------|-------|
| UNLOC? | D C S V L K LAT | LONG | INTERSECT | SECOND STREET | LESS TRAF- | (#LANES) | CONTL | DRVMY | LIGHT | SVRTY | 02 NONE | 0 | PRVTE | S -N | 02 PSNG | INJC | 24 | M | 00 | 00 | 000 | 000 | 000 | 000 | 00 | 00 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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