TRAFFIC IMPACT ANALYSIS

# Inn at Whalebone Updated TIA

## Nags Head, North Carolina

PREPARED FOR

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8/29/2024

# Executive Summary

A new hotel is planned in the northwest quadrant of the US 158 (S Croatan Highway) at West Lakeside Street intersection in Nags Head, North Carolina (Figure 1). The property can be accessed via West Lakeside Street, and the development will consist of a 90-room hotel. The development is expected to be open in 2026. A traffic impact analysis (TIA) for this development was completed previously and sealed on September 30th, 2022. This report serves as an update to the previously completed TIA using turning movement counts collected in July 2024.

## Project Background

Based on the conceptual site plan (Figure 2), access to the development is proposed via two (2) vehicular access points. The following are the proposed access points:

- Future Access #1, full movement access on West Lakeside Street, approximately 290 feet west of US 158 (S Croatan Highway).
- Future Access #2, full movement access on West Lakeside Street, approximately 440 feet west of US 158 (S Croatan Highway).

Based on discussions with the Town of Nags Head and the North Carolina Department of Transportation (NCDOT), the following intersections were included in the study area and analyzed for existing and future conditions using the same parameters as the initial TIA, as applicable:

- West Lakeside Street/East Lakeside Street at US 158 (S Croatan Highway) (unsignalized)
- East Lakeside Street at NC 12 (S Virginia Dare Trail) (unsignalized)
- West Lakeside Street at Future Access #1 (unsignalized)

› West Lakeside Street at Future Access #2 (unsignalized)

The following scenarios were analyzed for existing and future conditions to evaluate the impacts that the proposed development may have on the surrounding roadway network:

› Existing (2024) Conditions
› No-Build (2026) Conditions
› Build (2026) Conditions
› Build (2026) Conditions with Improvements

The Existing (2024) scenario includes typical weekday AM and PM peak hour analysis and typical weekend peak hour analysis based on turning movement count data collected in September 2024. The No-Build (2026) scenario includes existing traffic with a 1.5% annual growth rate applied between the existing year (2024) and the future analysis year (2026). The Build (2026) scenario includes No-Build (2026) volumes with the addition of site trips generated by the full build-out of the proposed development.

## Existing (2024) Conditions

Existing analyses were conducted based on current roadway geometrics and intersection turning movement counts collected in July 2024.

Turning movement counts were collected at the existing study area intersections on Wednesday, July 24th, 2024, and Saturday, July 27th, 2024. The Wednesday count collection period was from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM to record weekday AM and PM peak hour traffic conditions. The Saturday count collection period was from 7:00 AM to 6:00 PM to record weekend peak hour traffic conditions. The existing (2024) peak hour turning movements are displayed in Figure 3. Based on historical average annual daily traffic (AADT) data, a growth rate of 1.5% was applied to the existing (2024) counts to calculate the future year (2026) peak hour traffic volumes (Figure 4).

As reported in the Summary Level of Service (LOS) table on page vi, the eastbound approach of NC 12 and East Lakeside Street is expected to operate at an acceptable level of service (LOS D or better) during all existing scenarios. The eastbound approach of US 158 and Lakeside Street is expected to operate at LOS E during the Existing (2024) weekday AM peak hour and LOS F during the other existing peak hours. The westbound approach is expected to operate at LOS F during all existing scenarios.

## No-Build (2026) Conditions

An annual growth rate of 1.5% was applied to the existing traffic to account for the normal growth between the base year (2024) and the build year (2026). There were no other planned developments identified within the study area.

As shown on the Summary LOS table on page vi, the eastbound approach of NC 12 and East Lakeside Street is expected to operate at an acceptable level of service (LOS D or better) during all existing scenarios. The eastbound approach of US 158 and Lakeside Street is expected to operate at LOS E during the existing weekday AM peak hour and LOS F during the other

existing peak hours. The westbound approach is expected to operate at LOS F during all existing scenarios.

## Trip Generation and Assignment

Trip generation was conducted based on the most appropriate corresponding trip generation codes included in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition* and the suggested method of calculation in the NCDOT's *"Rate vs. Equation" Spreadsheet*. The proposed development is to consist of a 90-room hotel; ITE Land Use Code (LUC) 310 (Hotel) was used based on the NCDOT guidance.

As a result, the proposed development is projected to generate 552 daily weekday site trips, with 38 trips (21 entering, 17 exiting) occurring in the AM peak hour and 39 trips (20 entering, 19 exiting) occurring in the PM peak hour. The proposed development is projected to generate 728 daily Saturday site trips, with 65 trips (36 entering, 29 exiting) occurring in the peak hour. The generated site trips were distributed in accordance with the existing turning movement counts and land uses.

## Build (2026) Conditions

The Build (2026) conditions account for both the No-Build (2026) traffic and the site traffic anticipated to be generated by the proposed development.

As shown on the Summary LOS table on page vi, with the addition of site trips, the NC 12 and East Lakeside Street intersection is expected to continue operating acceptably with minimal delay increases. During the Saturday peak hour, the eastbound and westbound approaches of the US 158 and Lakeside Street intersection is expected degrade from LOS E to LOS F compared to the No-Build Saturday peak hour. During the weekday PM peak hour, the eastbound and westbound approaches of the US 158 and Lakeside Street intersection are expected to operate at LOS E under build conditions. The new driveways operate at LOS A during the weekday AM, weekday PM, and Saturday peak hour with single ingress and egress lanes.

## Build (2026) Conditions with Improvements

The Build (2026) conditions with improvements analyze traffic operations with a traffic signal at the intersection of US 158 and Lakeside Street using the Build (2026) peak hour volumes.

As shown in the Summary LOS table on page vi, with the installation of the signal at the intersection of US 158 and Lakeside Street, the intersection is expected to operate at LOS A during both weekday peak hours and the Saturday peak hour. All the approaches of the signalized intersection are expected to operate at LOS C or better during the analyzed peak hours. The analyzed lane geometrics and traffic control with improvements are depicted in Figure ES on page vii.

A traffic signal warrant analysis was completed for the intersection of US 158 & West Lakeside Street/East Lakeside Street following the Manual on Uniform Traffic Control Devices (MUTCD). The volumes were checked against the following MUTCD Warrants:

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak-Hour Vehicular Volume

Per the MUTCD, on roadways with speed limits of 40 mph or higher, reduced volume factors (70% Factor) apply to the intersection volumes for Warrants 2 (Four-Hour) and 3 (Peak Hour). Since the speed limit on US 158 is 50 mph, the reduced volume factors (70%) are applied to intersection volumes for Warrants 2 (Four-Hour) and 3 (Peak Hour).

Under build conditions, the intersection meets Warrant 1 (Eight-Hour), Warrant 2 (Four-Hour), and Warrant 3 (Peak-Hour) on Saturday; however, the intersection does not meet the warrants during the weekday.

## Findings and Conclusion

As indicated in the traffic operations analyses, the proposed development is projected to moderately impact the traffic operations of Lakeside Street at the intersection with US 158, especially during the Saturday peak hour. The current and projected volumes on Lakeside Street are too low during weekday traffic to warrant a traffic signal; however, all three warrants are met for expected traffic on a Saturday.

Based on observations and communication with residents during the traffic count data collection, drivers generally travel on NC 12 to the nearest signalized intersection when trying to turn left onto US 158. The nearest signalized intersections are at Gull Street, about 3,700 feet south of the Lakeside Street intersection, and Seachase Drive, about 3,100 feet north of the Lakeside Street intersection.

Due to the high traffic on US 158 and associated difficulty turning left from side streets at unsignalized intersections, volumes on SB Lakeside Street at US 158 are likely suppressed when compared to the potential demand. Therefore, the traffic data used for the signal warrant analysis is likely an underestimate of traffic volumes at a signalized intersection.

A new signalized intersection in an interconnected community can streamline left-turns onto a busy street by offering a safe and predictable gap in traffic. This reduces the risks and delays associated with making left-turns from unsignalized intersections, where drivers often struggle to find adequate gaps in traffic. As a result, compared to unsignalized approaches, drivers are more likely to choose the signalized intersection for left turns, making it a more attractive and efficient route. A new traffic signal at the Lakeside Street intersection may offer a convenient midpoint between the nearest existing upstream and downstream signalized intersections.

Considering the surrounding area, including Forbes Candies in the NE quadrant of the intersection, additional shops to the south on Forbes Street, and nearby hotels and condos on NC 12, a traffic signal at Lakeside Street would likely become a desirable alternative to turning left from a nearby unsignalized intersection or traveling on NC 12 to the nearest signalized intersection.

## Recommendations

US 158 & West Lakeside Street/East Lakeside Street

- Consider signalizing the intersection.
- If signalizing the intersection, restripe the existing TWLTLs on both US 158 approaches to have left-turn lanes with at least 100' of storage.

West Lakeside Street and Future Access #1

- Construct a driveway with single ingress and single egress lane.
- Provide stop-control for the southbound approach.

West Lakeside Street and Future Access #2

- Construct a driveway with single ingress and single egress lane.
- Provide stop-control for the southbound approach.

The summary of LOS results is shown in Table ES, and the proposed lane geometrics and traffic control following the full buildout of the development are depicted in Figure ES on the following page.

**Table ES Summary Level of Service Table**

| ID | Intersection and Approach | Traffic Control | Existing (2024) | | | No-Build (2026) | | | Build (2026) | | | Build (2026) with Improvements | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM | PM | Saturday | AM | PM | Saturday | AM | PM | Saturday | AM | PM | Saturday |
| 1 | **NC 12 & East Lakeside Street** | Unsignalized | - | - | - | - | - | - | - | - | - | - | - | - |
| | Eastbound | | A-9.5 | B-10.5 | B-13.2 | A-9.6 | B-10.6 | B-13.4 | A-9.6 | B-10.8 | B-13.7 | A-9.6 | B-10.8 | B-13.7 |
| 2 | **US 158 & West Lakeside Street/East Lakeside Street** | Signalized | - | - | - | - | - | - | - | - | - | **A (4.9)** | **A (5.3)** | **A (7.5)** |
| | Eastbound | | C-20.1 | D-27.9 | E-42.5 | C-20.7 | D-29.5 | E-45.8 | C-22.3 | E-36.8 | F-99.7 | C-23.4 | C-26.1 | C-28.4 |
| | Westbound | | C-22.1 | E-37.3 | E-41.2 | C-22.8 | E-39.1 | E-44.4 | C-23.6 | E-44.8 | F-63.6 | C-20.3 | C-22.8 | C-23.1 |
| | Northbound | | - | - | - | - | - | - | - | - | - | A-4.3 | A-5.0 | A-6.3 |
| | Southbound | | - | - | - | - | - | - | - | - | - | A-4.3 | A-4.6 | A-7.4 |
| 3 | **West Lakeside Street & Future Access #1** | Unsignalized | - | - | - | - | - | - | - | - | - | - | - | - |
| | Southbound | | - | - | - | - | - | - | A-8.9 | A-8.9 | A-9.2 | A-8.9 | A-8.9 | A-9.2 |
| 4 | **West Lakeside Street & Future Access #2** | Unsignalized | - | - | - | - | - | - | - | - | - | - | - | - |
| | Southbound | | - | - | - | - | - | - | A-8.7 | A-8.8 | A-9.0 | A-8.7 | A-8.8 | A-9.0 |

**X (XX.X)** = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay

| LEGEND | |
|---|---|
| —— | Existing Roadway |
| - - - - | Future Roadway |
| STOP | Existing Stop-Controlled Approach |
| STOP | Proposed Stop-Controlled Approach |
| | Proposed Signalized Intersection |
| ←— | Existing Lane Geometric |
| ←— | Proposed Lane Geometric |
| TWLTL | Two-Way Left-Turn Lane |

not to scale

**Inn at Whalebone**
**90 Units**

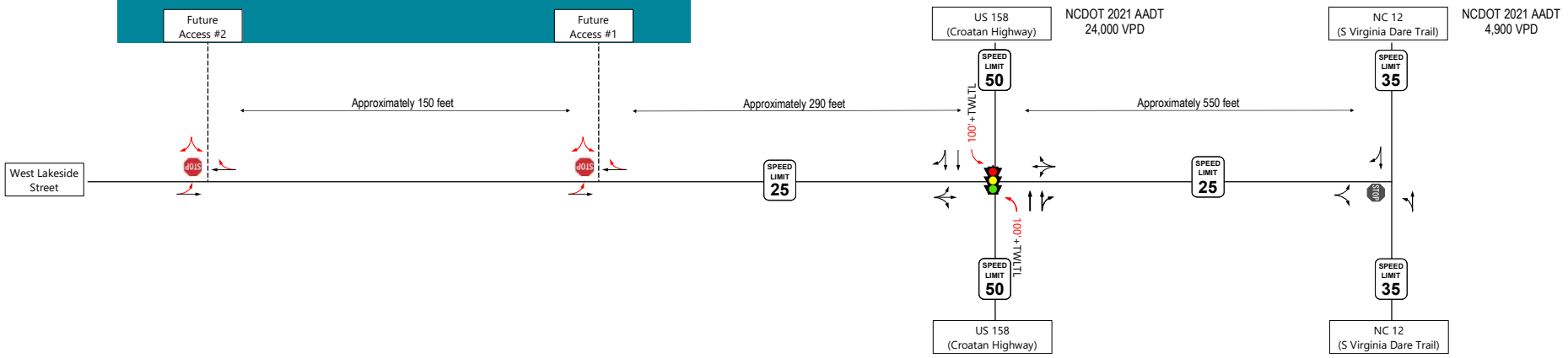


**Figure ES**
**Build (2026) Lane Geometrics and Traffic Control**

**Inn at Whalebone TIA**
**Nags Head, NC**

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# 1

# Introduction

A new hotel is planned in the northwest quadrant of the US 158 (S Croatan Highway) at West Lakeside Street intersection in Nags Head, North Carolina (Figure 1). The property can be accessed via West Lakeside Street, and the development will consist of a 90-room hotel. The development is expected to be open in 2026. A traffic impact analysis (TIA) for this development was completed previously and sealed on September 30th, 2022. This report serves as an update to the previously completed TIA using turning movement counts collected in July 2024.

VHB Engineering NC, P.C. was retained by the Town of Nags Head to analyze the potential traffic impacts of the proposed development during the summer and to identify any necessary roadway improvements. This TIA summarizes trip generation, distribution, traffic assignment, and traffic analyses for the proposed development.

Based on the conceptual site plan (Figure 2), access to the development is proposed via two (2) vehicular access points. The following are the proposed access points:

- Future Access #1, full movement access on West Lakeside Street, approximately 290 feet west of US 158 (S Croatan Highway).
- Future Access #2, full movement access on West Lakeside Street, approximately 440 feet west of US 158 (S Croatan Highway).

Based on discussions with the Town of Nags Head and the North Carolina Department of Transportation (NCDOT), the following intersections were included in the study area and analyzed for existing and future conditions using the same parameters as the initial TIA, as applicable:

- West Lakeside Street/East Lakeside Street at US 158 (S Croatan Highway) (unsignalized)
- East Lakeside Street at NC 12 (S Virginia Dare Trail) (unsignalized)
- West Lakeside Street at Future Access #1 (unsignalized)
- West Lakeside Street at Future Access #2 (unsignalized)

The following scenarios were analyzed for existing and future conditions to evaluate the impacts that the proposed development may have on the surrounding roadway network:

- Existing (2024) Conditions
- No-Build (2026) Conditions
- Build (2026) Conditions
- Build with Improvements (2026) Conditions


**Figure 1**
**Study Area Map**

**Inn at Whalebone TIA**
**Nags Head, NC**

CLUBCORP GOLF OF NORTH CAROLINA LLC
D.B. 1255, PG. 540

**Forrest Street**
**Right-of-Way**

PROPOSED 6' HIGH PRIVACY FENCE
NO PARKING FIRE LANE SIGN
PROPOSED 25' BUFFER
N62° 23' 27"E 419.78'
124.80'
40.09'
254.89'
STORMWATER BASIN
CURB INLET (TYP) (SEE SHEET C3)
POLE MOUNTED LIGHT (TYPICAL) (SEE SHEET C5)
PROPOSED STORMWATER PIPE (TYPICAL)
EXISTING MULTI-USE PATH

LOT 37
ROANOKE SHORE
M.B. I, PG. 081

LOT 38
ROANOKE SHORE
M.B. I, PG. 081

LOT 39
ROANOKE SHORE
M.B. I, PG. 081

LOT 40
ROANOKE SHORE
M.B. I, PG. 081

LOT 41
ROANOKE SHORE
M.B. I, PG. 081

N26° 32' 57"W 294.22'
117.69'
S58° 72'

NO PARKING FIRE LANE SIGN
PROPOSED 6' HIGH PRIVACY FENCE
HIGH IMPACT BUFFER
PROPOSED 25' BUFFER
DUMPSTER PAD WITH SCREENED ENCLOSURE (SEE TOWN STANDARD 203)

**4 Story 90 Unit Hotel**
**6 Employees**
**Building Pad Grade Elev. @ 8.9'**
**Finished Floor Elevation @ 9.1'**

COVERED PORCH
5' CONCRETE WALK
DOWN SPOUT (TYP)
CONCRETE WALK
EQUALING TANK 9,346 G.
SEPTIC TANK 8,100 G.
SEPTIC TANK 8,100 G.
SEPTIC TANK 8,100 G.
POOL FENCE
PATIO
POOL 12'x24'
CURB INLET (TYP) (SEE SHEET C3)
STORMWATER BASIN
LANE FIRE
CURB STOP (TYP)
BOLLARD (TYP)
Porte Cochere
WALL MOUNTED LIGHT (TYPICAL) (SEE SHEET C5)
STOP SIGN
CONCRETE CATCH CURB and GUTTER (TYPICAL)
TURFSTONE
RECIRC. TANK 6,370 G.
3-L POD
PUMP TANK 9,346 G.
ACTIVE DRAINFIELD
REPAIR DRAINFIELD
NO PARKING
PROPOSED SIGN (TOWN APPROVED)
NO PARKING FIRE LANE SIGN
DUMPSTER PAD WITH SCREENED ENCLOSURE (SEE TOWN STANDARD 203)
LOADING ZONE 12' x 80'
93 EMPLOYEE PARKING
92 EMPLOYEE PARKING
OVERFLOW (SEE SHEET C7)
RPZ VAULT (SEE SHEET C6)
BIKE RACK
GRASS SWALE (SEE SHEET C7)
NO PLANTING
S62° 24' 00"W 253.13'
HIGH IMPACT BUFFER
EXISTING UTILITY POLE
PROPOSED FIRE HYDRANT ASSEMBLY (SEE SHEET C6)
S63° 20' 50"W 166.99'
S26° 36' 22"E 151.05'
S26° 36' 02"E 146.99'

EXISTING CONCRETE
EXISTING SERVICE STATION
EXISTING CONCRETE
EXISTING UTILITY POLE
21.3'
10.5'
100.1'
120.2'

PROPOSED ENTRANCE AS PER TOWN STANDARD DETAIL# 201 (SEE DETAIL ON SHT C6)
24" w. STOP BAR NCDOT PAVEMENT MARKING STANDARDS REF. 1205.01 R1-1 36"x36" STOP SIGN

**Lakeside Street**
**Right-of-Way**

PROPOSED ENTRANCE AS PER TOWN STANDARD DETAIL# 201 (SEE DETAIL ON SHT C6)

EX. 8"WM
TAPPING SLEEVE
2" SERVICE

**Croatan Highway**
**US 158 Bypass**

## GENERAL NOTES:

* SUBJECT PROPERTY: Lot: 32-36 & Pheasant Ave, Nags Head, NC 27959
* STREET ADDRESS: 6632 W Pheasant Ave, Nags Head, NC 27959
* PARCEL ID NUMBER: 006891000
* GLOBAL PIN: 080006472501
* RECORDED REFERENCE: DB. 1515 PG. 0048
* TOTAL PARCEL AREA: 99,233 S.F. (2.28 AC.)
* BOUNDARY INFORMATION TAKEN FROM BISSELL PROFESSIONAL GROUP
* LOT COVERAGE:
  - BUILDING and COVERED DECKS – 12,840 SQ. FT.
  - CONCRETE VEHICULAR – 30,746 SQ. FT.
  - CONCRETE WALK/CURB – 6,589 SQ. FT.
  - POOL SURFACE AREA – 288 SQ. FT.
  - TURFSTONE GRID PAVERS – 7,686 S.F. x 0.67 = 5,150 SQ. FT.
  - POOL PAVERS – 1,718 S.F. x 0.67 = 1,151 SQ. FT.
  - TOTAL IMPERVIOUS COVERAGE = 56,764 SQ. FT.
  - PERCENT LOT COVERAGE = 57.20%
  - BUILDING @ 12.94%
  - PARKING @ 36.18%
  - LANDSCAPED @ 28.2%
  - TOTAL PARKING AREA = 38,432 x 20% = 7,686 SQ. FT. (IMPERVIOUS)
  - TOTAL IMPERVIOUS PROVIDED = 7,680 SQ. FT.
* PARKING DATA
  - 90 UNITS @ 1 SPACE PER UNIT = 90 SPACES
  - 6 EMPLOYEES @ 1 SPACE PER 3 EMPLOYEES = 2 SPACES
  - TOTAL SPACES REQUIRED = 92 SPACES
  - TOTAL SPACES PROVIDED = 93 SPACES

## LEGEND:

- PROPOSED VEHICLE CIRCULATION AREA
- PROPOSED TURFSTONE
- PROPOSED BUILDING AREA
- PROPOSED DECKS
- PROPOSED CONCRETE SURFACE
- PROPOSED VEHICLE PARKING AREA
- PROPOSED CURB INLET / CATCH BASIN
- PROPOSED STORMWATER PIPE

GRAPHIC SCALE
20 0 20 40
( IN FEET )
1 inch = 20 ft.

**BEFORE YOU DIG!**
North Carolina 811
WWW.nc811.ORG

**NOTE:**
*THE DATA GIVEN ON THESE PLANS IS BELIEVED TO BE ACCURATE, BUT THE ACCURACY IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL LEVELS, LOCATIONS, TYPES, AND DIMENSIONS OF THE EXISTING UTILITIES PRIOR TO CONSTRUCTION. IF A DISCREPANCY IS FOUND, WORK SHALL CEASE AND THE ENGINEER NOTIFIED. WORK MAY CONTINUE UPON ENGINEERS NOTICE TO PROCEED.*

ENGINEER SEAL
NORTH CAROLINA PROFESSIONAL SEAL 24740 ENGINEER REGISTERED FREDERICK A. HOUSE
Firm Certification# C-1955



| APPROVALS | | DATE |
|---|---|---|
| Drawn: | D. NEFF | 08/15/22 |
| Checked: | R. HOUSE | 08/15/22 |
| Engineer: | R. HOUSE | 08/15/22 |

REVISIONS

| No. | Date | Description |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

HOUSE ENGINEERING, P.C.
Post Office Box 466 – 6475 N. Croatan Hwy, Suite 201
Kitty Hawk North Carolina 27949
Office# (252) 261-8253 E-Mail: info@houseengineering.net

# Site and Utility Plan
For:
## The Inn at Whalebone
Location:
**6632 West Pheasant Avenue**
**Parcel in Nags Head**
Nags Head Dare County North Carolina

| SIZE | PROJECT NUMBER | REV | SHEET NO. |
|---|---|---|---|
| D | 226733 | - | C2 OF 8 |

CAD FILENAME: 226733 SCALE: 1" = 20'-0"

# 2

# Existing (2024) Conditions

This section describes the existing roadways in the vicinity of the proposed development. The most recent Average Annual Daily Traffic (AADT) data for the surrounding network of roadway was obtained from the North Carolina Department of Transportation (NCDOT).

### US 158 (S Croatan Highway)

- Within the study area limits, US 158 (S Croatan Highway) is a five-lane divided roadway including a two-way left-turn lane (TWLTL) with a posted speed limit of 50 mph.
- The land uses along US 158 (S Croatan Highway) are primarily residential and commercial within the study area.
- The 2021 AADT along US 158 (S Croatan Highway) was 24,000 vehicles per day (vpd).

### NC 12 (S Virginia Dare Trail)

- Within the study area limits, NC 12 (S Virginia Dare Trail) is a two-lane undivided roadway with a posted speed limit of 35 mph.
- The 2021 AADT along NC 12 (S Virginia Dare Trail) was 4,900 vpd.

Figure 3 provides a schematic diagram of the existing roadways near the proposed development, including the intersection geometrics.

## Existing Turning Movement Data

Turning movement counts were collected at the existing study area intersections on Wednesday, July 24th, 2024, and Saturday, July 27th, 2024. The Wednesday count collection period was from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM to record weekday AM and PM peak hour traffic conditions. The Saturday count collection period was from 7:00 AM to

6:00 PM to record weekend peak hour traffic conditions. The existing (2024) peak hour turning movements are displayed in Figure 3. Based on historical AADT data, a growth rate of 1.5% was applied to the existing (2024) counts to calculate the future year (2026) peak hour traffic volumes (Figure 4).

**Table 1 Peak Hour Turning Movement Count Schedule**

| Intersection | Source | Weekday | | Weekend | |
|---|---|---|---|---|---|
| | | **Time Period** | **Data Collection Date** | **Time Period** | **Data Collection Date** |
| West Lakeside Street/East Lakeside Street at US 158 (S Croatan Highway) | VHB | 7:00 AM - 9:00 AM<br>4:00 PM - 6:00 PM | Wednesday, July 24, 2024 | 7:00 AM - 6:00 PM | Saturday, July 27, 2024 |
| East Lakeside Street at NC 12 (S Virginia Dare Trail) | | | | | |

| LEGEND | |
|---|---|
| —— | Existing Roadway |
| - - - - | Future Roadway |
| STOP | Existing Stop-Controlled Approach |
| ←— | Existing Lane Geometric |
| TWLTL | Two-Way Left-Turn Lane |

not to scale

**Inn at Whalebone**
**90 Units**

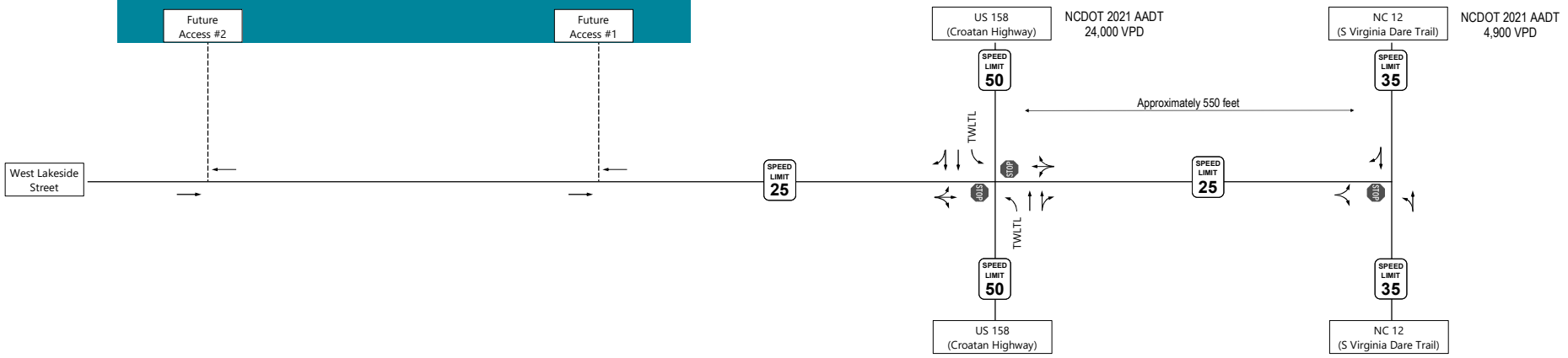


**Figure 3**
**Existing (2024) Lane Geometrics and Traffic Control**

**Inn at Whalebone TIA**
**Nags Head, NC**

## Level of Service Criteria

Peak hour level of service (LOS) measures the adequacy of the intersection geometrics and traffic controls of a particular intersection or approach for the given turning volumes. Levels of service range from A through F, based on the average control delay experienced by vehicles traveling through the intersection during the peak hour. Control delay represents the portion of total delay attributed to traffic control devices (e.g., signals or stop signs). The engineering professional generally accepts LOS D as an acceptable operating condition for signalized intersections in urban areas and LOS C for rural areas.

At unsignalized intersections, LOS E is generally considered acceptable only if the side street encounters the delay. Nevertheless, side streets sometimes function at LOS F during peak traffic periods; however, the traffic volume often does not warrant a traffic signal to assist side street traffic. Table 2 provides a general description of various levels of service categories and delay ranges.

**Table 2 Level of Service Description for Intersections**

| Level of Service | Description | Signalized Intersection | Unsignalized Intersection |
|---|---|---|---|
| A | Little or no delay | <= 10 sec. | <= 10 sec. |
| B | Short traffic delay | 10-20 sec. | 10-15 sec. |
| C | Average traffic delay | 20-35 sec. | 15-25 sec. |
| D | Long traffic delay | 35-55 sec. | 25-35 sec. |
| E | Very long traffic delay | 55-80 sec. | 35-50 sec. |
| F | Unacceptable delay | > 80 sec. | > 50 sec. |

## Level of Service Analysis

Intersection levels of service analyses were performed for the typical weekday AM and PM peak hour using *Synchro Professional Version 11*. The turning movement volumes analyzed in the Existing (2024) scenario are displayed in Figure 4. A summary of the findings for the Existing (2024) scenario LOS analysis can be found in Table 3 and the full *Synchro* output can be found in Appendix B.

As reported in Table 3, the eastbound approach of NC 12 and East Lakeside Street is expected to operate at an acceptable level of service (LOS D or better) during all existing scenarios. Under Existing (2024) conditions, the eastbound approach of US 158 and Lakeside Street is expected to operate at LOS C during the weekday AM peak hour, LOS D during the weekday PM peak hour, and LOS E during the Saturday peak hour. The westbound approach is expected to operate at LOS C during the weekday AM peak hour, and LOS E during the weekday PM peak hour and Saturday peak hour.

**Table 3 Existing (2024) LOS Results**

| ID | Intersection and Approach | Traffic Control | Existing (2024) | | |
|---|---|---|---|---|---|
| | | | AM | PM | Saturday |
| 1 | **NC 12 & East Lakeside Street** | Unsignalized | - | - | - |
| | Eastbound | | A-9.5 | B-10.5 | B-13.2 |
| 2 | **US 158 & West Lakeside Street/East Lakeside** | Unsignalized | - | - | - |
| | Eastbound | | C-20.1 | D-27.9 | E-42.5 |
| | Westbound | | C-22.1 | E-37.3 | E-41.2 |

**X (XX.X)** = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay

| LEGEND | |
|---|---|
| —— | Existing Roadway |
| ---- | Future Roadway |
| STOP | Existing Stop-Controlled Approach |
| ← | Turning Movement |
| XX | Weekday AM Peak Hour Turning Movement |
| (XX) | Weekday PM Peak Hour Turning Movement |
| {XX} | Saturday Peak Hour Turning Movement |

not to scale

**Inn at Whalebone**
**90 Units**

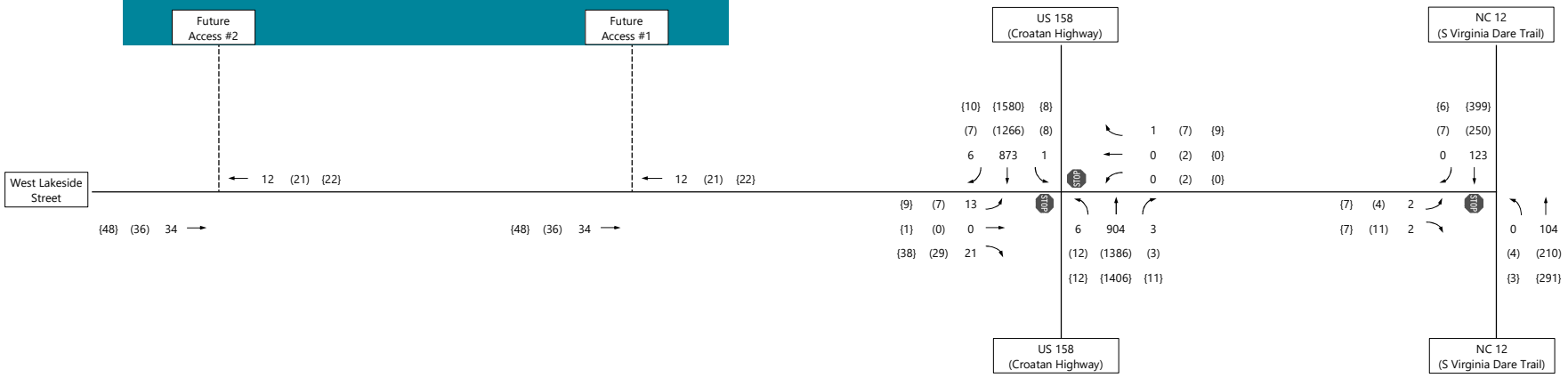


**Figure 4**
**Existing (2024) AM and PM Peak Hour Volumes**

**Inn at Whalebone TIA**
**Nags Head, NC**

# 3

# No-Build (2026) Conditions

## Background Growth Calculations

An annual growth rate of 1.5% was applied to the existing traffic to account for the normal growth between the base year (2024) and the build year (2026). There were no other planned developments identified within the study area.

## Level of Service Analysis

Intersection levels of service analyses were performed for the typical weekday AM and PM peak hours using *Synchro Professional Version 11*. A summary of the findings for the No-Build (2026) LOS analysis can be found in Table 4 and the full *Synchro* output can be found in Appendix B.

As reported in Table 4, the eastbound approach of NC 12 and East Lakeside Street is expected to operate at an acceptable level of service (LOS D or better) during all existing scenarios. Under No-Build (2026) conditions, the eastbound approach of US 158 and Lakeside Street is expected to operate at LOS C during the weekday AM peak hour, LOS D during the weekday PM peak hour, and LOS E during the Saturday peak hour. The westbound approach is expected to operate at LOS C during the weekday AM peak hour, and LOS E during the weekday PM peak hour and Saturday peak hour.

**Table 4 No-Build (2026) LOS Results**

| Intersection and Approach | Traffic Control | No-Build (2026) | | |
|---|---|---|---|---|
| | | AM | PM | Saturday |
| **NC 12 & East Lakeside Street** | Unsignalized | - | - | - |
| Eastbound | | A-9.6 | B-10.6 | B-13.4 |
| **US 158 & West Lakeside Street/East Lakeside** | Unsignalized | - | - | - |
| Eastbound | | C-20.7 | D-29.5 | E-45.8 |
| Westbound | | C-22.8 | E-39.1 | E-44.4 |

**X (XX.X)** = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay

| LEGEND | |
|---|---|
| —— | Existing Roadway |
| ---- | Future Roadway |
| STOP | Existing Stop-Controlled Approach |
| ← | Turning Movement |
| XX | Weekday AM Peak Hour Turning Movement |
| (XX) | Weekday PM Peak Hour Turning Movement |
| {XX} | Saturday Peak Hour Turning Movement |

not to scale

**Inn at Whalebone**
**90 Units**

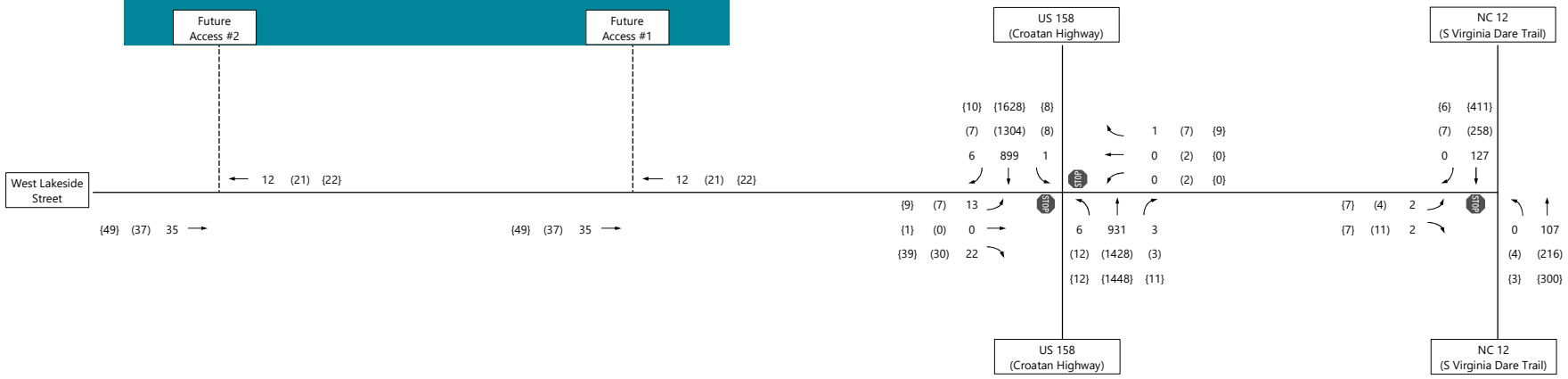


**Figure 5**
**No-Build (2026) AM and PM Peak Hour Volumes**

**Inn at Whalebone TIA**
**Nags Head, NC**

# 4

# Build (2026) Conditions

## Trip Generation

Trip generation was conducted based on the most appropriate corresponding trip generation codes included in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition* and the suggested method of calculation in the NCDOT's *"Rate vs. Equation" Spreadsheet*. The proposed development is to consist of a 90-room hotel; ITE Land Use Code (LUC) 310 (Hotel) was used based on the NCDOT guidance.

As a result, the proposed development is projected to generate 552 daily weekday site trips, with 38 trips (21 entering, 17 exiting) occurring in the AM peak hour and 39 trips (20 entering, 19 exiting) occurring in the PM peak hour. The proposed development is projected to generate 728 daily Saturday site trips, with 65 trips (36 entering, 29 exiting) occurring in the peak hour. The generated site trips were distributed in accordance with the existing turning movement counts and land uses.

Table 5 summarizes the assumed trip generation for the proposed development for typical weekday AM and PM peak hours.

**Table 5 Trip Generation Rates (Vehicle Trips)**

| Total Site Trips[1] | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use Code[2] | Land Use | Unit | ADT | AM Peak Hour | | | PM Peak Hour | | | ADT | Saturday Peak Hour | | |
| | | | | Enter | Exit | Total | Enter | Exit | Total | | Enter | Exit | Total |
| 310 | Hotel | 90 rooms | 552 | 21 | 17 | 38 | 20 | 19 | 39 | 726 | 36 | 29 | 65 |

Notes:

1. Total site trips are determined based on the suggested method in the NCDOT Rate vs Equation Spreadsheet
2. Land Use Code and trip generation rates are determined based on *ITE Trip Generation, 11th Edition*

## Trip Assignment

The proposed development will two driveways on West Lakeside Street. The generated site trips were distributed in accordance with the existing traffic patterns and land uses in the vicinity of the study area. The site trip distribution percentages are as follows:

- US 158 (S Croatan Highway) from/to the north – 40%
- US 158 (S Croatan Highway) from/to the south – 40%
- NC 12 (S Virginia Dare Trail) from/to the north – 10%
- NC 12 (S Virginia Dare Trail) from/to the south – 10%

The site trip distribution referenced above is shown in Figure 6, and the resulting site trips are shown in Figure 7.

| LEGEND | |
|---|---|
| —— | Existing Roadway |
| ---- | Future Roadway |
| STOP | Existing Stop-Controlled Approach |
| STOP | Proposed Stop-Controlled Approach |
| ← | Turning Movement |
| XX% | Entering Trip Distribution Percentage |
| XX% | Exiting Trip Distribution Percentage |

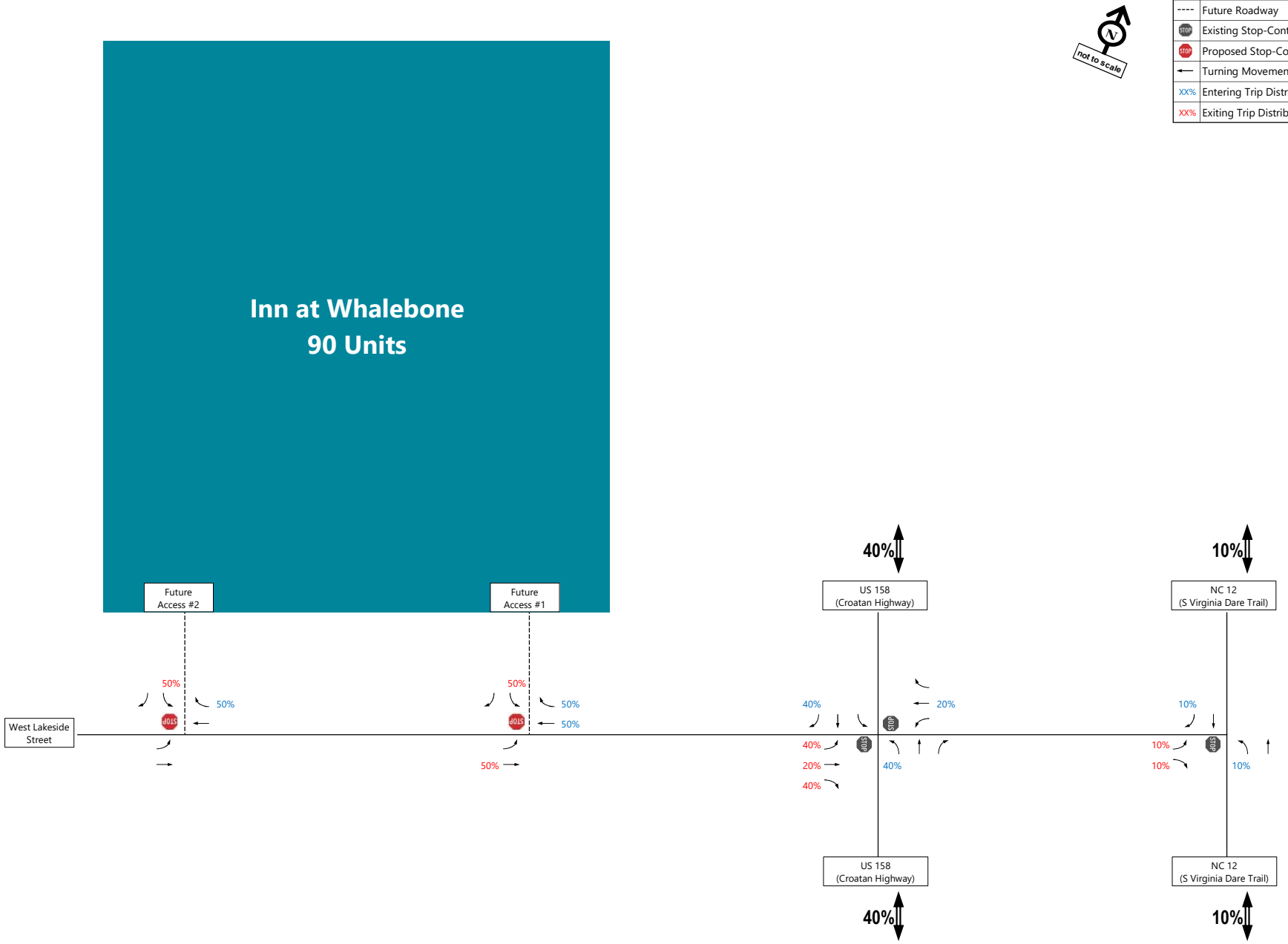


**Figure 6**
**Peak Hour Site Trip Directional Assignment Percentages**

**Inn at Whalebone TIA**
**Nags Head, NC**

| LEGEND | |
|---|---|
| —— | Existing Roadway |
| ---- | Future Roadway |
| STOP | Existing Stop-Controlled Approach |
| STOP | Proposed Stop-Controlled Approach |
| ← | Turning Movement |
| XX | Weekday AM Peak Hour Turning Movement |
| (XX) | Weekday PM Peak Hour Turning Movement |
| {XX} | Saturday Peak Hour Turning Movement |

not to scale

**Inn at Whalebone**
**90 Units**

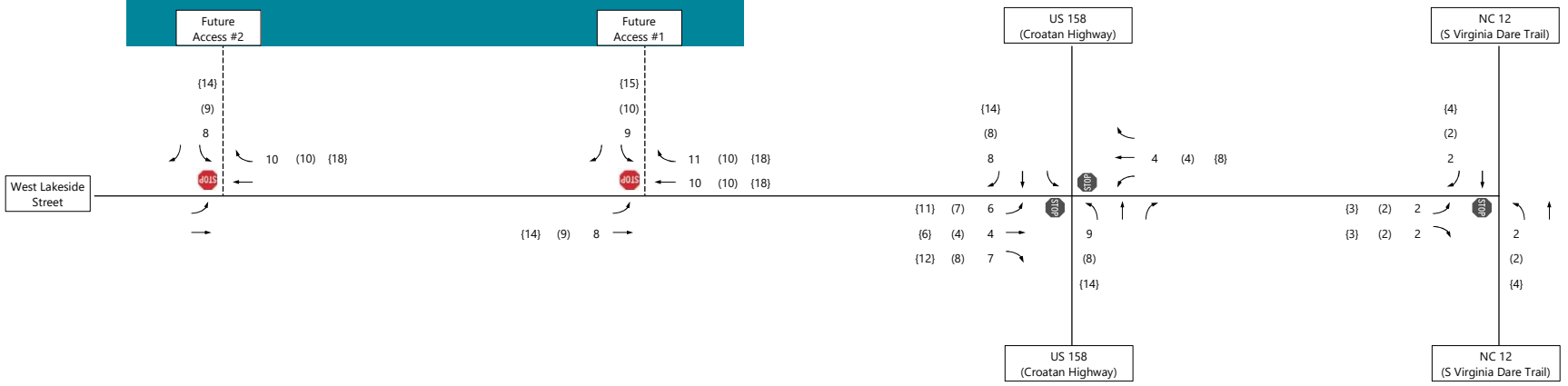


**Figure 7**
**Peak Site Generated Trips**

**Inn at Whalebone TIA**
**Nags Head, NC**

## Level of Service Analysis

The Build (2026) conditions account for both the No-Build (2026) traffic and the site-generated trips as described previously. Figure 8 depicts the turning movement volumes used in the Build (2026) scenario analysis, and the Build (2026) lane geometrics and traffic control is shown in Figure 9. Intersection levels of service analyses were performed for the typical weekday AM and PM peak hours using *Synchro Professional Version 11*. Table 6 summarizes the findings of the LOS analysis, and Appendix B contains the full *Synchro* reports of the analyses.

As shown in Table 6, with the addition of site trips, the NC 12 and East Lakeside Street intersection is expected to continue operating acceptably with minimal delay increases. During the Saturday peak hour, the eastbound and westbound approaches of the US 158 and Lakeside Street intersection are expected to degrade from LOS E to LOS F compared to the No-Build Saturday peak hour. The eastbound and westbound approaches of the US 158 and Lakeside Street intersection are expected to continue operating at LOS C during the weekday AM peak hour and operate at LOS E during the weekday PM peak hour. The proposed stop-controlled approaches at both future access driveways will operate at LOS A during the analyzed peak hours.

**Table 6 Build (2026) LOS Results**

| ID | Intersection and Approach | Traffic Control | Build (2026) | | |
|---|---|---|---|---|---|
| | | | AM | PM | Saturday |
| 1 | **NC 12 & East Lakeside Street** | Unsignalized | - | - | - |
| | Eastbound | | A-9.6 | B-10.8 | B-13.7 |
| 2 | **US 158 & West Lakeside Street/East Lakeside** | Unsignalized | - | - | - |
| | Eastbound | | C-22.3 | E-36.8 | F-99.7 |
| | Westbound | | C-23.6 | E-44.8 | F-63.6 |
| 3 | **West Lakeside Street & Future Access #1** | Unsignalized | - | - | - |
| | Southbound | | A-8.9 | A-8.9 | A-9.2 |
| 4 | **West Lakeside Street & Future Access #2** | Unsignalized | - | - | - |
| | Southbound | | A-8.7 | A-8.8 | A-9.0 |

**X (XX.X)** = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay

| LEGEND | |
|---|---|
| —— | Existing Roadway |
| ---- | Future Roadway |
| STOP | Existing Stop-Controlled Approach |
| STOP | Proposed Stop-Controlled Approach |
| ← | Turning Movement |
| XX | Weekday AM Peak Hour Turning Movement |
| (XX) | Weekday PM Peak Hour Turning Movement |
| {XX} | Saturday Peak Hour Turning Movement |

not to scale

**Inn at Whalebone**
**90 Units**

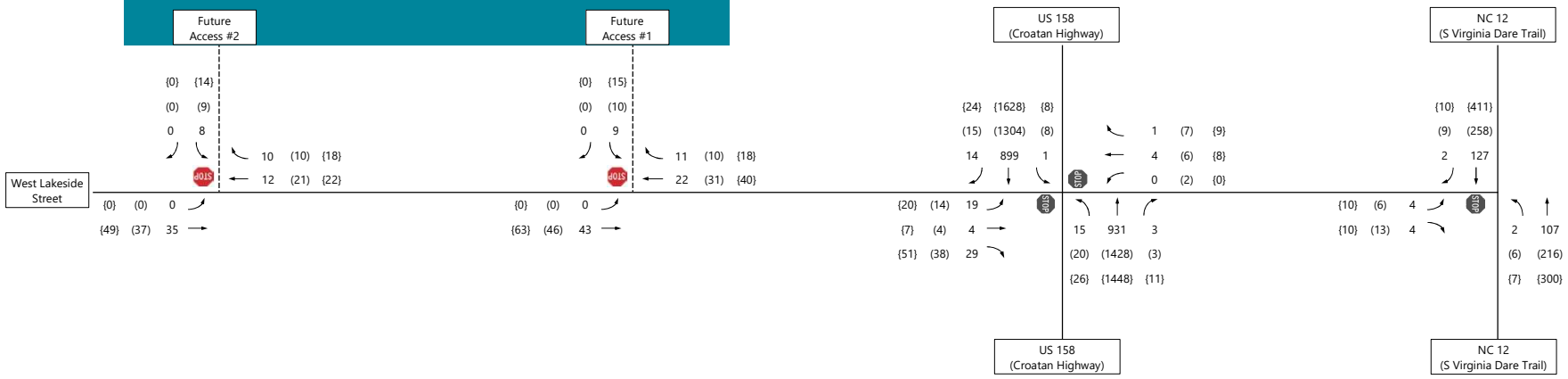


**Figure 8**
**Build (2026) AM and PM Peak Hour Volumes**

**Inn at Whalebone TIA**
**Nags Head, NC**

| LEGEND | |
|---|---|
| —— | Existing Roadway |
| - - - - | Future Roadway |
| STOP | Existing Stop-Controlled Approach |
| STOP | Proposed Stop-Controlled Approach |
| ←— | Existing Lane Geometric |
| ←— | Proposed Lane Geometric |
| TWLTL | Two-Way Left-Turn Lane |

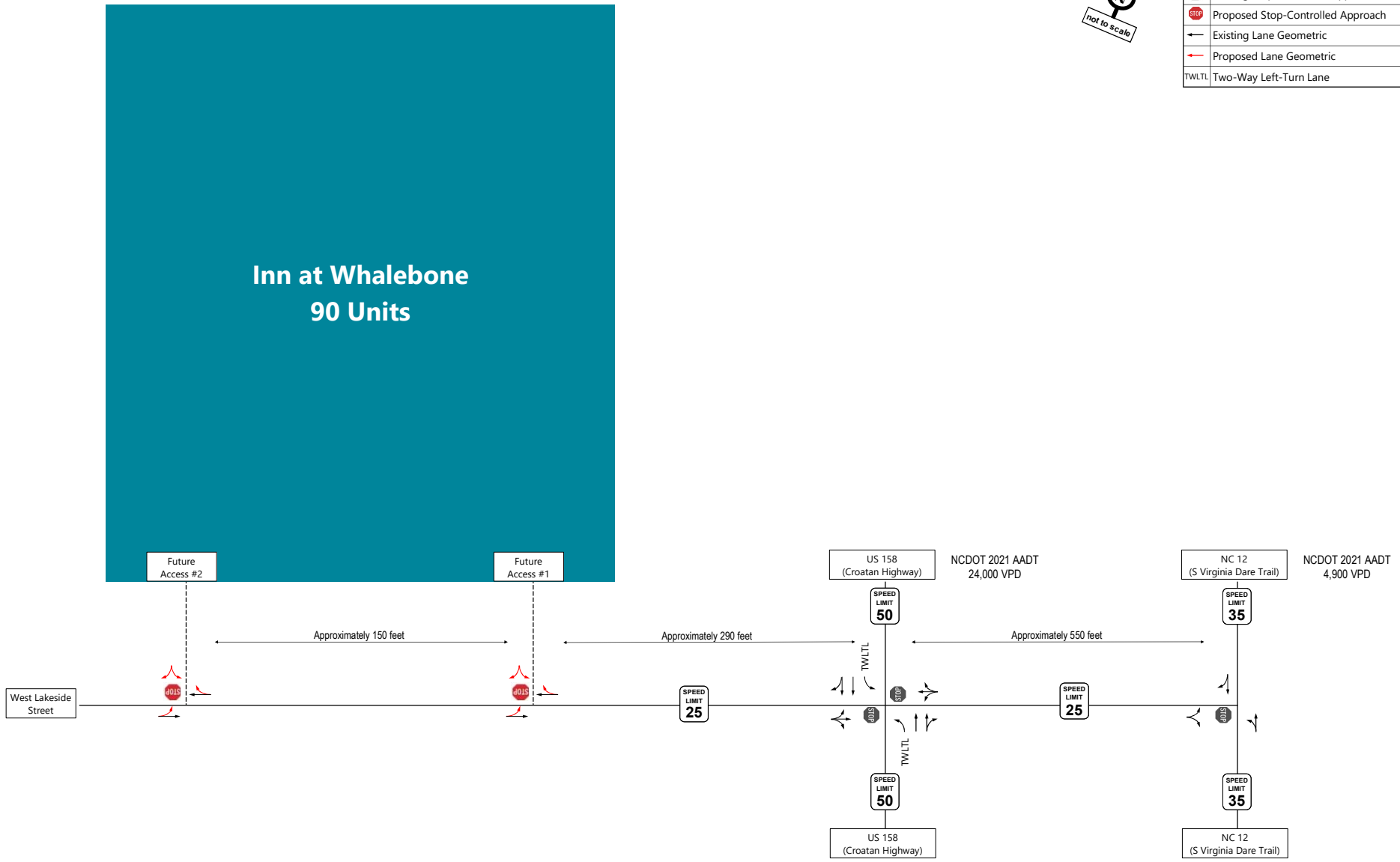


**Figure 9**
**Build (2026) Lane Geometrics and Traffic Control**

**Inn at Whalebone TIA**
**Nags Head, NC**

# 5

# Build (2026) Conditions with Improvements

## Level of Service Analysis

The Build (2026) conditions with improvements analyze traffic operations with a traffic signal at the intersection of US 158 and Lakeside Street using the Build (2026) peak hour volumes (shown previously in Figure 8). Intersection LOS analyses were performed for both weekday peak hours and the Saturday peak hour using *Synchro Professional Version 11*.

Table 7 summarizes the findings of the LOS analysis, and the full Synchro output can be found in Appendix B. The analyzed lane geometrics and traffic control with improvements following the completion of the development are depicted in Figure 10 at the end of the Findings and Recommendations.

With the installation of the signal at the intersection of US 158 and Lakeside Street, the intersection is expected to operate at LOS A during both weekday peak hours and the Saturday peak hour. All the approaches of the signalized intersection are expected to operate at LOS C or better during the analyzed peak hours.

**Table 7 Build (2026) with Improvements LOS Results**

| ID | Intersection and Approach | Traffic Control | Build (2026) with Improvements | | |
|---|---|---|---|---|---|
| | | | AM | PM | Saturday |
| 1 | **NC 12 & East Lakeside Street** | Unsignalized | - | - | - |
| | Eastbound | | A-9.6 | B-10.8 | B-13.7 |
| 2 | **US 158 & West Lakeside Street/East Lakeside Street** | Signalized | **A (4.9)** | **A (5.3)** | **A (7.5)** |
| | Eastbound | | C-23.4 | C-26.1 | C-28.4 |
| | Westbound | | C-20.3 | C-22.8 | C-23.1 |
| | Northbound | | A-4.3 | A-5.0 | A-6.3 |
| | Southbound | | A-4.3 | A-4.6 | A-7.4 |
| 3 | **West Lakeside Street & Future Access #1** | Unsignalized | - | - | - |
| | Southbound | | A-8.9 | A-8.9 | A-9.2 |
| 4 | **West Lakeside Street & Future Access #2** | Unsignalized | - | - | - |
| | Southbound | | A-8.7 | A-8.8 | A-9.0 |

**X (XX.X)** = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay

## Signal Warrant Analysis

Due to the LOS of the eastbound and westbound approaches at the intersection of US 158 & West Lakeside Street/East Lakeside Street for the Saturday peak hour, a signal was considered as a possible improvement. The results of the warrant analysis are shown in Table 8 for the weekday peak hours, and Table 9 for Saturday.

**Table 8 Saturday Signal Warrant Analysis at US 158 & West Lakeside Street/East Lakeside Street**

| | Existing (2024) | | | No-Build (2026) | | | Build (2026) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Meet Warrant? | | | Meet Warrant? | | | Meet Warrant? | | |
| Time Period | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| 7:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET |
| 8:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | MET | MET | NOT MET |
| 9:00 | MET | NOT MET | NOT MET | MET | MET | NOT MET | MET | MET | NOT MET |
| 10:00 | MET | NOT MET | NOT MET | MET | NOT MET | NOT MET | MET | MET | NOT MET |
| 11:00 | MET | NOT MET | NOT MET | MET | NOT MET | NOT MET | MET | MET | NOT MET |
| 12:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | MET | MET | NOT MET |
| 13:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | MET | MET | NOT MET |
| 14:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | MET | MET | NOT MET |
| 15:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | MET | MET | NOT MET |
| 16:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | MET | MET | NOT MET |
| 17:00 | MET | NOT MET | NOT MET | MET | NOT MET | NOT MET | MET | MET | MET |
| # Hours Meeting Warrant: | **4** | **0** | **0** | **4** | **1** | **0** | **10** | **10** | **1** |
| # Hours Needed: | **8** | **4** | **1** | **8** | **4** | **1** | **8** | **4** | **1** |
| Meeting Warrant? | **No** | **No** | **No** | **No** | **No** | **No** | **Yes** | **Yes** | **Yes** |

**Table 9 Weekday Signal Warrant Analysis at US 158 & West Lakeside Street/East Lakeside Street**

| | Existing (2024) | | | No-Build (2026) | | | Build (2026) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Meet Warrant? | | | Meet Warrant? | | | Meet Warrant? | | |
| Time Period | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| 7:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET |
| 8:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | MET | NOT MET | NOT MET |
| 16:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | MET | MET | NOT MET |
| 17:00 | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | NOT MET | MET | NOT MET | NOT MET |
| # Hours Meeting Warrant: | **0** | **0** | **0** | **0** | **0** | **0** | **3** | **1** | **0** |
| # Hours Needed: | **8** | **4** | **1** | **8** | **4** | **1** | **8** | **4** | **1** |
| Meeting Warrant? | **No** | **No** | **No** | **No** | **No** | **No** | **No** | **No** | **No** |

The traffic signal warrant analysis was completed for the intersection of US 158 & West Lakeside Street/East Lakeside Street following the Manual on Uniform Traffic Control Devices (MUTCD). The volumes were checked against the following MUTCD Warrants:

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak-Hour Vehicular Volume

Per the MUTCD, on roadways with speed limits of 40 mph or higher, reduced volume factors (70% Factor) apply to the intersection volumes for Warrants 2 (Four-Hour) and 3 (Peak Hour). Since the speed limit on US 158 is 50 mph, the reduced volume factors (70%) are applied to intersection volumes for Warrants 2 (Four-Hour) and 3 (Peak Hour).

As shown in Table 8 on the previous page, under build conditions; the intersection meets Warrant 1 (Eight-Hour), Warrant 2 (Four-Hour), and Warrant 3 (Peak-Hour) on Saturday; however, the intersection does not meet the warrants during the weekday.

# 6

# Findings and Conclusions

As indicated in the traffic operations analyses, the proposed development is projected to moderately impact the traffic operations of Lakeside Street at the intersection with US 158, especially during the Saturday peak hour. The current and projected volumes on Lakeside Street are too low during weekday traffic to warrant a traffic signal; however, all three warrants are met for expected traffic on a Saturday.

Based on observations and communication with residents during the traffic count data collection, drivers generally travel on NC 12 to the nearest signalized intersection when trying to turn left onto US 158. The nearest signalized intersections are at Gull Street, about 3,700 feet south of the Lakeside Street intersection, and Seachase Drive, about 3,100 feet north of the Lakeside Street intersection.

Due to the high traffic on US 158 and associated difficulty turning left from side streets at unsignalized intersections, volumes on SB Lakeside Street at US 158 are likely suppressed when compared to the potential demand. Therefore, the traffic data used for the signal warrant analysis is likely an underestimate of traffic volumes at a signalized intersection.

A new signalized intersection in an interconnected community can streamline left-turns onto a busy street by offering a safe and predictable gap in traffic. This reduces the risks and delays associated with making left-turns from unsignalized intersections, where drivers often struggle to find adequate gaps in traffic. As a result, compared to unsignalized approaches, drivers are more likely to choose the signalized intersection for left turns, making it a more attractive and efficient route. A new traffic signal at the Lakeside Street intersection may offer a convenient midpoint between the nearest existing upstream and downstream signalized intersections.

Considering the surrounding area, including Forbes Candies in the NE quadrant of the intersection, additional shops to the south on Forbes Street, and nearby hotels and condos on NC 12, a traffic signal at Lakeside Street would likely become a desirable alternative to turning left from a nearby unsignalized intersection or traveling on NC 12 to the nearest signalized intersection.

## Recommendations

US 158 & West Lakeside Street/East Lakeside Street

- Consider signalizing the intersection.
- If signalizing the intersection, restripe the existing TWLTLs on both US 158 approaches to have left-turn lanes with at least 100' of storage.

West Lakeside Street and Future Access #1

- Construct a driveway with single ingress and single egress lane.
- Provide stop-control for the southbound approach.

West Lakeside Street and Future Access #2

- Construct a driveway with single ingress and single egress lane.
- Provide stop-control for the southbound approach.

The summary of LOS results is shown in Table 10, and the proposed lane geometrics and traffic control following the full buildout of the development are depicted in Figure 10.

**Table 10 Summary of LOS Results**

| ID | Intersection and Approach | Traffic Control | Existing (2024) | | | No-Build (2026) | | | Build (2026) | | | Build (2026) with Improvements | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM | PM | Saturday | AM | PM | Saturday | AM | PM | Saturday | AM | PM | Saturday |
| 1 | **NC 12 & East Lakeside Street** | Unsignalized | - | - | - | - | - | - | - | - | - | - | - | - |
| | Eastbound | | A-9.5 | B-10.5 | B-13.2 | A-9.6 | B-10.6 | B-13.4 | A-9.6 | B-10.8 | B-13.7 | A-9.6 | B-10.8 | B-13.7 |
| 2 | **US 158 & West Lakeside Street/East Lakeside Street** | Signalized | - | - | - | - | - | - | - | - | - | **A (4.9)** | **A (5.3)** | **A (7.5)** |
| | Eastbound | | C-20.1 | D-27.9 | E-42.5 | C-20.7 | D-29.5 | E-45.8 | C-22.3 | E-36.8 | F-99.7 | C-23.4 | C-26.1 | C-28.4 |
| | Westbound | | C-22.1 | E-37.3 | E-41.2 | C-22.8 | E-39.1 | E-44.4 | C-23.6 | E-44.8 | F-63.6 | C-20.3 | C-22.8 | C-23.1 |
| | Northbound | | - | - | - | - | - | - | - | - | - | A-4.3 | A-5.0 | A-6.3 |
| | Southbound | | - | - | - | - | - | - | - | - | - | A-4.3 | A-4.6 | A-7.4 |
| 3 | **West Lakeside Street & Future Access #1** | Unsignalized | - | - | - | - | - | - | - | - | - | - | - | - |
| | Southbound | | - | - | - | - | - | - | A-8.9 | A-8.9 | A-9.2 | A-8.9 | A-8.9 | A-9.2 |
| 4 | **West Lakeside Street & Future Access #2** | Unsignalized | - | - | - | - | - | - | - | - | - | - | - | - |
| | Southbound | | - | - | - | - | - | - | A-8.7 | A-8.8 | A-9.0 | A-8.7 | A-8.8 | A-9.0 |

**X (XX.X)** = Overall intersection LOS (average delay), X-XX = Approach LOS and average delay

| LEGEND | |
|---|---|
| —— | Existing Roadway |
| - - - - | Future Roadway |
| STOP | Existing Stop-Controlled Approach |
| STOP | Proposed Stop-Controlled Approach |
| | Proposed Signalized Intersection |
| ←— | Existing Lane Geometric |
| ←— | Proposed Lane Geometric |
| TWLTL | Two-Way Left-Turn Lane |

not to scale

**Inn at Whalebone**
**90 Units**

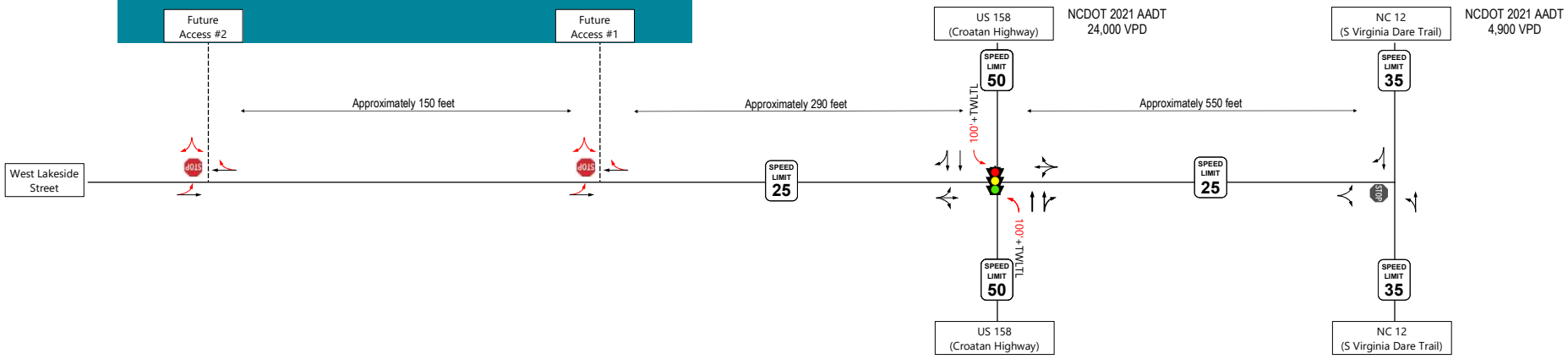


**Figure 10**
**Build (2026) Lane Geometrics and Traffic Control with Improvements**

**Inn at Whalebone TIA**
**Nags Head, NC**

# Appendices

# A

# Turning Movement Counts

**Vanasse Hangen Brustlin, Inc.**
**Venture 1**
**940 Main Campus Drive, Suite 500**
**Raleigh, North Carolina, United States 27606**
**919.829.0328 cmurden@vhb.com**

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/24/2024


# Turning Movement Data

| Start Time | NC 12 (Virginia Dare Trail) Southbound | | | | | | Private Drive Westbound | | | | | | NC 12 (Virginia Dare Trail) Northbound | | | | | | E. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 7:00 AM | 0 | 8 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 10 | 0 | 0 | 0 | 10 | 0 | 0 | 1 | 0 | 0 | 1 | 19 |
| 7:15 AM | 0 | 21 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 14 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| 7:30 AM | 0 | 17 | 0 | 0 | 1 | 17 | 0 | 0 | 1 | 0 | 13 | 1 | 1 | 16 | 0 | 0 | 0 | 17 | 0 | 0 | 4 | 0 | 0 | 4 | 39 |
| 7:45 AM | 1 | 37 | 0 | 0 | 1 | 38 | 1 | 0 | 0 | 0 | 15 | 1 | 0 | 17 | 0 | 0 | 0 | 17 | 1 | 0 | 0 | 0 | 1 | 1 | 57 |
| Hourly Total | 1 | 83 | 0 | 0 | 2 | 84 | 1 | 0 | 1 | 0 | 46 | 2 | 1 | 57 | 0 | 0 | 0 | 58 | 1 | 0 | 5 | 0 | 1 | 6 | 150 |
| 8:00 AM | 0 | 27 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 16 | 0 | 0 | 0 | 16 | 0 | 0 | 1 | 0 | 0 | 1 | 44 |
| 8:15 AM | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 25 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 8:30 AM | 0 | 45 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 32 | 0 | 0 | 0 | 32 | 1 | 0 | 0 | 0 | 0 | 1 | 78 |
| 8:45 AM | 0 | 31 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 31 | 0 | 0 | 0 | 31 | 1 | 0 | 1 | 0 | 0 | 2 | 64 |
| Hourly Total | 0 | 123 | 0 | 0 | 0 | 123 | 0 | 0 | 0 | 0 | 53 | 0 | 0 | 104 | 0 | 0 | 0 | 104 | 2 | 0 | 2 | 0 | 0 | 4 | 231 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 68 | 1 | 0 | 6 | 69 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 56 | 0 | 0 | 0 | 56 | 0 | 0 | 4 | 0 | 0 | 4 | 129 |
| 4:15 PM | 0 | 45 | 2 | 0 | 0 | 47 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 56 | 0 | 0 | 0 | 56 | 2 | 0 | 2 | 0 | 0 | 4 | 107 |
| 4:30 PM | 0 | 61 | 1 | 0 | 0 | 62 | 0 | 0 | 0 | 0 | 10 | 0 | 1 | 36 | 0 | 0 | 0 | 37 | 1 | 0 | 1 | 0 | 0 | 2 | 101 |
| 4:45 PM | 0 | 49 | 1 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 37 | 0 | 0 | 0 | 40 | 3 | 0 | 2 | 0 | 0 | 5 | 95 |
| Hourly Total | 0 | 223 | 5 | 0 | 6 | 228 | 0 | 0 | 0 | 0 | 19 | 0 | 4 | 185 | 0 | 0 | 0 | 189 | 6 | 0 | 9 | 0 | 0 | 15 | 432 |
| 5:00 PM | 0 | 62 | 1 | 0 | 0 | 63 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 62 | 0 | 0 | 0 | 65 | 0 | 0 | 5 | 0 | 0 | 5 | 133 |
| 5:15 PM | 0 | 75 | 2 | 0 | 0 | 77 | 0 | 0 | 0 | 0 | 12 | 0 | 1 | 68 | 1 | 0 | 0 | 70 | 1 | 0 | 1 | 0 | 0 | 2 | 149 |
| 5:30 PM | 0 | 62 | 2 | 0 | 0 | 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 40 | 1 | 0 | 1 | 0 | 0 | 2 | 106 |
| 5:45 PM | 0 | 51 | 2 | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 39 | 0 | 0 | 0 | 39 | 2 | 0 | 4 | 0 | 0 | 6 | 98 |
| Hourly Total | 0 | 250 | 7 | 0 | 0 | 257 | 0 | 0 | 0 | 0 | 15 | 0 | 4 | 209 | 1 | 0 | 0 | 214 | 4 | 0 | 11 | 0 | 0 | 15 | 486 |
| Grand Total | 1 | 679 | 12 | 0 | 8 | 692 | 1 | 0 | 1 | 0 | 133 | 2 | 9 | 555 | 1 | 0 | 0 | 565 | 13 | 0 | 27 | 0 | 1 | 40 | 1299 |
| Approach % | 0.1 | 98.1 | 1.7 | 0.0 | - | - | 50.0 | 0.0 | 50.0 | 0.0 | - | - | 1.6 | 98.2 | 0.2 | 0.0 | - | - | 32.5 | 0.0 | 67.5 | 0.0 | - | - | - |
| Total % | 0.1 | 52.3 | 0.9 | 0.0 | - | 53.3 | 0.1 | 0.0 | 0.1 | 0.0 | - | 0.2 | 0.7 | 42.7 | 0.1 | 0.0 | - | 43.5 | 1.0 | 0.0 | 2.1 | 0.0 | - | 3.1 | - |
| Lights | 1 | 658 | 12 | 0 | - | 671 | 1 | 0 | 1 | 0 | - | 2 | 9 | 520 | 1 | 0 | - | 530 | 13 | 0 | 24 | 0 | - | 37 | 1240 |
| % Lights | 100.0 | 96.9 | 100.0 | - | - | 97.0 | 100.0 | - | 100.0 | - | - | 100.0 | 100.0 | 93.7 | 100.0 | - | - | 93.8 | 100.0 | - | 88.9 | - | - | 92.5 | 95.5 |
| Mediums | 0 | 15 | 0 | 0 | - | 15 | 0 | 0 | 0 | 0 | - | 0 | 0 | 21 | 0 | 0 | - | 21 | 0 | 0 | 0 | 0 | - | 0 | 36 |
| % Mediums | 0.0 | 2.2 | 0.0 | - | - | 2.2 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 3.8 | 0.0 | - | - | 3.7 | 0.0 | - | 0.0 | - | - | 0.0 | 2.8 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 0 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 2 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 0.4 | 0.0 | - | - | 0.4 | 0.0 | - | 0.0 | - | - | 0.0 | 0.2 |
| Bicycles on Road | 0 | 6 | 0 | 0 | - | 6 | 0 | 0 | 0 | 0 | - | 0 | 0 | 12 | 0 | 0 | - | 12 | 0 | 0 | 3 | 0 | - | 3 | 21 |
| % Bicycles on Road | 0.0 | 0.9 | 0.0 | - | - | 0.9 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 2.2 | 0.0 | - | - | 2.1 | 0.0 | - | 11.1 | - | - | 7.5 | 1.6 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 23 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | 0.0 | - | - | - | - | - | 17.3 | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - |
| Pedestrians | - | - | - | - | 8 | - | - | - | - | - | 110 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 82.7 | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |

**Vanasse Hangen Brustlin, Inc.**
Venture 1
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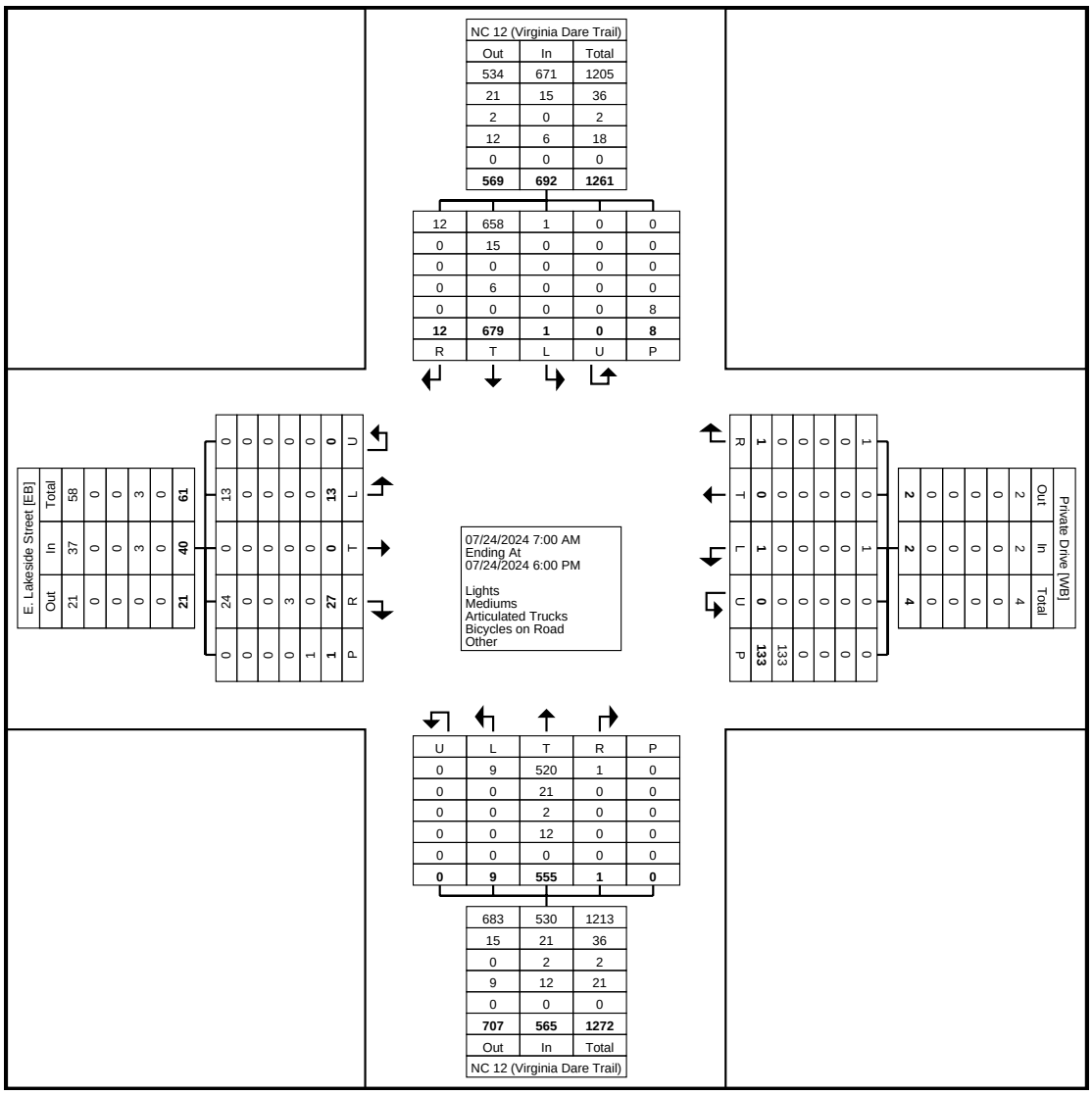
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/24/2024


Turning Movement Data Plot

**Vanasse Hangen Brustlin, Inc.**
**Venture 1**
**940 Main Campus Drive, Suite 500**
**Raleigh, North Carolina, United States 27606**
**919.829.0328 cmurden@vhb.com**

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/24/2024


# Turning Movement Peak Hour Data (8:00 AM)

| Start Time | NC 12 (Virginia Dare Trail) Southbound | | | | | | Private Drive Westbound | | | | | | NC 12 (Virginia Dare Trail) Northbound | | | | | | E. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 8:00 AM | 0 | 27 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 16 | 0 | 0 | 0 | 16 | 0 | 0 | 1 | 0 | 0 | 1 | 44 |
| 8:15 AM | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 25 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 8:30 AM | 0 | 45 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 32 | 0 | 0 | 0 | 32 | 1 | 0 | 0 | 0 | 0 | 1 | 78 |
| 8:45 AM | 0 | 31 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 31 | 0 | 0 | 0 | 31 | 1 | 0 | 1 | 0 | 0 | 2 | 64 |
| Total | 0 | 123 | 0 | 0 | 0 | 123 | 0 | 0 | 0 | 0 | 53 | 0 | 0 | 104 | 0 | 0 | 0 | 104 | 2 | 0 | 2 | 0 | 0 | 4 | 231 |
| Approach % | 0.0 | 100.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 100.0 | 0.0 | 0.0 | - | - | 50.0 | 0.0 | 50.0 | 0.0 | - | - | - |
| Total % | 0.0 | 53.2 | 0.0 | 0.0 | - | 53.2 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 45.0 | 0.0 | 0.0 | - | 45.0 | 0.9 | 0.0 | 0.9 | 0.0 | - | 1.7 | - |
| PHF | 0.000 | 0.683 | 0.000 | 0.000 | - | 0.683 | 0.000 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.000 | 0.813 | 0.000 | 0.000 | - | 0.813 | 0.500 | 0.000 | 0.500 | 0.000 | - | 0.500 | 0.740 |
| Lights | 0 | 112 | 0 | 0 | - | 112 | 0 | 0 | 0 | 0 | - | 0 | 0 | 86 | 0 | 0 | - | 86 | 2 | 0 | 2 | 0 | - | 4 | 202 |
| % Lights | - | 91.1 | - | - | - | 91.1 | - | - | - | - | - | - | - | 82.7 | - | - | - | 82.7 | 100.0 | - | 100.0 | - | - | 100.0 | 87.4 |
| Mediums | 0 | 7 | 0 | 0 | - | 7 | 0 | 0 | 0 | 0 | - | 0 | 0 | 7 | 0 | 0 | - | 7 | 0 | 0 | 0 | 0 | - | 0 | 14 |
| % Mediums | - | 5.7 | - | - | - | 5.7 | - | - | - | - | - | - | - | 6.7 | - | - | - | 6.7 | 0.0 | - | 0.0 | - | - | 0.0 | 6.1 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Articulated Trucks | - | 0.0 | - | - | - | 0.0 | - | - | - | - | - | - | - | 1.0 | - | - | - | 1.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.4 |
| Bicycles on Road | 0 | 4 | 0 | 0 | - | 4 | 0 | 0 | 0 | 0 | - | 0 | 0 | 10 | 0 | 0 | - | 10 | 0 | 0 | 0 | 0 | - | 0 | 14 |
| % Bicycles on Road | - | 3.3 | - | - | - | 3.3 | - | - | - | - | - | - | - | 9.6 | - | - | - | 9.6 | 0.0 | - | 0.0 | - | - | 0.0 | 6.1 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 7 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 13.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 46 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 86.8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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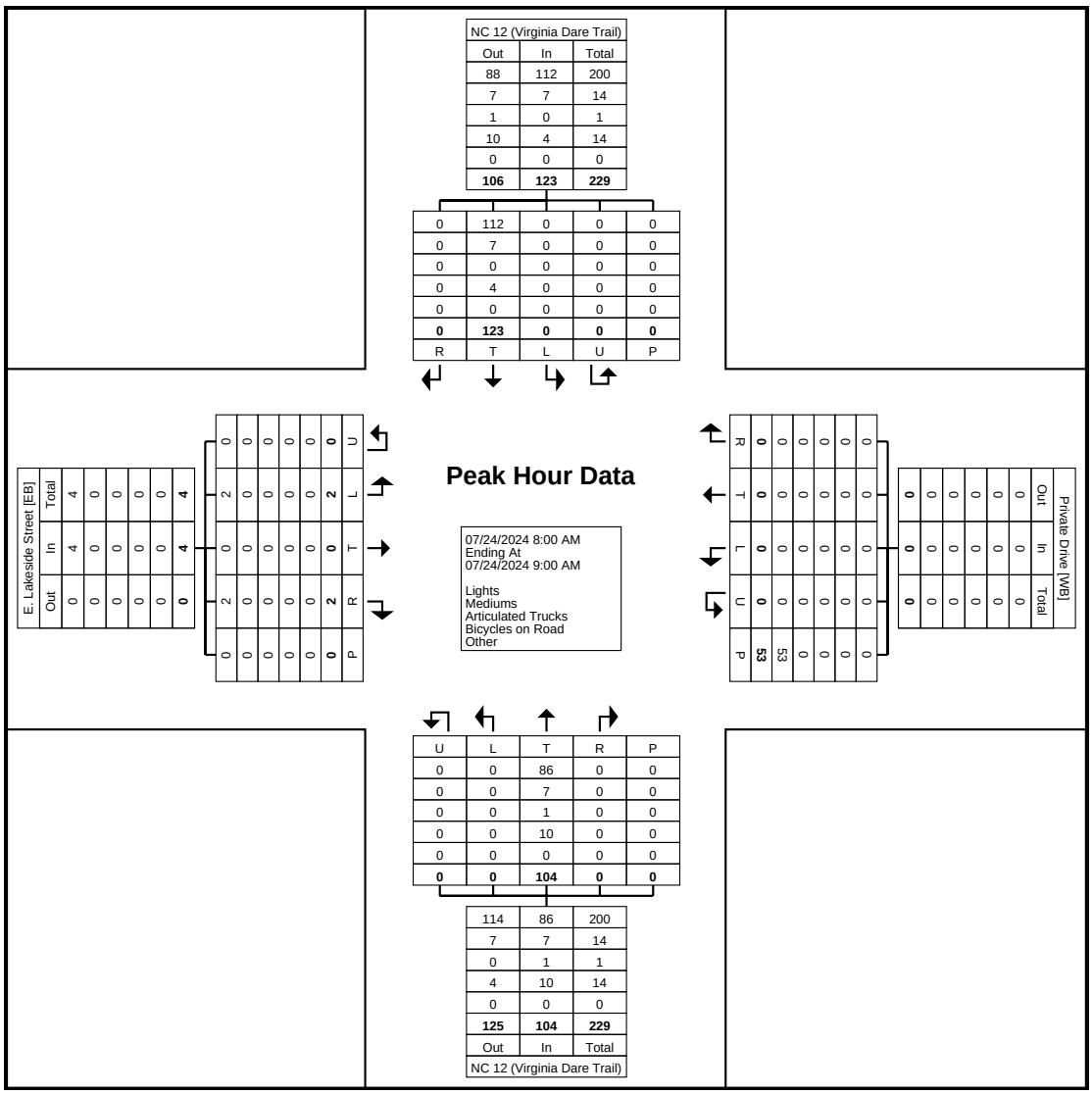
Site Code:
Start Date: 07/24/2024


Turning Movement Peak Hour Data Plot (8:00 AM)

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**919.829.0328 cmurden@vhb.com**

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/24/2024


# Turning Movement Peak Hour Data (5:00 PM)

| Start Time | NC 12 (Virginia Dare Trail) Southbound | | | | | | Private Drive Westbound | | | | | | NC 12 (Virginia Dare Trail) Northbound | | | | | | E. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 5:00 PM | 0 | 62 | 1 | 0 | 0 | 63 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 62 | 0 | 0 | 0 | 65 | 0 | 0 | 5 | 0 | 0 | 5 | 133 |
| 5:15 PM | 0 | 75 | 2 | 0 | 0 | 77 | 0 | 0 | 0 | 0 | 12 | 0 | 1 | 68 | 1 | 0 | 0 | 70 | 1 | 0 | 1 | 0 | 0 | 2 | 149 |
| 5:30 PM | 0 | 62 | 2 | 0 | 0 | 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 40 | 1 | 0 | 1 | 0 | 0 | 2 | 106 |
| 5:45 PM | 0 | 51 | 2 | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 39 | 0 | 0 | 0 | 39 | 2 | 0 | 4 | 0 | 0 | 6 | 98 |
| Total | 0 | 250 | 7 | 0 | 0 | 257 | 0 | 0 | 0 | 0 | 15 | 0 | 4 | 209 | 1 | 0 | 0 | 214 | 4 | 0 | 11 | 0 | 0 | 15 | 486 |
| Approach % | 0.0 | 97.3 | 2.7 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 1.9 | 97.7 | 0.5 | 0.0 | - | - | 26.7 | 0.0 | 73.3 | 0.0 | - | - | - |
| Total % | 0.0 | 51.4 | 1.4 | 0.0 | - | 52.9 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.8 | 43.0 | 0.2 | 0.0 | - | 44.0 | 0.8 | 0.0 | 2.3 | 0.0 | - | 3.1 | - |
| PHF | 0.000 | 0.833 | 0.875 | 0.000 | - | 0.834 | 0.000 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.333 | 0.768 | 0.250 | 0.000 | - | 0.764 | 0.500 | 0.000 | 0.550 | 0.000 | - | 0.625 | 0.815 |
| Lights | 0 | 247 | 7 | 0 | - | 254 | 0 | 0 | 0 | 0 | - | 0 | 4 | 202 | 1 | 0 | - | 207 | 4 | 0 | 11 | 0 | - | 15 | 476 |
| % Lights | - | 98.8 | 100.0 | - | - | 98.8 | - | - | - | - | - | - | 100.0 | 96.7 | 100.0 | - | - | 96.7 | 100.0 | - | 100.0 | - | - | 100.0 | 97.9 |
| Mediums | 0 | 3 | 0 | 0 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 0 | 7 | 0 | 0 | - | 7 | 0 | 0 | 0 | 0 | - | 0 | 10 |
| % Mediums | - | 1.2 | 0.0 | - | - | 1.2 | - | - | - | - | - | - | 0.0 | 3.3 | 0.0 | - | - | 3.3 | 0.0 | - | 0.0 | - | - | 0.0 | 2.1 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | - | - | 0.0 | - | - | - | - | - | - | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | - | - | 0.0 | - | - | - | - | - | - | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 2 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 13.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 13 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 86.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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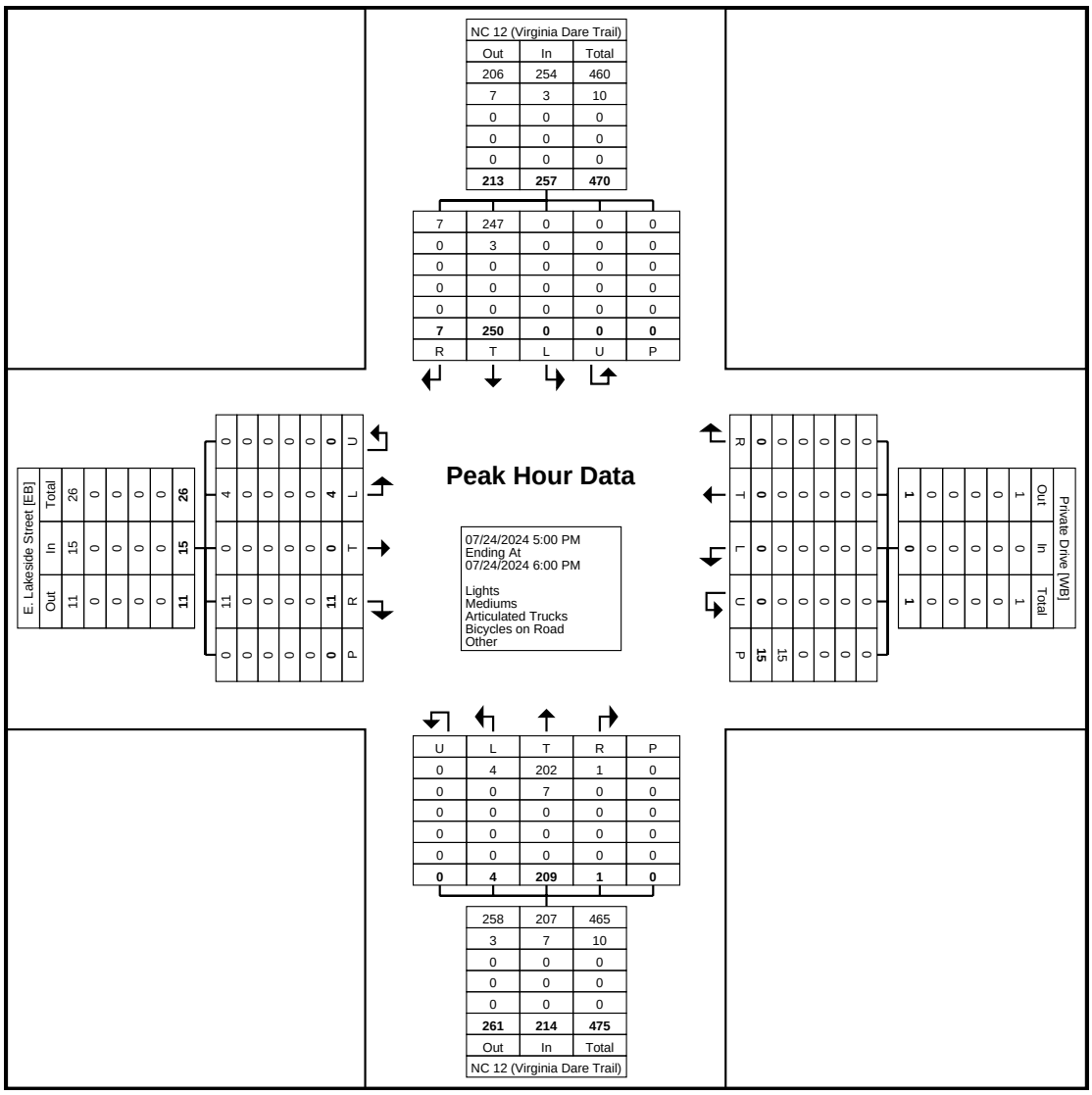
Site Code:
Start Date: 07/24/2024


Turning Movement Peak Hour Data Plot (5:00 PM)

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919.829.0328 cmurden@vhb.com

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/27/2024

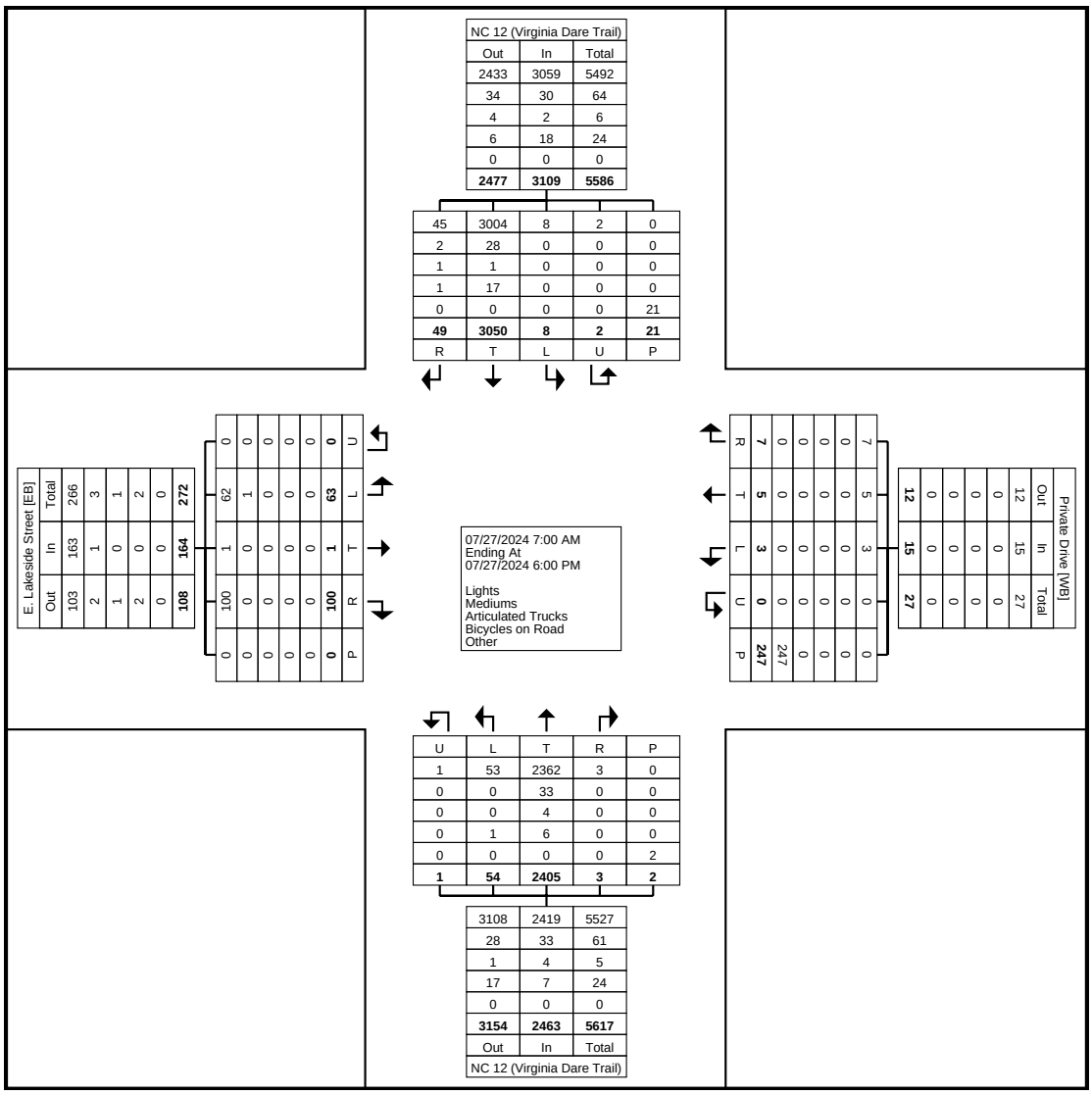

# Turning Movement Data

| Start Time | NC 12 (Virginia Dare Trail) Southbound | | | | | | Private Drive Westbound | | | | | | NC 12 (Virginia Dare Trail) Northbound | | | | | | E. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 7:00 AM | 0 | 10 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 8 | 0 | 1 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 7:15 AM | 0 | 16 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 25 | 0 | 0 | 0 | 28 | 1 | 0 | 2 | 0 | 0 | 3 | 47 |
| 7:30 AM | 0 | 22 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 21 | 0 | 0 | 0 | 21 | 0 | 0 | 1 | 0 | 0 | 1 | 44 |
| 7:45 AM | 0 | 20 | 1 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 18 | 0 | 0 | 0 | 20 | 1 | 0 | 1 | 0 | 0 | 2 | 43 |
| Hourly Total | 0 | 68 | 1 | 0 | 0 | 69 | 0 | 0 | 0 | 0 | 23 | 0 | 5 | 72 | 0 | 1 | 0 | 78 | 2 | 0 | 4 | 0 | 0 | 6 | 153 |
| 8:00 AM | 0 | 33 | 1 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 14 | 0 | 4 | 19 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| 8:15 AM | 0 | 35 | 0 | 0 | 0 | 35 | 0 | 1 | 0 | 0 | 7 | 1 | 0 | 27 | 0 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 63 |
| 8:30 AM | 0 | 37 | 0 | 0 | 0 | 37 | 0 | 1 | 1 | 0 | 16 | 2 | 1 | 33 | 0 | 0 | 0 | 34 | 0 | 0 | 1 | 0 | 0 | 1 | 74 |
| 8:45 AM | 0 | 35 | 1 | 0 | 6 | 36 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 34 | 0 | 0 | 0 | 34 | 0 | 0 | 1 | 0 | 0 | 1 | 71 |
| Hourly Total | 0 | 140 | 2 | 0 | 6 | 142 | 0 | 2 | 1 | 0 | 49 | 3 | 5 | 113 | 0 | 0 | 0 | 118 | 0 | 0 | 2 | 0 | 0 | 2 | 265 |
| 9:00 AM | 1 | 49 | 0 | 0 | 0 | 50 | 1 | 0 | 0 | 0 | 5 | 1 | 1 | 38 | 0 | 0 | 0 | 39 | 1 | 0 | 3 | 0 | 0 | 4 | 94 |
| 9:15 AM | 0 | 54 | 1 | 0 | 4 | 55 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 35 | 0 | 0 | 0 | 36 | 0 | 0 | 4 | 0 | 0 | 4 | 95 |
| 9:30 AM | 0 | 50 | 4 | 0 | 0 | 54 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 51 | 1 | 0 | 0 | 55 | 0 | 0 | 3 | 0 | 0 | 3 | 112 |
| 9:45 AM | 0 | 64 | 1 | 0 | 0 | 65 | 0 | 0 | 0 | 0 | 7 | 0 | 2 | 46 | 0 | 0 | 0 | 48 | 1 | 0 | 2 | 0 | 0 | 3 | 116 |
| Hourly Total | 1 | 217 | 6 | 0 | 4 | 224 | 1 | 0 | 0 | 0 | 20 | 1 | 7 | 170 | 1 | 0 | 0 | 178 | 2 | 0 | 12 | 0 | 0 | 14 | 417 |
| 10:00 AM | 0 | 64 | 1 | 0 | 0 | 65 | 0 | 1 | 2 | 0 | 6 | 3 | 1 | 58 | 1 | 0 | 0 | 60 | 1 | 0 | 2 | 0 | 0 | 3 | 131 |
| 10:15 AM | 0 | 72 | 0 | 0 | 0 | 72 | 0 | 0 | 0 | 0 | 9 | 0 | 1 | 61 | 0 | 0 | 0 | 62 | 2 | 0 | 2 | 0 | 0 | 4 | 138 |
| 10:30 AM | 1 | 78 | 0 | 0 | 0 | 79 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 54 | 0 | 0 | 0 | 54 | 0 | 0 | 4 | 0 | 0 | 4 | 137 |
| 10:45 AM | 0 | 78 | 1 | 0 | 0 | 79 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 57 | 0 | 0 | 0 | 58 | 1 | 0 | 2 | 0 | 0 | 3 | 140 |
| Hourly Total | 1 | 292 | 2 | 0 | 0 | 295 | 0 | 1 | 2 | 0 | 31 | 3 | 3 | 230 | 1 | 0 | 0 | 234 | 4 | 0 | 10 | 0 | 0 | 14 | 546 |
| 11:00 AM | 0 | 99 | 0 | 0 | 0 | 99 | 0 | 0 | 1 | 0 | 4 | 1 | 2 | 65 | 0 | 0 | 0 | 67 | 3 | 0 | 2 | 0 | 0 | 5 | 172 |
| 11:15 AM | 1 | 81 | 1 | 0 | 0 | 83 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 49 | 0 | 0 | 0 | 49 | 1 | 0 | 1 | 0 | 0 | 2 | 134 |
| 11:30 AM | 0 | 84 | 1 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 8 | 0 | 2 | 47 | 0 | 0 | 0 | 49 | 2 | 0 | 2 | 0 | 0 | 4 | 138 |
| 11:45 AM | 0 | 85 | 0 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 51 | 0 | 0 | 0 | 51 | 2 | 0 | 1 | 0 | 0 | 3 | 139 |
| Hourly Total | 1 | 349 | 2 | 0 | 0 | 352 | 0 | 0 | 1 | 0 | 19 | 1 | 4 | 212 | 0 | 0 | 0 | 216 | 8 | 0 | 6 | 0 | 0 | 14 | 583 |
| 12:00 PM | 0 | 79 | 3 | 0 | 0 | 82 | 1 | 1 | 0 | 0 | 2 | 2 | 0 | 63 | 0 | 0 | 0 | 63 | 3 | 0 | 1 | 0 | 0 | 4 | 151 |
| 12:15 PM | 0 | 77 | 1 | 0 | 0 | 78 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 85 | 0 | 0 | 0 | 86 | 2 | 0 | 3 | 0 | 0 | 5 | 169 |
| 12:30 PM | 0 | 87 | 2 | 0 | 0 | 89 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 72 | 0 | 0 | 0 | 73 | 2 | 0 | 5 | 0 | 0 | 7 | 169 |
| 12:45 PM | 0 | 85 | 0 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 55 | 0 | 0 | 0 | 56 | 2 | 0 | 5 | 0 | 0 | 7 | 148 |
| Hourly Total | 0 | 328 | 6 | 0 | 0 | 334 | 1 | 1 | 0 | 0 | 7 | 2 | 3 | 275 | 0 | 0 | 0 | 278 | 9 | 0 | 14 | 0 | 0 | 23 | 637 |
| 1:00 PM | 0 | 100 | 0 | 1 | 0 | 101 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 61 | 0 | 0 | 0 | 61 | 1 | 0 | 0 | 0 | 0 | 1 | 163 |
| 1:15 PM | 0 | 82 | 3 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 10 | 0 | 1 | 79 | 0 | 0 | 0 | 80 | 3 | 0 | 2 | 0 | 0 | 5 | 170 |
| 1:30 PM | 1 | 130 | 2 | 1 | 0 | 134 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 68 | 0 | 0 | 0 | 69 | 1 | 0 | 3 | 0 | 0 | 4 | 207 |
| 1:45 PM | 0 | 84 | 1 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 7 | 0 | 1 | 82 | 1 | 0 | 0 | 84 | 2 | 0 | 2 | 0 | 0 | 4 | 173 |
| Hourly Total | 1 | 396 | 6 | 2 | 0 | 405 | 0 | 0 | 0 | 0 | 22 | 0 | 3 | 290 | 1 | 0 | 0 | 294 | 7 | 0 | 7 | 0 | 0 | 14 | 713 |
| 2:00 PM | 0 | 78 | 1 | 0 | 5 | 79 | 0 | 0 | 1 | 0 | 3 | 1 | 1 | 64 | 0 | 0 | 0 | 65 | 3 | 0 | 2 | 0 | 0 | 5 | 150 |
| 2:15 PM | 1 | 80 | 2 | 0 | 0 | 83 | 0 | 0 | 1 | 0 | 4 | 1 | 1 | 69 | 0 | 0 | 0 | 70 | 2 | 1 | 6 | 0 | 0 | 9 | 163 |
| 2:30 PM | 0 | 90 | 3 | 0 | 0 | 93 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 72 | 0 | 0 | 0 | 72 | 6 | 0 | 4 | 0 | 0 | 10 | 175 |
| 2:45 PM | 0 | 92 | 4 | 0 | 0 | 96 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 56 | 0 | 0 | 0 | 56 | 1 | 0 | 2 | 0 | 0 | 3 | 155 |
| Hourly Total | 1 | 340 | 10 | 0 | 5 | 351 | 0 | 0 | 2 | 0 | 17 | 2 | 2 | 261 | 0 | 0 | 0 | 263 | 12 | 1 | 14 | 0 | 0 | 27 | 643 |
| 3:00 PM | 0 | 75 | 3 | 0 | 0 | 78 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 74 | 0 | 0 | 0 | 75 | 3 | 0 | 3 | 0 | 0 | 6 | 159 |
| 3:15 PM | 1 | 68 | 1 | 0 | 0 | 70 | 0 | 0 | 0 | 0 | 6 | 0 | 2 | 98 | 0 | 0 | 0 | 100 | 0 | 0 | 3 | 0 | 0 | 3 | 173 |
| 3:30 PM | 1 | 97 | 1 | 0 | 0 | 99 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 67 | 0 | 0 | 2 | 70 | 1 | 0 | 0 | 0 | 0 | 1 | 170 |
| 3:45 PM | 0 | 88 | 3 | 0 | 0 | 91 | 0 | 0 | 0 | 0 | 10 | 0 | 1 | 65 | 0 | 0 | 0 | 66 | 0 | 0 | 7 | 0 | 0 | 7 | 164 |
| Hourly Total | 2 | 328 | 8 | 0 | 0 | 338 | 0 | 0 | 0 | 0 | 23 | 0 | 7 | 304 | 0 | 0 | 2 | 311 | 4 | 0 | 13 | 0 | 0 | 17 | 666 |
| 4:00 PM | 0 | 90 | 1 | 0 | 0 | 91 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 53 | 0 | 0 | 0 | 54 | 3 | 0 | 1 | 0 | 0 | 4 | 149 |
| 4:15 PM | 1 | 74 | 1 | 0 | 0 | 76 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 56 | 0 | 0 | 0 | 59 | 0 | 0 | 5 | 0 | 0 | 5 | 140 |
| 4:30 PM | 0 | 72 | 0 | 0 | 0 | 72 | 1 | 0 | 0 | 0 | 1 | 1 | 3 | 61 | 0 | 0 | 0 | 64 | 3 | 0 | 1 | 0 | 0 | 4 | 141 |
| 4:45 PM | 0 | 66 | 1 | 0 | 0 | 67 | 0 | 0 | 1 | 0 | 2 | 1 | 1 | 66 | 0 | 0 | 0 | 67 | 1 | 0 | 2 | 0 | 0 | 3 | 138 |
| Hourly Total | 1 | 302 | 3 | 0 | 0 | 306 | 1 | 0 | 1 | 0 | 10 | 2 | 8 | 236 | 0 | 0 | 0 | 244 | 7 | 0 | 9 | 0 | 0 | 16 | 568 |
| 5:00 PM | 0 | 81 | 1 | 0 | 5 | 82 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 62 | 0 | 0 | 0 | 65 | 2 | 0 | 3 | 0 | 0 | 5 | 152 |
| 5:15 PM | 0 | 60 | 1 | 0 | 0 | 61 | 0 | 0 | 0 | 0 | 8 | 0 | 1 | 52 | 0 | 0 | 0 | 53 | 2 | 0 | 2 | 0 | 0 | 4 | 118 |
| 5:30 PM | 0 | 74 | 1 | 0 | 1 | 75 | 0 | 1 | 0 | 0 | 6 | 1 | 1 | 63 | 0 | 0 | 0 | 64 | 4 | 0 | 3 | 0 | 0 | 7 | 147 |
| 5:45 PM | 0 | 75 | 0 | 0 | 0 | 75 | 0 | 0 | 0 | 0 | 11 | 0 | 2 | 65 | 0 | 0 | 0 | 67 | 0 | 0 | 1 | 0 | 0 | 1 | 143 |
| Hourly Total | 0 | 290 | 3 | 0 | 6 | 293 | 0 | 1 | 0 | 0 | 26 | 1 | 7 | 242 | 0 | 0 | 0 | 249 | 8 | 0 | 9 | 0 | 0 | 17 | 560 |
| Grand Total | 8 | 3050 | 49 | 2 | 21 | 3109 | 3 | 5 | 7 | 0 | 247 | 15 | 54 | 2405 | 3 | 1 | 2 | 2463 | 63 | 1 | 100 | 0 | 0 | 164 | 5751 |
| Approach % | 0.3 | 98.1 | 1.6 | 0.1 | - | - | 20.0 | 33.3 | 46.7 | 0.0 | - | - | 2.2 | 97.6 | 0.1 | 0.0 | - | - | 38.4 | 0.6 | 61.0 | 0.0 | - | - | - |
| Total % | 0.1 | 53.0 | 0.9 | 0.0 | - | 54.1 | 0.1 | 0.1 | 0.1 | 0.0 | - | 0.3 | 0.9 | 41.8 | 0.1 | 0.0 | - | 42.8 | 1.1 | 0.0 | 1.7 | 0.0 | - | 2.9 | - |
| Lights | 8 | 3004 | 45 | 2 | - | 3059 | 3 | 5 | 7 | 0 | - | 15 | 53 | 2362 | 3 | 1 | - | 2419 | 62 | 1 | 100 | 0 | - | 163 | 5656 |
| % Lights | 100.0 | 98.5 | 91.8 | 100.0 | - | 98.4 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 98.1 | 98.2 | 100.0 | 100.0 | - | 98.2 | 98.4 | 100.0 | 100.0 | - | - | 99.4 | 98.3 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mediums | 0 | 28 | 2 | 0 | - | 30 | 0 | 0 | 0 | 0 | - | 0 | 0 | 33 | 0 | 0 | - | 33 | 1 | 0 | 0 | 0 | - | 1 | 64 |
| % Mediums | 0.0 | 0.9 | 4.1 | 0.0 | - | 1.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | - | 1.3 | 1.6 | 0.0 | 0.0 | - | - | 0.6 | 1.1 |
| Articulated Trucks | 0 | 1 | 1 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 4 | 0 | 0 | - | 4 | 0 | 0 | 0 | 0 | - | 0 | 6 |
| % Articulated Trucks | 0.0 | 0.0 | 2.0 | 0.0 | - | 0.1 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | - | 0.2 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.1 |
| Bicycles on Road | 0 | 17 | 1 | 0 | - | 18 | 0 | 0 | 0 | 0 | - | 0 | 1 | 6 | 0 | 0 | - | 7 | 0 | 0 | 0 | 0 | - | 0 | 25 |
| % Bicycles on Road | 0.0 | 0.6 | 2.0 | 0.0 | - | 0.6 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 1.9 | 0.2 | 0.0 | 0.0 | - | 0.3 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.4 |
| Bicycles on Crosswalk | - | - | - | - | 1 | - | - | - | - | - | 103 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | 4.8 | - | - | - | - | - | 41.7 | - | - | - | - | - | 0.0 | - | - | - | - | - | - | - | - |
| Pedestrians | - | - | - | - | 20 | - | - | - | - | - | 144 | - | - | - | - | - | 2 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | 95.2 | - | - | - | - | - | 58.3 | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - |

**Vanasse Hangen Brustlin, Inc.**
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/27/2024


Turning Movement Data Plot

**Vanasse Hangen Brustlin, Inc.**
**Venture 1**
**940 Main Campus Drive, Suite 500**
**Raleigh, North Carolina, United States 27606**
**919.829.0328 cmurden@vhb.com**

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/27/2024


# Turning Movement Peak Hour Data (10:15 AM)

| Start Time | NC 12 (Virginia Dare Trail) Southbound | | | | | | Private Drive Westbound | | | | | | NC 12 (Virginia Dare Trail) Northbound | | | | | | E. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 10:15 AM | 0 | 72 | 0 | 0 | 0 | 72 | 0 | 0 | 0 | 0 | 9 | 0 | 1 | 61 | 0 | 0 | 0 | 62 | 2 | 0 | 2 | 0 | 0 | 4 | 138 |
| 10:30 AM | 1 | 78 | 0 | 0 | 0 | 79 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 54 | 0 | 0 | 0 | 54 | 0 | 0 | 4 | 0 | 0 | 4 | 137 |
| 10:45 AM | 0 | 78 | 1 | 0 | 0 | 79 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 57 | 0 | 0 | 0 | 58 | 1 | 0 | 2 | 0 | 0 | 3 | 140 |
| 11:00 AM | 0 | 99 | 0 | 0 | 0 | 99 | 0 | 0 | 1 | 0 | 4 | 1 | 2 | 65 | 0 | 0 | 0 | 67 | 3 | 0 | 2 | 0 | 0 | 5 | 172 |
| Total | 1 | 327 | 1 | 0 | 0 | 329 | 0 | 0 | 1 | 0 | 29 | 1 | 4 | 237 | 0 | 0 | 0 | 241 | 6 | 0 | 10 | 0 | 0 | 16 | 587 |
| Approach % | 0.3 | 99.4 | 0.3 | 0.0 | - | - | 0.0 | 0.0 | 100.0 | 0.0 | - | - | 1.7 | 98.3 | 0.0 | 0.0 | - | - | 37.5 | 0.0 | 62.5 | 0.0 | - | - | - |
| Total % | 0.2 | 55.7 | 0.2 | 0.0 | - | 56.0 | 0.0 | 0.0 | 0.2 | 0.0 | - | 0.2 | 0.7 | 40.4 | 0.0 | 0.0 | - | 41.1 | 1.0 | 0.0 | 1.7 | 0.0 | - | 2.7 | - |
| PHF | 0.250 | 0.826 | 0.250 | 0.000 | - | 0.831 | 0.000 | 0.000 | 0.250 | 0.000 | - | 0.250 | 0.500 | 0.912 | 0.000 | 0.000 | - | 0.899 | 0.500 | 0.000 | 0.625 | 0.000 | - | 0.800 | 0.853 |
| Lights | 1 | 321 | 1 | 0 | - | 323 | 0 | 0 | 1 | 0 | - | 1 | 4 | 230 | 0 | 0 | - | 234 | 6 | 0 | 10 | 0 | - | 16 | 574 |
| % Lights | 100.0 | 98.2 | 100.0 | - | - | 98.2 | - | - | 100.0 | - | - | 100.0 | 100.0 | 97.0 | - | - | - | 97.1 | 100.0 | - | 100.0 | - | - | 100.0 | 97.8 |
| Mediums | 0 | 5 | 0 | 0 | - | 5 | 0 | 0 | 0 | 0 | - | 0 | 0 | 6 | 0 | 0 | - | 6 | 0 | 0 | 0 | 0 | - | 0 | 11 |
| % Mediums | 0.0 | 1.5 | 0.0 | - | - | 1.5 | - | - | 0.0 | - | - | 0.0 | 0.0 | 2.5 | - | - | - | 2.5 | 0.0 | - | 0.0 | - | - | 0.0 | 1.9 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | 0.0 | 0.4 | - | - | - | 0.4 | 0.0 | - | 0.0 | - | - | 0.0 | 0.2 |
| Bicycles on Road | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Bicycles on Road | 0.0 | 0.3 | 0.0 | - | - | 0.3 | - | - | 0.0 | - | - | 0.0 | 0.0 | 0.0 | - | - | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.2 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 13 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 44.8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 16 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 55.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

**Vanasse Hangen Brustlin, Inc.**
**Venture 1**
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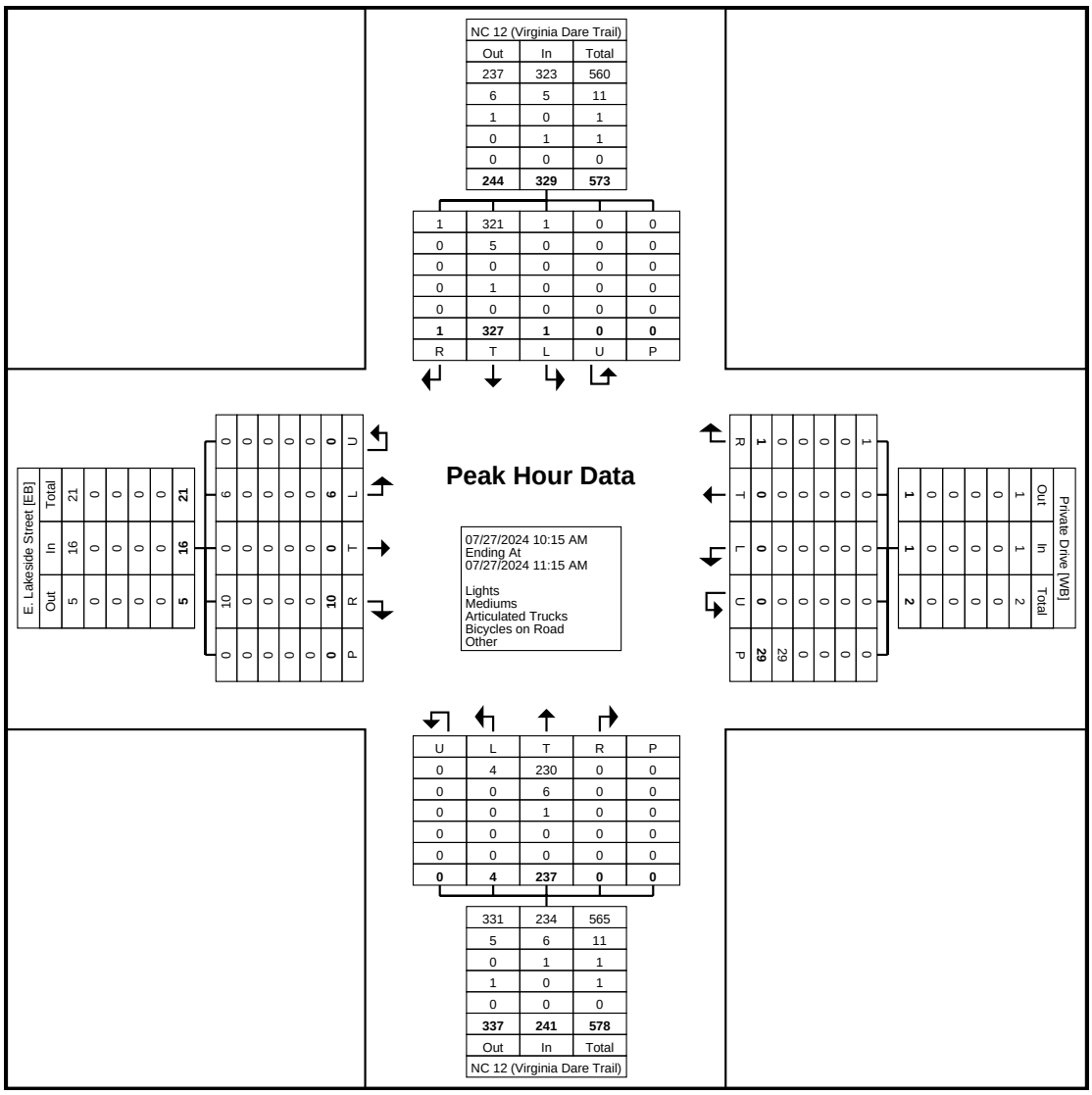
**Raleigh, North Carolina, United States 27606**
**919.829.0328 cmurden@vhb.com**

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/27/2024


Turning Movement Peak Hour Data Plot (10:15 AM)

**Vanasse Hangen Brustlin, Inc.**
**Venture 1**
**940 Main Campus Drive, Suite 500**
**Raleigh, North Carolina, United States 27606**
**919.829.0328 cmurden@vhb.com**

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/27/2024


# Turning Movement Peak Hour Data (1:00 PM)

| Start Time | NC 12 (Virginia Dare Trail) Southbound | | | | | | Private Drive Westbound | | | | | | NC 12 (Virginia Dare Trail) Northbound | | | | | | E. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 1:00 PM | 0 | 100 | 0 | 1 | 0 | 101 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 61 | 0 | 0 | 0 | 61 | 1 | 0 | 0 | 0 | 0 | 1 | 163 |
| 1:15 PM | 0 | 82 | 3 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 10 | 0 | 1 | 79 | 0 | 0 | 0 | 80 | 3 | 0 | 2 | 0 | 0 | 5 | 170 |
| 1:30 PM | 1 | 130 | 2 | 1 | 0 | 134 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 68 | 0 | 0 | 0 | 69 | 1 | 0 | 3 | 0 | 0 | 4 | 207 |
| 1:45 PM | 0 | 84 | 1 | 0 | 0 | 85 | 0 | 0 | 0 | 0 | 7 | 0 | 1 | 82 | 1 | 0 | 0 | 84 | 2 | 0 | 2 | 0 | 0 | 4 | 173 |
| Total | 1 | 396 | 6 | 2 | 0 | 405 | 0 | 0 | 0 | 0 | 22 | 0 | 3 | 290 | 1 | 0 | 0 | 294 | 7 | 0 | 7 | 0 | 0 | 14 | 713 |
| Approach % | 0.2 | 97.8 | 1.5 | 0.5 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 1.0 | 98.6 | 0.3 | 0.0 | - | - | 50.0 | 0.0 | 50.0 | 0.0 | - | - | - |
| Total % | 0.1 | 55.5 | 0.8 | 0.3 | - | 56.8 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.4 | 40.7 | 0.1 | 0.0 | - | 41.2 | 1.0 | 0.0 | 1.0 | 0.0 | - | 2.0 | - |
| PHF | 0.250 | 0.762 | 0.500 | 0.500 | - | 0.756 | 0.000 | 0.000 | 0.000 | 0.000 | - | 0.000 | 0.750 | 0.884 | 0.250 | 0.000 | - | 0.875 | 0.583 | 0.000 | 0.583 | 0.000 | - | 0.700 | 0.861 |
| Lights | 1 | 392 | 6 | 2 | - | 401 | 0 | 0 | 0 | 0 | - | 0 | 3 | 285 | 1 | 0 | - | 289 | 7 | 0 | 7 | 0 | - | 14 | 704 |
| % Lights | 100.0 | 99.0 | 100.0 | 100.0 | - | 99.0 | - | - | - | - | - | - | 100.0 | 98.3 | 100.0 | - | - | 98.3 | 100.0 | - | 100.0 | - | - | 100.0 | 98.7 |
| Mediums | 0 | 3 | 0 | 0 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 0 | 5 | 0 | 0 | - | 5 | 0 | 0 | 0 | 0 | - | 0 | 8 |
| % Mediums | 0.0 | 0.8 | 0.0 | 0.0 | - | 0.7 | - | - | - | - | - | - | 0.0 | 1.7 | 0.0 | - | - | 1.7 | 0.0 | - | 0.0 | - | - | 0.0 | 1.1 |
| Articulated Trucks | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Articulated Trucks | 0.0 | 0.3 | 0.0 | 0.0 | - | 0.2 | - | - | - | - | - | - | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.1 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | - | - | - | - | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 8 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 36.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 14 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 63.6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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Venture 1
940 Main Campus Drive, Suite 500
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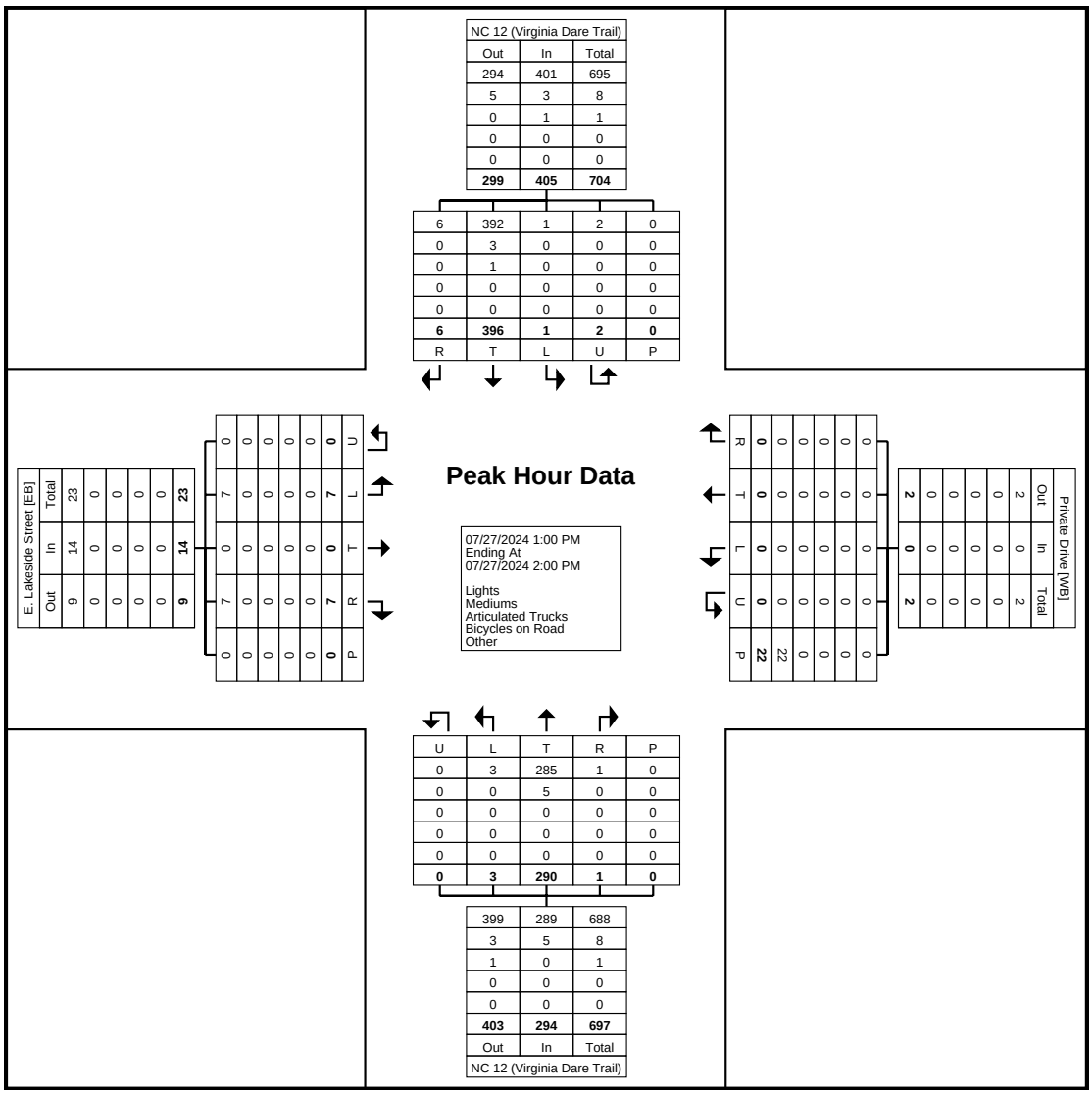
919.829.0328 cmurden@vhb.com

Count Name: NC 12 (Virginia Dare Tr) @ Lakeside St
Site Code:
Start Date: 07/27/2024


Turning Movement Peak Hour Data Plot (1:00 PM)

**Vanasse Hangen Brustlin, Inc.**
**Venture 1**
**940 Main Campus Drive, Suite 500**
**Raleigh, North Carolina, United States 27606**
**919.829.0328 cmurden@vhb.com**

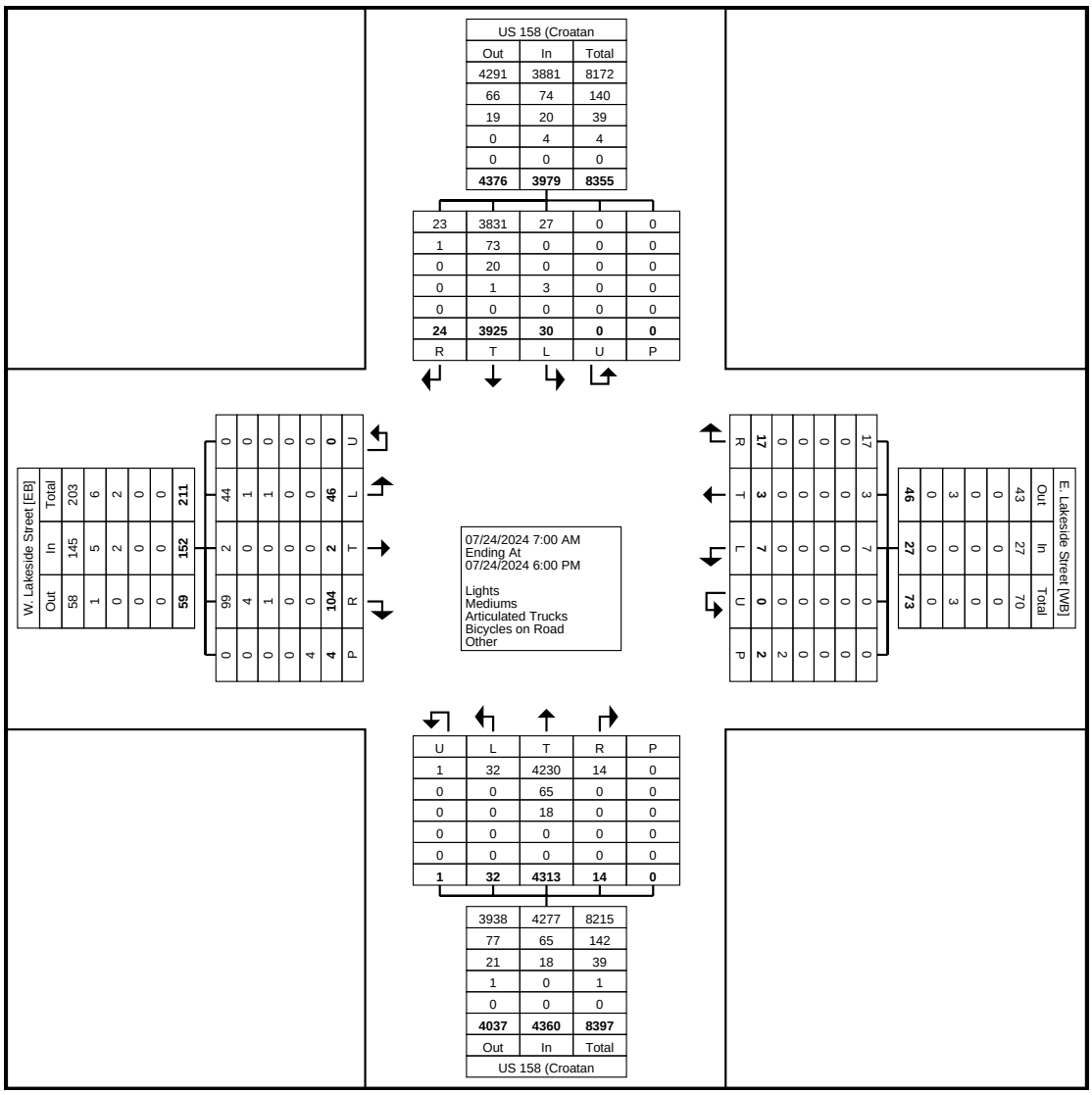
Count Name: US 158 (Croatan Hwy) @ Lakeside St
Site Code:
Start Date: 07/24/2024


# Turning Movement Data

| Start Time | US 158 (Croatan Highway) Southbound | | | | | | E. Lakeside Street Westbound | | | | | | US 158 (Croatan Highway) Northbound | | | | | | W. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 7:00 AM | 1 | 121 | 0 | 0 | 0 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 131 | 0 | 0 | 0 | 133 | 3 | 0 | 3 | 0 | 0 | 6 | 261 |
| 7:15 AM | 0 | 128 | 3 | 0 | 0 | 131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 | 0 | 0 | 0 | 158 | 3 | 0 | 0 | 0 | 0 | 3 | 292 |
| 7:30 AM | 3 | 160 | 2 | 0 | 0 | 165 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 211 | 1 | 0 | 0 | 212 | 3 | 0 | 7 | 0 | 0 | 10 | 388 |
| 7:45 AM | 1 | 233 | 1 | 0 | 0 | 235 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 222 | 1 | 0 | 0 | 225 | 1 | 0 | 5 | 0 | 0 | 6 | 467 |
| Hourly Total | 5 | 642 | 6 | 0 | 0 | 653 | 0 | 0 | 2 | 0 | 0 | 2 | 4 | 722 | 2 | 0 | 0 | 728 | 10 | 0 | 15 | 0 | 0 | 25 | 1408 |
| 8:00 AM | 0 | 203 | 1 | 0 | 0 | 204 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 229 | 1 | 0 | 0 | 231 | 1 | 0 | 6 | 0 | 1 | 7 | 442 |
| 8:15 AM | 0 | 224 | 1 | 0 | 0 | 225 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 226 | 0 | 0 | 0 | 229 | 3 | 0 | 4 | 0 | 0 | 7 | 461 |
| 8:30 AM | 0 | 213 | 3 | 0 | 0 | 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 227 | 1 | 0 | 0 | 228 | 8 | 0 | 6 | 0 | 0 | 14 | 458 |
| 8:45 AM | 1 | 196 | 1 | 0 | 0 | 198 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 229 | 0 | 0 | 0 | 231 | 6 | 1 | 4 | 0 | 0 | 11 | 441 |
| Hourly Total | 1 | 836 | 6 | 0 | 0 | 843 | 1 | 0 | 0 | 0 | 0 | 1 | 6 | 911 | 2 | 0 | 0 | 919 | 18 | 1 | 20 | 0 | 1 | 39 | 1802 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 3 | 277 | 1 | 0 | 0 | 281 | 0 | 1 | 4 | 0 | 0 | 5 | 4 | 359 | 3 | 0 | 0 | 366 | 5 | 0 | 15 | 0 | 2 | 20 | 672 |
| 4:15 PM | 4 | 328 | 1 | 0 | 0 | 333 | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 331 | 1 | 1 | 0 | 335 | 5 | 0 | 9 | 0 | 0 | 14 | 684 |
| 4:30 PM | 2 | 287 | 3 | 0 | 0 | 292 | 1 | 0 | 0 | 0 | 0 | 1 | 2 | 317 | 0 | 0 | 0 | 319 | 1 | 0 | 9 | 0 | 0 | 10 | 622 |
| 4:45 PM | 1 | 343 | 0 | 0 | 0 | 344 | 1 | 2 | 0 | 0 | 0 | 3 | 4 | 334 | 0 | 0 | 0 | 338 | 0 | 0 | 8 | 0 | 0 | 8 | 693 |
| Hourly Total | 10 | 1235 | 5 | 0 | 0 | 1250 | 3 | 3 | 5 | 0 | 0 | 11 | 12 | 1341 | 4 | 1 | 0 | 1358 | 11 | 0 | 41 | 0 | 2 | 52 | 2671 |
| 5:00 PM | 4 | 293 | 2 | 0 | 0 | 299 | 1 | 0 | 6 | 0 | 2 | 7 | 2 | 365 | 0 | 0 | 0 | 367 | 5 | 0 | 6 | 0 | 0 | 11 | 684 |
| 5:15 PM | 2 | 315 | 2 | 0 | 0 | 319 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 346 | 3 | 0 | 0 | 353 | 1 | 0 | 7 | 0 | 0 | 8 | 681 |
| 5:30 PM | 1 | 315 | 3 | 0 | 0 | 319 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 341 | 0 | 0 | 0 | 343 | 1 | 0 | 8 | 0 | 1 | 9 | 671 |
| 5:45 PM | 7 | 289 | 0 | 0 | 0 | 296 | 2 | 0 | 3 | 0 | 0 | 5 | 2 | 287 | 3 | 0 | 0 | 292 | 0 | 1 | 7 | 0 | 0 | 8 | 601 |
| Hourly Total | 14 | 1212 | 7 | 0 | 0 | 1233 | 3 | 0 | 10 | 0 | 2 | 13 | 10 | 1339 | 6 | 0 | 0 | 1355 | 7 | 1 | 28 | 0 | 1 | 36 | 2637 |
| Grand Total | 30 | 3925 | 24 | 0 | 0 | 3979 | 7 | 3 | 17 | 0 | 2 | 27 | 32 | 4313 | 14 | 1 | 0 | 4360 | 46 | 2 | 104 | 0 | 4 | 152 | 8518 |
| Approach % | 0.8 | 98.6 | 0.6 | 0.0 | - | - | 25.9 | 11.1 | 63.0 | 0.0 | - | - | 0.7 | 98.9 | 0.3 | 0.0 | - | - | 30.3 | 1.3 | 68.4 | 0.0 | - | - | - |
| Total % | 0.4 | 46.1 | 0.3 | 0.0 | - | 46.7 | 0.1 | 0.0 | 0.2 | 0.0 | - | 0.3 | 0.4 | 50.6 | 0.2 | 0.0 | - | 51.2 | 0.5 | 0.0 | 1.2 | 0.0 | - | 1.8 | - |
| Lights | 27 | 3831 | 23 | 0 | - | 3881 | 7 | 3 | 17 | 0 | - | 27 | 32 | 4230 | 14 | 1 | - | 4277 | 44 | 2 | 99 | 0 | - | 145 | 8330 |
| % Lights | 90.0 | 97.6 | 95.8 | - | - | 97.5 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 | 98.1 | 100.0 | 100.0 | - | 98.1 | 95.7 | 100.0 | 95.2 | - | - | 95.4 | 97.8 |
| Mediums | 0 | 73 | 1 | 0 | - | 74 | 0 | 0 | 0 | 0 | - | 0 | 0 | 65 | 0 | 0 | - | 65 | 1 | 0 | 4 | 0 | - | 5 | 144 |
| % Mediums | 0.0 | 1.9 | 4.2 | - | - | 1.9 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 1.5 | 0.0 | 0.0 | - | 1.5 | 2.2 | 0.0 | 3.8 | - | - | 3.3 | 1.7 |
| Articulated Trucks | 0 | 20 | 0 | 0 | - | 20 | 0 | 0 | 0 | 0 | - | 0 | 0 | 18 | 0 | 0 | - | 18 | 1 | 0 | 1 | 0 | - | 2 | 40 |
| % Articulated Trucks | 0.0 | 0.5 | 0.0 | - | - | 0.5 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | - | 0.4 | 2.2 | 0.0 | 1.0 | - | - | 1.3 | 0.5 |
| Bicycles on Road | 3 | 1 | 0 | 0 | - | 4 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 4 |
| % Bicycles on Road | 10.0 | 0.0 | 0.0 | - | - | 0.1 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 4 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 2 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - |

**Vanasse Hangen Brustlin, Inc.**
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
Site Code:
Start Date: 07/24/2024


Turning Movement Data Plot

**Vanasse Hangen Brustlin, Inc.**
**Venture 1**
**940 Main Campus Drive, Suite 500**
**Raleigh, North Carolina, United States 27606**
**919.829.0328 cmurden@vhb.com**

Count Name: US 158 (Croatan Hwy) @ Lakeside St
Site Code:
Start Date: 07/24/2024


# Turning Movement Peak Hour Data (7:45 AM)

| Start Time | US 158 (Croatan Highway) Southbound | | | | | | E. Lakeside Street Westbound | | | | | | US 158 (Croatan Highway) Northbound | | | | | | W. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 7:45 AM | 1 | 233 | 1 | 0 | 0 | 235 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 222 | 1 | 0 | 0 | 225 | 1 | 0 | 5 | 0 | 0 | 6 | 467 |
| 8:00 AM | 0 | 203 | 1 | 0 | 0 | 204 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 229 | 1 | 0 | 0 | 231 | 1 | 0 | 6 | 0 | 1 | 7 | 442 |
| 8:15 AM | 0 | 224 | 1 | 0 | 0 | 225 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 226 | 0 | 0 | 0 | 229 | 3 | 0 | 4 | 0 | 0 | 7 | 461 |
| 8:30 AM | 0 | 213 | 3 | 0 | 0 | 216 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 227 | 1 | 0 | 0 | 228 | 8 | 0 | 6 | 0 | 0 | 14 | 458 |
| Total | 1 | 873 | 6 | 0 | 0 | 880 | 0 | 0 | 1 | 0 | 0 | 1 | 6 | 904 | 3 | 0 | 0 | 913 | 13 | 0 | 21 | 0 | 1 | 34 | 1828 |
| Approach % | 0.1 | 99.2 | 0.7 | 0.0 | - | - | 0.0 | 0.0 | 100.0 | 0.0 | - | - | 0.7 | 99.0 | 0.3 | 0.0 | - | - | 38.2 | 0.0 | 61.8 | 0.0 | - | - | - |
| Total % | 0.1 | 47.8 | 0.3 | 0.0 | - | 48.1 | 0.0 | 0.0 | 0.1 | 0.0 | - | 0.1 | 0.3 | 49.5 | 0.2 | 0.0 | - | 49.9 | 0.7 | 0.0 | 1.1 | 0.0 | - | 1.9 | - |
| PHF | 0.250 | 0.937 | 0.500 | 0.000 | - | 0.936 | 0.000 | 0.000 | 0.250 | 0.000 | - | 0.250 | 0.500 | 0.987 | 0.750 | 0.000 | - | 0.988 | 0.406 | 0.000 | 0.875 | 0.000 | - | 0.607 | 0.979 |
| Lights | 1 | 836 | 6 | 0 | - | 843 | 0 | 0 | 1 | 0 | - | 1 | 6 | 879 | 3 | 0 | - | 888 | 12 | 0 | 20 | 0 | - | 32 | 1764 |
| % Lights | 100.0 | 95.8 | 100.0 | - | - | 95.8 | - | - | 100.0 | - | - | 100.0 | 100.0 | 97.2 | 100.0 | - | - | 97.3 | 92.3 | - | 95.2 | - | - | 94.1 | 96.5 |
| Mediums | 0 | 27 | 0 | 0 | - | 27 | 0 | 0 | 0 | 0 | - | 0 | 0 | 20 | 0 | 0 | - | 20 | 0 | 0 | 0 | 0 | - | 0 | 47 |
| % Mediums | 0.0 | 3.1 | 0.0 | - | - | 3.1 | - | - | 0.0 | - | - | 0.0 | 0.0 | 2.2 | 0.0 | - | - | 2.2 | 0.0 | - | 0.0 | - | - | 0.0 | 2.6 |
| Articulated Trucks | 0 | 10 | 0 | 0 | - | 10 | 0 | 0 | 0 | 0 | - | 0 | 0 | 5 | 0 | 0 | - | 5 | 1 | 0 | 1 | 0 | - | 2 | 17 |
| % Articulated Trucks | 0.0 | 1.1 | 0.0 | - | - | 1.1 | - | - | 0.0 | - | - | 0.0 | 0.0 | 0.6 | 0.0 | - | - | 0.5 | 7.7 | - | 4.8 | - | - | 5.9 | 0.9 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | 0.0 | 0.0 | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - |

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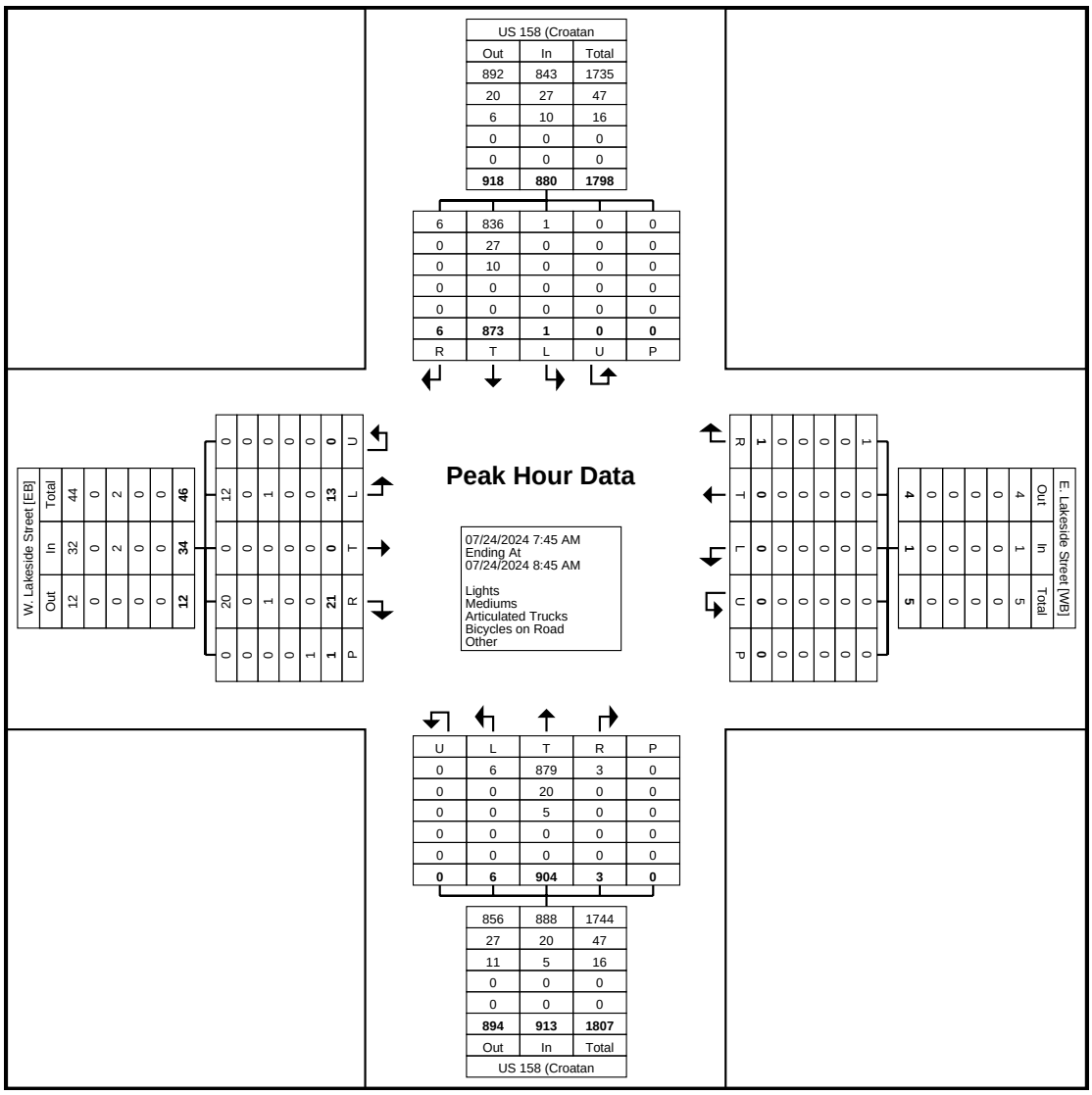
Count Name: US 158 (Croatan Hwy) @ Lakeside St
Site Code:
Start Date: 07/24/2024


Turning Movement Peak Hour Data Plot (7:45 AM)

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Count Name: US 158 (Croatan Hwy) @ Lakeside St
Site Code:
Start Date: 07/24/2024


# Turning Movement Peak Hour Data (4:45 PM)

| Start Time | US 158 (Croatan Highway) Southbound | | | | | | E. Lakeside Street Westbound | | | | | | US 158 (Croatan Highway) Northbound | | | | | | W. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 4:45 PM | 1 | 343 | 0 | 0 | 0 | 344 | 1 | 2 | 0 | 0 | 0 | 3 | 4 | 334 | 0 | 0 | 0 | 338 | 0 | 0 | 8 | 0 | 0 | 8 | 693 |
| 5:00 PM | 4 | 293 | 2 | 0 | 0 | 299 | 1 | 0 | 6 | 0 | 2 | 7 | 2 | 365 | 0 | 0 | 0 | 367 | 5 | 0 | 6 | 0 | 0 | 11 | 684 |
| 5:15 PM | 2 | 315 | 2 | 0 | 0 | 319 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 346 | 3 | 0 | 0 | 353 | 1 | 0 | 7 | 0 | 0 | 8 | 681 |
| 5:30 PM | 1 | 315 | 3 | 0 | 0 | 319 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 341 | 0 | 0 | 0 | 343 | 1 | 0 | 8 | 0 | 1 | 9 | 671 |
| Total | 8 | 1266 | 7 | 0 | 0 | 1281 | 2 | 2 | 7 | 0 | 2 | 11 | 12 | 1386 | 3 | 0 | 0 | 1401 | 7 | 0 | 29 | 0 | 1 | 36 | 2729 |
| Approach % | 0.6 | 98.8 | 0.5 | 0.0 | - | - | 18.2 | 18.2 | 63.6 | 0.0 | - | - | 0.9 | 98.9 | 0.2 | 0.0 | - | - | 19.4 | 0.0 | 80.6 | 0.0 | - | - | - |
| Total % | 0.3 | 46.4 | 0.3 | 0.0 | - | 46.9 | 0.1 | 0.1 | 0.3 | 0.0 | - | 0.4 | 0.4 | 50.8 | 0.1 | 0.0 | - | 51.3 | 0.3 | 0.0 | 1.1 | 0.0 | - | 1.3 | - |
| PHF | 0.500 | 0.923 | 0.583 | 0.000 | - | 0.931 | 0.500 | 0.250 | 0.292 | 0.000 | - | 0.393 | 0.750 | 0.949 | 0.250 | 0.000 | - | 0.954 | 0.350 | 0.000 | 0.906 | 0.000 | - | 0.818 | 0.984 |
| Lights | 8 | 1254 | 6 | 0 | - | 1268 | 2 | 2 | 7 | 0 | - | 11 | 12 | 1372 | 3 | 0 | - | 1387 | 7 | 0 | 27 | 0 | - | 34 | 2700 |
| % Lights | 100.0 | 99.1 | 85.7 | - | - | 99.0 | 100.0 | 100.0 | 100.0 | - | - | 100.0 | 100.0 | 99.0 | 100.0 | - | - | 99.0 | 100.0 | - | 93.1 | - | - | 94.4 | 98.9 |
| Mediums | 0 | 11 | 1 | 0 | - | 12 | 0 | 0 | 0 | 0 | - | 0 | 0 | 10 | 0 | 0 | - | 10 | 0 | 0 | 2 | 0 | - | 2 | 24 |
| % Mediums | 0.0 | 0.9 | 14.3 | - | - | 0.9 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.7 | 0.0 | - | - | 0.7 | 0.0 | - | 6.9 | - | - | 5.6 | 0.9 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 4 | 0 | 0 | - | 4 | 0 | 0 | 0 | 0 | - | 0 | 4 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.3 | 0.0 | - | - | 0.3 | 0.0 | - | 0.0 | - | - | 0.0 | 0.1 |
| Bicycles on Road | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Bicycles on Road | 0.0 | 0.1 | 0.0 | - | - | 0.1 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 2 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - |

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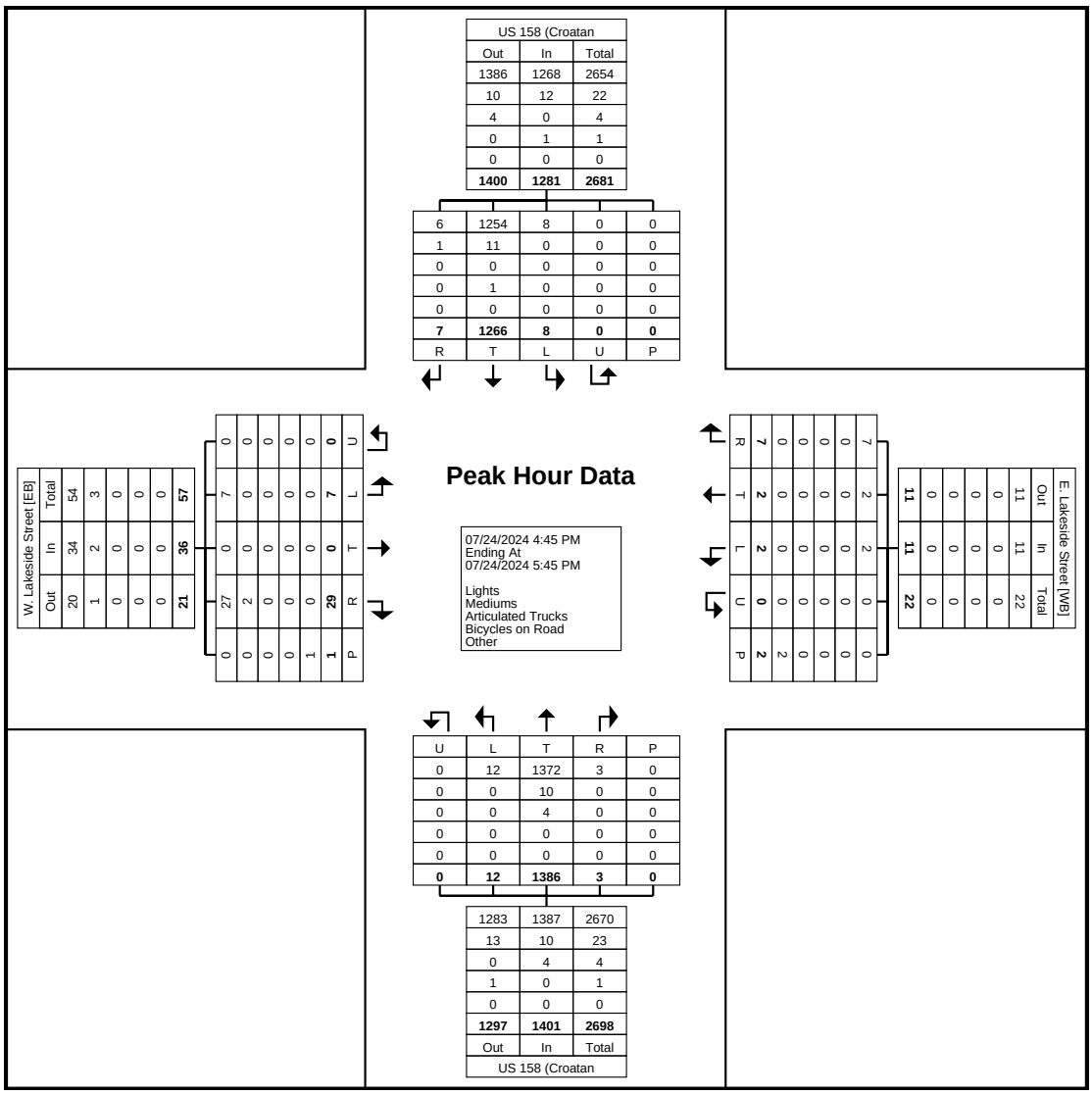
Site Code:
Start Date: 07/24/2024


Turning Movement Peak Hour Data Plot (4:45 PM)

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Venture 1
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Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
Site Code:
Start Date: 07/27/2024

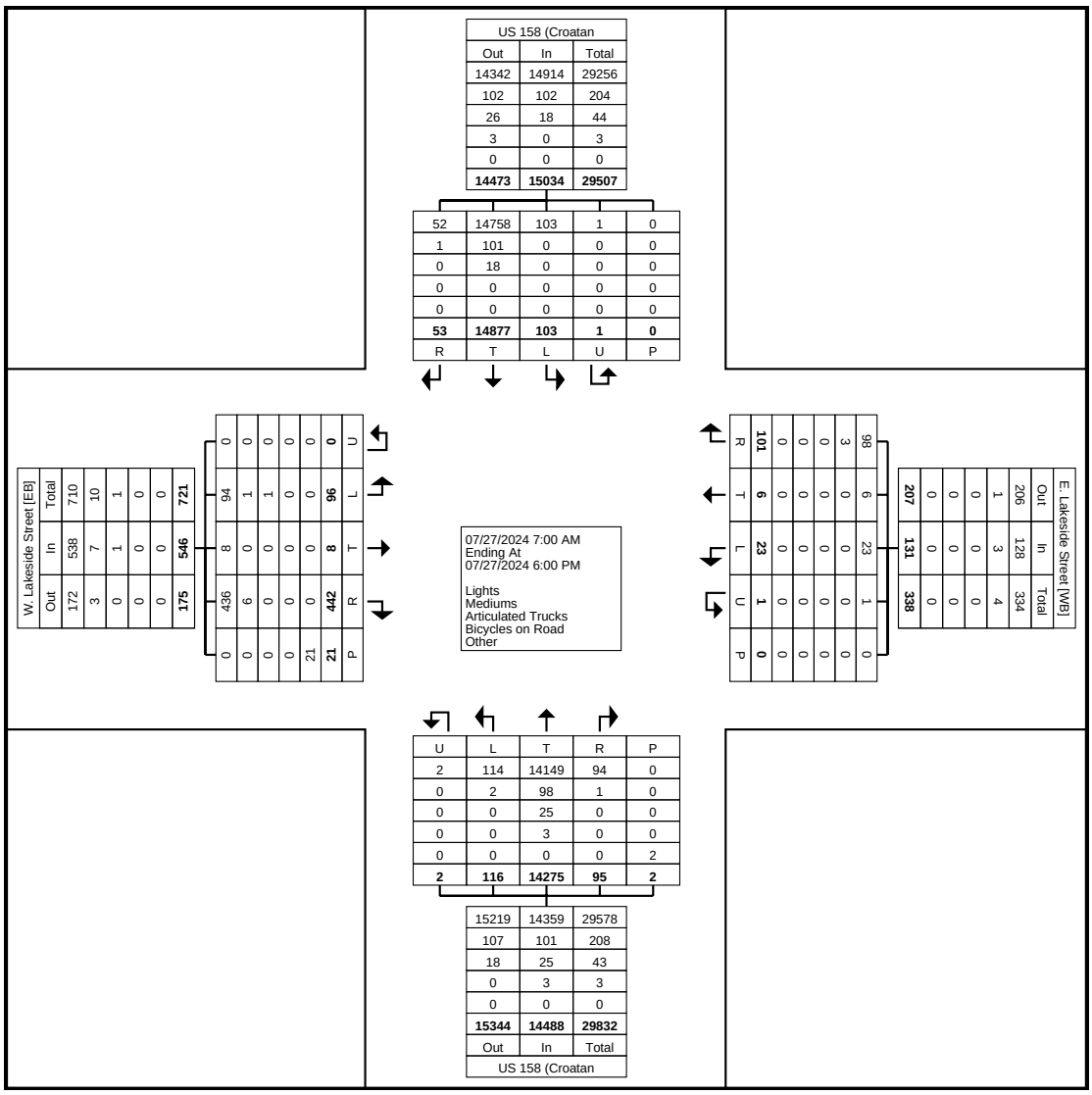

# Turning Movement Data

| Start Time | US 158 (Croatan Highway) Southbound | | | | | | E. Lakeside Street Westbound | | | | | | US 158 (Croatan Highway) Northbound | | | | | | W. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 7:00 AM | 1 | 94 | 0 | 0 | 0 | 95 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 240 | 0 | 0 | 0 | 242 | 5 | 0 | 4 | 0 | 0 | 9 | 347 |
| 7:15 AM | 1 | 167 | 1 | 0 | 0 | 169 | 0 | 2 | 0 | 0 | 0 | 2 | 3 | 257 | 0 | 0 | 0 | 260 | 3 | 1 | 2 | 0 | 0 | 6 | 437 |
| 7:30 AM | 0 | 168 | 0 | 0 | 0 | 168 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 233 | 1 | 0 | 0 | 235 | 1 | 1 | 5 | 0 | 0 | 7 | 412 |
| 7:45 AM | 1 | 182 | 0 | 0 | 0 | 183 | 0 | 1 | 2 | 0 | 0 | 3 | 2 | 296 | 1 | 0 | 0 | 299 | 2 | 0 | 4 | 0 | 0 | 6 | 491 |
| Hourly Total | 3 | 611 | 1 | 0 | 0 | 615 | 0 | 3 | 5 | 0 | 0 | 8 | 8 | 1026 | 2 | 0 | 0 | 1036 | 11 | 2 | 15 | 0 | 0 | 28 | 1687 |
| 8:00 AM | 0 | 202 | 2 | 0 | 0 | 204 | 0 | 0 | 5 | 0 | 0 | 5 | 0 | 268 | 0 | 0 | 0 | 268 | 1 | 0 | 5 | 0 | 0 | 6 | 483 |
| 8:15 AM | 0 | 197 | 0 | 0 | 0 | 197 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 312 | 0 | 0 | 1 | 314 | 3 | 0 | 8 | 0 | 0 | 11 | 523 |
| 8:30 AM | 2 | 204 | 0 | 0 | 0 | 206 | 1 | 0 | 3 | 0 | 0 | 4 | 2 | 289 | 2 | 0 | 0 | 293 | 2 | 0 | 8 | 0 | 0 | 10 | 513 |
| 8:45 AM | 0 | 243 | 0 | 0 | 0 | 243 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 277 | 1 | 0 | 1 | 279 | 1 | 0 | 13 | 0 | 0 | 14 | 538 |
| Hourly Total | 2 | 846 | 2 | 0 | 0 | 850 | 3 | 0 | 9 | 0 | 0 | 12 | 5 | 1146 | 3 | 0 | 2 | 1154 | 7 | 0 | 34 | 0 | 0 | 41 | 2057 |
| 9:00 AM | 4 | 247 | 1 | 0 | 0 | 252 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 284 | 1 | 0 | 0 | 286 | 2 | 1 | 6 | 0 | 0 | 9 | 547 |
| 9:15 AM | 1 | 348 | 0 | 0 | 0 | 349 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 336 | 2 | 0 | 0 | 338 | 4 | 0 | 13 | 0 | 1 | 17 | 706 |
| 9:30 AM | 3 | 325 | 0 | 0 | 0 | 328 | 2 | 0 | 4 | 0 | 0 | 6 | 8 | 332 | 3 | 1 | 0 | 344 | 3 | 0 | 17 | 0 | 1 | 20 | 698 |
| 9:45 AM | 2 | 369 | 1 | 0 | 0 | 372 | 2 | 0 | 4 | 0 | 0 | 6 | 4 | 366 | 3 | 0 | 0 | 373 | 2 | 0 | 12 | 0 | 0 | 14 | 765 |
| Hourly Total | 10 | 1289 | 2 | 0 | 0 | 1301 | 4 | 0 | 10 | 0 | 0 | 14 | 13 | 1318 | 9 | 1 | 0 | 1341 | 11 | 1 | 48 | 0 | 2 | 60 | 2716 |
| 10:00 AM | 5 | 375 | 0 | 0 | 0 | 380 | 1 | 0 | 5 | 0 | 0 | 6 | 1 | 334 | 5 | 0 | 0 | 340 | 2 | 0 | 15 | 0 | 0 | 17 | 743 |
| 10:15 AM | 4 | 343 | 2 | 0 | 0 | 349 | 2 | 0 | 3 | 0 | 0 | 5 | 2 | 351 | 6 | 0 | 0 | 359 | 3 | 0 | 14 | 0 | 0 | 17 | 730 |
| 10:30 AM | 2 | 353 | 1 | 0 | 0 | 356 | 1 | 0 | 3 | 0 | 0 | 4 | 5 | 330 | 1 | 0 | 0 | 336 | 5 | 0 | 5 | 0 | 2 | 10 | 706 |
| 10:45 AM | 2 | 406 | 2 | 0 | 0 | 410 | 0 | 0 | 4 | 0 | 0 | 4 | 5 | 350 | 1 | 1 | 0 | 357 | 1 | 0 | 14 | 0 | 0 | 15 | 786 |
| Hourly Total | 13 | 1477 | 5 | 0 | 0 | 1495 | 4 | 0 | 15 | 0 | 0 | 19 | 13 | 1365 | 13 | 1 | 0 | 1392 | 11 | 0 | 48 | 0 | 2 | 59 | 2965 |
| 11:00 AM | 3 | 361 | 0 | 0 | 0 | 364 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 384 | 3 | 0 | 0 | 388 | 3 | 0 | 21 | 0 | 0 | 24 | 776 |
| 11:15 AM | 1 | 392 | 0 | 0 | 0 | 393 | 1 | 0 | 2 | 0 | 0 | 3 | 6 | 360 | 2 | 0 | 0 | 368 | 1 | 0 | 7 | 0 | 0 | 8 | 772 |
| 11:30 AM | 0 | 372 | 0 | 0 | 0 | 372 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 322 | 1 | 0 | 0 | 324 | 5 | 0 | 12 | 0 | 3 | 17 | 715 |
| 11:45 AM | 0 | 351 | 1 | 0 | 0 | 352 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 414 | 2 | 0 | 0 | 418 | 1 | 0 | 8 | 0 | 1 | 9 | 779 |
| Hourly Total | 4 | 1476 | 1 | 0 | 0 | 1481 | 1 | 0 | 4 | 0 | 0 | 5 | 10 | 1480 | 8 | 0 | 0 | 1498 | 10 | 0 | 48 | 0 | 4 | 58 | 3042 |
| 12:00 PM | 3 | 381 | 1 | 0 | 0 | 385 | 0 | 0 | 2 | 0 | 0 | 2 | 3 | 413 | 3 | 0 | 0 | 419 | 1 | 0 | 11 | 0 | 0 | 12 | 818 |
| 12:15 PM | 3 | 362 | 2 | 0 | 0 | 367 | 0 | 0 | 2 | 0 | 0 | 2 | 3 | 340 | 3 | 0 | 0 | 346 | 2 | 0 | 12 | 0 | 0 | 14 | 729 |
| 12:30 PM | 4 | 367 | 2 | 0 | 0 | 373 | 1 | 1 | 1 | 0 | 0 | 3 | 4 | 313 | 4 | 0 | 0 | 321 | 5 | 0 | 6 | 0 | 0 | 11 | 708 |
| 12:45 PM | 4 | 378 | 2 | 0 | 0 | 384 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 358 | 4 | 0 | 0 | 362 | 1 | 0 | 14 | 0 | 1 | 15 | 763 |
| Hourly Total | 14 | 1488 | 7 | 0 | 0 | 1509 | 1 | 1 | 7 | 0 | 0 | 9 | 10 | 1424 | 14 | 0 | 0 | 1448 | 9 | 0 | 43 | 0 | 1 | 52 | 3018 |
| 1:00 PM | 1 | 356 | 2 | 1 | 0 | 360 | 0 | 0 | 1 | 0 | 0 | 1 | 8 | 343 | 5 | 0 | 0 | 356 | 1 | 0 | 13 | 0 | 0 | 14 | 731 |
| 1:15 PM | 2 | 350 | 3 | 0 | 0 | 355 | 1 | 0 | 5 | 0 | 0 | 6 | 0 | 317 | 1 | 0 | 0 | 318 | 2 | 0 | 11 | 0 | 0 | 13 | 692 |
| 1:30 PM | 6 | 392 | 2 | 0 | 0 | 400 | 0 | 0 | 3 | 1 | 0 | 4 | 3 | 284 | 0 | 0 | 0 | 287 | 0 | 0 | 14 | 0 | 1 | 14 | 705 |
| 1:45 PM | 0 | 404 | 0 | 0 | 0 | 404 | 2 | 1 | 0 | 0 | 0 | 3 | 2 | 376 | 4 | 0 | 0 | 382 | 0 | 0 | 9 | 0 | 1 | 9 | 798 |
| Hourly Total | 9 | 1502 | 7 | 1 | 0 | 1519 | 3 | 1 | 9 | 1 | 0 | 14 | 13 | 1320 | 10 | 0 | 0 | 1343 | 3 | 0 | 47 | 0 | 2 | 50 | 2926 |
| 2:00 PM | 7 | 346 | 2 | 0 | 0 | 355 | 1 | 1 | 1 | 0 | 0 | 3 | 4 | 326 | 3 | 0 | 0 | 333 | 2 | 1 | 8 | 0 | 0 | 11 | 702 |
| 2:15 PM | 5 | 340 | 2 | 0 | 0 | 347 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 322 | 5 | 0 | 0 | 331 | 0 | 1 | 10 | 0 | 0 | 11 | 692 |
| 2:30 PM | 4 | 399 | 1 | 0 | 0 | 404 | 1 | 0 | 3 | 0 | 0 | 4 | 4 | 297 | 3 | 0 | 0 | 304 | 1 | 1 | 8 | 0 | 1 | 10 | 722 |
| 2:45 PM | 1 | 412 | 2 | 0 | 0 | 415 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 311 | 0 | 0 | 0 | 315 | 2 | 0 | 12 | 0 | 0 | 14 | 747 |
| Hourly Total | 17 | 1497 | 7 | 0 | 0 | 1521 | 2 | 1 | 10 | 0 | 0 | 13 | 16 | 1256 | 11 | 0 | 0 | 1283 | 5 | 3 | 38 | 0 | 1 | 46 | 2863 |
| 3:00 PM | 5 | 348 | 0 | 0 | 0 | 353 | 0 | 0 | 2 | 0 | 0 | 2 | 3 | 294 | 0 | 0 | 0 | 297 | 5 | 0 | 9 | 0 | 0 | 14 | 666 |
| 3:15 PM | 3 | 343 | 2 | 0 | 0 | 348 | 0 | 0 | 5 | 0 | 0 | 5 | 2 | 352 | 2 | 0 | 0 | 356 | 1 | 1 | 8 | 0 | 3 | 10 | 719 |
| 3:30 PM | 1 | 397 | 1 | 0 | 0 | 399 | 0 | 0 | 4 | 0 | 0 | 4 | 1 | 299 | 2 | 0 | 0 | 302 | 3 | 0 | 13 | 0 | 1 | 16 | 721 |
| 3:45 PM | 4 | 402 | 2 | 0 | 0 | 408 | 1 | 0 | 2 | 0 | 0 | 3 | 2 | 321 | 0 | 0 | 0 | 323 | 2 | 0 | 8 | 0 | 1 | 10 | 744 |
| Hourly Total | 13 | 1490 | 5 | 0 | 0 | 1508 | 1 | 0 | 13 | 0 | 0 | 14 | 8 | 1266 | 4 | 0 | 0 | 1278 | 11 | 1 | 38 | 0 | 5 | 50 | 2850 |
| 4:00 PM | 2 | 378 | 3 | 0 | 0 | 383 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 346 | 1 | 0 | 0 | 347 | 2 | 1 | 10 | 0 | 1 | 13 | 745 |
| 4:15 PM | 1 | 395 | 4 | 0 | 0 | 400 | 0 | 0 | 2 | 0 | 0 | 2 | 5 | 330 | 5 | 0 | 0 | 340 | 1 | 0 | 6 | 0 | 0 | 7 | 749 |
| 4:30 PM | 2 | 426 | 0 | 0 | 0 | 428 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 373 | 1 | 0 | 0 | 378 | 5 | 0 | 12 | 0 | 0 | 17 | 826 |
| 4:45 PM | 3 | 381 | 3 | 0 | 0 | 387 | 0 | 0 | 2 | 0 | 0 | 2 | 3 | 357 | 4 | 0 | 0 | 364 | 1 | 0 | 10 | 0 | 0 | 11 | 764 |
| Hourly Total | 8 | 1580 | 10 | 0 | 0 | 1598 | 0 | 0 | 9 | 0 | 0 | 9 | 12 | 1406 | 11 | 0 | 0 | 1429 | 9 | 1 | 38 | 0 | 1 | 48 | 3084 |
| 5:00 PM | 3 | 417 | 0 | 0 | 0 | 420 | 1 | 0 | 6 | 0 | 0 | 7 | 3 | 285 | 4 | 0 | 0 | 292 | 3 | 0 | 15 | 0 | 0 | 18 | 737 |
| 5:15 PM | 3 | 390 | 3 | 0 | 0 | 396 | 1 | 0 | 1 | 0 | 0 | 2 | 2 | 307 | 3 | 0 | 0 | 312 | 3 | 0 | 9 | 0 | 3 | 12 | 722 |
| 5:30 PM | 4 | 398 | 1 | 0 | 0 | 403 | 2 | 0 | 1 | 0 | 0 | 3 | 2 | 380 | 1 | 0 | 0 | 383 | 2 | 0 | 12 | 0 | 0 | 14 | 803 |
| 5:45 PM | 0 | 416 | 2 | 0 | 0 | 418 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 296 | 2 | 0 | 0 | 299 | 1 | 0 | 9 | 0 | 0 | 10 | 729 |
| Hourly Total | 10 | 1621 | 6 | 0 | 0 | 1637 | 4 | 0 | 10 | 0 | 0 | 14 | 8 | 1268 | 10 | 0 | 0 | 1286 | 9 | 0 | 45 | 0 | 3 | 54 | 2991 |
| Grand Total | 103 | 14877 | 53 | 1 | 0 | 15034 | 23 | 6 | 101 | 1 | 0 | 131 | 116 | 14275 | 95 | 2 | 2 | 14488 | 96 | 8 | 442 | 0 | 21 | 546 | 30199 |
| Approach % | 0.7 | 99.0 | 0.4 | 0.0 | - | - | 17.6 | 4.6 | 77.1 | 0.8 | - | - | 0.8 | 98.5 | 0.7 | 0.0 | - | - | 17.6 | 1.5 | 81.0 | 0.0 | - | - | - |
| Total % | 0.3 | 49.3 | 0.2 | 0.0 | - | 49.8 | 0.1 | 0.0 | 0.3 | 0.0 | - | 0.4 | 0.4 | 47.3 | 0.3 | 0.0 | - | 48.0 | 0.3 | 0.0 | 1.5 | 0.0 | - | 1.8 | - |
| Lights | 103 | 14758 | 52 | 1 | - | 14914 | 23 | 6 | 98 | 1 | - | 128 | 114 | 14149 | 94 | 2 | - | 14359 | 94 | 8 | 436 | 0 | - | 538 | 29939 |
| % Lights | 100.0 | 99.2 | 98.1 | 100.0 | - | 99.2 | 100.0 | 100.0 | 97.0 | 100.0 | - | 97.7 | 98.3 | 99.1 | 98.9 | 100.0 | - | 99.1 | 97.9 | 100.0 | 98.6 | - | - | 98.5 | 99.1 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mediums | 0 | 101 | 1 | 0 | - | 102 | 0 | 0 | 3 | 0 | - | 3 | 2 | 98 | 1 | 0 | - | 101 | 1 | 0 | 6 | 0 | - | 7 | 213 |
| % Mediums | 0.0 | 0.7 | 1.9 | 0.0 | - | 0.7 | 0.0 | 0.0 | 3.0 | 0.0 | - | 2.3 | 1.7 | 0.7 | 1.1 | 0.0 | - | 0.7 | 1.0 | 0.0 | 1.4 | - | - | 1.3 | 0.7 |
| Articulated Trucks | 0 | 18 | 0 | 0 | - | 18 | 0 | 0 | 0 | 0 | - | 0 | 0 | 25 | 0 | 0 | - | 25 | 1 | 0 | 0 | 0 | - | 1 | 44 |
| % Articulated Trucks | 0.0 | 0.1 | 0.0 | 0.0 | - | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | - | 0.2 | 1.0 | 0.0 | 0.0 | - | - | 0.2 | 0.1 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 0 | 0 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 3 |
| % Bicycles on Road | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 20 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - | - | - | - | 95.2 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 2 | - | - | - | - | - | 1 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | 4.8 | - | - |

**Vanasse Hangen Brustlin, Inc.**
Venture 1
940 Main Campus Drive, Suite 500
Raleigh, North Carolina, United States 27606
919.829.0328 cmurden@vhb.com

Count Name: US 158 (Croatan Hwy) @ Lakeside St
Site Code:
Start Date: 07/27/2024


Turning Movement Data Plot

**Vanasse Hangen Brustlin, Inc.**
**Venture 1**
**940 Main Campus Drive, Suite 500**
**Raleigh, North Carolina, United States 27606**
**919.829.0328 cmurden@vhb.com**

Count Name: US 158 (Croatan Hwy) @ Lakeside St
Site Code:
Start Date: 07/27/2024


# Turning Movement Peak Hour Data (10:45 AM)

| Start Time | US 158 (Croatan Highway) Southbound | | | | | | E. Lakeside Street Westbound | | | | | | US 158 (Croatan Highway) Northbound | | | | | | W. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 10:45 AM | 2 | 406 | 2 | 0 | 0 | 410 | 0 | 0 | 4 | 0 | 0 | 4 | 5 | 350 | 1 | 1 | 0 | 357 | 1 | 0 | 14 | 0 | 0 | 15 | 786 |
| 11:00 AM | 3 | 361 | 0 | 0 | 0 | 364 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 384 | 3 | 0 | 0 | 388 | 3 | 0 | 21 | 0 | 0 | 24 | 776 |
| 11:15 AM | 1 | 392 | 0 | 0 | 0 | 393 | 1 | 0 | 2 | 0 | 0 | 3 | 6 | 360 | 2 | 0 | 0 | 368 | 1 | 0 | 7 | 0 | 0 | 8 | 772 |
| 11:30 AM | 0 | 372 | 0 | 0 | 0 | 372 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 322 | 1 | 0 | 0 | 324 | 5 | 0 | 12 | 0 | 3 | 17 | 715 |
| Total | 6 | 1531 | 2 | 0 | 0 | 1539 | 1 | 0 | 8 | 0 | 0 | 9 | 13 | 1416 | 7 | 1 | 0 | 1437 | 10 | 0 | 54 | 0 | 3 | 64 | 3049 |
| Approach % | 0.4 | 99.5 | 0.1 | 0.0 | - | - | 11.1 | 0.0 | 88.9 | 0.0 | - | - | 0.9 | 98.5 | 0.5 | 0.1 | - | - | 15.6 | 0.0 | 84.4 | 0.0 | - | - | - |
| Total % | 0.2 | 50.2 | 0.1 | 0.0 | - | 50.5 | 0.0 | 0.0 | 0.3 | 0.0 | - | 0.3 | 0.4 | 46.4 | 0.2 | 0.0 | - | 47.1 | 0.3 | 0.0 | 1.8 | 0.0 | - | 2.1 | - |
| PHF | 0.500 | 0.943 | 0.250 | 0.000 | - | 0.938 | 0.250 | 0.000 | 0.500 | 0.000 | - | 0.563 | 0.542 | 0.922 | 0.583 | 0.250 | - | 0.926 | 0.500 | 0.000 | 0.643 | 0.000 | - | 0.667 | 0.970 |
| Lights | 6 | 1521 | 2 | 0 | - | 1529 | 1 | 0 | 8 | 0 | - | 9 | 13 | 1399 | 6 | 1 | - | 1419 | 10 | 0 | 54 | 0 | - | 64 | 3021 |
| % Lights | 100.0 | 99.3 | 100.0 | - | - | 99.4 | 100.0 | - | 100.0 | - | - | 100.0 | 100.0 | 98.8 | 85.7 | 100.0 | - | 98.7 | 100.0 | - | 100.0 | - | - | 100.0 | 99.1 |
| Mediums | 0 | 9 | 0 | 0 | - | 9 | 0 | 0 | 0 | 0 | - | 0 | 0 | 12 | 1 | 0 | - | 13 | 0 | 0 | 0 | 0 | - | 0 | 22 |
| % Mediums | 0.0 | 0.6 | 0.0 | - | - | 0.6 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 0.8 | 14.3 | 0.0 | - | 0.9 | 0.0 | - | 0.0 | - | - | 0.0 | 0.7 |
| Articulated Trucks | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 5 | 0 | 0 | - | 5 | 0 | 0 | 0 | 0 | - | 0 | 6 |
| % Articulated Trucks | 0.0 | 0.1 | 0.0 | - | - | 0.1 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | - | 0.3 | 0.0 | - | 0.0 | - | - | 0.0 | 0.2 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 3 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - |

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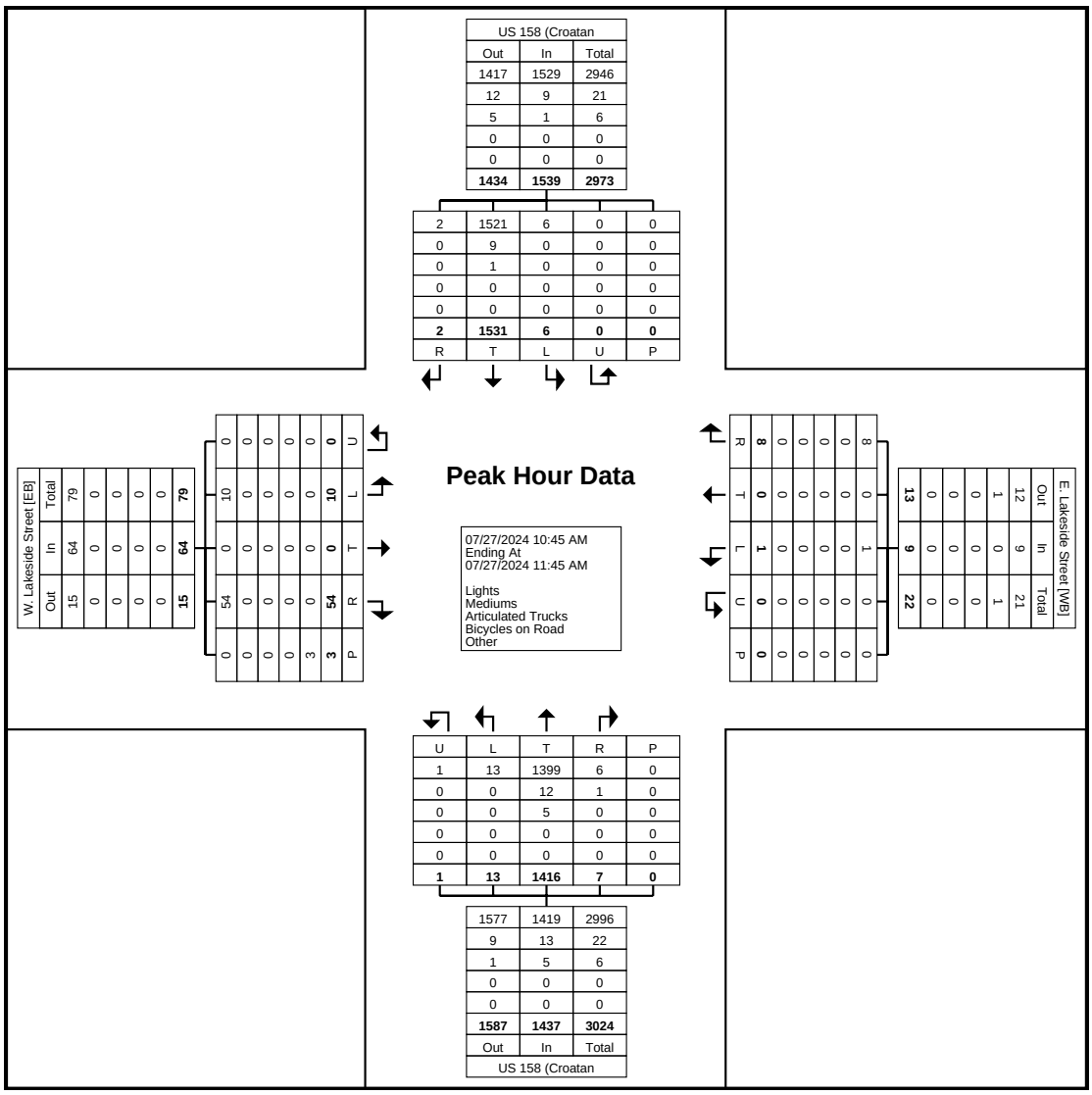
Site Code:
Start Date: 07/27/2024


Turning Movement Peak Hour Data Plot (10:45 AM)

**Vanasse Hangen Brustlin, Inc.**
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**Raleigh, North Carolina, United States 27606**
**919.829.0328 cmurden@vhb.com**

Count Name: US 158 (Croatan Hwy) @ Lakeside St
Site Code:
Start Date: 07/27/2024


# Turning Movement Peak Hour Data (4:00 PM)

| Start Time | US 158 (Croatan Highway) Southbound | | | | | | E. Lakeside Street Westbound | | | | | | US 158 (Croatan Highway) Northbound | | | | | | W. Lakeside Street Eastbound | | | | | | Int. Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | Left | Thru | Right | U-Turn | Peds | App. Total | |
| 4:00 PM | 2 | 378 | 3 | 0 | 0 | 383 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 346 | 1 | 0 | 0 | 347 | 2 | 1 | 10 | 0 | 1 | 13 | 745 |
| 4:15 PM | 1 | 395 | 4 | 0 | 0 | 400 | 0 | 0 | 2 | 0 | 0 | 2 | 5 | 330 | 5 | 0 | 0 | 340 | 1 | 0 | 6 | 0 | 0 | 7 | 749 |
| 4:30 PM | 2 | 426 | 0 | 0 | 0 | 428 | 0 | 0 | 3 | 0 | 0 | 3 | 4 | 373 | 1 | 0 | 0 | 378 | 5 | 0 | 12 | 0 | 0 | 17 | 826 |
| 4:45 PM | 3 | 381 | 3 | 0 | 0 | 387 | 0 | 0 | 2 | 0 | 0 | 2 | 3 | 357 | 4 | 0 | 0 | 364 | 1 | 0 | 10 | 0 | 0 | 11 | 764 |
| Total | 8 | 1580 | 10 | 0 | 0 | 1598 | 0 | 0 | 9 | 0 | 0 | 9 | 12 | 1406 | 11 | 0 | 0 | 1429 | 9 | 1 | 38 | 0 | 1 | 48 | 3084 |
| Approach % | 0.5 | 98.9 | 0.6 | 0.0 | - | - | 0.0 | 0.0 | 100.0 | 0.0 | - | - | 0.8 | 98.4 | 0.8 | 0.0 | - | - | 18.8 | 2.1 | 79.2 | 0.0 | - | - | - |
| Total % | 0.3 | 51.2 | 0.3 | 0.0 | - | 51.8 | 0.0 | 0.0 | 0.3 | 0.0 | - | 0.3 | 0.4 | 45.6 | 0.4 | 0.0 | - | 46.3 | 0.3 | 0.0 | 1.2 | 0.0 | - | 1.6 | - |
| PHF | 0.667 | 0.927 | 0.625 | 0.000 | - | 0.933 | 0.000 | 0.000 | 0.750 | 0.000 | - | 0.750 | 0.600 | 0.942 | 0.550 | 0.000 | - | 0.945 | 0.450 | 0.250 | 0.792 | 0.000 | - | 0.706 | 0.933 |
| Lights | 8 | 1567 | 10 | 0 | - | 1585 | 0 | 0 | 9 | 0 | - | 9 | 12 | 1400 | 11 | 0 | - | 1423 | 9 | 1 | 37 | 0 | - | 47 | 3064 |
| % Lights | 100.0 | 99.2 | 100.0 | - | - | 99.2 | - | - | 100.0 | - | - | 100.0 | 100.0 | 99.6 | 100.0 | - | - | 99.6 | 100.0 | 100.0 | 97.4 | - | - | 97.9 | 99.4 |
| Mediums | 0 | 13 | 0 | 0 | - | 13 | 0 | 0 | 0 | 0 | - | 0 | 0 | 6 | 0 | 0 | - | 6 | 0 | 0 | 1 | 0 | - | 1 | 20 |
| % Mediums | 0.0 | 0.8 | 0.0 | - | - | 0.8 | - | - | 0.0 | - | - | 0.0 | 0.0 | 0.4 | 0.0 | - | - | 0.4 | 0.0 | 0.0 | 2.6 | - | - | 2.1 | 0.6 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | 0.0 | 0.0 | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | - | 0.0 | 0.0 |
| Bicycles on Crosswalk | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - |
| % Bicycles on Crosswalk | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |
| Pedestrians | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.0 | - | - |

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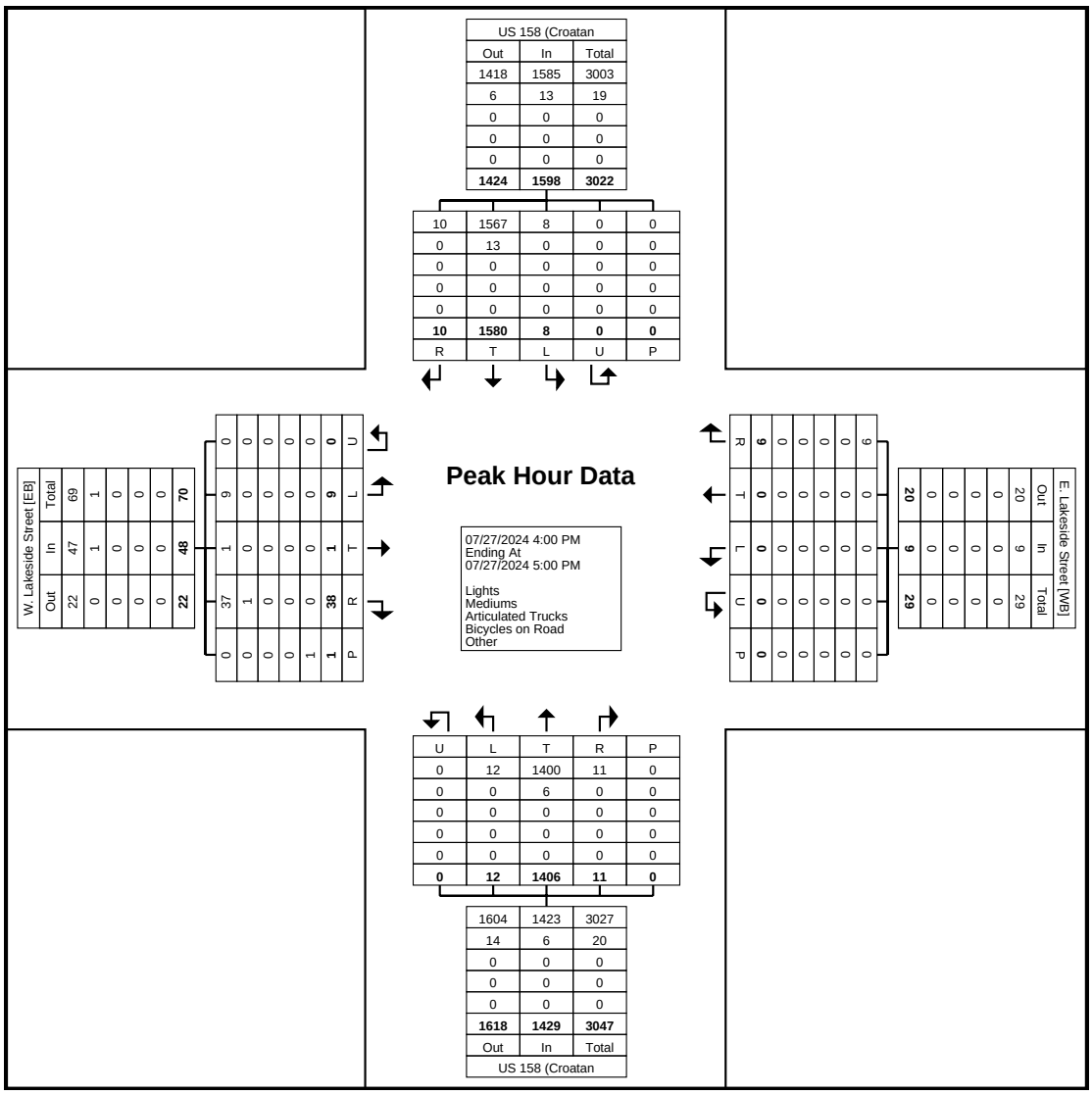



Turning Movement Peak Hour Data Plot (4:00 PM)

# B

# Intersection Capacity Analysis

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 4 | 4 | 104 | 123 | 4 |
| Future Volume (vph) | 4 | 4 | 4 | 104 | 123 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.932 | | | | 0.996 | |
| Flt Protected | 0.976 | | | 0.998 | | |
| Satd. Flow (prot) | 1694 | 0 | 0 | 1759 | 1787 | 0 |
| Flt Permitted | 0.976 | | | 0.998 | | |
| Satd. Flow (perm) | 1694 | 0 | 0 | 1759 | 1787 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1151 | 1199 | |
| Travel Time (s) | 14.9 | | | 22.4 | 23.4 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 8% | 6% | 2% |
| Adj. Flow (vph) | 4 | 4 | 4 | 116 | 137 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 8 | 0 | 0 | 120 | 141 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 18.7% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

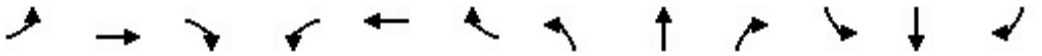
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 4 | 4 | 104 | 123 | 4 |
| Future Vol, veh/h | 4 | 4 | 4 | 104 | 123 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 8 | 6 | 2 |
| Mvmt Flow | 4 | 4 | 4 | 116 | 137 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 263 | 139 | 141 | 0 | - | 0 |
| Stage 1 | 139 | - | - | - | - | - |
| Stage 2 | 124 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 726 | 909 | 1442 | - | - | - |
| Stage 1 | 888 | - | - | - | - | - |
| Stage 2 | 902 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 724 | 909 | 1442 | - | - | - |
| Mov Cap-2 Maneuver | 724 | - | - | - | - | - |
| Stage 1 | 885 | - | - | - | - | - |
| Stage 2 | 902 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.5 | 0.3 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1442 | - | 806 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.011 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.5 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 13 | 4 | 21 | 4 | 4 | 4 | 6 | 904 | 4 | 4 | 873 | 6 |
| Future Volume (vph) | 13 | 4 | 21 | 4 | 4 | 4 | 6 | 904 | 4 | 4 | 873 | 6 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.924 | | | 0.955 | | | 0.999 | | | 0.999 | |
| Flt Protected | | 0.983 | | | 0.984 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1632 | 0 | 0 | 1750 | 0 | 1770 | 3501 | 0 | 1770 | 3468 | 0 |
| Flt Permitted | | 0.983 | | | 0.984 | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 1632 | 0 | 0 | 1750 | 0 | 1770 | 3501 | 0 | 1770 | 3468 | 0 |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1172 | | | 1116 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 16.0 | | | 15.2 | |
| 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 |
| Heavy Vehicles (%) | 8% | 2% | 5% | 2% | 2% | 2% | 2% | 3% | 2% | 2% | 4% | 2% |
| Adj. Flow (vph) | 14 | 4 | 23 | 4 | 4 | 4 | 7 | 1004 | 4 | 4 | 970 | 7 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 41 | 0 | 0 | 12 | 0 | 7 | 1008 | 0 | 4 | 977 | 0 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 35.1% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 13 | 4 | 21 | 4 | 4 | 4 | 6 | 904 | 4 | 4 | 873 | 6 |
| Future Vol, veh/h | 13 | 4 | 21 | 4 | 4 | 4 | 6 | 904 | 4 | 4 | 873 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 8 | 2 | 5 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 2 |
| Mvmt Flow | 14 | 4 | 23 | 4 | 4 | 4 | 7 | 1004 | 4 | 4 | 970 | 7 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1500 | 2004 | 489 | 1515 | 2005 | 504 | 977 | 0 | 0 | 1008 | 0 | 0 |
| Stage 1 | 982 | 982 | - | 1020 | 1020 | - | - | - | - | - | - | - |
| Stage 2 | 518 | 1022 | - | 495 | 985 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.66 | 6.54 | 7 | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.66 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.66 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.58 | 4.02 | 3.35 | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 80 | 59 | 517 | 82 | 59 | 513 | 702 | - | - | 683 | - | - |
| Stage 1 | 256 | 325 | - | 253 | 312 | - | - | - | - | - | - | - |
| Stage 2 | 494 | 312 | - | 525 | 324 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 77 | 58 | 517 | 76 | 58 | 513 | 702 | - | - | 683 | - | - |
| Mov Cap-2 Maneuver | 182 | 170 | - | 181 | 169 | - | - | - | - | - | - | - |
| Stage 1 | 253 | 323 | - | 250 | 309 | - | - | - | - | - | - | - |
| Stage 2 | 478 | 309 | - | 492 | 322 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 20.1 | 22.1 | 0.1 | 0 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 702 | - | - | 280 | 224 | 683 | - | - |
| HCM Lane V/C Ratio | 0.009 | - | - | 0.151 | 0.06 | 0.007 | - | - |
| HCM Control Delay (s) | 10.2 | - | - | 20.1 | 22.1 | 10.3 | - | - |
| HCM Lane LOS | B | - | - | C | C | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.5 | 0.2 | 0 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 11 | 4 | 210 | 250 | 7 |
| Future Volume (vph) | 4 | 11 | 4 | 210 | 250 | 7 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.899 | | | | 0.996 | |
| Flt Protected | 0.988 | | | 0.999 | | |
| Satd. Flow (prot) | 1655 | 0 | 0 | 1843 | 1855 | 0 |
| Flt Permitted | 0.988 | | | 0.999 | | |
| Satd. Flow (perm) | 1655 | 0 | 0 | 1843 | 1855 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1151 | 1199 | |
| Travel Time (s) | 14.9 | | | 22.4 | 23.4 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 3% | 2% | 2% |
| Adj. Flow (vph) | 4 | 12 | 4 | 233 | 278 | 8 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 16 | 0 | 0 | 237 | 286 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 24.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

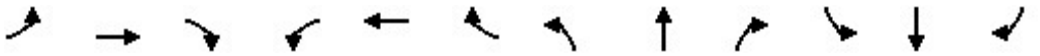
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 11 | 4 | 210 | 250 | 7 |
| Future Vol, veh/h | 4 | 11 | 4 | 210 | 250 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 3 | 2 | 2 |
| Mvmt Flow | 4 | 12 | 4 | 233 | 278 | 8 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 523 | 282 | 286 | 0 | - | 0 |
| Stage 1 | 282 | - | - | - | - | - |
| Stage 2 | 241 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 514 | 757 | 1276 | - | - | - |
| Stage 1 | 766 | - | - | - | - | - |
| Stage 2 | 799 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 512 | 757 | 1276 | - | - | - |
| Mov Cap-2 Maneuver | 512 | - | - | - | - | - |
| Stage 1 | 763 | - | - | - | - | - |
| Stage 2 | 799 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.5 | 0.1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1276 | - | 671 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.025 | - | - |
| HCM Control Delay (s) | 7.8 | 0 | 10.5 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 7 | 4 | 29 | 4 | 4 | 7 | 12 | 1386 | 4 | 8 | 1266 | 7 |
| Future Volume (vph) | 7 | 4 | 29 | 4 | 4 | 7 | 12 | 1386 | 4 | 8 | 1266 | 7 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.902 | | | 0.932 | | | | | | 0.999 | |
| Flt Protected | | 0.991 | | | 0.988 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1608 | 0 | 0 | 1715 | 0 | 1770 | 3539 | 0 | 1770 | 3533 | 0 |
| Flt Permitted | | 0.991 | | | 0.988 | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 1608 | 0 | 0 | 1715 | 0 | 1770 | 3539 | 0 | 1770 | 3533 | 0 |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1172 | | | 1116 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 16.0 | | | 15.2 | |
| 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 |
| Heavy Vehicles (%) | 2% | 2% | 7% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 14% |
| Adj. Flow (vph) | 8 | 4 | 32 | 4 | 4 | 8 | 13 | 1540 | 4 | 9 | 1407 | 8 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 44 | 0 | 0 | 16 | 0 | 13 | 1544 | 0 | 9 | 1415 | 0 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization | 48.4% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 7 | 4 | 29 | 4 | 4 | 7 | 12 | 1386 | 4 | 8 | 1266 | 7 |
| Future Vol, veh/h | 7 | 4 | 29 | 4 | 4 | 7 | 12 | 1386 | 4 | 8 | 1266 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 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 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 14 |
| Mvmt Flow | 8 | 4 | 32 | 4 | 4 | 8 | 13 | 1540 | 4 | 9 | 1407 | 8 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 2227 | 2999 | 708 | 2292 | 3001 | 772 | 1415 | 0 | 0 | 1544 | 0 | 0 |
| Stage 1 | 1429 | 1429 | - | 1568 | 1568 | - | - | - | - | - | - | - |
| Stage 2 | 798 | 1570 | - | 724 | 1433 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.54 | 6.54 | 7.04 | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 4.02 | 3.37 | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 24 | 13 | 366 | 21 | 13 | 342 | 478 | - | - | 426 | - | - |
| Stage 1 | 142 | 199 | - | 116 | 170 | - | - | - | - | - | - | - |
| Stage 2 | 346 | 170 | - | 383 | 198 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 22 | 12 | 366 | 18 | 12 | 342 | 478 | - | - | 426 | - | - |
| Mov Cap-2 Maneuver | 96 | 85 | - | 82 | 84 | - | - | - | - | - | - | - |
| Stage 1 | 138 | 195 | - | 113 | 165 | - | - | - | - | - | - | - |
| Stage 2 | 320 | 165 | - | 334 | 194 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 27.9 | 37.3 | 0.1 | 0.1 |
| HCM LOS | D | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 478 | - | - | 201 | 128 | 426 | - | - |
| HCM Lane V/C Ratio | 0.028 | - | - | 0.221 | 0.13 | 0.021 | - | - |
| HCM Control Delay (s) | 12.7 | - | - | 27.9 | 37.3 | 13.6 | - | - |
| HCM Lane LOS | B | - | - | D | E | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.8 | 0.4 | 0.1 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 7 | 7 | 4 | 291 | 399 | 6 |
| Future Volume (vph) | 7 | 7 | 4 | 291 | 399 | 6 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.932 | | | | 0.998 | |
| Flt Protected | 0.976 | | | 0.999 | | |
| Satd. Flow (prot) | 1694 | 0 | 0 | 1861 | 1859 | 0 |
| Flt Permitted | 0.976 | | | 0.999 | | |
| Satd. Flow (perm) | 1694 | 0 | 0 | 1861 | 1859 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1151 | 1199 | |
| Travel Time (s) | 14.9 | | | 22.4 | 23.4 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 8 | 8 | 4 | 323 | 443 | 7 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 16 | 0 | 0 | 327 | 450 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 31.4% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

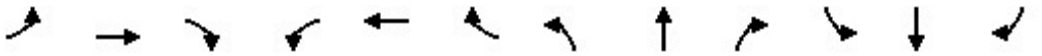
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 7 | 4 | 291 | 399 | 6 |
| Future Vol, veh/h | 7 | 7 | 4 | 291 | 399 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 8 | 8 | 4 | 323 | 443 | 7 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 778 | 447 | 450 | 0 | - | 0 |
| Stage 1 | 447 | - | - | - | - | - |
| Stage 2 | 331 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 365 | 612 | 1110 | - | - | - |
| Stage 1 | 644 | - | - | - | - | - |
| Stage 2 | 728 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 364 | 612 | 1110 | - | - | - |
| Mov Cap-2 Maneuver | 364 | - | - | - | - | - |
| Stage 1 | 641 | - | - | - | - | - |
| Stage 2 | 728 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 13.2 | 0.1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1110 | - | 456 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | 0.034 | - | - |
| HCM Control Delay (s) | 8.3 | 0 | 13.2 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 9 | 4 | 38 | 4 | 4 | 9 | 12 | 1406 | 11 | 8 | 1580 | 10 |
| Future Volume (vph) | 9 | 4 | 38 | 4 | 4 | 9 | 12 | 1406 | 11 | 8 | 1580 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.899 | | | 0.925 | | | 0.999 | | | 0.999 | |
| Flt Protected | | 0.991 | | | 0.989 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1647 | 0 | 0 | 1704 | 0 | 1770 | 3536 | 0 | 1770 | 3536 | 0 |
| Flt Permitted | | 0.991 | | | 0.989 | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 1647 | 0 | 0 | 1704 | 0 | 1770 | 3536 | 0 | 1770 | 3536 | 0 |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1172 | | | 1116 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 16.0 | | | 15.2 | |
| 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 |
| Heavy Vehicles (%) | 2% | 2% | 3% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| Adj. Flow (vph) | 10 | 4 | 42 | 4 | 4 | 10 | 13 | 1562 | 12 | 9 | 1756 | 11 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 56 | 0 | 0 | 18 | 0 | 13 | 1574 | 0 | 9 | 1767 | 0 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization | 54.4% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

| 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 | 9 | 4 | 38 | 4 | 4 | 9 | 12 | 1406 | 11 | 8 | 1580 | 10 |
| Future Vol, veh/h | 9 | 4 | 38 | 4 | 4 | 9 | 12 | 1406 | 11 | 8 | 1580 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 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 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 10 | 4 | 42 | 4 | 4 | 10 | 13 | 1562 | 12 | 9 | 1756 | 11 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 2589 | 3380 | 884 | 2492 | 3379 | 787 | 1767 | 0 | 0 | 1574 | 0 | 0 |
| Stage 1 | 1780 | 1780 | - | 1594 | 1594 | - | - | - | - | - | - | - |
| Stage 2 | 809 | 1600 | - | 898 | 1785 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.54 | 6.54 | 6.96 | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 4.02 | 3.33 | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 12 | 7 | 287 | 15 | 7 | 334 | 349 | - | - | 415 | - | - |
| Stage 1 | 85 | 133 | - | 112 | 165 | - | - | - | - | - | - | - |
| Stage 2 | 340 | 164 | - | 301 | 133 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 11 | 7 | 287 | 12 | 7 | 334 | 349 | - | - | 415 | - | - |
| Mov Cap-2 Maneuver | 62 | 67 | - | 72 | 65 | - | - | - | - | - | - | - |
| Stage 1 | 82 | 130 | - | 108 | 159 | - | - | - | - | - | - | - |
| Stage 2 | 309 | 158 | - | 243 | 130 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 42.5 | 41.2 | 0.1 | 0.1 |
| HCM LOS | E | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 349 | - | - | 151 | 118 | 415 | - | - |
| HCM Lane V/C Ratio | 0.038 | - | - | 0.375 | 0.16 | 0.021 | - | - |
| HCM Control Delay (s) | 15.7 | - | - | 42.5 | 41.2 | 13.9 | - | - |
| HCM Lane LOS | C | - | - | E | E | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 1.6 | 0.5 | 0.1 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 4 | 4 | 107 | 127 | 4 |
| Future Volume (vph) | 4 | 4 | 4 | 107 | 127 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.932 | | | | 0.996 | |
| Flt Protected | 0.976 | | | 0.998 | | |
| Satd. Flow (prot) | 1694 | 0 | 0 | 1759 | 1787 | 0 |
| Flt Permitted | 0.976 | | | 0.998 | | |
| Satd. Flow (perm) | 1694 | 0 | 0 | 1759 | 1787 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1076 | 1002 | |
| Travel Time (s) | 14.9 | | | 21.0 | 19.5 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 8% | 6% | 2% |
| Adj. Flow (vph) | 4 | 4 | 4 | 119 | 141 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 8 | 0 | 0 | 123 | 145 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 18.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

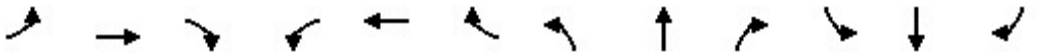
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 4 | 4 | 107 | 127 | 4 |
| Future Vol, veh/h | 4 | 4 | 4 | 107 | 127 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 8 | 6 | 2 |
| Mvmt Flow | 4 | 4 | 4 | 119 | 141 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 270 | 143 | 145 | 0 | - | 0 |
| Stage 1 | 143 | - | - | - | - | - |
| Stage 2 | 127 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 719 | 905 | 1437 | - | - | - |
| Stage 1 | 884 | - | - | - | - | - |
| Stage 2 | 899 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 717 | 905 | 1437 | - | - | - |
| Mov Cap-2 Maneuver | 717 | - | - | - | - | - |
| Stage 1 | 881 | - | - | - | - | - |
| Stage 2 | 899 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.6 | 0.3 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1437 | - | 800 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.011 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.6 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 13 | 4 | 22 | 4 | 4 | 4 | 6 | 931 | 4 | 4 | 899 | 6 |
| Future Volume (vph) | 13 | 4 | 22 | 4 | 4 | 4 | 6 | 931 | 4 | 4 | 899 | 6 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.923 | | | 0.955 | | | 0.999 | | | 0.999 | |
| Flt Protected | | 0.984 | | | 0.984 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1632 | 0 | 0 | 1750 | 0 | 1770 | 3501 | 0 | 1770 | 3468 | 0 |
| Flt Permitted | | 0.984 | | | 0.984 | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 1632 | 0 | 0 | 1750 | 0 | 1770 | 3501 | 0 | 1770 | 3468 | 0 |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1031 | | | 1222 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 14.1 | | | 16.7 | |
| 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 |
| Heavy Vehicles (%) | 8% | 2% | 5% | 2% | 2% | 2% | 2% | 3% | 2% | 2% | 4% | 2% |
| Adj. Flow (vph) | 14 | 4 | 24 | 4 | 4 | 4 | 7 | 1034 | 4 | 4 | 999 | 7 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 42 | 0 | 0 | 12 | 0 | 7 | 1038 | 0 | 4 | 1006 | 0 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 35.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 13 | 4 | 22 | 4 | 4 | 4 | 6 | 931 | 4 | 4 | 899 | 6 |
| Future Vol, veh/h | 13 | 4 | 22 | 4 | 4 | 4 | 6 | 931 | 4 | 4 | 899 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 8 | 2 | 5 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 2 |
| Mvmt Flow | 14 | 4 | 24 | 4 | 4 | 4 | 7 | 1034 | 4 | 4 | 999 | 7 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1544 | 2063 | 503 | 1560 | 2064 | 519 | 1006 | 0 | 0 | 1038 | 0 | 0 |
| Stage 1 | 1011 | 1011 | - | 1050 | 1050 | - | - | - | - | - | - | - |
| Stage 2 | 533 | 1052 | - | 510 | 1014 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.66 | 6.54 | 7 | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.66 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.66 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.58 | 4.02 | 3.35 | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 74 | 54 | 506 | 76 | 54 | 502 | 684 | - | - | 665 | - | - |
| Stage 1 | 246 | 315 | - | 243 | 302 | - | - | - | - | - | - | - |
| Stage 2 | 483 | 302 | - | 514 | 314 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 71 | 53 | 506 | 70 | 53 | 502 | 684 | - | - | 665 | - | - |
| Mov Cap-2 Maneuver | 174 | 163 | - | 173 | 162 | - | - | - | - | - | - | - |
| Stage 1 | 244 | 313 | - | 241 | 299 | - | - | - | - | - | - | - |
| Stage 2 | 467 | 299 | - | 479 | 312 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 20.7 | 22.8 | 0.1 | 0 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 684 | - | - | 273 | 215 | 665 | - | - |
| HCM Lane V/C Ratio | 0.01 | - | - | 0.159 | 0.062 | 0.007 | - | - |
| HCM Control Delay (s) | 10.3 | - | - | 20.7 | 22.8 | 10.4 | - | - |
| HCM Lane LOS | B | - | - | C | C | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.6 | 0.2 | 0 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 11 | 4 | 216 | 258 | 7 |
| Future Volume (vph) | 4 | 11 | 4 | 216 | 258 | 7 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.899 | | | | 0.996 | |
| Flt Protected | 0.988 | | | 0.999 | | |
| Satd. Flow (prot) | 1655 | 0 | 0 | 1843 | 1855 | 0 |
| Flt Permitted | 0.988 | | | 0.999 | | |
| Satd. Flow (perm) | 1655 | 0 | 0 | 1843 | 1855 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1076 | 1002 | |
| Travel Time (s) | 14.9 | | | 21.0 | 19.5 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 3% | 2% | 2% |
| Adj. Flow (vph) | 4 | 12 | 4 | 240 | 287 | 8 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 16 | 0 | 0 | 244 | 295 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 24.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

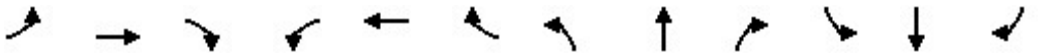
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 11 | 4 | 216 | 258 | 7 |
| Future Vol, veh/h | 4 | 11 | 4 | 216 | 258 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 3 | 2 | 2 |
| Mvmt Flow | 4 | 12 | 4 | 240 | 287 | 8 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 539 | 291 | 295 | 0 | - | 0 |
| Stage 1 | 291 | - | - | - | - | - |
| Stage 2 | 248 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 503 | 748 | 1266 | - | - | - |
| Stage 1 | 759 | - | - | - | - | - |
| Stage 2 | 793 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 501 | 748 | 1266 | - | - | - |
| Mov Cap-2 Maneuver | 501 | - | - | - | - | - |
| Stage 1 | 756 | - | - | - | - | - |
| Stage 2 | 793 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.6 | 0.1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1266 | - | 661 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | 0.025 | - | - |
| HCM Control Delay (s) | 7.9 | 0 | 10.6 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 7 | 4 | 30 | 4 | 4 | 7 | 12 | 1428 | 4 | 8 | 1304 | 7 |
| Future Volume (vph) | 7 | 4 | 30 | 4 | 4 | 7 | 12 | 1428 | 4 | 8 | 1304 | 7 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.901 | | | 0.932 | | | | | | 0.999 | |
| Flt Protected | | 0.991 | | | 0.988 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1606 | 0 | 0 | 1715 | 0 | 1770 | 3539 | 0 | 1770 | 3533 | 0 |
| Flt Permitted | | 0.991 | | | 0.988 | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 1606 | 0 | 0 | 1715 | 0 | 1770 | 3539 | 0 | 1770 | 3533 | 0 |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1031 | | | 1222 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 14.1 | | | 16.7 | |
| 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 |
| Heavy Vehicles (%) | 2% | 2% | 7% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 14% |
| Adj. Flow (vph) | 8 | 4 | 33 | 4 | 4 | 8 | 13 | 1587 | 4 | 9 | 1449 | 8 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 45 | 0 | 0 | 16 | 0 | 13 | 1591 | 0 | 9 | 1457 | 0 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 49.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 7 | 4 | 30 | 4 | 4 | 7 | 12 | 1428 | 4 | 8 | 1304 | 7 |
| Future Vol, veh/h | 7 | 4 | 30 | 4 | 4 | 7 | 12 | 1428 | 4 | 8 | 1304 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 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 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 14 |
| Mvmt Flow | 8 | 4 | 33 | 4 | 4 | 8 | 13 | 1587 | 4 | 9 | 1449 | 8 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 2293 | 3088 | 729 | 2360 | 3090 | 796 | 1457 | 0 | 0 | 1591 | 0 | 0 |
| Stage 1 | 1471 | 1471 | - | 1615 | 1615 | - | - | - | - | - | - | - |
| Stage 2 | 822 | 1617 | - | 745 | 1475 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.54 | 6.54 | 7.04 | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 4.02 | 3.37 | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 21 | 12 | 354 | 19 | 12 | 330 | 460 | - | - | 408 | - | - |
| Stage 1 | 133 | 190 | - | 108 | 161 | - | - | - | - | - | - | - |
| Stage 2 | 334 | 161 | - | 372 | 189 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 19 | 11 | 354 | 16 | 11 | 330 | 460 | - | - | 408 | - | - |
| Mov Cap-2 Maneuver | 89 | 80 | - | 77 | 80 | - | - | - | - | - | - | - |
| Stage 1 | 129 | 186 | - | 105 | 156 | - | - | - | - | - | - | - |
| Stage 2 | 308 | 156 | - | 322 | 185 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 29.5 | 39.1 | 0.1 | 0.1 |
| HCM LOS | D | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 460 | - | - | 192 | 122 | 408 | - | - |
| HCM Lane V/C Ratio | 0.029 | - | - | 0.237 | 0.137 | 0.022 | - | - |
| HCM Control Delay (s) | 13.1 | - | - | 29.5 | 39.1 | 14 | - | - |
| HCM Lane LOS | B | - | - | D | E | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.9 | 0.5 | 0.1 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 7 | 7 | 4 | 300 | 411 | 6 |
| Future Volume (vph) | 7 | 7 | 4 | 300 | 411 | 6 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.932 | | | | 0.998 | |
| Flt Protected | 0.976 | | | 0.999 | | |
| Satd. Flow (prot) | 1694 | 0 | 0 | 1861 | 1859 | 0 |
| Flt Permitted | 0.976 | | | 0.999 | | |
| Satd. Flow (perm) | 1694 | 0 | 0 | 1861 | 1859 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1076 | 1002 | |
| Travel Time (s) | 14.9 | | | 21.0 | 19.5 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 8 | 8 | 4 | 333 | 457 | 7 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 16 | 0 | 0 | 337 | 464 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 32.0% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

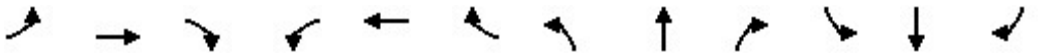
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 7 | 4 | 300 | 411 | 6 |
| Future Vol, veh/h | 7 | 7 | 4 | 300 | 411 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 8 | 8 | 4 | 333 | 457 | 7 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 802 | 461 | 464 | 0 | - | 0 |
| Stage 1 | 461 | - | - | - | - | - |
| Stage 2 | 341 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 353 | 600 | 1097 | - | - | - |
| Stage 1 | 635 | - | - | - | - | - |
| Stage 2 | 720 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 352 | 600 | 1097 | - | - | - |
| Mov Cap-2 Maneuver | 352 | - | - | - | - | - |
| Stage 1 | 632 | - | - | - | - | - |
| Stage 2 | 720 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 13.4 | 0.1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1097 | - | 444 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | 0.035 | - | - |
| HCM Control Delay (s) | 8.3 | 0 | 13.4 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 9 | 4 | 39 | 4 | 4 | 9 | 12 | 1448 | 11 | 8 | 1628 | 10 |
| Future Volume (vph) | 9 | 4 | 39 | 4 | 4 | 9 | 12 | 1448 | 11 | 8 | 1628 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.898 | | | 0.925 | | | 0.999 | | | 0.999 | |
| Flt Protected | | 0.991 | | | 0.989 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1646 | 0 | 0 | 1704 | 0 | 1770 | 3536 | 0 | 1770 | 3536 | 0 |
| Flt Permitted | | 0.991 | | | 0.989 | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 1646 | 0 | 0 | 1704 | 0 | 1770 | 3536 | 0 | 1770 | 3536 | 0 |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1031 | | | 1222 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 14.1 | | | 16.7 | |
| 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 |
| Heavy Vehicles (%) | 2% | 2% | 3% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| Adj. Flow (vph) | 10 | 4 | 43 | 4 | 4 | 10 | 13 | 1609 | 12 | 9 | 1809 | 11 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 57 | 0 | 0 | 18 | 0 | 13 | 1621 | 0 | 9 | 1820 | 0 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization | 55.8% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

| 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 | 9 | 4 | 39 | 4 | 4 | 9 | 12 | 1448 | 11 | 8 | 1628 | 10 |
| Future Vol, veh/h | 9 | 4 | 39 | 4 | 4 | 9 | 12 | 1448 | 11 | 8 | 1628 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 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 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 10 | 4 | 43 | 4 | 4 | 10 | 13 | 1609 | 12 | 9 | 1809 | 11 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 2666 | 3480 | 910 | 2566 | 3479 | 811 | 1820 | 0 | 0 | 1621 | 0 | 0 |
| Stage 1 | 1833 | 1833 | - | 1641 | 1641 | - | - | - | - | - | - | - |
| Stage 2 | 833 | 1647 | - | 925 | 1838 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.54 | 6.54 | 6.96 | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 4.02 | 3.33 | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 11 | 6 | 275 | 13 | 6 | 322 | 333 | - | - | 398 | - | - |
| Stage 1 | 79 | 125 | - | 104 | 156 | - | - | - | - | - | - | - |
| Stage 2 | 329 | 155 | - | 290 | 125 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 10 | 6 | 275 | 10 | 6 | 322 | 333 | - | - | 398 | - | - |
| Mov Cap-2 Maneuver | 58 | 62 | - | 66 | 60 | - | - | - | - | - | - | - |
| Stage 1 | 76 | 122 | - | 100 | 150 | - | - | - | - | - | - | - |
| Stage 2 | 297 | 149 | - | 230 | 122 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 45.8 | 44.4 | 0.1 | 0.1 |
| HCM LOS | E | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 333 | - | - | 144 | 110 | 398 | - | - |
| HCM Lane V/C Ratio | 0.04 | - | - | 0.401 | 0.172 | 0.022 | - | - |
| HCM Control Delay (s) | 16.3 | - | - | 45.8 | 44.4 | 14.3 | - | - |
| HCM Lane LOS | C | - | - | E | E | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 1.7 | 0.6 | 0.1 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 4 | 4 | 107 | 127 | 4 |
| Future Volume (vph) | 4 | 4 | 4 | 107 | 127 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.932 | | | | 0.996 | |
| Flt Protected | 0.976 | | | 0.998 | | |
| Satd. Flow (prot) | 1694 | 0 | 0 | 1759 | 1787 | 0 |
| Flt Permitted | 0.976 | | | 0.998 | | |
| Satd. Flow (perm) | 1694 | 0 | 0 | 1759 | 1787 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1119 | 1224 | |
| Travel Time (s) | 14.9 | | | 21.8 | 23.8 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 8% | 6% | 2% |
| Adj. Flow (vph) | 4 | 4 | 4 | 119 | 141 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 8 | 0 | 0 | 123 | 145 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 18.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

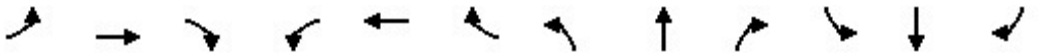
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 4 | 4 | 107 | 127 | 4 |
| Future Vol, veh/h | 4 | 4 | 4 | 107 | 127 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 8 | 6 | 2 |
| Mvmt Flow | 4 | 4 | 4 | 119 | 141 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 270 | 143 | 145 | 0 | - | 0 |
| Stage 1 | 143 | - | - | - | - | - |
| Stage 2 | 127 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 719 | 905 | 1437 | - | - | - |
| Stage 1 | 884 | - | - | - | - | - |
| Stage 2 | 899 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 717 | 905 | 1437 | - | - | - |
| Mov Cap-2 Maneuver | 717 | - | - | - | - | - |
| Stage 1 | 881 | - | - | - | - | - |
| Stage 2 | 899 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.6 | 0.3 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1437 | - | 800 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.011 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.6 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 19 | 4 | 29 | 4 | 4 | 4 | 15 | 931 | 4 | 4 | 899 | 14 |
| Future Volume (vph) | 19 | 4 | 29 | 4 | 4 | 4 | 15 | 931 | 4 | 4 | 899 | 14 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.924 | | | 0.955 | | | 0.999 | | | 0.998 | |
| Flt Protected | | 0.982 | | | 0.984 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1628 | 0 | 0 | 1750 | 0 | 1770 | 3501 | 0 | 1770 | 3465 | 0 |
| Flt Permitted | | 0.982 | | | 0.984 | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 1628 | 0 | 0 | 1750 | 0 | 1770 | 3501 | 0 | 1770 | 3465 | 0 |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1151 | | | 1090 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 15.7 | | | 14.9 | |
| 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 |
| Heavy Vehicles (%) | 8% | 2% | 5% | 2% | 2% | 2% | 2% | 3% | 2% | 2% | 4% | 2% |
| Adj. Flow (vph) | 21 | 4 | 32 | 4 | 4 | 4 | 17 | 1034 | 4 | 4 | 999 | 16 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 57 | 0 | 0 | 12 | 0 | 17 | 1038 | 0 | 4 | 1015 | 0 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 36.7% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

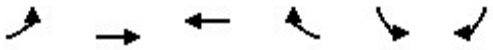
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 19 | 4 | 29 | 4 | 4 | 4 | 15 | 931 | 4 | 4 | 899 | 14 |
| Future Vol, veh/h | 19 | 4 | 29 | 4 | 4 | 4 | 15 | 931 | 4 | 4 | 899 | 14 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 8 | 2 | 5 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 2 |
| Mvmt Flow | 21 | 4 | 32 | 4 | 4 | 4 | 17 | 1034 | 4 | 4 | 999 | 16 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1568 | 2087 | 508 | 1580 | 2093 | 519 | 1015 | 0 | 0 | 1038 | 0 | 0 |
| Stage 1 | 1015 | 1015 | - | 1070 | 1070 | - | - | - | - | - | - | - |
| Stage 2 | 553 | 1072 | - | 510 | 1023 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.66 | 6.54 | 7 | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.66 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.66 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.58 | 4.02 | 3.35 | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 71 | 52 | 502 | 73 | 52 | 502 | 679 | - | - | 665 | - | - |
| Stage 1 | 244 | 314 | - | 236 | 296 | - | - | - | - | - | - | - |
| Stage 2 | 470 | 295 | - | 514 | 311 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 67 | 50 | 502 | 65 | 50 | 502 | 679 | - | - | 665 | - | - |
| Mov Cap-2 Maneuver | 168 | 158 | - | 165 | 155 | - | - | - | - | - | - | - |
| Stage 1 | 238 | 312 | - | 230 | 289 | - | - | - | - | - | - | - |
| Stage 2 | 447 | 288 | - | 471 | 309 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 22.3 | 23.6 | 0.2 | 0 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 679 | - | - | 265 | 207 | 665 | - | - |
| HCM Lane V/C Ratio | 0.025 | - | - | 0.218 | 0.064 | 0.007 | - | - |
| HCM Control Delay (s) | 10.4 | - | - | 22.3 | 23.6 | 10.4 | - | - |
| HCM Lane LOS | B | - | - | C | C | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.8 | 0.2 | 0 | - | - |



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 43 | 22 | 11 | 9 | 4 |
| Future Volume (vph) | 4 | 43 | 22 | 11 | 9 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.955 | | 0.961 | |
| Flt Protected | | 0.996 | | | 0.966 | |
| Satd. Flow (prot) | 0 | 1855 | 1779 | 0 | 1729 | 0 |
| Flt Permitted | | 0.996 | | | 0.966 | |
| Satd. Flow (perm) | 0 | 1855 | 1779 | 0 | 1729 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 150 | 290 | | 1082 | |
| Travel Time (s) | | 4.1 | 7.9 | | 29.5 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 4 | 48 | 24 | 12 | 10 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 52 | 36 | 0 | 14 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

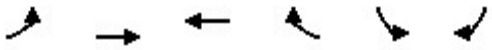
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 43 | 22 | 11 | 9 | 4 |
| Future Vol, veh/h | 4 | 43 | 22 | 11 | 9 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 48 | 24 | 12 | 10 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 36 | 0 | - | 0 | 86 | 30 |
| Stage 1 | - | - | - | - | 30 | - |
| Stage 2 | - | - | - | - | 56 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1575 | - | - | - | 915 | 1044 |
| Stage 1 | - | - | - | - | 993 | - |
| Stage 2 | - | - | - | - | 967 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1575 | - | - | - | 912 | 1044 |
| Mov Cap-2 Maneuver | - | - | - | - | 912 | - |
| Stage 1 | - | - | - | - | 990 | - |
| Stage 2 | - | - | - | - | 967 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.6 | 0 | 8.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1575 | - | - | - | 949 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.015 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 35 | 12 | 10 | 8 | 4 |
| Future Volume (vph) | 4 | 35 | 12 | 10 | 8 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.938 | | 0.958 | |
| Flt Protected | | 0.995 | | | 0.967 | |
| Satd. Flow (prot) | 0 | 1853 | 1747 | 0 | 1726 | 0 |
| Flt Permitted | | 0.995 | | | 0.967 | |
| Satd. Flow (perm) | 0 | 1853 | 1747 | 0 | 1726 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 1014 | 150 | | 1156 | |
| Travel Time (s) | | 27.7 | 4.1 | | 31.5 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 4 | 39 | 13 | 11 | 9 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 43 | 24 | 0 | 13 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 35 | 12 | 10 | 8 | 4 |
| Future Vol, veh/h | 4 | 35 | 12 | 10 | 8 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 39 | 13 | 11 | 9 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 24 | 0 | - | 0 | 66 | 19 |
| Stage 1 | - | - | - | - | 19 | - |
| Stage 2 | - | - | - | - | 47 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1591 | - | - | - | 939 | 1059 |
| Stage 1 | - | - | - | - | 1004 | - |
| Stage 2 | - | - | - | - | 975 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1591 | - | - | - | 936 | 1059 |
| Mov Cap-2 Maneuver | - | - | - | - | 936 | - |
| Stage 1 | - | - | - | - | 1001 | - |
| Stage 2 | - | - | - | - | 975 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.7 | 0 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1591 | - | - | - | 974 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.014 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.7 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 6 | 13 | 6 | 216 | 258 | 9 |
| Future Volume (vph) | 6 | 13 | 6 | 216 | 258 | 9 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.910 | | | | 0.995 | |
| Flt Protected | 0.984 | | | 0.999 | | |
| Satd. Flow (prot) | 1668 | 0 | 0 | 1843 | 1853 | 0 |
| Flt Permitted | 0.984 | | | 0.999 | | |
| Satd. Flow (perm) | 1668 | 0 | 0 | 1843 | 1853 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1119 | 1224 | |
| Travel Time (s) | 14.9 | | | 21.8 | 23.8 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 3% | 2% | 2% |
| Adj. Flow (vph) | 7 | 14 | 7 | 240 | 287 | 10 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 21 | 0 | 0 | 247 | 297 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 26.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

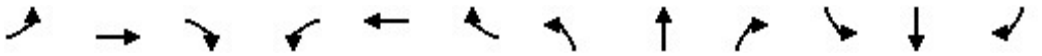
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 6 | 13 | 6 | 216 | 258 | 9 |
| Future Vol, veh/h | 6 | 13 | 6 | 216 | 258 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 3 | 2 | 2 |
| Mvmt Flow | 7 | 14 | 7 | 240 | 287 | 10 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 546 | 292 | 297 | 0 | - | 0 |
| Stage 1 | 292 | - | - | - | - | - |
| Stage 2 | 254 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 499 | 747 | 1264 | - | - | - |
| Stage 1 | 758 | - | - | - | - | - |
| Stage 2 | 788 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 496 | 747 | 1264 | - | - | - |
| Mov Cap-2 Maneuver | 496 | - | - | - | - | - |
| Stage 1 | 753 | - | - | - | - | - |
| Stage 2 | 788 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.8 | 0.2 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1264 | - | 644 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | 0.033 | - | - |
| HCM Control Delay (s) | 7.9 | 0 | 10.8 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 14 | 4 | 38 | 4 | 6 | 7 | 20 | 1428 | 4 | 8 | 1304 | 15 |
| Future Volume (vph) | 14 | 4 | 38 | 4 | 6 | 7 | 20 | 1428 | 4 | 8 | 1304 | 15 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.909 | | | 0.943 | | | | | | 0.998 | |
| Flt Protected | | 0.987 | | | 0.990 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1618 | 0 | 0 | 1739 | 0 | 1770 | 3539 | 0 | 1770 | 3527 | 0 |
| Flt Permitted | | 0.987 | | | 0.990 | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 1618 | 0 | 0 | 1739 | 0 | 1770 | 3539 | 0 | 1770 | 3527 | 0 |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1151 | | | 1090 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 15.7 | | | 14.9 | |
| 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 |
| Heavy Vehicles (%) | 2% | 2% | 7% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 14% |
| Adj. Flow (vph) | 16 | 4 | 42 | 4 | 7 | 8 | 22 | 1587 | 4 | 9 | 1449 | 17 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 62 | 0 | 0 | 19 | 0 | 22 | 1591 | 0 | 9 | 1466 | 0 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization | 50.8% | ICU Level of Service | A |
| Analysis Period (min) | 15 | | |

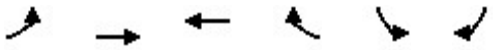
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 14 | 4 | 38 | 4 | 6 | 7 | 20 | 1428 | 4 | 8 | 1304 | 15 |
| Future Vol, veh/h | 14 | 4 | 38 | 4 | 6 | 7 | 20 | 1428 | 4 | 8 | 1304 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 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 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 14 |
| Mvmt Flow | 16 | 4 | 42 | 4 | 7 | 8 | 22 | 1587 | 4 | 9 | 1449 | 17 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 2317 | 3111 | 733 | 2378 | 3117 | 796 | 1466 | 0 | 0 | 1591 | 0 | 0 |
| Stage 1 | 1476 | 1476 | - | 1633 | 1633 | - | - | - | - | - | - | - |
| Stage 2 | 841 | 1635 | - | 745 | 1484 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.54 | 6.54 | 7.04 | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 4.02 | 3.37 | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 20 | 11 | 352 | 18 | 11 | 330 | 456 | - | - | 408 | - | - |
| Stage 1 | 132 | 189 | - | 105 | 158 | - | - | - | - | - | - | - |
| Stage 2 | 326 | 157 | - | 372 | 187 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 17 | 10 | 352 | 14 | 10 | 330 | 456 | - | - | 408 | - | - |
| Mov Cap-2 Maneuver | 86 | 77 | - | 73 | 75 | - | - | - | - | - | - | - |
| Stage 1 | 126 | 185 | - | 100 | 150 | - | - | - | - | - | - | - |
| Stage 2 | 289 | 149 | - | 312 | 183 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 36.8 | 44.8 | 0.2 | 0.1 |
| HCM LOS | E | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 456 | - | - | 174 | 109 | 408 | - | - |
| HCM Lane V/C Ratio | 0.049 | - | - | 0.358 | 0.173 | 0.022 | - | - |
| HCM Control Delay (s) | 13.3 | - | - | 36.8 | 44.8 | 14 | - | - |
| HCM Lane LOS | B | - | - | E | E | B | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 1.5 | 0.6 | 0.1 | - | - |



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 46 | 31 | 10 | 10 | 4 |
| Future Volume (vph) | 4 | 46 | 31 | 10 | 10 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.967 | | 0.964 | |
| Flt Protected | | 0.996 | | | 0.965 | |
| Satd. Flow (prot) | 0 | 1855 | 1801 | 0 | 1733 | 0 |
| Flt Permitted | | 0.996 | | | 0.965 | |
| Satd. Flow (perm) | 0 | 1855 | 1801 | 0 | 1733 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 150 | 290 | | 1082 | |
| Travel Time (s) | | 4.1 | 7.9 | | 29.5 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 4 | 51 | 34 | 11 | 11 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 55 | 45 | 0 | 15 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.7% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

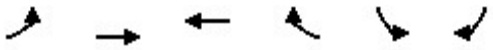
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 46 | 31 | 10 | 10 | 4 |
| Future Vol, veh/h | 4 | 46 | 31 | 10 | 10 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 51 | 34 | 11 | 11 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 45 | 0 | - | 0 | 99 | 40 |
| Stage 1 | - | - | - | - | 40 | - |
| Stage 2 | - | - | - | - | 59 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1563 | - | - | - | 900 | 1031 |
| Stage 1 | - | - | - | - | 982 | - |
| Stage 2 | - | - | - | - | 964 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1563 | - | - | - | 897 | 1031 |
| Mov Cap-2 Maneuver | - | - | - | - | 897 | - |
| Stage 1 | - | - | - | - | 979 | - |
| Stage 2 | - | - | - | - | 964 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.6 | 0 | 8.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1563 | - | - | - | 932 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.017 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 37 | 21 | 10 | 9 | 4 |
| Future Volume (vph) | 4 | 37 | 21 | 10 | 9 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.956 | | 0.961 | |
| Flt Protected | | 0.996 | | | 0.966 | |
| Satd. Flow (prot) | 0 | 1855 | 1781 | 0 | 1729 | 0 |
| Flt Permitted | | 0.996 | | | 0.966 | |
| Satd. Flow (perm) | 0 | 1855 | 1781 | 0 | 1729 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 1014 | 150 | | 1156 | |
| Travel Time (s) | | 27.7 | 4.1 | | 31.5 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 4 | 41 | 23 | 11 | 10 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 45 | 34 | 0 | 14 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 37 | 21 | 10 | 9 | 4 |
| Future Vol, veh/h | 4 | 37 | 21 | 10 | 9 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 41 | 23 | 11 | 10 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 34 | 0 | - | 0 | 78 | 29 |
| Stage 1 | - | - | - | - | 29 | - |
| Stage 2 | - | - | - | - | 49 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1578 | - | - | - | 925 | 1046 |
| Stage 1 | - | - | - | - | 994 | - |
| Stage 2 | - | - | - | - | 973 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1578 | - | - | - | 922 | 1046 |
| Mov Cap-2 Maneuver | - | - | - | - | 922 | - |
| Stage 1 | - | - | - | - | 991 | - |
| Stage 2 | - | - | - | - | 973 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.7 | 0 | 8.8 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1578 | - | - | - | 957 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.015 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.8 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 10 | 10 | 7 | 300 | 411 | 10 |
| Future Volume (vph) | 10 | 10 | 7 | 300 | 411 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.932 | | | | 0.997 | |
| Flt Protected | 0.976 | | | 0.999 | | |
| Satd. Flow (prot) | 1694 | 0 | 0 | 1861 | 1857 | 0 |
| Flt Permitted | 0.976 | | | 0.999 | | |
| Satd. Flow (perm) | 1694 | 0 | 0 | 1861 | 1857 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1119 | 1224 | |
| Travel Time (s) | 14.9 | | | 21.8 | 23.8 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 11 | 11 | 8 | 333 | 457 | 11 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 22 | 0 | 0 | 341 | 468 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 32.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

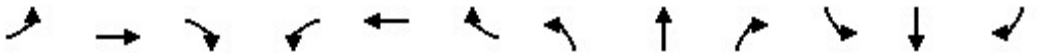
| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 10 | 7 | 300 | 411 | 10 |
| Future Vol, veh/h | 10 | 10 | 7 | 300 | 411 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 11 | 8 | 333 | 457 | 11 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 812 | 463 | 468 | 0 | - | 0 |
| Stage 1 | 463 | - | - | - | - | - |
| Stage 2 | 349 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 348 | 599 | 1094 | - | - | - |
| Stage 1 | 634 | - | - | - | - | - |
| Stage 2 | 714 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 345 | 599 | 1094 | - | - | - |
| Mov Cap-2 Maneuver | 345 | - | - | - | - | - |
| Stage 1 | 628 | - | - | - | - | - |
| Stage 2 | 714 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 13.7 | 0.2 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1094 | - | 438 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | 0.051 | - | - |
| HCM Control Delay (s) | 8.3 | 0 | 13.7 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 20 | 7 | 51 | 4 | 8 | 9 | 26 | 1448 | 11 | 8 | 1628 | 24 |
| Future Volume (vph) | 20 | 7 | 51 | 4 | 8 | 9 | 26 | 1448 | 11 | 8 | 1628 | 24 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.912 | | | 0.941 | | | 0.999 | | | 0.998 | |
| Flt Protected | | 0.988 | | | 0.991 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1668 | 0 | 0 | 1737 | 0 | 1770 | 3536 | 0 | 1770 | 3532 | 0 |
| Flt Permitted | | 0.988 | | | 0.991 | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 1668 | 0 | 0 | 1737 | 0 | 1770 | 3536 | 0 | 1770 | 3532 | 0 |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1151 | | | 1090 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 15.7 | | | 14.9 | |
| 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 |
| Heavy Vehicles (%) | 2% | 2% | 3% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| Adj. Flow (vph) | 22 | 8 | 57 | 4 | 9 | 10 | 29 | 1609 | 12 | 9 | 1809 | 27 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 87 | 0 | 0 | 23 | 0 | 29 | 1621 | 0 | 9 | 1836 | 0 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization | 59.3% | ICU Level of Service | B |
| Analysis Period (min) | 15 | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3 |

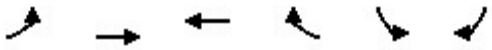
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 20 | 7 | 51 | 4 | 8 | 9 | 26 | 1448 | 11 | 8 | 1628 | 24 |
| Future Vol, veh/h | 20 | 7 | 51 | 4 | 8 | 9 | 26 | 1448 | 11 | 8 | 1628 | 24 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 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 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 8 | 57 | 4 | 9 | 10 | 29 | 1609 | 12 | 9 | 1809 | 27 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 2708 | 3520 | 918 | 2600 | 3527 | 811 | 1836 | 0 | 0 | 1621 | 0 | 0 |
| Stage 1 | 1841 | 1841 | - | 1673 | 1673 | - | - | - | - | - | - | - |
| Stage 2 | 867 | 1679 | - | 927 | 1854 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.54 | 6.54 | 6.96 | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.54 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 4.02 | 3.33 | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | ~ 10 | ~ 6 | 272 | 12 | ~ 6 | 322 | 328 | - | - | 398 | - | - |
| Stage 1 | 78 | 124 | - | 99 | 151 | - | - | - | - | - | - | - |
| Stage 2 | 314 | 150 | - | 289 | 122 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | ~ 8 | ~ 5 | 272 | 8 | ~ 5 | 322 | 328 | - | - | 398 | - | - |
| Mov Cap-2 Maneuver | 53 | 59 | - | 58 | 52 | - | - | - | - | - | - | - |
| Stage 1 | 71 | 121 | - | 90 | 138 | - | - | - | - | - | - | - |
| Stage 2 | 259 | 137 | - | 209 | 119 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 99.7 | 63.6 | 0.3 | 0.1 |
| HCM LOS | F | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 328 | - | - | 114 | 84 | 398 | - | - |
| HCM Lane V/C Ratio | 0.088 | - | - | 0.76 | 0.278 | 0.022 | - | - |
| HCM Control Delay (s) | 17 | - | - | 99.7 | 63.6 | 14.3 | - | - |
| HCM Lane LOS | C | - | - | F | F | B | - | - |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 4.2 | 1 | 0.1 | - | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 63 | 40 | 18 | 15 | 4 |
| Future Volume (vph) | 4 | 63 | 40 | 18 | 15 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.958 | | 0.974 | |
| Flt Protected | | 0.997 | | | 0.961 | |
| Satd. Flow (prot) | 0 | 1857 | 1785 | 0 | 1744 | 0 |
| Flt Permitted | | 0.997 | | | 0.961 | |
| Satd. Flow (perm) | 0 | 1857 | 1785 | 0 | 1744 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 150 | 290 | | 1082 | |
| Travel Time (s) | | 4.1 | 7.9 | | 29.5 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 4 | 70 | 44 | 20 | 17 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 74 | 64 | 0 | 21 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 16.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

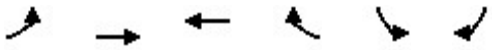
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 63 | 40 | 18 | 15 | 4 |
| Future Vol, veh/h | 4 | 63 | 40 | 18 | 15 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 70 | 44 | 20 | 17 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 64 | 0 | - | 0 | 132 | 54 |
| Stage 1 | - | - | - | - | 54 | - |
| Stage 2 | - | - | - | - | 78 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1538 | - | - | - | 862 | 1013 |
| Stage 1 | - | - | - | - | 969 | - |
| Stage 2 | - | - | - | - | 945 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1538 | - | - | - | 859 | 1013 |
| Mov Cap-2 Maneuver | - | - | - | - | 859 | - |
| Stage 1 | - | - | - | - | 966 | - |
| Stage 2 | - | - | - | - | 945 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 9.2 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1538 | - | - | - | 887 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.024 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 9.2 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 49 | 22 | 18 | 14 | 4 |
| Future Volume (vph) | 4 | 49 | 22 | 18 | 14 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.939 | | 0.973 | |
| Flt Protected | | 0.997 | | | 0.962 | |
| Satd. Flow (prot) | 0 | 1857 | 1749 | 0 | 1744 | 0 |
| Flt Permitted | | 0.997 | | | 0.962 | |
| Satd. Flow (perm) | 0 | 1857 | 1749 | 0 | 1744 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 1014 | 150 | | 1156 | |
| Travel Time (s) | | 27.7 | 4.1 | | 31.5 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 4 | 54 | 24 | 20 | 16 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 58 | 44 | 0 | 20 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 49 | 22 | 18 | 14 | 4 |
| Future Vol, veh/h | 4 | 49 | 22 | 18 | 14 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 54 | 24 | 20 | 16 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 44 | 0 | - | 0 | 96 | 34 |
| Stage 1 | - | - | - | - | 34 | - |
| Stage 2 | - | - | - | - | 62 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1564 | - | - | - | 903 | 1039 |
| Stage 1 | - | - | - | - | 988 | - |
| Stage 2 | - | - | - | - | 961 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1564 | - | - | - | 900 | 1039 |
| Mov Cap-2 Maneuver | - | - | - | - | 900 | - |
| Stage 1 | - | - | - | - | 985 | - |
| Stage 2 | - | - | - | - | 961 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.6 | 0 | 9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1564 | - | - | - | 928 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.022 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 4 | 4 | 107 | 127 | 4 |
| Future Volume (vph) | 4 | 4 | 4 | 107 | 127 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.932 | | | | 0.996 | |
| Flt Protected | 0.976 | | | 0.998 | | |
| Satd. Flow (prot) | 1694 | 0 | 0 | 1759 | 1787 | 0 |
| Flt Permitted | 0.976 | | | 0.998 | | |
| Satd. Flow (perm) | 1694 | 0 | 0 | 1759 | 1787 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1106 | 1033 | |
| Travel Time (s) | 14.9 | | | 21.5 | 20.1 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 8% | 6% | 2% |
| Adj. Flow (vph) | 4 | 4 | 4 | 119 | 141 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 8 | 0 | 0 | 123 | 145 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 18.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 4 | 4 | 107 | 127 | 4 |
| Future Vol, veh/h | 4 | 4 | 4 | 107 | 127 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 8 | 6 | 2 |
| Mvmt Flow | 4 | 4 | 4 | 119 | 141 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 270 | 143 | 145 | 0 | - | 0 |
| Stage 1 | 143 | - | - | - | - | - |
| Stage 2 | 127 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 719 | 905 | 1437 | - | - | - |
| Stage 1 | 884 | - | - | - | - | - |
| Stage 2 | 899 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 717 | 905 | 1437 | - | - | - |
| Mov Cap-2 Maneuver | 717 | - | - | - | - | - |
| Stage 1 | 881 | - | - | - | - | - |
| Stage 2 | 899 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.6 | 0.3 | 0 |
| HCM LOS | A | | |

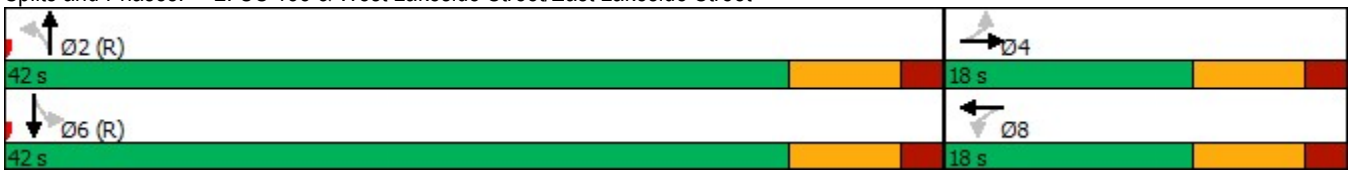
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1437 | - | 800 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.011 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 9.6 | - | - |
| HCM Lane LOS | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |

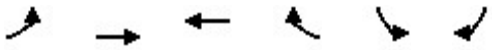
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 19 | 4 | 29 | 4 | 4 | 4 | 15 | 931 | 4 | 4 | 899 | 14 |
| Future Volume (vph) | 19 | 4 | 29 | 4 | 4 | 4 | 15 | 931 | 4 | 4 | 899 | 14 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.924 | | | 0.955 | | | 0.999 | | | 0.998 | |
| Flt Protected | | 0.982 | | | 0.984 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1628 | 0 | 0 | 1750 | 0 | 1770 | 3501 | 0 | 1770 | 3465 | 0 |
| Flt Permitted | | 0.874 | | | 0.867 | | 0.267 | | | 0.259 | | |
| Satd. Flow (perm) | 0 | 1449 | 0 | 0 | 1542 | 0 | 497 | 3501 | 0 | 482 | 3465 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1057 | | | 1026 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 14.4 | | | 14.0 | |
| 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 |
| Heavy Vehicles (%) | 8% | 2% | 5% | 2% | 2% | 2% | 2% | 3% | 2% | 2% | 4% | 2% |
| Adj. Flow (vph) | 21 | 4 | 32 | 4 | 4 | 4 | 17 | 1034 | 4 | 4 | 999 | 16 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 57 | 0 | 0 | 12 | 0 | 17 | 1038 | 0 | 4 | 1015 | 0 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 2 | 2 | | 6 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | |
| Minimum Split (s) | 14.0 | 14.0 | | 14.0 | 14.0 | | 21.0 | 21.0 | | 21.0 | 21.0 | |
| Total Split (s) | 18.0 | 18.0 | | 18.0 | 18.0 | | 42.0 | 42.0 | | 42.0 | 42.0 | |
| Total Split (%) | 30.0% | 30.0% | | 30.0% | 30.0% | | 70.0% | 70.0% | | 70.0% | 70.0% | |
| Maximum Green (s) | 11.0 | 11.0 | | 11.0 | 11.0 | | 35.0 | 35.0 | | 35.0 | 35.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | -2.0 | | | -2.0 | | -2.0 | -2.0 | | -2.0 | -2.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | None | None | | C-Min | C-Min | | C-Min | C-Min | |
| Act Effct Green (s) | | 10.2 | | | 10.2 | | 47.4 | 47.4 | | 47.4 | 47.4 | |
| Actuated g/C Ratio | | 0.17 | | | 0.17 | | 0.79 | 0.79 | | 0.79 | 0.79 | |
| v/c Ratio | | 0.23 | | | 0.05 | | 0.04 | 0.38 | | 0.01 | 0.37 | |
| Control Delay | | 23.4 | | | 20.3 | | 4.5 | 4.3 | | 4.2 | 4.3 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 23.4 | | | 20.3 | | 4.5 | 4.3 | | 4.2 | 4.3 | |
| LOS | | C | | | C | | A | A | | A | A | |
| Approach Delay | | 23.4 | | | 20.3 | | | 4.3 | | | 4.3 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach LOS | | C | | | C | | | A | | | A | |
| Queue Length 50th (ft) | | 18 | | | 4 | | 2 | 74 | | 0 | 72 | |
| Queue Length 95th (ft) | | 44 | | | 15 | | 8 | 125 | | 3 | 122 | |
| Internal Link Dist (ft) | | 210 | | | 468 | | | 977 | | | 946 | |
| Turn Bay Length (ft) | | | | | | | 100 | | | 100 | | |
| Base Capacity (vph) | | 313 | | | 334 | | 392 | 2766 | | 380 | 2737 | |
| Starvation Cap Reductn | | 0 | | | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.18 | | | 0.04 | | 0.04 | 0.38 | | 0.01 | 0.37 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 60 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 40 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.38 | | | |
| Intersection Signal Delay: 4.9 | | Intersection LOS: A | |
| Intersection Capacity Utilization 40.0% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2: US 158 & West Lakeside Street/East Lakeside Street





| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 43 | 22 | 11 | 9 | 4 |
| Future Volume (vph) | 4 | 43 | 22 | 11 | 9 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.955 | | 0.961 | |
| Flt Protected | | 0.996 | | | 0.966 | |
| Satd. Flow (prot) | 0 | 1855 | 1779 | 0 | 1729 | 0 |
| Flt Permitted | | 0.996 | | | 0.966 | |
| Satd. Flow (perm) | 0 | 1855 | 1779 | 0 | 1729 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 150 | 290 | | 1088 | |
| Travel Time (s) | | 4.1 | 7.9 | | 29.7 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 4 | 48 | 24 | 12 | 10 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 52 | 36 | 0 | 14 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

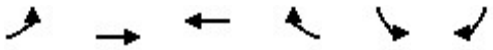
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 43 | 22 | 11 | 9 | 4 |
| Future Vol, veh/h | 4 | 43 | 22 | 11 | 9 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 48 | 24 | 12 | 10 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 36 | 0 | - | 0 | 86 | 30 |
| Stage 1 | - | - | - | - | 30 | - |
| Stage 2 | - | - | - | - | 56 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1575 | - | - | - | 915 | 1044 |
| Stage 1 | - | - | - | - | 993 | - |
| Stage 2 | - | - | - | - | 967 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1575 | - | - | - | 912 | 1044 |
| Mov Cap-2 Maneuver | - | - | - | - | 912 | - |
| Stage 1 | - | - | - | - | 990 | - |
| Stage 2 | - | - | - | - | 967 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.6 | 0 | 8.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1575 | - | - | - | 949 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.015 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 35 | 12 | 10 | 8 | 4 |
| Future Volume (vph) | 4 | 35 | 12 | 10 | 8 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.938 | | 0.958 | |
| Flt Protected | | 0.995 | | | 0.967 | |
| Satd. Flow (prot) | 0 | 1853 | 1747 | 0 | 1736 | 0 |
| Flt Permitted | | 0.995 | | | 0.967 | |
| Satd. Flow (perm) | 0 | 1853 | 1747 | 0 | 1736 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 1076 | 150 | | 1115 | |
| Travel Time (s) | | 29.3 | 4.1 | | 30.4 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 0% |
| Adj. Flow (vph) | 4 | 39 | 13 | 11 | 9 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 43 | 24 | 0 | 13 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 35 | 12 | 10 | 8 | 4 |
| Future Vol, veh/h | 4 | 35 | 12 | 10 | 8 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 4 | 39 | 13 | 11 | 9 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 24 | 0 | - | 0 | 66 | 19 |
| Stage 1 | - | - | - | - | 19 | - |
| Stage 2 | - | - | - | - | 47 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.3 |
| Pot Cap-1 Maneuver | 1591 | - | - | - | 939 | 1065 |
| Stage 1 | - | - | - | - | 1004 | - |
| Stage 2 | - | - | - | - | 975 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1591 | - | - | - | 936 | 1065 |
| Mov Cap-2 Maneuver | - | - | - | - | 936 | - |
| Stage 1 | - | - | - | - | 1001 | - |
| Stage 2 | - | - | - | - | 975 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.7 | 0 | 8.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1591 | - | - | - | 975 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.014 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.7 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 6 | 13 | 6 | 216 | 258 | 9 |
| Future Volume (vph) | 6 | 13 | 6 | 216 | 258 | 9 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.910 | | | | 0.995 | |
| Flt Protected | 0.984 | | | 0.999 | | |
| Satd. Flow (prot) | 1668 | 0 | 0 | 1843 | 1853 | 0 |
| Flt Permitted | 0.984 | | | 0.999 | | |
| Satd. Flow (perm) | 1668 | 0 | 0 | 1843 | 1853 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1106 | 1033 | |
| Travel Time (s) | 14.9 | | | 21.5 | 20.1 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 3% | 2% | 2% |
| Adj. Flow (vph) | 7 | 14 | 7 | 240 | 287 | 10 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 21 | 0 | 0 | 247 | 297 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 26.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 6 | 13 | 6 | 216 | 258 | 9 |
| Future Vol, veh/h | 6 | 13 | 6 | 216 | 258 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 3 | 2 | 2 |
| Mvmt Flow | 7 | 14 | 7 | 240 | 287 | 10 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 546 | 292 | 297 | 0 | - | 0 |
| Stage 1 | 292 | - | - | - | - | - |
| Stage 2 | 254 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 499 | 747 | 1264 | - | - | - |
| Stage 1 | 758 | - | - | - | - | - |
| Stage 2 | 788 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 496 | 747 | 1264 | - | - | - |
| Mov Cap-2 Maneuver | 496 | - | - | - | - | - |
| Stage 1 | 753 | - | - | - | - | - |
| Stage 2 | 788 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.8 | 0.2 | 0 |
| HCM LOS | B | | |

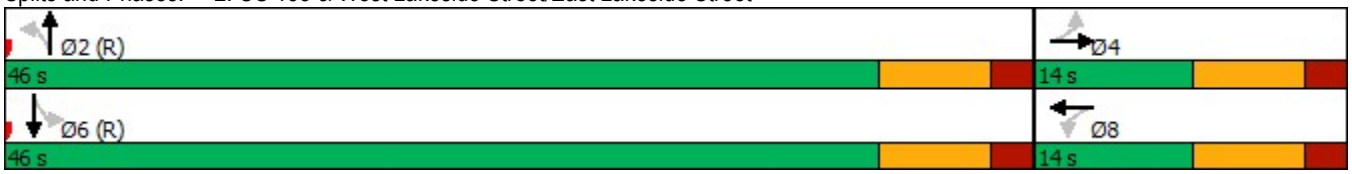
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1264 | - | 644 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | 0.033 | - | - |
| HCM Control Delay (s) | 7.9 | 0 | 10.8 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

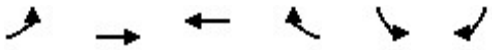
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 14 | 4 | 38 | 4 | 6 | 7 | 20 | 1428 | 4 | 8 | 1304 | 15 |
| Future Volume (vph) | 14 | 4 | 38 | 4 | 6 | 7 | 20 | 1428 | 4 | 8 | 1304 | 15 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.909 | | | 0.943 | | | | | | 0.998 | |
| Flt Protected | | 0.987 | | | 0.990 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1618 | 0 | 0 | 1739 | 0 | 1770 | 3539 | 0 | 1770 | 3527 | 0 |
| Flt Permitted | | 0.906 | | | 0.910 | | 0.149 | | | 0.124 | | |
| Satd. Flow (perm) | 0 | 1485 | 0 | 0 | 1598 | 0 | 278 | 3539 | 0 | 231 | 3527 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1057 | | | 1026 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 14.4 | | | 14.0 | |
| 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 |
| Heavy Vehicles (%) | 2% | 2% | 7% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 14% |
| Adj. Flow (vph) | 16 | 4 | 42 | 4 | 7 | 8 | 22 | 1587 | 4 | 9 | 1449 | 17 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 62 | 0 | 0 | 19 | 0 | 22 | 1591 | 0 | 9 | 1466 | 0 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 2 | 2 | | 6 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | |
| Minimum Split (s) | 14.0 | 14.0 | | 14.0 | 14.0 | | 21.0 | 21.0 | | 21.0 | 21.0 | |
| Total Split (s) | 14.0 | 14.0 | | 14.0 | 14.0 | | 46.0 | 46.0 | | 46.0 | 46.0 | |
| Total Split (%) | 23.3% | 23.3% | | 23.3% | 23.3% | | 76.7% | 76.7% | | 76.7% | 76.7% | |
| Maximum Green (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 39.0 | 39.0 | | 39.0 | 39.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | -2.0 | | | -2.0 | | -2.0 | -2.0 | | -2.0 | -2.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | None | None | | C-Min | C-Min | | C-Min | C-Min | |
| Act Effct Green (s) | | 9.2 | | | 9.2 | | 48.4 | 48.4 | | 48.4 | 48.4 | |
| Actuated g/C Ratio | | 0.15 | | | 0.15 | | 0.81 | 0.81 | | 0.81 | 0.81 | |
| v/c Ratio | | 0.27 | | | 0.08 | | 0.10 | 0.56 | | 0.05 | 0.51 | |
| Control Delay | | 26.1 | | | 22.8 | | 4.5 | 5.0 | | 4.0 | 4.6 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 26.1 | | | 22.8 | | 4.5 | 5.0 | | 4.0 | 4.6 | |
| LOS | | C | | | C | | A | A | | A | A | |
| Approach Delay | | 26.1 | | | 22.8 | | | 5.0 | | | 4.6 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach LOS | | C | | | C | | | A | | | A | |
| Queue Length 50th (ft) | | 20 | | | 6 | | 2 | 146 | | 1 | 126 | |
| Queue Length 95th (ft) | | 51 | | | 22 | | 9 | 193 | | 5 | 166 | |
| Internal Link Dist (ft) | | 210 | | | 468 | | | 977 | | | 946 | |
| Turn Bay Length (ft) | | | | | | | 100 | | | 100 | | |
| Base Capacity (vph) | | 226 | | | 243 | | 225 | 2866 | | 187 | 2857 | |
| Starvation Cap Reductn | | 0 | | | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.27 | | | 0.08 | | 0.10 | 0.56 | | 0.05 | 0.51 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 60 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 45 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.56 | | | |
| Intersection Signal Delay: 5.3 | | Intersection LOS: A | |
| Intersection Capacity Utilization 53.8% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2: US 158 & West Lakeside Street/East Lakeside Street





| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 46 | 31 | 10 | 10 | 4 |
| Future Volume (vph) | 4 | 46 | 31 | 10 | 10 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.967 | | 0.964 | |
| Flt Protected | | 0.996 | | | 0.965 | |
| Satd. Flow (prot) | 0 | 1855 | 1801 | 0 | 1742 | 0 |
| Flt Permitted | | 0.996 | | | 0.965 | |
| Satd. Flow (perm) | 0 | 1855 | 1801 | 0 | 1742 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 150 | 290 | | 1088 | |
| Travel Time (s) | | 4.1 | 7.9 | | 29.7 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 0% |
| Adj. Flow (vph) | 4 | 51 | 34 | 11 | 11 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 55 | 45 | 0 | 15 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.7% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

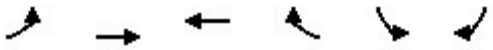
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 46 | 31 | 10 | 10 | 4 |
| Future Vol, veh/h | 4 | 46 | 31 | 10 | 10 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 4 | 51 | 34 | 11 | 11 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 45 | 0 | - | 0 | 99 | 40 |
| Stage 1 | - | - | - | - | 40 | - |
| Stage 2 | - | - | - | - | 59 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.3 |
| Pot Cap-1 Maneuver | 1563 | - | - | - | 900 | 1037 |
| Stage 1 | - | - | - | - | 982 | - |
| Stage 2 | - | - | - | - | 964 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1563 | - | - | - | 897 | 1037 |
| Mov Cap-2 Maneuver | - | - | - | - | 897 | - |
| Stage 1 | - | - | - | - | 979 | - |
| Stage 2 | - | - | - | - | 964 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.6 | 0 | 8.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1563 | - | - | - | 933 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.017 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 37 | 21 | 10 | 9 | 4 |
| Future Volume (vph) | 4 | 37 | 21 | 10 | 9 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.956 | | 0.961 | |
| Flt Protected | | 0.996 | | | 0.966 | |
| Satd. Flow (prot) | 0 | 1855 | 1781 | 0 | 1739 | 0 |
| Flt Permitted | | 0.996 | | | 0.966 | |
| Satd. Flow (perm) | 0 | 1855 | 1781 | 0 | 1739 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 1076 | 150 | | 1115 | |
| Travel Time (s) | | 29.3 | 4.1 | | 30.4 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 0% |
| Adj. Flow (vph) | 4 | 41 | 23 | 11 | 10 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 45 | 34 | 0 | 14 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.3% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 37 | 21 | 10 | 9 | 4 |
| Future Vol, veh/h | 4 | 37 | 21 | 10 | 9 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 4 | 41 | 23 | 11 | 10 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 34 | 0 | - | 0 | 78 | 29 |
| Stage 1 | - | - | - | - | 29 | - |
| Stage 2 | - | - | - | - | 49 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.3 |
| Pot Cap-1 Maneuver | 1578 | - | - | - | 925 | 1052 |
| Stage 1 | - | - | - | - | 994 | - |
| Stage 2 | - | - | - | - | 973 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1578 | - | - | - | 922 | 1052 |
| Mov Cap-2 Maneuver | - | - | - | - | 922 | - |
| Stage 1 | - | - | - | - | 991 | - |
| Stage 2 | - | - | - | - | 973 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.7 | 0 | 8.8 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1578 | - | - | - | 958 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.015 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.8 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 10 | 10 | 7 | 300 | 411 | 10 |
| Future Volume (vph) | 10 | 10 | 7 | 300 | 411 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.932 | | | | 0.997 | |
| Flt Protected | 0.976 | | | 0.999 | | |
| Satd. Flow (prot) | 1694 | 0 | 0 | 1861 | 1857 | 0 |
| Flt Permitted | 0.976 | | | 0.999 | | |
| Satd. Flow (perm) | 1694 | 0 | 0 | 1861 | 1857 | 0 |
| Link Speed (mph) | 25 | | | 35 | 35 | |
| Link Distance (ft) | 548 | | | 1106 | 1033 | |
| Travel Time (s) | 14.9 | | | 21.5 | 20.1 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 11 | 11 | 8 | 333 | 457 | 11 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 22 | 0 | 0 | 341 | 468 | 0 |
| Sign Control | Stop | | | Free | Free | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 32.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 10 | 7 | 300 | 411 | 10 |
| Future Vol, veh/h | 10 | 10 | 7 | 300 | 411 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 11 | 8 | 333 | 457 | 11 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 812 | 463 | 468 | 0 | - | 0 |
| Stage 1 | 463 | - | - | - | - | - |
| Stage 2 | 349 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 348 | 599 | 1094 | - | - | - |
| Stage 1 | 634 | - | - | - | - | - |
| Stage 2 | 714 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 345 | 599 | 1094 | - | - | - |
| Mov Cap-2 Maneuver | 345 | - | - | - | - | - |
| Stage 1 | 628 | - | - | - | - | - |
| Stage 2 | 714 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 13.7 | 0.2 | 0 |
| HCM LOS | B | | |

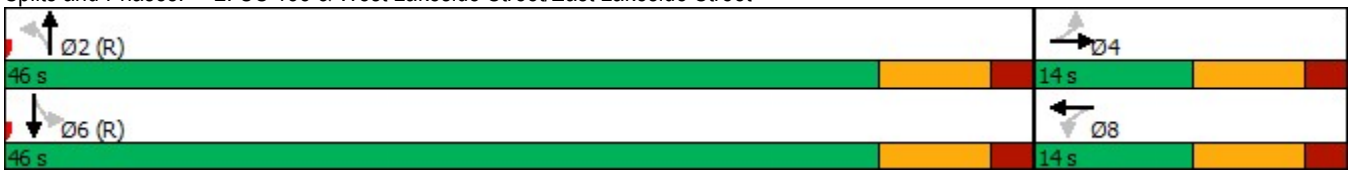
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1094 | - | 438 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | 0.051 | - | - |
| HCM Control Delay (s) | 8.3 | 0 | 13.7 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

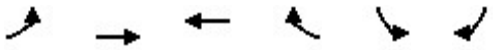
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 20 | 7 | 51 | 4 | 8 | 9 | 26 | 1448 | 11 | 8 | 1628 | 24 |
| Future Volume (vph) | 20 | 7 | 51 | 4 | 8 | 9 | 26 | 1448 | 11 | 8 | 1628 | 24 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 100 | | 0 | 100 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 100 | | | 100 | | | 100 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Frt | | 0.912 | | | 0.941 | | | 0.999 | | | 0.998 | |
| Flt Protected | | 0.988 | | | 0.991 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1668 | 0 | 0 | 1737 | 0 | 1770 | 3536 | 0 | 1770 | 3532 | 0 |
| Flt Permitted | | 0.906 | | | 0.937 | | 0.095 | | | 0.114 | | |
| Satd. Flow (perm) | 0 | 1529 | 0 | 0 | 1642 | 0 | 177 | 3536 | 0 | 212 | 3532 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 25 | | | 25 | | | 50 | | | 50 | |
| Link Distance (ft) | | 290 | | | 548 | | | 1057 | | | 1026 | |
| Travel Time (s) | | 7.9 | | | 14.9 | | | 14.4 | | | 14.0 | |
| 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 |
| Heavy Vehicles (%) | 2% | 2% | 3% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% | 2% |
| Adj. Flow (vph) | 22 | 8 | 57 | 4 | 9 | 10 | 29 | 1609 | 12 | 9 | 1809 | 27 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 87 | 0 | 0 | 23 | 0 | 29 | 1621 | 0 | 9 | 1836 | 0 |
| Turn Type | Perm | NA | | Perm | NA | | Perm | NA | | Perm | NA | |
| Protected Phases | | 4 | | | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 2 | 2 | | 6 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | |
| Minimum Split (s) | 14.0 | 14.0 | | 14.0 | 14.0 | | 21.0 | 21.0 | | 21.0 | 21.0 | |
| Total Split (s) | 14.0 | 14.0 | | 14.0 | 14.0 | | 46.0 | 46.0 | | 46.0 | 46.0 | |
| Total Split (%) | 23.3% | 23.3% | | 23.3% | 23.3% | | 76.7% | 76.7% | | 76.7% | 76.7% | |
| Maximum Green (s) | 7.0 | 7.0 | | 7.0 | 7.0 | | 39.0 | 39.0 | | 39.0 | 39.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | -2.0 | | | -2.0 | | -2.0 | -2.0 | | -2.0 | -2.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| Recall Mode | None | None | | None | None | | C-Min | C-Min | | C-Min | C-Min | |
| Act Effct Green (s) | | 9.1 | | | 9.1 | | 44.7 | 44.7 | | 44.7 | 44.7 | |
| Actuated g/C Ratio | | 0.15 | | | 0.15 | | 0.74 | 0.74 | | 0.74 | 0.74 | |
| v/c Ratio | | 0.38 | | | 0.09 | | 0.22 | 0.61 | | 0.06 | 0.70 | |
| Control Delay | | 28.4 | | | 23.1 | | 8.6 | 6.2 | | 4.1 | 7.5 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 28.4 | | | 23.1 | | 8.6 | 6.2 | | 4.1 | 7.5 | |
| LOS | | C | | | C | | A | A | | A | A | |
| Approach Delay | | 28.4 | | | 23.1 | | | 6.3 | | | 7.4 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach LOS | | C | | | C | | | A | | | A | |
| Queue Length 50th (ft) | | 29 | | | 7 | | 3 | 142 | | 1 | 182 | |
| Queue Length 95th (ft) | | 66 | | | 25 | | 16 | 200 | | 5 | 260 | |
| Internal Link Dist (ft) | | 210 | | | 468 | | | 977 | | | 946 | |
| Turn Bay Length (ft) | | | | | | | 100 | | | 100 | | |
| Base Capacity (vph) | | 230 | | | 248 | | 131 | 2640 | | 158 | 2637 | |
| Starvation Cap Reductn | | 0 | | | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | | 0.38 | | | 0.09 | | 0.22 | 0.61 | | 0.06 | 0.70 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 60 | | | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 55 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.70 | | | |
| Intersection Signal Delay: 7.5 | | Intersection LOS: A | |
| Intersection Capacity Utilization 61.0% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2: US 158 & West Lakeside Street/East Lakeside Street





| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 63 | 40 | 18 | 15 | 4 |
| Future Volume (vph) | 4 | 63 | 40 | 18 | 15 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.958 | | 0.974 | |
| Flt Protected | | 0.997 | | | 0.961 | |
| Satd. Flow (prot) | 0 | 1857 | 1785 | 0 | 1750 | 0 |
| Flt Permitted | | 0.997 | | | 0.961 | |
| Satd. Flow (perm) | 0 | 1857 | 1785 | 0 | 1750 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 150 | 290 | | 1088 | |
| Travel Time (s) | | 4.1 | 7.9 | | 29.7 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles (%) | 2% | 2% | 2% | 2% | 2% | 0% |
| Adj. Flow (vph) | 4 | 70 | 44 | 20 | 17 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 74 | 64 | 0 | 21 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 16.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

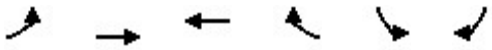
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 63 | 40 | 18 | 15 | 4 |
| Future Vol, veh/h | 4 | 63 | 40 | 18 | 15 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 4 | 70 | 44 | 20 | 17 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 64 | 0 | - | 0 | 132 | 54 |
| Stage 1 | - | - | - | - | 54 | - |
| Stage 2 | - | - | - | - | 78 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.3 |
| Pot Cap-1 Maneuver | 1538 | - | - | - | 862 | 1019 |
| Stage 1 | - | - | - | - | 969 | - |
| Stage 2 | - | - | - | - | 945 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1538 | - | - | - | 859 | 1019 |
| Mov Cap-2 Maneuver | - | - | - | - | 859 | - |
| Stage 1 | - | - | - | - | 966 | - |
| Stage 2 | - | - | - | - | 945 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 9.2 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1538 | - | - | - | 888 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.024 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 9.2 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 4 | 49 | 22 | 18 | 14 | 4 |
| Future Volume (vph) | 4 | 49 | 22 | 18 | 14 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.939 | | 0.973 | |
| Flt Protected | | 0.997 | | | 0.962 | |
| Satd. Flow (prot) | 0 | 1857 | 1749 | 0 | 1744 | 0 |
| Flt Permitted | | 0.997 | | | 0.962 | |
| Satd. Flow (perm) | 0 | 1857 | 1749 | 0 | 1744 | 0 |
| Link Speed (mph) | | 25 | 25 | | 25 | |
| Link Distance (ft) | | 1076 | 150 | | 1115 | |
| Travel Time (s) | | 29.3 | 4.1 | | 30.4 | |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph) | 4 | 54 | 24 | 20 | 16 | 4 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 58 | 44 | 0 | 20 | 0 |
| Sign Control | | Free | Free | | Stop | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Control Type: Unsignalized | | | |
| Intersection Capacity Utilization 15.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 49 | 22 | 18 | 14 | 4 |
| Future Vol, veh/h | 4 | 49 | 22 | 18 | 14 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 54 | 24 | 20 | 16 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 44 | 0 | - | 0 | 96 | 34 |
| Stage 1 | - | - | - | - | 34 | - |
| Stage 2 | - | - | - | - | 62 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1564 | - | - | - | 903 | 1039 |
| Stage 1 | - | - | - | - | 988 | - |
| Stage 2 | - | - | - | - | 961 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1564 | - | - | - | 900 | 1039 |
| Mov Cap-2 Maneuver | - | - | - | - | 900 | - |
| Stage 1 | - | - | - | - | 985 | - |
| Stage 2 | - | - | - | - | 961 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.6 | 0 | 9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1564 | - | - | - | 928 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.022 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

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