# Traffic Segment Studies for COUNTY LINE ROAD, US 41, AND SR 200 

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## DEFINITIONS

| Annual average daily traffic <br> (AADT) | The volume passing a point or segment of a roadway in both <br> directions for one year, divided by the number of days in the year. |
| :--- | :--- |
| Capacity | The maximum sustainable hourly flow rate at which persons or <br> vehicles can be expected to traverse a point or a uniform section of <br> a lane or roadway during a given time period under prevailing <br> roadway, environmental, traffic, and control conditions. (HCM 6th <br> Edition). As typically used in the Q/LOS Handbook, the maximum <br> number of vehicles that can pass a point in one hour under <br> prevailing roadway, traffic and control conditions. |
| Context classification | A classification assigned to a roadway that broadly identifies the <br> various built environments in Florida, based on existing or future <br> land use characteristics, development patterns, and the roadway <br> connectivity of an area. |
| K factor | The proportion of AADT that occurs during the peak hour. Standard <br> K values are statewide fixed parameters that depend on the general <br> area types (location) and facility types (roadway characteristics). |
| Level of service (LOS) | A quantitative stratification of a performance measure or measures <br> that represent quality of service, measured on an A-F scale, with <br> "LOS A" representing the best operating conditions from the <br> traveler's perspective and "LOS F" the worst. (HCM Sixth Edition) |
| Maximum service volume <br> (MSV) | The highest number of vehicles for a given LOS. |
| Traffic Analysis Zone (TAZ) | A traffic analysis zone (TAZ) is the unit of geography commonly used <br> in transportation planning or travel demand models. The size of a <br> zone can vary, but generally thresholds on land use <br> intensity/socioeconomic data and trips generated may govern size <br> of the zone. The spatial extent of zones typically varies in models, <br> ranging from very large areas in the undeveloped areas to as small <br> as a city block in central business districts. |
| Volume-to-capacity ratio <br> (V/C) <br> Either the ratio of demand volume to capacity or the ratio of service <br> flow volume to capacity, depending on the particular problem <br> situation. |  |

Source: 2023 Q/LOS Handbook, Florida Department of Transportation, 2023; Alfred Benesch \& Co., 2024.

## PURPOSE AND OBJECTIVES

With the recent, continued, and projected population growth in Hernando County and Citrus County there is an ever-increasing demand on the roadways. It is the responsibility of the Hernando/Citrus MPO to monitor and evaluate the performance of the transportation system, plan, and program roadway improvements to meet the existing and future demand on the area roadways.

The MPO monitors existing traffic through a traffic count program and future travel demand through the Tampa Bay Regional Planning Model (TBRPM). Using those data points and historic traffic count trends, the MPO desires to analyze the existing and future performance on certain vital roadways. This work effort includes conducting traffic studies as described herein for:

- County Line Road (including Ayers Road Extension), from US 19 to US 41.
- US 41 in Hernando County, from County Line Road to Ayers Road
- US 41 in Citrus County, from E Arlington Street to SR 200
- SR 200/Carl G Rose Highway, from E Adams Street to Marion County Line.

The objectives of the study are to assess the existing traffic conditions by determining generalized level of service (LOS) for the roadways and determine the severity of congestion and estimate over time when roadways may or will reach a failing condition. The studies will consider daily and AM and PM peak-hour conditions. The methodology/scope of services for this study can be found in Appendix A.

## 1 COUNTY LINE ROAD/AYERS ROAD, FROM US 19 TO US 41

The County Line Road corridor runs east-west along the county line between Pasco County and Hernando County. For the purpose of this analysis, the corridor has been divided into the four following segments:

- US 19 to Cobblestone Drive (Hernando)/East Road (Pasco)
- Functions as four lanes, divided roadway, $50 \mathrm{mph}, \mathrm{C}$ R context classification.
- Cobblestone Drive/East Road to Mariner Boulevard (Hernando)/Shady Hills Road (Pasco)
a Functions as two lanes, undivided roadway, $50 \mathrm{mph}, \mathrm{C} 3 \mathrm{R}$ context classification.
- Mariner Boulevard/Shady Hills Road to Suncoast Parkway.
- Functions as two lanes, undivided roadway, $50 \mathrm{mph}, \mathrm{C} 3 \mathrm{R}$ context classification.
- Suncoast Parkway to Ayers Road Extension, then Ayers Extension to US 41.
- Functions as four lanes, divided roadway, $45 \mathrm{mph}, \mathrm{C} 3$ R context classification.

Note that the above context classification is from the FDOT 2023 Q/LOS Handbook and is being used for analysis purposes for this study. In keeping with the methodology agreement for this study and for consistency with the other corridor analyses within this report, the 2023 Q/LOS context classificationbased capacity thresholds are being used for this facility.

Figure 1-1 illustrates the study corridor and its location in south-west Hernando County.

Figure 1-1: Corridor Location


## EXISTING CONDITIONS

For the existing conditions analysis, traffic data was collected from both the FDOT and the Hernando/Citrus MPO. Available historic annual average daily traffic (AADT) through 2022 was collected from the FDOT, Florida Traffic Information web site, and 2023 AADT was provided by the Hernando/Citrus MPO traffic counts program. Roadway capacity is based on the FDOT 2023 Q/LOS Handbook and the adopted Level of Service (LOS) for each road segment. Volume to Capacity ratio (V/C) and LOS is based on the 2023 MPO traffic counts. For peak-hour analyses, the actual peak-hour volumes (seasonally adjusted to annual average values) were used, based on the 15-minute incremental traffic counts.

As can be seen in Table 1-1, the four-lane divided segments are operating at LOS C and the two-lane segments are operating at LOS F under daily existing traffic conditions.

Table 1-1: Existing Conditions - Daily Traffic

| County Line Road - Hernando County | Lanes /Type | Posted Speed | LOS <br> Standard | Context Class | Capacity at LOS C | Capacity at LOS D | $\begin{aligned} & 2022 \\ & \text { AADT } \end{aligned}$ | $\begin{gathered} 2023 \\ \text { AADT** } \end{gathered}$ | $\begin{gathered} 2023 \\ \text { V/C } \end{gathered}$ | $\begin{gathered} 2023 \\ \text { LOS } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 19 to Cobblestone | 4LD | 50 | D | C3R | 32,585 | 35,435 | 21,000 | 19,675 | 0.56 | C |
| Cobblestone to Mariner | 2LU | 50 | D | C3R | 17,640 | 20,160 | 20,000 | 22,594 | 1.12 | F |
| Mariner to Suncoast | 2LU | 50 | D | C3R | 17,640 | 20,160 | 22,000 | 21,972 | 1.09 | F |
| Suncoast to US 41 (Ayers Ext.) | 4LD | 45 | D | C3R | 32,585 | 35,435 | N/A | 6,842 | 0.19 | C |

Note: Context Classification and capacity is based on 2023 FDOT QLOS for C3R classification (non-State road). This classification has not been adopted by Hernando County. *2023 AADT from 2023 Hernando/Citrus MPO counts. 2022 AADT from FDOT, FTI Historic AADT report.

As can be seen in Table 1-2, the four-lane divided segments are operating at LOS C during the AM and PM peak-hours and the two-lane segments are operating within adopted standards during the AM peak-hour but are operating at LOS F during the PM peak-hour, under existing traffic conditions.

Table 1-2: Existing Conditions - Peak-Hour Traffic

| County Line Road - Hernando <br> County | Lanes <br> IType | LOS <br> Std. | Context <br> Class | Capacity <br> at LOS C | Capacity <br> at LOS D | 2023 AM <br> PH 2W Vol* | 2023 PM <br> PH 2W Vol* | 2023 <br> AM V/C | 2023 <br> PM V/C | 2023 AM <br> LOS | 2023 PM <br> LOS |
| :--- | :---: | :---: | :---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| US 19 to Cobblestone | 4LD | D | C3R | 2,936 | 3,192 | 1,365 | 1,627 | 0.43 | 0.51 | C | C |
| Cobblestone to Mariner | 2LU | D | C3R | 1,584 | 1,818 | 1,496 | 1,850 | 0.82 | 1.02 | C | F |
| Mariner to Suncoast | 2LU | D | C3R | 1,584 | 1,818 | 1,673 | 1,897 | 0.92 | 1.04 | D | F |
| Suncoast to US 41 (Ayers Ext.) | 4LD | D | C3R | 2,936 | 3,192 | 501 | 584 | 0.16 | 0.18 | C | C |

Note: Context Classification and capacity is based on 2023 FDOT QLOS for C3R classification (non-State road). This classification has not been adopted by Hernando County. * 2023 PH volumes from 2023 Hernando/Citrus MPO counts.

While the segments from Cobblestone Drive to Mariner Boulevard and from Mariner Boulevard to Suncoast Parkway are listed as two-lane undivided roadways, it is worth noting that approaches to the signalized intersections with Cobblestone, Mariner, and Suncoast, along County Line Road have been improved to four lanes with auxiliary turning lanes and restrictive medians. Additional intersections along these segments have also been improved with turn lanes to better maintain the flow of through traffic along County Line Road and overall operation of these intersections.

Corridor 2023 traffic counts and historical AADT reports can be seen in Appendix B. The 2023 Q/LOS generalized tables used for evaluating roadway capacity can be seen in Appendix $\mathbf{C}$.

## FIVE YEAR FORECAST

Historical AADT and the Trend v03a tool were used to develop annualized growth rates for the segments along this corridor. These growth rates were applied to the 2023 traffic counts and used to project future traffic volumes to 2028 for both daily and peak-hour conditions. A review of the current Transportation Improvement Program (TIP) and FDOT Work Program documents indicate that there are no committed and funded capacity improvements for this corridor within the 2023 to 2028 forecast period.

As can be seen in Table 1-3, the four-lane divided segments are anticipated to continue operating at LOS C and the two-lane segments are anticipated to continue operating at LOS F under future daily traffic conditions in 2028. Corridor Trend v03a worksheets can be seen in Appendix B.

Table 1-3: Five Year Forecast - Daily Traffic

| County Line Road - Hernando <br> County | Lanes <br> /Type | Posted <br> Speed | LOS <br> Standard | Context <br> Class | Capacity <br> at LOS C | Capacity <br> at LOS D | 2023 <br> AADT* | Est. 2028 <br> AADT* | Est. 2028 <br> LOS | Trend 3a <br> AGR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 19 to Cobblestone | 4 LD | 50 | D | C3R | 32,585 | 35,435 | 19,675 | 20,032 | C | $0.36 \%$ |
| Cobblestone to Mariner | 2 LU | 50 | D | C3R | 17,640 | 20,160 | 22,594 | 24,641 | F | $1.75 \%$ |
| Mariner to Suncoast | 2 LU | 50 | D | C3R | 17,640 | 20,160 | 21,972 | 24,908 | F | $2.54 \%$ |
| Suncoast to US 41 (Ayers Ext.) | 4LD | 45 | D | C3R | 32,585 | 35,435 | 6,842 | 8,154 | C | $3.57 \%$ |

Note: Context Classification and capacity is based on 2023 FDOT QLOS for C3R classification (non-State road). This classification has not been adopted by Hernando County. * 2023 AADT from 2023 Hernando/Citrus MPO counts. 2028 AADT estimated using Trend v03.a. 2022 \& historic AADT used for Trend analysis from FDOT, FTI Historic AADT report. AGR is an annualized (compounding) growth rate.

Under future peak-hour traffic conditions, the four-lane divided segments are projected to continue operating at LOS C during the AM and PM peak-hours and the two-lane Cobblestone to Mariner segment is projected to continue operating within adopted standards during the AM peak-hour. However, the Mariner to Suncoast segment is anticipated to decline from LOS D to LOS F in the AM peak-hour by 2028. Both two-lane segments are projected to continue operating at LOS F during the PM peak-hour, under future 2028 traffic conditions, as can be seen in Table 1-4.

Table 1-4: Five Year Forecast - Peak-Hour Traffic

| County Line Road - Hernando County | Lanes /Type | $\begin{aligned} & \text { LOS } \\ & \text { Std. } \end{aligned}$ | Context Class | Capacity at LOS C | Capacity at LOSD | $\begin{gathered} 2023 \\ \text { AM PH } \\ 2 W \text { Vol* } \end{gathered}$ | $\left\|\begin{array}{c} 2023 \\ \text { PM PH } \\ 2 W \text { Vol* } \end{array}\right\|$ | $\begin{array}{c\|} \hline \text { Est. } \\ 2028 \text { AM } \\ \text { PH } 2 \mathrm{~W} \\ \text { Vot } \% \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { Est. } \\ \hline 2028 \text { PM } \\ \text { PH 2W } \\ \text { Vol** } \\ \hline \end{array}$ | $\begin{gathered} \text { Est. } \\ 2028 \\ \text { AM } \\ \text { LOS } \end{gathered}$ | $\begin{gathered} \hline \text { Est. } \\ 2028 \\ \text { PM } \\ \text { LOS } \end{gathered}$ | $\begin{array}{\|c} \hline \text { Trend } \\ \text { 3a AGR } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 19 to Cobblestone | 4LD | D | C3R | 2,936 | 3,192 | 1,365 | 1,627 | 1,390 | 1,656 | C | C | 0.36\% |
| Cobblestone to Mariner | 2LU | D | C3R | 1,584 | 1,818 | 1,496 | 1,850 | 1,632 | 2,018 | D | F | 1.75\% |
| Mariner to Suncoast | 2 LU | D | C3R | 1,584 | 1,818 | 1,673 | 1,897 | 1,897 | 2,150 | F | F | 2.54\% |
| Suncoast to US 41 (Ayers Ext.) | 4LD | D | C3R | 2,936 | 3,192 | 501 | 584 | 597 | 696 | C | C | 3.57\% |

Note: Context Classification and capacity is based on 2023 FDOT QLOS for C3R classification (non-Stateroad). This classification has not been adopted by Hernando County.

* 2023 PH volumes from 2023 Hernando/Citrus MPO counts. AGR estimated using Trend vO3a and FDOT, FII Historic AADT report. AGR is an annualized growth rate.


## ORIGIN/DESTINATION ANALYSIS AND SOCIOECONOMIC DATA

To better understand the existing traffic using the corridor, the Replica database was accessed to estimate the origins and destinations (O/D) of trips along each segment of the corridor. This was to provide insight into the regional significance of the roadway, and to assist in Traffic Analysis Zone (TAZ) selection for the model socioeconomic data growth analysis. Due to the length of the corridor, each segment was selected individually for O/D analysis in order to show any differences in travel characteristics along the corridor.

The Replica database provides O/D estimates by Census block group for a specific roadway corridor or segment. The number of trips per block group was classified to the following ranges for mapping and analysis purposes: $1-100,101-500,501-1500, \&>1500$. Detailed block Group O/D maps can be seen in Appendix $\mathbf{D}$ for each segment along the corridor.
For the US 19 to Cobblestone segment, trip O/Ds were primarily limited to block groups local to the segment for trips over 500 per block group. Trip O/Ds between 100 and 500 were limited to Pasco and Hernando Counties, with regional trips notable to block groups below 100 trip O/Ds per block group.

For the Cobblestone to Mariner segment, trip O/Ds were identified for block groups extending from west of US 19 to US 41 and north and south locally into Hernando and Pasco Counties for trips over 500 per block group. Trip O/Ds between 100 and 500 were notable in Pasco and Hernando Counties with incidences into Hillsborough County. Regional trips were also more notable for block groups below 100 trip O/Ds per block group.

For the Mariner to Suncoast segment, trip O/Ds were identified for block groups extending from west of US 19 to $1-75$ in the east, and north and south locally into Hernando and Pasco Counties for trips over 500 per block group. Trip O/Ds between 100 and 500 were significant within Pasco and Hernando Counties with incidences into Hillsborough County. Regional trips were also significant for block groups below 100 trip O/Ds per block group.

For the Suncoast to US 41 segment, trip O/Ds were primarily limited to block groups local to the segment in Pasco and Hernando Counties for trips over 500 per block group. Trip O/Ds between 100 and 500 were significant within Pasco and Hernando Counties with incidences into Hillsborough County. Regional trips were significant for block groups below 100 trip O/Ds per block group.

In summary, segments closer to the Suncoast parkway tended to have more regional impact in terms of trip origins and destinations per block group.

The Replica based trip O/D study was also used for the selection of Traffic Analysis Zones (TAZs) for the analysis of socioeconomic data and growth rates from the Tampa Bay Regional Planning Model (TBRPM) version 9.3. Rather than simply selecting TAZs adjacent to, or within a specific distance of, the O/D analysis allowed for the selection of TAZs with trip origins and destinations significant to the corridor. For this selection, TAZs were selected that were made up of block groups with trip O/Ds above 500 trips and contiguous to the corridor. Figure 1-2 identifies these TAZs that best match these conditions in aggregate for all four roadway segments. The TBRPM provides datasets for population and employment data for the base year of 2015, interim year 2035, and horizon year 2045. The yearly totals for dwelling units, population, employment, and school enrollment land uses for the selected TAZs were summarized and annualized growth rates were calculated for the base to interim, interim to horizon, and base to horizon years. The results of this analysis can be seen in Table 1-5, below.

Table 1-5: Change in TBRPM Socioeconomic Data 2015-2045

|  | 2015 | 2015-2035 <br> AGR | $\mathbf{2 0 3 5}$ | 2035-2045 <br> AGR | $\mathbf{2 0 4 5}$ | 2015-2045 <br> AGR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D.U.s | 21,923 | $0.79 \%$ | 25,681 | $0.95 \%$ | 28,217 | $0.84 \%$ |
| Population | 47,127 | $0.86 \%$ | 55,938 | $0.94 \%$ | 61,451 | $0.89 \%$ |
| Employees | 14,895 | $1.04 \%$ | 18,325 | $1,26 \%$ | 20,761 | $1.11 \%$ |
| K-12 Enrol. | 4,574 | $0.69 \%$ | 5,252 | $0.19 \%$ | 5,350 | $0.52 \%$ |

Note: TAZs of influence selected using Replica $O$ and $D$ analysis AGR is an annualized (compounding) growth rate.

The average annual growth rate for the trip generating land uses in Table 1-5 is approximately $1 \%$ per year, which is notably less than the Trend 03a growth rates listed in the section above for corridor traffic. This would reasonably support the Replica O/D based analysis indicating regional background traffic along the corridor.

Figure 1-2: Selected Traffic Analysis Zones from O/D Analysis


## TBRPM FORECAST

The current version of the TBRPM, v9.3, was executed for both the 2024 existing plus committed ( $E+C$ ) model scenario and the 2045 Cost Feasible scenario. The 2024 scenario uses the 2045 socioeconomic forecast on the $2024 \mathrm{E}+\mathrm{C}$ roadway network to evaluate future demand on the committed roadway network, while the 2045 scenario uses the same socioeconomic dataset on the cost feasible network to evaluate the effectiveness of the Long-Range Transportation Plan (LRTP) improvements. These planned improvements include the widening of the Cobblestone to Mariner segment in the 2036-2045 period of the current LRTP. The model generates peak season volume estimates. These were adjusted to AADT using the most recent Model Output Correction Factor (MOCF) from the FDOT Peak Season Correction Factor (PSCF) report. The PSCF report can be seen in Appendix C along with the 2023 Q/LOS Handbook tables used for the Maximum Service Volumes (MSV) shown.

Table 1-6: TBRPM 9.3 Future Forecast

| County Line Road - Hemando County | Posted <br> Speed | LOS <br> Standard | Context <br> Class | $\begin{gathered} 2024 \\ \text { TBRPM } \\ \text { Lanes } \end{gathered}$ | $\begin{aligned} & \text { MSV } \\ & 2024 \end{aligned}$ | $\begin{gathered} \text { TBRPM } \\ 2024 \\ \text { AADT } \\ \hline \end{gathered}$ | $\begin{aligned} & 2024 \\ & \text { V/C } \end{aligned}$ | 2045 <br> TBRPM <br> Lanes | $\begin{aligned} & \text { MSV } \\ & 2045 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { TBRPM } \\ 2045 \\ \text { AADT } \\ \hline \end{gathered}$ | $\begin{gathered} 2045 \\ \text { V/C } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US 19 to Cobblestone | 50 | D | C3R | 4LD | 35,435 | 19,819 | 0.56 | 4LD | 35,435 | 17,486 | 0.49 |
| Cobblestone to Mariner | 50 | D | C3R | 2LU | 20,160 | 18,872 | 0.94 | 4LD | 35,435 | 18,592 | 0.52 |
| Mariner to Suncoast | 50 | D | C3R | 2LU | 20,160 | 15,407 | 0.76 | 2LU | 20,160 | 12,520 | 0.62 |
| Suncoast to US 41 (Ayers Ext.) | 45 | D | C3R | 4LD | 35,435 | 18,325 | 0.52 | 4LD | 35,435 | 19,617 | 0.55 |

${ }^{1}$ Number of Lanes from TBRPM scenario year. ${ }^{2}$ MSV is the capacity at the LOS standard for the segmentbased on the FDOT 2023 QLOS Handbook.
${ }^{3}$ Volume has been adjusted to AADT using an MOCF of 0.95 from the most recent FDOT Peak Season Correction Report. 2024 model uses 2045 SE data on the $2024 E+C$ network.

While it appears that the model forecast indicates that all segments will be operating without deficiency for future daily traffic volumes according to the V/Cs shown in Table 1-6 above, it is worth noting that 2045 volumes are projected to be lowerthan current counts on three segments west of the Suncoast Parkway, and that all segments are showing lower volumes than the 2024 model results. Given the current volumes and annual growth rates for traffic, plus the annual growth rates of area trip generating land uses, it appears that these specific model results may not be reasonable and should be used with caution if used for planning on these specific roadway segments. TBRPM model volume plots can be seen in Appendix E.

## CONCLUSIONS

County Line Road from Cobblestone Drive to Mariner Boulevard, and from Mariner Boulevard to Suncoast Parkway is currently deficient for both daily traffic and for PM peak-hour traffic conditions throughout the two-lane portions of the corridor. By 2028, the Mariner to Suncoast segment is also projected to become deficient in the AM peak-hour. No capacity improvements such as four-laning are funded at this time with the Cobblestone to Mariner segment showing as becoming four-laned between 2036 and 2045 in the LRTP.

The O/D study suggests regional significance for traffic using the County Line Road corridor as identified in this study.

## 2

## US 41 (BROAD ST), FROM COUNTY LINE ROAD TO AYERS ROAD

The US 41 corridor runs north-south, immediately north of the Pasco/Hernando County Line from County Line Road to Ayers Road. For the purpose of this analysis, the corridor is being analyzed as one segment.

This corridor has been identified with a C3R context classification in the 2023 FDOT District 7 LOS Report, and is a two-lane undivided roadway with a posted speed of 45 miles per hour, and an LOS standard of D.

Figure 2-1 illustrates the study corridor and its location in south Hernando County.

Figure 2-1: Corridor Location


For the existing conditions analysis, traffic data was collected from FDOT. Available historic annual average daily traffic (AADT) through 2022 was collected from the FDOT Florida Traffic Information web site. Since no 2023 AADT was available from the Hernando/Citrus MPO traffic counts program 2023 AADT was estimated using a Trend 03a derived growth rate from historical AADT. Roadway capacity is based on the FDOT 2023 Q/LOS Handbook and the adopted Level of Service (LOS) for the corridor. Volume to Capacity ratio (V/C) and LOS is based on the 2023 estimated AADT. For peak-hour analyses, peak-hour volumes were derived using the standard $K$ factor provided with the most recent AADT report.

As can be seen in Table 2-1, the corridor is operating at LOS C with a $\mathrm{V} / \mathrm{C}$ under 1.0 for daily traffic conditions.

Table 2-1: Existing Conditions - Daily Traffic

| US 41 - Hernando County | Lanes <br> IType | Posted <br> Speed | LOS <br> Standard | Context <br> Class | Capacity <br> at LOS C | Capacity <br> at LOS D | 2022 <br> AADT | 2023 Est <br> AADT* | 2023 <br> V/C |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2023 |  |  |  |  |  |  |  |  |  |
| LOS |  |  |  |  |  |  |  |  |  |$|$

Note: Capacity is based on 2023 FDOT QLOS for C3R classification. * 2023 AADT estimated using Trend v03.a and FDOT, FTI Historic AADT report.
Context Classification, LOS Standard, and MSV taken from FDOT District 72023 LOS Report.

As can be seen in Table 2-2, the corridor operates at LOS C during the AM and PM peak-hours with V/Cs of less than 1.0 under peak hour existing traffic conditions.

Table 2-2: Existing Conditions - Peak Hour Traffic

| US 41 - Hernando County | $\begin{array}{\|l\|} \hline \text { Lanes } \\ \text { / } \text { 1ype } \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline \text { LOS } \\ \text { Std. } \\ \hline \end{array}$ | Context Class | Capacity at LOS C | Capacity at LOS D | $\begin{gathered} 2023 \text { AM } \\ \text { PH } 2 \mathrm{~W} \text { Vol } \end{gathered}$ | $\begin{gathered} 2023 \text { PM } \\ \text { PH 2W Vol* } \end{gathered}$ | $\begin{array}{c\|} \hline 2023 \\ \text { AM VIC } \end{array}$ | $\begin{array}{\|c\|} \hline 2023 \\ \text { PM V/C } \\ \hline \end{array}$ | $\begin{array}{\|c} \hline 2023 \mathrm{AM} \\ \text { LOS } \\ \hline \end{array}$ | $\begin{array}{\|c} \hline 2023 \text { PM } \\ \text { LOS } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County Line Road to Ayers Road | 2LU | D | C3R | 1,848 | 2,121 | 1,477 | 1,477 | 0.70 | 0.70 | C | C |

Note: Capacity is based on 2023 FDOT QLOS for C3R classification. * Peak hour volume estimated using Trend v03.a and FDOT, FTI Historic AADT report and K factor. Context Classification, LOS Standard, and MSV taken from FDOT District 72023 LOS Report.

Corridor historical AADT reports and the Trend 03a work sheets can be seen in Appendix B. The 2023 Q/LOS generalized tables used for evaluating roadway capacity can be seen in Appendix C.

## FIVE YEAR FORECAST

Historical AADT and the Trend v03a tool were used to develop annualized growth rates for the traffic along this corridor. These growth rates were applied to the 2023 traffic volumes and used to project future traffic volumes to 2028 for both daily and peak-hour conditions. A review of the current Transportation Improvement Program (TIP) and FDOT Work Program documents indicate that there are no committed and funded capacity improvements for this corridor within the 2023 to 2028 forecast period.

As can be seen in Table 2-3, the corridor is anticipated to continue operating at LOS C under future daily traffic conditions in 2028.

Table 2-3: Five Year Forecast - Daily Traffic

| US 41 - Hernando County | Lanes <br> /Type | Posted <br> Speed | LOS <br> Standard | Context <br> Class | Capacity <br> at LOS C | Capacity <br> at LOS D | 2023 <br> AADT* | Est. 2028 <br> AADT* | Est. 2028 <br> LOS | Trend 3a <br> AGR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County Line Road to Ayers Road | 2 LU | 45 | D | C3R | 19,600 | 22,400 | 16,410 | 18,057 | C | $1.93 \%$ |

Note: Capacity is based on 2023 FDOT QLOS for C3R classification. * Future AADT estimated using Trend v03. a and FDOT. FTI Historic AADT report.
Context Classification, LOSStandard, and MSV taken from FDOT District 72023 LOS Report. AGR is an annualized growth rate.

Under future peak-hour traffic conditions, the corridor is projected to continue operating at LOS C during the AM and PM peak-hours by 2028, as can be seen in Table 2-4.

Corridor Trend v03a worksheets can be seen in Appendix B.

Table 2-4: Five Year Forecast - Peak Hour Traffic

| US 41 - Hernando County | Lanes Луре | $\begin{aligned} & \text { LOS } \\ & \text { Std. } \end{aligned}$ | $\begin{gathered} \text { Context } \\ \text { Class } \end{gathered}$ | Capacity at LOS C | Capacity at LOS D | $\begin{array}{\|c\|} \hline 2023 \\ \text { AM PH } \\ 2 \mathrm{~W} \text { Vol*} \\ \hline \end{array}$ | 2023 <br> PM PH <br> 2W Vol* | $\begin{gathered} 2028 \text { AM } \\ \text { PH 2W } \\ \text { Vol* } \end{gathered}$ | $\begin{gathered} \hline 2028 \text { PM } \\ \text { PH 2W } \\ \text { Vol* } \\ \hline \end{gathered}$ | $\begin{gathered} 2028 \\ \text { AM } \\ \text { LOS } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2028 \\ \text { PM } \\ \text { LOS } \\ \hline \end{gathered}$ | Trend <br> 3a AGR | $\begin{array}{\|c\|} \hline \text { K } \\ \text { Factor } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County Line Road to Ayers Road | 2LU | D | C3R | 1,848 | 2,121 | 1,477 | 1,477 | 1,625 | 1,625 | C | C | 1.93\% | 9.0 |

Note: Capacity is based on 2023 FDOT QLOS for C3R classification. * Peak hour volume estimated using Trend v03.a and FDOT, FTI Historic AADT report and K factor.
Context Classification, LOS Standard, and MSV taken from FDOT District 72023 LOS Report. AGR is an annualized growth rate.

## ORIGIN/DESTINATION ANALYSIS AND SOCIOECONOMIC DATA

To better understand the existing traffic using the corridor, the Replica database was accessed to estimate the origins and destinations (O/D) of trips along the corridor. This was to provide insight into the regional significance of the roadway, and to assist in Traffic Analysis Zone (TAZ) selection for the model socioeconomic data growth analysis.

The Replica database provides O/D estimates by Census block group for a specific roadway corridor or segment. The number of trips per block group was classified to the following ranges for mapping and analysis purposes: 1-100, 101-500, 501-1500, $\&>1500$. Detailed block Group O/D maps can be seen in Appendix $\mathbf{D}$ for each segment along the corridor.

Corridor trip O/Ds were identified for block groups extending east and west of US 41 and north and south locally into Hernando and Pasco Counties for trips over 500 per block group, including the area of Brooksville-Tampa Bay Regional Airport, just north of the corridor. Trip O/Ds between 100 and 500 were significant within Pasco and Hernando Counties with incidences into Hillsborough County. Regional trips were also significant for block groups below 100 trip O/Ds per block group.

The Replica based trip O/D study was also used for the selection of Traffic Analysis Zones (TAZs) for the analysis of socioeconomic data and growth rates from the Tampa Bay Regional Planning Model (TBRPM) version 9.3. Rather than simply selecting FAZs adjacent to, or within a specific distance of, the O/D analysis allowed for the selection of TAZs with trip origins and destinations significant to the corridor. For this selection, TAZs were selected that were made up of block groups with trip O/Ds above 500 trips and contiguous to the corridor. Figure 2-2 identifies these TAZs that best match these conditions. The TBRPM provides datasets for population and employment data for the base year of 2015 , interim year 2035 , and horizon year 2045. The yearly totals for dwelling units, population, employment, and school enrollment land uses for the selected TAZs were summarized and annualized growth rates were calculated for the base to interim, interim to horizon, and base to horizon years. The results of this analysis can be seen in Table 2-5, below.

Figure 2-2: Selected Traffic Analysis Zones from O/D Analysis


Table 2-5: Change in TBRPM Socioeconomic Data 2015-2045

|  | $\mathbf{2 0 1 5}$ | 2015-2035 <br> AGR | $\mathbf{2 0 3 5}$ | 2035-2045 <br> AGR | $\mathbf{2 0 4 5}$ | 2015-2045 <br> AGR |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| D.U.s | 3,813 | $4.51 \%$ | 9,222 | $2.42 \%$ | 11,717 | $3.81 \%$ |
| Population | 8,682 | $4.56 \%$ | 21,197 | $2.42 \%$ | 26,921 | $3.84 \%$ |
| Employees | 5,488 | $2.61 \%$ | 9,179 | $1.93 \%$ | 11,118 | $2.38 \%$ |
| K-12 Enrol. | 2,053 | $1.35 \%$ | 2,685 | $1.52 \%$ | 3,122 | $1.41 \%$ |

Note: TAZs of influence selected using Replica O and D analysis
AGR is an annualized (compounding) growth rate.

## TBRPM FORECAST

The current version of the TBRPM, v9.3, was executed for both the 2024 existing plus committed ( $\mathrm{E}+\mathrm{C}$ ) model scenario and the 2045 Cost Feasible scenario. The 2024 scenario uses the 2045 socioeconomic forecast on the $2024 \mathrm{E}+\mathrm{C}$ roadway network to evaluate future demand on the committed roadway network, while the 2045 scenario uses the same socioeconomic dataset on the cost feasible network to evaluate the effectiveness of the Long-Range Transportation Plan (LRTP) improvements. These planned improvements include the widening of the US 41 corridor from two to four lanes in the 2031-2035 period of the current LRTP. The model generates peak season volume estimates. These were adjusted to AADT using the most recent Model Output Correction Factor (MOCF) from the FDOT Peak Season Correction Factor (PSCF) report. The PSCF report can be seen in Appendix C along with the 2023 Q/LOS Handbook tables used for the Maximum Service Volumes (MSV) shown.

Table 2-6: TBRPM 9.3 Future Forecast

| US 41 - Hernando County | Posted <br> Speed | LOS <br> Standard | Context Class | $\begin{gathered} \hline 2024 \\ \text { TBRPM } \\ \text { Lanes } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { MSV } \\ & 2024 \end{aligned}$ | $\begin{gathered} \text { TBRPM } \\ 2024 \\ \text { AADT } \\ \hline \end{gathered}$ | $\begin{gathered} 2024 \\ \text { V/C } \end{gathered}$ | 2045 <br> TBRPM <br> Lanes | $\begin{aligned} & \text { MSV } \\ & 2045 \end{aligned}$ | $\begin{gathered} \text { TBRPM } \\ 2045 \\ \text { AADT } \end{gathered}$ | $\begin{gathered} 2045 \\ \text { V/C } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County Line Road to Ayers Road | 45 | D | C3R | 2 LU | 22,400 | 22,941 | 1.02 | 4LD | 37,300 | 22,889 | 0.61 |

${ }^{1}$ Number of Lanes from TBRPM scenario year. ${ }^{2}$ MSV is the capacity at the LOS standard for the segmentbased on the FDOT 2023 QLOS Handbook.
${ }^{3}$ Volume has been adjusted to AADT using an MOCF of 0.95 from the most recent FDOT Peak Season Correction Report. 2024 model uses 2045 SE data on the $2024 E+$ C network.

As shown in Table 2-6 above, the model indicates deficiency under E+C network conditions by 2045. This corresponds with the Trend 03a derived growth rate identified in the section above, projecting volume exceeding existing capacity by 2040 when applied to the estimated 2023 AADT as shown in Table 2-1 above.

TBRPM model volume plots can be seen in Appendix E.

## CONCLUSIONS

US 41 from County Line Road to Ayers Road is currently operating within adopted LOS standard at LOS C with V/C of less than 1.0. Current growth rates for the corridor and future volume estimates from the TBRPM suggest corridor volumes exceeding existing capacity by 2040. This corridor is currently listed in the LRTP as being widened from two to four lanes between 2031 and 2035.

## 3 US 41, FROM E ARLINGTON STREET TO SR 200

This US 41 corridor runs north-south between SR 44 and SR 200, in north Citrus County. For the purpose of this analysis, the corridor has been divided into the three following segments:

- East Arlington Street to Independence Highway.
- Functions as two lanes, undivided roadway, $50 \mathrm{mph}, \mathrm{C} 3 \mathrm{R}$ context classification.
- Independence Highway to Norvell Bryant Highway/CR 486.
- Functions as two lanes, undivided roadway, $50 \mathrm{mph}, \mathrm{C} 3 \mathrm{C}$ context classification.
- Norvell Bryant Highway/CR 486 to SR 200/Carl G Rose Highway.
- Functions as two lanes, undivided roadway, $50 \mathrm{mph}, \mathrm{C} 3 \mathrm{C}$ context classification.

This corridor has been identified with C3R and C3C context classifications in the 2023 FDOT District 7 LOS Report, and is a two-lane undivided roadway with a posted speed of 50 miles per hour, and an LOS standard of D.

Figure 3-1 illustrates the study corridor and its location in north Citrus County.

Figure 3-1: Corridor Location


## EXISTING CONDITIONS

For the existing conditions analysis, traffic data was collected from both the FDOT and the Hernando/Citrus MPO. Available historic annual average daily traffic (AADT) through 2022 was collected from the FDOT, Florida Traffic Information web site, and 2023 AADT was provided by the

Hernando/Citrus MPO traffic counts program. Roadway capacity is based on the FDOT 2023 Q/LOS Handbook and the adopted Level of Service (LOS) for each road segment. Volume to Capacity ratio (V/C) and LOS is based on the 2023 MPO traffic counts. For peak-hour analyses, the actual peak-hour volumes (seasonally adjusted to annual average values) were used, based on the 15 -minute incremental traffic counts. For the segment of Arlington to Independence, 2023 AADT was not available from the Hernando/Citrus MPO traffic counts program so 2023 AADT was estimated using a Trend 03a derived growth rate from historical AADT.

As can be seen in Table 3-1, the corridor segments are operating at LOS D under daily existing traffic conditions. However, the Arlington to Independence segment is very near capacity.

Table 3-1: Existing Conditions -Daily Traffic

| US 41-Citrus County | Lanes <br> Iype | Posted <br> Speed | LOS <br> Standard | Context <br> Class | Capacity <br> at LOS C | Capacity <br> at LOS D | 2022 <br> AADT | 2023 Est <br> AADT* | 2023 <br> V/C |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2023 |  |  |  |  |  |  |  |  |  |
| LOS |  |  |  |  |  |  |  |  |  |

Note: Capacity is based on 2023FDOT QLOS for C3R/C3C clas sific ations. Context Classification, LOS Standard, and MSV taken from FDOTDistrict 72023 LOSReport.
*2023 AADT from 2023 Hernando/Gitrus MPO counts N of independence. Future AADT e stimated using Trend v03, a and FDOT, FTI Historic AADT report.

As can be seen in Table 3-2, the segments are operating within the adopted LOS standard during the AM and PM peak-hours under existing traffic conditions. As with the daily existing traffic conditions, the Arlington to Independence segment is approaching capacity.

Table 3-2: Existing Conditions - Peak Hour Traffic

| US 41-Citrus County | Lanes <br> /Type | LOS <br> Stan | Context <br> Class | Capacity <br> at LOS C | Capacity <br> at LOS D | 2023 AM <br> PH 2W Vol | 2023 PM <br> PH 2W Vol* | 2023 <br> AM V/C | 2023 <br> PM V/C | 2023 AM <br> LOS | 2023 PM <br> LOS |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EArlington to Independence | 2LU | D | C3R | 1,848 | 2,121 | 1,980 | 1,980 | 0.93 | 0.93 | D | D |
| Independence to Norvell Bryant | 2LU | D | C3C | 1,449 | 2,048 | 1,470 | 1,703 | 0.72 | 0.83 | D | D |
| Norvell Brayant to SR 200 | 2LU | D | C3C | 1,449 | 2,048 | 1,427 | 1,694 | 0.70 | 0.83 | C | D |

Note: Capacity is based on 2023 FDOT QLOS for C3R/C3C olassifications. Context Classification, LOS Standard, and MSV taken from FDOT District 72023 LOS Report. *2023 AADT from 2023 Hernando/Citrus MPO counts N of Independence. Future AADT estimated using Trendv03.a and FDOT, FTI Historic AADT report.

2023 traffic counts, corridor historical AADT reports, and the Trend 03a work sheets can be seen in Appendix B. The 2023 Q/LOS generalized tables used for evaluating roadway capacity can be seen in Appendix C.

## FIVE YEAR FORECAST

Historical AADT and the Trend v03a tool were used to develop annualized growth rates for the segments along this corridor. These growth rates were applied to the 2023 traffic volumes and used to project future traffic volumes to 2028 for both daily and peak-hour conditions. A review of the current Transportation Improvement Program (TIP) and FDOT Work Program documents indicate that there are no committed and funded capacity improvements for this corridor within the 2023 to 2028 forecast period. However, the segment immediately south of Arlington Road is listed as a Priority Project in the TIP with widening from two to four lanes in 2027.


As can be seen in Table 3-3, the Arlington to Independence segment is projected to exceed capacity by 2028 under daily future traffic conditions. The two segments from Independence to SR 200 are anticipated to continue operating at LOS D, however they are projected to be nearing capacity under future daily traffic conditions by 2028.

Table 3-3: Five Year Forecast - Daily Traffic

| US 41-Citrus County | Lanes /Type | Posted Speed | LOS Standard | Context Class | Capacity at LOS C | Capacity at LOS D | $\begin{aligned} & 2023 \text { Est } \\ & \text { AADT* } \end{aligned}$ | Est. 2028 AADT* | $\begin{array}{\|c} \hline \text { Est. } 2028 \\ \text { LOS } \\ \hline \end{array}$ | $\begin{gathered} \hline \text { Trend 3a } \\ \text { AGR } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E Arlington to Independence | 2LU | 50 | D | C3R | 19,600 | 23,520 | 22,306 | 23,900 | F | 1.39\% |
| Independence to Norvell Bryant | 2LU | 50 | D | C3C | 15,300 | 22,785 | 19,798 | 21,213 | D | 1.39\% |
| Norvell Brayant to SR 200 | 2LU | 50 | D | C3C | 15,300 | 22,785 | 19,683 | 20,924 | D | 1.23\% |

Note: Capacity is based on 2023 FDOT QLOS for C3R/C3C classifications. Context Classification, LOS Standard, and MSV takenfromFDOT District 72023 LOSReport. *2023 AADT from 2023 Hernando/Citrus MPO counts $N$ of Independence. Future AADT estimated using Trend v03. a and FDOT, FII Historic AADT report. AGR is an annualized growth rate.

Under future peak-hour traffic conditions, the Arlington to Independence segment is projected to exceed capacity by 2028 under peak-hour future traffic conditions. As with the projected daily traffic conditions, the two segments from Independence to SR 200 are anticipated to continue operating at LOS D during the PM peak-hour, under future 2028 traffic conditions, as can be seen in Table 3-4.

Table 3-4: Five Year Forecast - Peak Hour Traffic

| US 41-Citrus County | Lanes <br> /Type | $\begin{aligned} & \text { LOS } \\ & \text { Std. } \end{aligned}$ | Context <br> Class | Capacity at LOS C | Capacity at LOSD | 2023 <br> AM PH <br> 2W Vol* | 2023 <br> PM PH <br> 2W Vol* | $\begin{aligned} & \text { Est. } \\ & \text { 2028 AM } \\ & \text { PH 2W } \\ & \text { Vol* } \end{aligned}$ | Est. <br> 2028 PM <br> PH 2W <br> Vol* | $\begin{gathered} \text { Est. } \\ 2028 \\ \text { AM } \\ \text { LOS } \end{gathered}$ | $\begin{gathered} \text { Est. } \\ 2028 \\ \text { PM } \\ \text { LOS } \end{gathered}$ | $\begin{gathered} \text { Trend } \\ \text { 3a AGR } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EArlington to Independence | 2LU | D | C3R | 1,848 | 2,121 | 1,980 | 1,980 | 2,121 | 2,121 | F | F | 1.39\% |
| Independence to Norvell Bryant | 2LU | D | C3C | 1,449 | 2,048 | 1,470 | 1,703 | 1,575 | 1,825 | D | D | 1.39\% |
| Norvell Brayant to SR 200 | 2LU | D | C3C | 1,449 | 2,048 | 1,427 | 1,694 | 1,517 | 1,801 | D | D | 1.23\% |

Note: Capacity is based on 2023 FDOT QLOS for C3R/C3C classifications. Context Classification, LOS Standard, and MSV taken from FDOT District 72023 LOS Report.
$* 2023$ PH volumes from 2023 Hernando/Citrus MPO counts. AGR estimated using Trend v03a and FDOT, FTI Historic AADT report. AGR is an annualized growth rate.

Corridor historical AADT reports and the Trend 03a work sheets can be seen in Appendix B. The 2023 Q/LOS generalized tables used for evaluating roadway capacity can be seen in Appendix C.

## ORIGIN/DESTINATION ANALYSIS AND SOCIOECONOMIC DATA

To better understand the existing traffic using the corridor, the Replica database was accessed to estimate the origins and destinations (O/D) of trips along the corridor. This was to provide insight into the regional significance of the roadway, and to assist in Traffic Analysis Zone (TAZ) selection for the model socioeconomic data growth analysis.

The Replica database provides O/D estimates by Census block group for a specific roadway corridor or segment. The number of trips per block group was classified to the following ranges for mapping and analysis purposes: 1-100, 101-500, 501-1500, $\&>1500$. Detailed block Group O/D maps can be seen in Appendix D for each segment along the corridor.

Corridor trip O/Ds were identified for block groups extending east and west of US 41 and north into Marion County for trips over 500 per block group. Trip O/Ds between 100 and 500 were significant within Citrus County, with incidences into Marion County. Regional trips were also significant for block groups below 100 trip O/Ds per block group, most notable in Citrus, Pasco, Hernando, Sumter, Marion, and Levy Counties.

The Replica based trip O/D study was also used for the selection of Traffic Analysis Zones (TAZs) for the analysis of socioeconomic data and growth rates from the Tampa Bay Regional Planning Model (TBRPM) version 9.3. Rather than simply selecting TAZs adjacent to, or within a specific distance of, the O/D analysis allowed for the selection of TAZs with trip origins and destinations significant to the corridor. For this selection, TAZs were selected that were made up of block groups with trip O/Ds above 500 trips and contiguous to the corridor. Figure 3-2 identifies these TAZs that best match these conditions. The TBRPM provides datasets for population and employment data for the base year of 2015, interim year 2035, and horizon year 2045. The yearly totals for dwelling units, population, employment, and school enrollment land uses for the selected TAZs were summarized and annualized growth rates were calculated for the base to interim, interim to horizon, and base to horizon years. The results of this analysis can be seen in Table 3-5, below.

Table 3-5: Change in TBRPM Socioeconomic Data 2015-2045

|  | 2015 | AG15-2035 <br> AGR | $\mathbf{2 0 3 5}$ | AGR | 2045 | 2015-2045 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGR |  |  |  |  |  |  |
| D.U.s | 12,969 | $1.03 \%$ | 15,926 | $0.73 \%$ | 17,125 | $0.93 \%$ |
| Population | 22,442 | $1.09 \%$ | 27,869 | $0.76 \%$ | 30,068 | $0.98 \%$ |
| Employees | 10,283 | $0.90 \%$ | 12,292 | $0.73 \%$ | 13,213 | $0.84 \%$ |
| K-12 Enrol. | 5,594 | $1.18 \%$ | 7,075 | $0.83 \%$ | 7,682 | $1.06 \%$ |

Note: TAZs of influence selected using Replica $O$ and D analysis
AGR is an annualized (compounding) growth rate.

Figure 3-2: Selected Traffic Analysis Zones (TAZs) from O/D Analysis


## TBRPM FORECAST

The current version of the TBRPM, v9.3, was executed for both the 2024 existing plus committed ( $\mathrm{E}+\mathrm{C}$ ) model scenario and the 2045 Cost Feasible scenario. The 2024 scenario uses the 2045 socioeconomic forecast on the $2024 \mathrm{E}+\mathrm{C}$ roadway network to evaluate future demand on the committed roadway network, while the 2045 scenario uses the same socioeconomic dataset on the cost feasible network to evaluate the effectiveness of the Long-Range Transportation Plan (LRTP) improvements. These planned improvements include the widening of US 41 from Arlington to Van Ness in the 2031-2035 period of the current LRTP, and from Van Ness to SR 200 in the 2036-2045 period. The model generates peak season volume estimates. These were adjusted to AADT using the most recent Model Output Correction Factor (MOCF) from the FDOT Peak Season Correction Factor (PSCF) report. The PSCF report can be seen in Appendix C along with the 2023 Q/LOS Handbook tables used for the Maximum Service Volumes (MSV) shown.

Table 3-6: TBRPM 9.3 Future Forecast

| US 41-Citrus County | Posted Speed | LOS <br> Standard | Context <br> Class | 2024 <br> TBRPM <br> Lanes ${ }^{1}$ | $\begin{aligned} & \text { MSV } \\ & 2024^{2} \end{aligned}$ | $\begin{gathered} \text { TBRPM } \\ 2024 \\ \text { AADT } \end{gathered}$ | $\begin{aligned} & 2024 \\ & \text { V/C } \end{aligned}$ | $\begin{gathered} 2045 \\ \text { TBRPM } \\ \text { Lanes } \end{gathered}$ | MSV <br> 2045 | $\begin{aligned} & \text { TBRPM } \\ & 2045 \\ & \text { AADT } \end{aligned}$ | $\begin{aligned} & 2045 \\ & \text { V/C } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EArlington to Independence | 50 | D | C3R | 2LU | 23,520 | 12,662 | 0.54 | 4LD | 37,300 | 18,830 | 0.50 |
| Independence to Norvell Bryant | 50 | D | C3C | 2LU | 22,785 | 18,269 | 0.80 | 4LD | 36,600 | 20,669 | 0.56 |
| Norvell Brayant to SR 200 | 50 | D | C3C | 2LU | 22,785 | 23,350 | 1.02 | 4LD | 36,600 | 22,504 | 0.61 |

${ }^{1}$ Number of Lanes from TBRPM scenario year. ${ }^{2}$ MSV is the capacity at the LOS standard lor the segmentbased on the FDOT 2023QLOS Handbook.
${ }^{3}$ Votume has been adjusted to AADT using an MOCF of 0.95 trom the most recent FDOT Peak Season Correction Report, 2024 model uses 2045 SE data on the 2024E-C network.

As shown in Table 3-6 above, the model indicates deficiency under $2024 \mathrm{E}+\mathrm{C}$ model network conditions for the Norvell Bryant to SR 200 segment by 2045. However, the projected volumes for the Arlington to Norvell Bryant segments are less than, or near, existing traffic conditions. Given the current volumes and annual growth rates for traffic, plus the annual growth rates of area trip generating land uses, it appears that these specific model results may not be reasonable and should be used with caution if used for planning on these specific roadway segments. Growth rates based on historic AADT suggest that the segments between Independence and SR 200 will become deficient between 2030 and 2035.

TBRPM model volume plots can be seen in Appendix E.

## CONCLUSIONS

US 41 from E Arlington Street to Independence Highway, is projected to become deficient for both daily traffic and for peak-hour traffic conditions by 2028. While the model appears to be inconsistent with counts and trending growth rates for this specific corridor, growth rates based on historic AADT suggest that the segments between Independence and SR 200 will become deficient between 2030 and 2035. No capacity improvements such as adding lanes are funded at this time although the corridor is showing as becoming four-laned between 2031 and 2045 in the LRTP.

## 4 SR 200, FROM E ADAM STREET TO MARION COUNTY LINE

The SR 200 corridor runs north-south between US 41 and the Marion County Line, in north Citrus County. For the purpose of this analysis, the corridor has been divided into the two following segments:

- East Adam Street to N Lecanto Highway/CR491.
- Functions as two lanes, undivided roadway, 55 mph, C2T context classification.
- N Lecanto Highway/CR491 to Marion County Line.
- Functions as two lanes, undivided roadway, $55 \mathrm{mph}, \mathrm{C} 2$ context classification.

This corridor has been identified with C2T and C2 context classifications in the 2023 FDOT District 7 LOS Report and is a two-lane undivided roadway with a posted speed of 55 miles per hour, and an LOS standard of D for the C2T segment and an LOS standard of C for the C2 segment.

Figure 4-1 illustrates the study corridor and its location in north Citrus County.

Figure 4-1: Corridor Location


## EXISTING CONDITIONS

For the existing conditions analysis, traffic data was collected from both the FDOT and the Hernando/Citrus MPO. Available historic annual average daily traffic (AADT) through 2022 was collected from the FDOT, Florida Traffic Information web site, and 2023 AADT was provided by the Hernando/Citrus MPO traffic counts program. Roadway capacity is based on the FDOT 2023 Q/LOS Handbook and the adopted Level of Service (LOS) for each road segment. Volume to Capacity ratio
(V/C) and LOS is based on the 2023 MPO traffic counts. For peak-hour analyses, the actual peak-hour volumes (seasonally adjusted to annual average values) were used, based on the 15 -minute incremental traffic counts. For the segment of E Adam to N Lecanto, 2023 AADT was estimated using a Trend 03a derived growth rate from historical AADT.

As can be seen in Table 4-1, the E Adam to $N$ Lecanto segment is operating at LOS C under daily existing traffic conditions. However, the N Lecanto to Marion County Line segment is currently deficient at LOS F under daily existing traffic conditions.

Table 4-1: Existing Conditions -Daily Traffic

| SR 200 - Citrus County | Lanes <br> IType | Posted <br> Speed | LOS <br> Standard | Context <br> Class | Capacity <br> at LOS C | Capacity <br> at LOS D | 2022 <br> AADT | 2023 Est <br> AADT* | 2023 <br> V/C |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2023 |  |  |  |  |  |  |  |  |  |
| LOS |  |  |  |  |  |  |  |  |  |$|$

Note: Capacity is based on 2023 FDOT QLOS. Context Classification and LOSStandard taken from FDOT District 72023 LOSReport.
*2023AADT from 2023 Hernando/Citrus MPO counts N of CR 491. Future AADT estimated using Trend v03.a and FDOT, FTIHistoric AADT re port.

As can be seen in Table 4-2, the E Adam to $N$ Lecanto segment operates at LOS C during the $A M$ and $P M$ peak-hours under existing traffic conditions. As with the daily existing traffic conditions, the $N$ Lecanto to Marion County Line segment is currently deficient, exceeding the LOS C capacity during the AM and PM peak-hours.

Table 4-2: Existing Conditions - Peak Hour Traffic

| SR 200 - Citrus County | Lanes /Type | $\begin{aligned} & \text { LOS } \\ & \text { Std. } \end{aligned}$ | Context Class | Capacity at LOS C | Capacity at LOSD | 2023 AM <br> PH 2W Vol* | $\begin{array}{\|c\|} \hline 2023 \text { PM } \\ \text { PH } 2 \mathrm{~W} \mathrm{Vol} \end{array}$ | $\begin{array}{c\|} \hline 2023 \\ \text { AM V/C } \end{array}$ | $\begin{array}{\|c\|} \hline 2023 \\ \text { PMV/C } \end{array}$ | $\begin{gathered} 2023 \text { AM } \\ \text { LOS } \end{gathered}$ | $\begin{gathered} 2023 \text { PM } \\ \text { LOS } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E Adams to N Lecanto Hwy | 2LU | D | C2T | 1,310 | 1,710 | 494 | 576 | 0.29 | 0.34 | C | C |
| N Lecanto Hwy to Marion CL | 2LU | C | C2 | 780 | 1,330 | 1,091 | 1,240 | 1.40 | 1.59 | D | D |

Note: Capacity is based on 2023 FDOT QLOS. Context Classification and LOS Standard taken from FDOT District 7 2023 LOS Report.
*2023 PH volumes from 2023 Hernando/Citrus MPO counts. AGR estimated using Trend wo3a and FDOT, FTI Historic AADT report.

2023 traffic counts, corridor historical AADT reports, and the Trend 03a work sheets can be seen in Appendix B. The 2023 Q/LOS generalized tables used for evaluating roadway capacity can be seen in Appendix $\mathbf{C}$.

## FIVE YEAR FORECAST

Historical AADT and the Trend v03a tool were used to develop annualized growth rates for the segments along this corridor. These growth rates were applied to the 2023 traffic volumes and used to project future traffic volumes to 2028 for both daily and peak-hour conditions. A review of the current Transportation Improvement Program (TIP) and FDOT Work Program documents indicate that there are no committed and funded capacity improvements for this corridor within the 2023 to 2028 forecast period. However, the corridor is listed as an unfunded Priority Project.

As can be seen in Table 4-3, the $N$ Lecanto to Marion County Line segment is projected to continue to exceed capacity in 2028 under daily future traffic conditions. The E Adam to N Lecanto segment is
anticipated to continue operating at LOS C, however it is projected to be nearing LOS D under future daily traffic conditions by 2028.

Table 4-3: Five Year Forecast - Daily Traffic

| SR 200-Citrus County | Lanes <br> IType | Posted <br> Speed | LOS <br> Standard | Context <br> Class | Capacity <br> at LOS C | Capacity <br> at LOS D | 2023 Est <br> AADT* | Est. 2028 <br> AADT* | Est. 2028 <br> LOS | Trend 3a <br> AGR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EAdams to N Lecanto Hwy | 2 LU | 55 | D | C 2 T | 13,800 | 18,000 | 11,618 | 13,344 | C | $2.81 \%$ |
| N Lecanto Hwy to Marion CL | 2 LU | 55 | C | C 2 | 8,200 | 14,000 | 14,869 | 16,296 | F | $1.85 \%$ |

Note: Capacity is based on 2023 FDOT QLOS. Context Classific ation and LOS Standard taken from FDOT District 72023 LOS Report. AGR is an annualized growth rate. *2023 AADT from 2023 Hernando/Citrus MPO counts N of CR 491. Future AADT estimated using Trend v03.a and FDOT, FTI Historic AADT report.

Under future peak-hour traffic conditions, the $N$ Lecanto to Marion County Line segment is projected to continue to exceed capacity in 2028 under peak-hour future traffic conditions. As with the projected daily traffic conditions, the E Adam to N Lecanto segment is anticipated to continue operating at LOS C during the AM and PM peak-hours, under future 2028 traffic conditions, as can be seen in Table 4-4.

Table 4-4: Five Year Forecast - Peak Hour Traffic

| SR 200-Citrus County | Lanes <br> /Type | $\begin{aligned} & \text { LOS } \\ & \text { Std. } \end{aligned}$ | Context Class | Capacity at LOS C | Capacity at LOS D | 2023 <br> AM PH <br> 2W Vol* | 2023 <br> PM PH <br> 2W Vol* | Est. 2028 AM <br> PH 2W <br> Vol* | Est. <br> 2028 PM <br> PH 2W <br> Vol* | $\begin{gathered} \text { Est. } \\ 2028 \\ \text { AM } \\ \text { LOS } \end{gathered}$ | $\begin{gathered} \text { Est. } \\ 2028 \\ \text { PM } \\ \text { LOS } \end{gathered}$ | $\begin{gathered} \text { Trend } \\ \text { 3a AGR } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EAdams to N Lecanto Hwy | 2LU | D | C2T | 1,310 | 1,710 | 494 | 576 | 567 | 662 | C | C | 2.81\% |
| N Lecanto Hwy to Marion CL | 2LU | C | C2 | 780 | 1,330 | 1,091 | 1,240 | 1,196 | 1,359 | D | F | 1.85\% |

Note: Capacity is based on 2023 FDOT QLOS. Context Classification and LOS Standard taken from FDOT District 72023 LOS Report. AGR is an annualized growth rate.

* 2023 PH volumes from 2023 Hernando/Citrus MPO counts. AGR estimated using Trend v03a and FDOT, FTI HistoriC AADT report.

Corridor historical AADT reports and the Trend 03a work sheets can be seen in Appendix B. The 2023 Q/LOS generalized tables used for evaluating roadway capacity can be seen in Appendix C.

## ORIGIN/DESTINATION ANALYSIS AND SOCIOECONOMIC DATA

To better understand the existing traffic using the corridor, the Replica database was accessed to estimate the origins and destinations (O/D) of trips along the corridor. This was to provide insight into the regional significance of the roadway, and to assist in Traffic Analysis Zone (TAZ) selection for the model socioeconomic data growth analysis.

The Replica database provides O/D estimates by Census block group for a specific roadway corridor or segment. The number of trips per block group was classified to the following ranges for mapping and analysis purposes: $1-100,101-500,501-1500, \&>1500$. Detailed block Group O/D maps can be seen in Appendix $\mathbf{D}$ for each segment along the corridor.

Corridor trip O/Ds were identified for block groups immediately east and west of SR 200 in Citrus County for trips over 500 per block group. Trip O/Ds between 100 and 500 were significant within Citrus County and Marion County. Regional trips were also significant for block groups below 100 trip O/Ds per block group, most notable in Citrus, Pasco, Hernando, and Marion Counties.


The Replica based trip O/D study was also used for the selection of Traffic Analysis Zones (TAZs) for the analysis of socioeconomic data and growth rates from the Tampa Bay Regional Planning Model (TBRPM) version 9.3. Rather than simply selecting TAZs adjacent to, or within a specific distance of, the O/D analysis allowed for the selection of TAZs with trip origins and destinations significant to the corridor. For this selection, TAZs were selected that were made up of block groups with trip O/Ds above 500 trips and contiguous to the corridor. Figure 4-2 identifies these TAZs that best match these conditions. The TBRPM provides datasets for population and employment data for the base year of 2015, interim year 2035, and horizon year 2045. The yearly totals for dwelling units, population, employment, and school enrollment land uses for the selected TAZs were summarized and annualized growth rates were calculated for the base to interim, interim to horizon, and base to horizon years. The results of this analysis can be seen in Table 4-5, below.

Table 4-5: Change in TBRPM Socioeconomic Data 2015-2045

|  | 2015-2035 |  | 2035-2045 |  | 2015-2045 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 5}$ | AGR | $\mathbf{2 0 3 5}$ | AGR | $\mathbf{2 0 4 5}$ | AGR |
| D.U.s | 3,279 | $0.84 \%$ | 3,876 | $0.62 \%$ | 4,123 | $0.77 \%$ |
| Population | 5,024 | $0.91 \%$ | 6,026 | $0.67 \%$ | 6,441 | $0.83 \%$ |
| Employees | 549 | $3.31 \%$ | 1,052 | $1.93 \%$ | 1,273 | $2.84 \%$ |
| K-12 Enrol. | 0 | $0.00 \%$ | 0 | $0.00 \%$ | 0 | $0.00 \%$ |

Note: TAZs of influence selected using Replica $O$ and $D$ analysis
AGR is an annualized (compounding) growth rate.

Figure 4-2: Selected Traffic Analysis Zones from O/D Analysis


## TBRPM FORECAST

The current version of the TBRPM, v9.3, was executed for both the 2024 existing plus committed ( $\mathrm{E}+\mathrm{C}$ ) model scenario and the 2045 Cost Feasible scenario. The 2024 scenario uses the 2045 socioeconomic forecast on the $2024 \mathrm{E}+\mathrm{C}$ roadway network to evaluate future demand on the committed roadway network, while the 2045 scenario uses the same socioeconomic dataset on the cost feasible network to evaluate the effectiveness of the Long-Range Transportation Plan (LRTP) improvements. These planned improvements include the widening of SR 200 from north of E Adam Street to N Lecanto Highway (partially funded) in the 2045 LRTP.

The model generates peak season volume estimates. These were adjusted to AADT using the most recent Model Output Correction Factor (MOCF) from the FDOT Peak Season Correction Factor (PSCF) report. The PSCF report can be seen in Appendix C along with the $2023 \mathrm{O} / \mathrm{LOS}$ Handbook tables used for the Maximum Service Volumes (MSV) shown.

Table 4-6: TBRPM 9.3 Future Forecast

| SR 200 - Citrus County | Posted <br> Speed | LOS <br> Standard | Context Class | $\begin{gathered} 2024 \\ \text { TBRPM } \\ \text { Lanes } \end{gathered}$ | $\begin{aligned} & \text { MSV } \\ & 2024 \end{aligned}$ | $\begin{gathered} \text { TBRPM } \\ 2024 \\ \text { AADT } \end{gathered}$ | $\begin{aligned} & 2024 \\ & \text { V/C } \end{aligned}$ | 2045 <br> TBRPM <br> Lanes | MSV <br> 2045 | TBRPM <br> 2045 <br> AADT | $\begin{gathered} 2045 \\ \text { V/C } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EAdams to N Lecanto Hwy | 55 | D | C2T | 2LU | 18,000 | 23,350 | 1.30 | 2LU/4LD | 18,000 | 22,504 | 1.25 |
| N Lecanto Hwy to Marion CL | 55 | C | C2 | 2LU | 8,200 | 28,505 | 3.48 | 2LU | 8,200 | 28,494 | 3.47 |

${ }^{1}$ Number of Lanes from TBRPM scenario year. ${ }^{2}$ MSV is the capacity at the LOS standard for the segmentbased on the FDOT 2023 QLOSHandbook.
${ }^{3}$ Volume has been adjusted to AADT using an MOCF of 0.95 from the most recent FDOT Peak Season Correction Report. 2024 model uses 2045 SE data on the $2024 \mathrm{E}+\mathrm{C}$ network.

As shown in Table 4-6 above, the model indicates deficiency under $\mathrm{E}+\mathrm{C}$ network conditions by 2045. The N Lecanto Highway to Marion County Line segment is currently deficient.

TBRPM model volume plots can be seen in Appendix E.

## CONCLUSIONS

SR 200 from US 41 to Marion County Line is currently listed in the TIP as an unfunded Priority Project. SR 200 from North Lecanto Highway to Marion County Line is currently deficient at LOS F under existing daily and peak-hour traffic conditions. All remaining two-lane sections of this roadway are projected to be deficient by 2045 as estimated by the TBRPM 9.3 LRTP 2045 Cost Feasible model scenario.

This SR 200 corridor has limited regional impact throughout Citrus, Pasco, Hernando, and Marion County, with notable travel between Citrus and Marion Counties, as indicated by the Replica based O/D analysis.


# Hernando/Citrus MPO <br> Traffic Segment Studies for <br> County Line Road, US 41, and SR 200 

## Scope of Services

December 5, 2023

## Purpose and Objectives

With the recent, continued, and projected population growth in Hernando County and Citrus County there is an ever increasing demand on the roadways. It is the responsibility of the Hernando/Citrus MPO to monitor and evaluate the performance of the transportation system, plan, and program roadway improvements to meet the existing and future demand on the area roadways.

The MPO monitors existing traffic through a traffic count program and future travel demand through the Tampa Bay Regional Planning Model. Using those data points and bistoric traffic count trends, the MPO desires to analyze the existing and future performance on certain vital roadways. This work effort includes conducting traffic studies as described herein for County Line Road (including Ayers Road Extension/County Line Road intersection) and two, one-mile segments of US 41 in Hernando County and US 41 and SR 200 in Citrus County.

The objectives of the study are to assess the existing traffic conditions by determining generalized level of service for the roadways and determine the severity of congestion and estimate over time when roadways may or will reach a failing condition. The studies will consider daily and AM and PM peak conditions.

## Tasks and Deliverables

Traffic studies will be completed for the following roadways within the identified limits. Each study will include the tasks described below.

## Hernando County Study Corridors

Task 1 - County Line Rd./Ayers Rd. (from US 19 to Ayers Rd./US 41 intersection)
Task 2 - US 41 (from County Line Rd. to Ayers Rd./US 41 intersection)

## Citrus County Study Corridors

Task 3 - US 41 (from E of Arlington St. to N Carl G Rose Highway)
Task 4 - SR 200 (from E Adams Street to Marion County Line)

## Conducting the Studies

## Subtask 1 - Data Gathering and Traffic Inputs

The CONSULTANT will compile the latest available traffic volume count information from the Hernando and Citrus traffic count programs and the Florida Department of Transportation (FDOT). This information will be used to establish the average daily traffic to be used in the existing conditions analysis. It will also be used to establish a reasonable growth rate or trend line for estimating future daily corridor volumes.

The CONSULTANT will refer to the projected volumes from the most recently approved Tampa Bay Regional Planning Model (TBRPM) to ascertain future volumes along the study corridors.

As a primary guide throughout the studies, the CONSULTANT will refer to the latest FDOT Multimodal/Quality Level of Service Handbook dated 06/06/2023.

The CONSULTANT will obtain and review the latest plans and programs of the MPO, FDOT, and the Counties to account for any identified roadway improvements which will be considered in the studies.

## Subtask 2 - Traffic Analysis

The CONSULTANT will conduct a planning-level traffic analysis user the procedures and data table in the FDOT Multimodal/Quality Level of Service Handbook dated 06/06/2023. This will determine existing and future levels of service. An analysis of daily peaking conditions will be conducted to determine if operational measures may need to be considered to address conditions during these time periods. If the corridors are not already in a failing level of service condition, forecast future traffic will be analyzed to estimate a year in which the failing conditions will occur
To better understand the existing traffic, the REPLICA database will be used to determine the origins and destinations of trips along the corridor. This will provide insight into the regional significance of the roadway, the purpose of trips along the corridor, and the modes of travel.

A review of existing and anticipated change in population and employment along the study corridors will be completed using data found within the TBRPM. In conjunction with this, a review of existing land uses along the study corridor will be conducted and compared to the TBRPM data to confirm that planned and potential growth is represented in the TBRPM.

## Subtask 3 - Documentation, Deliverables, and Presentation

The CONSULTANT will record all study activities, processes, and results in a single electronic document. The document will include separate, clearly marked sections for each of the four study tasks. The study process and results will be described in text and illustrated using tables, figures, and maps.

The CONSULTANT will prepare and provide a presentation of the study results to the MPO Board and a date and time to be agreed upon by the MPO staff.

## Deliverables:

- Draft Traffic Studies Document
- Final Traffic Studies Document
- PowerPoint presentation to be delivered by the CONSULTANT to the MPO Board


## Schedule

The draft Traffic Studies documentation will be completed within two (2) months of a notice-to-proceed (NTP) being issued by the MPO.

Full completion of this task work order is dependent on the receipt of review comments on the draft documentation from the MPO staff and the MPO Board schedule.

## Fee

The estimated fee to complete all tasks and subtasks of the Traffic Studies described in this scope of services is $\$ 24,933$.



## Prepared by NDS/ATD

VOLUME
County Line Rd/CR 578 Bet. US 19/SR 55 \& Cobblestone Dr

Day: Tues-Thurs
Date: March 21-23, 2023

Average Annual Daily Traffic

City: Hudson
Project \#: FL23_120075_010


## Prepared by NDS/ATD

VOLUME
County Line Rd/CR 578 Bet. Cobblestone Dr \& Spring Time St

Day: Tues-Thurs
Date: March 21-23, 2023

Average Annual Daily Traffic

City: Spring Hill
Project \#: FL23_120075_011


## Prepared by NDS/ATD

VOLUME
County Line Rd/CR 578 Bet. Farnsworth Blvd \& Linden Dr

Day: Tues-Thurs
Date: March 21-23, 2023

Average Annual Daily Traffic

City: Spring Hill
Project \#: FL23_120075_013


## Prepared by NDS/ATD

VOLUME
County Line Rd/CR 578 Bet. Suncoast Pkwy \& Broad St/US 41

Day: Tues-Thurs
Date: May 16-18, 2023

Average Annual Daily Traffic

City: Spring Hill
Project \#: FL23_120075_016


# Prepared by NDS/ATD 

VOLUME
US 41/SR 45 Bet. N Sportsmans Point \& N Indepedence Pkwy

Day: Tues-Thurs
Date: April 11-13, 2023

Average Annual Daily Traffic

City: Inverness
Project \#: FL23_120075_045


VOLUME
US 41/SR 45 Bet. N Indepedence Pkwy \& E Norvell Bryant Hwy

Day: Tues-Thurs
Date: April 11-13, 2023

City: Hernando
Project \#: FL23_120075_046


## Prepened by wos/atio <br> VOLUME

US 41/SR 45 Bet. E Norvell Bryant Hwy \& SR 200/N Cari G Rose Hwy

Day: Tues-Thurs
Date: April 11-13, 2023

Average Annual Daily Traffic

City: Hernando
Project \#: FL23_120075_047


## Prepared by NDS/ATD

VOLUME
SR 200/Gari G Rose Hwy Bet. E Adams St \& CR 491/N Lecanto Hwy

Day: Tues-Thurs
Date: April 11-13, 2023

Average Annual Daily Traffic
SB


City: Hernando
Project \#: FL23_120075_049


## Prepared by NDS/ATD

VOLUME
SR 200/Gari G Rose Hwy Bet. CR 491/N Lecanto Hwy \& Marion County Line

Day: Tues-Thurs
Date: April 11-13, 2023

Average Annual Daily Traffic

City: Hernando
Project \#: FL23_120075_050


```
JTY: 08 - HERNANDO
```

ミ: 9601 - CR 578, BETWEEN 'US 19 ' AND 'WATERFALL DR'


AADT FLAGS: $C=$ COMPUTED; $E=$ MANUAL ESTIMATE; $F=$ FIRST YEAR ESTIMATE
$S=$ SECOND YEAR ESTIMATE; $T=$ THIRD YEAR ESTIMATE; $\mathrm{R}=$ FOURTH YEAR ESTIMATE
$\mathrm{V}=$ FIFTH YEAR ESTIMATE; $6=$ SIXTH YEAR ESTIMATE; $\mathrm{X}=$ UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K3O VALUES

JTY: 08 - HERNANDO
3: 2015 - COUNTY LINE RD, EAST OF COBBLESTONE DR (HPMS)


AADT FLAGS: $C=$ COMPUTED $; E=$ MANUAL ESTIMATE; $F=$ FIRST YEAR ESTIMATE $\mathrm{S}=$ SECOND YEAR ESTIMATE; $\mathrm{T}=$ THIRD YEAR ESTIMATE; $\mathrm{R}=$ FOURTH YEAR ESTIMATE $\mathrm{V}=$ FIFTH YEAR ESTIMATE; $6=$ SIXTH YEAR ESTIMATE; $\mathrm{X}=$ UNKNOWN *K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K3O VALUES

JTY: 08 - HERNANDO
3: 2030 - COUNTY LINE ROAD, EAST OF MARINER BLVD (HPMS)


AADT FLAGS: $C=$ COMPUTED; $E=$ MANUAL ESTIMATE; $F=F I R S T$ YEAR ESTIMATE
$\mathrm{S}=$ SECOND YEAR ESTIMATE; $\mathrm{T}=$ THIRD YEAR ESTIMATE; $\mathrm{R}=$ FOURTH YEAR ESTIMATE $\mathrm{V}=\mathrm{FIFTH}$ YEAR ESTIMATE; $6=$ SIXTH YEAR ESTIMATE; $\mathrm{X}=$ UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K3O VALUES

NTY: 08 - HERNANDO
: 2020 - COUNTY LINE RD, EAST OF SUNCOAST PKWY (HPMS)

| AADT |
| ---: |
| 16600 |
| 16000 |
| S |
| 15600 |
| 12000 |
| C |
| 11500 |
| 11000 |
| X |
| 10300 |
| E |
| 9800 |
| E |
| 9700 |
| S |
| 9900 |
| 9900 |
| F |
| 10100 |
| 10100 |
| 10300 |
| 9900 |


| DIRECTION 1 |  |
| :---: | :---: |
| E | 8300 |
| E | 8000 |
| E | 7800 |
|  | 0 |
|  | 0 |
|  | 0 |
|  | 0 |
| E | 4800 |
| E | 4900 |
| E | 4900 |
| E | 5000 |
| E | 5000 |
| E | 5100 |
| E | 4900 |


| DIRECTION 2 |  |
| :--- | :---: |
| W | 8300 |
| W | 8000 |
| W | 7800 |
|  | 0 |
|  | 0 |
|  | 0 |
|  | 0 |
| W | 4900 |
| W | 5000 |
| W | 5000 |
| W | 5100 |
| W | 5100 |
| W | 5200 |
| W | 5000 |


| *K FACTOR | D FACTOR | T EACTOR |
| ---: | ---: | ---: |
| 9.00 | 54.50 | 9.60 |
| 9.00 | 54.20 | 7.00 |
| 9.00 | 54.30 | 5.90 |
| 9.00 | 54.30 | 6.90 |
| 9.00 | 54.40 | 6.40 |
| 9.00 | 55.60 | 2.90 |
| 9.00 | 54.80 | 4.70 |
| 9.00 | 55.00 | 3.80 |
| 9.00 | 56.00 | 6.90 |
| 9.00 | 56.80 | 6.90 |
| 9.00 | 55.00 | 6.90 |
| 9.00 | 55.00 | 8.20 |
| 9.74 | 54.68 | 8.20 |
| 9.60 | 55.47 | 8.20 |
| 9.72 | 54.99 | 11.00 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

 $\mathrm{S}=$ SECOND YEAR ESTIMATE; $\mathrm{T}=$ THIRD YEAR ESTIMATE; $\mathrm{R}=$ FOURTH YEAR ESTIMATE $\mathrm{V}=$ FIFTH YEAR ESTIMATE; $6=$ SIXTH YEAR ESTIMATE; $\mathrm{X}=$ UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

## JTY: 08 - HERNANDO

3: 0031 - SR 45/US 41/BROAD ST, APPROX $1 / 2$ MILE NORTH OF PASCO COUNTY
AADT
16100 F
15500 C
15300
14500
14200
13800
13000
13400
12700
11700
10600
10200
11300
12200
12900
$12400 ~ C$

| DIRECTION |  |
| :--- | :--- |
| N |  |
| N | 8000 |
| N | 7700 |
| N | 7700 |
| N | 7100 |
| N | 6900 |
| N | 6500 |
| N | 6900 |
| N | 6500 |
| N | 5800 |
| N | 5300 |
| N | 5100 |
| N | 5600 |
| N | 6000 |
| N | 6500 |
| N | 6200 |


| DIRECTION 2 | *K FACTOR |  |
| :--- | ---: | ---: |
| S | 8100 | 9.00 |
| S | 7800 | 9.00 |
| S | 7600 | 9.00 |
|  |  | 9.00 |
| S | 7100 | 9.00 |
| S | 6900 | 9.00 |
| S | 6500 | 9.00 |
| S | 6500 | 9.00 |
| S | 5900 | 9.00 |
| S | 5300 | 9.00 |
| S | 5100 | 9.00 |
| S | 5700 | 9.00 |
| S | 6200 | 9.74 |
| S | 6400 | 9.60 |
| S | 6200 | 9.72 |
|  |  | 9.34 |


| D FACTOR | T FACTOR |
| ---: | ---: |
| 54.50 | 12.30 |
| 54.20 | 12.30 |
| 54.30 | 5.00 |
| 54.30 | 5.80 |
| 54.40 | 9.30 |
| 55.60 | 9.30 |
| 54.80 | 9.30 |
| 55.00 | 8.50 |
| 56.00 | 7.50 |
| 56.80 | 8.00 |
| 55.00 | 8.30 |
| 55.00 | 7.30 |
| 54.68 | 7.20 |
| 55.47 | 7.90 |
| 54.99 | 9.90 |
| 56.51 | 16.40 |

AADT FLAGS: $C=$ COMPUTED $; E=$ MANUAL ESTIMATE; $F=$ FIRST YEAR ESTIMATE
$S=$ SECOND YEAR ESTIMATE; $T=$ THIRD YEAR ESTIMATE; $R=$ FOURTH YEAR ESTIMATE $\mathrm{V}=$ FIFTH YEAR ESTIMATE; $6=$ SIXTH YEAR ESTIMATE; $\mathrm{X}=$ UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

JTY: 02 - CITRUS
3: 0238 - SR $45 / \mathrm{US} 41 / \mathrm{N}$ FLORIDA AVE, SOUTH OF NORVELL BRYANT/PARSON POINT
AADT
22000 F
21000 C
16600 C
18200
18200
16100
C
15500
17000
C
15800
15800
16200
C
16000
16300
165
16600
16000
1

| DIRECTION |  |
| :--- | ---: |
| N | 11000 |
| N | 10500 |
| N | 8100 |
| N | 8900 |
| N | 8900 |
| N | 7800 |
| N | 7500 |
| N | 8300 |
| N | 7700 |
| N | 7600 |
| N | 7800 |
| N | 7800 |
| N | 7900 |
| N | 8100 |
| N | 8100 |
| N | 7900 |




D FACTOR
T FACTOR
--...-.$\begin{array}{ll}51.40 & 7.20 \\ 51.10 & 7.20 \\ 53.20 & 7.30\end{array}$
$53.10 \quad 7.20$
$\begin{array}{ll}52.90 & 7.20 \\ 53.30 & 5.80\end{array}$
$\begin{array}{ll}53.10 & 5.80 \\ 53.20 & 6.80\end{array}$
$\begin{array}{ll}53.20 & 6.10 \\ 53.30 & 6.30\end{array}$
$52.90 \quad 5.90$
$54.60 \quad 5.50$
$52.90 \quad 6.20$
$\begin{array}{ll}53.81 & 6.00 \\ 54.59 & 4.00\end{array}$
$\begin{array}{ll}54.59 & 4.90 \\ 53.97 & 5.80\end{array}$
54.20
6.10

AADT FLAGS : $C=$ COMPUTED $; E=$ MANUAL ESTIMATE; $F=$ FIRST YEAR ESTIMATE $S=S E C O N D$ YEAR ESTIMATE; $T=$ THIRD YEAR ESTIMATE; $R=$ FOURTH YEAR ESTIMATE $\mathrm{V}=\mathrm{FIFTH}$ YEAR ESTIMATE; $6=$ SIXTH YEAR ESTIMATE; $\mathrm{X}=$ UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

## JTY: 02 - CITRUS

3: 1009 - SR 45/US 41/N FLORIDA AVE, SOUTH OF SR200/CARL G ROSE HWY
AADT
23000
22000
16600
18600
18600
16100
15500
16800
16000
15900
17700
165
16500
16700
16800
17200
17800

| DIRECTION 1 |  |
| :--- | ---: |
| N | 11000 |
| N | 10500 |
| N | 8300 |
| N | 9300 |
| N | 9300 |
| N | 8000 |
| N | 7700 |
| N | 8300 |
| N | 7900 |
| N | 7900 |
| N | 8800 |
| N | 8200 |
| N | 8300 |
| N | 8400 |
| N | 8600 |
| N | 8900 |


|  | ECTION | *K FACTOR |
| :---: | :---: | :---: |
| S | 12000 | 9.00 |
| S | 11500 | 9.00 |
| S | 8300 | 9.00 |
| S | 9300 | 9.00 |
| S | 9300 | 9.00 |
| S | 8100 | 9.00 |
| 5 | 7800 | 9.00 |
| S | 8500 | 9.00 |
| S | 8100 | 9.00 |
| S | 8000 | 9.00 |
| S | 8900 | 9.00 |
| S | 8300 | 9.00 |
| S | 8400 | 10.10 |
| S | 8400 | 9.82 |
| S | 8600 | 10.01 |
| S | 8900 | 9.88 |


| D FACTOR | T FACTOR |
| ---: | ---: |
| 51.40 | 5.90 |
| 51.10 | 5.90 |
| 53.20 | 8.00 |
| 53.10 | 7.20 |
| 52.90 | 7.20 |
| 53.30 | 5.80 |
| 53.10 | 5.80 |
| 53.20 | 5.90 |
| 53.30 | 5.50 |
| 52.90 | 6.40 |
| 54.60 | 4.80 |
| 52.90 | 5.90 |
| 53.81 | 6.00 |
| 54.59 | 5.00 |
| 53.97 | 6.10 |
| 54.20 | 6.90 |

AADT FLAGS : $C=$ COMPUTED $; E=$ MANUAL ESTIMATE; $F=$ FIRST YEAR ESTIMATE $\mathrm{S}=$ SECOND YEAR ESTIMATE; $\mathrm{T}=$ THIRD YEAR ESTIMATE; $\mathrm{R}=$ FOURTH YEAR ESTIMATE $\mathrm{V}=\mathrm{FIFTH}$ YEAR ESTIMATE; $6=$ SIXTH YEAR ESTIMATE; $\mathrm{X}=$ UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K3O VALUES

```
JTY: 02 - CITRUS
```

ב: 8606 - FL 200 , CR 491 TO E ADAMS ST

| AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 7300 F | E | 3700 | $W$ | 3600 | 9.00 | 51.40 |
| 7100 C | E | 3600 | W | 3500 | 9.00 | 51.10 |

AADT FLAGS : $C=$ COMPUTED $; E=$ MANUAL ESTIMATE; $F=$ FIRST YEAR ESTIMATE $\mathrm{S}=$ SECOND YEAR ESTIMATE; $\mathrm{T}=\mathrm{THIRD}$ YEAR ESTIMATE; $\mathrm{R}=$ FOURTH YEAR ESTIMATE $\mathrm{V}=\mathrm{FIFTH}$ YEAR ESTIMATE; $\sigma=$ SIXTH YEAR ESTIMATE; $\mathrm{X}=$ UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

```
JTY: 02 - CITRUS
```

I: 0200 - SR 200/CARL ROSE HIGHWAY, SOUTH OF CR 39


AADT FLAGS: $\mathrm{C}=$ COMPUTED $; \mathrm{E}=$ MANUAL ESTIMATE; $\mathrm{F}=$ FIRST YEAR ESTIMATE
$S=S E C O N D$ YEAR ESTIMATE; $T=$ THIRD YEAR ESTIMATE; $R=$ FOURTH YEAR ESTIMATE $\mathrm{V}=\mathrm{FIFTH}$ YEAR ESTIMATE; $\quad 6=$ SIXTH YEAR ESTIMATE; $\mathrm{X}=$ UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K3O VALUES

Traffic Trends - V03.a
SITE: 9601 - CR 578, BETWEEN 'US 19' AND 'WATERFALL DR' --

| FIN\# | 1234 |
| :--- | ---: |
| Location | 1 |


| County: | Hernando (08) |
| :---: | :---: |
| Station \#: | 0 |
| Highway: | -CR 578, BETWEEN 'US 19' AND 'WATES |



Traffic Trends - V03.a
SITE: 2015 - COUNTY LINE RD, EAST OF COBBLESTONE DR (HPMS) --

| County: | Hemando (08) |
| :---: | :---: |
| Station \#: |  |
| Highway: | OUNTY LINE RD, EAST OF COBBLESTON |



*Axle-Adjusted

Traffic Trends - V03.a
SITE: 2030 - COUNTY LINE ROAD, EAST OF MARINER BLVD (HPMS) --

| County: | Hernando (08) |
| :---: | :---: |
| Station \#: | 0 |
| Highway: | EOUNTY LINE ROAD, EAST OF MARINER |



Traffic Trends - V03.a
SITE: 2020 - COUNTY LINE RD, EAST OF SUNCOAST PKWY (HPMS) --

| County: | Hernando (08) |
| :---: | :---: |
| Station \#: | 0 |
| Highway: | COUNTY LINE RD, EAST OF SUNCOAST |



*Axle-Adjusted

Traffic Trends - V03.a



Traffic Trends - V03.a
8 - SR 45/US 41/N FLORIDA AVE, SOUTH OF NORVELL BRYANT/PARSON

| FIN\# |  |
| :--- | :--- | :--- | :--- |
| Location | 1234 | \(\begin{aligned} \& County: <br>

\& Station\#: <br>
\& Highway:\end{aligned} \quad $$
\begin{gathered}\text { Citrus (02) } \\
\text { 1/N FLORIDA AVE, SOUTH OF NORVELL }\end{gathered}
$$\)


*Axle-Adjusted

Traffic Trends - V03.a
: 1009 - SR 45/US 41/N FLORIDA AVE, SOUTH OF SR200/CARL G ROSE HV

| $\begin{array}{l}\text { FIN\# } \\ \text { Location }\end{array}$ | 1234 |
| :--- | :--- | :--- | :--- |




Straight Line Growth Option
*Axle-Adjusted

Traffic Trends - V03.a SITE: 8606 - FL 200, CR 491 TO E ADAMS ST --


| County: | Citrus (02) |
| :---: | :---: |
| Station \#: | 0 |
| Highway: | ITE: 8606 - FL 200, CR 491 TO E ADAMS S |



Traffic Trends - V03.a
SITE: 0200 - SR 200/CARL ROSE HIGHWAY, SOUTH OF CR 39 --


| County: | Citrus (02) |
| :---: | :---: |
| Station \#: | 0 |
| Highway: | -SR 200/CARL ROSE HIGHWAY, SOUTH |




## C1 \& C2

Motor Vehicle Highway Generalized Service Volume Tables


## C3C \& C3R

Motor Vehicle Arterial Generalized Service Volume Tables

## Peak Hour Directional

|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 1 Lane | $*$ | 760 | 1,070 | $* *$ |
| 2 Lane | $*$ | 1,520 | 1,810 | $* *$ |
| 3 Lane | $*$ | 2,360 | 2,680 | $* *$ |
| 4 Lane | $*$ | 3,170 | 3,180 | $* *$ |

Peak Hour Two-Way

|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | $*$ | 1,380 | 1,950 | $* *$ |
| 4 Lane | $*$ | 2,760 | 3,290 | $* *$ |
| 6 Lane | $*$ | 4,290 | 4,870 | $* *$ |
| 8 Lane | $*$ | 5,760 | 5,780 | $* *$ |

AADT

|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | $*$ | 15,300 | 21,700 | $* *$ |
| 4 Lane | $*$ | 30,700 | 36,600 | $* *$ |
| 6 Lane | $*$ | 47,700 | 54,100 | $* *$ |
| 8 Lane | $*$ | 64,000 | 64,200 | $* *$ |

(C3K-Suburban

|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 1 Lane | $*$ | 970 | 1,110 | $* *$ |
| 2 Lane | $*$ | 1,700 | 1,850 | $* *$ |
| 3 Lane | $*$ | 2,620 | 2,730 | $* *$ |


|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | $*$ | 1,760 | 2,020 | $* *$ |
| 4 Lane | $*$ | 3,090 | 3,360 | $* *$ |
| 6 Lane | $*$ | 4,760 | 4,960 | $* *$ |


|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | $*$ | 19,600 | 22,400 | $* *$ |
| 4 Lane | $*$ | 34,300 | 37,300 | $* *$ |
| 6 Lane | $*$ | 52,900 | 55,100 | $* *$ |

## Adjustment Factors

[^0][^1][^2]
## C2T, C4, C5, \& C6

Motor Vehicle Arterial Generalized Service Volume Tables

(C2T-Rural Town)

(C4-Urban General) ○

(C5-Urban
Center)

(C6-Urban Core)

Peak Hour Directional

|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 1 Lane | $*$ | 720 | 940 | $* *$ |
| 2 Lane | $*$ | 1,140 | 1,640 | $* *$ |
| 3 Lane | $*$ | 2,120 | 2,510 | $* *$ |


|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 1 Lane | $*$ | $*$ | 870 | 1,190 |
| 2 Lane | $*$ | 1,210 | 1,790 | 2,020 |
| 3 Lane | $*$ | 2,210 | 2,810 | 2,990 |
| 4 Lane | $*$ | 2,590 | 3,310 | 3,510 |


|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 1 Lane | $*$ | $*$ | 690 | 1,080 |
| 2 Lane | $*$ | 1,290 | 1,900 | 2,130 |
| 3 Lane | $*$ | 1,410 | 2,670 | 3,110 |
| 4 Lane | $*$ | 2,910 | 3,560 | 3,640 |


|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 1 Lane | $*$ | $* * *$ | 790 | 1,030 |
| 2 Lane | $*$ | $* * *$ | 1,490 | 1,920 |
| 3 Lane | $*$ | $* * *$ | 2,730 | 2,940 |
| 4 Lane | $*$ | $* * *$ | 3,250 | 3,490 |

## Peak Hour Two-Way

|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | $*$ | 1,310 | 1,710 | $* *$ |
| 4 Lane | $*$ | 2,070 | 2,980 | $* *$ |
| 6 Lane | $*$ | 3,850 | 4,560 | $* *$ |

AADT

|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | $*$ | 13,800 | 18,000 | $* *$ |
| 4 Lane | $*$ | 21,800 | 31,400 | $* *$ |
| 6 Lane | $*$ | 40,500 | 48,000 | $* *$ |


|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | ${ }^{*}$ | ${ }^{*}$ | 17,600 | 24,000 |
| 4 Lane | $*$ | 24,400 | 36,100 | 40,800 |
| 6 Lane | $*$ | 44,700 | 56,800 | 60,400 |
| 8 Lane | ${ }^{*}$ | 52,300 | 66,900 | 70,900 |



|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | $*$ | $*$ | 13,900 | 21,800 |
| 4 Lane | $*$ | 26,100 | 38,300 | 43,000 |
| 6 Lane | $*$ | 28,400 | 53,900 | 62,800 |
| 8 Lane | $*$ | 58,800 | 71,900 | 73,600 |


|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | $*$ | $* * *$ | 1,440 | 1,870 |
| 4 Lane | $*$ | $* * *$ | 2,710 | 3,490 |
| 6 Lane | $*$ | $* * *$ | 4,960 | 5,350 |
| 8 Lane | $*$ | $* * *$ | 5,910 | 6,350 |


|  | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: |
| 2 Lane | $*$ | $* * *$ | 16,000 | 20,800 |
| 4 Lane | $*$ | $* * *$ | 30,100 | 38,800 |
| 6 Lane | $*$ | $* * *$ | 55,100 | 59,400 |
| 8 Lane | $*$ | $* * *$ | 65,700 | 70,600 |

## Adjustment Factors

[^3]Exclusive right turn lane(s): Multiply by 1.05
Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95 Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75 Non-State Signalized Roadway: Multiply by 0.90

[^4]2022 PEAK SEASON EACTOR CATEGORY REPORT - REPORT TYPE: ALL CATEGORY: 0800 HERNANDO COUNTYWIDE


* PEAK SEASON

```
2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
```

CATEGORY: 0200 CITRUS COUNTYWIDE
WEEK DATES SF

| 1 | 01/01/2022 | - 01/01/2022 | 0.99 | 1.04 |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 01/02/2022 | - 01/08/2022 | 1.04 | 1.09 |
| 3 | 01/09/2022 | - 01/15/2022 | 1.08 | 1.14 |
| 4 | 01/16/2022 | - 01/22/2022 | 1.06 | 1.12 |
| 5 | 01/23/2022 | - 01/29/2022 | 1.04 | 1.09 |
| 6 | 01/30/2022 | - 02/05/2022 | 1.02 | 1.07 |
| 7 | 02/06/2022 | - 02/12/2022 | 1.00 | 1.05 |
| 8 | 02/13/2022 | - 02/19/2022 | 0.98 | 1.03 |
| * 9 | 02/20/2022 | - 02/26/2022 | 0.97 | 1.02 |
| *10 | 02/27/2022 | - 03/05/2022 | 0.95 | 1.00 |
| *11 | 03/06/2022 | - 03/12/2022 | 0.94 | 0.99 |
| *12 | 03/13/2022 | - 03/19/2022 | 0.92 | 0.97 |
| *13 | 03/20/2022 | - 03/26/2022 | 0.92 | 0.97 |
| *14 | 03/27/2022 | - 04/02/2022 | 0.93 | 0.98 |
| *15 | 04/03/2022 | - 04/09/2022 | 0.93 | 0.98 |
| *16 | 04/10/2022 | - 04/16/2022 | 0.93 | 0.98 |
| *17 | 04/17/2022 | - 04/23/2022 | 0.94 | 0.99 |
| *18 | 04/24/2022 | - 04/30/2022 | 0.95 | 1.00 |
| *19 | 05/01/2022 | - 05/07/2022 | 0.96 | 1.01 |
| * 20 | 05/08/2022 | - 05/14/2022 | 0.97 | 1.02 |
| *21 | 05/15/2022 | - 05/21/2022 | 0.98 | 1.03 |
| 22 | 05/22/2022 | - 05/28/2022 | 1.00 | 1.05 |
| 23 | 05/29/2022 | - 06/04/2022 | 1.01 | 1.05 |
| 24 | 06/05/2022 | - 06/11/2022 | 1.03 | 1.08 |
| 25 | 06/12/2022 | - 06/18/2022 | 1.04 | 1.09 |
| 26 | 05/19/2022 | - 06/25/2022 | 1.05 | 1.11 |
| 27 | 06/26/2022 | - 07/02/2022 | 1.05 | 1.11 |
| 28 | 07/03/2022 | -07/09/2022 | 1.06 | 1.12 |
| 29 | 07/10/2022 | - 07/16/2022 | 1.06 | 1.12 |
| 30 | 07/17/2022 | - 07/23/2022 | 1.05 | 1.11 |
| 31 | 07/24/2022 | - 07/30/2022 | 1.04 | 1.09 |
| 32 | 07/31/2022 | -08/06/2022 | 1.03 | 1.08 |
| 33 | 08/07/2022 | - 08/13/2022 | 1.02 | 1.07 |
| 34 | 08/14/2022 | - 08/20/2022 | 1.01 | 1.06 |
| 35 | 08/21/2022 | - 08/27/2022 | 1.03 | 1.08 |
| 36 | 08/28/2022 | - 09/03/2022 | 1. 04 | 1.09 |
| 37 | 09/04/2022 | - 09/10/2022 | 1.06 | 1.12 |
| 38 | 09/11/2022 | - 09/17/2022 | 1.07 | 1. 13 |
| 39 | 09/18/2022 | - 09/24/2022 | 1.04 | 1.09 |
| 40 | 09/25/2022 | - 10/01/2022 | 1.02 | 1.07 |
| 41 | 10/02/2022 | - 10/08/2022 | 0.99 | 1.04 |
| 42 | 10/09/2022 | - 10/15/2022 | 0.96 | 1.01 |
| 43 | 10/16/2022 | - $10 / 22 / 2022$ | 0.97 | 1.02 |
| 44 | 10/23/2022 | - 10/29/2022 | 0.98 | 1. ${ }^{\text {d }}$. 3 |
| 45 | 10/30/2022 | -11/05/2022 | 1.00 | 1.05 |
| 46 | 11/06/2022 | - 11/12/2022 | 1.01 | 1.06 |
| 47 | 11/13/2022 | - 11/19/2022 | 1.02 | 1.07 |
| 48 | 11/20/2022 | - 11/26/2022 | 1.01 | 1.06 |
| 49 | 11/27/2022 | - 12/03/2022 | 1.01 | 1.06 |
| 50 | 12/04/2022 | - 12/10/2022 | 1.00 | 1.05 |
| 51 | 12/11/2022 | - 12/17/2022 | 0.99 | 1.04 |
| 52 | 12/18/2022 | - 12/24/2022 | 1.04 | 1.09 |
| 53 | 12/25/2022 | - 12/31/2022 | 1.08 | 1.14 |

* PEAK SEASON































TBRPM 9.3 2045 CF Network with 2045 SE Data
Hernando/Pasco County Line Road - Cobblestone to Mariner
Daily Two-way Volume, Directional Volume, Directional Planning V:C Ratio (LOS E)


CuTb


TBRPM 9.3 2045 CF Network with 2045 SE Data
Hernando/Pasco County Line/Ayers Road -Suncoast to US 41






[^0]:    The peak hour directional service volumes should be adjust by multiplying by 1.2 for one-way facilities The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
    2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80

[^1]:    Exclusive right turn lane(s): Multiply by 1.05
    Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95
    Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75
    Non-State Signalized Roadway: Multiply by 0.90

[^2]:    This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.

    * Cannot be achieved using table input value defaults.
    ** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become $F$ because intersection capacities have been reached.

[^3]:    The peak hour directional service volumes should be adjust by multiplying by 1.2 for one-way facilities The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
    2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80

[^4]:    This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist

    - Cannot be achieved using table input value defaults.
    ** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service $D$ become $F$ because intersection capacities have been reached.

