



TM#3 EXISTING CONDITIONS INVENTORY AND ANALYSIS (DRAFT)

DATE: September 12, 2023

TO: Project Management Team

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SUBJECT: Sweet Home TSP and NSHA Refinement
TM#3 Existing Conditions

Project #20020-015

INTRODUCTION

This memorandum summarizes the transportation inventory of existing conditions for the City of Sweet Home and analyzes the existing multimodal travel conditions. A review of the existing transportation conditions for walking, biking, transit, motor vehicles, freight, and safety is included in the inventory.

The purpose of this existing conditions inventory and analysis is to assess the current conditions of the transportation system in Sweet Home, including its physical infrastructure, operational characteristics, and usage patterns. This includes an inventory of the existing transportation network, including roadways, sidewalks, bike infrastructure, and transit facilities. The analysis also includes an assessment of existing traffic conditions and a review of historical crash rates. The inventory will help identify potential gaps and deficiencies in the transportation system.

BACKGROUND

Sweet Home is a small city located in Linn County, Oregon, United States. As of the 2020 census, the population was approximately 10,000 people. The community is situated in the foothills of the Cascade Mountains and is known for its outdoor recreation opportunities, including hiking, fishing, and camping. Sweet Home is located approximately 19 miles east of Interstate-5 (I-5). Sweet Home is approximately 80 miles south of Portland, 40 miles north of Eugene/Springfield, and 45 miles west of Santiam Pass. The area surrounding Sweet Home is primarily rural and has historically been served by a mostly agricultural and timber-based economy. Located within the

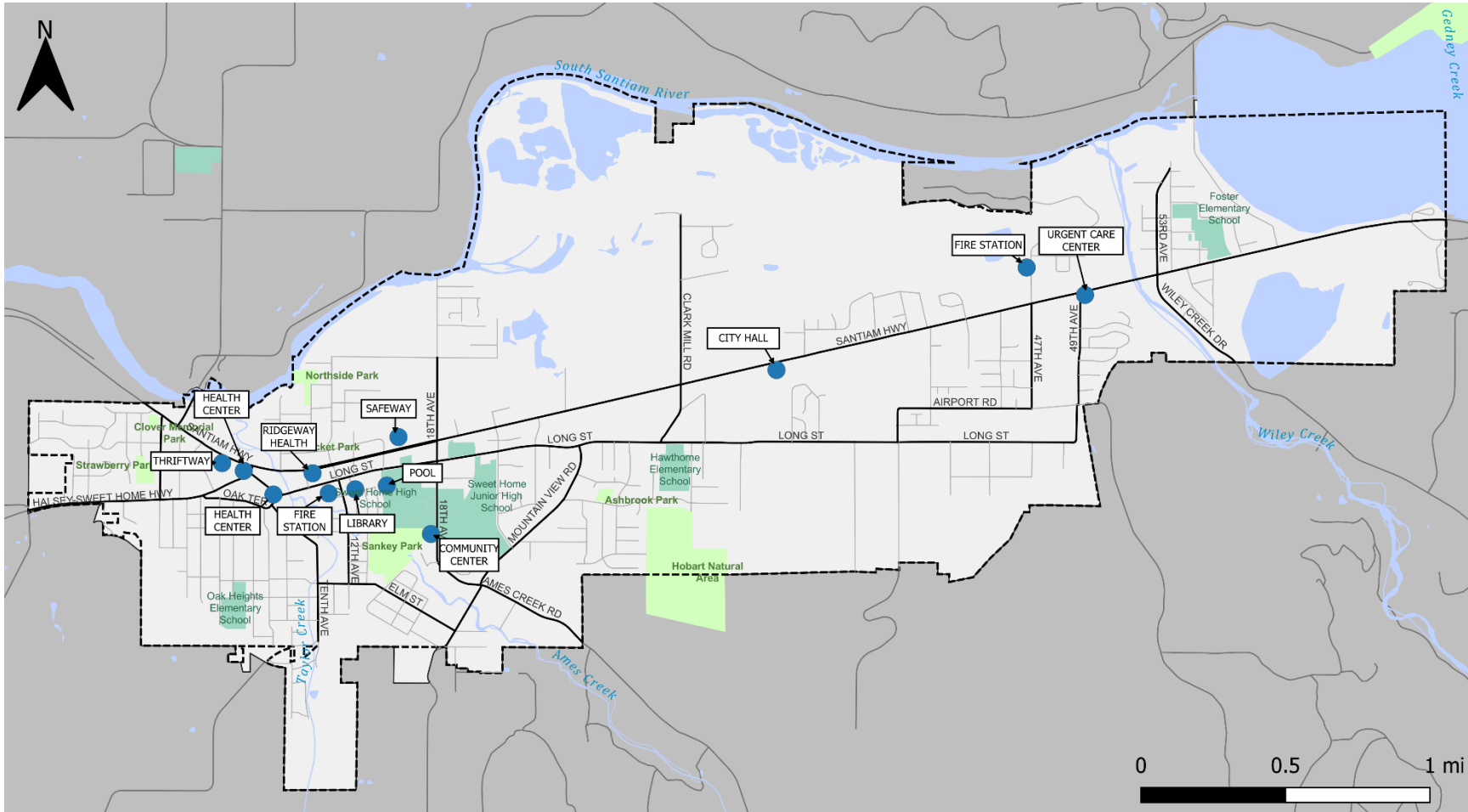
South Santiam Watershed, the city is situated along the South Fork of the Santiam River at an elevation of about 537 feet.

U.S. 20 (Santiam Highway) runs east-west through the city along Main Street and forms the major transportation link through the community. ORE 228 (Holley Road) enters Sweet Home from the west and curves north to terminate at U.S. 20 near the west end of the city.

Sweet Home is served by the Sweet Home School District. The district includes Sweet Home High School, a junior high school, and four elementary schools. The district covers Sweet Home, Cascadia, Crawfordsville, Holley, Liberty, Pleasant Valley, and other surrounding communities.

The study area boundary for this plan generally coincides with the Urban Growth Boundary (UGB), which is shown in **Figure 1** together with the city limits and street system, and key destinations identified within the city.

Figure 2 illustrates a zoning map of Sweet Home that shows how different land uses are oriented around the City. Most commercial land is found in the downtown area, and highway commercial along U.S. 20. High density residential is primarily located along Long Street or adjacent to the downtown area, and medium and low density radiating outward from the downtown area. In Fall 2022 the City updated the Development Code and added a Mixed Use Employment Zone (MUE) designation. This update was accompanied by an update to the Comprehensive Plan map and all the properties currently zoned RC had the Comprehensive Plan designation changed to MUE. While existing zoning in the area was not changed during this process, the modification enables flexibility by providing the benefits of the existing RC zoning while facilitating future transition to the MUE. **Figure 3** illustrates the City's 2022 Zoning Update.



- City Limits
- Schools
- Parks
- Outside UGB

FIGURE 1: SWEET HOME AND KEY DESTINATIONS

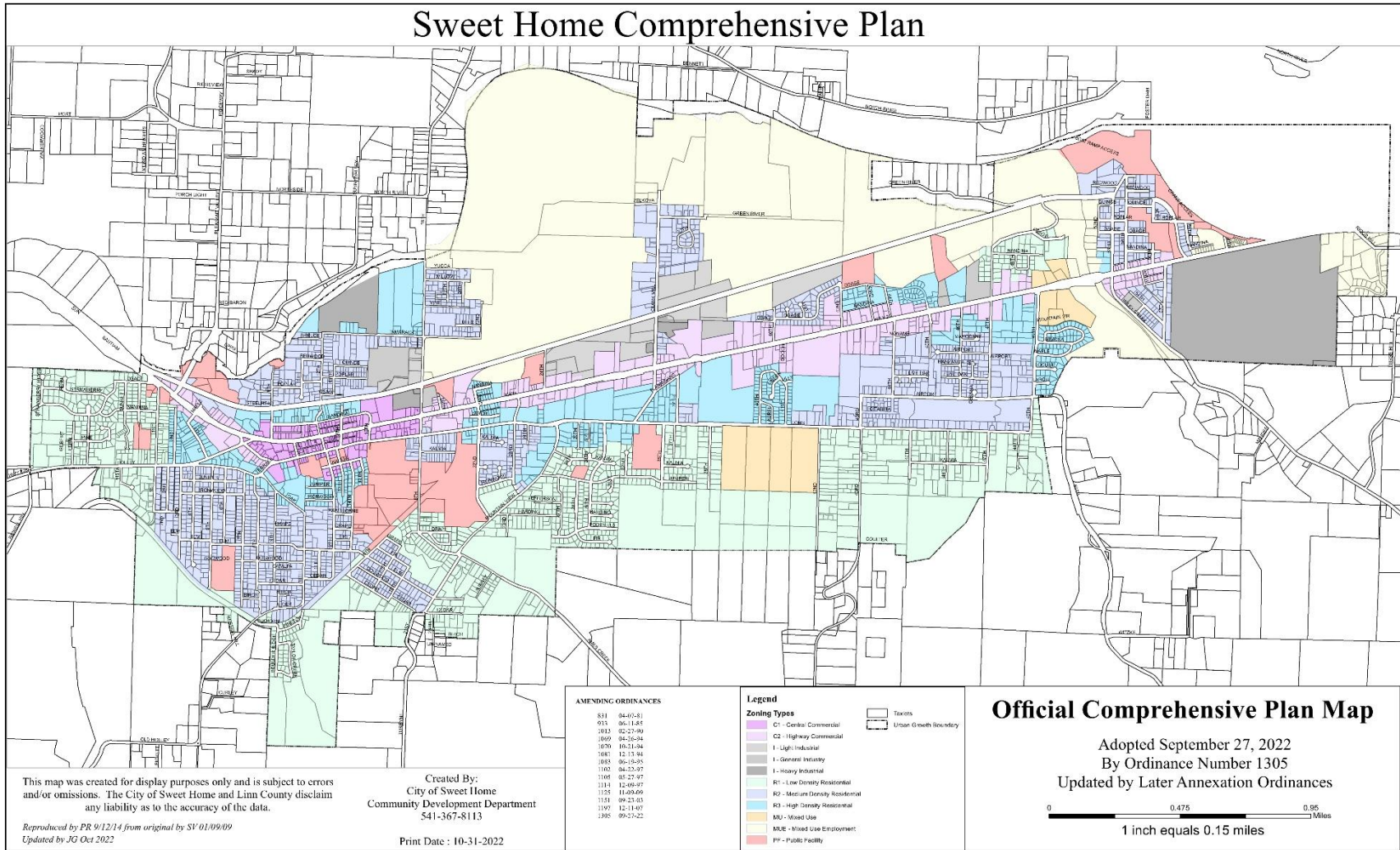


FIGURE 2: SWEET HOME COMPREHENSIVE PLAN (2022) LAND USE DESIGNATIONS

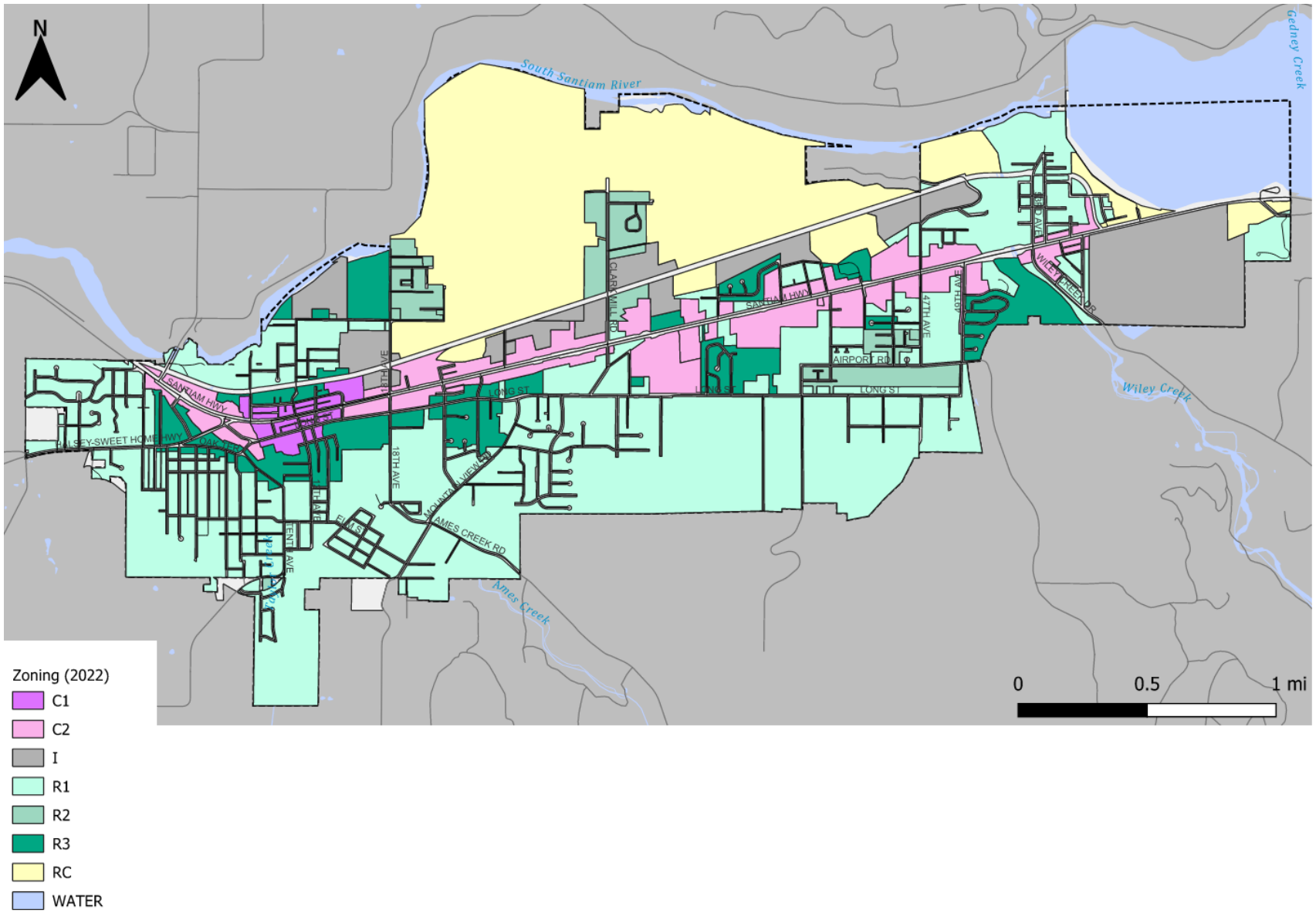


FIGURE 3: SWEET HOME ZONING UPDATE (2022)

WALKING AND BIKING CONDITIONS

Sweet Home is a compact city with many destinations located within a half-mile to three miles of each other. The system connectivity, density, and generally flat topography offer excellent pedestrian and cycling conditions in many areas of the city. Sweet Home's downtown area features a grid pattern of short blocks only interrupted by Ames Creek. Older areas in town also have a grid pattern, while newer areas transition to more suburban character with long blocks and cul-de-sacs.

The primary corridor through Sweet Home is U.S. 20 (Main Street/South Santiam Highway), which facilitates traffic flow between I-5 and Central Oregon. The high travel speeds of motor passing through the town to reach other destinations highlights the need for safe and highly visible pedestrian and bicycling facilities. Although improvements have been made, U.S. 20 still lacks adequate infrastructure for pedestrians and bicyclists along much of its length. However, the downtown stretch of the highway features a median with mid-block crosswalks, promoting enhanced visibility and safety for motorists, cyclists, and pedestrians.

While some streets in downtown provide satisfactory pedestrian amenities and can accommodate bicycles, many other streets in Sweet Home lack basic amenities such as sidewalks. Several barriers contribute to inefficient and less desirable pedestrian and bicycle travel, including the absence of walkways and challenges in crossing U.S. 20 outside of downtown, the lack of sidewalks and bike lanes or paths on collector streets, limited east-west connectivity (aside from Long Street and U.S. 20), and the absence of a connection between the newer and older parts of town via the street system, making it difficult to link the downtown core with the newer residential areas.

PEDESTRIAN NETWORK

Pedestrian facilities are a key aspect of a complete multimodal transportation system. Emphasizing pedestrian infrastructure not only promotes healthy lifestyles but also addresses social equity concerns by ensuring that individuals of all ages, including the young and elderly, as well as those without access to motorized transportation, can access essential goods, services, employment opportunities, public transit, and education.

Sidewalks are provided throughout the downtown core and some residential areas. Sidewalks are located in all of the commercial areas along Main Street and are well connected with most streets improved with curbs and sidewalks. Moving away from the downtown and nearby residential areas, the roads take on a more rural, unimproved character with the eastern part of the City having fewer sidewalks than the western and central areas.

Sidewalks are present on one or both sides of the street on arterials and collectors in streets, but there are deficiencies and gaps in multiple locations. Deficiencies are defined at locations where there is no sidewalk on either side of the street. Deficiencies exist on Long Street, Airport Road, 47th Avenue, 49th Avenue, 53rd Avenue and Wiley Creek Drive. Full sidewalks on both sides of the street are generally provided downtown and near the schools, as well as along Santiam Highway.

A map of existing pedestrian facilities can be found in **Figure 4**.

BICYCLE NETWORK

Bicycling plays a key role in the transportation system's ability to support healthy lifestyles and provide a variety of travel choices beyond the motor vehicle. Biking trips are an option for getting to and from school, shopping, commuting to work, and for travel to other activity generators in the City, as well as for recreational purposes. Currently, there are several designated bike routes and lanes within Sweet Home's downtown area, including portions of Main Street and Long Street.

Currently there are no separated cycling facilities in Sweet Home, however, painted bike lanes are present along a large portion of U.S. 20 and one segment of Long Street between 22nd Avenue and 35th Avenue. Sweet Home's existing bicycle facilities is shown in **Figure 5**.

BICYCLE LEVEL OF TRAFFIC STRESS

The Bicycle Level of Traffic Stress (LTS) is a measure used to assess the comfort and safety of bicycling conditions on different streets and routes. It quantifies the level of stress or discomfort experienced by cyclists when riding in proximity to motor vehicle traffic. The LTS methodology was developed to evaluate the suitability of streets and determine the need for bicycle infrastructure improvements.

LTS categorizes streets into four levels based on their traffic characteristics:

- LTS 1: Very Low Stress - These streets typically have minimal or no traffic, low vehicle speeds, and dedicated bicycle facilities such as bike lanes or separated paths. They are considered highly comfortable for cyclists.
- LTS 2: Low Stress - These streets have low traffic volumes and speeds, and they may have shared roadways or designated bicycle lanes. They are generally comfortable for most cyclists.
- LTS 3: Moderate Stress - These streets have moderate traffic volumes and speeds, often lacking dedicated bicycle facilities. Cyclists may have to share the road with vehicles, and there may be some challenges at intersections or other conflict points.
- LTS 4: High Stress - These streets are characterized by high traffic volumes, high vehicle speeds, and a lack of dedicated bicycle facilities. Cyclists face significant challenges sharing the road with fast-moving and heavy traffic, making these streets uncomfortable and potentially unsafe for biking.

By evaluating streets using the LTS framework, transportation planners and policymakers can identify areas where improvements are needed to create a more bicycle-friendly environment. This may include implementing bike lanes, protected bike facilities, traffic calming measures, or other infrastructure enhancements to reduce stress and enhance safety for cyclists.

Collector and Arterial streets in Sweet Home have been evaluated based on the BLTS methodology outlined in the *ODOT Analysis Procedures Manual Version 2 (2020)*. Based on this methodology, the majority of Sweet Home's arterial and connector street network is BLTS level 3 or BLTS level 4, with the score primarily driven by the high travel speeds on these corridors. BLTS on Sweet Home's transportation network is summarized in **Figure 6**.

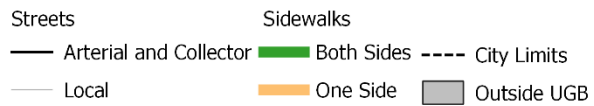
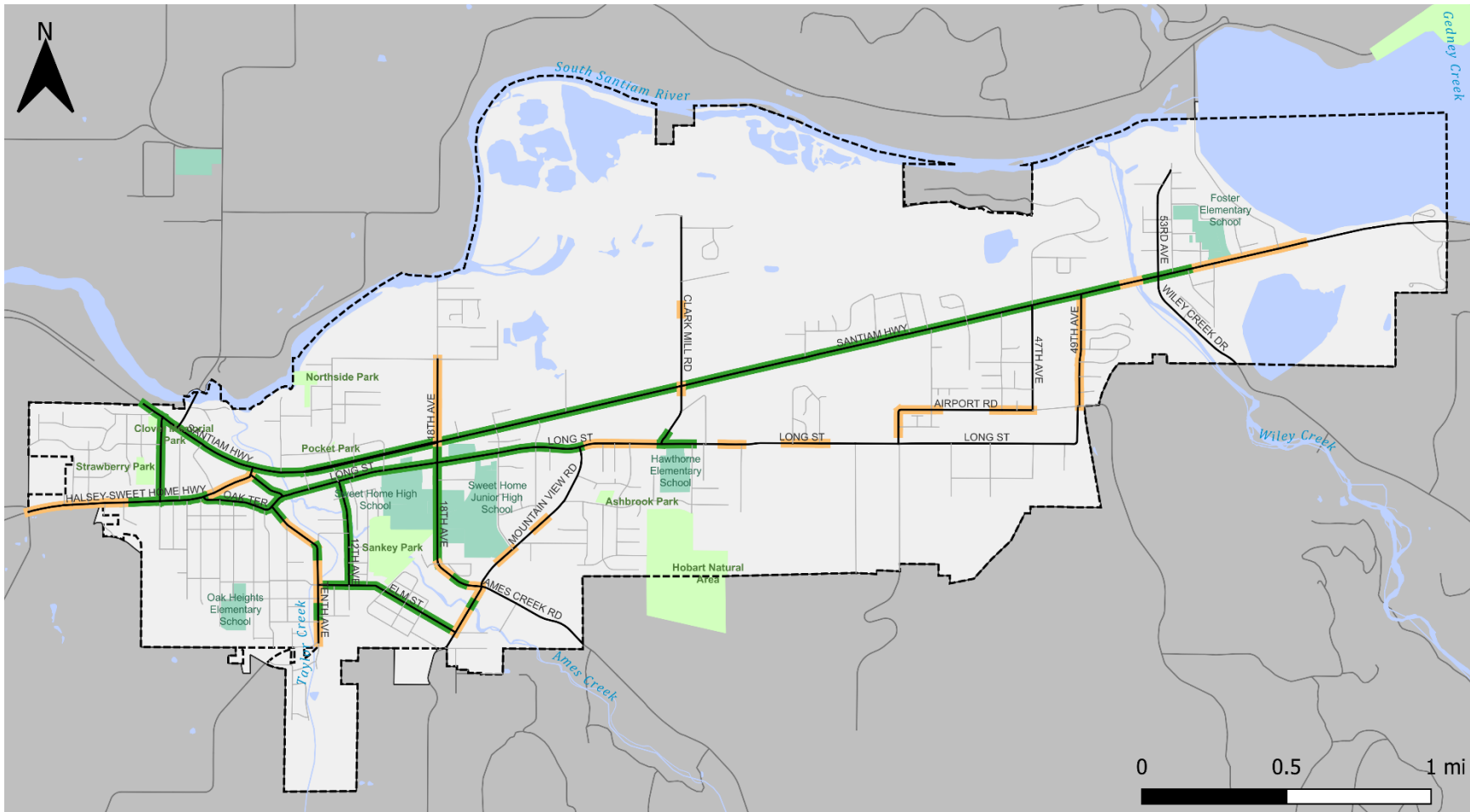
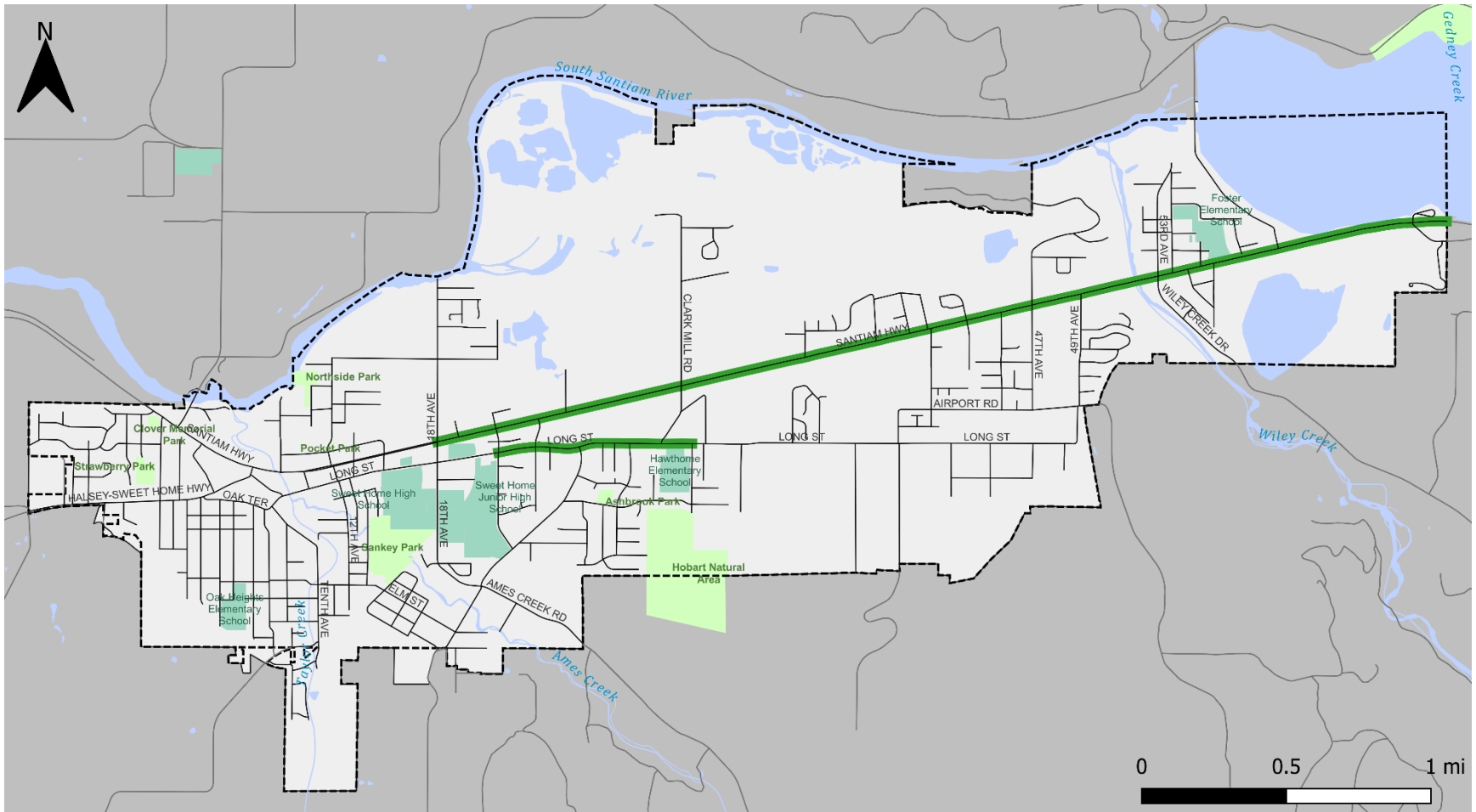
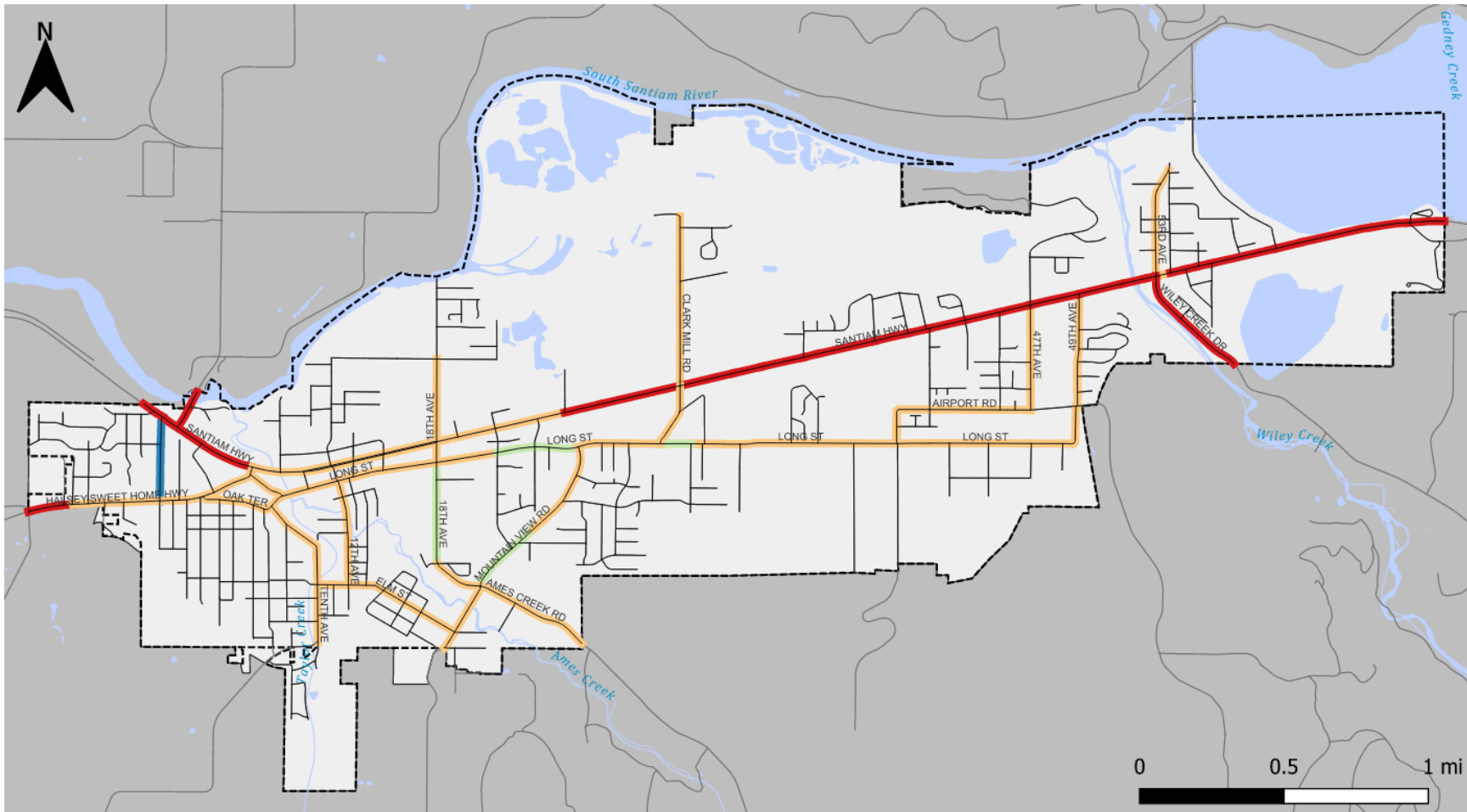


FIGURE 4: SIDEWALK INVENTORY



- Painted Bike Lane
- City Limits
- Outside UGB

FIGURE 5: EXISTING BICYCLE FACILITIES



- BLTS - - - - City Limits
- 1 █ Outside UGB
- 2 █
- 3 █
- 4 █

FIGURE 6: BLTS ON CITY COLLECTOR AND ARTERIAL STREETS

TRANSIT CONDITIONS

Transit service is provided in Sweet Home through three main routes. The Linn Shuttle, the Sweet Home Shopper, and Dial-A-Bus Service. A description of these three services is summarized in the following sections.

LINN SHUTTLE

The non-profit Senior Citizens of Sweet Home operates the Linn Shuttle fixed route service between Sweet Home-Lebanon-Albany. The Linn Shuttle connects with the Linn-Benton Loop (at the Linn- Benton Community College Albany Campus) to provide service to East Linn County residents who wish to travel to Albany or Corvallis. Seven round trips a day between Sweet Home-Lebanon-Albany with an additional 5 round trips between Lebanon and LBCC-Albany called the "LBCC-Lebanon Express". Service is available Monday-Friday between 6:30 a.m. and 7:30 p.m.

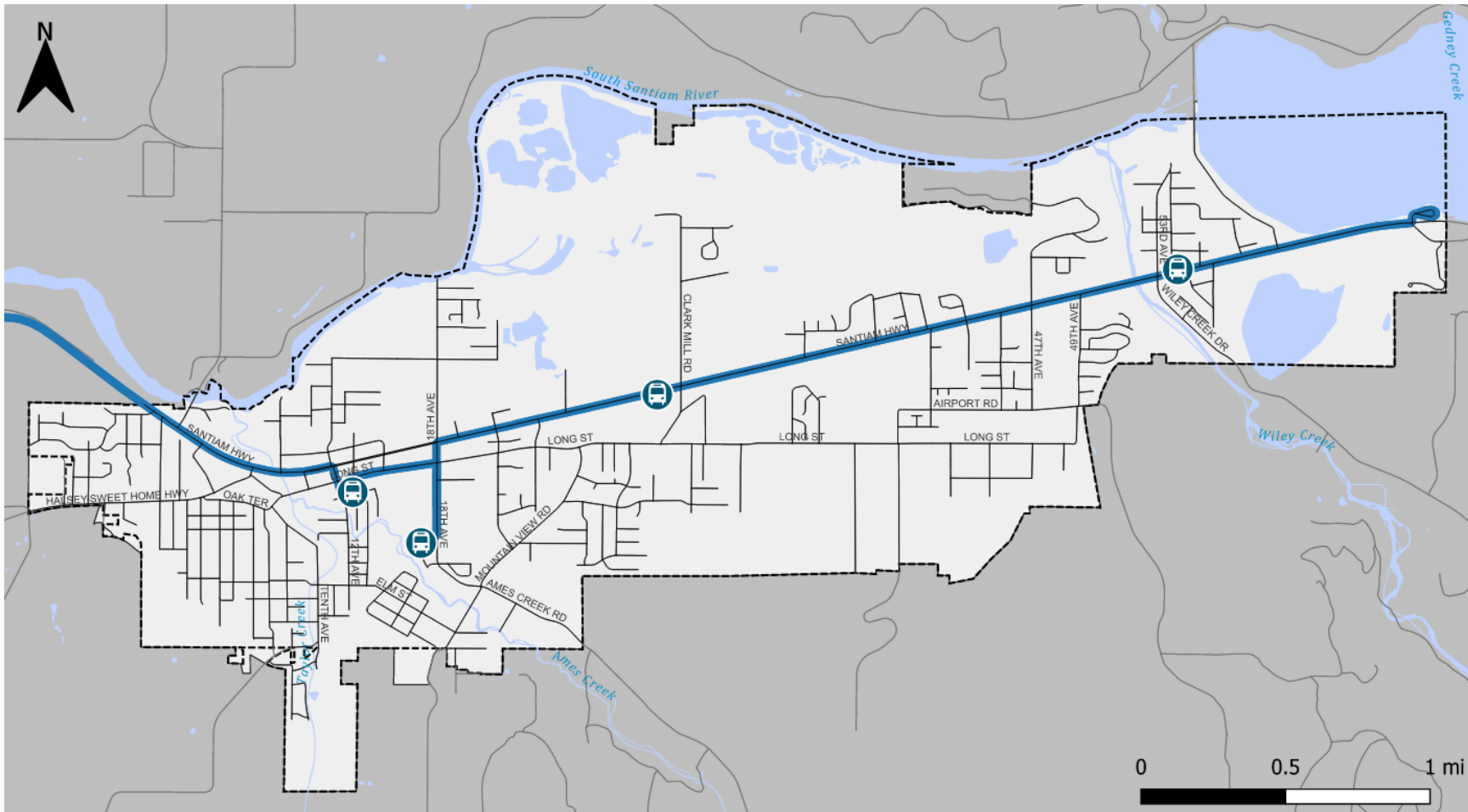
Funding for the Linn Shuttle comes from State Cigarette Tax funds allocated for elderly and handicapped transportation systems, as well as small cities and rural transportation funds from the Department of Transportation. Anyone can ride the Linn Shuttle. Linn-Benton Community College students and staff can ride for free by showing their ID cards. The shuttle operates on a scheduled route and the route is illustrated in **Figure 7**.

SWEET HOME SHOPPER

The Shopper is available to everyone, is wheelchair accessible, and buses are equipped with bike racks. The Shopper operates Monday Through Friday from 9:00 a.m. to 4:00 p.m. There are four trips from town out to Foster and back. On Tuesdays and Thursdays, the Shopper goes to Cascadia (stopping at Cascadia Short Bridge Rest Stop) with a trip in the morning and a return in the afternoon. The Sweet Home Shopper Route is illustrated in **Figure 8**.

DIAL-A-BUS

The non-profit Senior Citizens of Sweet Home operates the Sweet Home Dial-A-Bus which provides curb-to-curb service to older adults, people with disabilities and the general public within the boundaries of the Sweet Home School District. It also operates a limited "deviated fixed route" program within the boundaries of the City of Sweet Home. Dial-A-Bus Service is available Monday-Friday between 7:00 a.m. and 4:00 p.m. Rides must be scheduled in advance.

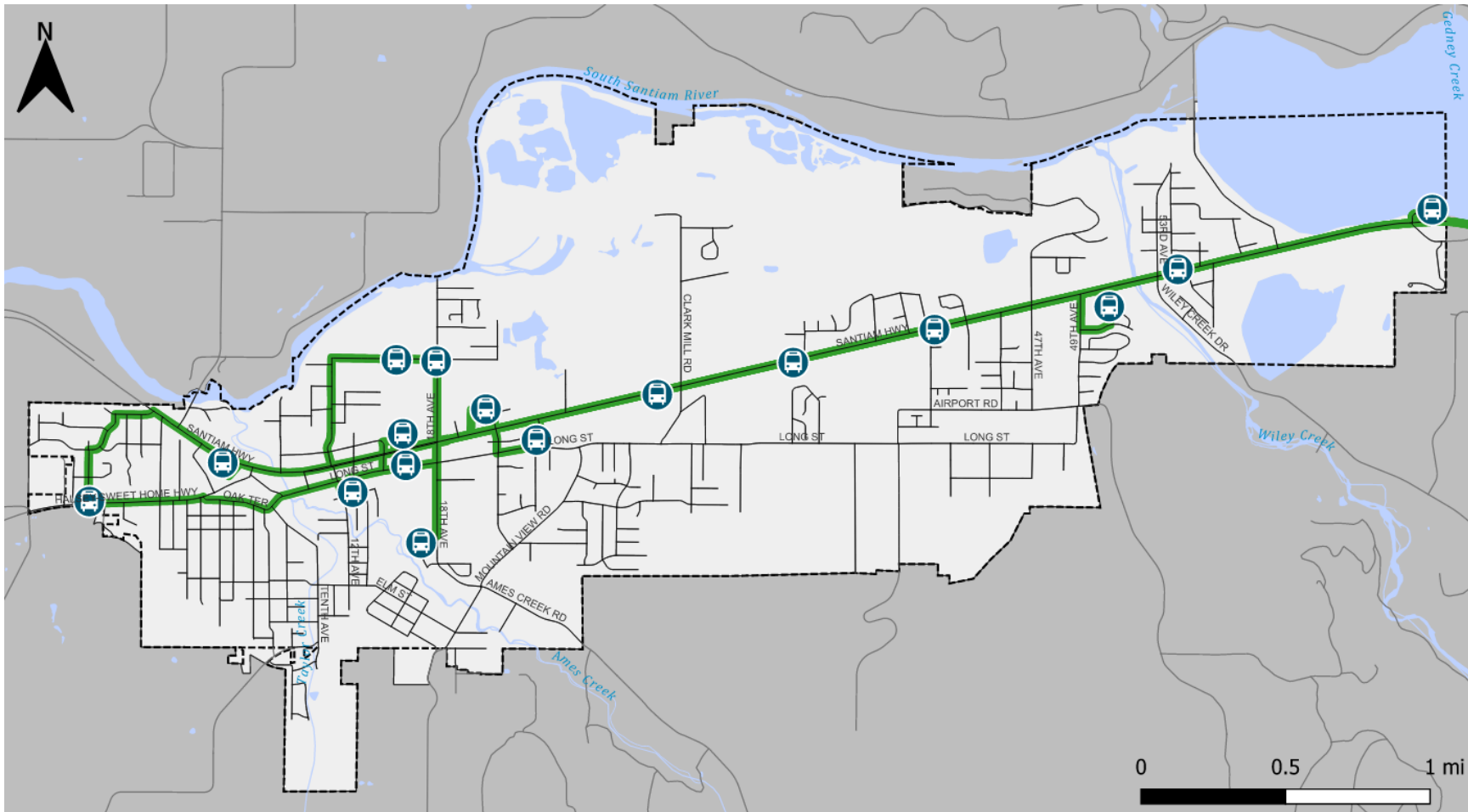


 Stops

Route

 Linn Shuttle

FIGURE 7: LINN SHUTTLE ROUTE





-  Stops
- Route
-  Sweet Home Shopper

FIGURE 8: SWEET HOME SHOPPER ROUTE

SAFETY CONDITIONS

SAFETY ANALYSIS

Transportation infrastructure must be safe for everyone, whether walking, biking, rolling, or driving. Assessing historical collision data helps identify any shortcomings in the system and improve safety conditions for Sweet Home residents. Crash data from 2017 through 2021 (the most recent five years available) was obtained from the Oregon Department of Transportation (ODOT) and reviewed to identify any high-crash locations and trends involving people walking or biking who are typically the most vulnerable to serious injuries. All crashes within Sweet Home are mapped in **Figure 9**. Bicycle and pedestrian only crashes are mapped in **Figure 10**.

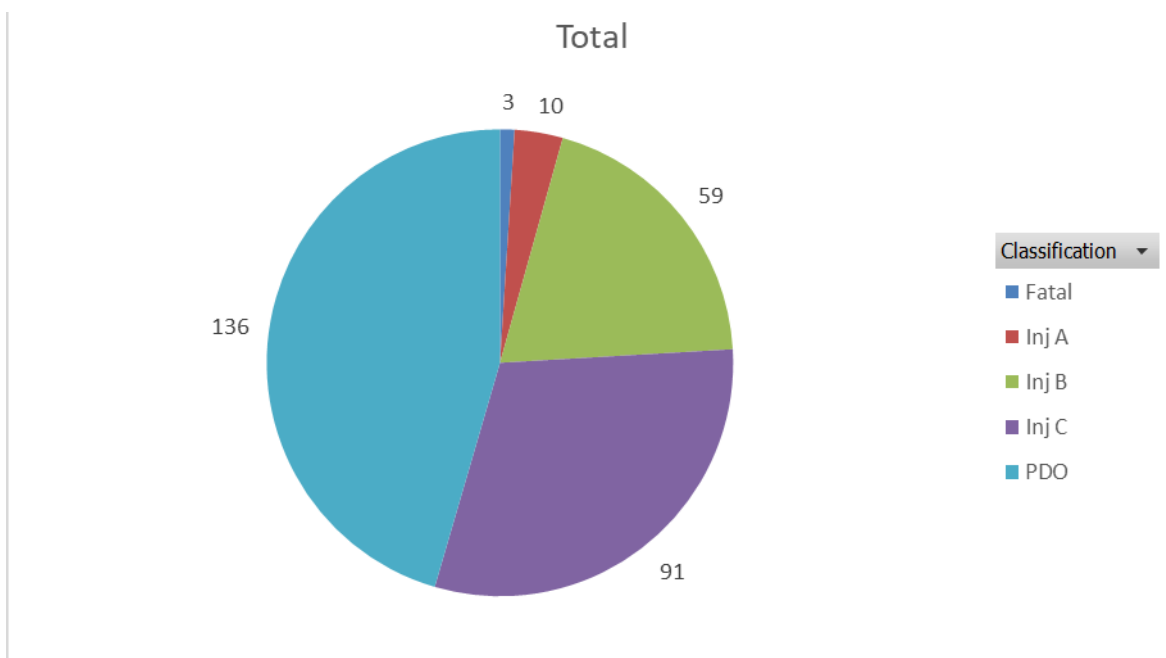
During this five-year period, there were a total of 299 crashes, 13 of which involved a pedestrian, and 9 involved a cyclist. 19 crashes were flagged for drug or alcohol involvement. As seen in Figure 13, there were three fatalities and 69 crashes that resulted in serious injuries during this period. These comprise almost of quarter of all crashes in Sweet Home.

Many crashes occurred along US 20 (Main Street), including 104 at study intersections for the Transportation System Plan. There was one Fatal crash on US 20 (Main Street) at 1st Avenue and four Injury A crashes occurred at the intersections with Holley Road, 12th Avenue, 15th Avenue and 22nd Avenue.

The two other fatal crashes occurred at the intersection of 12th Avenue/Hawthorne Street (involved pedestrian) and at the intersection of Ames Creek Road/Mountain View Road.

The most common collision types, in order of frequency, include turning vehicles, rear-end crashes, crashes with fixed objects and angle crashes (often referred to as "T-bone" crashes). Thirty-one percent of crashes involved turning movements. Over half of these turning crashes resulted in injury. Most of these crashes were caused by a failure to yield at a stop sign. There were 71 rear end collisions, 34 of which resulted in only property damage. There were 50 fixed-object crashes and 33 angle collisions. Many of these crashes occurred at stop-controlled intersections.

FIGURE 13: SEVERITY OF CRASHES IN SWEET HOME (2017-2021)



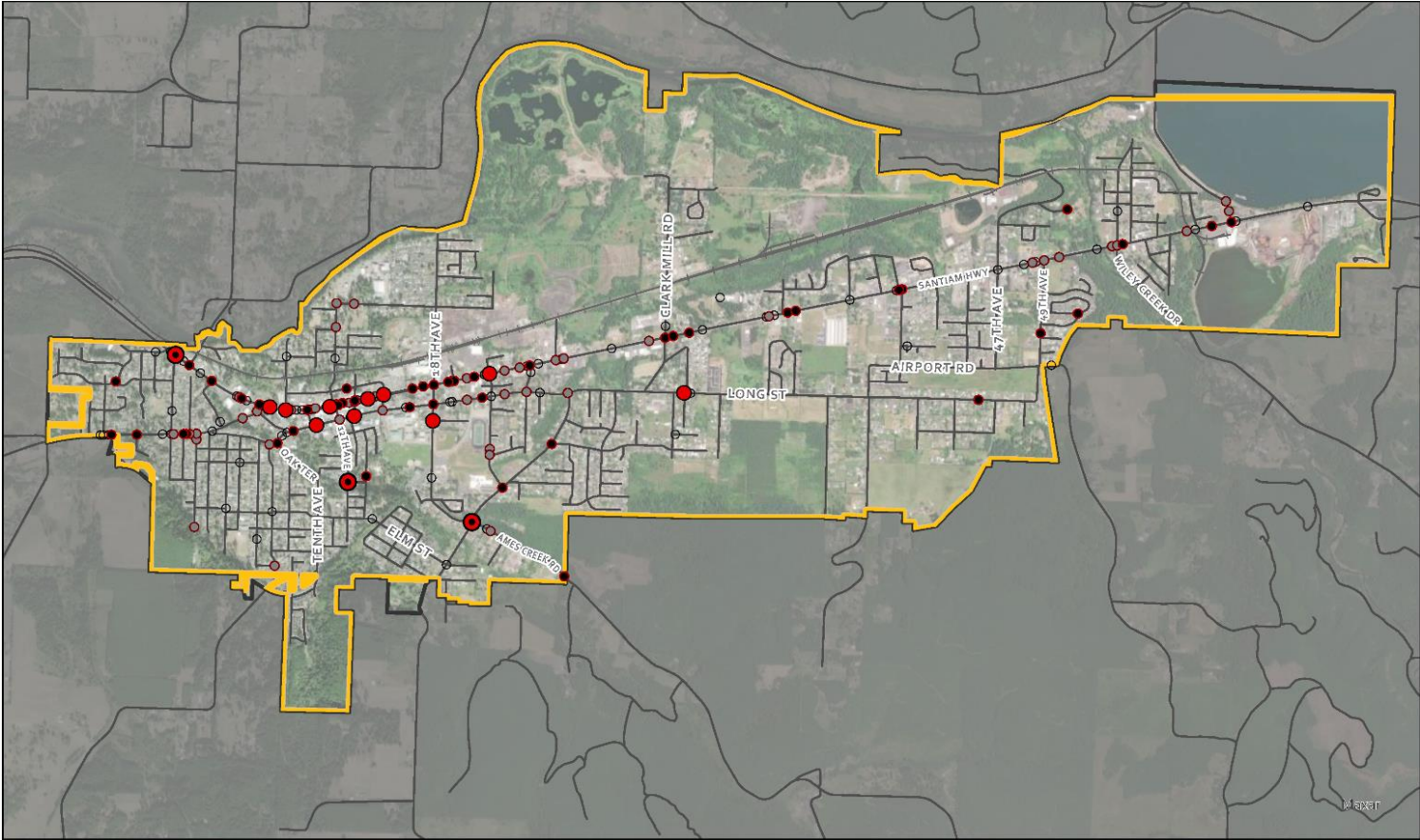
Of the nine pedestrian crashes most were caused by a failure to yield, one of these resulted in a pedestrian fatality. The fatality occurred at the intersection of Hawthorne Street and 12th Avenue in dry conditions during the day. Of the nine bicycle involved crashes there were no serious injuries.

The crash analysis was supplemented by a review of ODOT’s Safety Priority Index System listings for locations in the City that ranked among the state’s top ten percent of hazardous locations. The Safety Priority Index System (SPIS) is a method developed by ODOT for identifying hazardous locations on state highways, with the score based on three years of crash data, considering crash frequency, rate, and severity. ODOT bases its SPIS on 0.10-mile segments to account for variances in how crash locations are reported. This rating provides a general comparison of the overall safety of the highway based on crash information for all highway segments throughout the state. According to ODOT 2020 SPIS ratings (data reported between 2017 and 2019), the only location within Sweet Home in the top ten percent of segments is along US 20 (Main Street) just east of 9th Avenue.

TABLE: COLLISION TYPE FOR STUDY INTERSECTIONS

| STUDY INTERSECTION | ANGLE | BACK | FIXED OBJECT | NCOL | OTHER | PEDESTRIAN | REAR END | SIDE SWIPE OPPOSITE | TURNING |
|---|-------|------|--------------|------|-------|------------|----------|---------------------|---------|
| 1. MAIN STREET (U.S. 20) AND PLEASANT VALLEY ROAD | | | 2 | | | | | 1 | 3 |
| 2. MAIN STREET (U.S. 20) AND HOLLEY ROAD (HWY 228) | | | | | | | 6 | 1 | 10 |
| 3. MAIN STREET (U.S. 20) AND 12 TH AVENUE | 5 | 1 | 2 | | | | 1 | 2 | 3 |
| 4. MAIN STREET (U.S. 20) AND 15 TH AVENUE | 3 | | | | | | 1 | 1 | 5 |
| 5. MAIN STREET (U.S. 20) AND 18 TH AVENUE | 2 | | 2 | | | 2 | 3 | | 3 |
| 6. MAIN STREET (U.S. 20) AND 22 ND AVENUE | 5 | | | 1 | | 2 | 4 | 1 | 7 |
| 7. MAIN STREET (U.S. 20) AND 24 TH AVENUE | | | 1 | | | | 1 | 1 | 3 |
| 8. MAIN STREET (U.S. 20) AND CLARK MILL ROAD | 3 | | 1 | | 1 | | 2 | 1 | 5 |
| 9. MAIN STREET (U.S. 20) AND 44 TH AVENUE | | | 3 | | | | | | 3 |
| 10. MAIN STREET (U.S. 20) AND 47 TH AVENUE | | | 1 | | | | | | 1 |

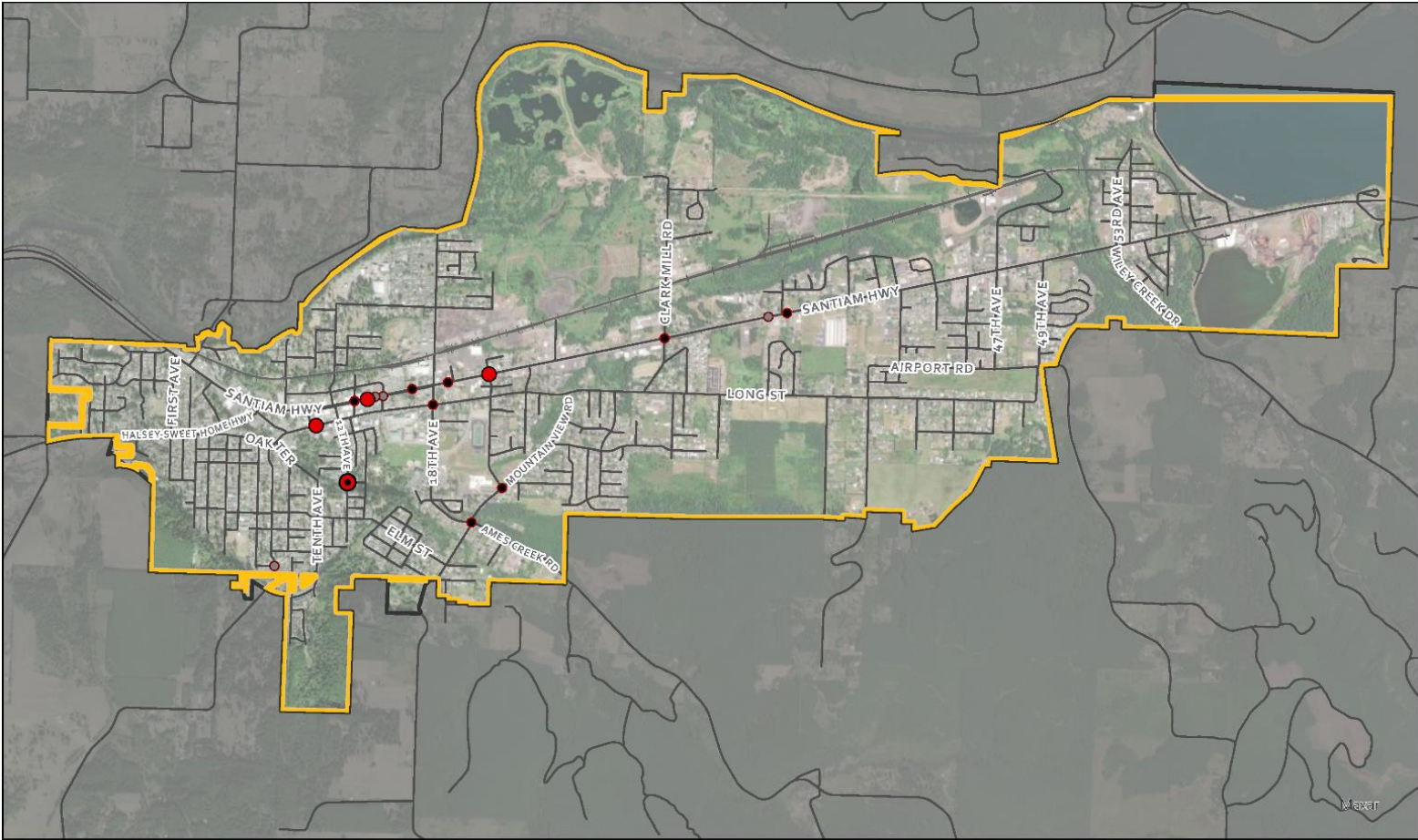
| STUDY INTERSECTION | ANGLE | BACK | FIXED OBJECT | NCOL | OTHER | PEDESTRIAN | REAR END | SIDE SWIPE OPPOSITE | TURNING |
|---|-----------|----------|--------------|----------|----------|------------|-----------|---------------------|-----------|
| 11. MAIN STREET (U.S. 20) AND 49 TH AVENUE | | | | | | | | 1 | 3 |
| 12. MAIN STREET (U.S. 20) AND 53 RD AVENUE | 1 | | 1 | | | | 1 | | 2 |
| 14. MAIN STREET (U.S. 20) AND 60 TH AVENUE (FOSTER DAM ROAD) | | | 3 | | | | 1 | | 1 |
| 15. HOLLEY ROAD (HWY 228) AND 1 ST AVENUE | | | 1 | | | | 3 | 1 | |
| 16. HOLLEY ROAD (HWY 228) AND OAK TERRACE | | | | | | | | | 1 |
| 17. LONG STREET AND 18 TH AVENUE | 4 | | 1 | | | 1 | 1 | | 2 |
| TOTAL | 23 | 1 | 18 | 1 | 1 | 5 | 24 | 10 | 52 |



Classification Base Map

- Fatal
- Inj A
- Inj B
- Inj C
- PDO
- City Limits
- UGB
- +—+—+— Rail
- — — — Streets

FIGURE 9: 2017 TO 2021 CRASH MAP BY SEVERITY



Classification Base Map

- Fatal
- Inj A
- Inj B
- Inj C
- PDO
- City Limits
- ▭ UGB
- Rail
- Streets

FIGURE 10: 2017 TO 2021 BICYCLE AND PEDESTRIAN CRASHES BY SEVERITY

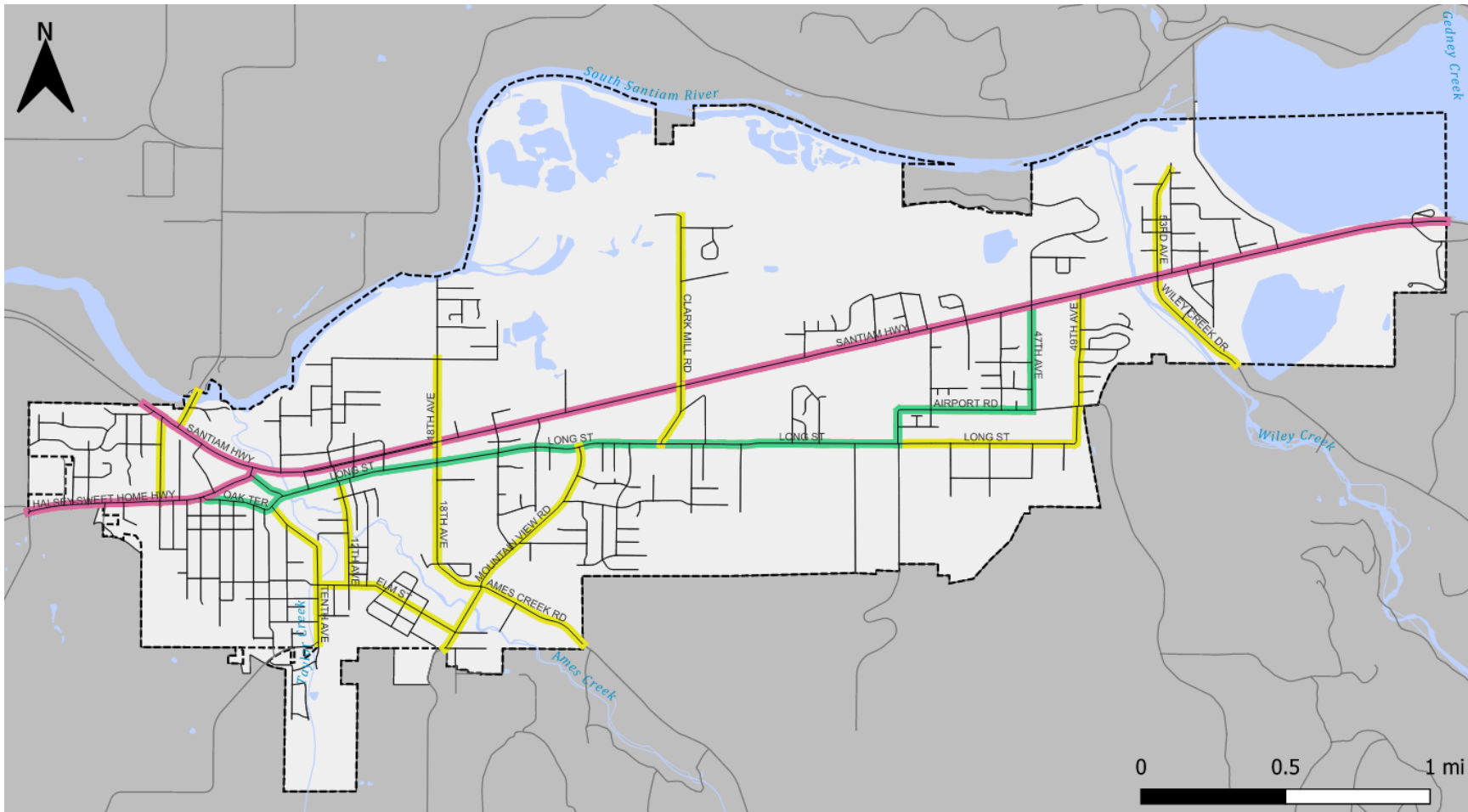
MOTOR VEHICLE CONDITIONS

KEY CORRIDORS

U.S. 20 and Highway 228 are the key arterials in Sweet Home. U.S. 20 is a major east-west highway that runs through Sweet Home. It begins at the Oregon Coast in Newport and travels eastward through the Willamette National Forest before eventually reaching the Idaho border. In Sweet Home, U.S. 20 runs through the center of town along Main Street. It is an important transportation route for local residents, as well as for travelers passing through the area. Highway 228 is a shorter highway that runs north-south through Sweet Home. It begins at U.S. 20 near the eastern edge of town and travels southward through the Willamette National Forest before eventually reaching the city of Brownsville. In Sweet Home, Highway 228 provides access to several recreational areas and natural attractions, including Quartzville Creek and Green Peter Lake.

In addition to the two highways, Long Street serves as the primary east-west arterial in Sweet Home. Long Street begins at Highway 228 to the west, and eventually terminates at Airport Road and connects to U.S. 20 via 47th Avenue.

The arterial and collector road network in Sweet Home is illustrated in **Figure 1111**. The posted speeds on this study road network is illustrated in **Figure 1212**.



Functional Classification --- City Limits
 Collector Outside UGB
 Major Arterial
 Minor Arterial

FIGURE 11: ARTERIAL AND COLLECTOR ROAD NETWORK

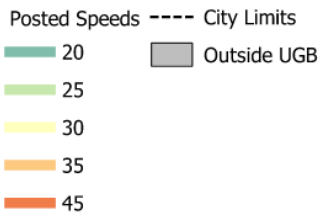
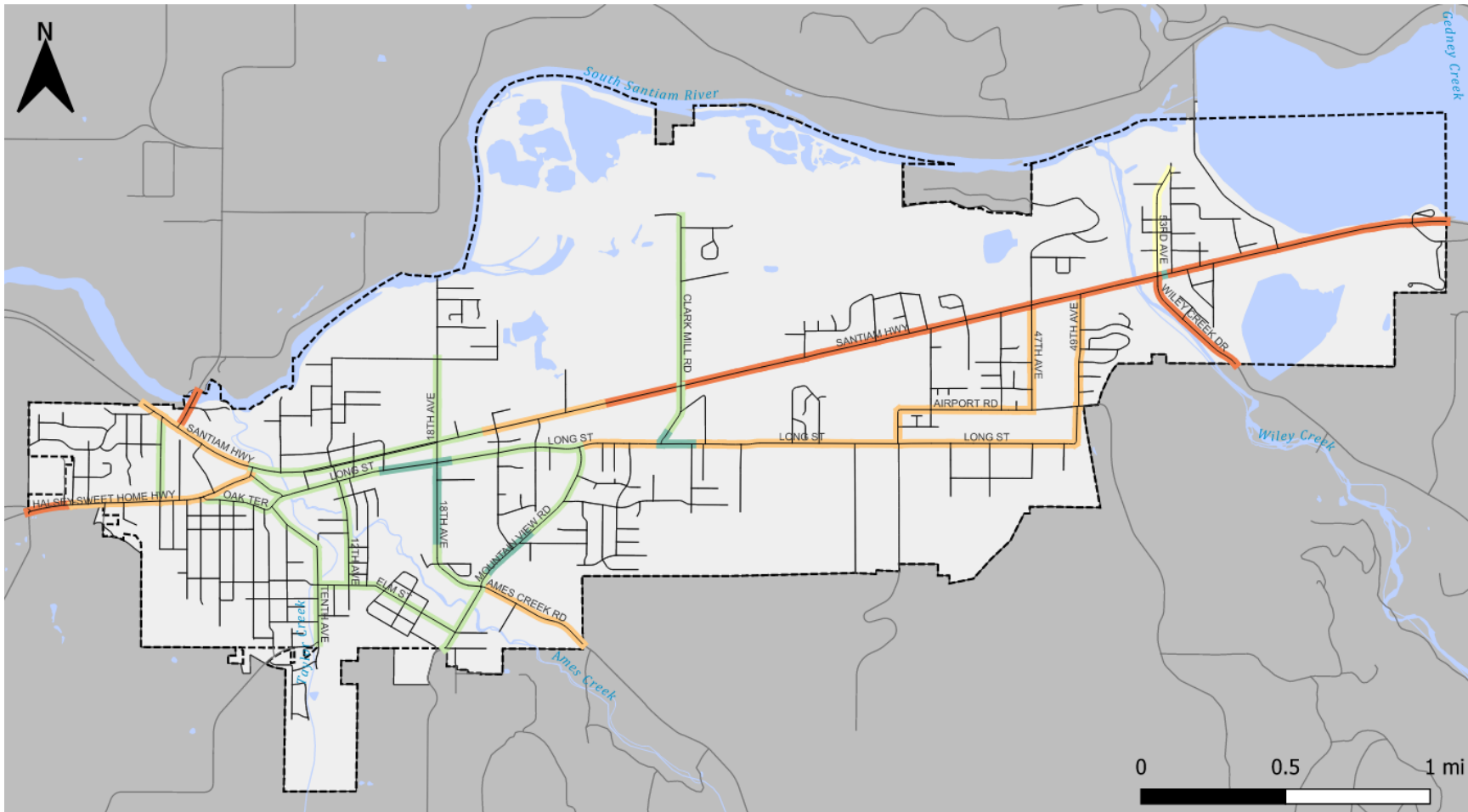


FIGURE 12: POSTED SPEEDS ON ARTERIAL AND COLLECTOR ROAD NETWORK

EXISTING TRAFFIC CONDITIONS AT STUDY INTERSECTIONS

Congestion levels at a selection of key intersections (**Figure 9**) in Sweet Home were evaluated to understand where motorists experience higher delays. The study intersections include five signalized intersections, 12 two-way stop-controlled (TWSC) intersections, and two all-way stop-controlled (AWSC) intersections.

Traffic counts were collected in June 2021 and existing conditions analysis has assumed a base year of 2021. Study intersection traffic operations have been analyzed using estimated 30th highest hour traffic volume (30 HV) conditions. A singular system peak hour has been used to derive intersection traffic volumes for traffic analysis. The peak hour for the study intersections was identified using the Oregon Traffic Monitoring System MS2 platform, which determined the system p.m. peak hour to be 4:15 to 5:15 p.m. A seasonal adjustment factor of 1.04 has been applied to the volumes based on the methodology described in **Task 3.1 Existing Conditions Inventory and Analysis**. Traffic volumes for the weekday p.m. peak hour are shown in **Figures 12 and 13**.

The County and City have adopted vehicle mobility standards. These standards provide a benchmark to measure intersection congestion against and ensure that the transportation system will have adequate capacity to support planned growth. These standards are either measured with level of service (LOS) or volume-to-capacity ratio (v/c ratio). The LOS is an A to F rating of the level of delay the average vehicle will experience at an intersection (similar to a report card, where LOS A has very little delay and LOS F has a lot of delay). The v/c ratio is a proportion from zero to one that measures the approximate amount of an intersection's capacity to move traffic that is being used. For example, a v/c ratio of 0.90 indicates that 90 percent of an intersection's capacity to move traffic is being used. Existing Peak Hour traffic conditions have been compared to ODOT

and City mobility targets/operating standards in

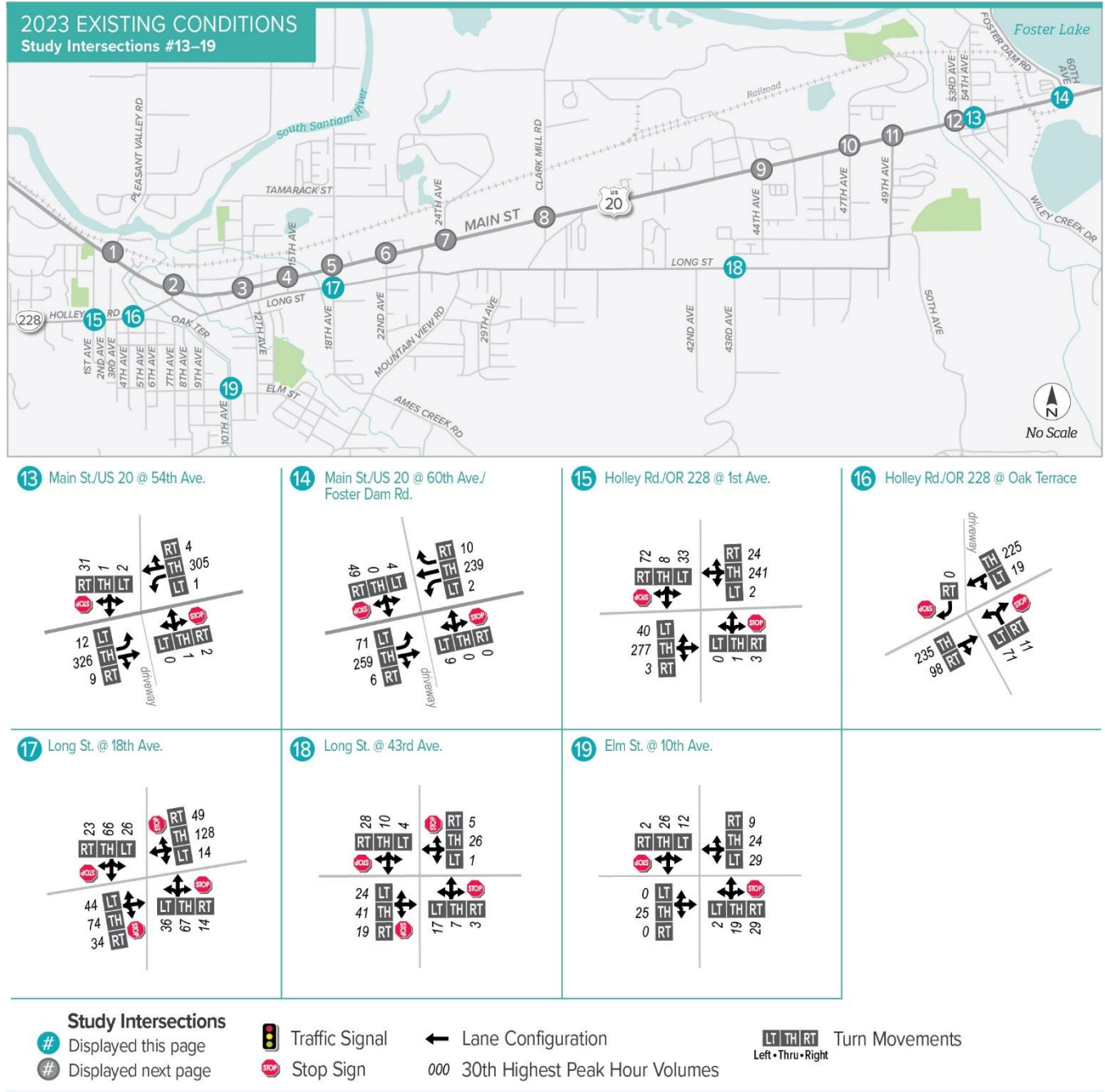


Figure 14: Study Intersection Lane Configuration and Traffic Volume (Part 2)

Table 1.

Results of the traffic operations analysis indicate that all study intersections are operating within analysis thresholds. Results of the traffic operations analysis are summarized in

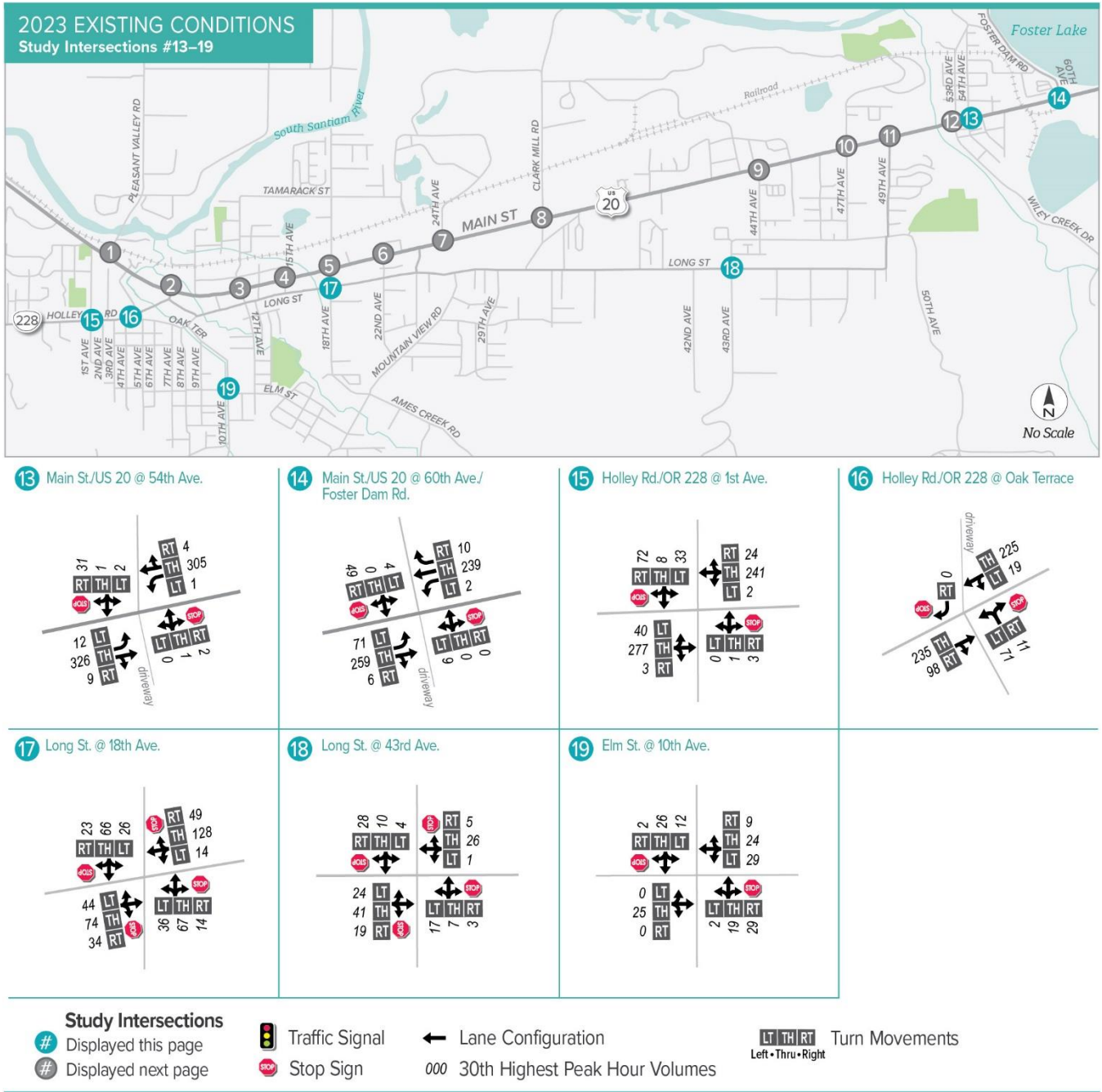


Figure 14: Study Intersection Lane Configuration and Traffic Volume (Part 2)

Table 1.

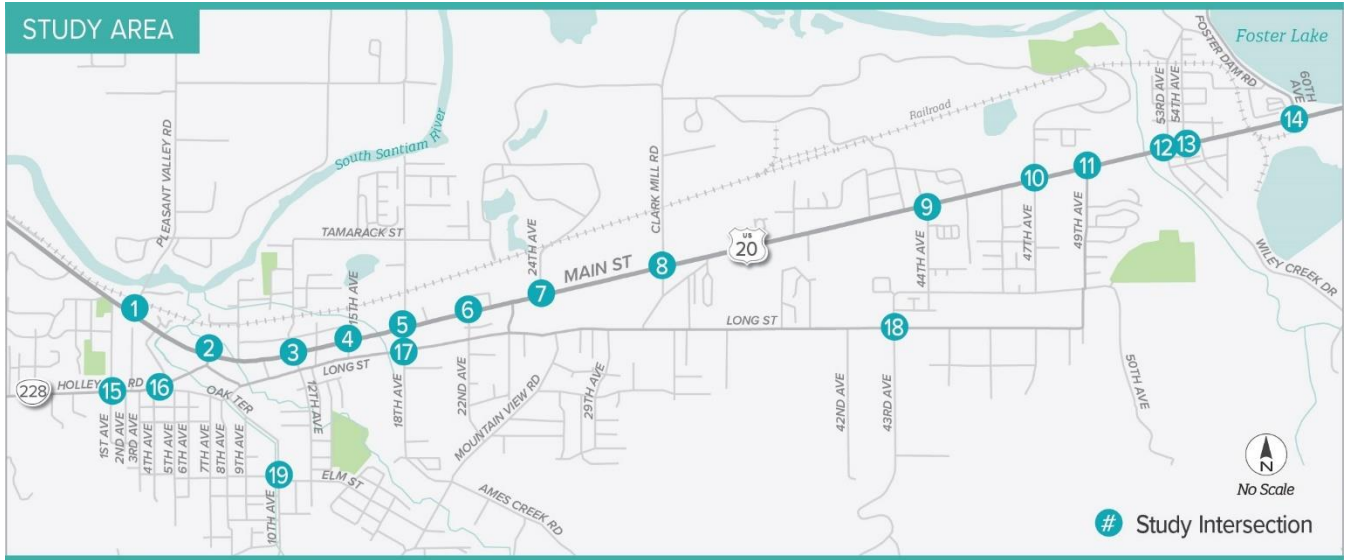
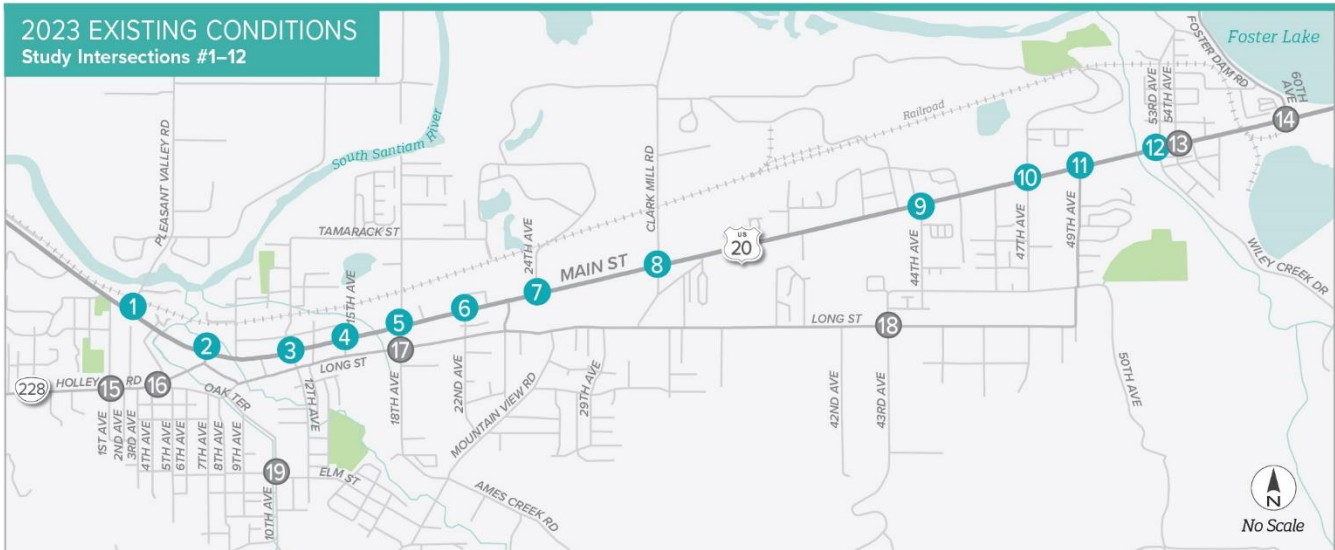
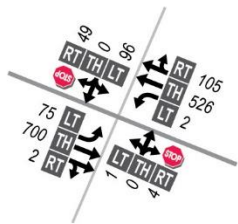


FIGURE 9: STUDY INTERSECTIONS



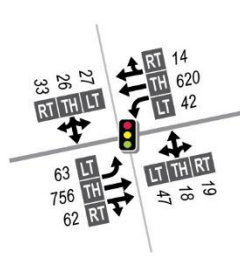
1 Main St/US 20 @ Pleasant Valley Rd.



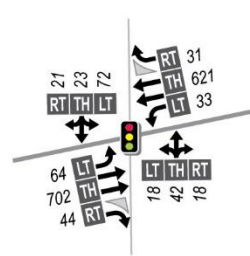
2 Main St/US 20 @ Holley Rd./OR 228



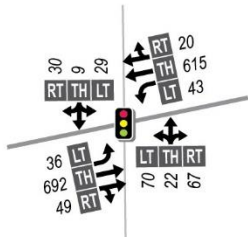
3 Main St/US 20 @ 12th Ave.



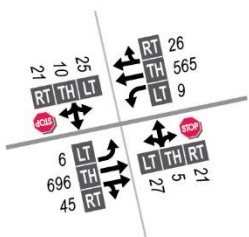
4 Main St/US 20 @ 15th Ave.



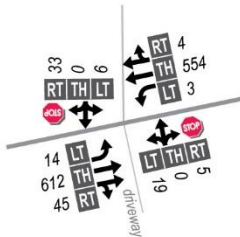
5 Main St/US 20 @ 18th Ave.



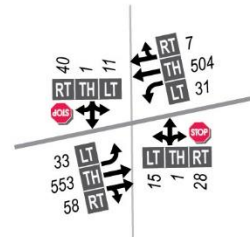
6 Main St/US 20 @ 22nd Ave.



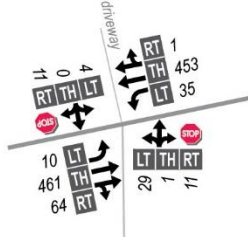
7 Main St/US 20 @ 24th Ave.



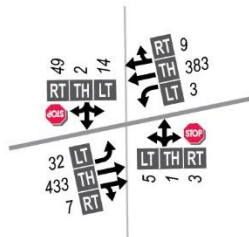
8 Main St/US 20 @ Clark Mill Rd.



9 Main St/US 20 @ 44th Ave.



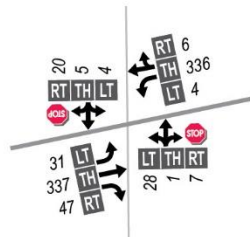
10 Main St/US 20 @ 47th Ave.



11 Main St/US 20 @ 49th Ave.



12 Main St/US 20 @ 53rd Ave.



Study Intersections

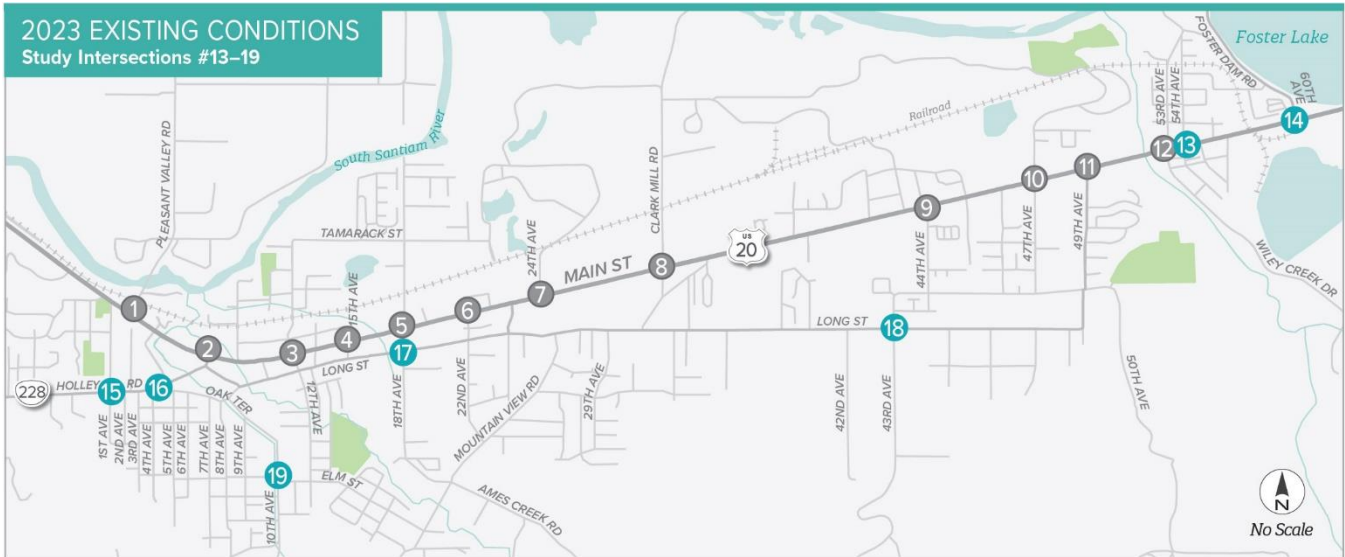
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- Traffic Signal
- Stop Sign

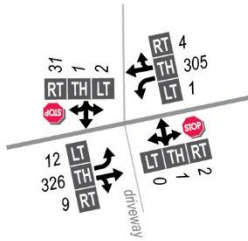
- Lane Configuration
- 000 30th Highest Peak Hour Volumes

- Turn Movements
Left • Thru • Right

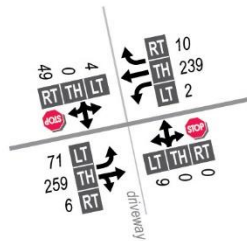
FIGURE 13: STUDY INTERSECTION LANE CONFIGURATION AND TRAFFIC VOLUME (PART 1)



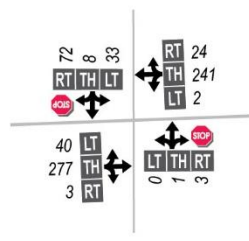
13 Main St./US 20 @ 54th Ave.



14 Main St./US 20 @ 60th Ave./ Foster Dam Rd.



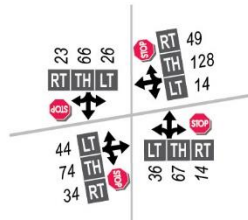
15 Holley Rd./OR 228 @ 1st Ave.



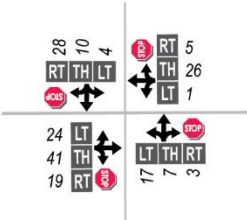
16 Holley Rd./OR 228 @ Oak Terrace



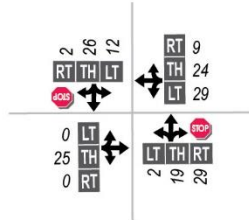
17 Long St. @ 18th Ave.



18 Long St. @ 43rd Ave.



19 Elm St. @ 10th Ave.



Study Intersections

- # Displayed this page
- # Displayed next page

- Traffic Signal
- Stop Sign

← Lane Configuration

000 30th Highest Peak Hour Volumes

LT | TH | RT Turn Movements
Left • Thru • Right

FIGURE 14: STUDY INTERSECTION LANE CONFIGURATION AND TRAFFIC VOLUME (PART 2)

TABLE 1: EXISTING (2021) TRAFFIC OPERATIONS AT STUDY INTERSECTIONS – WEEKDAY PM PEAK HOUR

| INTERSECTION | CONTROL TYPE | MOBILITY STANDARD | LOS | DELAY (SECONDS) | V/C RATIO |
|---|--------------|-------------------|-----|-----------------|-----------|
| 1. MAIN STREET (U.S. 20) AND PLEASANT VALLEY ROAD | TWSC | v/c ≤ 0.85 | A/F | 1/97 | 0.02/0.91 |
| 2. MAIN STREET (U.S. 20) AND HOLLEY ROAD (HWY 228) | Signal | v/c ≤ 0.90 | B | 12 | 0.78 |
| 3. MAIN STREET (U.S. 20) AND 12 TH AVENUE | Signal | v/c ≤ 0.90 | A | 5 | 0.43 |
| 4. MAIN STREET (U.S. 20) AND 15 TH AVENUE | Signal | v/c ≤ 0.90 | A | 5 | 0.4 |
| 5. MAIN STREET (U.S. 20) AND 18 TH AVENUE | Signal | v/c ≤ 0.90 | A | 6 | 0.44 |
| 6. MAIN STREET (U.S. 20) AND 22 ND AVENUE | Two-Way Stop | v/c ≤ 0.90 | A/E | 0.2/35 | 0.01/35 |
| 7. MAIN STREET (U.S. 20) AND 24 TH AVENUE | Two-Way Stop | v/c ≤ 0.90 | A/D | 0.2/27 | 0.02/0.15 |
| 8. MAIN STREET (U.S. 20) AND CLARK MILL ROAD | Two-Way Stop | v/c ≤ 0.85 | A/C | 0.5/19 | 0.04/0.16 |
| 9. MAIN STREET (U.S. 20) AND 44 TH AVENUE | Two-Way Stop | v/c ≤ 0.85 | A/C | 0.6/22 | 0.04/0.18 |
| 10. MAIN STREET (U.S. 20) AND 47 TH AVENUE | Two-Way Stop | v/c ≤ 0.85 | A/C | 0.6/19 | 0.04/0.16 |
| 11. MAIN STREET (U.S. 20) AND 49 TH AVENUE | Two-Way Stop | v/c ≤ 0.85 | A/B | 0.5/14 | 0.02/0.16 |
| 12. MAIN STREET (U.S. 20) AND 53 RD AVENUE | Two-Way Stop | v/c ≤ 0.85 | A/C | 0.6/20 | 0.03/0.15 |
| 13. MAIN STREET (U.S. 20) AND 54 TH AVENUE | Two-Way Stop | v/c ≤ 0.85 | A/B | 0.3/13 | 0.01/0.07 |
| 14. MAIN STREET (U.S. 20) AND 60 TH AVENUE (FOSTER DAM ROAD) | Two-Way Stop | v/c ≤ 0.85 | A/C | 2/19 | 0.07/0.09 |
| 15. HOLLEY ROAD (HWY 228) AND 1 ST AVENUE | Two-Way Stop | v/c ≤ 0.95 | A/C | 1/16 | 0.04/0.29 |
| 16. HOLLEY ROAD (HWY 228) AND OAK TERRACE | Two-Way Stop | v/c ≤ 0.95 | A/C | 1/16 | 0.02/0.23 |

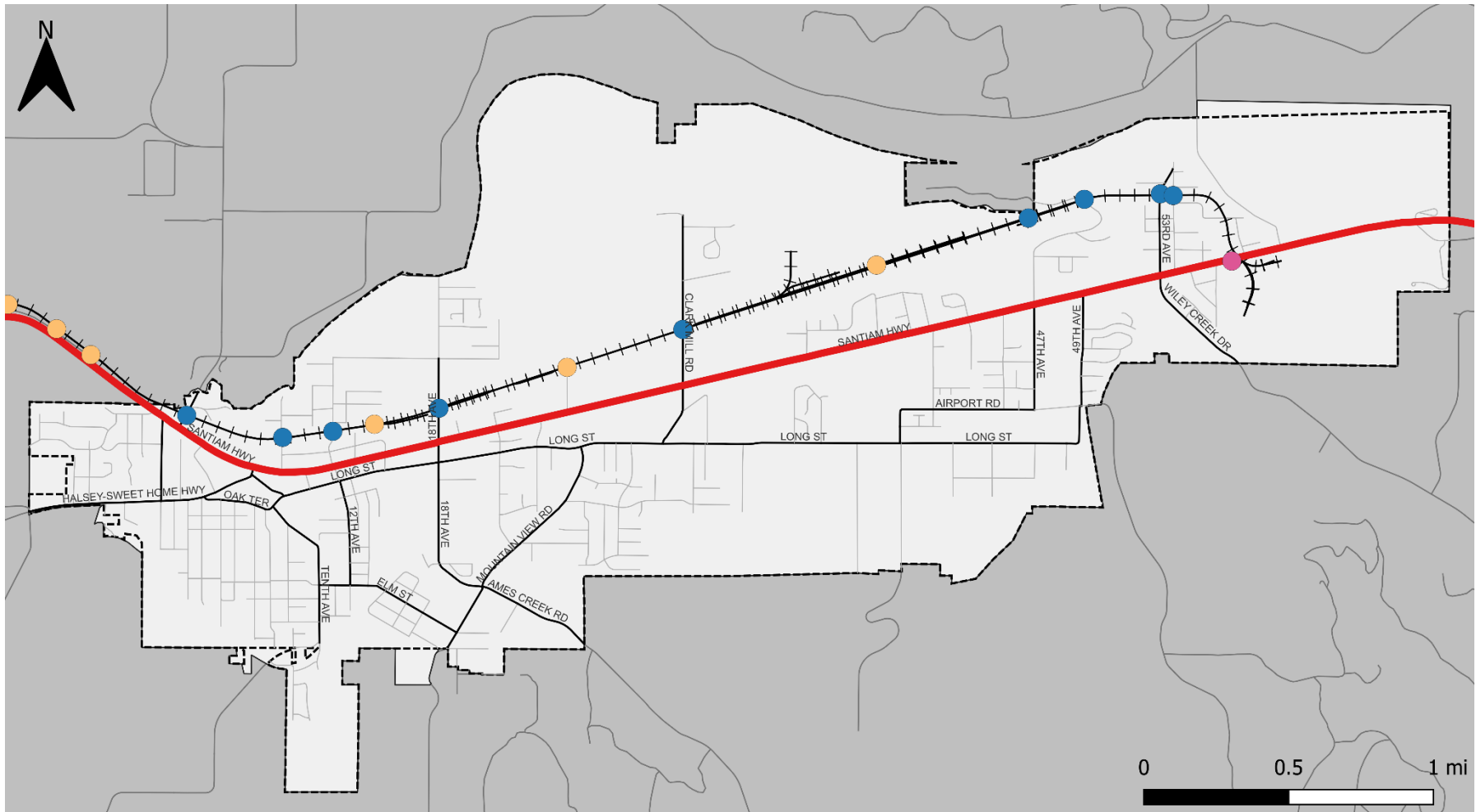
| INTERSECTION | CONTROL TYPE | MOBILITY STANDARD | LOS | DELAY (SECONDS) | V/C RATIO |
|---|--------------|-------------------|-----|------------------|-----------|
| 17. LONG STREET AND 18 TH AVENUE | AWSC | LOS D | A | 10 | 0.32 |
| 18. LONG STREET AND 43 RD AVENUE | AWSC | LOS D | A | 8 | 0.11 |
| 19. ELM STREET AND 10 TH AVENUE | Two-Way Stop | LOS D | A/B | 3/11 | 0.03/0.08 |

^a Note: Overall intersection measures reported for signal and AWSC intersections. The worst approach for major/minor approaches is reported for TWSC intersections.

FREIGHT NETWORK

The existing freight network, railways and rail crossing locations are shown in **Figure 15**. U.S. 20 is part of the National Highway System and handles moderate truck volumes between Sweet Home and I-5 to the west, with an average daily traffic (ADT) range between 500 and 14,999.

One rail line serves Sweet Home from the west terminating at the Foster Mill site on the east side of the City. The line is operated by Albany and Eastern Railroad Company and connects Sweet Home to Albany. Within the City limits the line is located roughly one block north of U.S. 20 running roughly parallel thereto.



- | | |
|---|--|
| Rail Crossings | — National Highway System |
| ● City Owned | ⊢⊢⊢ RailRoads |
| ● Private Crossing | - - - - City Limits |
| ● State-Owned Trestle (Damaged) | ■ Outside UGB |

FIGURE 105: EXISTING FREIGHT NETWORK

APPENDIX A: EXISTING TRAFFIC OPERATIONS ANALYSIS RESULTS

HCM 6th TWSC
1: Pleasant Valley Rd & Main St (US 20)

07/20/2023

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 9.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↕ | | ↖ | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 75 | 700 | 2 | 2 | 526 | 105 | 1 | 0 | 4 | 96 | 0 | 49 |
| Future Vol, veh/h | 75 | 700 | 2 | 2 | 526 | 105 | 1 | 0 | 4 | 96 | 0 | 49 |
| Conflicting Peds, #/hr | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | 100 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 4 | 4 | 4 | 0 | 0 | 0 | 1 | 1 | 1 |
| Mvmt Flow | 83 | 778 | 2 | 2 | 584 | 117 | 1 | 0 | 4 | 107 | 0 | 54 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-----|--------|------|------|
| Conflicting Flow All | 702 | 0 | 0 | 781 | 0 | 0 | 1242 | 1652 | 391 | 1203 | 1595 | 352 |
| Stage 1 | - | - | - | - | - | - | 946 | 946 | - | 648 | 648 | - |
| Stage 2 | - | - | - | - | - | - | 296 | 706 | - | 555 | 947 | - |
| Critical Hdwy | 4.14 | - | - | 4.18 | - | - | 7.5 | 6.5 | 6.9 | 7.52 | 6.52 | 6.92 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.52 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.52 | 5.52 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.24 | - | - | 3.5 | 4 | 3.3 | 3.51 | 4.01 | 3.31 |
| Pot Cap-1 Maneuver | 891 | - | - | 819 | - | - | 133 | 100 | 614 | 141 | 107 | 647 |
| Stage 1 | - | - | - | - | - | - | 285 | 343 | - | 428 | 467 | - |
| Stage 2 | - | - | - | - | - | - | 694 | 442 | - | 486 | 340 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 890 | - | - | 818 | - | - | 113 | 90 | 613 | 130 | 97 | 646 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 113 | 90 | - | 130 | 97 | - |
| Stage 1 | - | - | - | - | - | - | 258 | 311 | - | 388 | 466 | - |
| Stage 2 | - | - | - | - | - | - | 634 | 441 | - | 437 | 308 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|------|------|
| HCM Control Delay, s | 0.9 | 0 | 16.3 | 97.1 |
| HCM LOS | | | C | F |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 325 | 890 | - | - | 818 | - | - | 178 |
| HCM Lane V/C Ratio | 0.017 | 0.094 | - | - | 0.003 | - | - | 0.905 |
| HCM Control Delay (s) | 16.3 | 9.5 | - | - | 9.4 | - | - | 97.1 |
| HCM Lane LOS | C | A | - | - | A | - | - | F |
| HCM 95th %tile Q(veh) | 0.1 | 0.3 | - | - | 0 | - | - | 6.8 |

HCM 6th Signalized Intersection Summary
 2: Holley Rd (OR 228) & Main St (US 20)

07/20/2023



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | | | ↑ | ↗ | | ↕ | |
| Traffic Volume (veh/h) | 6 | 734 | 80 | 161 | 537 | 1 | 116 | 0 | 191 | 2 | 4 | 4 |
| Future Volume (veh/h) | 6 | 734 | 80 | 161 | 537 | 1 | 116 | 0 | 191 | 2 | 4 | 4 |
| 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 | 1709 | 1709 | 1709 | 1709 | 1709 | 1709 | 1709 | 1709 | 1709 | 1750 | 1750 | 1750 |
| Adj Flow Rate, veh/h | 7 | 807 | 88 | 177 | 590 | 1 | 127 | 0 | 210 | 2 | 4 | 4 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Percent Heavy Veh, % | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 |
| Cap, veh/h | 9 | 1497 | 666 | 232 | 1989 | 3 | 375 | 0 | 454 | 104 | 139 | 108 |
| Arrive On Green | 0.01 | 0.46 | 0.46 | 0.14 | 0.60 | 0.59 | 0.17 | 0.00 | 0.17 | 0.17 | 0.17 | 0.17 |
| Sat Flow, veh/h | 1628 | 3247 | 1445 | 1628 | 3326 | 6 | 1403 | 0 | 1448 | 132 | 813 | 630 |
| Grp Volume(v), veh/h | 7 | 807 | 88 | 177 | 288 | 303 | 127 | 0 | 210 | 10 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1628 | 1624 | 1445 | 1628 | 1624 | 1708 | 1403 | 0 | 1448 | 1575 | 0 | 0 |
| Q Serve(g_s), s | 0.2 | 9.5 | 1.9 | 5.6 | 4.6 | 4.6 | 4.1 | 0.0 | 6.2 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.2 | 9.5 | 1.9 | 5.6 | 4.6 | 4.6 | 4.4 | 0.0 | 6.2 | 0.3 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 0.00 | 1.00 | | 1.00 | 0.20 | | 0.40 |
| Lane Grp Cap(c), veh/h | 9 | 1497 | 666 | 232 | 971 | 1022 | 375 | 0 | 454 | 350 | 0 | 0 |
| V/C Ratio(X) | 0.78 | 0.54 | 0.13 | 0.76 | 0.30 | 0.30 | 0.34 | 0.00 | 0.46 | 0.03 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 367 | 2472 | 1100 | 765 | 1236 | 1300 | 793 | 0 | 887 | 432 | 0 | 0 |
| 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 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 26.4 | 10.3 | 8.2 | 21.9 | 5.2 | 5.2 | 20.1 | 0.0 | 14.7 | 18.4 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 39.8 | 0.4 | 0.1 | 3.9 | 0.2 | 0.2 | 0.4 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 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 | 0.2 | 2.9 | 0.5 | 2.2 | 1.2 | 1.3 | 1.4 | 0.0 | 1.9 | 0.1 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 66.2 | 10.7 | 8.4 | 25.8 | 5.5 | 5.5 | 20.5 | 0.0 | 15.2 | 18.4 | 0.0 | 0.0 |
| LnGrp LOS | E | B | A | C | A | A | C | A | B | B | A | A |
| Approach Vol, veh/h | | 902 | | | 768 | | | 337 | | | | 10 |
| Approach Delay, s/veh | | 10.9 | | | 10.1 | | | 17.2 | | | | 18.4 |
| Approach LOS | | B | | | B | | | B | | | | B |
| Timer - Assigned Phs | 1 | 2 | | 4 | 5 | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 11.6 | 28.5 | | 13.1 | 4.3 | 35.8 | | 13.1 | | | | |
| Change Period (Y+Rc), s | 4.0 | 4.5 | | 4.0 | 4.0 | 4.5 | | 4.0 | | | | |
| Max Green Setting (Gmax), s | 25.0 | 40.0 | | 12.0 | 12.0 | 40.0 | | 25.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 7.6 | 11.5 | | 2.3 | 2.2 | 6.6 | | 8.2 | | | | |
| Green Ext Time (p_c), s | 0.6 | 12.5 | | 0.0 | 0.0 | 8.3 | | 0.9 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 11.7 |
| HCM 6th LOS | B |

HCM 6th Signalized Intersection Summary
 3: 12th Ave & Main St (US 20)

07/20/2023



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 63 | 756 | 62 | 42 | 620 | 14 | 47 | 18 | 19 | 27 | 26 | 33 |
| Future Volume (veh/h) | 63 | 756 | 62 | 42 | 620 | 14 | 47 | 18 | 19 | 27 | 26 | 33 |
| 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 | 0.99 | | 0.98 | 0.99 | | 0.98 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | No | | No | | No | | No | | No |
| Adj Sat Flow, veh/h/ln | 1695 | 1695 | 1695 | 1668 | 1668 | 1668 | 1723 | 1723 | 1723 | 1736 | 1736 | 1736 |
| Adj Flow Rate, veh/h | 70 | 840 | 69 | 47 | 689 | 16 | 52 | 20 | 21 | 30 | 29 | 37 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 4 | 4 | 4 | 6 | 6 | 6 | 2 | 2 | 2 | 1 | 1 | 1 |
| Cap, veh/h | 604 | 1952 | 160 | 506 | 2050 | 48 | 242 | 50 | 39 | 181 | 75 | 77 |
| Arrive On Green | 0.65 | 0.65 | 0.63 | 0.65 | 0.65 | 0.63 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Sat Flow, veh/h | 731 | 3013 | 248 | 594 | 3166 | 73 | 661 | 397 | 308 | 376 | 588 | 604 |
| Grp Volume(v), veh/h | 70 | 449 | 460 | 47 | 345 | 360 | 93 | 0 | 0 | 96 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 731 | 1611 | 1650 | 594 | 1585 | 1655 | 1366 | 0 | 0 | 1568 | 0 | 0 |
| Q Serve(g_s), s | 1.7 | 4.8 | 4.9 | 1.5 | 3.5 | 3.5 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.2 | 4.8 | 4.9 | 6.3 | 3.5 | 3.5 | 2.1 | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.15 | 1.00 | | 0.04 | 0.56 | | 0.23 | 0.31 | | 0.39 |
| Lane Grp Cap(c), veh/h | 604 | 1043 | 1069 | 506 | 1026 | 1072 | 332 | 0 | 0 | 332 | 0 | 0 |
| V/C Ratio(X) | 0.12 | 0.43 | 0.43 | 0.09 | 0.34 | 0.34 | 0.28 | 0.00 | 0.00 | 0.29 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 965 | 1838 | 1884 | 800 | 1809 | 1888 | 708 | 0 | 0 | 773 | 0 | 0 |
| 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 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 4.0 | 3.1 | 3.1 | 4.6 | 2.8 | 2.8 | 14.4 | 0.0 | 0.0 | 14.4 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.4 | 0.4 | 0.1 | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 |
| 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 | 0.2 | 0.6 | 0.6 | 0.1 | 0.4 | 0.5 | 0.6 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 4.1 | 3.5 | 3.5 | 4.7 | 3.1 | 3.1 | 14.8 | 0.0 | 0.0 | 14.7 | 0.0 | 0.0 |
| LnGrp LOS | A | A | A | A | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 979 | | | 752 | | | 93 | | | 96 | |
| Approach Delay, s/veh | | 3.5 | | | 3.2 | | | 14.8 | | | 14.7 | |
| Approach LOS | | A | | | A | | | B | | | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 27.0 | | 8.5 | | 27.0 | | 8.5 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.0 | | 4.5 | | 4.0 | | | | |
| Max Green Setting (Gmax), s | | 40.0 | | 15.0 | | 40.0 | | 15.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.2 | | 3.9 | | 8.3 | | 4.1 | | | | |
| Green Ext Time (p_c), s | | 15.3 | | 0.2 | | 11.1 | | 0.2 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | | 4.5 | | | | | | | | |
| HCM 6th LOS | | | | A | | | | | | | | |

HCM 6th Signalized Intersection Summary

4: 15th Ave & Main St (US 20)

07/20/2023



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 64 | 702 | 44 | 33 | 621 | 31 | 18 | 42 | 18 | 72 | 23 | 21 |
| Future Volume (veh/h) | 64 | 702 | 44 | 33 | 621 | 31 | 18 | 42 | 18 | 72 | 23 | 21 |
| 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 | 0.98 | | 0.97 | 0.98 | | 0.97 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 0.90 |
| Work Zone On Approach | No | | | No | | | No | | | No | | |
| Adj Sat Flow, veh/h/ln | 1723 | 1723 | 1723 | 1695 | 1695 | 1695 | 1736 | 1736 | 1736 | 1736 | 1736 | 1736 |
| Adj Flow Rate, veh/h | 74 | 807 | 0 | 38 | 714 | 0 | 21 | 48 | 21 | 83 | 26 | 24 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 4 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cap, veh/h | 561 | 1998 | | 515 | 1966 | | 154 | 158 | 59 | 279 | 69 | 42 |
| Arrive On Green | 0.61 | 0.61 | 0.00 | 0.61 | 0.61 | 0.00 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Sat Flow, veh/h | 734 | 3273 | 1460 | 663 | 3221 | 1437 | 196 | 914 | 338 | 695 | 399 | 241 |
| Grp Volume(v), veh/h | 74 | 807 | 0 | 38 | 714 | 0 | 90 | 0 | 0 | 133 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 734 | 1637 | 1460 | 663 | 1611 | 1437 | 1447 | 0 | 0 | 1336 | 0 | 0 |
| Q Serve(g_s), s | 2.1 | 4.7 | 0.0 | 1.2 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 6.2 | 4.7 | 0.0 | 5.9 | 4.1 | 0.0 | 2.0 | 0.0 | 0.0 | 3.2 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 0.23 | | 0.23 | 0.62 | | 0.18 |
| Lane Grp Cap(c), veh/h | 561 | 1998 | | 515 | 1966 | | 371 | 0 | 0 | 390 | 0 | 0 |
| V/C Ratio(X) | 0.13 | 0.40 | | 0.07 | 0.36 | | 0.24 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 917 | 3583 | | 836 | 3527 | | 695 | 0 | 0 | 683 | 0 | 0 |
| 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 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 5.2 | 3.7 | 0.0 | 5.2 | 3.6 | 0.0 | 13.5 | 0.0 | 0.0 | 13.9 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 | 0.2 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 |
| 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 | 0.2 | 0.8 | 0.0 | 0.1 | 0.7 | 0.0 | 0.6 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 5.3 | 3.9 | 0.0 | 5.3 | 3.8 | 0.0 | 13.7 | 0.0 | 0.0 | 14.3 | 0.0 | 0.0 |
| LnGrp LOS | A | A | | A | A | | B | A | A | B | A | A |
| Approach Vol, veh/h | 881 | | A | 752 | | A | 90 | | 133 | | | |
| Approach Delay, s/veh | 4.0 | | | 3.8 | | | 13.7 | | 14.3 | | | |
| Approach LOS | A | | | A | | | B | | B | | | |
| Timer - Assigned Phs | 2 | | 4 | | 6 | | 8 | | | | | |
| Phs Duration (G+Y+Rc), s | 26.6 | | 10.4 | | 26.6 | | 10.4 | | | | | |
| Change Period (Y+Rc), s | 4.5 | | 4.0 | | 4.5 | | 4.0 | | | | | |
| Max Green Setting (Gmax), s | 40.0 | | 15.0 | | 40.0 | | 15.0 | | | | | |
| Max Q Clear Time (g_c+I1), s | 8.2 | | 5.2 | | 7.9 | | 4.0 | | | | | |
| Green Ext Time (p_c), s | 13.9 | | 0.3 | | 11.7 | | 0.2 | | | | | |

Intersection Summary

| | |
|--------------------|-----|
| HCM 6th Ctrl Delay | 5.2 |
| HCM 6th LOS | A |

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 5: 18th Ave & Main St (US 20)

07/20/2023



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 36 | 692 | 49 | 43 | 615 | 20 | 70 | 22 | 67 | 29 | 9 | 30 |
| Future Volume (veh/h) | 36 | 692 | 49 | 43 | 615 | 20 | 70 | 22 | 67 | 29 | 9 | 30 |
| 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 | | No | | No |
| Adj Sat Flow, veh/h/ln | 1695 | 1695 | 1695 | 1668 | 1668 | 1668 | 1668 | 1668 | 1668 | 1668 | 1668 | 1668 |
| Adj Flow Rate, veh/h | 40 | 778 | 55 | 48 | 691 | 22 | 79 | 25 | 75 | 33 | 10 | 34 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Percent Heavy Veh, % | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Cap, veh/h | 527 | 1764 | 125 | 471 | 1812 | 58 | 244 | 67 | 123 | 226 | 84 | 135 |
| Arrive On Green | 0.58 | 0.58 | 0.56 | 0.58 | 0.58 | 0.56 | 0.19 | 0.21 | 0.19 | 0.19 | 0.21 | 0.19 |
| Sat Flow, veh/h | 725 | 3051 | 216 | 638 | 3135 | 100 | 503 | 328 | 599 | 425 | 408 | 659 |
| Grp Volume(v), veh/h | 40 | 411 | 422 | 48 | 349 | 364 | 179 | 0 | 0 | 77 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 725 | 1611 | 1656 | 638 | 1585 | 1650 | 1431 | 0 | 0 | 1492 | 0 | 0 |
| Q Serve(g_s), s | 1.2 | 5.3 | 5.4 | 1.7 | 4.4 | 4.4 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.6 | 5.3 | 5.4 | 7.1 | 4.4 | 4.4 | 4.2 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.13 | 1.00 | | 0.06 | 0.44 | | 0.42 | 0.43 | | 0.44 |
| Lane Grp Cap(c), veh/h | 527 | 931 | 957 | 471 | 916 | 954 | 415 | 0 | 0 | 425 | 0 | 0 |
| V/C Ratio(X) | 0.08 | 0.44 | 0.44 | 0.10 | 0.38 | 0.38 | 0.43 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 904 | 1767 | 1817 | 802 | 1738 | 1810 | 903 | 0 | 0 | 902 | 0 | 0 |
| 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 | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 5.7 | 4.4 | 4.4 | 6.4 | 4.2 | 4.2 | 13.5 | 0.0 | 0.0 | 12.5 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.5 | 0.5 | 0.1 | 0.4 | 0.4 | 1.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 |
| 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 | 1.0 | 1.1 | 1.1 | 0.2 | 0.8 | 0.9 | 1.3 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 5.8 | 4.9 | 4.9 | 6.5 | 4.6 | 4.6 | 14.5 | 0.0 | 0.0 | 12.8 | 0.0 | 0.0 |
| LnGrp LOS | A | A | A | A | A | A | B | A | A | B | A | A |
| Approach Vol, veh/h | | 873 | | | 761 | | | 179 | | | | 77 |
| Approach Delay, s/veh | | 4.9 | | | 4.7 | | | 14.5 | | | | 12.8 |
| Approach LOS | | A | | | A | | | B | | | | B |
| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 25.3 | | 11.6 | | 25.3 | | 11.6 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 40.0 | | 20.0 | | 40.0 | | 20.0 | | | | |
| Max Q Clear Time (g_c+1), s | | 7.6 | | 3.6 | | 9.1 | | 6.2 | | | | |
| Green Ext Time (p_c), s | | 13.3 | | 0.4 | | 11.1 | | 1.0 | | | | |

Intersection Summary

| | |
|--------------------|-----|
| HCM 6th Ctrl Delay | 6.1 |
| HCM 6th LOS | A |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔↔ | | ↔ | ↔↔ | | | ↔ | | | ↔↔ | |
| Traffic Vol, veh/h | 6 | 696 | 45 | 9 | 565 | 26 | 27 | 5 | 21 | 25 | 10 | 21 |
| Future Vol, veh/h | 6 | 696 | 45 | 9 | 565 | 26 | 27 | 5 | 21 | 25 | 10 | 21 |
| Conflicting Peds, #/hr | 0 | 0 | 4 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | 100 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 3 | 3 | 3 | 4 | 4 | 4 | 6 | 6 | 6 | 0 | 0 | 0 |
| Mvmt Flow | 7 | 782 | 51 | 10 | 635 | 29 | 30 | 6 | 24 | 28 | 11 | 24 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|-----|
| Conflicting Flow All | 664 | 0 | 0 | 837 | 0 | 0 | 1171 | 1510 | 421 | 1078 | 1521 | 334 |
| Stage 1 | - | - | - | - | - | - | 826 | 826 | - | 670 | 670 | - |
| Stage 2 | - | - | - | - | - | - | 345 | 684 | - | 408 | 851 | - |
| Critical Hdwy | 4.16 | - | - | 4.18 | - | - | 7.62 | 6.62 | 7.02 | 7.5 | 6.5 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.62 | 5.62 | - | 6.5 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.62 | 5.62 | - | 6.5 | 5.5 | - |
| Follow-up Hdwy | 2.23 | - | - | 2.24 | - | - | 3.56 | 4.06 | 3.36 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 914 | - | - | 780 | - | - | 143 | 115 | 570 | 176 | 120 | 668 |
| Stage 1 | - | - | - | - | - | - | 324 | 375 | - | 417 | 459 | - |
| Stage 2 | - | - | - | - | - | - | 633 | 437 | - | 596 | 379 | - |
| Platoon blocked, % | | - | - | - | - | - | | | | | | |
| Mov Cap-1 Maneuver | 914 | - | - | 777 | - | - | 124 | 111 | 568 | 159 | 116 | 667 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 124 | 111 | - | 159 | 116 | - |
| Stage 1 | - | - | - | - | - | - | 318 | 368 | - | 411 | 453 | - |
| Stage 2 | - | - | - | - | - | - | 587 | 431 | - | 555 | 372 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.1 | | | 35.3 | | | 30.3 | | |
| HCM LOS | | | | | | | E | | | D | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 177 | 914 | - | - | 777 | - | - | 204 |
| HCM Lane V/C Ratio | 0.336 | 0.007 | - | - | 0.013 | - | - | 0.308 |
| HCM Control Delay (s) | 35.3 | 9 | 0.1 | - | 9.7 | - | - | 30.3 |
| HCM Lane LOS | E | A | A | - | A | - | - | D |
| HCM 95th %tile Q(veh) | 1.4 | 0 | - | - | 0 | - | - | 1.2 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↕ | | ↖ | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 14 | 612 | 45 | 3 | 554 | 4 | 19 | 0 | 5 | 6 | 0 | 33 |
| Future Vol, veh/h | 14 | 612 | 45 | 3 | 554 | 4 | 19 | 0 | 5 | 6 | 0 | 33 |
| Conflicting Peds, #/hr | 0 | 0 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | - | 100 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 5 | 5 | 5 | 4 | 4 | 4 | 0 | 0 | 0 | 3 | 3 | 3 |
| Mvmt Flow | 16 | 703 | 52 | 3 | 637 | 5 | 22 | 0 | 6 | 7 | 0 | 38 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-----|--------|------|------|
| Conflicting Flow All | 642 | 0 | 0 | 761 | 0 | 0 | 1092 | 1415 | 384 | 1030 | 1439 | 321 |
| Stage 1 | - | - | - | - | - | - | 767 | 767 | - | 646 | 646 | - |
| Stage 2 | - | - | - | - | - | - | 325 | 648 | - | 384 | 793 | - |
| Critical Hdwy | 4.2 | - | - | 4.18 | - | - | 7.5 | 6.5 | 6.9 | 7.56 | 6.56 | 6.96 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.56 | 5.56 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.56 | 5.56 | - |
| Follow-up Hdwy | 2.25 | - | - | 2.24 | - | - | 3.5 | 4 | 3.3 | 3.53 | 4.03 | 3.33 |
| Pot Cap-1 Maneuver | 918 | - | - | 834 | - | - | 172 | 139 | 620 | 186 | 131 | 672 |
| Stage 1 | - | - | - | - | - | - | 365 | 414 | - | 424 | 463 | - |
| Stage 2 | - | - | - | - | - | - | 667 | 469 | - | 608 | 396 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 918 | - | - | 829 | - | - | 159 | 135 | 616 | 181 | 127 | 672 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 159 | 135 | - | 181 | 127 | - |
| Stage 1 | - | - | - | - | - | - | 357 | 404 | - | 417 | 461 | - |
| Stage 2 | - | - | - | - | - | - | 627 | 467 | - | 592 | 387 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.1 | | | 27.4 | | | 13.4 | | |
| HCM LOS | | | | | | | D | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 188 | 918 | - | - | 829 | - | - | 474 |
| HCM Lane V/C Ratio | 0.147 | 0.018 | - | - | 0.004 | - | - | 0.095 |
| HCM Control Delay (s) | 27.4 | 9 | - | - | 9.4 | - | - | 13.4 |
| HCM Lane LOS | D | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.5 | 0.1 | - | - | 0 | - | - | 0.3 |

HCM 6th TWSC
8: Clark Mill Rd & Main St (US 20)

07/20/2023

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 33 | 553 | 58 | 31 | 504 | 7 | 15 | 1 | 28 | 11 | 1 | 40 |
| Future Vol, veh/h | 33 | 553 | 58 | 31 | 504 | 7 | 15 | 1 | 28 | 11 | 1 | 40 |
| Conflicting Peds, #/hr | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | - | 100 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, % | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 6 | 6 | 6 |
| Mvmt Flow | 36 | 608 | 64 | 34 | 554 | 8 | 16 | 1 | 31 | 12 | 1 | 44 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 563 | 0 | 0 | 672 | 0 | 0 | 1058 | 1343 | 336 | 1004 | 1371 | 282 |
| Stage 1 | - | - | - | - | - | - | 712 | 712 | - | 627 | 627 | - |
| Stage 2 | - | - | - | - | - | - | 346 | 631 | - | 377 | 744 | - |
| Critical Hdwy | 4.18 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.62 | 6.62 | 7.02 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.62 | 5.62 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.62 | 5.62 | - |
| Follow-up Hdwy | 2.24 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.56 | 4.06 | 3.36 |
| Pot Cap-1 Maneuver | 991 | - | - | 915 | - | - | 179 | 151 | 660 | 190 | 140 | 703 |
| Stage 1 | - | - | - | - | - | - | 389 | 434 | - | 428 | 465 | - |
| Stage 2 | - | - | - | - | - | - | 643 | 473 | - | 606 | 410 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 990 | - | - | 915 | - | - | 158 | 140 | 660 | 170 | 130 | 702 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 158 | 140 | - | 170 | 130 | - |
| Stage 1 | - | - | - | - | - | - | 375 | 418 | - | 412 | 447 | - |
| Stage 2 | - | - | - | - | - | - | 579 | 455 | - | 555 | 395 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.4 | | | 0.5 | | | 19.1 | | | 15.4 | | |
| HCM LOS | | | | | | | C | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 304 | 990 | - | - | 915 | - | - | 402 |
| HCM Lane V/C Ratio | 0.159 | 0.037 | - | - | 0.037 | - | - | 0.142 |
| HCM Control Delay (s) | 19.1 | 8.8 | - | - | 9.1 | - | - | 15.4 |
| HCM Lane LOS | C | A | - | - | A | - | - | C |
| HCM 95th %tile Q(veh) | 0.6 | 0.1 | - | - | 0.1 | - | - | 0.5 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↵ | ↕↗ | | ↵ | ↕↗ | | | ↕↗ | | | ↕↗ | |
| Traffic Vol, veh/h | 10 | 461 | 64 | 35 | 453 | 1 | 29 | 1 | 11 | 4 | 0 | 11 |
| Future Vol, veh/h | 10 | 461 | 64 | 35 | 453 | 1 | 29 | 1 | 11 | 4 | 0 | 11 |
| Conflicting Peds, #/hr | 2 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | - | 100 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 11 | 530 | 74 | 40 | 521 | 1 | 33 | 1 | 13 | 5 | 0 | 13 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-----|--------|------|-----|
| Conflicting Flow All | 524 | 0 | 0 | 605 | 0 | 0 | 931 | 1194 | 303 | 892 | 1231 | 263 |
| Stage 1 | - | - | - | - | - | - | 590 | 590 | - | 604 | 604 | - |
| Stage 2 | - | - | - | - | - | - | 341 | 604 | - | 288 | 627 | - |
| Critical Hdwy | 4.18 | - | - | 4.18 | - | - | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.5 | 5.5 | - | 6.5 | 5.5 | - |
| Follow-up Hdwy | 2.24 | - | - | 2.24 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1025 | - | - | 955 | - | - | 225 | 188 | 699 | 240 | 179 | 742 |
| Stage 1 | - | - | - | - | - | - | 466 | 498 | - | 457 | 491 | - |
| Stage 2 | - | - | - | - | - | - | 653 | 491 | - | 701 | 479 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1023 | - | - | 954 | - | - | 212 | 178 | 698 | 225 | 169 | 741 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 212 | 178 | - | 225 | 169 | - |
| Stage 1 | - | - | - | - | - | - | 460 | 492 | - | 451 | 469 | - |
| Stage 2 | - | - | - | - | - | - | 615 | 469 | - | 679 | 473 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|----|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.6 | | | 22 | | | 13.1 | | |
| HCM LOS | | | | | | | C | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 259 | 1023 | - | - | 954 | - | - | 460 |
| HCM Lane V/C Ratio | 0.182 | 0.011 | - | - | 0.042 | - | - | 0.037 |
| HCM Control Delay (s) | 22 | 8.6 | - | - | 8.9 | - | - | 13.1 |
| HCM Lane LOS | C | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.7 | 0 | - | - | 0.1 | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↵ | ↕ | | ↵ | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 32 | 433 | 7 | 3 | 383 | 9 | 5 | 1 | 3 | 14 | 2 | 49 |
| Future Vol, veh/h | 32 | 433 | 7 | 3 | 383 | 9 | 5 | 1 | 3 | 14 | 2 | 49 |
| Conflicting Peds, #/hr | 4 | 0 | 6 | 6 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | - | 100 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 |
| Heavy Vehicles, % | 3 | 3 | 3 | 4 | 4 | 4 | 11 | 11 | 11 | 2 | 2 | 2 |
| Mvmt Flow | 39 | 522 | 8 | 4 | 461 | 11 | 6 | 1 | 4 | 17 | 2 | 59 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 476 | 0 | 0 | 536 | 0 | 0 | 850 | 1094 | 271 | 819 | 1093 | 240 |
| Stage 1 | - | - | - | - | - | - | 610 | 610 | - | 479 | 479 | - |
| Stage 2 | - | - | - | - | - | - | 240 | 484 | - | 340 | 614 | - |
| Critical Hdwy | 4.16 | - | - | 4.18 | - | - | 7.72 | 6.72 | 7.12 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.72 | 5.72 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.72 | 5.72 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.23 | - | - | 2.24 | - | - | 3.61 | 4.11 | 3.41 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1075 | - | - | 1014 | - | - | 239 | 199 | 700 | 267 | 213 | 761 |
| Stage 1 | - | - | - | - | - | - | 427 | 461 | - | 537 | 553 | - |
| Stage 2 | - | - | - | - | - | - | 717 | 528 | - | 648 | 481 | - |
| Platoon blocked, % | | - | - | - | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1071 | - | - | 1008 | - | - | 211 | 189 | 696 | 255 | 203 | 758 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 211 | 189 | - | 255 | 203 | - |
| Stage 1 | - | - | - | - | - | - | 409 | 442 | - | 516 | 549 | - |
| Stage 2 | - | - | - | - | - | - | 656 | 524 | - | 619 | 461 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.6 | | | 0.1 | | | 18.9 | | | 13.5 | | |
| HCM LOS | | | | | | | C | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 270 | 1071 | - | - | 1008 | - | - | 502 |
| HCM Lane V/C Ratio | 0.04 | 0.036 | - | - | 0.004 | - | - | 0.156 |
| HCM Control Delay (s) | 18.9 | 8.5 | - | - | 8.6 | - | - | 13.5 |
| HCM Lane LOS | C | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0.1 | - | - | 0 | - | - | 0.5 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↵ | ↕ | | ↵ | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 0 | 385 | 43 | 22 | 363 | 0 | 21 | 0 | 29 | 0 | 0 | 0 |
| Future Vol, veh/h | 0 | 385 | 43 | 22 | 363 | 0 | 21 | 0 | 29 | 0 | 0 | 0 |
| Conflicting Peds, #/hr | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | - | 100 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 5 | 5 | 5 | 6 | 6 | 6 | 9 | 9 | 9 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 438 | 49 | 25 | 413 | 0 | 24 | 0 | 33 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|-----|-----|
| Conflicting Flow All | 414 | 0 | 0 | 487 | 0 | 0 | 720 | 927 | 244 | 683 | 951 | 208 |
| Stage 1 | - | - | - | - | - | - | 463 | 463 | - | 464 | 464 | - |
| Stage 2 | - | - | - | - | - | - | 257 | 464 | - | 219 | 487 | - |
| Critical Hdwy | 4.2 | - | - | 4.22 | - | - | 7.68 | 6.68 | 7.08 | 7.5 | 6.5 | 6.9 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.68 | 5.68 | - | 6.5 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.68 | 5.68 | - | 6.5 | 5.5 | - |
| Follow-up Hdwy | 2.25 | - | - | 2.26 | - | - | 3.59 | 4.09 | 3.39 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1120 | - | - | 1045 | - | - | 303 | 255 | 736 | 339 | 262 | 804 |
| Stage 1 | - | - | - | - | - | - | 530 | 545 | - | 553 | 567 | - |
| Stage 2 | - | - | - | - | - | - | 706 | 545 | - | 769 | 554 | - |
| Platoon blocked, % | | - | - | - | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1119 | - | - | 1045 | - | - | 298 | 249 | 736 | 318 | 255 | 803 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 298 | 249 | - | 318 | 255 | - |
| Stage 1 | - | - | - | - | - | - | 530 | 545 | - | 552 | 553 | - |
| Stage 2 | - | - | - | - | - | - | 689 | 531 | - | 735 | 554 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----|----|----|
| HCM Control Delay, s | 0 | 0.5 | 14 | 0 |
| HCM LOS | | | B | A |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 455 | 1119 | - | - | 1045 | - | - | - |
| HCM Lane V/C Ratio | 0.125 | - | - | - | 0.024 | - | - | - |
| HCM Control Delay (s) | 14 | 0 | - | - | 8.5 | - | - | 0 |
| HCM Lane LOS | B | A | - | - | A | - | - | A |
| HCM 95th %tile Q(veh) | 0.4 | 0 | - | - | 0.1 | - | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↑ | ↗ | ↖ | ↗ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 31 | 337 | 47 | 4 | 336 | 6 | 28 | 1 | 7 | 4 | 5 | 20 |
| Future Vol, veh/h | 31 | 337 | 47 | 4 | 336 | 6 | 28 | 1 | 7 | 4 | 5 | 20 |
| Conflicting Peds, #/hr | 1 | 0 | 3 | 3 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 200 | - | 100 | 100 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 5 | 5 | 5 | 7 | 7 | 7 | 3 | 3 | 3 | 7 | 7 | 7 |
| Mvmt Flow | 36 | 387 | 54 | 5 | 386 | 7 | 32 | 1 | 8 | 5 | 6 | 23 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 394 | 0 | 0 | 444 | 0 | 0 | 876 | 866 | 391 | 893 | 917 | 391 |
| Stage 1 | - | - | - | - | - | - | 462 | 462 | - | 401 | 401 | - |
| Stage 2 | - | - | - | - | - | - | 414 | 404 | - | 492 | 516 | - |
| Critical Hdwy | 4.15 | - | - | 4.17 | - | - | 7.13 | 6.53 | 6.23 | 7.17 | 6.57 | 6.27 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.13 | 5.53 | - | 6.17 | 5.57 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.13 | 5.53 | - | 6.17 | 5.57 | - |
| Follow-up Hdwy | 2.245 | - | - | 2.263 | - | - | 3.527 | 4.027 | 3.327 | 3.563 | 4.063 | 3.363 |
| Pot Cap-1 Maneuver | 1148 | - | - | 1090 | - | - | 268 | 290 | 655 | 257 | 267 | 647 |
| Stage 1 | - | - | - | - | - | - | 578 | 563 | - | 616 | 592 | - |
| Stage 2 | - | - | - | - | - | - | 614 | 597 | - | 549 | 526 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1147 | - | - | 1087 | - | - | 246 | 278 | 653 | 246 | 256 | 646 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 246 | 278 | - | 246 | 256 | - |
| Stage 1 | - | - | - | - | - | - | 558 | 544 | - | 596 | 588 | - |
| Stage 2 | - | - | - | - | - | - | 584 | 593 | - | 524 | 508 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|-----|----|----|
| HCM Control Delay, s | 0.6 | 0.1 | 20 | 14 |
| HCM LOS | | | C | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 281 | 1147 | - | - | 1087 | - | - | 434 |
| HCM Lane V/C Ratio | 0.147 | 0.031 | - | - | 0.004 | - | - | 0.077 |
| HCM Control Delay (s) | 20 | 8.2 | - | - | 8.3 | - | - | 14 |
| HCM Lane LOS | C | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.5 | 0.1 | - | - | 0 | - | - | 0.2 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 12 | 326 | 9 | 1 | 305 | 4 | 0 | 1 | 2 | 2 | 1 | 31 |
| Future Vol, veh/h | 12 | 326 | 9 | 1 | 305 | 4 | 0 | 1 | 2 | 2 | 1 | 31 |
| Conflicting Peds, #/hr | 9 | 0 | 4 | 4 | 0 | 9 | 14 | 0 | 0 | 0 | 0 | 14 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 100 | - | - | 100 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 4 | 4 | 4 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 15 | 408 | 11 | 1 | 381 | 5 | 0 | 1 | 3 | 3 | 1 | 39 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 395 | 0 | 0 | 423 | 0 | 0 | 868 | 845 | 418 | 841 | 848 | 407 |
| Stage 1 | - | - | - | - | - | - | 448 | 448 | - | 395 | 395 | - |
| Stage 2 | - | - | - | - | - | - | 420 | 397 | - | 446 | 453 | - |
| Critical Hdwy | 4.14 | - | - | 4.16 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.236 | - | - | 2.254 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1153 | - | - | 1115 | - | - | 275 | 302 | 639 | 287 | 301 | 648 |
| Stage 1 | - | - | - | - | - | - | 594 | 576 | - | 634 | 608 | - |
| Stage 2 | - | - | - | - | - | - | 615 | 607 | - | 595 | 573 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1143 | - | - | 1111 | - | - | 250 | 294 | 637 | 280 | 293 | 634 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 250 | 294 | - | 280 | 293 | - |
| Stage 1 | - | - | - | - | - | - | 584 | 566 | - | 620 | 602 | - |
| Stage 2 | - | - | - | - | - | - | 568 | 601 | - | 584 | 563 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|------|------|
| HCM Control Delay, s | 0.3 | 0 | 12.9 | 11.8 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 459 | 1143 | - | - | 1111 | - | - | 572 |
| HCM Lane V/C Ratio | 0.008 | 0.013 | - | - | 0.001 | - | - | 0.074 |
| HCM Control Delay (s) | 12.9 | 8.2 | - | - | 8.2 | - | - | 11.8 |
| HCM Lane LOS | B | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0.2 |

HCM 6th TWSC
 14: 60th Ave (Foster Dam Rd) & Main St (US 20)

07/20/2023

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 71 | 259 | 6 | 2 | 239 | 10 | 9 | 0 | 0 | 4 | 0 | 49 |
| Future Vol, veh/h | 71 | 259 | 6 | 2 | 239 | 10 | 9 | 0 | 0 | 4 | 0 | 49 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 150 | - | - | 125 | - | 125 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 5 | 5 | 5 | 7 | 7 | 7 | 0 | 0 | 0 | 4 | 4 | 4 |
| Mvmt Flow | 83 | 301 | 7 | 2 | 278 | 12 | 10 | 0 | 0 | 5 | 0 | 57 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 290 | 0 | 0 | 308 | 0 | 0 | 788 | 765 | 305 | 753 | 756 | 278 |
| Stage 1 | - | - | - | - | - | - | 471 | 471 | - | 282 | 282 | - |
| Stage 2 | - | - | - | - | - | - | 317 | 294 | - | 471 | 474 | - |
| Critical Hdwy | 4.15 | - | - | 4.17 | - | - | 7.1 | 6.5 | 6.2 | 7.14 | 6.54 | 6.24 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.14 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.14 | 5.54 | - |
| Follow-up Hdwy | 2.245 | - | - | 2.263 | - | - | 3.5 | 4 | 3.3 | 3.536 | 4.036 | 3.336 |
| Pot Cap-1 Maneuver | 1255 | - | - | 1225 | - | - | 311 | 336 | 740 | 324 | 335 | 756 |
| Stage 1 | - | - | - | - | - | - | 577 | 563 | - | 721 | 674 | - |
| Stage 2 | - | - | - | - | - | - | 698 | 673 | - | 570 | 554 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1255 | - | - | 1225 | - | - | 273 | 313 | 740 | 307 | 312 | 756 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 273 | 313 | - | 307 | 312 | - |
| Stage 1 | - | - | - | - | - | - | 539 | 526 | - | 673 | 673 | - |
| Stage 2 | - | - | - | - | - | - | 644 | 672 | - | 532 | 517 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 1.7 | | | 0.1 | | | 18.7 | | | 10.8 | | |
| HCM LOS | | | | | | | C | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 273 | 1255 | - | - | 1225 | - | - | 681 |
| HCM Lane V/C Ratio | 0.038 | 0.066 | - | - | 0.002 | - | - | 0.09 |
| HCM Control Delay (s) | 18.7 | 8.1 | - | - | 7.9 | - | - | 10.8 |
| HCM Lane LOS | C | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0.2 | - | - | 0 | - | - | 0.3 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 40 | 277 | 3 | 2 | 241 | 24 | 0 | 1 | 3 | 33 | 8 | 72 |
| Future Vol, veh/h | 40 | 277 | 3 | 2 | 241 | 24 | 0 | 1 | 3 | 33 | 8 | 72 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 4 | 4 | 4 | 3 | 3 | 3 | 0 | 0 | 0 | 1 | 1 | 1 |
| Mvmt Flow | 50 | 346 | 4 | 3 | 301 | 30 | 0 | 1 | 4 | 41 | 10 | 90 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 331 | 0 | 0 | 350 | 0 | 0 | 820 | 785 | 348 | 773 | 772 | 316 |
| Stage 1 | - | - | - | - | - | - | 448 | 448 | - | 322 | 322 | - |
| Stage 2 | - | - | - | - | - | - | 372 | 337 | - | 451 | 450 | - |
| Critical Hdwy | 4.14 | - | - | 4.13 | - | - | 7.1 | 6.5 | 6.2 | 7.11 | 6.51 | 6.21 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.11 | 5.51 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.11 | 5.51 | - |
| Follow-up Hdwy | 2.236 | - | - | 2.227 | - | - | 3.5 | 4 | 3.3 | 3.509 | 4.009 | 3.309 |
| Pot Cap-1 Maneuver | 1217 | - | - | 1203 | - | - | 296 | 327 | 700 | 317 | 331 | 727 |
| Stage 1 | - | - | - | - | - | - | 594 | 576 | - | 692 | 653 | - |
| Stage 2 | - | - | - | - | - | - | 653 | 645 | - | 590 | 573 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1217 | - | - | 1203 | - | - | 243 | 309 | 700 | 301 | 313 | 727 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 243 | 309 | - | 301 | 313 | - |
| Stage 1 | - | - | - | - | - | - | 564 | 547 | - | 657 | 651 | - |
| Stage 2 | - | - | - | - | - | - | 562 | 643 | - | 556 | 544 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 1 | | | 0.1 | | | 11.8 | | | 15.5 | | |
| HCM LOS | | | | | | | B | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 532 | 1217 | - | - | 1203 | - | - | 482 |
| HCM Lane V/C Ratio | 0.009 | 0.041 | - | - | 0.002 | - | - | 0.293 |
| HCM Control Delay (s) | 11.8 | 8.1 | 0 | - | 8 | 0 | - | 15.5 |
| HCM Lane LOS | B | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0 | 0.1 | - | - | 0 | - | - | 1.2 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.2 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↶ | | | ↷ | | | ↷ | | | | ↶ |
| Traffic Vol, veh/h | 0 | 235 | 98 | 19 | 225 | 0 | 71 | 0 | 11 | 0 | 0 | 0 |
| Future Vol, veh/h | 0 | 235 | 98 | 19 | 225 | 0 | 71 | 0 | 11 | 0 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | 0 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 5 | 5 | 5 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 270 | 113 | 22 | 259 | 0 | 82 | 0 | 13 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|---|-----|
| Conflicting Flow All | - | 0 | 0 | 383 | 0 | 0 | 630 | 630 | 328 | - | - | 259 |
| Stage 1 | - | - | - | - | - | - | 327 | 327 | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | 303 | 303 | - | - | - | - |
| Critical Hdwy | - | - | - | 4.14 | - | - | 7.1 | 6.5 | 6.2 | - | - | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | - | - | - |
| Follow-up Hdwy | - | - | - | 2.236 | - | - | 3.5 | 4 | 3.3 | - | - | 3.3 |
| Pot Cap-1 Maneuver | 0 | - | - | 1165 | - | 0 | 397 | 401 | 718 | 0 | 0 | 785 |
| Stage 1 | 0 | - | - | - | - | 0 | 690 | 651 | - | 0 | 0 | - |
| Stage 2 | 0 | - | - | - | - | 0 | 711 | 667 | - | 0 | 0 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | - | 1165 | - | - | 390 | 392 | 717 | - | - | 785 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 390 | 392 | - | - | - | - |
| Stage 1 | - | - | - | - | - | - | 690 | 651 | - | - | - | - |
| Stage 2 | - | - | - | - | - | - | 695 | 652 | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----|--|-----|--|------|--|----|--|
| HCM Control Delay, s | 0 | | 0.6 | | 16.2 | | 0 | |
| HCM LOS | | | | | C | | A | |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT | SBLn1 |
|-----------------------|-------|-----|-----|-------|-----|-------|
| Capacity (veh/h) | 415 | - | - | 1165 | - | - |
| HCM Lane V/C Ratio | 0.227 | - | - | 0.019 | - | - |
| HCM Control Delay (s) | 16.2 | - | - | 8.1 | 0 | 0 |
| HCM Lane LOS | C | - | - | A | A | A |
| HCM 95th %tile Q(veh) | 0.9 | - | - | 0.1 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 6.2 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 0 | 25 | 0 | 29 | 24 | 9 | 2 | 19 | 29 | 12 | 26 | 2 |
| Future Vol, veh/h | 0 | 25 | 0 | 29 | 24 | 9 | 2 | 19 | 29 | 12 | 26 | 2 |
| Conflicting Peds, #/hr | 3 | 0 | 1 | 1 | 0 | 3 | 2 | 0 | 1 | 1 | 0 | 2 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 3 | 3 | 3 |
| Mvmt Flow | 0 | 36 | 0 | 42 | 35 | 13 | 3 | 28 | 42 | 17 | 38 | 3 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | Minor2 | | | | | |
|----------------------|--------|---|--------|-------|--------|---|--------|-----|------|-------|-------|-------|
| Conflicting Flow All | 51 | 0 | 0 | 37 | 0 | 0 | 185 | 172 | 38 | 201 | 166 | 47 |
| Stage 1 | - | - | - | - | - | - | 37 | 37 | - | 129 | 129 | - |
| Stage 2 | - | - | - | - | - | - | 148 | 135 | - | 72 | 37 | - |
| Critical Hdwy | 4.1 | - | - | 4.12 | - | - | 7.1 | 6.5 | 6.2 | 7.13 | 6.53 | 6.23 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.13 | 5.53 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.13 | 5.53 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.218 | - | - | 3.5 | 4 | 3.3 | 3.527 | 4.027 | 3.327 |
| Pot Cap-1 Maneuver | 1568 | - | - | 1574 | - | - | 780 | 725 | 1040 | 755 | 725 | 1019 |
| Stage 1 | - | - | - | - | - | - | 984 | 868 | - | 872 | 787 | - |
| Stage 2 | - | - | - | - | - | - | 859 | 789 | - | 935 | 862 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1564 | - | - | 1573 | - | - | 729 | 703 | 1038 | 686 | 703 | 1014 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 729 | 703 | - | 686 | 703 | - |
| Stage 1 | - | - | - | - | - | - | 983 | 867 | - | 869 | 763 | - |
| Stage 2 | - | - | - | - | - | - | 791 | 765 | - | 868 | 861 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----|-----|------|
| HCM Control Delay, s | 0 | 3.4 | 9.5 | 10.5 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 866 | 1564 | - | - | 1573 | - | - | 709 |
| HCM Lane V/C Ratio | 0.084 | - | - | - | 0.027 | - | - | 0.082 |
| HCM Control Delay (s) | 9.5 | 0 | - | - | 7.4 | 0 | - | 10.5 |
| HCM Lane LOS | A | A | - | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.3 | 0 | - | - | 0.1 | - | - | 0.3 |

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 9.8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 44 | 74 | 34 | 14 | 128 | 49 | 36 | 67 | 14 | 26 | 66 | 23 |
| Future Vol, veh/h | 44 | 74 | 34 | 14 | 128 | 49 | 36 | 67 | 14 | 26 | 66 | 23 |
| Peak Hour Factor | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, % | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 14 | 14 | 14 |
| Mvmt Flow | 54 | 91 | 42 | 17 | 158 | 60 | 44 | 83 | 17 | 32 | 81 | 28 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|------|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 9.7 | 10.1 | 9.6 | 9.8 |
| HCM LOS | A | B | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 31% | 29% | 7% | 23% |
| Vol Thru, % | 57% | 49% | 67% | 57% |
| Vol Right, % | 12% | 22% | 26% | 20% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 117 | 152 | 191 | 115 |
| LT Vol | 36 | 44 | 14 | 26 |
| Through Vol | 67 | 74 | 128 | 66 |
| RT Vol | 14 | 34 | 49 | 23 |
| Lane Flow Rate | 144 | 188 | 236 | 142 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.206 | 0.256 | 0.314 | 0.208 |
| Departure Headway (Hd) | 5.134 | 4.906 | 4.787 | 5.272 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 690 | 724 | 743 | 673 |
| Service Time | 3.227 | 2.987 | 2.863 | 3.366 |
| HCM Lane V/C Ratio | 0.209 | 0.26 | 0.318 | 0.211 |
| HCM Control Delay | 9.6 | 9.7 | 10.1 | 9.8 |
| HCM Lane LOS | A | A | B | A |
| HCM 95th-tile Q | 0.8 | 1 | 1.3 | 0.8 |

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.5 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 24 | 41 | 19 | 1 | 26 | 5 | 17 | 7 | 3 | 4 | 10 | 28 |
| Future Vol, veh/h | 24 | 41 | 19 | 1 | 26 | 5 | 17 | 7 | 3 | 4 | 10 | 28 |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, % | 3 | 3 | 3 | 6 | 6 | 6 | 12 | 12 | 12 | 3 | 3 | 3 |
| Mvmt Flow | 28 | 47 | 22 | 1 | 30 | 6 | 20 | 8 | 3 | 5 | 11 | 32 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.6 | 7.4 | 7.7 | 7.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 63% | 29% | 3% | 10% |
| Vol Thru, % | 26% | 49% | 81% | 24% |
| Vol Right, % | 11% | 23% | 16% | 67% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 27 | 84 | 32 | 42 |
| LT Vol | 17 | 24 | 1 | 4 |
| Through Vol | 7 | 41 | 26 | 10 |
| RT Vol | 3 | 19 | 5 | 28 |
| Lane Flow Rate | 31 | 97 | 37 | 48 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.038 | 0.108 | 0.042 | 0.051 |
| Departure Headway (Hd) | 4.433 | 4.039 | 4.127 | 3.825 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 800 | 883 | 861 | 925 |
| Service Time | 2.501 | 2.082 | 2.182 | 1.894 |
| HCM Lane V/C Ratio | 0.039 | 0.11 | 0.043 | 0.052 |
| HCM Control Delay | 7.7 | 7.6 | 7.4 | 7.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.4 | 0.1 | 0.2 |