

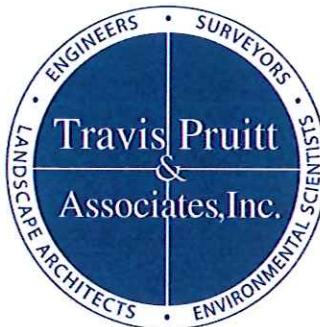
TRIP GENERATION MEMORANDUM UPDATE

for

Madison Trace Residential Neighborhood

215 Shadybrook Drive
Parcel ID 233 008A
Athens, Georgia 30605

TPA Job No. 1-23-0508



1586 Mars Hill Road, Suite A
Watkinsville, Georgia 30677
(706) 310-1551



FOR THE FIRM
Travis Pruitt & Associates, Inc.

Issued: 5/2/2024



Trip Generation Memorandum-Madison Trace Residential Neighborhood

The purpose of this memorandum is to address transportation comments that were provided by the Athens-Clarke County Transportation and Public Works Department Staff and are as follows:

- Please provide a Traffic Impact Analysis that includes a signal warrant analysis for the following street intersections:
 - o Lexington Road / Seagraves Drive

The proposed development is a mixed density residential (RM-1) neighborhood located on tax parcel 233 008A at 215 Shadybrook Drive in Athens-Clarke County, Georgia. The property is a 23.474-acre undeveloped lot. The proposed development will include 61 cottage units. The project will include a private internal roadway network that connects the proposed development to Seagraves Drive, detention and stormwater quality facilities, and a clubhouse/leasing office.

The development will be accessed by connecting Seagraves Drive to the development via parcel 233A4 A099. There will be an additional access point for emergency services located between Tax Parcel 233A4 A025 and 233A4 A026. Each of the project access points will be a 2-lane road, consisting of a single ingress lane and a single egress lane. The emergency services access is proposed with a 30-foot easement and the other access will be private. All roads will be constructed in accordance with ACC Standards.

Figure 1 is a vicinity map for the subject property and Figure 2 is a site plan that shows the location of the proposed access points for the project.

Traffic Impact Analysis Thresholds and Signal Warrant Analysis Thresholds will be conducted for the intersections listed above.

TRAFFIC IMPACT ANALYSIS THRESHOLDS

Trip Generation

The accepted procedure for determining the trips generated by the development of a property based on the land use and intensity is to apply the rates or equations developed by the Institute of Transportation Engineers (ITE) as published in the Trip Generation Manual – 11th Edition. The rates or equations in this informational report are calculated from nationally collected data. This method was used to establish the trip generation for the proposed development.

The results of the trip generation for the Madison Trace Residential Neighborhood are given in Table 1.

Table 1. Trip Generation Results Madison Trace

| Land Use (ITE Code) | Intensity | Independent Variable | ADT 2-Way | AM Peak Hour | | | PM Peak Hour | | |
|---|-----------|----------------------|--------------|--------------|-----------|-----------|--------------|-----------|-----------|
| | | | | Enter | Exit | Total | Enter | Exit | Total |
| Single-Family Detached Housing (210) - Cottages | 61 | Dwelling Units | 414 | 7 | 19 | 26 | 19 | 14 | 33 |
| Total | | | 414 | 7 | 19 | 26 | 19 | 14 | 33 |

FIGURE 1
VICINITY MAP



1586 Mars Hill Road, Suite A
Athens, Georgia 30677
Phone: (706) 310-1551
Fax: (706) 310-1789
www.travispruitt.com

Contact Person:
Michael Greenlee
Mgreenlee@travispruitt.com

VICINITY MAP

MADISON TRACE S/D

215 SHADBROOK DRIVE
ATHENS CLARKE COUNTY GEORGIA

DATE: 10/24/2023

SCALE: NTS

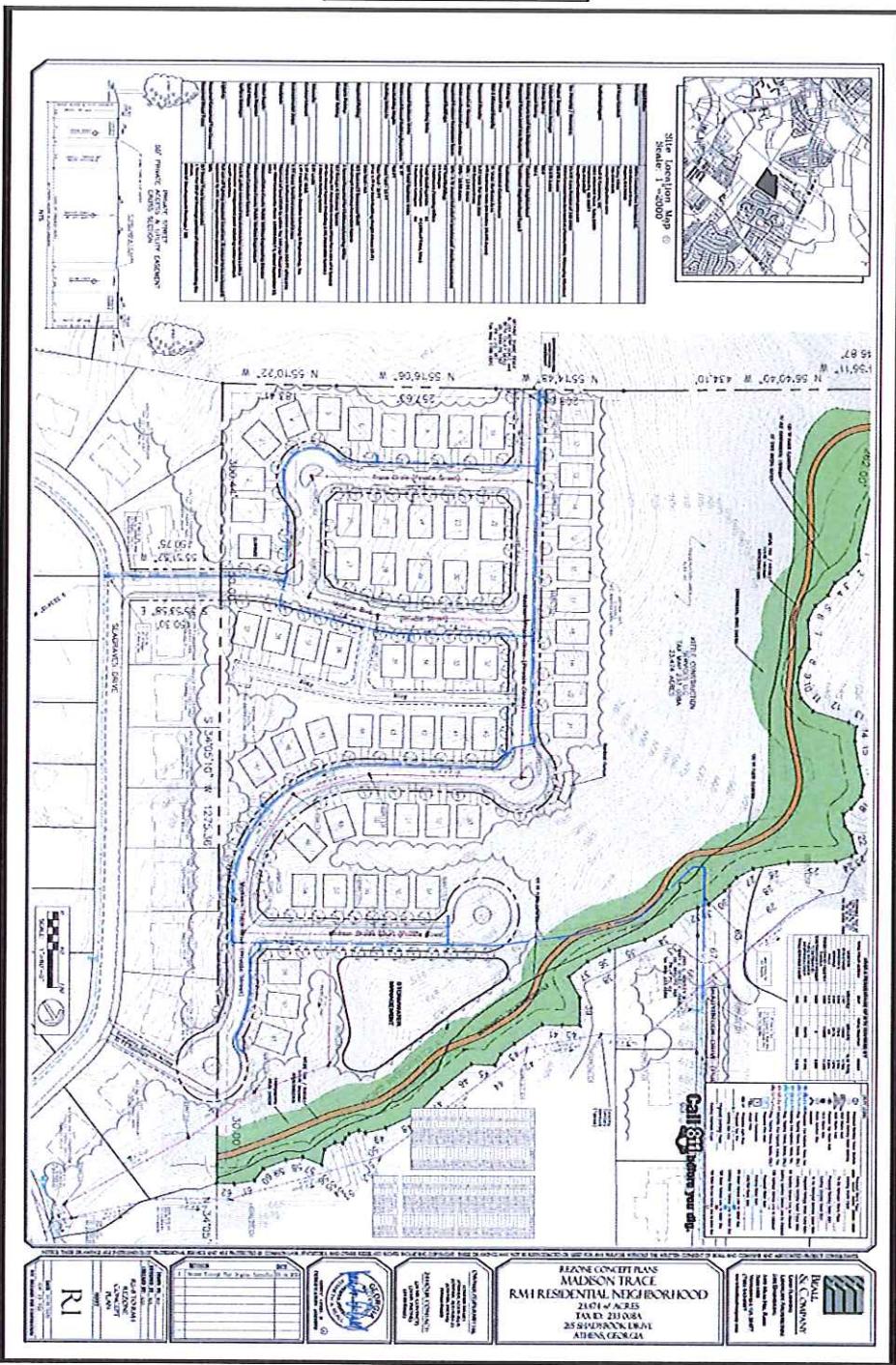
CN: 230508TRAFFIC

JN: 1-23-0508

FN:

Sheet No. FIGURE 1

FIGURE 2
CONCEPT PLAN



1586 Mars Hill Road, Suite A
Athens, Georgia 30677
Phone: (706) 310-1551
Fax: (706) 310-1789
www.travispruitt.com

Contact Person:
Michael Greenlee
Mgreenlee@travispruitt.com



ACC Traffic Impact Analysis Thresholds

Per Athens-Clarke County Code Sec. 9-25-5(A), "Transportation impact analysis shall be required for any proposed site development that can be reasonably expected to generate more than 1,000 vehicle trip ends during a single day and/or more than 100 vehicle trip ends during a single hour".

Analysis

The proposed residential development is expected to generate 414 average daily trips, 26 AM peak hour trips, and 33 PM peak hour trips based on the ITE Trip Generation Manual as shown in Table 1 above. Per the Athens-Clarke County Code the proposed values are less than the Athens-Clarke County thresholds.

Conclusion

Based on above analysis, a traffic impact analysis is not warranted because the proposed development does not exceed the standards listed by Athens-Clarke County Code.

SIGNAL WARRANT ANALYSIS THRESHOLDS

Methodology

The existing conditions were studied to determine the amount of vehicle trips generated from the existing infrastructure located along Seagraves Drive. Seagraves Drive consists of 8-Single-Family Detached dwelling units, 98-Single-Family Attached dwelling units and 1-Medical Clinic. The results of the trip generation for Seagraves Drive are given in Table 2.

Table 2. Trip Generation Results Seagraves Drive

| Land Use (ITE Code) | Intensity | Independent Variable | ADT 2-Way | AM Peak Hour | | | PM Peak Hour | | |
|--|-----------|----------------------|--------------|--------------|-----------|-----------|--------------|-----------|-----------|
| | | | | Enter | Exit | Total | Enter | Exit | Total |
| Single-Family Detached Housing (210) - Seagraves | 8 | Dwelling Units | 75 | 1 | 5 | 6 | 5 | 3 | 8 |
| Single-Family Attached Housing (215) - Seagraves | 98 | Dwelling Units | 706 | 12 | 35 | 47 | 33 | 23 | 56 |
| Medical Clinic (630) - Seagraves | 16.86 | 1000 Sq. Ft. GFA | 24 | 1 | 0 | 1 | 0 | 2 | 2 |
| Total | | | 805 | 14 | 40 | 54 | 38 | 28 | 66 |

Traffic from the proposed development will be combined with the existing traffic from Seagraves Drive. The results for the combined existing and proposed Seagraves Drive are given in Table 3.



Table 3. Trip Generation Results Segraves Drive

| Land Use (ITE Code) | Intensity | Trip Generation Seagraves Total | |
|--|-----------|---------------------------------|--------------|
| | | Independent Variable | ADT 2-Way |
| Single-Family Detached Housing (210) - Seagraves | 69 | Dwelling Units | 717 |
| Single-Family Attached Housing (215) - Seagraves | 98 | Dwelling Units | 706 |
| Medical Clinic (630) - Seagraves | 16.86 | 1000 Sq. Ft. GFA | 24 |
| Total | | | 1,446 |

The average daily traffic (ADT) data located in Table 3 was then used in the Vehicle Time-of-Day distribution data for Land Use ITE Codes 210, 215, and 630 from the ITE Trip Generation Manual, 11th Edition. The raw data is located in Figures 3, 4 and 5 respectively. From this data we were able to determine the Northbound "Total", "Entering", and "Exiting" trips based on the time period from 7:00am to 6:15pm for Seagraves Drive.

For the Eastbound and Westbound traffic, traffic counts were used from the Traffic Impact Study for 2400 Lexington Road Mixed-Use Development or now known as the "Atlas Athens" apartment complex. The proposed condition was used in order to account for the new development as well as the existing traffic. These counts are located in Figure 6.

All of the above data was compiled into a chart and shown in Figure 7.

Analysis

The project intersection, Lexington/Seagraves, has been analyzed for signal warrants as outlined in the U.S. Department of Transportation Federal Highway Administration Manual on Uniform Traffic Control Devices and signal spacing as outlined in the Georgia Department of Transportation (GDOT) Regulations for Driveway and Encroachment Control Manual. This intersection was evaluated to see if it met the requirements outlined in Warrant 1 and Warrant 2 in the MUTCD and signal spacing requirements in the GDOT Driveway Manual .

Warrant 1

Warrant 1 criteria are outlined in MUTCD Table 4C-1 below and the number of lanes that fits both intersections are outlined in yellow below.

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

| | | Condition A—Minimum Vehicular Volume | | | | | | | | Vehicles per hour on higher-volume minor-street approach (one direction only) | | | |
|---------------|---------------|---|------------------|------------------|------------------|--|------------------|------------------|------------------|---|------------------|------------------|------------------|
| | | Number of lanes for moving traffic on each approach | | | | Vehicles per hour on major street (total of both approaches) | | | | Vehicles per hour on higher-volume minor-street approach (one direction only) | | | |
| Major Street | Minor Street | 100% ^a | 80% ^b | 70% ^c | 56% ^d | 100% ^a | 80% ^b | 70% ^c | 56% ^d | 100% ^a | 80% ^b | 70% ^c | 56% ^d |
| 1..... | 1..... | 500 | 400 | 350 | 280 | 150 | 120 | 105 | 84 | | | | |
| 2 or more.... | 1..... | 600 | 480 | 420 | 336 | 150 | 120 | 105 | 84 | | | | |
| 2 or more.... | 2 or more.... | 600 | 480 | 420 | 336 | 200 | 160 | 140 | 112 | | | | |
| 1..... | 2 or more.... | 500 | 400 | 350 | 280 | 200 | 160 | 140 | 112 | | | | |

| Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use | | | | | | | | | |
|---|--------------------------------|----------|---------|--------------------------------|----------|---------|--------------------------------|----------|---------|
| Source: ITE Trip Generation Manual, 11th Edition | | | | | | | | | |
| Land Use Code | 210 | | | 210 | | | 210 | | |
| Land Use | Single-Family Detached Housing | | | Single-Family Detached Housing | | | Single-Family Detached Housing | | |
| Setting | General Urban/Suburban | | | General Urban/Suburban | | | General Urban/Suburban | | |
| Time Period | Wednesday | | | Saturday | | | Sunday | | |
| # Data Sets | 7 | | | 2 | | | 2 | | |
| | % of 24-Hour Vehicle Trips | | | % of 24-Hour Vehicle Trips | | | % of 24-Hour Vehicle Trips | | |
| Time | Total | Entering | Exiting | Total | Entering | Exiting | Total | Entering | Exiting |
| 12:00-1:00 AM | 0.3% | 0.5% | 0.2% | 0.8% | 0.6% | 1.0% | 0.6% | 0.6% | 0.6% |
| 1:00-2:00 AM | 0.2% | 0.2% | 0.1% | 0.4% | 0.4% | 0.2% | 0.6% | 1.2% | 0.6% |
| 2:00-3:00 AM | 0.2% | 0.3% | 0.1% | 0.3% | 0.4% | 0.2% | 0.0% | 0.0% | 0.0% |
| 3:00-4:00 AM | 0.2% | 0.2% | 0.2% | 0.5% | 0.4% | 0.6% | 0.3% | 0.2% | 0.6% |
| 4:00-5:00 AM | 0.6% | 0.3% | 0.8% | 0.5% | 0.6% | 0.4% | 0.0% | 0.0% | 0.0% |
| 5:00-6:00 AM | 1.2% | 0.5% | 2.0% | 1.0% | 0.8% | 1.2% | 1.8% | 1.8% | 1.8% |
| 6:00-7:00 AM | 3.7% | 1.6% | 5.8% | 1.0% | 0.4% | 1.5% | 1.5% | 1.8% | 1.2% |
| 7:00-8:00 AM | 6.5% | 3.1% | 10.0% | 2.0% | 0.8% | 3.3% | 1.8% | 0.6% | 3.0% |
| 8:00-9:00 AM | 0.5% | 1.1% | 1.6% | 1.8% | 2.3% | 5.2% | 4.7% | 0.6% | 9.0% |
| 9:00-10:00 AM | 4.6% | 3.3% | 5.8% | 5.5% | 5.6% | 6.0% | 4.7% | 3.5% | 6.0% |
| 10:00-11:00 AM | 4.9% | 4.2% | 5.6% | 5.2% | 6.2% | 6.2% | 3.5% | 3.5% | 6.0% |
| 11:00-12:00 PM | 5.3% | 5.4% | 5.1% | 7.2% | 8.7% | 5.8% | 7.2% | 8.7% | 7.2% |
| 12:00-1:00 PM | 5.7% | 5.7% | 5.7% | 7.2% | 7.3% | 8.1% | 9.2% | 10.5% | 7.0% |
| 1:00-2:00 PM | 6.1% | 6.1% | 6.0% | 8.1% | 7.1% | 9.0% | 9.8% | 10.5% | 9.0% |
| 2:00-3:00 PM | 6.0% | 7.1% | 6.1% | 8.0% | 8.7% | 7.3% | 5.9% | 5.8% | 6.0% |
| 3:00-4:00 PM | 7.5% | 8.7% | 6.2% | 9.2% | 9.8% | 8.7% | 4.4% | 5.8% | 3.0% |
| 4:00-5:00 PM | 8.5% | 10.5% | 7.4% | 6.2% | 6.5% | 5.4% | 8.3% | 8.2% | 8.4% |
| 5:00-6:00 PM | 8.7% | 10.0% | 7.3% | 8.4% | 9.6% | 7.1% | 9.1% | 11.1% | 8.4% |
| 6:00-7:00 PM | 7.2% | 8.5% | 6.0% | 7.3% | 7.8% | 6.5% | 6.2% | 6.2% | 7.0% |
| 7:00-8:00 PM | 2.1% | 2.1% | 1.0% | 1.7% | 1.5% | 1.9% | 0.3% | 0.6% | 0.0% |
| 8:00-9:00 PM | 1.6% | 1.6% | 1.0% | 2.4% | 2.4% | 2.1% | 0.3% | 0.6% | 0.0% |
| 9:00-10:00 PM | 1.8% | 2.1% | 1.0% | 1.7% | 1.5% | 1.5% | 1.5% | 1.8% | 1.2% |
| 10:00-11:00 PM | 1.0% | 1.3% | 0.6% | 1.4% | 1.5% | 1.3% | 0.0% | 0.0% | 0.0% |
| 11:00-12:00 AM | 0.0% | 0.0% | 0.0% | 1.1% | 0.8% | 1.2% | 0.0% | 0.0% | 0.0% |
| 12:00-1:00 AM | 0.3% | 0.5% | 0.2% | 0.8% | 0.6% | 1.0% | 0.6% | 0.6% | 0.6% |
| 12:15-1:15 AM | 0.4% | 0.4% | 0.2% | 0.6% | 0.6% | 0.5% | 0.6% | 0.6% | 0.6% |
| 1:30-2:30 AM | 0.2% | 0.3% | 0.1% | 0.5% | 0.8% | 0.2% | 0.3% | 0.6% | 0.2% |
| 2:45-3:45 AM | 0.2% | 0.2% | 0.1% | 0.4% | 0.4% | 0.2% | 0.6% | 1.2% | 0.0% |
| 3:45-4:45 AM | 0.4% | 0.3% | 0.1% | 0.4% | 0.4% | 0.2% | 0.6% | 1.2% | 0.0% |
| 4:45-5:45 AM | 0.2% | 0.2% | 0.1% | 0.4% | 0.4% | 0.2% | 0.6% | 1.2% | 0.0% |
| 5:45-6:45 AM | 0.2% | 0.2% | 0.1% | 0.4% | 0.4% | 0.2% | 0.6% | 1.2% | 0.0% |
| 6:45-7:45 AM | 0.2% | 0.2% | 0.1% | 0.4% | 0.4% | 0.2% | 0.6% | 1.2% | 0.0% |
| 7:45-8:45 AM | 0.2% | 0.2% | 0.1% | 0.4% | 0.4% | 0.2% | 0.6% | 1.2% | 0.0% |
| 8:45-9:45 AM | 0.2% | 0.2% | 0.1% | 0.4% | 0.4% | 0.2% | 0.6% | 1.2% | 0.0% |
| 9:45-10:45 AM | 0.5% | 0.4% | 0.5% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% |
| 10:45-11:45 AM | 1.0% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 11:45-12:45 AM | 1.2% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 12:45-1:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 1:45-2:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 2:45-3:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 3:45-4:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 4:45-5:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 5:45-6:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 6:45-7:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 7:45-8:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 8:45-9:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 9:45-10:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 10:45-11:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 11:45-12:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 12:45-1:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 1:45-2:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 2:45-3:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 3:45-4:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 4:45-5:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 5:45-6:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 6:45-7:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 7:45-8:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 8:45-9:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 9:45-10:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 10:45-11:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 11:45-12:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 12:45-1:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 1:45-2:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 2:45-3:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 3:45-4:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 4:45-5:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 5:45-6:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 6:45-7:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 7:45-8:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 8:45-9:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 9:45-10:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 10:45-11:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 11:45-12:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 12:45-1:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 1:45-2:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 2:45-3:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 3:45-4:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 4:45-5:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 5:45-6:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 6:45-7:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 7:45-8:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 8:45-9:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 9:45-10:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 10:45-11:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 11:45-12:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 12:45-1:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 1:45-2:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 2:45-3:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 3:45-4:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 4:45-5:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 5:45-6:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 6:45-7:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 7:45-8:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 8:45-9:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 9:45-10:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 10:45-11:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 11:45-12:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 12:45-1:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 1:45-2:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 2:45-3:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 3:45-4:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 4:45-5:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 5:45-6:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 6:45-7:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 7:45-8:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 8:45-9:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 9:45-10:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 10:45-11:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 11:45-12:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 12:45-1:45 AM | 1.5% | 1.5% | 0.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% |
| 1:45-2:45 AM | 1.5% | 1.5%</ | | | | | | | |

Figure 4

| Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use | | | |
|---|--------------------------------|----------|---------|
| Source: ITE Trip Generation Manual, 11th Edition | | | |
| Land Use Code | 213 | Entering | Exiting |
| Land Use | Single-family Attached Housing | | |
| Size | General Urban/Suburban | | |
| Time Period | Weekday | | |
| # Data Series | 7 | | |
| | % of 24-Hour Vehicle Trips | | |
| Time | Total | Entering | Exiting |
| 12:00 - 1:00 AM | 0.5% | 0.7% | 0.3% |
| 1:00 - 2:00 AM | 0.2% | 0.4% | 0.1% |
| 2:00 - 3:00 AM | 0.3% | 0.2% | 0.3% |
| 3:00 - 4:00 AM | 0.3% | 0.3% | 0.4% |
| 4:00 - 5:00 AM | 0.7% | 0.4% | 1.0% |
| 5:00 - 6:00 AM | 1.6% | 0.1% | 2.6% |
| 6:00 - 7:00 AM | 3.3% | 1.1% | 2.8% |
| 7:00 - 8:00 AM | 7.5% | 2.7% | 1.1% |
| 8:00 - 9:00 AM | 6.6% | 3.8% | 2.3% |
| 9:00 - 10:00 AM | 5.3% | 3.7% | 6.5% |
| 10:00 - 11:00 AM | 4.1% | 4.0% | 4.3% |
| 11:00 - 12:00 PM | 5.3% | 4.8% | 5.7% |
| 12:00 - 1:00 PM | 5.2% | 5.4% | 5.1% |
| 1:00 - 2:00 PM | 4.7% | 4.5% | 4.8% |
| 2:00 - 3:00 PM | 5.8% | 5.5% | 6.0% |
| 3:00 - 4:00 PM | 6.5% | 8.2% | 4.8% |
| 4:00 - 5:00 PM | 7.5% | 9.8% | 5.1% |
| 5:00 - 6:00 PM | 8.5% | 12.1% | 6.8% |
| 6:00 - 7:00 PM | 8.8% | 9.8% | 6.6% |
| 7:00 - 8:00 PM | 5.9% | 2.7% | 3.5% |
| 8:00 - 9:00 PM | 4.7% | 3.9% | 3.5% |
| 9:00 - 10:00 PM | 3.0% | 4.8% | 1.3% |
| 10:00 - 11:00 PM | 2.6% | 3.0% | 1.1% |
| 11:00 - 12:00 AM | 0.9% | 1.3% | 0.4% |
| 12:00 - 1:00 AM | 0.5% | 0.7% | 0.3% |
| 1:00 - 2:00 AM | 0.5% | 0.7% | 0.3% |
| 2:00 - 3:00 AM | 0.4% | 0.6% | 0.2% |
| 3:00 - 4:00 AM | 0.6% | 0.5% | 0.2% |
| 4:00 - 5:00 AM | 0.2% | 0.4% | 0.1% |
| 5:00 - 6:00 AM | 0.2% | 0.2% | 0.1% |
| 6:00 - 7:00 AM | 0.2% | 0.1% | 0.1% |
| 7:00 - 8:00 AM | 0.2% | 0.1% | 0.2% |
| 8:00 - 9:00 AM | 0.2% | 0.2% | 0.2% |
| 9:00 - 10:00 AM | 0.3% | 0.3% | 0.5% |
| 10:00 - 11:00 AM | 0.4% | 0.4% | 0.5% |
| 11:00 - 12:00 PM | 0.4% | 0.4% | 0.5% |
| 12:00 - 1:00 PM | 0.3% | 0.3% | 0.4% |
| 1:00 - 2:00 PM | 0.3% | 0.3% | 0.4% |
| 2:00 - 3:00 PM | 0.3% | 0.2% | 0.4% |
| 3:00 - 4:00 PM | 0.3% | 0.3% | 0.5% |
| 4:00 - 5:00 PM | 0.5% | 0.3% | 0.8% |
| 5:00 - 6:00 PM | 0.4% | 0.4% | 1.0% |
| 6:00 - 7:00 PM | 0.5% | 0.4% | 1.2% |
| 7:00 - 8:00 PM | 0.5% | 0.2% | 1.6% |
| 8:00 - 9:00 PM | 1.0% | 0.2% | 1.6% |
| 9:00 - 10:00 PM | 0.5% | 0.2% | 1.0% |
| 10:00 - 11:00 PM | 0.5% | 0.2% | 1.0% |
| 11:00 - 12:00 AM | 0.5% | 0.2% | 1.1% |
| 12:00 - 1:00 AM | 0.5% | 0.2% | 1.1% |
| 1:00 - 2:00 AM | 0.5% | 0.2% | 1.1% |
| 2:00 - 3:00 AM | 0.5% | 0.2% | 1.1% |
| 3:00 - 4:00 AM | 0.5% | 0.2% | 1.1% |
| 4:00 - 5:00 AM | 0.5% | 0.2% | 1.1% |
| 5:00 - 6:00 AM | 1.4% | 0.1% | 2.6% |
| 6:00 - 7:00 AM | 1.8% | 0.4% | 3.3% |
| 7:00 - 8:00 AM | 2.3% | 0.5% | 4.0% |
| 8:00 - 9:00 AM | 2.8% | 0.6% | 4.9% |
| 9:00 - 10:00 AM | 3.5% | 1.1% | 5.8% |
| 10:00 - 11:00 AM | 4.3% | 1.3% | 7.2% |
| 11:00 - 12:00 PM | 5.3% | 1.8% | 8.8% |
| 12:00 - 1:00 PM | 6.8% | 2.2% | 11.4% |
| 1:00 - 2:00 PM | 7.5% | 2.7% | 13.2% |
| 2:00 - 3:00 PM | 7.6% | 2.9% | 13.5% |
| 3:00 - 4:00 PM | 7.1% | 3.1% | 11.0% |
| 4:00 - 5:00 PM | 6.6% | 3.8% | 9.3% |
| 5:00 - 6:00 PM | 6.3% | 3.7% | 8.8% |
| 6:00 - 7:00 PM | 6.1% | 4.2% | 8.1% |
| 7:00 - 8:00 PM | 5.8% | 4.3% | 7.3% |
| 8:00 - 9:00 PM | 5.3% | 3.7% | 6.9% |
| 9:00 - 10:00 PM | 4.8% | 3.8% | 5.7% |
| 10:00 - 11:00 PM | 4.4% | 3.6% | 5.1% |
| 11:00 - 12:00 AM | 4.4% | 3.6% | 5.1% |
| 12:00 - 1:00 AM | 4.0% | 3.4% | 4.5% |
| 1:00 - 2:00 AM | 4.1% | 4.0% | 4.3% |
| 2:00 - 3:00 AM | 4.2% | 4.2% | 4.7% |
| 3:00 - 4:00 AM | 4.3% | 4.4% | 4.2% |
| 4:00 - 5:00 AM | 4.5% | 4.7% | 5.5% |
| 5:00 - 6:00 AM | 5.3% | 4.8% | 5.7% |
| 6:00 - 7:00 AM | 5.2% | 4.2% | 6.5% |
| 7:00 - 8:00 AM | 5.1% | 4.8% | 6.5% |
| 8:00 - 9:00 AM | 5.1% | 5.3% | 6.0% |
| 9:00 - 10:00 AM | 5.1% | 5.3% | 6.0% |
| 10:00 - 11:00 AM | 5.1% | 5.3% | 6.0% |
| 11:00 - 12:00 PM | 5.2% | 5.4% | 6.5% |
| 12:00 - 1:00 PM | 5.1% | 5.3% | 6.0% |
| 1:00 - 2:00 PM | 5.0% | 5.5% | 6.6% |
| 2:00 - 3:00 PM | 5.0% | 5.5% | 6.6% |
| 3:00 - 4:00 PM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 PM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 PM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 PM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 PM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 PM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 PM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 PM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 AM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 AM | 5.0% | 5.5% | 6.4% |
| 1:00 - 2:00 AM | 5.0% | 5.5% | 6.4% |
| 2:00 - 3:00 AM | 5.0% | 5.5% | 6.4% |
| 3:00 - 4:00 AM | 5.0% | 5.5% | 6.4% |
| 4:00 - 5:00 AM | 5.0% | 5.5% | 6.4% |
| 5:00 - 6:00 AM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 AM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 AM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 AM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 AM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 AM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 PM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 PM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 PM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 PM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 PM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 PM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 PM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 PM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 PM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 PM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 PM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 PM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 AM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 AM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 AM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 AM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 AM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 AM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 AM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 AM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 AM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 AM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 AM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 AM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 PM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 PM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 PM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 PM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 PM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 PM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 PM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 PM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 PM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 PM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 PM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 PM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 AM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 AM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 AM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 AM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 AM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 AM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 AM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 AM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 AM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 AM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 AM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 AM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 PM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 PM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 PM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 PM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 PM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 PM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 PM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 PM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 PM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 PM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 PM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 PM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 AM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 AM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 AM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 AM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 AM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 AM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 AM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 AM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 AM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 AM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 AM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 AM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 PM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 PM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 PM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 PM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 PM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 PM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 PM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 PM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 PM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 PM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 PM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 PM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 AM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 AM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 AM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 AM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 AM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 AM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 AM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 AM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 AM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 AM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 AM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 AM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 PM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 PM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 PM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 PM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 PM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 PM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 PM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 PM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 PM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 PM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 PM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 PM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 AM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 AM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 AM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 AM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 AM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 AM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 AM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 AM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 AM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 AM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 AM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 AM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 PM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 PM | 5.1% | 5.6% | 6.5% |
| 1:00 - 2:00 PM | 5.1% | 5.6% | 6.5% |
| 2:00 - 3:00 PM | 5.1% | 5.6% | 6.5% |
| 3:00 - 4:00 PM | 5.1% | 5.6% | 6.5% |
| 4:00 - 5:00 PM | 5.1% | 5.6% | 6.5% |
| 5:00 - 6:00 PM | 5.1% | 5.6% | 6.5% |
| 6:00 - 7:00 PM | 5.1% | 5.6% | 6.5% |
| 7:00 - 8:00 PM | 5.1% | 5.6% | 6.5% |
| 8:00 - 9:00 PM | 5.1% | 5.6% | 6.5% |
| 9:00 - 10:00 PM | 5.1% | 5.6% | 6.5% |
| 10:00 - 11:00 PM | 5.1% | 5.6% | 6.5% |
| 11:00 - 12:00 AM | 5.1% | 5.6% | 6.5% |
| 12:00 - 1:00 AM | 5.1% | 5.6% | 6.5% |

Figure 5

| Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use | | | |
|---|------------------------|----------|----------------|
| Source: ITE Trip Generation Manual, 11th Edition | | | |
| Land Use Code | Land Use | 630 | |
| Setting | General Urban/Suburban | | Weekday |
| Time Period | 3 | | 12:00-12:00 AM |
| % of 24 Hour Vehicle Trips | | | |
| Time | Total | Entering | Exiting |
| 13:00 - 1:00 AM | 0.5% | 0.0% | 0.1% |
| 1:00 - 2:00 AM | 0.0% | 0.0% | 0.0% |
| 2:00 - 3:00 AM | 0.0% | 0.0% | 0.0% |
| 3:00 - 4:00 AM | 0.0% | 0.0% | 0.0% |
| 4:00 - 5:00 AM | 0.0% | 0.0% | 0.0% |
| 5:00 - 6:00 AM | 0.1% | 0.2% | 0.1% |
| 6:00 - 7:00 AM | 0.6% | 1.2% | 0.0% |
| 7:00 - 8:00 AM | 6.1% | 10.5% | 1.7% |
| 8:00 - 9:00 AM | 9.8% | 14.5% | 5.0% |
| 9:00 - 10:00 AM | 9.5% | 10.7% | 9.1% |
| 10:00 - 11:00 AM | 10.2% | 10.6% | 9.7% |
| 11:00 - 12:00 AM | 9.5% | 7.4% | 12.4% |
| 12:00 - 1:00 PM | 4.1% | 4.1% | 9.6% |
| 1:00 - 2:00 PM | 7.5% | 10.1% | 5.7% |
| 2:00 - 3:00 PM | 8.5% | 8.5% | 8.5% |
| 3:00 - 4:00 PM | 9.7% | 9.7% | 9.3% |
| 4:00 - 5:00 PM | 9.1% | 5.8% | 12.4% |
| 5:00 - 6:00 PM | 7.0% | 7.0% | 11.0% |
| 6:00 - 7:00 PM | 1.7% | 0.3% | 3.2% |
| 7:00 - 8:00 PM | 0.6% | 0.4% | 0.8% |
| 8:00 - 9:00 PM | 0.5% | 0.1% | 0.8% |
| 9:00 - 10:00 PM | 0.0% | 0.0% | 0.1% |
| 10:00 - 11:00 PM | 0.0% | 0.0% | 0.0% |
| 11:00 - 12:00 AM | 0.0% | 0.0% | 0.0% |
| 12:00 - 1:30 AM | 0.0% | 0.0% | 0.0% |
| 1:30 - 1:45 AM | 0.0% | 0.0% | 0.1% |
| 1:45 - 2:00 AM | 0.0% | 0.0% | 0.1% |
| 2:00 - 3:00 AM | 0.0% | 0.0% | 0.0% |
| 3:00 - 3:15 AM | 0.0% | 0.0% | 0.0% |
| 3:45 - 4:00 AM | 0.0% | 0.0% | 0.0% |
| 4:45 - 5:00 AM | 0.0% | 0.0% | 0.0% |
| 5:45 - 6:00 AM | 0.1% | 0.1% | 0.1% |
| 6:00 - 6:30 AM | 0.0% | 0.0% | 0.0% |
| 6:45 - 7:00 AM | 0.4% | 0.0% | 0.0% |
| 7:15 - 7:30 AM | 1.0% | 1.5% | 0.0% |
| 7:45 - 7:45 AM | 3.8% | 0.8% | 0.8% |
| 7:45 - 8:00 AM | 6.1% | 10.5% | 1.2% |
| 7:45 - 8:15 AM | 8.1% | 11.9% | 2.3% |
| 7:45 - 8:30 AM | 9.5% | 10.6% | 3.2% |
| 7:45 - 8:45 AM | 9.8% | 10.4% | 4.1% |
| 8:00 - 9:00 AM | 9.8% | 14.5% | 5.0% |
| 8:15 - 9:15 AM | 9.5% | 11.1% | 6.6% |
| 8:30 - 9:30 AM | 9.4% | 11.0% | 7.3% |
| 8:45 - 9:45 AM | 9.5% | 11.1% | 8.5% |
| 9:00 - 10:00 AM | 9.5% | 10.7% | 8.0% |
| 9:15 - 10:15 AM | 9.2% | 10.0% | 9.4% |
| 9:30 - 10:30 AM | 9.5% | 10.1% | 8.0% |
| 9:45 - 10:45 AM | 10.1% | 10.5% | 9.7% |
| 10:00 - 11:00 AM | 12.2% | 12.8% | 9.7% |
| 10:15 - 11:15 AM | 10.4% | 10.5% | 10.1% |
| 10:30 - 11:30 AM | 10.9% | 10.9% | 11.0% |
| 10:45 - 11:45 AM | 10.4% | 9.2% | 11.6% |
| 11:00 - 12:00 PM | 9.9% | 7.4% | 12.4% |
| 11:15 - 12:15 PM | 9.8% | 6.4% | 13.3% |
| 11:30 - 12:30 PM | 8.8% | 4.5% | 12.7% |
| 11:45 - 12:45 PM | 8.6% | 6.0% | 11.1% |
| 12:00 - 1:00 PM | 8.5% | 6.8% | 8.8% |
| 12:15 - 1:15 PM | 7.8% | 7.1% | 7.5% |
| 12:30 - 1:30 PM | 8.0% | 8.2% | 6.7% |
| 12:45 - 1:45 PM | 7.3% | 8.6% | 5.5% |
| 1:00 - 2:00 PM | 7.9% | 12.1% | 5.7% |
| 1:15 - 2:15 PM | 8.3% | 10.4% | 6.1% |
| 1:30 - 2:30 PM | 8.2% | 9.3% | 7.1% |
| 1:45 - 2:45 PM | 8.5% | 9.3% | 7.7% |
| 2:00 - 3:00 PM | 8.6% | 8.5% | 8.6% |
| 2:15 - 3:15 PM | 9.0% | 8.9% | 9.1% |
| 2:30 - 3:30 PM | 8.5% | 9.1% | 8.7% |
| 2:45 - 3:45 PM | 8.7% | 9.3% | 9.8% |
| 3:00 - 4:00 PM | 9.5% | 9.7% | 8.4% |
| 3:15 - 4:15 PM | 9.7% | 9.6% | 10.2% |
| 3:30 - 4:30 PM | 9.8% | 8.3% | 11.3% |
| 3:45 - 4:45 PM | 9.4% | 7.4% | 11.8% |
| 4:00 - 5:00 PM | 9.1% | 5.5% | 12.6% |
| 4:15 - 5:15 PM | 8.7% | 5.3% | 12.2% |
| 4:30 - 5:30 PM | 8.8% | 4.4% | 11.3% |
| 4:45 - 5:45 PM | 7.7% | 3.6% | 11.8% |
| 5:00 - 6:00 PM | 7.0% | 3.0% | 11.0% |
| 5:15 - 6:15 PM | 5.5% | 2.1% | 9.0% |
| 5:30 - 6:30 PM | 3.7% | 1.5% | 5.9% |
| 5:45 - 6:45 PM | 3.0% | 0.9% | 5.1% |
| 6:00 - 7:00 PM | 1.6% | 0.3% | 3.2% |
| 6:15 - 7:15 PM | 1.2% | 0.3% | 2.3% |
| 6:30 - 7:30 PM | 0.8% | 0.3% | 1.4% |
| 6:45 - 7:45 PM | 0.7% | 0.4% | 0.5% |
| 7:00 - 8:00 PM | 0.6% | 0.4% | 0.8% |
| 7:15 - 8:15 PM | 0.4% | 0.3% | 0.5% |
| 7:30 - 8:30 PM | 0.4% | 0.2% | 0.6% |
| 7:45 - 8:45 PM | 0.5% | 0.1% | 0.8% |
| 8:00 - 9:00 PM | 0.5% | 0.1% | 0.8% |
| 8:15 - 9:15 PM | 0.4% | 0.0% | 0.8% |
| 8:30 - 9:30 PM | 0.3% | 0.0% | 0.6% |
| 8:45 - 9:45 PM | 0.2% | 0.0% | 0.3% |
| 9:00 - 10:00 PM | 0.1% | 0.0% | 0.1% |
| 9:15 - 10:15 PM | 0.0% | 0.0% | 0.1% |
| 9:30 - 10:30 PM | 0.0% | 0.0% | 0.1% |
| 9:45 - 10:45 PM | 0.0% | 0.0% | 0.0% |
| 10:00 - 11:00 PM | 0.0% | 0.0% | 0.0% |
| 10:15 - 11:15 PM | 0.0% | 0.0% | 0.0% |
| 10:30 - 11:30 PM | 0.0% | 0.0% | 0.0% |
| 10:45 - 11:45 PM | 0.0% | 0.0% | 0.0% |
| 11:00 - 12:00 AM | 0.0% | 0.0% | 0.0% |
| 11:15 - 12:15 AM | 0.0% | 0.0% | 0.0% |
| 11:30 - 12:30 AM | 0.0% | 0.0% | 0.0% |

Figure 6

A & R Engineering, Inc.
 2160 Kingston Court, Suite 'O',
 Marietta, GA 30067

TMC DATA
 US 78 (SR 10) Lexington Rd @
 Mini U Storage Drwy
 7 am - 7 pm

File Name : 20200122
 Site Code : 20200122
 Start Date : 8/26/2020
 Page No : 1

| Groups Printed- Cars, Buses & Trucks | | | | | | | | | | | | | | | | | |
|--------------------------------------|------------|------|-------|------------|--------------------------------|------|-------|------------|--------------------------------------|------|-------|------------|--------------------------------------|------|-------|------------|------------|
| Start Time | Northbound | | | | Mini U Storage Drwy Southbound | | | | US 78 (SR 10) Lexington Rd Eastbound | | | | US 78 (SR 10) Lexington Rd Westbound | | | | Int. Total |
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 0 | 114 | 0 | 221 | 0 | 221 | 335 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 117 | 0 | 117 | 0 | 250 | 0 | 250 | 367 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 133 | 0 | 133 | 0 | 304 | 0 | 304 | 437 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 208 | 0 | 211 | 0 | 303 | 0 | 303 | 514 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 572 | 0 | 575 | 0 | 1078 | 0 | 1078 | 1653 |
| 08:00 AM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 140 | 0 | 140 | 0 | 260 | 0 | 260 | 401 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 177 | 0 | 177 | 0 | 257 | 0 | 257 | 434 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 147 | 0 | 148 | 0 | 247 | 0 | 247 | 396 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 186 | 0 | 186 | 0 | 206 | 1 | 207 | 393 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 650 | 0 | 651 | 0 | 970 | 1 | 971 | 1624 |
| 09:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 159 | 0 | 159 | 0 | 173 | 0 | 173 | 333 |
| 09:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 182 | 0 | 182 | 0 | 213 | 1 | 214 | 396 |
| 09:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 150 | 0 | 150 | 0 | 198 | 0 | 198 | 349 |
| 09:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 197 | 0 | 197 | 0 | 190 | 0 | 190 | 388 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 688 | 0 | 688 | 0 | 774 | 1 | 775 | 1466 |
| 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 194 | 0 | 195 | 0 | 167 | 0 | 167 | 362 |
| 10:15 AM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 207 | 0 | 207 | 0 | 218 | 0 | 218 | 426 |
| 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 199 | 0 | 200 | 0 | 211 | 0 | 211 | 411 |
| 10:45 AM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 194 | 0 | 195 | 0 | 201 | 0 | 201 | 398 |
| Total | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 3 | 794 | 0 | 797 | 0 | 797 | 0 | 797 | 1597 |
| 11:00 AM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 218 | 0 | 219 | 0 | 208 | 0 | 208 | 428 |
| 11:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 204 | 0 | 204 | 0 | 216 | 0 | 216 | 420 |
| 11:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 253 | 0 | 255 | 0 | 212 | 1 | 213 | 470 |
| 11:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 235 | 0 | 235 | 0 | 187 | 0 | 187 | 423 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 4 | 3 | 910 | 0 | 913 | 0 | 823 | 1 | 824 | 1741 |
| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 232 | 0 | 232 | 0 | 207 | 2 | 209 | 442 |
| 12:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 248 | 0 | 249 | 0 | 204 | 1 | 205 | 456 |
| 12:30 PM | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 205 | 0 | 206 | 0 | 284 | 0 | 284 | 492 |
| 12:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254 | 0 | 254 | 0 | 239 | 1 | 240 | 494 |
| Total | 0 | 0 | 0 | 0 | 3 | 0 | 2 | 5 | 2 | 939 | 0 | 941 | 0 | 934 | 4 | 938 | 1884 |
| 01:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 1 | 225 | 0 | 226 | 0 | 241 | 1 | 242 | 471 |
| 01:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 235 | 0 | 236 | 0 | 229 | 1 | 230 | 468 |
| 01:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 224 | 0 | 224 | 0 | 214 | 0 | 214 | 439 |
| 01:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 222 | 0 | 224 | 0 | 219 | 2 | 221 | 445 |
| Total | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 6 | 4 | 906 | 0 | 910 | 0 | 903 | 4 | 907 | 1823 |
| 02:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 248 | 0 | 250 | 0 | 234 | 1 | 235 | 487 |
| 02:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 1 | 244 | 0 | 245 | 0 | 233 | 0 | 233 | 481 |
| 02:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 282 | 0 | 284 | 0 | 228 | 0 | 228 | 513 |
| 02:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 2 | 252 | 0 | 254 | 0 | 219 | 1 | 220 | 479 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 11 | 7 | 1026 | 0 | 1033 | 0 | 914 | 2 | 916 | 1960 |
| 03:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 283 | 0 | 284 | 0 | 234 | 0 | 234 | 518 |
| 03:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 1 | 283 | 0 | 284 | 0 | 255 | 3 | 258 | 546 |
| 03:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 1 | 283 | 0 | 284 | 0 | 231 | 0 | 231 | 518 |

Figure 6

A & R Engineering, Inc.
 2160 Kingston Court, Suite 'O',
 Marietta, GA 30067

TMC DATA
 US 78 (SR 10) Lexington Rd @
 Mini U Storage Drwy
 7 am - 7 pm

File Name : 20200122
 Site Code : 20200122
 Start Date : 8/26/2020
 Page No : 2

| Groups Printed- Cars, Buses & Trucks | | | | | | | | | | | | | | | | | |
|--------------------------------------|------------|------|-------|------------|--------------------------------|------|-------|------------|--------------------------------------|-------|-------|------------|--------------------------------------|-------|-------|------------|------------|
| Start Time | Northbound | | | | Mini U Storage Drwy Southbound | | | | US 78 (SR 10) Lexington Rd Eastbound | | | | US 78 (SR 10) Lexington Rd Westbound | | | | |
| | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 03:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 251 | 0 | 254 | 0 | 254 | 1 | 255 | 510 |
| Total | 0 | 0 | 0 | 0 | 2 | 0 | 6 | 8 | 6 | 1100 | 0 | 1106 | 0 | 974 | 4 | 978 | 2092 |
| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 259 | 0 | 260 | 0 | 227 | 0 | 227 | 489 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 299 | 0 | 299 | 0 | 224 | 0 | 224 | 523 |
| 04:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 2 | 277 | 0 | 279 | 0 | 240 | 0 | 240 | 522 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 283 | 0 | 283 | 0 | 230 | 1 | 231 | 514 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 5 | 3 | 1118 | 0 | 1121 | 0 | 921 | 1 | 922 | 2048 |
| 05:00 PM | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 1 | 315 | 0 | 316 | 0 | 228 | 0 | 228 | 547 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 309 | 0 | 309 | 0 | 192 | 0 | 192 | 501 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 287 | 0 | 287 | 0 | 210 | 0 | 210 | 498 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 278 | 0 | 280 | 0 | 197 | 0 | 197 | 477 |
| Total | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 | 3 | 1189 | 0 | 1192 | 0 | 827 | 0 | 827 | 2023 |
| 06:00 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 247 | 0 | 247 | 0 | 184 | 0 | 184 | 432 |
| 06:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 245 | 0 | 245 | 0 | 166 | 1 | 167 | 413 |
| 06:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 215 | 0 | 215 | 0 | 151 | 0 | 151 | 366 |
| 06:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 236 | 0 | 238 | 0 | 175 | 0 | 175 | 414 |
| Total | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 2 | 943 | 0 | 945 | 0 | 676 | 1 | 677 | 1625 |
| Grand Total | 0 | 0 | 0 | 0 | 18 | 0 | 36 | 54 | 37 | 10835 | 0 | 10872 | 0 | 10591 | 19 | 10610 | 21536 |
| Apprch % | 0 | 0 | 0 | 0 | 33.3 | 0 | 66.7 | 0.3 | 99.7 | 0 | 0 | 0 | 99.8 | 0.2 | 0.2 | 0.2 | 0.2 |
| Total % | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.2 | 0.3 | 0.2 | 50.3 | 0 | 50.5 | 0 | 49.2 | 0.1 | 49.3 | 0.1 |

| SEAGRAVES DRIVE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|-------|------------------------|---------|---------|----------|---------|-------|------------|---------|------|------|--|------------|------|------|--|------------|------|------|--|------------|------|------|--|------------|------|------|----------------|------------|----------------------------|-------|----------------------------|-------|---------------------------|-------|---------------------------|-------|-----------|-------|----|-----|----|----|
| Single-Family Detached | | Single-Family Attached | | Medical | | | | Northbound | | | | US 78 (SR 10) Lexington Road Eastbound | | | | US 78 (SR 10) Lexington Road Westbound | | | | US 78 (SR 10) Lexington Road Eastbound | | | | US 78 (SR 10) Lexington Road Westbound | | | | Approach Total | | Warrant 1 Condition A 100% | | Warrant 1 Condition B 100% | | Warrant 1 Condition A 80% | | Warrant 1 Condition B 80% | | Warrant 2 | | | | | |
| Time | Total | Entering | Exiting | Total | Entering | Exiting | Total | Entering | Exiting | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Major | Minor | Major | Minor | Major | Minor | Major | Minor | Major | Minor | | | | |
| 7:00 - 8:00 AM | 47 | 11 | 36 | 56 | 9 | 47 | 1 | 0 | 50 | 0 | 33 | 50 | 114 | 0 | 114 | 0 | 221 | 0 | 221 | 0 | 572 | 13 | 572 | 8 | 1078 | 0 | 1076 | 1658 | 50 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | | |
| 7:15 - 8:15 AM | 51 | 12 | 38 | 58 | 11 | 47 | 2 | 2 | 0 | 51 | 0 | 34 | 51 | 117 | 0 | 117 | 0 | 177 | 0 | 250 | 0 | 250 | 0 | 616 | 15 | 616 | 11 | 1117 | 0 | 1127 | 125 | 51 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | |
| 7:30 - 8:30 AM | 50 | 12 | 38 | 55 | 10 | 45 | 2 | 2 | 0 | 50 | 0 | 33 | 50 | 133 | 0 | 133 | 0 | 304 | 0 | 304 | 0 | 658 | 14 | 658 | 13 | 1124 | 0 | 1134 | 172 | 50 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 7:45 - 8:45 AM | 47 | 13 | 34 | 50 | 11 | 39 | 2 | 2 | 0 | 44 | 0 | 29 | 44 | 256 | 0 | 256 | 0 | 298 | 0 | 303 | 0 | 303 | 0 | 672 | 16 | 672 | 12 | 1067 | 0 | 1077 | 144 | 47 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | |
| 8:00 - 9:00 AM | 44 | 14 | 31 | 45 | 13 | 33 | 2 | 2 | 1 | 39 | 0 | 24 | 39 | 140 | 0 | 140 | 0 | 200 | 0 | 260 | 0 | 650 | 17 | 650 | 12 | 833 | 0 | 835 | 164 | 40 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 8:15 - 9:15 AM | 41 | 14 | 27 | 44 | 13 | 31 | 2 | 2 | 1 | 35 | 0 | 24 | 35 | 177 | 0 | 177 | 0 | 257 | 0 | 257 | 0 | 609 | 17 | 609 | 12 | 833 | 0 | 835 | 164 | 32 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 8:30 - 9:30 AM | 38 | 13 | 24 | 43 | 15 | 29 | 2 | 1 | 1 | 32 | 0 | 22 | 32 | 147 | 0 | 147 | 0 | 247 | 0 | 247 | 0 | 674 | 17 | 674 | 12 | 830 | 0 | 851 | 155 | 32 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 8:45 - 9:45 AM | 35 | 14 | 22 | 41 | 15 | 26 | 2 | 1 | 1 | 29 | 0 | 20 | 29 | 186 | 0 | 186 | 0 | 206 | 0 | 206 | 0 | 677 | 18 | 677 | 12 | 795 | 0 | 872 | 147 | 29 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 8:00 - 12:00 PM | 33 | 12 | 21 | 38 | 13 | 24 | 2 | 1 | 1 | 25 | 0 | 15 | 29 | 109 | 0 | 109 | 0 | 173 | 0 | 173 | 0 | 658 | 18 | 658 | 10 | 774 | 0 | 784 | 142 | 28 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 8:15 - 12:15 PM | 31 | 12 | 24 | 34 | 14 | 20 | 2 | 1 | 1 | 24 | 0 | 15 | 24 | 182 | 0 | 182 | 0 | 213 | 0 | 213 | 0 | 721 | 15 | 721 | 13 | 1169 | 0 | 1170 | 152 | 24 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 8:30 - 12:30 AM | 33 | 13 | 20 | 31 | 13 | 19 | 2 | 1 | 1 | 23 | 0 | 16 | 23 | 150 | 0 | 150 | 0 | 198 | 0 | 198 | 0 | 748 | 14 | 748 | 11 | 773 | 0 | 784 | 132 | 23 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 8:45 - 12:45 AM | 33 | 13 | 20 | 28 | 12 | 16 | 2 | 1 | 1 | 22 | 0 | 15 | 22 | 97 | 0 | 97 | 0 | 195 | 0 | 195 | 0 | 190 | 0 | 190 | 0 | 707 | 15 | 707 | 10 | 736 | 0 | 796 | 153 | 22 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 9:00 - 11:00 AM | 36 | 15 | 25 | 29 | 14 | 15 | 2 | 1 | 1 | 22 | 0 | 14 | 22 | 104 | 0 | 104 | 0 | 164 | 0 | 164 | 0 | 167 | 0 | 167 | 0 | 754 | 15 | 754 | 12 | 797 | 0 | 809 | 153 | 22 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 9:15 - 11:15 AM | 36 | 17 | 20 | 31 | 15 | 17 | 2 | 1 | 1 | 23 | 0 | 15 | 23 | 207 | 0 | 207 | 0 | 218 | 0 | 218 | 0 | 215 | 0 | 215 | 0 | 810 | 18 | 810 | 13 | 838 | 0 | 851 | 160 | 23 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 9:30 - 11:30 AM | 37 | 17 | 20 | 34 | 16 | 19 | 3 | 1 | 1 | 23 | 0 | 18 | 23 | 199 | 0 | 199 | 0 | 211 | 0 | 211 | 0 | 815 | 20 | 815 | 14 | 836 | 0 | 850 | 165 | 23 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 9:45 - 11:45 AM | 38 | 18 | 19 | 37 | 16 | 21 | 2 | 1 | 1 | 25 | 0 | 18 | 25 | 194 | 0 | 194 | 0 | 204 | 0 | 204 | 0 | 211 | 0 | 211 | 0 | 809 | 21 | 809 | 14 | 837 | 0 | 851 | 172 | 25 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 10:00 - 12:00 PM | 39 | 18 | 19 | 37 | 17 | 20 | 2 | 1 | 1 | 23 | 0 | 15 | 23 | 219 | 0 | 219 | 0 | 218 | 0 | 218 | 0 | 208 | 0 | 208 | 0 | 810 | 22 | 810 | 15 | 830 | 0 | 846 | 174 | 25 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 11:15 - 12:15 PM | 38 | 19 | 19 | 37 | 17 | 20 | 2 | 1 | 1 | 25 | 0 | 15 | 25 | 204 | 0 | 204 | 0 | 216 | 0 | 216 | 0 | 824 | 22 | 824 | 15 | 832 | 0 | 837 | 171 | 25 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 11:30 - 12:30 PM | 40 | 21 | 19 | 36 | 19 | 18 | 2 | 1 | 2 | 23 | 0 | 18 | 23 | 203 | 0 | 203 | 0 | 212 | 0 | 212 | 0 | 826 | 25 | 826 | 16 | 868 | 0 | 870 | 174 | 23 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 11:45 - 12:45 PM | 45 | 21 | 19 | 36 | 19 | 16 | 2 | 1 | 1 | 22 | 0 | 14 | 22 | 235 | 0 | 235 | 0 | 235 | 0 | 235 | 0 | 187 | 0 | 187 | 0 | 825 | 25 | 825 | 16 | 862 | 0 | 888 | 18 | 22 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 12:00 - 1:00 PM | 41 | 21 | 20 | 37 | 19 | 15 | 2 | 1 | 1 | 23 | 0 | 15 | 23 | 233 | 0 | 233 | 0 | 232 | 0 | 232 | 0 | 207 | 0 | 207 | 0 | 829 | 25 | 829 | 16 | 862 | 0 | 888 | 18 | 22 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 12:15 - 1:15 PM | 41 | 21 | 20 | 36 | 18 | 15 | 2 | 1 | 1 | 23 | 0 | 16 | 23 | 248 | 0 | 248 | 0 | 248 | 0 | 248 | 0 | 204 | 0 | 204 | 0 | 832 | 24 | 832 | 16 | 868 | 0 | 894 | 16 | 19 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 12:30 - 2:30 PM | 43 | 22 | 21 | 37 | 18 | 19 | 2 | 1 | 1 | 25 | 0 | 15 | 25 | 255 | 0 | 255 | 0 | 254 | 0 | 254 | 0 | 239 | 0 | 239 | 0 | 938 | 16 | 938 | 16 | 1029 | 0 | 1028 | 25 | 65 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 12:45 - 1:45 PM | 44 | 22 | 22 | 36 | 18 | 18 | 2 | 1 | 1 | 25 | 0 | 15 | 25 | 254 | 0 | 254 | 0 | 254 | 0 | 254 | 0 | 239 | 0 | 239 | 0 | 938 | 16 | 938 | 16 | 1027 | 0 | 1026 | 25 | 65 | YES | NO | YES | NO | YES | NO | YES | NO | NO |
| 1:00 - 2:00 PM | 43 | 22 | 22 | 33 | 18 | 17 | 2 | 1 | 1 | 24 | 0 | 15 | 24 | 225 | 0 | 225 | 0 | 241 | 0 | 241 | 0 | 906 | 23 | 906 | 16 | 963 | 0 | 919 | 128 | 24 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 1:15 - 2:15 PM | 44 | 22 | 23 | 37 | 19 | 15 | 2 | 1 | 1 | 25 | 0 | 17 | 25 | 225 | 0 | 225 | 0 | 229 | 0 | 229 | 0 | 929 | 17 | 929 | 17 | 956 | 0 | 913 | 134 | 25 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 1:30 - 2:30 PM | 43 | 23 | 22 | 37 | 19 | 15 | 2 | 1 | 1 | 25 | 0 | 18 | 25 | 224 | 0 | 224 | 0 | 214 | 0 | 214 | 0 | 938 | 17 | 938 | 17 | 960 | 0 | 917 | 135 | 25 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 1:45 - 2:45 PM | 45 | 23 | 22 | 43 | 19 | 21 | 2 | 1 | 1 | 26 | 0 | 18 | 26 | 222 | 0 | 222 | 0 | 219 | 0 | 219 | 0 | 996 | 16 | 996 | 17 | 914 | 0 | 931 | 127 | 26 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 2:00 - 3:00 PM | 47 | 25 | 22 | 41 | 20 | 21 | 2 | 1 | 1 | 26 | 0 | 18 | 26 | 243 | 0 | 243 | 0 | 234 | 0 | 234 | 0 | 1028 | 18 | 1028 | 19 | 914 | 0 | 933 | 169 | 26 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 2:15 - 3:15 PM | 49 | 28 | 21 | 41 | 21 | 21 | 2 | 1 | 1 | 26 | 0 | 17 | 26 | 244 | 0 | 244 | 0 | 233 | 0 | 233 | 0 | 1061 | 20 | 1061 | 20 | 914 | 0 | 934 | 195 | 26 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 2:30 - 3:30 PM | 49 | 28 | 21 | 45 | 24 | 21 | 2 | 1 | 1 | 25 | 0 | 17 | 25 | 282 | 0 | 282 | 0 | 228 | 0 | 228 | 0 | 122 | 0 | 122 | 10 | 936 | 0 | 957 | 207 | 26 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 2:45 - 3:45 PM | 52 | 30 | 22 | 42 | 25 | 18 | 2 | 1 | 1 | 25 | 0 | 16 | 25 | 252 | 0 | 252 | 0 | 219 | 0 | 219 | 0 | 1151 | 34 | 1151 | 22 | 979 | 0 | 961 | 204 | 26 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 3:00 - 4:00 PM | 54 | 31 | 22 | 49 | 29 | 17 | 2 | 1 | 1 | 24 | 0 | 16 | 24 | 253 | 0 | 253 | 0 | 234 | 0 | 234 | 0 | 1100 | 37 | 1100 | 24 | 974 | 0 | 968 | 208 | 24 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 3:15 - 4:15 PM | 57 | 34 | 23 | 47 | 31 | 17 | 2 | 1 | 1 | 25 | 0 | 15 | 25 | 253 | 0 | 253 | 0 | 265 | 0 | 265 | 0 | 1076 | 40 | 1076 | 25 | 967 | 0 | 993 | 209 | 25 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 3:30 - 4:30 PM | 61 | 37 | 25 | 46 | 31 | 15 | 2 | 1 | 1 | 25 | 0 | 16 | 25 | 263 | 0 | 263 | 0 | 231 | 0 | 231 | 0 | 1062 | 29 | 1062 | 29 | 964 | 0 | 956 | 205 | 25 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 3:45 - 4:45 PM | 63 | 38 | 25 | 51 | 34 | 17 | 2 | 1 | 1 | 25 | 0 | 17 | 25 | 251 | 0 | 251 | 0 | 254 | 0 | 254 | 0 | 1058 | 44 | 1058 | 29 | 943 | 0 | 974 | 206 | 25 | YES | NO | YES | NO | YES | NO | YES | NO | NO | | | | |
| 4:00 - 5:00 PM | 64 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

| Condition B—Interruption of Continuous Traffic | | | | | | | | | |
|---|----------------|--|------------------|------------------|------------------|---|------------------|------------------|------------------|
| Number of lanes for moving traffic on each approach | | Vehicles per hour on major street (total of both approaches) | | | | Vehicles per hour on higher-volume minor-street approach (one direction only) | | | |
| Major Street | Minor Street | 100% ^a | 80% ^b | 70% ^c | 56% ^d | 100% ^a | 80% ^b | 70% ^c | 56% ^d |
| 1..... | 1..... | 750 | 600 | 525 | 420 | 75 | 60 | 53 | 42 |
| 2 or more..... | 1..... | 900 | 720 | 630 | 504 | 75 | 60 | 53 | 42 |
| 2 or more..... | 2 or more..... | 900 | 720 | 630 | 504 | 100 | 80 | 70 | 56 |
| 1..... | 2 or more..... | 750 | 600 | 525 | 420 | 100 | 80 | 70 | 56 |

In order for a traffic signal to be warranted one of the following conditions must exist for each of any 8 hours on an average day:

- The vehicles per hour given in both of the 100 percent columns of Condition A in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.
- The vehicles per hour given in both of the 100 percent columns of Condition B in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

Or, both of the following conditions exist for each of any 8 hours on an average day:

- The vehicles per hour given in both of the 80 percent columns of Condition A in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.
- The vehicles per hour given in both of the 80 percent columns of Condition B in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

When calculating the number of hours that meet the above criteria, we selected the same hour period with each study hour beginning at the same 15-minute interval and ending at the same 15-minute interval.

For the intersection of Lexington Road and Seagraves Drive, Figure 7 shows the approach totals for both the major and minor streets. For Condition A (100% and 80%) and Condition B (100% and 80%) there are no hours in which the major street and minor street conditions are met. Therefore, under Warrant 1 Condition A and B (100% and 80%) a signal is not warranted.

Warrant 2

Warrant 2 criteria are outlined in MUTCD Table for Figure 4C-1 below and the number of lanes that fits both intersections are outlined in yellow below.

| One lane and one lane | | Two or more lanes and one lane | | Two or more lanes and two or more lanes | |
|--|--|--|--|--|--|
| VPH on the major street (Total of both approaches) | VPH on the minor street (Higher volume approach) | VPH on the major street (Total of both approaches) | VPH on the minor street (Higher volume approach) | VPH on the major street (Total of both approaches) | VPH on the minor street (Higher volume approach) |
| 1400 | 8 | 1400 | 80 or 115* | 1400 | 115 |
| 1300 | 82 | 1300 | 80 or 115* | 1300 | 115 |
| 1200 | 85 | 1200 | 80 or 115* | 1200 | 115 |
| 1100 | 82 | 1100 | 80 or 115* | 1100 | 115 |
| 1000 | 102 | 1000 | 102 | 1000 | 200 |
| 900 | 102 | 900 | 112 | 900 | 210 |
| 800 | 152 | 800 | 202 | 800 | 210 |
| 700 | 182 | 700 | 252 | 700 | 310 |
| 600 | 222 | 600 | 342 | 600 | 310 |
| 500 | 262 | 500 | 312 | 500 | 310 |
| 400 | 312 | 400 | 392 | 400 | No available |

In order for a traffic signal to be warranted the following conditions must exist for each of any 4 hours on an average day:



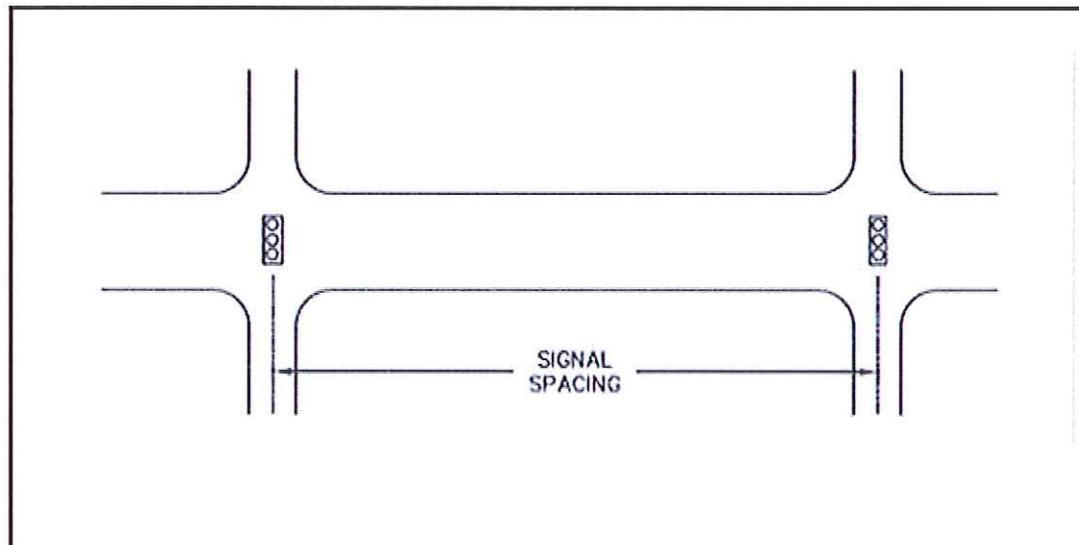
- The plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) all fall above the applicable curve in Figure 4C-1 for the existing combination of approach lanes. On the minor street, the higher volume shall not be required to be on the same approach during each of these 4 hours.

When calculating the number of hours that meet the above criteria, we selected the same hour period with each study hour beginning at the same 15-minute interval and ending at the same 15-minute interval.

For the intersection of Lexington Road and Seagraves Drive, Figure 7 shows the approach totals for both the major and minor streets. There are no hours (starting at 5:15-6:15 and ending at 7:15-8:15) in which the major street and minor street conditions are both met. Therefore, under Warrant 2 a signal is not warranted.

Signal Spacing

Signal spacing criteria are outlined in GDOT Regulations for Driveway and Encroachment Control Manual Table 3-3 below and the roadway that fits both intersections are outlined in yellow below.



| ROADWAY TYPE | SIGNAL SPACING, FT. | |
|--------------|---------------------|---------|
| | DESIRABLE | MINIMUM |
| RURAL | 2,640 | 1,320 |
| URBAN | 1,320 | 1,000 |

Table 3-3 Spacing of Signalized Intersections

For the intersection of Lexington Road and Seagraves Drive the distance to the nearest eastbound signal at Lexington Road and Gaines School Road is 3168 feet. This exceeds both the desirable and minimum values outlined in Table 3-3. The distance to the nearest westbound signal at Lexington Road and Atlas Way is 1584 feet, resulting in Seagraves drive being less than the desirable but greater than the minimum spacing outlined in Table 3-3.



Conclusion

Based on above analysis, a signal warrant analysis is not warranted for the intersection of Lexington/Seagraves because the proposed development does not meet any of the requirements outlined in the U.S. Department of Transportation Federal Highway Administration Manual on Uniform Traffic Control Devices. In addition, based on the spacing requirements in the GDOT Regulations for Driveway and Encroachment Control Manual, neither of the study intersections should be considered for signalization.

Recommendations

As traffic develops along this roadway network, we recommend that the developer of the facility and roadway network address the following items as outlined below:

Intersection: Lexington Road / Seagraves Drive

1. A traffic impact analysis is not warranted because the proposed development does not exceed the standards listed by Athens-Clarke County Code.
2. A signal warrant analysis is not warranted because the proposed development does not meet any of the requirements outlined in the U.S. Department of Transportation Federal Highway Administration Manual on Uniform Traffic Control Devices.
3. The intersection of State Route 10 and Seagraves Drive should include the addition of a dedicated right turn lane for the eastbound traffic on SR 10. The existing two-way left-turn lane on SR 10 will serve as a left turn lane for the westbound traffic. Below are the recommended improvements in accordance with GDOT and ACC Standards. The recommended right turn lane must be permitted through GDOT and ACC.
 - a. State Route 10 (Lexington Road) will continue to be free-flowing and Seagraves Drive continue to be stop-controlled at its intersection with SR 10.
 - b. The intersection will have signage and marking in accordance with the MUTCD, current edition.
 - c. With the posted 45-mph speed limit on SR 10, the eastbound right turn lane is required to have a minimum of 175 feet of full width storage length with a taper of 100 feet. The proposed right turn lane must have a minimum width of 12 feet and have curb and gutter.
 - d. The intersection shall have minimum 25-foot radii and the lane widths on Seagraves Drive will remain unchanged.
 - e. All design and construction must meet GDOT and Athens-Clarke County standards and specifications, as appropriate.