December 15, 2022
Last Revised: May 1, 2023
Via Hand Delivery

Montgomery Township Planning Department<br>100 Community Drive<br>Skillman, NJ 08558<br>Attn: Lori Savron, PP, AICP, Planning Director


#### Abstract

RE: Traffic \& Parking Assessment Proposed Day School and Medical Office 982 Georgetown-Franklin Turnpike (CR 518) Montgomery Township, Somerset County, New Jersey DT\#4447 22-02363


Dear Ms. Savon:
Dynamic Traffic has prepared the following assessment to determine the traffic impact and adequacy of access, circulation, and parking associated with redevelopment of a site located along GeorgetownFranklin Turnpike (CR 518) in the Township of Montgomery, Somerset County, New Jersey (see Figure 1). The site is designated as Block 28010 - Lots 57 \& 58 on the Township Tax Maps. The site is currently occupied by a single-family dwelling. It is proposed to raze the existing site and construct a two-story, 8,640 SF Malvern School and a 4,000 SF medical office (The Project). Access to the site is proposed to be provided via one (1) full-movement driveway along Brecknell Way, which is currently under construction.

## Existing Conditions

Georgetown-Franklin Turnpike (CR 518) is an Urban Minor Arterial roadway under Somerset County jurisdiction. In the vicinity of the site the posted speed limit is 45 MPH and the roadway provides one travel lane in each direction. On-street parking is prohibited along both sides of the roadway. Curb is provided along the both sides of the roadway. Sidewalk is not provided along either side of the roadway. Georgetown-Franklin Turnpike provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Georgetown-Franklin Turnpike in the vicinity of The Project are mixed residential and agricultural.
U.S. Route 206 is an Urban Principal Arterial roadway under New Jersey Department of Transportation (NJDOT) jurisdiction. In the vicinity of the site the posted speed limit is 40 MPH and the roadway provides one travel lane in each direction with turn lanes provided at key intersections. On-street parking is prohibited along both sides of the roadway. Curb is provided along the easterly side of the roadway while sidewalk is not provided along either side of the roadway. U.S. Route 206 has a curved horizontal alignment and a relatively flat vertical alignment. The land uses along Route 206 within the study area are primarily commercial.

Brecknell Way is a local roadway under Township of Montgomery jurisdiction that is currently under construction. In the vicinity of the site posted speed limit is 25 MPH and the roadway provides one lane of travel in each direction. On-street parking is prohibited along both sides of the roadway. Curb is provided along the both sides of the roadway, while sidewalk is not provided along either side of the roadway. Brecknell Way provides a curved horizontal alignment and a downhill vertical alignment in both directions from the proposed location of the site driveway. The land uses along Brecknell Way in the vicinity of The Project are mixed residential and commercial.

## Existing Traffic Volumes

Manual turning movement (MTM) counts were conducted on Thursday, October 12, 2017 from 7:00 to 9:00 AM and from 4:30 to 6:30 PM at the intersection of Research Road (now known as Village Drive) with Georgetown-Franklin Turnpike (CR 518). Review of the collected traffic data reveals that the weekday morning peak street hour (PSH) occurs between 7:45-8:45 AM and the weekday evening PSH occurs between 4:30-5:30 PM. Note that the 2017 counts were increased to better represent existing 2022 traffic volumes by applying a growth rate of $1.25 \%$ per year obtained from the NJDOT Annual Background Growth Rate Table for a period of five years.

Additionally, this firm conducted MTM counts on Thursday, October 7, 2021 from 7:00 AM to 9:00 AM and Tuesday, July 26, 2022 from 4:30 PM to 6:30 PM at the intersection of U.S. Route 206 and Georgetown-Franklin-Turnpike/Washington Street (CR 518). These traffic counts were then used to determine the volume of traffic along U.S. Route 206 at the intersection with Brecknell Way. Note that the 2021 weekday morning counts were increased to better represent existing 2022 traffic volumes by applying a growth rate of $1.25 \%$ per year obtained from the NJDOT Annual Background Growth Rate Table for a period of one year.

In order to confirm the grown 2017 traffic volumes are an accurate reflection of current traffic conditions, the adjusted 2017 traffic volumes were then compared to the current count data. The grown 2017 traffic volumes were compared to the existing 2021 weekday morning traffic counts and the existing weekday evening 2022 traffic counts at the intersection of U.S. Route 206 and Georgetown-Franklin-Turnpike/Washington Street (CR 518) as summarized in the table below.

Table I
Traffic Count Comparison

| Location | Date | CR 518 Peak Hour Traffic Volume |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | With Background <br> Growth | \% Difference |  |
|  | Oct. 2017 - AM | 1,136 | $1,194^{[1]}$ | $-35 \%$ |
| CR 518 b/w <br>  <br> U.S. Route 206 | Oct. 2021 - AM | 887 | 887 |  |
|  | Oct. 2017 - PM | 1,139 | $1,212^{[2]}$ | $-21 \%$ |
|  | July 2022 - PM | 1,000 | 1,000 |  |

[1] 2017 data increased by $1.25 \%$ per NJDOT Annual Background Growth Rate Table compounded annually for four years.
[2] 2017 data increased by $1.25 \%$ per NJDOT Annual Background Growth Rate Table compounded annually for five years.
As seen above, the grown 2017 traffic volumes were found to be higher in the weekday AM than the existing 2021 traffic volumes and higher in the weekday PM than the existing 2022 traffic volumes. As such, no further adjustment was applied to the grown 2017 volumes which represent a conservative estimate of current conditions. Figure 2 shows the existing peak hour traffic volumes at the study intersection. The manual turning movement count data is appended.

## Future Traffic Volumes

Regardless of whether the subject site is developed or not, traffic volumes on the surrounding roadways are expected to increase as a result of developments throughout the region. A growth rate for roadways within the study area was obtained from the NJDOT Annual Background Growth Rate Table, which indicates a growth rate of $1.25 \%$ per year.

Through consultation with the Montgomery Township staff, there are several developments in the vicinity of the site that have been approved but not yet constructed that are identified as potential significant traffic generators, shown below. It is assumed that the background growth rate is adequate to account for the traffic associated with all developments not listed hereafter.

- A residential townhome development, known as Country Classics, located along the northbound side of US Route 206 just north of Montgomery Center, is currently under construction. The 115-unit development will replace an existing $38,000 \mathrm{SF}$ office / warehouse / flex-space building. Projections for the increase in traffic associated with the residential development were obtained from the Traffic Impact Assessment completed by Dolan \& Dean Consulting Engineers, LLC and dated August 20, 2019. The traffic volumes for this development in the vicinity of The Project are shown on Figure 3.
- Montgomery Walk is an approved mixed-use development that will replace the Village Shopper II development. It will consist of 50 multifamily housing units and 56,000 square feet of commercial retail. Traffic associated with the change of use is obtained from the Traffic Impact Analysis for Montgomery Walk completed by McDonough \& Rea Associates and dated January 16, 2018. The traffic volumes for this development in the vicinity of The Project are shown on Figure 4.
- A car dealership, known as Baker Auto, located at the northwestern corner of US Route 206 and Airport Road has been approved. Traffic generated by the $28,170 \mathrm{SF}$ site is found in the Traffic Impact Study completed by Harlyn Associates and dated June 20, 2016. The traffic volumes for this development in the vicinity of The Project are shown on Figure 5.
- An 8,040 SF expansion of the existing Enrollment Management Association campus has been approved. The office is located at the northwest corner of Georgetown Franklin Turnpike and Vreeland Drive. The increase in traffic affiliated with this improvement is provided in the Traffic Statement executed by Langan Engineering and Environmental Services and dated December 19, 2016. The traffic volumes for this development in the vicinity of The Project are shown on Figure 6.
- A residential development consisting of 107 townhomes, 40 condominiums and 86 apartment units known as Montgomery Crossing, located along Village Drive just north of Georgetown Franklin Turnpike, has been approved. Traffic projections for this development were obtained from the Traffic Impact Study, prepared by Dynamic Traffic, dated March 5, 2018. The traffic volumes for this development in the vicinity of The Project are shown on Figure 7.
- A $34,444 \mathrm{SF}, 80$-unit assisted living facility located at the northwestern corner of the intersection of Hartwick Drive and Village Drive is currently under review by the Montgomery Township Planning Board. In an effort to remain conservative, this development has been included as an adjacent development for the purposes of this study. Traffic projections for this development were obtained from the Traffic \& Parking Assessment, prepared by Dynamic Traffic, dated December 9, 2022. The traffic volumes for this development in the vicinity of The Project are shown on Figure 8.
- A mixed-use development known as Montgomery Promenade, at the southwest corner of US Route 206 and Georgetown Franklin Turnpike (CR 518) has been approved. It will consist of 34 -single family dwelling units and 320,000 square feet of commercial retail space. Traffic projections for this development were obtained from the Traffic Impact Analysis prepared by Atlantic Traffic \& Design Engineers, Inc. and dated December 28, 2017. Because this development is not approved, No Build and Build scenarios have been prepared with and without the traffic generation from this proposed development. The traffic volumes for this development in the vicinity of The Project are shown on Figure 10 and the rerouted traffic volumes associated with the roadway improvements included with the construction of this development are shown separately on Figure 11.

Future 2024 No Build traffic volumes were developed by applying the background growth rate of $1.25 \%$ for two (2) years to the study area roadways existing traffic volumes and adding the adjacent development traffic volumes. Figures 9 and 12, show the 2024 No Build traffic volumes without and with the Montgomery Promenade Development, respectively.

## Site Generated Traffic

Trip generation projections for The Project were made utilizing trip generation research data as published under Land Use Code (LUC) 565 - Day Care Center and LUC 720 - Medical-Dental Office Building - Stand Alone in the Institute of Transportation Engineers' (ITE) publication, Trip Generation, $11^{\text {th }}$ Edition. This publication sets forth trip generation rates based on empirical traffic count data conducted at numerous research sites. The following table shows the anticipated trip generation for The Project.

According to studies conducted by ITE, traffic associated with LUC 565 is not $100 \%$ newly generated. Rather, a portion of the traffic is diverted from the existing traffic stream on the adjacent roadway network. This is because the day care is not exclusively a destination land use, instead patrons stop on their way to/from other locations such as home or work. ITE identifies a $44 \%$ passby traffic percentage for LUC 565 during the weekday evening peak period. It should be noted that there will realistically be passby traffic during the weekday morning peak period as well even though there is no data published by ITE, however conservatively no credit was taken for this effect. The table below details the traffic volumes associated with the subject project taking into account the passby credits.

Table II
Trip Generation Considering Passby Traffic

| Land Use | Trip Type | AM PSH |  |  | PM PSH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Out | Total | In | Out | Total |  |
| 8,640 SF Day Care | Total | 50 | 45 | 95 | 45 | 51 | 96 |
|  | Passby | - | - | - | 20 | 22 | 42 |
|  | New (Primary) | $\mathbf{5 0}$ | $\mathbf{4 5}$ | $\mathbf{9 5}$ | $\mathbf{2 5}$ | $\mathbf{2 9}$ | $\mathbf{5 4}$ |
| 4,000 SF Standalone <br> Medical Office <br> Building | Total | 10 | 3 | 13 | 4 | 9 | 13 |
|  | Passby | - | - | - | - | - | - |
| Total | New (Primary) | $\mathbf{1 0}$ | $\mathbf{3}$ | $\mathbf{1 3}$ | $\mathbf{4}$ | $\mathbf{9}$ | $\mathbf{1 3}$ |
|  | Total | 60 | 48 | 108 | 49 | 60 | 109 |
|  | Passby | - | - | - | 20 | 22 | 42 |

Once the magnitude of the site generated traffic is known, it is necessary to assign the traffic to the adjacent street system. The distribution of new traffic to the surrounding roadways is based on the location of primary arterial roadways, major signalized intersections and existing traffic patterns. Figures 13-17 illustrate the Primary Traffic Trip Distribution, Primary Site Generated Volumes, Passby Traffic Trip Distribution, Passby Site Generated Volumes, and the Total Site Generated Volumes, respectively. The Site Generated Volumes assigned to the study area network were added to the No Build traffic volumes without the Montgomery Promenade development to generate the Build traffic volumes without the Montgomery Promenade development, which are shown in Figure 18. The re-routed site-generated volumes associated with the construction of the Montgomery Promenade development are shown on Figure 19. These volumes were then added to the Build traffic volumes without the Montgomery Promenade development to generate the Build traffic volumes with the Montgomery Promenade development, which are shown on Figure 20.

## Capacity Analysis

Capacity analyses were conducted for the study intersections under the No Build and Build conditions both without and with the Montgomery Promenade development. The analyses were performed for the weekday morning and evening peak hours. The analyses have been conducted utilizing methodologies set forth in the Highway Capacity Manual, $6^{\text {th }}$ Edition. The following table summarizes the results of the capacity analyses and the capacity analysis worksheets are appended to this letter.

Table III
Future Levels of Service without Montgomery Promenade Development

| Intersection | Direction/ <br> Movement |  | AM PSH <br> Build |  | Build | No <br> Build |  | Build |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Georgetown-Franklin Turnpike <br> (CR 518) \& Brecknell Way | SB | R | B (14) | B (14) | B (13) | B (14) |  |  |
| U.S. Route 206 \& Brecknell Way | EB | R | C (16) | C (17) | C (17) | C (18) |  |  |
|  <br> Site Driveway | WB | LR | - | A (9) | - | A (9) |  |  |
|  | SB | L | - | A (7) | - | A (7) |  |  |

A (\#) - Unsignalized Intersection Level of Service (seconds of delay per vehicles)
Table IV
Future Levels of Service with Montgomery Promenade Development

| Intersection | Direction/ <br> Movement |  | AM PSH <br> Nuild |  | Build | PM <br> Nuild |  | Build |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Georgetown-Franklin Turnpike <br> (CR 518) \& Brecknell Way | SB | R | B (13) | B (13) | B (13) | B (13) |  |  |
| U.S. Route 206 \& Brecknell Way | EB | R | C (16) | C (18) | C (20) | C (22) |  |  |
|  <br> Site Driveway | WB | LR | - | A (9) | - | A (9) |  |  |
|  | SB | L | - | A (7) | - | A (7) |  |  |

A (\#) - Unsignalized Intersection Level of Service (seconds of delay per vehicles)

## Georgetown-Franklin Turnpike (CR 518) \& Brecknell Way

Brecknell Way is proposed to intersect Georgetown-Franklin Turnpike (CR 518) to form a three-leg intersection with the southbound approach of Brecknell Way operating under stop control. Georgetown-Franklin Turnpike is proposed to provide a shared through/right turn lane in the westbound direction and one dedicated through lane in the eastbound direction. Brecknell Way is proposed to provide one dedicated right turn lane in the southbound direction.

With the addition of the traffic from the subject project, the levels of service are anticipated to remain unchanged from the No Build condition both without and with the Montgomery Promenade development. See Tables III and IV for the individual movement levels of service and delays.

## U.S. Route 206 \& Brecknell Way

Brecknell Way is proposed to intersection U.S. Route 206 to form a three-leg intersection with the eastbound approach of Brecknell Way operating under stop control. U.S. Route 206 is proposed to provide a dedicated through lane and a shared through/right turn lane. Brecknell Way is proposed to provide one dedicated right turn lane in the eastbound direction.

With the addition of the traffic from the subject project, the levels of service are anticipated to remain unchanged from the No Build condition both without and with the Montgomery Promenade development. See Tables III and IV for the individual movement levels of service and delays.

## Brecknell Way \& Site Driveway

The site driveway is proposed to intersect Brecknell Way to form a three-leg intersection with the westbound approach of the site driveway operating under stop control. Brecknell Way is proposed to provide a shared through/right turn lane in the northbound direction and a shared left turn/through lane in the southbound direction. The site driveway is proposed to provide a shared left turn/right turn lane in the westbound direction.

As designed, the site driveway is anticipated to operate at level of service "A" both without and with the Montgomery Promenade development. See Tables III and IV for the individual movement levels of service and delays.

## Site Access, Parking and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As previously noted, access to the site is proposed to be provided via one (1) full-movement driveway along Brecknell Way.

The parking lot will be serviced by one-way and two-way parking aisles with widths varying from $20^{\prime}$ to $24^{\prime}$, which satisfy the Ordinance's minimum requirement of 18 ' aisles for one-way parking aisles servicing 60 -degree parking, $22^{\prime}$ for one-way aisles servicing 90 degree parking, and $24^{\prime}$ for two-way parking servicing 90 -degree parking. Review of the site plan design indicates that the site can sufficiently accommodate a large wheel base vehicle, such as a single unit truck (SU), along with the automobile traffic anticipated.

The Montgomery Township Ordinance sets forth a parking requirement of 1 parking space per 200 square feet for offices and 1 parking space per employee plus 1 parking space per 8 children for child care centers. This equates to a parking requirement of 20 spaces for the proposed $4,000 \mathrm{SF}$ medical office and 35 spaces for the proposed Malvern School with 20 employees and 120 children. The site as proposed provides 58 parking spaces, inclusive of three handicap spaces, and the Ordinance requirement is satisfied.

It is proposed to provide parking stalls with dimensions of $9^{\prime} \times 18^{\prime}$. It should be noted that industry standards recommend stall widths of between $8^{\prime} 6^{\prime \prime}$ and $8^{\prime \prime} 9^{\prime \prime}$ and a length of $18^{\prime}$ for low to moderateturnover land uses such as The Project, which is met as designed.

## Conclusion

Based upon our Traffic Impact Assessment as detailed in the body of this report, it is the professional opinion of Dynamic Traffic that the adjacent street system of Montgomery Township, Somerset County, and NJDOT will not experience any significant degradation in operating conditions with the redevelopment of the site. The site driveways are located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good circulation throughout the site and provides adequate parking to accommodate The Project's needs.

If you have any questions on the above, please do not hesitate to contact me.
Sincerely,

## Dynamic Traffic, LLC



Nick Verderese, PE
Senior Principal
NJ PE License 38991


Kevin Savage, PE, PTOE
Principal
NJ PE License 55728

UT
Enclosures

## c: Joe Scandone (via email w/enclosure) <br> Jeff Haberman, PE, PP (via email w/enclosure)

File: T:\TRAFFIC PROJECTS $\backslash 4447$ The Malvern School $\backslash 22-02363$ Montgomery $\backslash$ Design_Planning $\backslash$ Planning $\backslash 2023$-05-01 Response to
Comments $\backslash$ Traffic \& Parking Assessment - Rev 1 $\backslash 2023$-05-01 Traffic \& Parking Assessment. docx





## Georgetown-Franklin <br> Turnpike (CR 518)

## LEGEND

$\begin{array}{ll} & \begin{array}{l}\text { Existing Roadway } \\ ------- \\ \text { Proposed Roadway }\end{array}\end{array}$


AM (PM)
Signalized Intersection

Proposed Day School \& Medical Office Building
Traffic \& Parking Assessment
4447 22-02363




Georgetown-Franklin
Turnpike (CR 518)

LEGEND
$\begin{array}{ll} & \begin{array}{l}\text { Existing Roadway } \\ \text { Proposed Roadway }\end{array}\end{array}$
AM (PM)
Signalized Intersection

Proposed Day School \& Medical Office Building
Traffic \& Parking Assessment
Figure 7
4447 22-02363














# D ynamic Traffic, LLC <br> 1904 M ain Street, Lake Como, NJ, 07719 

245 M ain Street - Suite 110, Chester, NJ , 07930
(732) 681-0760

E/W: Georgetown Franklin Turnpike N/S: Research Road
Town/County: Montgomery/Somerset Job \#: 0043-14-015T

File Name : Georgetown Franklin Tpke \& Research Rd AM \& PM
Site Code : 00000000
Start Date : 10/12/2017
Page No : 1

|  | Georgetown Franklin Turnpike Eastbound |  |  |  | Georgetown Franklin Turnpike Westbound |  |  |  | Research Road Southbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 07:00 AM | 0 | 71 | 0 | 71 | 0 | 115 | 0 | 115 | 9 | 0 | 2 | 11 | 197 |
| 07:15 AM | 0 | 107 | 0 | 107 | 0 | 95 | 2 | 97 | 11 | 0 | 1 | 12 | 216 |
| 07:30 AM | 1 | 114 | 0 | 115 | 0 | 113 | 4 | 117 | 13 | 0 | 0 | 13 | 245 |
| 07:45 AM | 0 | 118 | 0 | 118 | 0 | 137 | 1 | 138 | 12 | 0 | 2 | 14 | 270 |
| Total | 1 | 410 | 0 | 411 | 0 | 460 | 7 | 467 | 45 | 0 | 5 | 50 | 928 |
| 08:00 AM | 0 | 121 | 0 | 121 | 0 | 153 | 5 | 158 | 7 | 0 | 1 | 8 | 287 |
| 08:15 AM | 1 | 130 | 0 | 131 | 0 | 131 | 3 | 134 | 5 | 0 | 0 | 5 | 270 |
| 08:30 AM | 0 | 115 | 0 | 115 | 0 | 132 | 1 | 133 |  | 0 | 0 | 9 | 257 |
| 08:45 AM | 0 | 129 | 0 | 129 | 0 | 113 | 2 | 115 | 6 | 0 | 0 | 6 | 250 |
| Total | 1 | 495 | 0 | 496 | 0 | 529 | 11 | 540 | 27 | 0 | 1 | 28 | 1064 |

*** BREAK ***

| 04:30 PM | 2 | 173 | 0 | 175 | 0 | 127 | 3 | 130 | 4 | 0 | 2 | 6 | 311 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04:45 PM | 0 | 129 | 0 | 129 | 0 | 126 | 4 | 130 | 3 | 0 | 0 | 3 | 262 |
| Total | 2 | 302 | 0 | 304 | 0 | 253 | 7 | 260 | 7 | 0 | 2 | 9 | 573 |
| 05:00 PM | 2 | 146 | 0 | 148 | 0 | 130 | 9 | 139 | 4 | 0 | 0 | 4 | 291 |
| 05:15 PM | 0 | 141 | 0 | 141 | 0 | 119 | 9 | 128 | 12 | 0 | 0 | 12 | 281 |
| 05:30 PM | 0 | 143 | 0 | 143 | 0 | 125 | 5 | 130 | 7 | 0 | 0 | 7 | 280 |
| 05:45 PM | 0 | 135 | 0 | 135 | 0 | 115 | 12 | 127 | 9 | 0 | 0 | 9 | 271 |
| Total | 2 | 565 | 0 | 567 | 0 | 489 | 35 | 524 | 32 | 0 | 0 | 32 | 1123 |
| 06:00 PM | 2 | 174 | 0 | 176 | 0 | 115 | 7 | 122 | 11 | 0 | 1 | 12 | 310 |
| 06:15 PM | 1 | 117 | 0 | 118 | 0 | 124 | 11 | 135 | 8 | 0 | 0 | 8 | 261 |
| Grand Total | 9 | 2063 | 0 | 2072 | 0 | 1970 | 78 | 2048 | 130 | 0 | 9 | 139 | 4259 |
| Apprch \% | 0.4 | 99.6 | 0 |  | 0 | 96.2 | 3.8 |  | 93.5 | 0 | 6.5 |  |  |
| Total \% | 0.2 | 48.4 | 0 | 48.6 | 0 | 46.3 | 1.8 | 48.1 | 3.1 | 0 | 0.2 | 3.3 |  |
| Cars | 9 | 1996 | 0 | 2005 | 0 | 1911 | 74 | 1985 | 125 | 0 | 8 | 133 | 4123 |
| \% Cars | 100 | 96.8 | 0 | 96.8 | 0 | 97 | 94.9 | 96.9 | 96.2 | 0 | 88.9 | 95.7 | 96.8 |
| Trucks | 0 | 67 | 0 | 67 | 0 | 59 | 4 | 63 | 5 | 0 | 1 | 6 | 136 |
| \% Trucks | 0 | 3.2 | 0 | 3.2 | 0 | 3 | 5.1 | 3.1 | 3.8 | 0 | 11.1 | 4.3 | 3.2 |

# D ynamic Traffic, LLC <br> 1904 M ain Street, Lake Como, NJ, 07719 <br> 245 M ain Street - Suite 110, Chester, NJ, 07930 <br> (732) 681-0760 

E/W: Georgetown Franklin Turnpike N/S: Research Road
Town/County: Montgomery/Somerset Job \#: 0043-14-015T

File Name : Georgetown Franklin Tpke \& Research Rd AM \& PM
Site Code : 00000000
Start Date : 10/12/2017
Page No :2

|  | Georgetown Franklin Turnpike Eastbound |  |  |  | Georgetown Franklin Turnpike Westbound |  |  |  | Research Road Southbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire | ersec | Begin | $\text { at } 07: 45$ | $5 \text { AM }$ |  |  |  |  |  |  |  |  |  |
| 07:45 AM | 0 | 118 | 0 | 118 | 0 | 137 | 1 | 138 | 12 | 0 | 2 | 14 | 270 |
| 08:00 AM | 0 | 121 | 0 | 121 | 0 | 153 | 5 | 158 | 7 | 0 | 1 | 8 | 287 |
| 08:15 AM | 1 | 130 | 0 | 131 | 0 | 131 | 3 | 134 | 5 | 0 | 0 | 5 | 270 |
| 08:30 AM | 0 | 115 | 0 | 115 | 0 | 132 | 1 | 133 | 9 | 0 | 0 | 9 | 257 |
| Total Volume | 1 | 484 | 0 | 485 | 0 | 553 | 10 | 563 | 33 | 0 | 3 | 36 | 1084 |
| \% App. Total | 0.2 | 99.8 | 0 |  | 0 | 98.2 | 1.8 |  | 91.7 | 0 | 8.3 |  |  |
| PHF | . 250 | . 931 | . 000 | . 926 | . 000 | . 904 | . 500 | . 891 | . 688 | . 000 | . 375 | . 643 | . 944 |
| Cars | 1 | 457 | 0 | 458 | 0 | 532 | 9 | 541 | 31 | 0 | 3 | 34 | 1033 |
| \% Cars | 100 | 94.4 | 0 | 94.4 | 0 | 96.2 | 90.0 | 96.1 | 93.9 | 0 | 100 | 94.4 | 95.3 |
| Trucks | 0 | 27 | 0 | 27 | 0 | 21 | 1 | 22 | 2 | 0 | 0 | 2 | 51 |
| \% Trucks | 0 | 5.6 | 0 | 5.6 | 0 | 3.8 | 10.0 | 3.9 | 6.1 | 0 | 0 | 5.6 | 4.7 |

Peak Hour Analysis From 12:00 PM to 06:15 PM - Peak 1 of 1

| eak Hour for | section | gin | :30 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04:30 PM | 2 | 173 | 0 | 175 | 0 | 127 | 3 | 130 | 4 | 0 | 2 | 6 | 311 |
| 04:45 PM | 0 | 129 | 0 | 129 | 0 | 126 | 4 | 130 | 3 | 0 | 0 | 3 | 262 |
| 05:00 PM | 2 | 146 | 0 | 148 | 0 | 130 | 9 | 139 | 4 | 0 | 0 | 4 | 291 |
| 05:15 PM | 0 | 141 | 0 | 141 | 0 | 119 | 9 | 128 | 12 | 0 | 0 | 12 | 281 |
| Total Volume | 4 | 589 | 0 | 593 | 0 | 502 | 25 | 527 | 23 | 0 | 2 | 25 | 1145 |
| \% App. Total | 0.7 | 99.3 | 0 |  | 0 | 95.3 | 4.7 |  | 92 | 0 | 8 |  |  |
| PHF | . 500 | . 851 | . 000 | . 847 | . 000 | . 965 | . 694 | . 948 | . 479 | . 000 | . 250 | . 521 | . 920 |
| Cars | 4 | 575 | 0 | 579 | 0 | 491 | 25 | 516 | 22 | 0 | 2 | 24 | 1119 |
| \% Cars | 100 | 97.6 | 0 | 97.6 | 0 | 97.8 | 100 | 97.9 | 95.7 | 0 | 100 | 96.0 | 97.7 |
| Trucks | 0 | 14 | 0 | 14 | 0 | 11 | 0 | 11 | 1 | 0 | 0 | 1 | 26 |
| \% Trucks | 0 | 2.4 | 0 | 2.4 | 0 | 2.2 | 0 | 2.1 | 4.3 | 0 | 0 | 4.0 | 2.3 |

# D ynamic Traffic, LLC <br> 1904 M ain Street, Lake Como, NJ 07719 <br> 245 M ain Street-Suite 110, Chester, NJ 07930 <br> 732-681-0760 

E/W: CR 518
N/S: Rt 206
Town/County: Montgomery/Somerset
Job \#: 3334-99-001TE

File Name : Rt 206 \& Georgetown Franklin Tpke - AM Site Code : 00000000
Start Date: 10/7/2021
Page No : 1

| Groups Printed- Cars - Trucks (SU) - Trucks (TT) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Int. Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Georgetown Franklin Turnpike (CR 518) Eastbound |  |  |  |  | Georgetown Franklin Turnpike (CR 518) Westbound |  |  |  |  | Route 206 Northbound |  |  |  |  | Route 206 Southbound |  |  |  |  |  |
| Start Time | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total |  |
| 07:00 AM | 12 | 37 | 7 | 0 | 56 | 6 | 48 | 20 | 0 | 74 | 18 | 105 | 7 | 0 | 130 | 33 | 94 | 16 | 0 | 143 | 403 |
| 07:15 AM | 11 | 32 | 21 | 0 | 64 | 13 | 54 | 11 | 0 | 78 | 40 | 87 | 7 | 0 | 134 | 46 | 123 | 8 | 0 | 177 | 453 |
| 07:30 AM | 22 | 64 | 27 | 0 | 113 | 30 | 64 | 19 | 0 | 113 | 18 | 108 | 6 | 0 | 132 | 39 | 129 | 14 | 0 | 182 | 540 |
| 07:45 AM | 22 | 54 | 20 | 0 | 96 | 25 | 68 | 29 | 0 | 122 | 38 | 113 | 7 | 0 | 158 | 31 | 134 | 21 | 0 | 186 | 562 |
| Total | 67 | 187 | 75 | 0 | 329 | 74 | 234 | 79 | 0 | 387 | 114 | 413 | 27 | 0 | 554 | 149 | 480 | 59 | 0 | 688 | 1958 |
| 08:00 AM | 18 | 47 | 20 | 0 | 85 | 24 | 71 | 31 | 0 | 126 | 29 | 108 | 5 | 0 | 142 | 24 | 127 | 19 | 0 | 170 | 523 |
| 08:15 AM | 27 | 64 | 15 | 0 | 106 | 12 | 69 | 34 | 0 | 115 | 20 | 106 | 6 | 0 | 132 | 34 | 121 | 21 | 0 | 176 | 529 |
| 08:30 AM | 23 | 45 | 27 | 0 | 95 | 32 | 74 | 30 | 0 | 136 | 31 | 117 | 5 | 0 | 153 | 45 | 114 | 18 | 0 | 177 | 561 |
| 08:45 AM | 30 | 59 | 36 | 0 | 125 | 32 | 55 | 29 | 0 | 116 | 41 | 136 | 12 | 0 | 189 | 34 | 102 | 28 | 0 | 164 | 594 |
| Total | 98 | 215 | 98 | 0 | 411 | 100 | 269 | 124 | 0 | 493 | 121 | 467 | 28 | 0 | 616 | 137 | 464 | 86 | 0 | 687 | 2207 |
| Grand Total | 165 | 402 | 173 | 0 | 740 | 174 | 503 | 203 | 0 | 880 | 235 | 880 | 55 | 0 | 1170 | 286 | 944 | 145 | 0 | 1375 | 4165 |
| Apprch \% | 22.3 | 54.3 | 23.4 | 0 |  | 19.8 | 57.2 | 23.1 | 0 |  | 20.1 | 75.2 | 4.7 | 0 |  | 20.8 | 68.7 | 10.5 | 0 |  |  |
| Total \% | 4 | 9.7 | 4.2 | 0 | 17.8 | 4.2 | 12.1 | 4.9 | 0 | 21.1 | 5.6 | 21.1 | 1.3 | 0 | 28.1 | 6.9 | 22.7 | 3.5 | 0 | 33 |  |
| Cars | 163 | 386 | 144 | 0 | 693 | 171 | 483 | 195 | 0 | 849 | 214 | 840 | 47 | 0 | 1101 | 278 | 904 | 135 | 0 | 1317 | 3960 |
| \% Cars | 98.8 | 96 | 83.2 | 0 | 93.6 | 98.3 | 96 | 96.1 | 0 | 96.5 | 91.1 | 95.5 | 85.5 | 0 | 94.1 | 97.2 | 95.8 | 93.1 | 0 | 95.8 | 95.1 |
| Trucks (SU) | 2 | 16 | 28 | 0 | 46 | 3 | 18 | 6 | 0 | 27 | 20 | 16 | 7 | 0 | 43 | 7 | 28 | 9 | 0 | 44 | 160 |
| \% Trucks (SU) | 1.2 | 4 | 16.2 | 0 | 6.2 | 1.7 | 3.6 | 3 | 0 | 3.1 | 8.5 | 1.8 | 12.7 | 0 | 3.7 | 2.4 | 3 | 6.2 | 0 | 3.2 | 3.8 |
| Trucks (TT) | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 2 | 0 | 4 | 1 | 24 | 1 | 0 | 26 | 1 | 12 | 1 | 0 | 14 | 45 |
| \% Trucks (TT) | 0 | 0 | 0.6 | 0 | 0.1 | 0 | 0.4 | 1 | 0 | 0.5 | 0.4 | 2.7 | 1.8 | 0 | 2.2 | 0.3 | 1.3 | 0.7 | 0 | 1 | 1.1 |


|  | Georgetown Franklin Turnpike (CR 518) Eastbound |  |  |  |  | Georgetown Franklin Turnpike (CR 518) Westbound |  |  |  |  | Route 206 Northbound |  |  |  |  | Route 206 Southbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour | or Entir | ire Int | rsect | ion Be | gins at | 08:00 | AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 08:00 AM | 18 | 47 | 20 | 0 | 85 | 24 | 71 | 31 | 0 | 126 | 29 | 108 | 5 | 0 | 142 | 24 | 127 | 19 | 0 | 170 | 523 |
| 08:15 AM | 27 | 64 | 15 | 0 | 106 | 12 | 69 | 34 | 0 | 115 | 20 | 106 | 6 | 0 | 132 | 34 | 121 | 21 | 0 | 176 | 529 |
| 08:30 AM | 23 | 45 | 27 | 0 | 95 | 32 | 74 | 30 | 0 | 136 | 31 | 117 | 5 | 0 | 153 | 45 | 114 | 18 | 0 | 177 | 561 |
| 08:45 AM | 30 | 59 | 36 | 0 | 125 | 32 | 55 | 29 | 0 | 116 | 41 | 136 | 12 | 0 | 189 | 34 | 102 | 28 | 0 | 164 | 594 |
| Total Volume | 98 | 215 | 98 | 0 | 411 | 100 | 269 | 124 | 0 | 493 | 121 | 467 | 28 | 0 | 616 | 137 | 464 | 86 | 0 | 687 | 2207 |
| \% App. Total | 23.8 | 52.3 | 23.8 | 0 |  | 20.3 | 54.6 | 25.2 | 0 |  | 19.6 | 75.8 | 4.5 | 0 |  | 19.9 | 67.5 | 12.5 | 0 |  |  |
| PHF | . 817 | . 840 | . 681 | . 000 | . 822 | . 781 | . 909 | . 912 | . 000 | . 906 | . 738 | . 858 | . 583 | . 000 | . 815 | . 761 | . 913 | . 768 | . 000 | . 970 | 929 |
| Cars | 97 | 208 | 87 | 0 | 392 | 97 | 259 | 119 | 0 | 475 | 109 | 453 | 26 | 0 | 588 | 132 | 440 | 81 | 0 | 653 | 2108 |
| \% Cars | 99.0 | 96.7 | 88.8 | 0 | 95.4 | 97.0 | 96.3 | 96.0 | 0 | 96.3 | 90.1 | 97.0 | 92.9 | 0 | 95.5 | 96.4 | 94.8 | 94.2 | 0 | 95.1 | 95.5 |
| Trucks (SU) | 1 | 7 | 10 | 0 | 18 | 3 | 8 | 4 | 0 | 15 | 12 | 7 | 2 | 0 | 21 | 4 | 16 | 4 | 0 | 24 | 78 |
| \% Trucks (SU) | 1.0 | 3.3 | 10.2 | 0 | 4.4 | 3.0 | 3.0 | 3.2 | 0 | 3.0 | 9.9 | 1.5 | 7.1 | 0 | 3.4 | 2.9 | 3.4 | 4.7 | 0 | 3.5 | 3.5 |
| Trucks (TT) | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 0 | 3 | 0 | 7 | 0 | 0 | 7 | 1 | 8 | 1 | 0 | 10 | 21 |
| \% Trucks (TT) | 0 | 0 | 1.0 | 0 | 0.2 | 0 | 0.7 | 0.8 | 0 | 0.6 | 0 | 1.5 | 0 | 0 | 1.1 | 0.7 | 1.7 | 1.2 | 0 | 1.5 | 1.0 |

# D ynamic Traffic, LLC <br> 1904 M ain Street, Lake Como, NJ 07719 <br> 245 M ain Street - Suite \#110, Chester, NJ 07930 <br> 732-681-0760 

E/W: CR 518
N/S: Route 206
Town/County: Montgomery/Somerset Job \#: 2334-22-01462

File Name: Rt 206 \& CR 518 - PM
Site Code : 00000000
Start Date : 7/26/2022
Page No : 1

Groups Printed- Cars - Trucks (SU) - Trucks (TT)

|  | Georgetown Franklin Turnpike (CR 518) Eastbound |  |  |  |  | Washington Street (CR 518) Westbound |  |  |  |  | Route 206 Northbound |  |  |  |  | Route 206 Southbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | Peds | App. Toal | Left | Thru | Right | Peds | po. Tom | Left | Thru | Right | Peds | App. Toal | Left | Thru | Right | Peds | App. Toal | Int. Total |
| 04:30 PM | 31 | 67 | 21 | 0 | 119 | 17 | 70 | 41 | 0 | 128 | 20 | 183 | 13 | 0 | 216 | 54 | 102 | 31 | 0 | 187 | 650 |
| 04:45 PM | 34 | 52 | 23 | 0 | 109 | 12 | 53 | 30 | 0 | 95 | 24 | 160 | 18 | 0 | 202 | 51 | 101 | 27 | 0 | 179 | 585 |
| Total | 65 | 119 | 44 | 0 | 228 | 29 | 123 | 71 | 0 | 223 | 44 | 343 | 31 | 0 | 418 | 105 | 203 | 58 | 0 | 366 | 1235 |
| 05:00 PM | 36 | 76 | 21 | 0 | 133 | 10 | 56 | 35 | 0 | 101 | 27 | 174 | 21 | 0 | 222 | 45 | 104 | 28 | 0 | 177 | 633 |
| 05:15 PM | 39 | 85 | 29 | 0 | 153 | 17 | 48 | 44 | 0 | 109 | 28 | 196 | 14 | 0 | 238 | 51 | 102 | 30 | 1 | 18 | 684 |
| 05:30 PM | 28 | 74 | 20 | 0 | 122 | 7 | 66 | 48 | 0 | 121 | 27 | 188 | 19 | 0 | 234 | 48 | 110 | 29 | 0 | 187 | 664 |
| 05:45 PM | 35 | 82 | 23 | 0 | 140 | 10 | 66 | 44 | 0 | 120 | 27 | 157 | 28 | 1 | 213 | 56 | 116 | 20 | 0 | 192 | 665 |
| Total | 138 | 317 | 93 | 0 | 548 | 44 | 236 | 171 | 0 | 451 | 109 | 715 | 82 | 1 | 907 | 200 | 432 | 107 | 1 | 740 | 2646 |
| 06:00 PM | 40 | 50 | 13 | 0 | 103 | 12 | 47 | 40 | 0 | 99 | 26 | 176 | 15 | 0 | 217 | 54 | 113 | 27 | 0 | 194 | 613 |
| 06:15 PM | 27 | 48 | 12 | 0 | 87 | 4 | 70 | 36 | 0 | 110 | 24 | 155 | 19 | 0 | 198 | 47 | 118 | 37 | 0 | 202 | 597 |
| Grand Total | 270 | 534 | 162 | 0 | 966 | 89 | 476 | 318 | 0 | 883 | 203 | 1389 | 147 | 1 | 1740 | 406 | 866 | 229 | 1 | 1502 | 5091 |
| Apprch \% | 28 | 55.3 | 16.8 | 0 |  | 10.1 | 53.9 | 36 | 0 |  | 11.7 | 79.8 | 8.4 | 0.1 |  | 27 | 57.7 | 15.2 | 0.1 |  |  |
| Total \% | 5.3 | 10.5 | 3.2 | 0 | 19 | 1.7 | 9.3 | 6.2 | 0 | 17.3 | 4 | 27.3 | 2.9 | 0 | 34.2 | 8 | 17 | 4.5 | 0 | 29.5 |  |
| Cars | 268 | 529 | 162 | 0 | 959 | 88 | 469 | 318 | 0 | 875 | 203 | 1362 | 146 | 1 | 1712 | 400 | 845 | 228 | 1 | 1474 | 5020 |
| \% Cars | 99.3 | 99.1 | 100 | 0 | 99.3 | 98.9 | 98.5 | 100 | 0 | 99.1 | 100 | 98.1 | 99.3 | 100 | 98.4 | 98.5 | 97.6 | 99.6 | 100 | 98.1 | 98.6 |
| Trucks (SU) | 2 | 3 | 0 | 0 | 5 | 1 | 7 | 0 | 0 | 8 | 0 | 12 | 1 | 0 | 13 | 4 | 11 | 1 | 0 | 16 | 42 |
| \% Trucks (SU) | 0.7 | 0.6 | 0 | 0 | 0.5 | 1.1 | 1.5 | 0 | 0 | 0.9 | 0 | 0.9 | 0.7 | 0 | 0.7 | 1 | 1.3 | 0.4 | 0 | 1.1 | 0.8 |
| Trucks (TT) | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 15 | 2 | 10 | 0 | 0 | 12 | 29 |
| \% Trucks (TT) | 0 | 0.4 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1 | 0 | 0 | 0.9 | 0.5 | 1.2 | 0 | 0 | 0.8 | 0.6 |

# D ynamic Traffic, LLC <br> 1904 M ain Street, Lake Como, NJ 07719 <br> 245 M ain Street - Suite \#110, C hester, NJ 07930 <br> 732-681-0760 

E/W: CR 518
N/S: Route 206
Town/County: Montgomery/Somerset Job \#: 2334-22-01462

File Name: Rt 206 \& CR 518 - PM
Site Code : 00000000
Start Date : 7/26/2022
Page No : 2

|  | Georgetown Franklin Turnpike (CR 518) Eastbound |  |  |  |  | Washington Street (CR 518) Westbound |  |  |  |  | Route 206 Northbound |  |  |  |  | Route 206 Southbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 04:30 PM to 06:15 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Intersection Begins at 05:00 PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 05:00 PM | 36 | 76 | 21 | 0 | 133 | 10 | 56 | 35 | 0 | 101 | 27 | 174 | 21 | 0 | 222 | 45 | 104 | 28 | 0 | 177 | 633 |
| 05:15 PM | 39 | 85 | 29 | 0 | 153 | 17 | 48 | 44 | 0 | 109 | 28 | 196 | 14 | 0 | 238 | 51 | 102 | 30 | 1 | 184 | 684 |
| 05:30 PM | 28 | 74 | 20 | 0 | 122 | 7 | 66 | 48 | 0 | 121 | 27 | 188 | 19 | 0 | 234 | 48 | 110 | 29 | 0 | 187 | 664 |
| 05:45 PM | 35 | 82 | 23 | 0 | 140 | 10 | 66 | 44 | 0 | 120 | 27 | 157 | 28 | 1 | 213 | 56 | 116 | 20 | 0 | 192 | 665 |
| Total Volume | 138 | 317 | 93 | 0 | 548 | 44 | 236 | 171 | 0 | 451 | 109 | 715 | 82 | 1 | 907 | 200 | 432 | 107 | 1 | 740 | 2646 |
| \% App. Total | 25.2 | 57.8 | 17 | 0 |  | 9.8 | 52.3 | 37.9 | 0 |  | 12 | 78.8 | 9 | 0.1 |  | 27 | 58.4 | 14.5 | 0.1 |  |  |
| PHF | . 885 | . 932 | . 802 | . 000 | . 895 | . 647 | . 894 | . 891 | . 000 | . 932 | . 973 | . 912 | . 732 | . 250 | . 953 | . 893 | . 931 | . 892 | . 250 | . 964 | . 967 |
| Cars | 136 | 315 | 93 | 0 | 544 | 44 | 233 | 171 | 0 | 448 | 109 | 705 | 81 | 1 | 896 | 196 | 419 | 107 | 1 | 723 | 2611 |
| \% Cars | 98.6 | 99.4 | 100 | 0 | 99.3 | 100 | 98.7 | 100 | 0 | 99.3 | 100 | 98.6 | 98.8 | 100 | 98.8 | 98.0 | 97.0 | 100 | 100 | 97.7 | 98.7 |
| Trucks (SU) | 2 | 2 | 0 | 0 | 4 | 0 | 3 | 0 | 0 | 3 | 0 | 3 | 1 | 0 | 4 | 3 | 7 | 0 | 0 | 10 | 21 |
| \% Trucks (SU) | 1.4 | 0.6 | 0 | 0 | 0.7 | 0 | 1.3 | 0 | 0 | 0.7 | 0 | 0.4 | 1.2 | 0 | 0.4 | 1.5 | 1.6 | 0 | 0 | 1.4 | 0.8 |
| Trucks (TT) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 | 1 | 6 | 0 | 0 | 7 | 14 |
| \% Trucks (TT) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | 0 | 0 | 0.8 | 0.5 | 1.4 | 0 | 0 | 0.9 | 0.5 |




| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |


| Major/Minor | Major1 |  | Major2 |  | Minor2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | - | 0 | - | 0 | - | 622 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - |  | - | - |
| Critical Hdwy Stg 2 | - | - | - |  | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.318 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | 487 |
| Stage 1 | 0 | - | - |  | 0 | - |
| Stage 2 | 0 | - | - |  | 0 | - |
| Platoon blocked, \% |  | - | - | - |  |  |
| Mov Cap-1 Maneuver | - | - | - | - | - | 487 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - |  | - | - |
| Stage 2 | - | - | - |  | - | - |
|  |  |  |  |  |  |  |
| Approach | EB |  | WB |  | SB |  |
| HCM Control Delay, s | 0 |  | 0 |  | 12.5 |  |
| HCM LOS |  |  |  |  | B |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | EBT WBT WBRSBLn1 |  |  |  |  |
| Capacity (veh/h) |  | - | - | - | 487 |  |
| HCM Lane V/C Ratio |  | - | - |  | 0.015 |  |
| HCM Control Delay (s) |  | - | - | - | 12.5 |  |
| HCM Lane LOS |  | - | - | - | B |  |
| HCM 95th \%tile Q(veh) |  | - | - | - | 0 |  |



| Major/Minor | Major1 | Major2 |  | Minor2 |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | - | 0 | - | 0 | - |
| $\quad$ Stage 1 | - | - | - | - | - |
| $\quad$ Stage 2 | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 |
| $\quad$ Stage 1 | 0 | - | - | - | 0 |
| $\quad$ Stage 2 | 0 | - | - | - | 0 |


| Approach | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| HCM Control Delay, s | 0 | 0 | 13.1 |

HCMLOS B

| Minor Lane/Major Mvmt | EBT | WBT | WBR SBLn1 |
| :--- | :---: | ---: | ---: |
| Capacity (veh/h) | - | - | -453 |
| HCM Lane V/C Ratio | - | - | -0.021 |
| HCM Control Delay (s) | - | - | -13.1 |
| HCM Lane LOS | - | - | - |
| HCM 95th \%tile Q(veh) | - | - | - |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |


| Major/Minor | Major1 |  | Major2 |  | Minor2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | - | 0 | - | 0 | - | 705 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | - | - | - | 3.318 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | 436 |
| Stage 1 | 0 | - | - |  | 0 | - |
| Stage 2 | 0 | - | - | - | 0 | - |
| Platoon blocked, \% |  | - | - | - |  |  |
| Mov Cap-1 Maneuver | - | - | - | - | - | 436 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - |  | - | - |
| Stage 2 | - | - | - |  | - | - |
|  |  |  |  |  |  |  |
| Approach | EB |  | WB |  | SB |  |
| HCM Control Delay, s | 0 |  | 0 |  | 13.8 |  |
| HCM LOS |  |  |  |  | B |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | EBT WBT WBRSBLn1 |  |  |  |  |
| Capacity (veh/h) |  | - | - | - | 436 |  |
| HCM Lane V/C Ratio |  | - | - | - | 0.057 |  |
| HCM Control Delay (s) |  | - | - | - | 13.8 |  |
| HCM Lane LOS |  | - | - | - | B |  |
| HCM 95th \%tile Q(veh) |  | - | - | - | 0.2 |  |



| Major/Minor | Major1 |  | Major2 |  | Minor2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | - | 0 | - | 0 | - | 628 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | - |  | - - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - |  | - | - |
| Critical Hdwy Stg 2 | - | - | - |  | - | - |
| Follow-up Hdwy | - | - | - | - | - - | 3.318 |
| Pot Cap-1 Maneuver | 0 | - | - | - | 0 | 483 |
| Stage 1 | 0 | - | - |  | - 0 | - |
| Stage 2 | 0 | - | - |  | 0 | - |
| Platoon blocked, \% |  | - | - | - |  |  |
| Mov Cap-1 Maneuver | - | - | - |  | - | 483 |
| Mov Cap-2 Maneuver | - | - | - |  | - - | - |
| Stage 1 | - | - | - |  | - | - |
| Stage 2 | - | - | - |  | - - | - |
|  |  |  |  |  |  |  |
| Approach | EB |  | WB |  | SB |  |
| HCM Control Delay, s | 0 |  | 0 |  | 12.7 |  |
| HCM LOS |  |  |  |  | B |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | EBT WBT WBRSBLn1 |  |  |  |  |
| Capacity (veh/h) |  | - | - | - | 483 |  |
| HCM Lane V/C Ratio |  | - | - |  | 0.037 |  |
| HCM Control Delay (s) |  | - | - | - | - 12.7 |  |
| HCM Lane LOS |  | - | - | - | B |  |
| HCM 95th \%tile Q(veh) |  | - | - | - | 0.1 |  |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $l$ |  |  |  |  |  |  |


| Major/Minor | Minor2 |  | Major1 |  | Major2 |  |
| :--- | ---: | ---: | ---: | :--- | :--- | :--- |
| Conflicting Flow All | - | 876 | - | 0 | - | 0 |
| $\quad$ Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.42 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.318 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 332 | 0 | - | - | - |
| $\quad$ Stage 1 | 0 | - | 0 | - | - | - |
| $\quad$ Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, \% |  |  |  | - | - | - |
| Mov Cap-1 Maneuver | - | 332 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |


| Approach | EB | NB | SB |
| :--- | ---: | ---: | ---: |
| HCM Control Delay, s | 16.7 | 0 | 0 |
| HCM LOS | C |  |  |


| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
| :--- | ---: | ---: | ---: |
| Capacity (veh/h) | -332 | - | - |
| HCM Lane V/C Ratio | -0.076 | - | - |
| HCM Control Delay (s) | -16.7 | - | - |
| HCM Lane LOS | - | C | - |
| HCM 95th \%tile Q(veh) | - | 0.2 | - |




| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |


| Major/Minor | Minor2 |  | Major1 |  | Major2 |  |
| :--- | ---: | ---: | ---: | :--- | :--- | :--- |
| Conflicting Flow All | - | 1024 | - | 0 | - | 0 |
| $\quad$ Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.42 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.318 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 270 | 0 | - | - | - |
| $\quad$ Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, \% |  |  |  | - | - | - |
| Mov Cap-1 Maneuver | - | 270 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |


| Approach | EB | NB | SB |
| :--- | ---: | ---: | ---: |
| HCM Control Delay, s | 19.7 | 0 | 0 |


| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
| :--- | ---: | ---: | ---: |
| Capacity (veh/h) | -270 | - | - |
| HCM Lane V/C Ratio | -0.094 | - | - |
| HCM Control Delay (s) | -19.7 | - | - |
| HCM Lane LOS | - | C | - |
| HCM 95th \%tile Q(veh) | - | - |  |
| (v.3 | - | - |  |



| Major/Minor | Minor2 |  |  |  |  |  |  | Major1 |  | Major2 |  |
| :--- | ---: | ---: | ---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | - | 825 | - | 0 | - | 0 |  |  |  |  |  |
| $\quad$ Stage 1 | - | - | - | - | - | - |  |  |  |  |  |
| Stage 2 | - | - | - | - | - | - |  |  |  |  |  |
| Critical Hdwy | - | 6.42 | - | - | - | - |  |  |  |  |  |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |  |  |  |  |  |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |  |  |  |  |  |
| Follow-up Hdwy | - | 3.318 | - | - | - | - |  |  |  |  |  |
| Pot Cap-1 Maneuver | 0 | 356 | 0 | - | - | - |  |  |  |  |  |
| $\quad$ Stage 1 | 0 | - | 0 | - | - | - |  |  |  |  |  |
| Stage 2 | 0 | - | 0 | - | - | - |  |  |  |  |  |
| Platoon blocked, \% |  |  |  | - | - | - |  |  |  |  |  |
| Mov Cap-1 Maneuver | - | 356 | - | - | - | - |  |  |  |  |  |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |  |  |  |  |  |
| Stage 1 | - | - | - | - | - | - |  |  |  |  |  |
| Stage 2 | - | - | - | - | - | - |  |  |  |  |  |


| Approach | EB | NB | SB |
| :--- | ---: | ---: | ---: |
| HCM Control Delay, s | 16.5 | 0 | 0 |


| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
| :--- | ---: | ---: | ---: |
| Capacity (veh/h) | - | 356 | - |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $l$ |  |  |  |  |  |  |


| Major/Minor | Minor2 |  |  |  |  |  |  | Major1 |  | Major2 |  |
| :--- | ---: | ---: | ---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | - | 877 | - | 0 | - | 0 |  |  |  |  |  |
| $\quad$ Stage 1 | - | - | - | - | - | - |  |  |  |  |  |
| Stage 2 | - | - | - | - | - | - |  |  |  |  |  |
| Critical Hdwy | - | 6.42 | - | - | - | - |  |  |  |  |  |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |  |  |  |  |  |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |  |  |  |  |  |
| Follow-up Hdwy | - | 3.318 | - | - | - | - |  |  |  |  |  |
| Pot Cap-1 Maneuver | 0 | 331 | 0 | - | - | - |  |  |  |  |  |
| $\quad$ Stage 1 | 0 | - | 0 | - | - | - |  |  |  |  |  |
| Stage 2 | 0 | - | 0 | - | - | - |  |  |  |  |  |
| Platoon blocked, \% |  |  |  | - | - | - |  |  |  |  |  |
| Mov Cap-1 Maneuver | - | 331 | - | - | - | - |  |  |  |  |  |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |  |  |  |  |  |
| Stage 1 | - | - | - | - | - | - |  |  |  |  |  |
| Stage 2 | - | - | - | - | - | - |  |  |  |  |  |


| Approach | EB | NB | SB |
| :--- | ---: | ---: | ---: |
| HCM Control Delay, s | 18.1 | 0 | 0 |
| HCM LOS | C |  |  |


| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
| :--- | ---: | ---: | ---: |
| Capacity (veh/h) | -331 | - | - |
| HCM Lane V/C Ratio | -0.169 | - | - |
| HCM Control Delay (s) | -18.1 | - | - |
| HCM Lane LOS | - | C | - |
| HCM 95th \%tile Q(veh) | - | - |  |
| (s.6 | - | - |  |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |


| Major/Minor | Minor2 |  | Major1 |  | Major2 |  |
| :--- | ---: | ---: | ---: | :--- | :--- | :--- |
| Conflicting Flow All | - | 1026 | - | 0 | - | 0 |
| $\quad$ Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.42 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.318 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 269 | 0 | - | - | - |
| $\quad$ Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, \% |  |  |  | - | - | - |
| Mov Cap-1 Maneuver | - | 269 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |


| Approach | EB | NB | SB |
| :--- | ---: | ---: | ---: |
| HCM Control Delay, s | 21.9 | 0 | 0 |


| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
| :--- | ---: | ---: | ---: |
| Capacity (veh/h) | - | 269 | - |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |




| Major/Minor | Minor1 | Major1 |  |  | Major2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 110 | 46 | 0 | 0 | 59 | 0 |  |
| Stage 1 | 46 | - | - | - | - | - |  |
| Stage 2 | 64 | - | - | - | - | - |  |
| 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 | 887 | 1023 | - | - | 1545 | - |  |
| Stage 1 | 976 | - | - | - | - | - |  |
| Stage 2 | 959 | - | - | - | - | - |  |
| Platoon blocked, \% |  |  | - | - |  | - |  |
| Mov Cap-1 Maneuver | 871 | 1023 | - | - | 1545 | - |  |
| Mov Cap-2 Maneuver | 871 | - | - | - | - | - |  |
| Stage 1 | 976 | - | - | - | - | - |  |
| Stage 2 | 942 | - | - | - | - | - |  |
|  |  |  |  |  |  |  |  |
| Approach | WB |  | NB |  | SB |  |  |
| HCM Control Delay, s | 8.9 |  | 0 |  | 5.4 |  |  |
| HCM LOS | A |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Minor Lane/Major Mvm |  | NBT | NBR1 | BLn1 | SBL | SBT |  |
| Capacity (veh/h) |  | - | - | 983 | 1545 | - |  |
| HCM Lane V/C Ratio |  | - | - | 0.066 | 0.018 | - |  |
| HCM Control Delay (s) |  | - | - | 8.9 | 7.4 | 0 |  |
| HCM Lane LOS |  | - | - | A | A | A |  |
| HCM 95th \%tile Q(veh) |  | - | - | 0.2 | 0.1 | - |  |






