Traffic Impact Statement

Baumgarten MPUD (fka Pelican Nursery MPUD)
Planned Unit Development (PUD) Rezone

Collier County, FL
3/11/2019

Prepared for:

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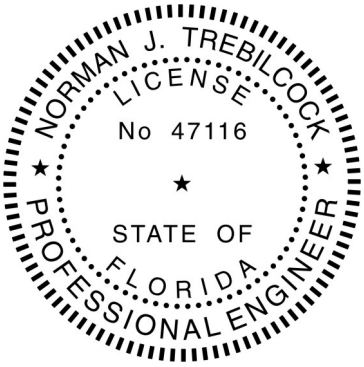
Collier County Transportation Methodology Fee – $500.00

Collier County Transportation Review Fee – Major Scale Study – $1,500.00

Statement of Certification

I certify that this Traffic Impact Statement has been prepared by me or under my immediate supervision and that I have experience and training in the field of Traffic and Transportation Engineering.



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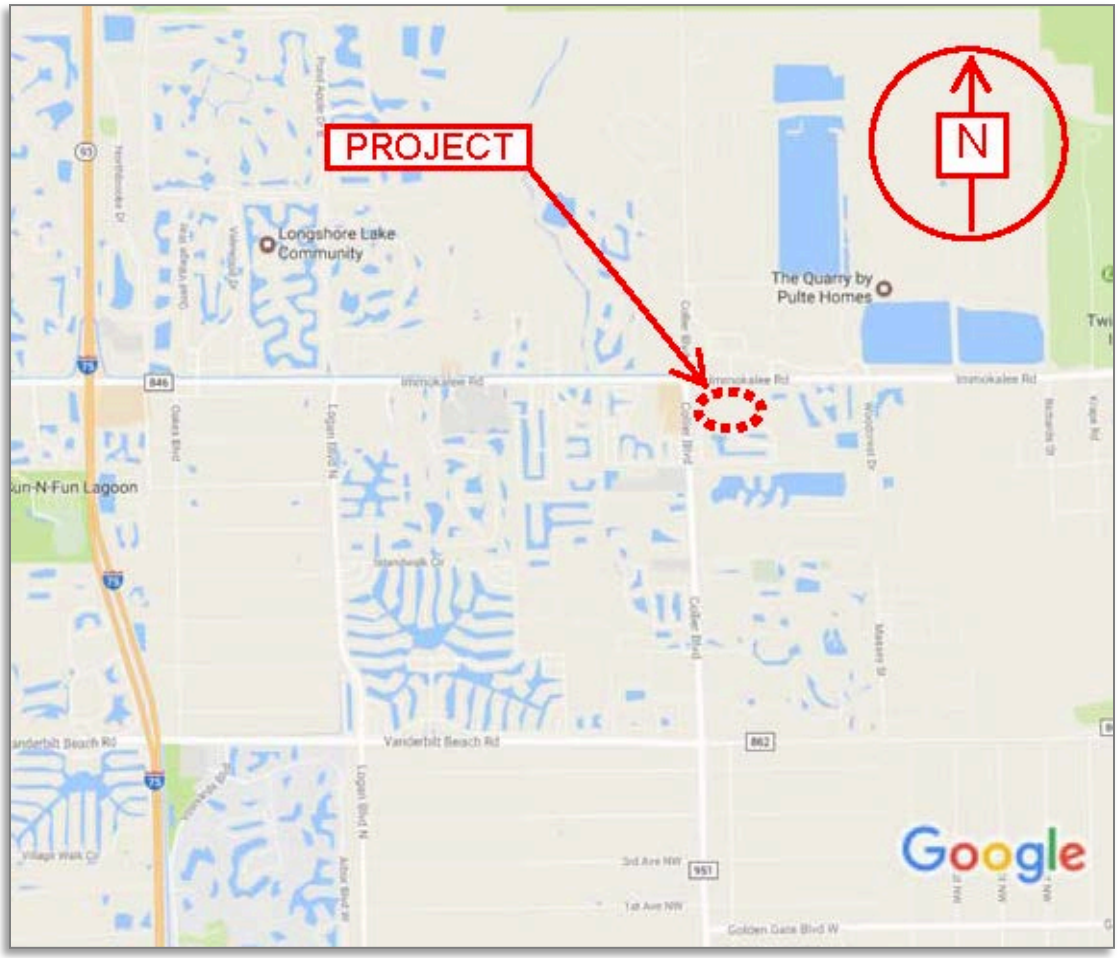
Project Description

The Baumgarten project (fka Pelican Nursery Property) is an existing nursery zoned A – Agricultural. The subject parcels have a total gross area of approximately 56 acres.

The project site is located in north Naples, in the southeast quadrant of the Immokalee Road (CR 846) and Collier Boulevard (CR 951) intersection, in Section 26, Township 48 South, Range 26 East, in Collier County, Florida. Refer to **Figure 1 – Project Location Map**.

Figure 1 – Project Location Map



The Baumgarten project proposes to rezone the existing parcels to allow for commercial and residential development. The proposed development parameters are illustrated in **Table 1A**. The proposed master site plans is illustrated in **Appendix A: Project Master Site Plan**.

For purposes of this evaluation, the project build-out year is assumed to be consistent with the Collier County 2023 planning horizon.

Table 1A
Proposed Development Program

Development	Land Use (SIC in Parenthesis)	ITE Land Use Code	Scenario 1 Total Size	Scenario 2 Total Size
Residential	Apartments (N/A)	220	200 dwelling units	200 dwelling units
	Condominiums/Townhouses (N/A)	220	200 dwelling units	200 dwelling units
Commercial	Hotel (7011)	310	140 rooms	140 rooms
	Medical Office (8011 through 8049)	720	35,000 square feet	43,000 square feet
	Shopping Center (all PUD principal uses possible—typical for a shopping center—as an inline/outparcel use—refer to PUD Exhibit A for applicable SIC Codes)	820	245,000 square feet	125,000 square feet
	Restaurant [Sit-Down] (5812)	932	0 sf	15,000 square feet
	Restaurant [Fast-Food] with Drive-Through Window (5812)	934	0 sf	12,000 square feet
	Super Convenience Market/Gas Station (5411, 5541)	960	0 sf	6,000 square feet, 20 fueling positions
	Miniwarehouse/self-storage [indoor only] (4225)	151	90,000 sf	0 square feet

Note(s): N/A – Not applicable; Per the PUD Master Plan a total of 370,000 sf of commercial is possible (as depicted by Scenario 1) where less trip generation intensive land uses are proposed (i.e. mini warehouse); the Scenario 2 illustrated to establish the project trip cap totals 201,000 sf (Hotel is not included in commercial square feet and is measured by rooms). Note ITE Land Use Code 220—Multifamily Housing (Low Rise) applies to apartments and condominiums/townhouses.

Traffic generation associated with the proposed development is evaluated generally based on ITE Trip Generation Manual, 10th Edition and ITE Trip Generation Handbook, 3rd Edition. The project provides a highest and best use scenario with respect to the project's proposed trip generation.

A trip generation comparison is provided for the Land Use Code (LUC) 960 – Super Convenience Market/Gas Station between two variables: convenience market Gross Floor Area (GFA) and the number of Fueling Positions (fp). For the ITE LUC 960 – fueling positions is the conservative estimate (higher) of the two trip generations and it is used for the purposes of this report.

The trip generation associated with the hotel land use is conservatively calculated by utilizing the ITE variable "occupied rooms".

The ITE 10th Edition Trip Generation Manual now classifies multifamily dwelling units as low, mid or high-rise buildings and no longer classifies them as apartments or condominium/town home. Consistent with the ITE land use code description, multifamily housing includes apartments, townhouses and condominiums. For trip generation purposes and consistent with a conservative approach, the proposed residential dwelling units are analyzed based on the ITE LUC 220 – Multifamily Housing (Low-Rise).

The associated common recreation amenities are considered passive incidental to the residential land use and are not included in the trip generation analysis.

In agreement with applicable ITE LUC descriptions, the ITE land use designations are also illustrated in **Table 1A.**

A methodology meeting was held with the Collier County Transportation Planning staff on April 20, 2017, via email (ref. **Appendix B: Initial Meeting Checklist (Methodology Meeting**).

Connections to the subject site are proposed to be provided as follows:

- **Collier Boulevard (CR 951):** Proposed full access connection onto CR 951.
- **Immokalee Road:** West access – proposed new right-in access from eastbound Immokalee Road. East access – existing directional left-in/right-in/right-out access onto eastbound Immokalee Road to remain.

Trip Generation

The software program OTISS (Online Traffic Impact Study Software), most current version is used to create the raw unadjusted trip generation for the project. The ITE equations and/or rates are used for the trip generation calculations, as applicable. The ITE – OTISS trip generation calculation worksheets and applicable ITE land use descriptions are provided in **Appendix C: Trip Generation Calculations ITE 10th Edition**.

The **internal capture** accounts for a reduction in external traffic because of the interaction between the multiple land uses in a site.

In agreement with ITE Trip Generation Handbook, 3rd Edition, the internal trip capture is estimated using the NCHRP (National Cooperative Highway Research Program) Report 684 (Enhancing Internal Trip Capture Estimation for Mixed-Use Developments) – NCHRP 8-51 Internal Trip Capture Estimation Tool.

One of the ITE premises in estimating the internal capture traffic illustrates that the number of trips from a land use within a mixed-use development to another land use within the same development (an internal trip) is a function of the size of the "receiving" land use and the number of trips it attracts, as well as the size of the "originating" land use and the number of trips it sends. The number of trips between a particular pair of internal land uses is limited to the smaller of these two values (ITE procedure of balancing internal trips in a mixed-use development).

As internal capture data for the weekday daily time period is not available, the daily internal capture is assumed identical with the ITE AM peak hour internal capture rate.

The estimated weekday trip generation based on ITE procedures for internal capture is illustrated in **Table 2A** (for Scenario 1) **and Table 2B** (for Scenario 2).

Consistent with the Collier County TIS Guidelines and Procedures recommendations, the overall internal capture rate should be reasonable and should not exceed 20%. As such, the Scenario 2 PM peak hour internal capture was adjusted to reflect an internal capture maximum of 20%. The adjusted trip generation associated with the proposed project at buildout conditions is depicted in **Table 2C**. For this project, **Table 2C** results in the higher trip generation, so it will be used in the analysis.

The **pass-by trips** account for traffic that is already on the external roadway network and stops at the project on the way to a primary trip destination. It should be noted that the driveway volumes are not reduced as a result of the pass-by reduction, only the traffic added to the surrounding streets and intersections. As such, pass-by trips are not deducted for operational turn lane analysis (all external traffic is accounted for).

Consistent with Collier County TIS Guidelines and Procedures, fast food restaurants with drive-through windows and gasoline/service stations with convenience market are allowed maximum pass-by traffic of 50% of the project's external trip generation potential. In addition, the Collier County TIS Guidelines recommends that shopping center pass-by rates should not exceed 25% for the peak hour and the daily capture rates to be assumed 10% lower than the peak hour capture rate. Furthermore, the High Turnover Sit-Down Restaurant pass-by rate is limited to 40% per county guidelines.

In summary, this analysis evaluates pass-by capture associated with the proposed land uses as follows:

- Shopping Center (LUC 820) – Weekday 15%; AM 25%; PM 25%
- High-Turnover (Sit-Down) Restaurant (LUC 932) – Weekday 30%; AM 40%; PM 40%
- Fast-Food Restaurant with Drive-Through Window (LUC 934) – Weekday 40%; AM 49% (per ITE Trip Generation Handbook); PM 50%
- Super Convenience Market/Gas Station (LUC 960) – Weekday 40%; AM 50%; PM 50%

Based on the trip generation evaluation results illustrated in **Table 2A** and **Table 2B**, the proposed **Scenario** development **(Table 2B)** results in the higher trip generation for this project and it will be used in this traffic analysis. Details of the trip generation calculations can be found in **Appendix C**.

Table 2A
Scenario 1 – Trip Generation – Average Weekday – ITE Procedure for Internal Capture

Development Scenario 2	24 Hour Two-Way Volume	AM Peak Hour			PM Peak Hour		
Traffic		**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**
Unadjusted	**17,145**	335	301	**636**	725	771	**1,496**
Internal Capture	**(770)[(1)]**	(17)	(17)	**(34)**	(141)	(141)	**(282)**
External	**16,375**	318	284	**602**	584	630	**1,214**
Pass-by	**(1,604)**	(40)	(25)	**(65)**	(112)	(118)	**(230)**
Net External	**14,771**	278	259	**537**	472	512	**984**

Note(s): [(1)] Daily internal capture rates are not available in the 3rd Edition Trip Generation Handbook; AM rates are used to calculate daily internal capture.

Table 2B
Scenario 2 – Trip Generation – Average Weekday – ITE Procedure for Internal Capture

Development Scenario	24 Hour Two-Way Volume	AM Peak Hour			PM Peak Hour		
Traffic		**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**
Unadjusted	**25,200**	915	862	**1,777**	1,052	1,040	**2,092**
Internal Capture	**(3,516)[(1)]**	(107)	(107)	**(214)**	(267)	(267)	**(534)**
External	**21,684**	808	755	**1,563**	785	773	**1,558**
Pass-by	**(4,940)**	(290)	(280)	**(570)**	(264)	(236)	**(500)**
Net External	**16,744**	518	475	**993**	521	537	**1,058**

Note(s): [(1)] Daily internal capture rates are not available in the 3rd Edition Trip Generation Handbook; AM rates are used to calculate daily internal capture.

Table 2C
Scenario 2 – Trip Generation – Average Weekday – Adjusted for 20% Maximum Internal Capture

Development Scenario	24 Hour Two-Way Volume	AM Peak Hour			PM Peak Hour		
Traffic		**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**
Unadjusted	**25,200**	915	862	**1,777**	1,052	1,040	**2,092**
Internal Capture	**(3,516)[(1)]**	(107)	(107)	**(214)**	(204)	(204)	**(408)[(2)]**
External	**21,684**	808	755	**1,563**	848	836	**1,684**
Pass-by	**(4,940)**	(290)	(280)	**(570)**	(272)	(253)	**(525)**
Net External	**16,744**	518	475	**993**	576	583	**1,159**

Note(s): [(1)] Daily internal capture rates are not available in the 3rd Edition Trip Generation Handbook; AM rates are used to calculate daily internal capture.
[(2)] Adjusted not to exceed 20% maximum internal capture.

In agreement with the Collier County TIS Guidelines and Procedures, significantly impacted roadways are identified based on the proposed project highest peak hour trip generation (net external traffic) and consistent with the peak hour of the adjacent street traffic. Based on the information contained in Collier County 2018 Annual Update and Inventory Report (AUIR), the peak hour for adjacent roadway network is PM.

For the purpose of this TIS, the surrounding roadway network link concurrency analysis is analyzed based on projected PM peak hour net external traffic generated by the project. The site operational analysis reflects projected AM and PM peak hour external traffic generated by the project.

Trip Distribution and Assignment

The traffic generated by the development is assigned to the adjacent roadways using the knowledge of the area and as coordinated with Collier County Transportation Planning staff.

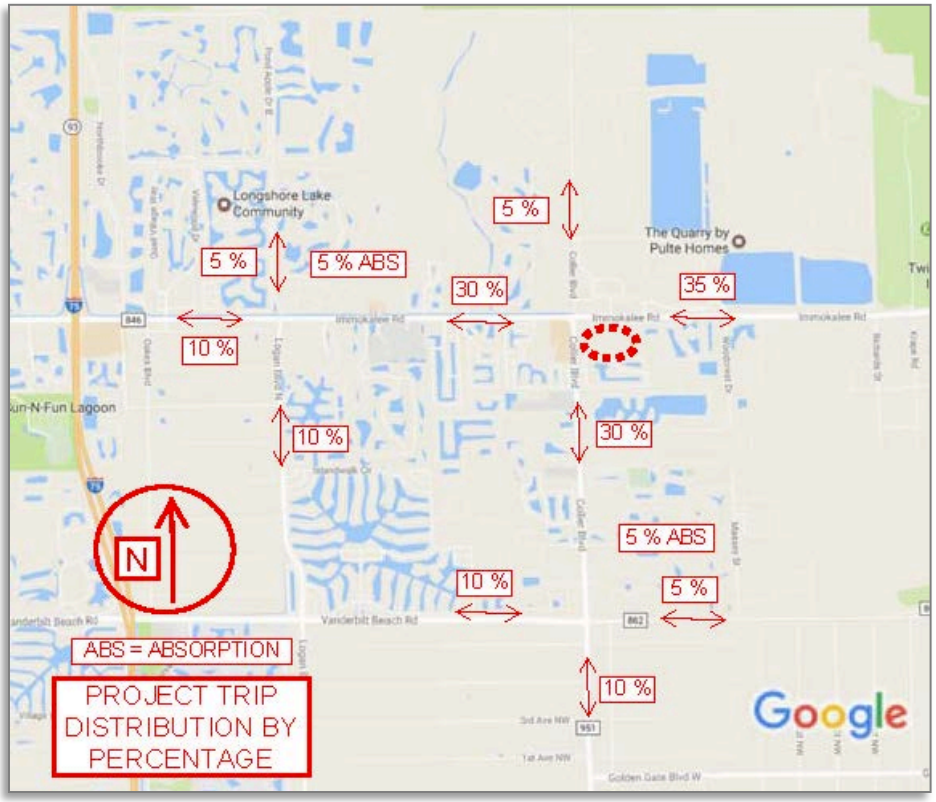
The site-generated trip distribution is shown in **Table 3, Project Traffic Distribution for Peak Hour** and is graphically depicted in **Figure 2**.

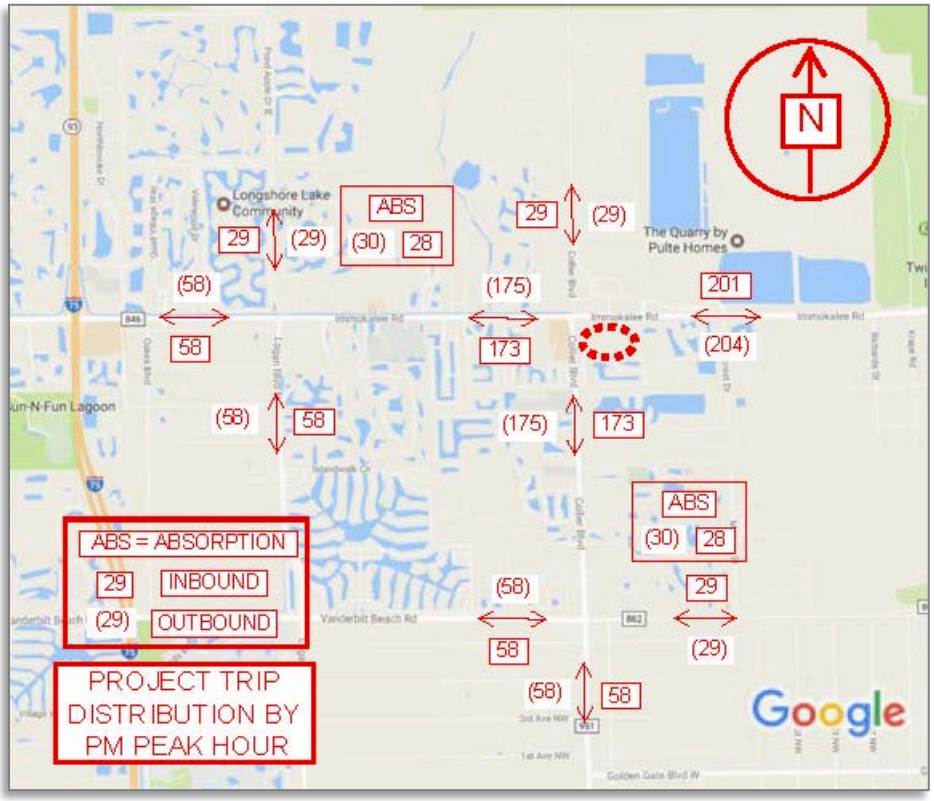
Table 3
Project Traffic Distribution for Peak Hour

Roadway Link	Collier County Link No.	Roadway Link Location	Distribution of Project Traffic	PM Peak Hour Project Traffic Volume	
				Enter	Exit
Immokalee Rd.	44.0	East of Collier Blvd.	35%	WB – 201	**EB – 204**
Immokalee Rd.	43.2	Logan Blvd. to Collier Blvd.	30%	**EB – 173**	WB – 175
Immokalee Rd.	43.1	I-75 to Logan Blvd.	10%	**EB – 58**	WB – 58
Collier Blvd.	N/A[(1)]	North of Immokalee Rd.	5%	SB – 29	NB – 29
Collier Blvd.	30.1	Immokalee Rd. to Vanderbilt Beach Rd.	30%	**NB – 173**	SB – 175
Collier Blvd.	30.2	Vanderbilt Beach Golden Gate Blvd.	10%	NB – 58	**SB – 58**
Vanderbilt Beach Rd.	N/A[(1)]	East of Collier Blvd.	5%	WB – 29	EB – 29
Vanderbilt Beach Rd.	112.0	Logan Blvd. to Collier Blvd.	10%	**EB – 58**	WB – 58
Logan Blvd.	N/A[(1)]	North of Immokalee Rd.	5%	SB – 29	NB – 29
Logan Blvd.	50.0	Immokalee Rd. to Vanderbilt Beach Rd.	10%	**NB – 58**	SB – 58

Note(s): [(1)] Not a Collier County Monitored roadway.

Figure 2 – Project Distribution by Percentage and by PM Peak Hour





Background Traffic

Average background traffic growth rates were estimated for the segments of the roadway network in the study area using the Collier County Transportation Planning Staff guidance of a minimum 2% growth rate, or the historical growth rate estimated based on the peak hour peak direction volume (estimated from 2008 through 2017), whichever is greater. Another way to derive the background traffic is to use the 2018 AUIR volume plus the trip bank volume. **Table 4, Background Traffic without Project,** illustrates the application of projected growth rates to generate the projected background (without project) peak hour peak direction traffic volume for the future horizon year 2023.

Table 4
Background Traffic without Project (2018 - 2023)

Roadway Link	CC AUIR Link ID #	Roadway Link Location	2018 AUIR Pk Hr, Pk Dir Background Traffic Volume (trips/hr)	Projected Traffic Annual Growth Rate (%/yr)*	Growth Factor	2023 Projected Pk Hr, Peak Dir Background Traffic Volume w/out Project (trips/hr) Growth Factor**	Trip Bank	2023 Projected Pk Hr, Peak Dir Background Traffic Volume w/out Project (trips/hr) Trip Bank***
Immokalee Rd	44.0	East of Collier Blvd	1,770	2.00%	1.1041	1,955	849	**2,619**
Immokalee Rd	43.2	Logan Blvd to Collier Blvd.	2,020	3.93%	1.2126	2,450	992	**3,012**
Immokalee Rd	43.1	I-75 to Logan Blvd	2,390	3.52%	1.1888	2,842	580	**2,970**
Collier Blvd	30.1	Immokalee Rd to Vanderbilt Beach Rd	1,680	3.45%	1.1848	1,991	547	**2,227**
Collier Blvd	30.2	Vanderbilt Beach Golden Gate Blvd	1,220	2.0%	1.1041	**1,347**	118	1,338
Vanderbilt Beach Rd	112.0	Logan Blvd to Collier Blvd	1,690	4.0%	1.2167	**2,057**	258	1,948
Logan Blvd	50.0	Immokalee Rd to Vanderbilt Beach Rd	570	4.0%	1.2167	**694**	59	629

Note(s): *Annual Growth Rate – based on peak hour peak direction volume (from 2008 through 2017), 2% minimum.
**Growth Factor = $(1+\text{Annual Growth Rate})^5$. 2023 Projected Volume = 2018 AUIR Volume x Growth Factor.
***2023 Projected Volume= 2018 AUIR Volume + Trip Bank.
The projected 2023 Peak Hour – Peak Direction Background Traffic is the greater of the Growth Factor or Trip Bank calculation, which is **underlined** and **bold** as applicable.

Existing and Future Roadway Network

The existing roadway conditions are extracted from the 2018 Annual Update and Inventory Report (AUIR) and the project roadway conditions are based on the current Collier County 5-Year Work Program. Roadway improvements that are currently under construction or are scheduled to be constructed within the five year Transportation Improvement Plan (TIP) or Capital Improvement program (CIP) are considered to be committed improvements. As no such improvements were identified in the Collier County 2018 AUIR, the evaluated roadways are anticipated to remain as such through project build-out. The existing and future roadway conditions are illustrated in **Table 5, Existing and Future Roadway Conditions**.

Table 5
Existing and Future Roadway Conditions

Roadway Link	CC AUIR Link ID #	Roadway Link Location	Exist Roadway	Min. Standard LOS	Exist Peak Dir, Peak Hr Capacity Volume	Future Project Build out Roadway
Immokalee Rd	44.0	East of Collier Blvd	6D	E	3,300 (EB)	6D
Immokalee Rd	43.2	Logan Blvd to Collier Blvd	6D	E	3,200 (EB)	6D
Immokalee Rd	43.1	I-75 to Logan Blvd	6D/8D	E	3,500 (EB)	6D/8D
Collier Blvd	30.1	Immokalee Rd to Vanderbilt Beach Rd	6D	E	3,000 (NB)	6D
Collier Blvd	30.2	Vanderbilt Beach Rd to Golden Gate Blvd	6D	E	3,000 (SB)	6D
Vanderbilt Beach Rd	112.0	Logan Blvd to Collier Blvd	6D	E	3,000 (EB)	6D
Logan Blvd N	50.0	Immokalee Rd to Vanderbilt Beach Rd	2U	D	1,000 (NB)	2U

Note(s): 2U = 2-lane undivided roadway; 4D, 6D, 8D =4-lane, 6-lane, 8-lane divided roadway, respectively; LOS = Level of Service.

Project Impacts to Area Roadway Network-Link Analysis

The Collier County Transportation Planning Services developed Level of Service (LOS) volumes for the roadway links impacted by the project, which were evaluated to determine the project impacts to the area roadway network in the future. The Collier County Transportation Planning Services guidelines have determined that a project will be considered to have a significant and adverse impact if **both** the percentage volume capacity exceeds 2% of the capacity for the link directly accessed by the project and for the link adjacent to the link directly accessed by the project; 3% for other subsequent links **and** if the roadway is projected to operate below the adopted LOS standard.

Based on these criteria, this project's impacts are significant on Immokalee Road east and west of Collier Boulevard, significant on Collier Boulevard between Immokalee Road and Vanderbilt Beach Road, and significant on Logan Boulevard between Immokalee Road and Vanderbilt Beach Road. The estimated traffic does not create any significant impacts on the other analyzed roadway segments of the study network.

None of the analyzed links are projected to exceed the adopted LOS standard with or without the project at 2023 future build-out conditions. **Table 6, Roadway Link Level of Service** illustrates the LOS impacts of the project on the roadway network closest to the project.**Table 6**

Roadway Link Level of Service (LOS) – With Project in the Year 2023

Roadway Link	CC AUIR Link ID #	Roadway Link Location	2018 Peak Dir, Peak Hr Capacity Volume	Roadway Link, Peak Dir, Peak Hr (Project Vol Added)*	2023 Peak Dir, Peak Hr Volume w/Project**	% Vol Capacity Impact By Project	Min LOS exceeded without Project? Yes/No	Min LOS exceeded with Project? Yes/No
Immokalee Rd	44.0	East of Collier Blvd	3,300 (EB)	**EB – 204**	**2,823**	6.2%	No	No
Immokalee Rd	43.2	Logan Blvd to Collier Blvd	3,200 (EB)	**EB – 173**	**3,185**	5.4%	No	No
Immokalee Rd	43.1	I-75 to Logan Blvd	3,500 (EB)	**EB – 58**	**3,028**	1.7%	No	No
Collier Blvd	30.1	Immokalee Rd to Vanderbilt Beach Rd	3,000 (NB)	**NB – 173**	**2,400**	5.8%	No	No
Collier Blvd	30.2	Vanderbilt Beach Rd to Golden Gate Blvd	3,000 (SB)	**SB – 58**	**1,405**	1.9%	No	No
Vanderbilt Beach Rd	112.0	Logan Blvd to Collier Blvd	3,000 (EB)	**EB – 58**	**2,115**	1.9%	No	No
Logan Blvd N	50.0	Immokalee Rd to Vanderbilt Beach Rd	1,000 (NB)	**NB – 58**	**752**	5.8%	No	No

Note(s): *Refer to **Table 3**.
2023 Projected Volume= 2023 background (refer to **Table 4) + Project Volume added.

Site Access Turn Lane Analysis

Immokalee Road (CR 846) is a 6-lane urban divided arterial under Collier County jurisdiction, and has a posted legal speed of 45 mph in the vicinity of the project. This is currently a curb and gutter facility at this location. As depicted in the Manual of Uniform Minimum Standards ("MUMS") for Design, Construction and Maintenance for Streets and Highways (commonly known as the "Florida Greenbook"), Table 3-15, curb and gutter is not to be used on facilities with design speed greater than 45 mph. Based on coordination with County Staff, a design speed 5 mph greater than the posted speed limit is chosen to compensate for a slight overrunning of the speed limit by some drivers. Based on FDOT Index 301, design speed of 50 mph – urban conditions – the minimum turn lane length is 240 feet (which includes a 50-foot taper) plus required queue.

Collier Boulevard (CR 951) is a 6-lane urban divided arterial under Collier County jurisdiction, and has a posted legal speed of 45 mph in the vicinity of the project. Based on similar justification illustrated for Immokalee Road, a design speed 5 mph greater than the posted speed limit is chosen to compensate for a slight overrunning of the speed limit by some drivers. Based on a design speed of 50 mph, the minimum turn lane length is 240 feet (which includes a 50 foot taper) plus required queue.

Turn lane lengths at unsignalized intersections are analyzed based on the number of turning vehicles in an average one-minute period for right-turning movements, and two-minute period for left-turning movements, within the peak hour traffic. The minimum queue length is 25 feet and the queue/vehicle is 25 feet.

The site operational analysis reflects projected AM and PM peak hour external traffic generated by the project – refer to **Table 2B** (AM Peak Hour – Enter 808; Exit 755; PM Peak Hour – Enter 848; Exit 836).

The estimated project trips at driveway locations are illustrated in **Appendix D: Project Turning Movements Exhibits.**

Collier Boulevard – Site Access – Signal – Synchro Analysis

A dedicated northbound right-turn lane is warranted as the project meets the multi-lane criteria. The proposed project is expected to generate 243vph and 255vph right-turning movements during the AM and PM peak hour, respectively. Based on Synchro Software results, the turn lane should be 340 feet long (Synchro queue length 95th percentile rounded to the nearest 25 ft increment).

A dedicated southbound left-turn lane is warranted as the project meets the multi-lane criteria. The proposed project is expected to generate 121vph and 127vph left-turning movements during the AM and PM peak hour, respectively. Based on Synchro Software results, the turn lane should be 315 feet long (Synchro queue length 95th percentile – 75 ft).

A detailed evaluation of applicable access points – turn lane requirements will be performed at the time of site development permitting/platting when more specific development parameters will be made available.

Eastbound U-turn/Left-turn – Immokalee Road and Bellaire Bay Drive Intersection

There is an existing eastbound U-turn/left-turn lane approximately 340 feet long serving this intersection. The proposed project is expected to generate 151vph and 167vph U-turning movements during the AM and PM peak hour, respectively. At the minimum, the turn lane should be 390 feet long (which includes a minimum of 150 feet of storage). As such, the existing left-turn lane would need to be extended a minimum of 50 feet to accommodate projected traffic at this location.

Intersection Operational Analyses

Intersection Traffic Volumes

To support the traffic analysis, intersection turning movement counts were conducted on January 31 and February 1, 2018, at the following locations: Collier Blvd. and Immokalee Rd. intersection, Collier Blvd. and Pebblebrooke Center driveway intersection and Collier Blvd. and Tuscany Cove Dr. intersection – Southbound Left/U turns only. AM and PM peak period turning movement data were collected in 15-minute intervals from 7-9 AM, and from 4-6 PM.

A summary of the intersection turning movement counts is provided in **Appendix E: Raw Intersections Turning Movement Counts**.

Traffic count volumes collected are adjusted for peak season conditions by using the peak season conversion factor (PSCF) as illustrated in FDOT 2017 Peak Season Factor Category Report. For this report the PSCF utilized is 1.01 as shown in **Appendix F: FDOT 2017 Peak Season Factor Category Report – Excerpt**.

It is noted that based on the two day AM and PM peak hour raw traffic count data, the most intense traffic data is conservatively utilized versus the average of the two, as follows:

- Collier Blvd. & Immokalee Rd Intersection – AM peak hour – 7.00-8.00AM on Thu 02/01/2018 (intersection hourly traffic = 5,292vph); PM peak hour – 5.00-6.00PM on Wed 01/31/2018 (intersection hourly traffic = 5,649vph);
- Collier Blvd. & Pebblebrooke Center Drive – AM peak hour – 8.00-9.00AM on Wed 01/31/2018 (intersection hourly traffic = 301vph); PM peak hour – 4.45-5.45PM on Wed 01/31/2018 (intersection hourly traffic = 632vph);
- Collier Blvd. & Tuscany Cove Drive – Southbound Left/U turns only – AM peak hour – 7.45-8.45AM on Thu 02/01/2018 (hourly traffic = 48vph); PM peak hour – 4.15-5.15PM on Thu 02/01/2018 (hourly traffic = 221vph);

Annual growth rates utilized to evaluate the analyzed intersections traffic for future 2023 conditions are considered as follows: 2% for through lanes and 1% for turn lanes.

Subject intersections are evaluated based on the calculated background traffic with the additional traffic estimated for PUD buildout conditions. The estimated overall traffic is shown in **Appendix G: Intersections Projected Traffic at Buildout Conditions**.

Collier Blvd. and Immokalee Rd. Intersection – Capacity and Quality/Level of Service (LOS)

As requested by Collier County Transportation staff the Collier Boulevard and Immokalee Road intersection is analyzed for capacity and quality/Level of Service (LOS) purposes.

The intersection lane configuration is illustrated in **Appendix H: Collier Blvd. & Immokalee Rd. Intersection – Approved Signalization Plan**.

- North Approach – Two through lanes, one right-turn lane and one left-turn lane.
- South Approach – One through lane, two right-turn lanes and three left-turn lanes.
- East Approach – Three through lanes, one right-turn lane and three left-turn lanes.
- West Approach – Three through lanes, one right-turn lane and two left-turn lanes.

An assessment of the Level of Service (LOS) and volume to capacity ratio analysis of the subject intersection is conducted using Synchro Studio 9 (Trafficware Version 9). This software has the capability of utilizing the Highway Capacity Manual 2010 (HCM 2010) and HCM 2000 methodologies to analyze signalized and unsignalized intersections. In addition, Synchro implements the Intersection Capacity Utilization (ICU) 2003 method for determining intersection capacity. This method compares the current volume to the intersection's ultimate capacity.

The HCM control delay is used as the basis for determining LOS, ranging from LOS A to LOS F using the delay ranges for signalized intersections. According to HCM, the level of service criterion for intersections is shown in **Table 7**.

Table 7
Level of Service for Intersections

HCM-Based Level of Service and Delay Ranges

Average Delay (seconds / vehicle)		LOS
Signalized Intersections	Unsignalized intersections	
< 10.0	< 10.0	A
> 10.0 to < 20.0	> 10.0 to < 15.0	B
> 20.0 to < 35.0	> 15.0 to < 25.0	C
> 35.0 to < 55.0	> 25.0 to < 35.0	D
> 55.0 to < 80.0	> 35.0 to < 50.0	E
> 80.0	> 50.0	F

Source: HCM 2010

Based on HCM guidelines, the general description of each LOS is as follows: LOS A – free flow; LOS B – stable flow with slight delays, LOS C – stable flow with acceptable delays, LOS D – approaching unstable

flow with tolerable delay and unfavorable progression, LOS E – unstable flow with intolerable delay and poor progression to all movements, and LOS F – forced flow (congested and queues fail to clear) and poor progression to all movements.

The LOS for overall approach or intersection is determined solely by the control delay. In addition, if the volume-to-capacity (V/C) ratio for a lane group exceeds 1.0, LOS F is assigned to the individual lane group.

To support the signalized intersection analysis, the existing programmed signal timings (MaxTime Timing Sheet) were provided by Collier County Transportation staff. Based on our review, a 170 second cycle length is used for the AM and PM peak hour evaluations.

The HCS 2010 percent heavy vehicle is assumed the Design Hour Truck (DHT) – the percent of trucks expected to use the roadway segment during the design hour of the design year. Design Hour Truck is determined as half of T24 (annual 24-hour percentage of trucks). A 2% heavy vehicle factor is assumed for all movements for the purposes of this analysis.

The volume to capacity ratio (V/C), also referred to as degree of saturation, represents the sufficiency of an intersection to accommodate the vehicular demand. A V/C ratio less than 0.85 generally indicates that adequate capacity is available and vehicles are not expected to experience significant queues and delays. As the V/C ratio approaches 1.0, traffic flow may become unstable, and delay and queuing conditions may occur. Once the demand exceeds the capacity (a V/C ratio greater than 1.0), traffic flow is unstable and excessive delay and queuing is expected. Under these conditions vehicles may require more than one signal cycle to pass through the intersection (known as cycle failure). For design purposes, a V/C ratio between 0.85 and 0.95 is generally utilized for the peak hour of the horizon year. As such, each intersection movement is analyzed to ensure that the threshold value of V/C failure (1.0) is not exceeded.

The results of the Synchro intersection analysis for AM and PM peak hour conditions are summarized in **Table 8**. Synchro intersection worksheets are provided in **Appendix I: Intersection Analyses – Synchro Studio 9 Printouts**.

Table 8
Collier Blvd. and Immokalee Rd. Intersection Traffic Analysis

Traffic Control Existing/Future – Signalized	2018 Background Traffic AM/PM Pk Hr	2023 Background Traffic AM/PM Pk Hr	2023 Background Traffic with Project AM/PM Pk Hr
Intersection LOS	C/D	D/D	D/D
Approach LOS Failure (LOS F)	No/No	No/No	No/No
V/C ratio > 1 for Movements	No/No	No/No	No/No

Collier Blvd. and Pebblebrooke Center/Project Access Intersection – Capacity and LOS

The Developer proposes a signalized full opening access which is analyzed for capacity and LOS purposes. The intersection lane configuration is illustrated as follow:

- North Approach – Three through lanes, one right-turn lane and dual left-turn lanes;
- South Approach - Three through lanes, one right-turn lane and dual left-turn lanes;
- East Approach – One left lane and one shared through/right-turn lane;
- West Approach – One left lane and one shared through/right-turn lane.

Consistent with signal timings provided for Immokalee Road and Collier Blvd intersection, a 170 second cycle length is used for the AM and PM peak hour analyses. The results of the traffic Synchro intersection analysis for AM and PM peak hour conditions are summarized in **Table 9**. Synchro intersection worksheets are provided in **Appendix I**.

Table 9
Collier Blvd. and Pebblebrooke Center/Project Access Intersection Traffic Analysis

Traffic Control Existing – Unsignalized Future – Signalized	2023 Background Traffic with Project AM Pk Hr	2023 Background Traffic with Project PM Pk Hr
Intersection LOS	C	C
Approach LOS Failure (LOS F)	No	No
V/C ratio > 1 for Movements	No	No

Collier Blvd. and Tuscany Cove Dr. Intersection – Southbound U/Left Turn Lane Adequacy

The existing southbound left-turn lane servicing the Tuscany Cove Development is approximately 365 feet long (which includes 50 feet of taper) and is developed at maximum extent due to geometric constrains (existing directional left turn lane servicing the Pebblebrooke Center plaza, located to the north).

Based on the traffic counts information provided (current 2018 peak season conditions), the existing turn lane provides service for 50vph in the AM peak hour and 224vph in the PM peak hour. **Table 10** illustrates the projected 2023 PM peak hour background traffic volume.

Table 10
Background PM Peak Hour Traffic at Year 2018 – 2023

Movement	2018 Peak Season Background Traffic Volume (trips/hr)*	Projected Traffic Annual Growth Rate (%/yr)	Growth Factor**	2023 Peak Season Background Traffic Volume (trips/hr) **	2023 Peak Season Turn Lane Recommended Storage(ft)***
SB Left/U Turns	224	1.00%	1.0510	236	200

Note(s): *Includes 177vph U-turns (2018 peak season volume); **Growth Factor = (1+Annual Growth Rate) ^5. 2023 Projected Volume= 2018 AUIR Volume x Growth Factor; ***Based on 2-minute queue.

As such, at the minimum, the southbound left-turn lane should be 440 feet long (240 foot deceleration lane with taper and 200 feet storage) to accommodate projected traffic.

The proposed signalized full opening at the project access on Collier Blvd. would alleviate congestion by providing left-out movements for the 177vph U-turn movements currently occurring on the southbound left-turn lane at Tuscany Cove Dr and CR 951 intersection. As illustrated in the traffic counts data, the Tuscany Cove development generates 47 left turns in the peak hour (PM peak hour peak season). To adequately accommodate future traffic at 2023 year conditions (47x1.0510 = 50 trips), this turn lane should be 290 feet (240 foot deceleration lane with taper and 50 feet storage). As such, the existing turn lane will be satisfactory provided a signalized intersection at proposed project access is allowed.

Improvement Analysis

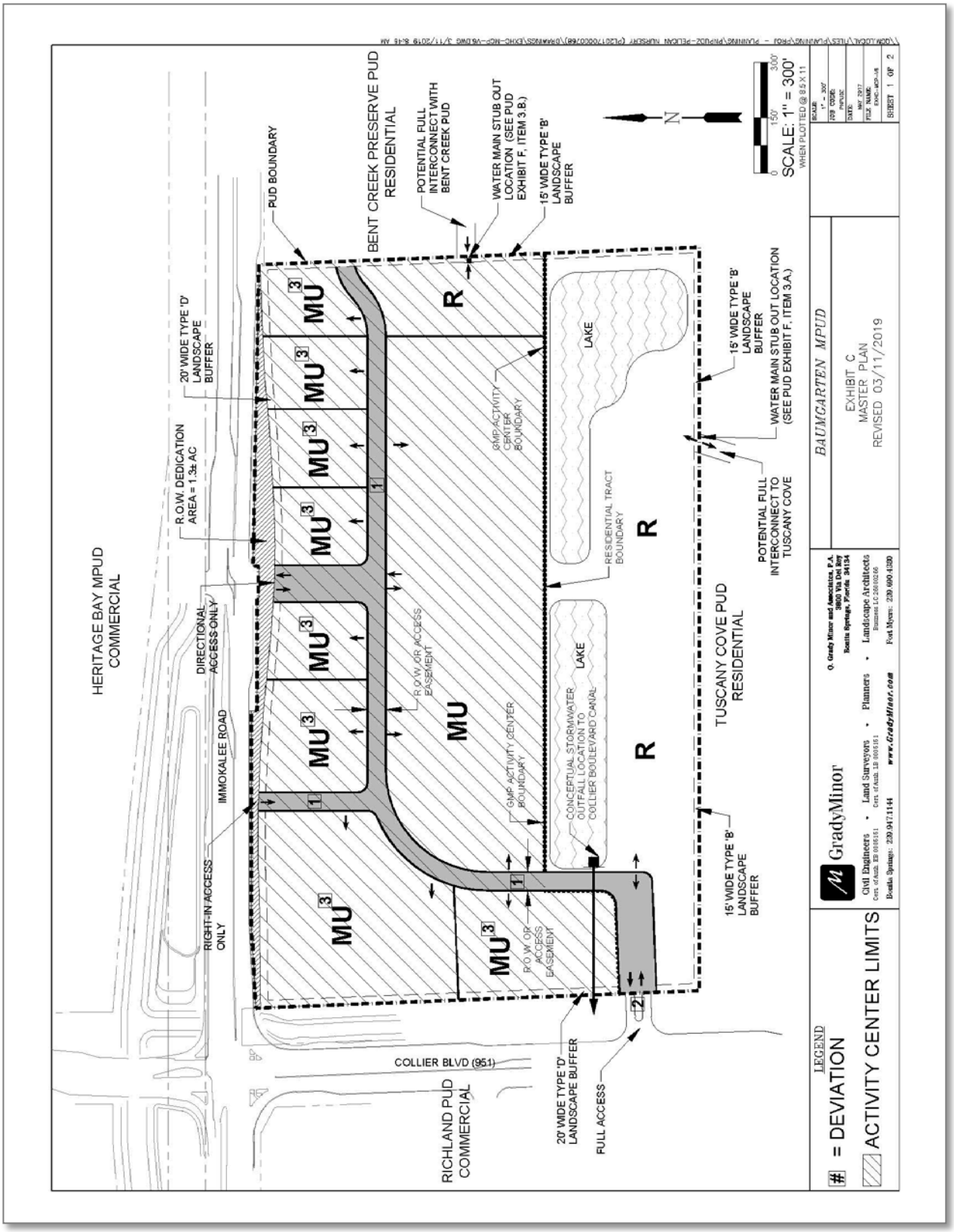
Based upon the results of turn lane analysis performed within this report, turn lane improvements are recommended at the main project accesses. A detailed evaluation of applicable access points – turn lane requirements will be performed at the time of site development permitting/platting when more specific development parameters will be made available.

Based on the results of the Synchro analysis, Collier Boulevard and Immokalee Road intersection operates at an acceptable level of service under future 2023 background conditions with the addition of the traffic generated by the proposed development. In addition, a future signal at project access on Collier Boulevard will provide an adequate Level of Service and will alleviate congestion on the Collier Boulevard southbound left turn lane servicing the Tuscany Cove Development.

Mitigation of Impact

The developer proposes to pay the appropriate Collier County Road Impact Fee as building permits are issued for the project.

Appendix A: Project Master Site Plan


HERITAGE BAY MPUD
COMMERCIAL
R.O.W. DEDICATION
AREA = 1.3± AC
20' WIDE TYPE 'D'
LANDSCAPE
BUFFER
PUD BOUNDARY
BENT CREEK PRESERVE PUD
RESIDENTIAL
POTENTIAL FULL
INTERCONNECT WITH
BENT CREEK PUD
WATER MAIN STUB OUT
LOCATION (SEE PUD
EXHIBIT F, ITEM 3.B.)
15' WIDE TYPE 'B'
LANDSCAPE
BUFFER
DIRECTIONAL
ACCESS ONLY
IMMOKALEE ROAD
RIGHT-IN ACCESS
ONLY
R.O.W. OR ACCESS
EASEMENT
GMP ACTIVITY CENTER
BOUNDARY
CONCEPTUAL STORMWATER
OUTFALL LOCATION TO
COLLIER BOULEVARD CANAL
LAKE
RESIDENTIAL TRACT
BOUNDARY
GMP ACTIVITY
CENTER
BOUNDARY
TUSCANY COVE PUD
RESIDENTIAL
POTENTIAL FULL
INTERCONNECT TO
TUSCANY COVE
WATER MAIN STUB OUT LOCATION
(SEE PUD EXHIBIT F, ITEM 3.A.)
MU
R
1
2
3
N
SCALE: 1" = 300'
WHEN PLOTTED @ 8.5 X 11
BAUMGARTEN MPUD
EXHIBIT C
MASTER PLAN
REVISED 03/11/2019
LEGEND
= DEVIATION
ACTIVITY CENTER LIMITS
COLLIER BLVD (951)
RICHLAND PUD
COMMERCIAL
20' WIDE TYPE 'D'
LANDSCAPE BUFFER
FULL ACCESS
GradyMinor
Civil Engineers • Land Surveyors • Planners • Landscape Architects
SHEET 1 OF 2

Appendix B: Initial Meeting Checklist (Methodology Meeting)

INITIAL MEETING CHECKLIST

Suggestion: Use this Appendix as a worksheet to ensure that no important elements are overlooked. Cross out the items that do not apply, or N/A (not applicable).

Date: April 20, 2017 Time: N/A

Location: via email

People Attending:
Name, Organization, and Telephone Numbers

1) Michael Sawyer, Collier County Transportation Planning
2) Norman Trebilcock, Trebilcock Consulting Solutions
3) Ciprian Malaescu, Trebilcock Consulting Solutions
4) Stephen Baluch, Collier County Transportation Planning
5) Anthony Khawaja, Traffic Operations
6) Chad Sweet, Traffic Engineering & Sign Operations
7) Eric Mallory, Metro Commercial
8) Bill Gramer, Ch2M Hill

Study Preparer:
Preparer's Name and Title: Norman Trebilcock, AICP, PE
Organization: Trebilcock Consulting Solutions, PA
Address & Telephone Number: 1205 Piper Boulevard, Suite 202, Naples, FL 34110; ph 239-566-9551

Reviewer(s):
Reviewer's Name & Title: Michael Sawyer, Project Manager
Organization & Telephone Number: Collier County Transportation Planning Department; 239-252-2926

Applicant:
Applicant's Name: Peninsula Engineering.
Address: 2600 Golden Gate Parkway, Naples, FL 34105
Telephone Number: 239-403-6700

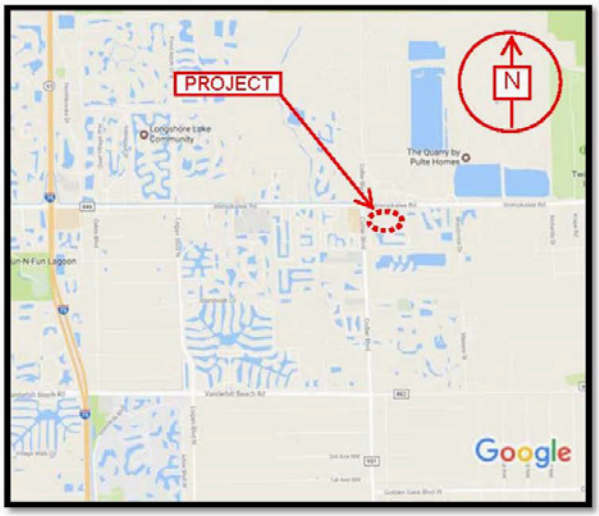
Proposed Development:
Name: Pelican Nursery Property – PUD Rezone
Location: Southeast quadrant of the intersection of Collier Boulevard (CR 951) and Immokalee Road, refer to **Fig.1**
Land Use Type: Commercial and Residential
ITE Code #: LUC 220, LUC 710, LUC 820, LUC 853, LUC 862, LUC 934

Page **1** of **5**

Description: Project proposes to rezone the existing parcel to allow for commercial and residential development. The TIS will use the highest of 2 potential development scenarios: **Scenario 1** – 112 du residential apartments, 30,000 sf general office, 147,000 sf shopping center, 6,000 sf (20 pumps) convenience market with gasoline pumps, 135,000 sf home improvement superstore and 7,000 sf fast-food restaurant with drive through window; and **Scenario 2** – 300 du residential apartments, 147,000 sf shopping center, 6,000 sf (20 pumps) convenience market with gasoline pumps, and 7,000 sf fast-food restaurant with drive through window. The most intense scenario from a traffic standpoint is used for the purposes of this TIS.

Zoning;
Comprehensive plan recommendation: N/A
Requested: To allow rezone request.

Fig.1 – Project Location Map



Findings of the Preliminary Study:
Since estimated net new project traffic is more than 100 two-way peak hour trips, this study qualifies for a Major Scale TIS. The TIS will include AM-PM peak hour trip generation, traffic distribution and assignments, significance test (based on 2%/2%/3% criterion).
Roadway link analysis is determined based on estimated net PM peak hour traffic.
Operational site access - turn lane analysis is based on proposed project build-out conditions AM-PM peak hour generated traffic and will include EB left-turn/U-turn analysis at Immokalee Rd. and Bellaire Bay Dr.
Internal capture and pass-by rates are considered based on ITE and Collier County guidelines recommendations.

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Study Type: (if not net increase, operational study)

Small Scale TIS ☐ Minor TIS ☐

Major TIS ☒

Study Area:

Adjacent roadways: north - Immokalee Rd, west – Collier Blvd.
Additional intersections to be analyzed: N/A
Horizon Year(s): 2022
Analysis Time Period(s): AM-PM
Future Off-Site Developments: N/A
Source of Trip Generation Rates: ITE 9th Edition

Reductions in Trip Generation Rates:

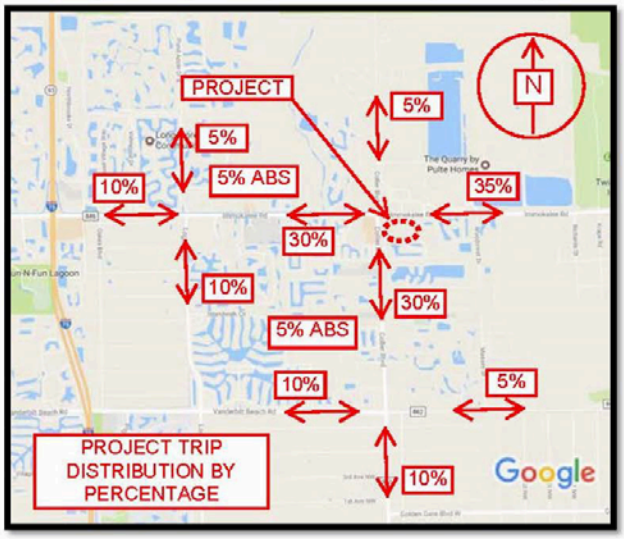
None: N/A
Pass-by trips: Per ITE, CC TIS Guidelines
Internal trips (PUD): Per ITE, CC TIS Guidelines
Transit use: N/A
Other: N/A

Horizon Year Roadway Network Improvements: 2022

Methodology & Assumptions:

Non-site traffic estimates: CC 2016 AUIR; CC Traffic Counts
Site-trip generation: OTISS Software
Trip distribution method: Engineer's Estimate – refer to **Fig. 2**
Traffic assignment method: Engineer's Estimate
Traffic growth rate: historical growth rate or 2% minimum

Fig. 2 – Project Trip Distribution by Percentage



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Special Features: (from preliminary study or prior experience)
Accidents locations: N/A
Sight distance: N/A
Queuing: N/A
Access location & configuration: N/A
Traffic control: MUTCD
Signal system location & progression needs: N/A
On-site parking needs: Per CC LDC
Data Sources: ITE Trip Generation 9th Edition; CC 2016 AUIR; CC Traffic Counts
Base maps: N/A
Prior study reports: N/A
Access policy and jurisdiction: N/A
Review process: N/A
Requirements: N/A
Miscellaneous: N/A

Small Scale Study – No Fee	_____
Minor Study - $750.00	_____
Major Study - $1500.00	X
Methodology Fee $500	X
Includes 0 intersections	_____
Additional Intersections - $500.00 each	_____

All fees will be agreed to during the Methodology meeting and must be paid to Transportation prior to our sign-off on the application.

SIGNATURES

Norman Trebilcock

Study Preparer—Norman Trebilcock

_____
Reviewer(s)

_____
Applicant

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EXHIBIT A
Collier County
Traffic Impact Study Review Fee Schedule

Fees will be paid incrementally as the development proceeds: Methodology Review, Analysis Review, and Sufficiency Reviews. Fees for additional meetings or other optional services are also provided below.

Methodology Review - $500 Fee
Methodology Review includes review of a submitted methodology statement, including review of submitted trip generation estimate(s), distribution, assignment, and review of a "Small Scale Study" determination, written approval/comments on a proposed methodology statement, and written confirmation of a re-submitted, amended methodology statement, and one meeting in Collier County, if needed.

"Small Scale Study" Review - No Additional Fee (Includes one sufficiency review)
Upon approval of the methodology review, the applicant may submit the study. The review includes: a concurrency determination, site access inspection and confirmation of the study compliance with trip generation, distribution and maximum threshold compliance.

"Minor Study Review" - $750 Fee (Includes one sufficiency review)
Review of the submitted traffic analysis includes: optional field visit to site, confirmation of trip generation, distribution, and assignment, concurrency determination, confirmation of committed improvements, review of traffic volume data collected/assembled, review of off-site improvements within the right-of-way, review of site access and circulation, and preparation and review of "sufficiency" comments/questions.

"Major Study Review" - $1,500 Fee (Includes two intersection analysis and two sufficiency reviews)
Review of the submitted traffic analysis includes: field visit to site, confirmation of trip generation, special trip generation and/or trip length study, distribution and assignment, concurrency determination, confirmation of committed improvements, review of traffic volume data collected/assembled, review of traffic growth analysis, review of off-site roadway operations and capacity analysis, review of site access and circulation, neighborhood traffic intrusion issues, any necessary improvement proposals and associated cost estimates, and preparation and review of up to two rounds of "sufficiency" comments/questions and/or recommended conditions of approval.

"Additional intersection Review" - $500 Fee
The review of additional intersections shall include the same parameters as outlined in the "Major Study Review" and shall apply to each intersection above the first two intersections included in the "Major Study Review"

"Additional Sufficiency Reviews" - $500 Fee
Additional sufficiency reviews beyond those initially included in the appropriate study shall require the additional Fee prior to the completion of the review.

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Appendix C: Land Use Code Descriptions and Trip Generation Calculations ITE 10th Edition

ITE Trip Generation Manual – 10th Edition – Applicable Land Use Descriptions

Land Use: 151
Mini-Warehouse

Description

A mini-warehouse is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as "self-storage" facilities. Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point.

Additional Data

Time-of-day distribution data for this land use are presented in Appendix A. For the 10 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 10:30 and 11:30 a.m. and 1:15 and 2:15 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Colorado, Massachusetts, Minnesota, New Jersey, Texas, and Utah.

Source Numbers

212, 403, 551, 568, 642, 708, 724, 850, 868, 876

Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have one or two levels (floors). Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), and off-campus student apartment (Land Use 225) are related land uses.

Additional Data

In prior editions of *Trip Generation Manual*, the low-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

This land use included data from a wide variety of units with different sizes, price ranges, locations, and ages. Consequently, there was a wide variation in trips generated within this category. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

Time-of-day distribution data for this land use are presented in Appendix A. For the 10 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:45 and 5:45 p.m., respectively. For the one site with Saturday data, the overall highest vehicle volume was counted between 9:45 and 10:45 a.m. For the one site with Sunday data, the overall highest vehicle volume was counted between 11:45 a.m. and 12:45 p.m.

For the one dense multi-use urban site with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:00 and 8:00 a.m. and 6:15 and 7:15 p.m., respectively.

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

The average numbers of person trips per vehicle trip at the five general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.13 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.21 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, District of Columbia, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Minnesota, New Jersey, New York, Ontario, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Virginia, and Washington.

It is expected that the number of bedrooms and number of residents are likely correlated to the number of trips generated by a residential site. Many of the studies included in this land use did not indicate the total number of bedrooms. To assist in the future analysis of this land use, it is important that this information be collected and included in trip generation data submissions.

Source Numbers

168, 187, 188, 204, 211, 300, 305, 306, 319, 320, 321, 357, 390, 412, 418, 525, 530, 571, 579, 583, 864, 868, 869, 870, 896, 903, 918, 946, 947, 948, 951

Land Use: 310
Hotel

Description

A hotel is a place of lodging that provides sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, limited recreational facilities (pool, fitness room), and/or other retail and service shops. All suites hotel (Land Use 311), business hotel (Land Use 312), motel (Land Use 320), and resort hotel (Land Use 330) are related uses.

Additional Data

Studies of hotel employment density indicate that, on the average, a hotel will employ 0.9 employees per room.[1]

Twenty-five studies provided information on occupancy rates at the time the studies were conducted. The average occupancy rate for these studies was approximately 82 percent.

Some properties contained in this land use provide guest transportation services such as airport shuttles, limousine service, or golf course shuttle service, which may have an impact on the overall trip generation rates.

Time-of-day distribution data for this land use are presented in Appendix A. For the one center city core site with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 8:30 and 9:30 a.m. and 3:15 and 4:15 p.m., respectively. On Saturday and Sunday, the peak hours were between 5:00 and 6:00 p.m. and 10:15 and 11:15 a.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, District of Columbia, Florida, Georgia, Indiana, Minnesota, New York, Pennsylvania, South Dakota, Texas, Vermont, Virginia, and Washington.

For all lodging uses, it is important to collect data on occupied rooms as well as total rooms in order to accurately predict trip generation characteristics for the site.

Trip generation at a hotel may be related to the presence of supporting facilities such as convention facilities, restaurants, meeting/banquet space, and retail facilities. Future data submissions should specify the presence of these amenities. Reporting the level of activity at the supporting facilities such as full, empty, partially active, number of people attending a meeting/banquet during observation may also be useful in further analysis of this land use.

Source Numbers

170, 260, 262, 277, 280, 301, 306, 357, 422, 507, 577, 728, 867, 872, 925, 951

[1] Buttke, Carl H. Unpublished studies of building employment densities, Portland, Oregon.

Land Use: 720
Medical-Dental Office Building

Description

A medical-dental office building is a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility. Clinic (Land Use 630) is a related use.

Additional Data

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 19 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 9:30 and 10:30 a.m. and 2:15 and 3:15 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Connecticut, Kentucky, Maryland, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Virginia, Washington, and Wisconsin.

Source Numbers

104, 109, 120, 157, 184, 209, 211, 253, 287, 294, 295, 304, 357, 384, 404, 407, 423, 444, 509, 601, 715, 867, 879, 901, 902, 908, 959, 972

Land Use: 820
Shopping Center

Description

A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands. Factory outlet center (Land Use 823) is a related use.

Additional Data

Shopping centers, including neighborhood centers, community centers, regional centers, and super regional centers, were surveyed for this land use. Some of these centers contained non-merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities (for example, ice skating rinks or indoor miniature golf courses).

Many shopping centers, in addition to the integrated unit of shops in one building or enclosed around a mall, include outparcels (peripheral buildings or pads located on the perimeter of the center adjacent to the streets and major access points). These buildings are typically drive-in banks, retail stores, restaurants, or small offices. Although the data herein do not indicate which of the centers studied included peripheral buildings, it can be assumed that some of the data show their effect.

The vehicle trips generated at a shopping center are based upon the total GLA of the center. In cases of smaller centers without an enclosed mall or peripheral buildings, the GLA could be the same as the gross floor area of the building.

Time-of-day distribution data for this land use are presented in Appendix A. For the 10 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:15 and 1:15 p.m., respectively.

The average numbers of person trips per vehicle trip at the 27 general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.31 during Weekday, AM Peak Hour of Generator
- 1.43 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.46 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), British Columbia (CAN), California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Jersey, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

Source Numbers

105, 110, 154, 156, 159, 186, 190, 198, 199, 202, 204, 211, 213, 239, 251, 259, 260, 269, 294, 295, 299, 300, 301, 304, 305, 307, 308, 309, 310, 311, 314, 315, 316, 317, 319, 358, 365, 376, 385, 390, 400, 404, 414, 420, 423, 428, 437, 440, 442, 444, 446, 507, 562, 580, 598, 629, 658, 702, 715, 728, 868, 870, 871, 880, 899, 908, 912, 915, 926, 936, 944, 946, 960, 961, 962, 973, 974, 978

Land Use: 932
High-Turnover (Sit-Down) Restaurant

Description

This land use consists of sit-down, full-service eating establishments with typical duration of stay of approximately one hour. This type of restaurant is usually moderately priced and frequently belongs to a restaurant chain. Generally, these restaurants serve lunch and dinner; they may also be open for breakfast and are sometimes open 24 hours a day. These restaurants typically do not take reservations. Patrons commonly wait to be seated, are served by a waiter/waitress, order from menus and pay for their meal after they eat. Some facilities contained within this land use may also contain a bar area for serving food and alcoholic drinks. Fast casual restaurant (Land Use 930), quality restaurant (Land Use 931), fast-food restaurant without drive-through window (Land Use 933), fast-food restaurant with drive-through window (Land Use 934), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

The outdoor seating area is not included in the overall gross floor area. Therefore, the number of seats may be a more reliable independent variable on which to establish trip generation rates for facilities having significant outdoor seating.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 38 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:00 and 1:00 p.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Georgia, Indiana, Kentucky, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Texas, Vermont, and Wisconsin.

Source Numbers

126, 269, 275, 280, 300, 301, 305, 338, 340, 341, 358, 384, 424, 432, 437, 438, 444, 507, 555, 577, 589, 617, 618, 728, 868, 884, 885, 903, 927, 944, 961, 962, 977

Land Use: 934
Fast-Food Restaurant with Drive-Through Window

Description

This category includes fast-food restaurants with drive-through windows. This type of restaurant is characterized by a large drive-through clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day) and high turnover rates for eat-in customers. These limited-service eating establishments do not provide table service. Non-drive-through patrons generally order at a cash register and pay before they eat. Fast casual restaurant (Land Use 930), high-turnover (sit-down) restaurant (Land Use 932), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

The outdoor seating area is not included in the overall gross floor area. Therefore, the number of seats may be a more reliable independent variable on which to establish trip generation rates for facilities having significant outdoor seating.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 46 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 11:45 a.m. and 12:45 p.m. and 12:00 and 1:00 p.m., respectively. For the one dense multi-use urban site with data, the same AM and PM peak hours were observed.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alaska, Alberta (CAN), California, Colorado, Florida, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

163, 164, 168, 180, 181, 241, 245, 278, 294, 300, 301, 319, 338, 340, 342, 358, 389, 438, 502, 552, 577, 583, 584, 617, 640, 641, 704, 715, 728, 810, 866, 867, 869, 885, 886, 927, 935, 962, 977

Land Use: 960
Super Convenience Market/Gas Station

Description

This land use includes gasoline/service stations with convenience markets where there is significant business related to the sale of convenience items and the fueling of motor vehicles. Some commonly sold convenience items include newspapers, freshly brewed coffee, daily-made donuts, bakery items, hot and cold beverages, breakfast items, dairy items, fresh fruits, soups, light meals, ready-to-go and freshly made sandwiches and wraps, and ready-to-go salads. Stores typically also had automated teller machines (ATMs), and public restrooms. The sites included in this land use category have the following two specific characteristics:

- The gross floor area of the convenience market is at least 3,000 gross square feet
- The number of vehicle fueling positions is at least 10

Convenience market with gasoline pumps (Land Use 853) and gasoline/service station with convenience market (Land Use 945) are related uses.

Additional Data

To reflect changing characteristics of the convenience market component of this land use, only data from the past two decades have been included in this land use.

The independent variable, vehicle fueling positions, is defined as the maximum number of vehicles that can be fueled simultaneously. Gasoline/service stations in this land use include "pay-at-the-pump" and traditional fueling stations.

A multi-variable regression analysis based on both the convenience market gross floor area (GFA) and the number of vehicle fueling positions (VFP) produced a series of fitted curve equations. The equations are in the form of:

Vehicle Trips = [(VFP Factor) x (Number of VFP)] + [(GFA Factor) x (GFA)] + (Constant)

The values for the VFP factor, GFA factor, and constant are presented in the following table for each time period for which a fitted curve equation could produce an R^2 value of at least 0.50.

Time Period	VFP Factor	GFA Factor	Constant	R^2
Weekday, AM Peak Hour of Generator	10.3	105	-290	0.62
Weekday, PM Peak Hour of Generator	6.91	76.0	-133	0.68
Weekday, AM Peak Hour of Adjacent Street	16.1	135	-483	0.66
Weekday, PM Peak Hour of Adjacent Street	11.5	82.9	-226	0.51

The sites were surveyed in the late 1990's, 2000s and the 2010s in Florida, Iowa, Maryland, Minnesota, New Hampshire, New Jersey, Pennsylvania, Texas, Utah, and Wisconsin.

Source Numbers

617, 813, 844, 850, 864, 865, 867, 869, 882, 888, 904, 938, 954, 960, 962

Trip Generation Comparison – LUC 960 – Market square feet vs Fueling Positions

Project Information	
Project Name:	Baumgarten - SF, FP compare
No:	
Date:	08/02/2018
City:	
State/Province:	
Zip/Postal Code:	
Country:	
Client Name:	
Analyst's Name:	
Edition:	ITE-TGM 10th Edition

Land Use	Size	AM Peak Hour		PM Peak Hour	
		Entry	Exit	Entry	Exit
960 - Super Convenience Market/Gas Station (General Urban/Suburban)	6 1000 Sq. Ft. GFA	280	280	208	208
Reduction		0	0	0	0
Internal		0	0	0	0
Pass-by		0	0	0	0
Non-pass-by		280	280	208	208
960 - Super Convenience Market/Gas Station - 1 (General Urban/Suburban)	20 Vehicle Fueling Positions	281	281	230	229
Reduction		0	0	0	0
Internal		0	0	0	0
Pass-by		0	0	0	0
Non-pass-by		281	281	230	229
Total		561	561	438	437
Total Reduction		0	0	0	0
Total Internal		0	0	0	0
Total Pass-by		0	0	0	0
Total Non-pass-by		561	561	438	437

PERIOD SETTING

Analysis Name : AM Peak Hour
Project Name : Baumgarten - SF, FP compare **No :**
Date: 8/2/2018 **City:**
State/Province: **Zip/Postal Code:**
Country: **Client Name:**
Analyst's Name: **Edition:** ITE-TGM 10th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
960 - Super Convenience Market/Gas Station (General Urban/Suburban)	1000 Sq. Ft. GFA	6	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Best Fit (LIN) T = 137.38 (X)+- 264.53	280 50%	280 50%	560
960 - Super Convenience Market/Gas Station - 1 (General Urban/Suburban)	Vehicle Fueling Positions	20	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Average 28.08	281 50%	281 50%	562

PERIOD SETTING

Analysis Name : PM Peak Hour
Project Name : Baumgarten - SF, FP compare **No :**
Date: 8/2/2018 **City:**
State/Province: **Zip/Postal Code:**
Country: **Client Name:**
Analyst's Name: **Edition:** ITE-TGM 10th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
960 - Super Convenience Market/Gas Station (General Urban/Suburban)	1000 Sq. Ft. GFA	6	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 69.28	208 50%	208 50%	416
960 - Super Convenience Market/Gas Station - 1 (General Urban/Suburban)	Vehicle Fueling Positions	20	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 22.96	230 50%	229 50%	459

Proposed Scenario 1 Development

Land Use	Size	Daily		AM Peak Hour		PM Peak Hour	
		Entry	Exit	Entry	Exit	Entry	Exit
220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)	400 Dwelling Units	1492	1491	41	137	128	75
Reduction		0	0	0	0	0	0
Internal		30	34	1	3	61	35
Pass-by		0	0	0	0	0	0
Non-pass-by		1462	1457	40	134	67	40
720 - Medical-Dental Office Building (General Urban/Suburban)	35 1000 Sq. Ft. GFA	629	628	69	19	34	87
Reduction		0	0	0	0	0	0
Internal		44	176	5	5	14	19
Pass-by		0	0	0	0	0	0
Non-pass-by		585	452	64	14	20	68
820 - Shopping Center (General Urban/Suburban)	245 1000 Sq. Ft. GLA	5529	5528	170	104	506	549
Reduction		0	0	0	0	0	0
Internal		311	55	11	4	57	79
Pass-by		783	821	40	25	112	118
Non-pass-by		4435	4652	119	75	337	352
310 - Hotel (General	140 Occupied Rooms	856	856	50	37	50	52
Reduction		0	0	0	0	0	0
Internal		0	120	0	5	9	8
Pass-by		0	0	0	0	0	0
Non-pass-by		856	736	50	32	41	44
151 - Mini-Warehouse (General Urban/Suburban)	90 1000 Sq. Ft. GFA	68	68	5	4	7	8
Reduction		0	0	0	0	0	0
Internal		0	0	0	0	0	0
Pass-by		0	0	0	0	0	0
Non-pass-by		68	68	5	4	7	8
Total		8574	8571	335	301	725	771
Total Reduction		0	0	0	0	0	0
Total Internal		385	385	17	17	141	141
Total Pass-by		783	821	40	25	112	118
Total Non-pass-by		7406	7365	278	259	472	512

PERIOD SETTING

Analysis Name : Daily
Project Name : Baumgarten - Proposed PUD - 370ksf Comm; 400 Res; 140 Hotel **No :**
Date: 12/4/2018 **City:**
State/Province: **Zip/Postal Code:**
Country: **Client Name:**
Analyst's Name: **Edition:** ITE-TGM 10th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)	Dwelling Units	400	Weekday	Best Fit (LIN) T = 7.56 (X)+-40.86	1492 50%	1491 50%	2983
720 - Medical-Dental Office Building (General Urban/Suburban)	1000 Sq. Ft. GFA	35	Weekday	Best Fit (LIN) T = 38.42 (X)+-87.62	629 50%	628 50%	1257
820 - Shopping Center (General Urban/Suburban)	1000 Sq. Ft. GLA	245	Weekday	Best Fit (LOG) Ln(T) = 0.68Ln(X) +5.57	5529 50%	5528 50%	11057
310 - Hotel (General Urban/Suburban)	Occupied Rooms	140(0)	Weekday	Average 12.23	856(1) 50%	856(1) 50%	1712(1)
151 - Mini-Warehouse (General Urban/Suburban)	1000 Sq. Ft. GFA	90	Weekday	Average 1.51	68 50%	68 50%	136

(0) indicates size out of range.
(1) indicates small sample size, use carefully.

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
220 - Multifamily Housing (Low-Rise)	0 %	1492	0 %	1491
720 - Medical-Dental Office Building	0 %	629	0 %	628
820 - Shopping Center	0 %	5529	0 %	5528
310 - Hotel	0 %	856	0 %	856
151 - Mini-Warehouse	0 %	68	0 %	68

INTERNAL TRIPS

220 - Multifamily Housing (Low-Rise)

Exit 1491 Demand Exit: 2 % (30)

Balanced: 19

720 - Medical-Dental Office Building

Demand Entry: 3 % (19) **Entry** 629

Entry	1492	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 1 % (6)	**Exit**	628	
220 - Multifamily Housing (Low-Rise)					**820 - Shopping Center**		
Exit	1491	Demand Exit: 1 % (15)	Balanced: 15	Demand Entry: 17 % (940)	**Entry**	5529	
Entry	1492	Demand Entry: 2 % (30)	Balanced: 30	Demand Exit: 14 % (774)	**Exit**	5528	
220 - Multifamily Housing (Low-Rise)					**310 - Hotel**		
Exit	1491	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	856	
Entry	1492	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	856	
220 - Multifamily Housing (Low-Rise)					**151 - Mini-Warehouse**		
Exit	1491	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	68	
Entry	1492	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	68	
720 - Medical-Dental Office Building					**820 - Shopping Center**		
Exit	628	Demand Exit: 28 % (176)	Balanced: 176	Demand Entry: 32 % (1769)	**Entry**	5529	
Entry	629	Demand Entry: 4 % (25)	Balanced: 25	Demand Exit: 29 % (1603)	**Exit**	5528	
720 - Medical-Dental Office Building					**310 - Hotel**		
Exit	628	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	856	
Entry	629	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	856	
720 - Medical-Dental Office Building					**151 - Mini-Warehouse**		
Exit	628	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	68	
Entry	629	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	68	
820 - Shopping Center					**310 - Hotel**		
Exit	5528	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	856	
Entry	5529	Demand Entry: 4 % (221)	Balanced: 120	Demand Exit: 14 % (120)	**Exit**	856	
820 - Shopping Center					**151 - Mini-Warehouse**		
Exit	5528	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	68	
Entry	5529	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	68	
310 - Hotel					**151 - Mini-Warehouse**		
Exit	856	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	68	
Entry	856	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	68	

220 - Multifamily Housing (Low-Rise)

Total Trips	**Internal Trips**					**External Trips**
	720 -	**820 -**	**310 - Hotel**	**151 - Mini-**	**Total**	

		Medical-Dental Office Building	Shopping Center		Warehouse		
Entry	1492 (100%)	0 (0%)	30 (2%)	0 (0%)	0 (0%)	30 (2%)	1462 (98%)
Exit	1491 (100%)	19 (1%)	15 (1%)	0 (0%)	0 (0%)	34 (2%)	1457 (98%)
Total	2983 (100%)	19 (1%)	45 (2%)	0 (0%)	0 (0%)	64 (2%)	2919 (98%)

720 - Medical-Dental Office Building

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	820 - Shopping Center	310 - Hotel	151 - Mini-Warehouse	Total	
Entry	629 (100%)	19 (3%)	25 (4%)	0 (0%)	0 (0%)	44 (7%)	585 (93%)
Exit	628 (100%)	0 (0%)	176 (28%)	0 (0%)	0 (0%)	176 (28%)	452 (72%)
Total	1257 (100%)	19 (2%)	201 (16%)	0 (0%)	0 (0%)	220 (18%)	1037 (82%)

820 - Shopping Center

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	310 - Hotel	151 - Mini-Warehouse	Total	
Entry	5529 (100%)	15 (0%)	176 (3%)	120 (2%)	0 (0%)	311 (6%)	5218 (94%)
Exit	5528 (100%)	30 (1%)	25 (0%)	0 (0%)	0 (0%)	55 (1%)	5473 (99%)
Total	11057 (100%)	45 (0%)	201 (2%)	120 (1%)	0 (0%)	366 (3%)	10691 (97%)

310 - Hotel

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	151 - Mini-Warehouse	Total	
Entry	856 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	856 (100%)
Exit	856 (100%)	0 (0%)	0 (0%)	120 (14%)	0 (0%)	120 (14%)	736 (86%)
Total	1712 (100%)	0 (0%)	0 (0%)	120 (7%)	0 (0%)	120 (7%)	1592 (93%)

151 - Mini-Warehouse

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	310 - Hotel	Total	
Entry	68 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	68 (100%)
Exit	68 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	68 (100%)
Total	136 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	136 (100%)

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
220 - Multifamily Housing (Low-Rise)	2919	0	0	2919
720 - Medical-Dental Office Building	1037	0	0	1037
820 - Shopping Center	10691	15	1604	9087
310 - Hotel	1592	0	0	1592
151 - Mini-Warehouse	136	0	0	136

ITE DEVIATION DETAILS

Weekday

Landuse — No deviations from ITE.

Methods — No deviations from ITE.

External Trips — 220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

720 - Medical-Dental Office Building (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

820 - Shopping Center (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

310 - Hotel (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

151 - Mini-Warehouse (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	8574
Total Exiting	8571
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	385
Total Exiting Internal Capture Reduction	385
Total Entering Pass-by Reduction	783
Total Exiting Pass-by Reduction	821
Total Entering Non-Pass-by Trips	7406
Total Exiting Non-Pass-by Trips	7365

PERIOD SETTING

Analysis Name : AM Peak Hour
Project Name : Baumgarten - Proposed PUD - 370ksf Comm; 400 Res; 140 Hotel **No :**
Date: 12/4/2018 **City:**
State/Province: **Zip/Postal Code:**
Country: **Client Name:**
Analyst's Name: **Edition:** ITE-TGM 10th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)	Dwelling Units	400	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Best Fit (LOG) Ln(T) = 0.95Ln(X) +-0.51	41 23%	137 77%	178
720 - Medical-Dental Office Building (General Urban/Suburban)	1000 Sq. Ft. GFA	35	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Best Fit (LOG) Ln(T) = 0.89Ln(X) +1.31	69 78%	19 22%	88
820 - Shopping Center (General Urban/Suburban)	1000 Sq. Ft. GLA	245	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Best Fit (LIN) T = 0.5 (X)+151.78	170 62%	104 38%	274
310 - Hotel (General Urban/Suburban)	Occupied Rooms	140	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Average 0.62	50 57%	37 43%	87
151 - Mini-Warehouse (General Urban/Suburban)	1000 Sq. Ft. GFA	90	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Average 0.1	5 56%	4 44%	9

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
220 - Multifamily Housing (Low-Rise)	0 %	41	0 %	137
720 - Medical-Dental Office Building	0 %	69	0 %	19
820 - Shopping Center	0 %	170	0 %	104
310 - Hotel	0 %	50	0 %	37
151 - Mini-Warehouse	0 %	5	0 %	4

INTERNAL TRIPS

220 - Multifamily Housing (Low-Rise)					**720 - Medical-Dental Office Building**		
Exit	137	Demand Exit: 2 % (3)	Balanced: 2	Demand Entry: 3 % (2)		**Entry**	69
Entry	41	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 1 % (0)		**Exit**	19
220 - Multifamily Housing (Low-Rise)					**820 - Shopping Center**		
Exit	137	Demand Exit: 1 % (1)	Balanced: 1	Demand Entry: 17 % (29)		**Entry**	170
Entry	41	Demand Entry: 2 % (1)	Balanced: 1	Demand Exit: 14 % (15)		**Exit**	104
220 - Multifamily Housing (Low-Rise)					**310 - Hotel**		
Exit	137	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)		**Entry**	50
Entry	41	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)		**Exit**	37
220 - Multifamily Housing (Low-Rise)					**151 - Mini-Warehouse**		
Exit	137	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)		**Entry**	5
Entry	41	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)		**Exit**	4
720 - Medical-Dental Office Building					**820 - Shopping Center**		
Exit	19	Demand Exit: 28 % (5)	Balanced: 5	Demand Entry: 32 % (54)		**Entry**	170
Entry	69	Demand Entry: 4 % (3)	Balanced: 3	Demand Exit: 29 % (30)		**Exit**	104
720 - Medical-Dental Office Building					**310 - Hotel**		
Exit	19	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)		**Entry**	50
Entry	69	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)		**Exit**	37
720 - Medical-Dental Office Building					**151 - Mini-Warehouse**		
Exit	19	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)		**Entry**	5
Entry	69	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)		**Exit**	4
820 - Shopping Center					**310 - Hotel**		
Exit	104	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)		**Entry**	50
Entry	170	Demand Entry: 4 % (7)	Balanced: 5	Demand Exit: 14 % (5)		**Exit**	37
820 - Shopping Center					**151 - Mini-Warehouse**		
Exit	104	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)		**Entry**	5
Entry	170	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)		**Exit**	4
310 - Hotel					**151 - Mini-Warehouse**		
Exit	37	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)		**Entry**	5

Entry 50 Demand Entry: 0 % (0) Balanced: 0 Demand Exit: 0 % (0) **Exit** 4

220 - Multifamily Housing (Low-Rise)

	Total Trips	Internal Trips					External Trips
		720 - Medical-Dental Office Building	820 - Shopping Center	310 - Hotel	151 - Mini-Warehouse	Total	
Entry	41 (100%)	0 (0%)	1 (2%)	0 (0%)	0 (0%)	1 (2%)	40 (98%)
Exit	137 (100%)	2 (1%)	1 (1%)	0 (0%)	0 (0%)	3 (2%)	134 (98%)
Total	178 (100%)	2 (1%)	2 (1%)	0 (0%)	0 (0%)	4 (2%)	174 (98%)

720 - Medical-Dental Office Building

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	820 - Shopping Center	310 - Hotel	151 - Mini-Warehouse	Total	
Entry	69 (100%)	2 (3%)	3 (4%)	0 (0%)	0 (0%)	5 (7%)	64 (93%)
Exit	19 (100%)	0 (0%)	5 (26%)	0 (0%)	0 (0%)	5 (26%)	14 (74%)
Total	88 (100%)	2 (2%)	8 (9%)	0 (0%)	0 (0%)	10 (11%)	78 (89%)

820 - Shopping Center

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	310 - Hotel	151 - Mini-Warehouse	Total	
Entry	170 (100%)	1 (1%)	5 (3%)	5 (3%)	0 (0%)	11 (6%)	159 (94%)
Exit	104 (100%)	1 (1%)	3 (3%)	0 (0%)	0 (0%)	4 (4%)	100 (96%)
Total	274 (100%)	2 (1%)	8 (3%)	5 (2%)	0 (0%)	15 (5%)	259 (95%)

310 - Hotel

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	151 - Mini-Warehouse	Total	
Entry	50 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	50 (100%)
Exit	37 (100%)	0 (0%)	0 (0%)	5 (14%)	0 (0%)	5 (14%)	32 (86%)
Total	87 (100%)	0 (0%)	0 (0%)	5 (6%)	0 (0%)	5 (6%)	82 (94%)

151 - Mini-Warehouse

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	310 - Hotel	Total	
Entry	5 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (100%)
Exit	4 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	4 (100%)
Total	9 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	9 (100%)

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
220 - Multifamily Housing (Low-Rise)	174	0	0	174
720 - Medical-Dental Office Building	78	0	0	78
820 - Shopping Center	259	25	65	194
310 - Hotel	82	0	0	82
151 - Mini-Warehouse	9	0	0	9

ITE DEVIATION DETAILS

Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Landuse — No deviations from ITE.

Methods — No deviations from ITE.

External Trips — 220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

720 - Medical-Dental Office Building (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

820 - Shopping Center (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

310 - Hotel (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

151 - Mini-Warehouse (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	335
Total Exiting	301
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	17
Total Exiting Internal Capture Reduction	17
Total Entering Pass-by Reduction	40
Total Exiting Pass-by Reduction	25
Total Entering Non-Pass-by Trips	278
Total Exiting Non-Pass-by Trips	259

PERIOD SETTING

Analysis Name : PM Peak Hour
Project Name : Baumgarten - Proposed PUD - 370ksf Comm; 400 Res; 140 Hotel **No :**
Date: 12/4/2018 **City:**
State/Province: **Zip/Postal Code:**
Country: **Client Name:**
Analyst's Name: **Edition:** ITE-TGM 10th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)	Dwelling Units	400	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LOG) Ln(T) = 0.89Ln(X) +-0.02	128 63%	75 37%	203
720 - Medical-Dental Office Building (General Urban/Suburban)	1000 Sq. Ft. GFA	35	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LIN) T = 3.39 (X)+2.02	34 28%	87 72%	121
820 - Shopping Center (General Urban/Suburban)	1000 Sq. Ft. GLA	245	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LOG) Ln(T) = 0.74Ln(X) +2.89	506 48%	549 52%	1055
310 - Hotel (General Urban/Suburban)	Occupied Rooms	140	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 0.73	50 49%	52 51%	102
151 - Mini-Warehouse (General Urban/Suburban)	1000 Sq. Ft. GFA	90	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 0.17	7 47%	8 53%	15

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
220 - Multifamily Housing (Low-Rise)	0 %	128	0 %	75
720 - Medical-Dental Office Building	0 %	34	0 %	87
820 - Shopping Center	0 %	506	0 %	549
310 - Hotel	0 %	50	0 %	52
151 - Mini-Warehouse	0 %	7	0 %	8

INTERNAL TRIPS

220 - Multifamily Housing (Low-Rise)					**720 - Medical-Dental Office Building**	
Exit 75	Demand Exit: 4 % (3)	Balanced: 3	Demand Entry: 57 % (19)	**Entry** 34		
Entry 128	Demand Entry: 4 % (5)	Balanced: 2	Demand Exit: 2 % (2)	**Exit** 87		
220 - Multifamily Housing (Low-Rise)					**820 - Shopping Center**	
Exit 75	Demand Exit: 42 % (32)	Balanced: 32	Demand Entry: 10 % (51)	**Entry** 506		
Entry 128	Demand Entry: 46 % (59)	Balanced: 59	Demand Exit: 26 % (143)	**Exit** 549		
220 - Multifamily Housing (Low-Rise)					**310 - Hotel**	
Exit 75	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry** 50		
Entry 128	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit** 52		
220 - Multifamily Housing (Low-Rise)					**151 - Mini-Warehouse**	
Exit 75	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry** 7		
Entry 128	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit** 8		
720 - Medical-Dental Office Building					**820 - Shopping Center**	
Exit 87	Demand Exit: 20 % (17)	Balanced: 17	Demand Entry: 8 % (40)	**Entry** 506		
Entry 34	Demand Entry: 31 % (11)	Balanced: 11	Demand Exit: 2 % (11)	**Exit** 549		
720 - Medical-Dental Office Building					**310 - Hotel**	
Exit 87	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry** 50		
Entry 34	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit** 52		
720 - Medical-Dental Office Building					**151 - Mini-Warehouse**	
Exit 87	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry** 7		
Entry 34	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit** 8		
820 - Shopping Center					**310 - Hotel**	
Exit 549	Demand Exit: 5 % (27)	Balanced: 9	Demand Entry: 17 % (9)	**Entry** 50		
Entry 506	Demand Entry: 2 % (10)	Balanced: 8	Demand Exit: 16 % (8)	**Exit** 52		
820 - Shopping Center					**151 - Mini-Warehouse**	
Exit 549	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry** 7		
Entry 506	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit** 8		
310 - Hotel					**151 - Mini-Warehouse**	
Exit 52	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry** 7		

Entry 50 Demand Entry: 0 % (0) Balanced: 0 Demand Exit: 0 % (0) **Exit** 8

220 - Multifamily Housing (Low-Rise)

	Total Trips	Internal Trips					External Trips
		720 - Medical-Dental Office Building	820 - Shopping Center	310 - Hotel	151 - Mini-Warehouse	Total	
Entry	128 (100%)	2 (2%)	59 (46%)	0 (0%)	0 (0%)	61 (48%)	67 (52%)
Exit	75 (100%)	3 (4%)	32 (43%)	0 (0%)	0 (0%)	35 (47%)	40 (53%)
Total	203 (100%)	5 (2%)	91 (45%)	0 (0%)	0 (0%)	96 (47%)	107 (53%)

720 - Medical-Dental Office Building

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	820 - Shopping Center	310 - Hotel	151 - Mini-Warehouse	Total	
Entry	34 (100%)	3 (9%)	11 (32%)	0 (0%)	0 (0%)	14 (41%)	20 (59%)
Exit	87 (100%)	2 (2%)	17 (20%)	0 (0%)	0 (0%)	19 (22%)	68 (78%)
Total	121 (100%)	5 (4%)	28 (23%)	0 (0%)	0 (0%)	33 (27%)	88 (73%)

820 - Shopping Center

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	310 - Hotel	151 - Mini-Warehouse	Total	
Entry	506 (100%)	32 (6%)	17 (3%)	8 (2%)	0 (0%)	57 (11%)	449 (89%)
Exit	549 (100%)	59 (11%)	11 (2%)	9 (2%)	0 (0%)	79 (14%)	470 (86%)
Total	1055 (100%)	91 (9%)	28 (3%)	17 (2%)	0 (0%)	136 (13%)	919 (87%)

310 - Hotel

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	151 - Mini-Warehouse	Total	
Entry	50 (100%)	0 (0%)	0 (0%)	9 (18%)	0 (0%)	9 (18%)	41 (82%)
Exit	52 (100%)	0 (0%)	0 (0%)	8 (15%)	0 (0%)	8 (15%)	44 (85%)
Total	102 (100%)	0 (0%)	0 (0%)	17 (17%)	0 (0%)	17 (17%)	85 (83%)

151 - Mini-Warehouse

	Total Trips	Internal Trips					External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	310 - Hotel	Total	
Entry	7 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	7 (100%)
Exit	8 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	8 (100%)
Total	15 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	15 (100%)

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
220 - Multifamily Housing (Low-Rise)	107	0	0	107
720 - Medical-Dental Office Building	88	0	0	88
820 - Shopping Center	919	25	230	689
310 - Hotel	85	0	0	85
151 - Mini-Warehouse	15	0	0	15

ITE DEVIATION DETAILS

Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Landuse — No deviations from ITE.

Methods — No deviations from ITE.

External Trips

220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

720 - Medical-Dental Office Building (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

820 - Shopping Center (General Urban/Suburban)
The chosen pass-by% (25) is not provided by ITE. ITE recommends 34.

310 - Hotel (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

151 - Mini-Warehouse (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	725
Total Exiting	771
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	141
Total Exiting Internal Capture Reduction	141
Total Entering Pass-by Reduction	112
Total Exiting Pass-by Reduction	118
Total Entering Non-Pass-by Trips	472
Total Exiting Non-Pass-by Trips	512

Proposed Scenario 2 Development

Land Use	Size	Daily		AM Peak Hour		PM Peak Hour	
		Entry	Exit	Entry	Exit	Entry	Exit
220 - Multifamily Housing (Low-Rise)	400 Dwelling						
(General Urban/Suburban)	Units	1492	1491	41	137	128	75
Reduction		0	0	0	0	0	0
Internal		77	286	2	26	75	44
Pass-by		0	0	0	0	0	0
Non-pass-by		1415	1205	39	111	53	31
720 - Medical-Dental Office Building	43 1000 Sq. Ft.						
(General Urban/Suburban)	GFA	782	782	82	23	41	107
Reduction		0	0	0	0	0	0
Internal		165	553	18	20	11	25
Pass-by		0	0	0	0	0	0
Non-pass-by		617	229	64	3	30	82
820 - Shopping Center (General	125 1000 Sq. Ft.						
Urban/Suburban)	GLA	3499	3498	133	81	308	333
Reduction		0	0	0	0	0	0
Internal		279	237	12	6	54	56
Pass-by		483	489	30	19	64	69
Non-pass-by		2737	2772	91	56	190	208
932 - High-Turnover (Sit-Down) Restaurant	15 1000 Sq. Ft.						
(General Urban/Suburban)	GFA	842	841	82	67	91	56
Reduction		0	0	0	0	0	0
Internal		372	130	26	12	21	20
Pass-by		141	213	22	22	28	14
Non-pass-by		329	498	34	33	42	22
934 - Fast-Food Restaurant with Drive-							
Through Window (General	12 1000 Sq. Ft.						
Urban/Suburban)	GFA	2826	2825	246	236	204	188
Reduction		0	0	0	0	0	0
Internal		599	218	32	17	42	56
Pass-by		891	1043	105	107	81	66
Non-pass-by		1336	1564	109	112	81	66
960 - Super Convenience Market/Gas	20 Vehicle						
Station (General Urban/Suburban)	Fueling Positions	2305	2305	281	281	230	229
Reduction		0	0	0	0	0	0
Internal		241	169	15	18	48	55
Pass-by		826	854	133	132	91	87
Non-pass-by		1238	1282	133	131	91	87
310 - Hotel (General Urban/Suburban)	140 Occupied	856	856	50	37	50	52
Reduction		0	0	0	0	0	0
Internal		25	165	2	8	16	11
Pass-by		0	0	0	0	0	0
Non-pass-by		831	691	48	29	34	41
Total		12602	12598	915	862	1052	1040
Total Reduction		0	0	0	0	0	0
Total Internal		1758	1758	107	107	267	267
Total Pass-by		2341	2599	290	280	264	236
Total Non-pass-by		8503	8241	518	475	521	537

PERIOD SETTING

Analysis Name :	Daily		
Project Name :	Baumgarten - Proposed PUD	**No :**	
Date:	11/15/2018	**City:**	
State/Province:		**Zip/Postal Code:**	
Country:		**Client Name:**	
Analyst's Name:		**Edition:**	ITE-TGM 10th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)	Dwelling Units	400	Weekday	Best Fit (LIN) T = 7.56 (X)+-40.86	1492 50%	1491 50%	2983
720 - Medical-Dental Office Building (General Urban/Suburban)	1000 Sq. Ft. GFA	43	Weekday	Best Fit (LIN) T = 38.42 (X)+-87.62	782 50%	782 50%	1564
820 - Shopping Center (General Urban/Suburban)	1000 Sq. Ft. GLA	125	Weekday	Best Fit (LOG) Ln(T) = 0.68Ln(X) +5.57	3499 50%	3498 50%	6997
932 - High-Turnover (Sit-Down) Restaurant (General Urban/Suburban)	1000 Sq. Ft. GFA	15(0)	Weekday	Average 112.18	842 50%	841 50%	1683
934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban)	1000 Sq. Ft. GFA	12(0)	Weekday	Average 470.95	2826 50%	2825 50%	5651
960 - Super Convenience Market/Gas Station (General Urban/Suburban)	Vehicle Fueling Positions	20	Weekday	Average 230.52	2305 50%	2305 50%	4610
310 - Hotel (General Urban/Suburban)	Occupied Rooms	140(0)	Weekday	Average 12.23	856(1) 50%	856(1) 50%	1712(1)

(0) indicates size out of range.
(1) indicates small sample size, use carefully.

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
220 - Multifamily Housing (Low-Rise)	0 %	1492	0 %	1491
720 - Medical-Dental Office Building	0 %	782	0 %	782
820 - Shopping Center	0 %	3499	0 %	3498
932 - High-Turnover (Sit-Down) Restaurant	0 %	842	0 %	841
934 - Fast-Food Restaurant with Drive-Through Window	0 %	2826	0 %	2825
960 - Super Convenience Market/Gas Station	0 %	2305	0 %	2305
310 - Hotel	0 %	856	0 %	856

INTERNAL TRIPS

220 - Multifamily Housing (Low-Rise)					**720 - Medical-Dental Office Building**		
Exit	1491	Demand Exit: 2 % (30)	Balanced: 23	Demand Entry: 3 % (23)		**Entry**	782
Entry	1492	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 1 % (8)		**Exit**	782
220 - Multifamily Housing (Low-Rise)					**820 - Shopping Center**		
Exit	1491	Demand Exit: 1 % (15)	Balanced: 15	Demand Entry: 8 % (280)		**Entry**	3499
Entry	1492	Demand Entry: 1 % (15)	Balanced: 15	Demand Exit: 7 % (245)		**Exit**	3498
220 - Multifamily Housing (Low-Rise)					**932 - High-Turnover (Sit-Down) Restaurant**		
Exit	1491	Demand Exit: 10 % (149)	Balanced: 84	Demand Entry: 10 % (84)		**Entry**	842
Entry	1492	Demand Entry: 2 % (30)	Balanced: 17	Demand Exit: 2 % (17)		**Exit**	841
220 - Multifamily Housing (Low-Rise)					**934 - Fast-Food Restaurant with Drive-Through Window**		
Exit	1491	Demand Exit: 10 % (149)	Balanced: 149	Demand Entry: 10 % (283)		**Entry**	2826
Entry	1492	Demand Entry: 2 % (30)	Balanced: 30	Demand Exit: 2 % (57)		**Exit**	2825
220 - Multifamily Housing (Low-Rise)					**960 - Super Convenience Market/Gas Station**		
Exit	1491	Demand Exit: 1 % (15)	Balanced: 15	Demand Entry: 8 % (184)		**Entry**	2305
Entry	1492	Demand Entry: 1 % (15)	Balanced: 15	Demand Exit: 7 % (161)		**Exit**	2305
220 - Multifamily Housing (Low-Rise)					**310 - Hotel**		
Exit	1491	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)		**Entry**	856
Entry	1492	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)		**Exit**	856
720 - Medical-Dental Office Building					**820 - Shopping Center**		
Exit	782	Demand Exit: 14 % (109)	Balanced: 109	Demand Entry: 16 % (560)		**Entry**	3499
Entry	782	Demand Entry: 2 % (16)	Balanced: 16	Demand Exit: 14 % (490)		**Exit**	3498
720 - Medical-Dental Office Building					**932 - High-Turnover (Sit-Down) Restaurant**		
Exit	782	Demand Exit: 31 % (242)	Balanced: 93	Demand Entry: 11 % (93)		**Entry**	842
Entry	782	Demand Entry: 7 % (55)	Balanced: 55	Demand Exit: 15 % (126)		**Exit**	841
720 - Medical-Dental Office Building					**934 - Fast-Food Restaurant with Drive-Through Window**		
Exit	782	Demand Exit: 31 % (242)	Balanced: 242	Demand Entry: 11 % (311)		**Entry**	2826
Entry	782	Demand Entry: 7 % (55)	Balanced:	Demand Exit: 15 % (424)		**Exit**	2825

55

720 - Medical-Dental Office Building				**960 - Super Convenience Market/Gas Station**		
Exit	782	Demand Exit: 14 % (109)	Balanced: 109	Demand Entry: 16 % (369)	**Entry**	2305
Entry	782	Demand Entry: 2 % (16)	Balanced: 16	Demand Exit: 14 % (323)	**Exit**	2305
720 - Medical-Dental Office Building					**310 - Hotel**	
Exit	782	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	856
Entry	782	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	856
820 - Shopping Center				**932 - High-Turnover (Sit-Down) Restaurant**		
Exit	3498	Demand Exit: 3 % (105)	Balanced: 101	Demand Entry: 12 % (101)	**Entry**	842
Entry	3499	Demand Entry: 2 % (70)	Balanced: 25	Demand Exit: 3 % (25)	**Exit**	841
820 - Shopping Center				**934 - Fast-Food Restaurant with Drive-Through Window**		
Exit	3498	Demand Exit: 3 % (105)	Balanced: 105	Demand Entry: 12 % (339)	**Entry**	2826
Entry	3499	Demand Entry: 2 % (70)	Balanced: 70	Demand Exit: 3 % (85)	**Exit**	2825
820 - Shopping Center				**960 - Super Convenience Market/Gas Station**		
Exit	3498	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	2305
Entry	3499	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	2305
820 - Shopping Center					**310 - Hotel**	
Exit	3498	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	856
Entry	3499	Demand Entry: 2 % (70)	Balanced: 60	Demand Exit: 7 % (60)	**Exit**	856
932 - High-Turnover (Sit-Down) Restaurant				**934 - Fast-Food Restaurant with Drive-Through Window**		
Exit	841	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	2826
Entry	842	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	2825
932 - High-Turnover (Sit-Down) Restaurant				**960 - Super Convenience Market/Gas Station**		
Exit	841	Demand Exit: 3 % (25)	Balanced: 25	Demand Entry: 2 % (46)	**Entry**	2305
Entry	842	Demand Entry: 12 % (101)	Balanced: 69	Demand Exit: 3 % (69)	**Exit**	2305
932 - High-Turnover (Sit-Down) Restaurant					**310 - Hotel**	
Exit	841	Demand Exit: 1 % (8)	Balanced: 8	Demand Entry: 2 % (17)	**Entry**	856
Entry	842	Demand Entry: 3 % (25)	Balanced: 25	Demand Exit: 4 % (34)	**Exit**	856
934 - Fast-Food Restaurant with Drive-Through Window				**960 - Super Convenience Market/Gas Station**		
Exit	2825	Demand Exit: 3 % (85)	Balanced:	Demand Entry: 2 % (46)	**Entry**	2305

			46				
Entry	2826	Demand Entry: 12 % (339)	Balanced: 69	Demand Exit: 3 % (69)		**Exit**	2305
934 - Fast-Food Restaurant with Drive-Through Window						**310 - Hotel**	
Exit	2825	Demand Exit: 1 % (28)	Balanced: 17	Demand Entry: 2 % (17)		**Entry**	856
Entry	2826	Demand Entry: 3 % (85)	Balanced: 34	Demand Exit: 4 % (34)		**Exit**	856
960 - Super Convenience Market/Gas Station						**310 - Hotel**	
Exit	2305	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)		**Entry**	856
Entry	2305	Demand Entry: 2 % (46)	Balanced: 46	Demand Exit: 7 % (60)		**Exit**	856

220 - Multifamily Housing (Low-Rise)

	Total Trips	Internal Trips							External Trips
		720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	1492 (100%)	0 (0%)	15 (1%)	17 (1%)	30 (2%)	15 (1%)	0 (0%)	77 (5%)	1415 (95%)
Exit	1491 (100%)	23 (2%)	15 (1%)	84 (6%)	149 (10%)	15 (1%)	0 (0%)	286 (19%)	1205 (81%)
Total	2983 (100%)	23 (1%)	30 (1%)	101 (3%)	179 (6%)	30 (1%)	0 (0%)	363 (12%)	2620 (88%)

720 - Medical-Dental Office Building

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	782 (100%)	23 (3%)	16 (2%)	55 (7%)	55 (7%)	16 (2%)	0 (0%)	165 (21%)	617 (79%)
Exit	782 (100%)	0 (0%)	109 (14%)	93 (12%)	242 (31%)	109 (14%)	0 (0%)	553 (71%)	229 (29%)
Total	1564 (100%)	23 (1%)	125 (8%)	148 (9%)	297 (19%)	125 (8%)	0 (0%)	718 (46%)	846 (54%)

820 - Shopping Center

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	3499 (100%)	15 (0%)	109 (3%)	25 (1%)	70 (2%)	0 (0%)	60 (2%)	279 (8%)	3220 (92%)
Exit	3498 (100%)	15 (0%)	16 (0%)	101 (3%)	105 (3%)	0 (0%)	0 (0%)	237 (7%)	3261 (93%)
Total	6997 (100%)	30 (0%)	125 (2%)	126 (2%)	175 (3%)	0 (0%)	60 (1%)	516 (7%)	6481 (93%)

932 - High-Turnover (Sit-Down) Restaurant

	Total Trips	Internal Trips						External Trips
		220 - Multifamily	720 - Medical-Dental	820 - Shopping Center	934 - Fast-Food Restaurant	960 - Super Convenience	310 - Hotel	Total	

		Housing (Low-Rise)	Office Building		with Drive-Through Window	Market/Gas Station			
Entry	842 (100%)	84 (10%)	93 (11%)	101 (12%)	0 (0%)	69 (8%)	25 (3%)	372 (44%)	470 (56%)
Exit	841 (100%)	17 (2%)	55 (7%)	25 (3%)	0 (0%)	25 (3%)	8 (1%)	130 (15%)	711 (85%)
Total	1683 (100%)	101 (6%)	148 (9%)	126 (7%)	0 (0%)	94 (6%)	33 (2%)	502 (30%)	1181 (70%)

934 - Fast-Food Restaurant with Drive-Through Window

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	2826 (100%)	149 (5%)	242 (9%)	105 (4%)	0 (0%)	69 (2%)	34 (1%)	599 (21%)	2227 (79%)
Exit	2825 (100%)	30 (1%)	55 (2%)	70 (2%)	0 (0%)	46 (2%)	17 (1%)	218 (8%)	2607 (92%)
Total	5651 (100%)	179 (3%)	297 (5%)	175 (3%)	0 (0%)	115 (2%)	51 (1%)	817 (14%)	4834 (86%)

960 - Super Convenience Market/Gas Station

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	310 - Hotel	Total	
Entry	2305 (100%)	15 (1%)	109 (5%)	0 (0%)	25 (1%)	46 (2%)	46 (2%)	241 (10%)	2064 (90%)
Exit	2305 (100%)	15 (1%)	16 (1%)	0 (0%)	69 (3%)	69 (3%)	0 (0%)	169 (7%)	2136 (93%)
Total	4610 (100%)	30 (1%)	125 (3%)	0 (0%)	94 (2%)	115 (2%)	46 (1%)	410 (9%)	4200 (91%)

310 - Hotel

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	Total	
Entry	856 (100%)	0 (0%)	0 (0%)	0 (0%)	8 (1%)	17 (2%)	0 (0%)	25 (3%)	831 (97%)
Exit	856 (100%)	0 (0%)	0 (0%)	60 (7%)	25 (3%)	34 (4%)	46 (5%)	165 (19%)	691 (81%)
Total	1712 (100%)	0 (0%)	0 (0%)	60 (4%)	33 (2%)	51 (3%)	46 (3%)	190 (11%)	1522 (89%)

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
220 - Multifamily Housing (Low-Rise)	2620	0	0	2620
720 - Medical-Dental Office Building	846	0	0	846
820 - Shopping Center	6481	15	972	5509
932 - High-Turnover (Sit-Down) Restaurant	1181	30	354	827

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
934 - Fast-Food Restaurant with Drive-Through Window	4834	40	1934	2900
960 - Super Convenience Market/Gas Station	4200	40	1680	2520
310 - Hotel	1522	0	0	1522

ITE DEVIATION DETAILS

Weekday

Landuse — No deviations from ITE.

Methods — No deviations from ITE.

External Trips

220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

720 - Medical-Dental Office Building (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

820 - Shopping Center (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

932 - High-Turnover (Sit-Down) Restaurant (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

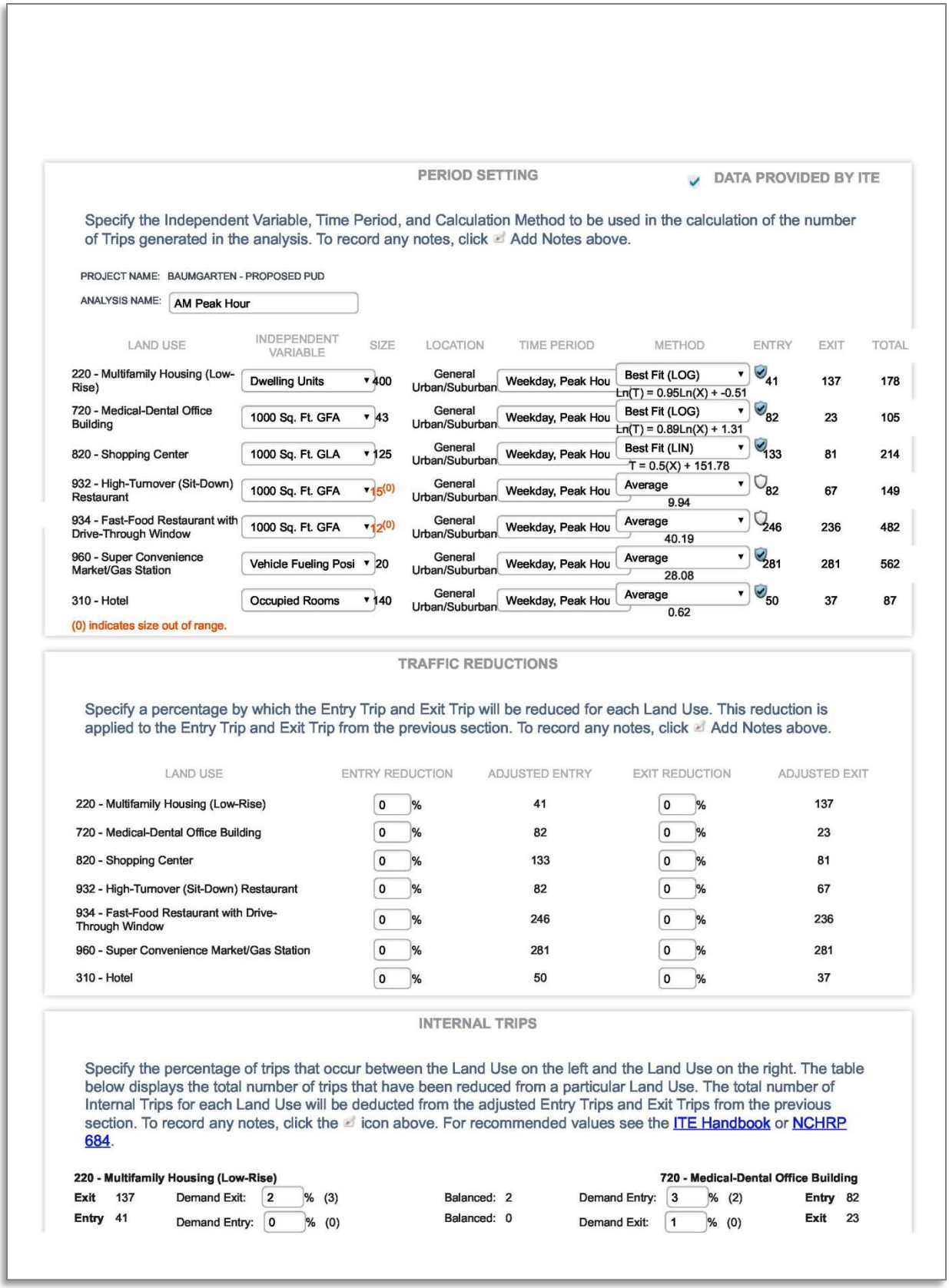
934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

960 - Super Convenience Market/Gas Station (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

310 - Hotel (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	12602
Total Exiting	12598
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	1758
Total Exiting Internal Capture Reduction	1758
Total Entering Pass-by Reduction	2341
Total Exiting Pass-by Reduction	2599
Total Entering Non-Pass-by Trips	8503
Total Exiting Non-Pass-by Trips	8241



PERIOD SETTING

DATA PROVIDED BY ITE

Specify the Independent Variable, Time Period, and Calculation Method to be used in the calculation of the number of Trips generated in the analysis. To record any notes, click Add Notes above.

PROJECT NAME: BAUMGARTEN - PROPOSED PUD

ANALYSIS NAME: AM Peak Hour

LAND USE	INDEPENDENT VARIABLE	SIZE	LOCATION	TIME PERIOD	METHOD	ENTRY	EXIT	TOTAL
220 - Multifamily Housing (Low-Rise)	Dwelling Units	400	General Urban/Suburban	Weekday, Peak Hou	Best Fit (LOG) Ln(T) = 0.95Ln(X) + -0.51	41	137	178
720 - Medical-Dental Office Building	1000 Sq. Ft. GFA	43	General Urban/Suburban	Weekday, Peak Hou	Best Fit (LOG) Ln(T) = 0.89Ln(X) + 1.31	82	23	105
820 - Shopping Center	1000 Sq. Ft. GLA	125	General Urban/Suburban	Weekday, Peak Hou	Best Fit (LIN) T = 0.5(X) + 151.78	133	81	214
932 - High-Turnover (Sit-Down) Restaurant	1000 Sq. Ft. GFA	15(0)	General Urban/Suburban	Weekday, Peak Hou	Average 9.94	82	67	149
934 - Fast-Food Restaurant with Drive-Through Window	1000 Sq. Ft. GFA	12(0)	General Urban/Suburban	Weekday, Peak Hou	Average 40.19	246	236	482
960 - Super Convenience Market/Gas Station	Vehicle Fueling Posi	20	General Urban/Suburban	Weekday, Peak Hou	Average 28.08	281	281	562
310 - Hotel	Occupied Rooms	140	General Urban/Suburban	Weekday, Peak Hou	Average 0.62	50	37	87

(0) indicates size out of range.

TRAFFIC REDUCTIONS

Specify a percentage by which the Entry Trip and Exit Trip will be reduced for each Land Use. This reduction is applied to the Entry Trip and Exit Trip from the previous section. To record any notes, click Add Notes above.

LAND USE	ENTRY REDUCTION	ADJUSTED ENTRY	EXIT REDUCTION	ADJUSTED EXIT
220 - Multifamily Housing (Low-Rise)	0 %	41	0 %	137
720 - Medical-Dental Office Building	0 %	82	0 %	23
820 - Shopping Center	0 %	133	0 %	81
932 - High-Turnover (Sit-Down) Restaurant	0 %	82	0 %	67
934 - Fast-Food Restaurant with Drive-Through Window	0 %	246	0 %	236
960 - Super Convenience Market/Gas Station	0 %	281	0 %	281
310 - Hotel	0 %	50	0 %	37

INTERNAL TRIPS

Specify the percentage of trips that occur between the Land Use on the left and the Land Use on the right. The table below displays the total number of trips that have been reduced from a particular Land Use. The total number of Internal Trips for each Land Use will be deducted from the adjusted Entry Trips and Exit Trips from the previous section. To record any notes, click the icon above. For recommended values see the ITE Handbook or NCHRP 684.

220 - Multifamily Housing (Low-Rise)

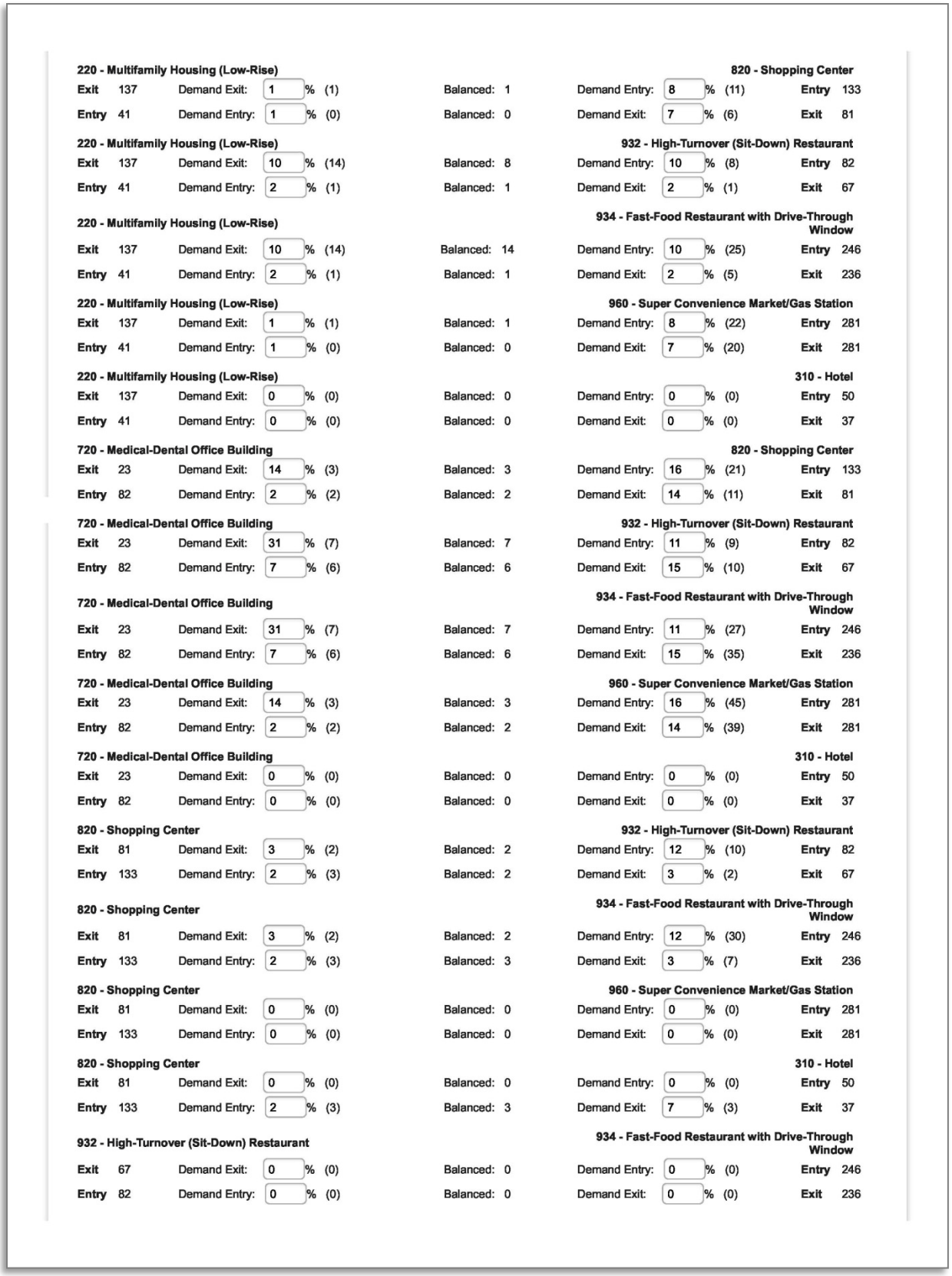
Exit 137 — Demand Exit: 2 % (3) — Balanced: 2

Entry 41 — Demand Entry: 0 % (0) — Balanced: 0

720 - Medical-Dental Office Building

Demand Entry: 3 % (2) — Entry 82

Demand Exit: 1 % (0) — Exit 23



220 - Multifamily Housing (Low-Rise)									**820 - Shopping Center**	
Exit	137	Demand Exit:	1	% (1)	Balanced: 1	Demand Entry:	8	% (11)	**Entry**	133
Entry	41	Demand Entry:	1	% (0)	Balanced: 0	Demand Exit:	7	% (6)	**Exit**	81
220 - Multifamily Housing (Low-Rise)									**932 - High-Turnover (Sit-Down) Restaurant**	
Exit	137	Demand Exit:	10	% (14)	Balanced: 8	Demand Entry:	10	% (8)	**Entry**	82
Entry	41	Demand Entry:	2	% (1)	Balanced: 1	Demand Exit:	2	% (1)	**Exit**	67
220 - Multifamily Housing (Low-Rise)									**934 - Fast-Food Restaurant with Drive-Through Window**	
Exit	137	Demand Exit:	10	% (14)	Balanced: 14	Demand Entry:	10	% (25)	**Entry**	246
Entry	41	Demand Entry:	2	% (1)	Balanced: 1	Demand Exit:	2	% (5)	**Exit**	236
220 - Multifamily Housing (Low-Rise)									**960 - Super Convenience Market/Gas Station**	
Exit	137	Demand Exit:	1	% (1)	Balanced: 1	Demand Entry:	8	% (22)	**Entry**	281
Entry	41	Demand Entry:	1	% (0)	Balanced: 0	Demand Exit:	7	% (20)	**Exit**	281
220 - Multifamily Housing (Low-Rise)									**310 - Hotel**	
Exit	137	Demand Exit:	0	% (0)	Balanced: 0	Demand Entry:	0	% (0)	**Entry**	50
Entry	41	Demand Entry:	0	% (0)	Balanced: 0	Demand Exit:	0	% (0)	**Exit**	37
720 - Medical-Dental Office Building									**820 - Shopping Center**	
Exit	23	Demand Exit:	14	% (3)	Balanced: 3	Demand Entry:	16	% (21)	**Entry**	133
Entry	82	Demand Entry:	2	% (2)	Balanced: 2	Demand Exit:	14	% (11)	**Exit**	81
720 - Medical-Dental Office Building									**932 - High-Turnover (Sit-Down) Restaurant**	
Exit	23	Demand Exit:	31	% (7)	Balanced: 7	Demand Entry:	11	% (9)	**Entry**	82
Entry	82	Demand Entry:	7	% (6)	Balanced: 6	Demand Exit:	15	% (10)	**Exit**	67
720 - Medical-Dental Office Building									**934 - Fast-Food Restaurant with Drive-Through Window**	
Exit	23	Demand Exit:	31	% (7)	Balanced: 7	Demand Entry:	11	% (27)	**Entry**	246
Entry	82	Demand Entry:	7	% (6)	Balanced: 6	Demand Exit:	15	% (35)	**Exit**	236
720 - Medical-Dental Office Building									**960 - Super Convenience Market/Gas Station**	
Exit	23	Demand Exit:	14	% (3)	Balanced: 3	Demand Entry:	16	% (45)	**Entry**	281
Entry	82	Demand Entry:	2	% (2)	Balanced: 2	Demand Exit:	14	% (39)	**Exit**	281
720 - Medical-Dental Office Building									**310 - Hotel**	
Exit	23	Demand Exit:	0	% (0)	Balanced: 0	Demand Entry:	0	% (0)	**Entry**	50
Entry	82	Demand Entry:	0	% (0)	Balanced: 0	Demand Exit:	0	% (0)	**Exit**	37
820 - Shopping Center									**932 - High-Turnover (Sit-Down) Restaurant**	
Exit	81	Demand Exit:	3	% (2)	Balanced: 2	Demand Entry:	12	% (10)	**Entry**	82
Entry	133	Demand Entry:	2	% (3)	Balanced: 2	Demand Exit:	3	% (2)	**Exit**	67
820 - Shopping Center									**934 - Fast-Food Restaurant with Drive-Through Window**	
Exit	81	Demand Exit:	3	% (2)	Balanced: 2	Demand Entry:	12	% (30)	**Entry**	246
Entry	133	Demand Entry:	2	% (3)	Balanced: 3	Demand Exit:	3	% (7)	**Exit**	236
820 - Shopping Center									**960 - Super Convenience Market/Gas Station**	
Exit	81	Demand Exit:	0	% (0)	Balanced: 0	Demand Entry:	0	% (0)	**Entry**	281
Entry	133	Demand Entry:	0	% (0)	Balanced: 0	Demand Exit:	0	% (0)	**Exit**	281
820 - Shopping Center									**310 - Hotel**	
Exit	81	Demand Exit:	0	% (0)	Balanced: 0	Demand Entry:	0	% (0)	**Entry**	50
Entry	133	Demand Entry:	2	% (3)	Balanced: 3	Demand Exit:	7	% (3)	**Exit**	37
932 - High-Turnover (Sit-Down) Restaurant									**934 - Fast-Food Restaurant with Drive-Through Window**	
Exit	67	Demand Exit:	0	% (0)	Balanced: 0	Demand Entry:	0	% (0)	**Entry**	246
Entry	82	Demand Entry:	0	% (0)	Balanced: 0	Demand Exit:	0	% (0)	**Exit**	236

932 - High-Turnover (Sit-Down) Restaurant									**960 - Super Convenience Market/Gas Station**		
Exit	67	Demand Exit:	3	% (2)	Balanced: 2		Demand Entry:	2	% (6)	**Entry**	281
Entry	82	Demand Entry:	12	% (10)	Balanced: 8		Demand Exit:	3	% (8)	**Exit**	281
932 - High-Turnover (Sit-Down) Restaurant										**310 - Hotel**	
Exit	67	Demand Exit:	1	% (1)	Balanced: 1		Demand Entry:	2	% (1)	**Entry**	50
Entry	82	Demand Entry:	3	% (2)	Balanced: 1		Demand Exit:	4	% (1)	**Exit**	37
934 - Fast-Food Restaurant with Drive-Through Window									**960 - Super Convenience Market/Gas Station**		
Exit	236	Demand Exit:	3	% (7)	Balanced: 6		Demand Entry:	2	% (6)	**Entry**	281
Entry	246	Demand Entry:	12	% (30)	Balanced: 8		Demand Exit:	3	% (8)	**Exit**	281
934 - Fast-Food Restaurant with Drive-Through Window										**310 - Hotel**	
Exit	236	Demand Exit:	1	% (2)	Balanced: 1		Demand Entry:	2	% (1)	**Entry**	50
Entry	246	Demand Entry:	3	% (7)	Balanced: 1		Demand Exit:	4	% (1)	**Exit**	37
960 - Super Convenience Market/Gas Station										**310 - Hotel**	
Exit	281	Demand Exit:	0	% (0)	Balanced: 0		Demand Entry:	0	% (0)	**Entry**	50
Entry	281	Demand Entry:	2	% (6)	Balanced: 3		Demand Exit:	7	% (3)	**Exit**	37

220 - Multifamily Housing (Low-Rise)

	TOTAL TRIPS	INTERNAL TRIPS							EXTERNAL TRIPS
		720 - Medical-Dental Office Building	**820 - Shopping Center**	**932 - High-Turnover (Sit-Down) Restaurant**	**934 - Fast-Food Restaurant with Drive-Through Window**	**960 - Super Convenience Market/Gas Station**	**310 - Hotel**	**Total**	
Entry	41 (100%)	0 (0%)	0 (0%)	1 (2%)	1 (2%)	0 (0%)	0 (0%)	2 (5%)	39 (95%)
Exit	137 (100%)	2 (1%)	1 (1%)	8 (6%)	14 (10%)	1 (1%)	0 (0%)	26 (19%)	111 (81%)
Total	178 (100%)	2 (1%)	1 (1%)	9 (5%)	15 (8%)	1 (1%)	0 (0%)	28 (16%)	150 (84%)

720 - Medical-Dental Office Building

	TOTAL TRIPS	INTERNAL TRIPS							EXTERNAL TRIPS
		220 - Multifamily Housing (Low-Rise)	**820 - Shopping Center**	**932 - High-Turnover (Sit-Down) Restaurant**	**934 - Fast-Food Restaurant with Drive-Through Window**	**960 - Super Convenience Market/Gas Station**	**310 - Hotel**	**Total**	
Entry	82 (100%)	2 (2%)	2 (2%)	6 (7%)	6 (7%)	2 (2%)	0 (0%)	18 (22%)	64 (78%)
Exit	23 (100%)	0 (0%)	3 (13%)	7 (30%)	7 (30%)	3 (13%)	0 (0%)	20 (87%)	3 (13%)
Total	105 (100%)	2 (2%)	5 (5%)	13 (12%)	13 (12%)	5 (5%)	0 (0%)	38 (36%)	67 (64%)

820 - Shopping Center

	TOTAL TRIPS	INTERNAL TRIPS							EXTERNAL TRIPS
		220 - Multifamily Housing (Low-Rise)	**720 - Medical-Dental Office Building**	**932 - High-Turnover (Sit-Down) Restaurant**	**934 - Fast-Food Restaurant with Drive-Through Window**	**960 - Super Convenience Market/Gas Station**	**310 - Hotel**	**Total**	
Entry	133 (100%)	1 (1%)	3 (2%)	2 (2%)	3 (2%)	0 (0%)	3 (2%)	12 (9%)	121 (91%)
Exit	81 (100%)	0 (0%)	2 (2%)	2 (2%)	2 (2%)	0 (0%)	0 (0%)	6 (7%)	75 (93%)
Total	214 (100%)	1 (0%)	5 (2%)	4 (2%)	5 (2%)	0 (0%)	3 (1%)	18 (8%)	196 (92%)

932 - High-Turnover (Sit-Down) Restaurant

	TOTAL TRIPS	INTERNAL TRIPS							EXTERNAL TRIPS
		220 - Multifamily Housing (Low-Rise)	**720 - Medical-Dental Office Building**	**820 - Shopping Center**	**934 - Fast-Food Restaurant with Drive-Through Window**	**960 - Super Convenience Market/Gas Station**	**310 - Hotel**	**Total**	
Entry	82 (100%)	8 (10%)	7 (9%)	2 (2%)	0 (0%)	8 (10%)	1 (1%)	26 (32%)	56 (68%)

Exit	67 (100%)	1 (1%)	6 (9%)	2 (3%)	0 (0%)	2 (3%)	1 (1%)	12 (18%)	55 (82%)
Total	149 (100%)	9 (6%)	13 (9%)	4 (3%)	0 (0%)	10 (7%)	2 (1%)	38 (26%)	111 (74%)

934 - Fast-Food Restaurant with Drive-Through Window

		INTERNAL TRIPS							
	TOTAL TRIPS	220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	EXTERNAL TRIPS
Entry	246 (100%)	14 (6%)	7 (3%)	2 (1%)	0 (0%)	8 (3%)	1 (0%)	32 (13%)	214 (87%)
Exit	236 (100%)	1 (0%)	6 (3%)	3 (1%)	0 (0%)	6 (3%)	1 (0%)	17 (7%)	219 (93%)
Total	482 (100%)	15 (3%)	13 (3%)	5 (1%)	0 (0%)	14 (3%)	2 (0%)	49 (10%)	433 (90%)

960 - Super Convenience Market/Gas Station

		INTERNAL TRIPS							
	TOTAL TRIPS	220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	310 - Hotel	Total	EXTERNAL TRIPS
Entry	281 (100%)	1 (0%)	3 (1%)	0 (0%)	2 (1%)	6 (2%)	3 (1%)	15 (5%)	266 (95%)
Exit	281 (100%)	0 (0%)	2 (1%)	0 (0%)	8 (3%)	8 (3%)	0 (0%)	18 (6%)	263 (94%)
Total	562 (100%)	1 (0%)	5 (1%)	0 (0%)	10 (2%)	14 (2%)	3 (1%)	33 (6%)	529 (94%)

310 - Hotel

		INTERNAL TRIPS							
	TOTAL TRIPS	220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	Total	EXTERNAL TRIPS
Entry	50 (100%)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	1 (2%)	0 (0%)	2 (4%)	48 (96%)
Exit	37 (100%)	0 (0%)	0 (0%)	3 (8%)	1 (3%)	1 (3%)	3 (8%)	8 (22%)	29 (78%)
Total	87 (100%)	0 (0%)	0 (0%)	3 (3%)	2 (2%)	2 (2%)	3 (3%)	10 (11%)	77 (89%)

EXTERNAL TRIPS

Specify the percentage of Pass-by Trips for each Land Use. The percentage will be reduced from the total number of External Trips from the previous section. To record any notes, click Add Notes above.

The icon preceding the Pass-by% value indicates data provided by ITE. Clicking the icon changes a custom Pass-by% value to data provided by ITE.

LAND USE	EXTERNAL TRIPS	PASS-BY%	PASS-BY TRIPS	NON-PASS-BY TRIPS
220 - Multifamily Housing (Low-Rise)	150	0 %	0	150
720 - Medical-Dental Office Building	67	0 %	0	67
820 - Shopping Center	196	25 %	49	147
932 - High-Turnover (Sit-Down) Restaurant	111	40 %	44	67
934 - Fast-Food Restaurant with Drive-Through Window	433	49 %	212	221
960 - Super Convenience Market/Gas Station	529	50 %	265	264
310 - Hotel	77	0 %	0	77

Print Report Save Analysis

PERIOD SETTING

Analysis Name : PM Peak Hour
Project Name : Baumgarten - Proposed PUD **No :**
Date: 11/15/2018 **City:**
State/Province: **Zip/Postal Code:**
Country: **Client Name:**
Analyst's Name: **Edition:** ITE-TGM 10th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)	Dwelling Units	400	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LOG) Ln(T) = 0.89Ln(X) +-0.02	128 63%	75 37%	203
720 - Medical-Dental Office Building (General Urban/Suburban)	1000 Sq. Ft. GFA	43	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LIN) T = 3.39 (X)+2.02	41 28%	107 72%	148
820 - Shopping Center (General Urban/Suburban)	1000 Sq. Ft. GLA	125	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LOG) Ln(T) = 0.74Ln(X) +2.89	308 48%	333 52%	641
932 - High-Turnover (Sit-Down) Restaurant (General Urban/Suburban)	1000 Sq. Ft. GFA	15(0)	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 9.77	91 62%	56 38%	147
934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban)	1000 Sq. Ft. GFA	12(0)	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 32.67	204 52%	188 48%	392
960 - Super Convenience Market/Gas Station (General Urban/Suburban)	Vehicle Fueling Positions	20	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 22.96	230 50%	229 50%	459
310 - Hotel (General Urban/Suburban)	Occupied Rooms	140	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 0.73	50 49%	52 51%	102

(0) indicates size out of range.

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
220 - Multifamily Housing (Low-Rise)	0 %	128	0 %	75
720 - Medical-Dental Office Building	0 %	41	0 %	107
820 - Shopping Center	0 %	308	0 %	333
932 - High-Turnover (Sit-Down) Restaurant	0 %	91	0 %	56
934 - Fast-Food Restaurant with Drive-Through Window	0 %	204	0 %	188
960 - Super Convenience Market/Gas Station	0 %	230	0 %	229
310 - Hotel	0 %	50	0 %	52

INTERNAL TRIPS

220 - Multifamily Housing (Low-Rise)					**720 - Medical-Dental Office Building**	
Exit 75	Demand Exit: 4 % (3)	Balanced: 3	Demand Entry: 57 % (23)	**Entry** 41		
Entry 128	Demand Entry: 4 % (5)	Balanced: 2	Demand Exit: 2 % (2)	**Exit** 107		
220 - Multifamily Housing (Low-Rise)					**820 - Shopping Center**	
Exit 75	Demand Exit: 21 % (16)	Balanced: 15	Demand Entry: 5 % (15)	**Entry** 308		
Entry 128	Demand Entry: 23 % (29)	Balanced: 29	Demand Exit: 13 % (43)	**Exit** 333		
220 - Multifamily Housing (Low-Rise)					**932 - High-Turnover (Sit-Down) Restaurant**	
Exit 75	Demand Exit: 10 % (8)	Balanced: 6	Demand Entry: 7 % (6)	**Entry** 91		
Entry 128	Demand Entry: 8 % (10)	Balanced: 5	Demand Exit: 9 % (5)	**Exit** 56		
220 - Multifamily Housing (Low-Rise)					**934 - Fast-Food Restaurant with Drive-Through Window**	
Exit 75	Demand Exit: 10 % (8)	Balanced: 8	Demand Entry: 7 % (14)	**Entry** 204		
Entry 128	Demand Entry: 8 % (10)	Balanced: 10	Demand Exit: 9 % (17)	**Exit** 188		
220 - Multifamily Housing (Low-Rise)					**960 - Super Convenience Market/Gas Station**	
Exit 75	Demand Exit: 21 % (16)	Balanced: 12	Demand Entry: 5 % (12)	**Entry** 230		
Entry 128	Demand Entry: 23 % (29)	Balanced: 29	Demand Exit: 13 % (30)	**Exit** 229		
220 - Multifamily Housing (Low-Rise)					**310 - Hotel**	
Exit 75	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry** 50		
Entry 128	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit** 52		
720 - Medical-Dental Office Building					**820 - Shopping Center**	
Exit 107	Demand Exit: 10 % (11)	Balanced: 11	Demand Entry: 4 % (12)	**Entry** 308		
Entry 41	Demand Entry: 15 % (6)	Balanced: 3	Demand Exit: 1 % (3)	**Exit** 333		
720 - Medical-Dental Office Building					**932 - High-Turnover (Sit-Down) Restaurant**	

Exit	107	Demand Exit: 2 % (2)	Balanced: 1	Demand Entry: 1 % (1)	**Entry**	91
Entry	41	Demand Entry: 15 % (6)	Balanced: 1	Demand Exit: 1 % (1)	**Exit**	56

720 - Medical-Dental Office Building — **934 - Fast-Food Restaurant with Drive-Through Window**

Exit	107	Demand Exit: 2 % (2)	Balanced: 2	Demand Entry: 1 % (2)	**Entry**	204
Entry	41	Demand Entry: 15 % (6)	Balanced: 2	Demand Exit: 1 % (2)	**Exit**	188

720 - Medical-Dental Office Building — **960 - Super Convenience Market/Gas Station**

Exit	107	Demand Exit: 10 % (11)	Balanced: 9	Demand Entry: 4 % (9)	**Entry**	230
Entry	41	Demand Entry: 15 % (6)	Balanced: 2	Demand Exit: 1 % (2)	**Exit**	229

720 - Medical-Dental Office Building — **310 - Hotel**

Exit	107	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	50
Entry	41	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	52

820 - Shopping Center — **932 - High-Turnover (Sit-Down) Restaurant**

Exit	333	Demand Exit: 7 % (23)	Balanced: 6	Demand Entry: 7 % (6)	**Entry**	91
Entry	308	Demand Entry: 12 % (37)	Balanced: 6	Demand Exit: 10 % (6)	**Exit**	56

820 - Shopping Center — **934 - Fast-Food Restaurant with Drive-Through Window**

Exit	333	Demand Exit: 7 % (23)	Balanced: 14	Demand Entry: 7 % (14)	**Entry**	204
Entry	308	Demand Entry: 12 % (37)	Balanced: 19	Demand Exit: 10 % (19)	**Exit**	188

820 - Shopping Center — **960 - Super Convenience Market/Gas Station**

Exit	333	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	230
Entry	308	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	229

820 - Shopping Center — **310 - Hotel**

Exit	333	Demand Exit: 2 % (7)	Balanced: 4	Demand Entry: 8 % (4)	**Entry**	50
Entry	308	Demand Entry: 1 % (3)	Balanced: 3	Demand Exit: 8 % (4)	**Exit**	52

932 - High-Turnover (Sit-Down) Restaurant — **934 - Fast-Food Restaurant with Drive-Through Window**

Exit	56	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	204
Entry	91	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	188

932 - High-Turnover (Sit-Down) Restaurant — **960 - Super Convenience Market/Gas Station**

Exit	56	Demand Exit: 10 % (6)	Balanced: 6	Demand Entry: 12 % (28)	**Entry**	230
Entry	91	Demand Entry: 7 % (6)	Balanced: 6	Demand Exit: 7 % (16)	**Exit**	229

932 - High-Turnover (Sit-Down) Restaurant — **310 - Hotel**

Exit	56	Demand Exit:	3 % (2)	Balanced: 2	Demand Entry:	35 % (18)	**Entry** 50
Entry	91	Demand Entry:	2 % (2)	Balanced: 2	Demand Exit:	34 % (18)	**Exit** 52

934 - Fast-Food Restaurant with Drive-Through Window — **960 - Super Convenience Market/Gas Station**

Exit	188	Demand Exit:	10 % (19)	Balanced: 19	Demand Entry:	12 % (28)	**Entry** 230
Entry	204	Demand Entry:	7 % (14)	Balanced: 14	Demand Exit:	7 % (16)	**Exit** 229

934 - Fast-Food Restaurant with Drive-Through Window — **310 - Hotel**

Exit	188	Demand Exit:	3 % (6)	Balanced: 6	Demand Entry:	35 % (18)	**Entry** 50
Entry	204	Demand Entry:	2 % (4)	Balanced: 4	Demand Exit:	34 % (18)	**Exit** 52

960 - Super Convenience Market/Gas Station — **310 - Hotel**

Exit	229	Demand Exit:	2 % (5)	Balanced: 4	Demand Entry:	8 % (4)	**Entry** 50
Entry	230	Demand Entry:	1 % (2)	Balanced: 2	Demand Exit:	8 % (4)	**Exit** 52

220 - Multifamily Housing (Low-Rise)

	Total Trips	Internal Trips							External Trips
		720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	128 (100%)	2 (2%)	29 (23%)	5 (4%)	10 (8%)	29 (23%)	0 (0%)	75 (59%)	53 (41%)
Exit	75 (100%)	3 (4%)	15 (20%)	6 (8%)	8 (11%)	12 (16%)	0 (0%)	44 (59%)	31 (41%)
Total	203 (100%)	5 (2%)	44 (22%)	11 (5%)	18 (9%)	41 (20%)	0 (0%)	119 (59%)	84 (41%)

720 - Medical-Dental Office Building

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	41 (100%)	3 (7%)	3 (7%)	1 (2%)	2 (5%)	2 (5%)	0 (0%)	11 (27%)	30 (73%)
Exit	107 (100%)	2 (2%)	11 (10%)	1 (1%)	2 (2%)	9 (8%)	0 (0%)	25 (23%)	82 (77%)
Total	148 (100%)	5 (3%)	14 (9%)	2 (1%)	4 (3%)	11 (7%)	0 (0%)	36 (24%)	112 (76%)

820 - Shopping Center

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	308 (100%)	15 (5%)	11 (4%)	6 (2%)	19 (6%)	0 (0%)	3 (1%)	54 (18%)	254 (82%)
Exit	333 (100%)	29 (9%)	3 (1%)	6 (2%)	14 (4%)	0 (0%)	4 (1%)	56 (17%)	277 (83%)
Total	641 (100%)	44 (7%)	14 (2%)	12 (2%)	33 (5%)	0 (0%)	7 (1%)	110 (17%)	531 (83%)

932 - High-Turnover (Sit-Down) Restaurant

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	91 (100%)	6 (7%)	1 (1%)	6 (7%)	0 (0%)	6 (7%)	2 (2%)	21 (23%)	70 (77%)
Exit	56 (100%)	5 (9%)	1 (2%)	6 (11%)	0 (0%)	6 (11%)	2 (4%)	20 (36%)	36 (64%)
Total	147 (100%)	11 (7%)	2 (1%)	12 (8%)	0 (0%)	12 (8%)	4 (3%)	41 (28%)	106 (72%)

934 - Fast-Food Restaurant with Drive-Through Window

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	204 (100%)	8 (4%)	2 (1%)	14 (7%)	0 (0%)	14 (7%)	4 (2%)	42 (21%)	162 (79%)
Exit	188 (100%)	10 (5%)	2 (1%)	19 (10%)	0 (0%)	19 (10%)	6 (3%)	56 (30%)	132 (70%)
Total	392 (100%)	18 (5%)	4 (1%)	33 (8%)	0 (0%)	33 (8%)	10 (3%)	98 (25%)	294 (75%)

960 - Super Convenience Market/Gas Station

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	310 - Hotel	Total	
Entry	230 (100%)	12 (5%)	9 (4%)	0 (0%)	6 (3%)	19 (8%)	2 (1%)	48 (21%)	182 (79%)
Exit	229 (100%)	29 (13%)	2 (1%)	0 (0%)	6 (3%)	14 (6%)	4 (2%)	55 (24%)	174 (76%)
Total	459 (100%)	41 (9%)	11 (2%)	0 (0%)	12 (3%)	33 (7%)	6 (1%)	103 (22%)	356 (78%)

310 - Hotel

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	Total	
Entry	50 (100%)	0 (0%)	0 (0%)	4 (8%)	2 (4%)	6 (12%)	4 (8%)	16 (32%)	34 (68%)
Exit	52 (100%)	0 (0%)	0 (0%)	3 (6%)	2 (4%)	4 (8%)	2 (4%)	11 (21%)	41 (79%)
Total	102 (100%)	0 (0%)	0 (0%)	7 (7%)	4 (4%)	10 (10%)	6 (6%)	27 (26%)	75 (74%)

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
220 - Multifamily Housing (Low-Rise)	84	0	0	84
720 - Medical-Dental Office Building	112	0	0	112

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
820 - Shopping Center	531	25	133	398
932 - High-Turnover (Sit-Down) Restaurant	106	40	42	64
934 - Fast-Food Restaurant with Drive-Through Window	294	50	147	147
960 - Super Convenience Market/Gas Station	356	50	178	178
310 - Hotel	75	0	0	75

ITE DEVIATION DETAILS

Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Landuse — No deviations from ITE.

Methods — No deviations from ITE.

External Trips

220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

720 - Medical-Dental Office Building (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

820 - Shopping Center (General Urban/Suburban)
The chosen pass-by% (25) is not provided by ITE. ITE recommends 34.

932 - High-Turnover (Sit-Down) Restaurant (General Urban/Suburban)
The chosen pass-by% (40) is not provided by ITE. ITE recommends 43.

960 - Super Convenience Market/Gas Station (General Urban/Suburban)
The chosen pass-by% (50) is not provided by ITE. ITE recommends 66.

310 - Hotel (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	1052
Total Exiting	1040
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	267
Total Exiting Internal Capture Reduction	267
Total Entering Pass-by Reduction	264
Total Exiting Pass-by Reduction	236
Total Entering Non-Pass-by Trips	521
Total Exiting Non-Pass-by Trips	537

Proposed Scenario 2 Development - Adjusted for 20% Maximum Internal Capture

Land Use	Size	Daily		AM Peak Hour		PM Peak Hour	
		Entry	Exit	Entry	Exit	Entry	Exit
220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)	400 Dwelling Units	1492	1491	41	137	128	75
Reduction		0	0	0	0	0	0
Internal		77	286	2	26	36	20
Pass-by		0	0	0	0	0	0
Non-pass-by		1415	1205	39	111	92	55
720 - Medical-Dental Office Building (General Urban/Suburban)	43 1000 Sq. Ft. GFA	782	782	82	23	41	107
Reduction		0	0	0	0	0	0
Internal		165	553	18	20	10	24
Pass-by		0	0	0	0	0	0
Non-pass-by		617	229	64	3	31	83
820 - Shopping Center (General Urban/Suburban)	125 1000 Sq. Ft. GLA	3499	3498	133	81	308	333
Reduction		0	0	0	0	0	0
Internal		279	237	12	6	45	41
Pass-by		483	489	30	19	66	73
Non-pass-by		2737	2772	91	56	197	219
932 - High-Turnover (Sit-Down) Restaurant (General Urban/Suburban)	15 1000 Sq. Ft. GFA	842	841	82	67	91	56
Reduction		0	0	0	0	0	0
Internal		372	130	26	12	18	17
Pass-by		141	213	22	22	29	16
Non-pass-by		329	498	34	33	44	23
934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban)	12 1000 Sq. Ft. GFA	2826	2825	246	236	204	188
Reduction		0	0	0	0	0	0
Internal		599	218	32	17	38	51
Pass-by		891	1043	105	107	83	69
Non-pass-by		1336	1564	109	112	83	68
960 - Super Convenience Market/Gas Station (General Urban/Suburban)	20 Vehicle Fueling Positions	2305	2305	281	281	230	229
Reduction		0	0	0	0	0	0
Internal		241	169	15	18	41	40
Pass-by		826	854	133	132	94	95
Non-pass-by		1238	1282	133	131	95	94
310 - Hotel (General Urban/Suburban)	140 Occupied Rooms	856	856	50	37	50	52
Reduction		0	0	0	0	0	0
Internal		25	165	2	8	16	11
Pass-by		0	0	0	0	0	0
Non-pass-by		831	691	48	29	34	41
Total		12602	12598	915	862	1052	1040
Total Reduction		0	0	0	0	0	0
Total Internal		1758	1758	107	107	204	204
Total Pass-by		2341	2599	290	280	272	253
Total Non-pass-by		8503	8241	518	475	576	583

PERIOD SETTING

Analysis Name : PM Peak Hour
Project Name : Baumgarten - Proposed PUD - Adjusted IC **No :**
Date: 11/15/2018 **City:**
State/Province: **Zip/Postal Code:**
Country: **Client Name:**
Analyst's Name: **Edition:** ITE-TGM 10th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)	Dwelling Units	400	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LOG) Ln(T) = 0.89Ln(X) +-0.02	128 63%	75 37%	203
720 - Medical-Dental Office Building (General Urban/Suburban)	1000 Sq. Ft. GFA	43	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LIN) T = 3.39 (X)+2.02	41 28%	107 72%	148
820 - Shopping Center (General Urban/Suburban)	1000 Sq. Ft. GLA	125	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Best Fit (LOG) Ln(T) = 0.74Ln(X) +2.89	308 48%	333 52%	641
932 - High-Turnover (Sit-Down) Restaurant (General Urban/Suburban)	1000 Sq. Ft. GFA	15(0)	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 9.77	91 62%	56 38%	147
934 - Fast-Food Restaurant with Drive-Through Window (General Urban/Suburban)	1000 Sq. Ft. GFA	12(0)	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 32.67	204 52%	188 48%	392
960 - Super Convenience Market/Gas Station (General Urban/Suburban)	Vehicle Fueling Positions	20	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 22.96	230 50%	229 50%	459
310 - Hotel (General Urban/Suburban)	Occupied Rooms	140	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 0.73	50 49%	52 51%	102

(0) indicates size out of range.

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
220 - Multifamily Housing (Low-Rise)	0 %	128	0 %	75
720 - Medical-Dental Office Building	0 %	41	0 %	107
820 - Shopping Center	0 %	308	0 %	333
932 - High-Turnover (Sit-Down) Restaurant	0 %	91	0 %	56
934 - Fast-Food Restaurant with Drive-Through Window	0 %	204	0 %	188
960 - Super Convenience Market/Gas Station	0 %	230	0 %	229
310 - Hotel	0 %	50	0 %	52

INTERNAL TRIPS

220 - Multifamily Housing (Low-Rise)				**720 - Medical-Dental Office Building**		
Exit 75	Demand Exit: 2 % (2)	Balanced: 2	Demand Entry: 28 % (11)	**Entry** 41		
Entry 128	Demand Entry: 2 % (3)	Balanced: 1	Demand Exit: 1 % (1)	**Exit** 107		
220 - Multifamily Housing (Low-Rise)				**820 - Shopping Center**		
Exit 75	Demand Exit: 11 % (8)	Balanced: 6	Demand Entry: 2 % (6)	**Entry** 308		
Entry 128	Demand Entry: 11 % (14)	Balanced: 14	Demand Exit: 6 % (20)	**Exit** 333		
220 - Multifamily Housing (Low-Rise)				**932 - High-Turnover (Sit-Down) Restaurant**		
Exit 75	Demand Exit: 5 % (4)	Balanced: 3	Demand Entry: 3 % (3)	**Entry** 91		
Entry 128	Demand Entry: 4 % (5)	Balanced: 2	Demand Exit: 4 % (2)	**Exit** 56		
220 - Multifamily Housing (Low-Rise)				**934 - Fast-Food Restaurant with Drive-Through Window**		
Exit 75	Demand Exit: 5 % (4)	Balanced: 4	Demand Entry: 3 % (6)	**Entry** 204		
Entry 128	Demand Entry: 4 % (5)	Balanced: 5	Demand Exit: 4 % (8)	**Exit** 188		
220 - Multifamily Housing (Low-Rise)				**960 - Super Convenience Market/Gas Station**		
Exit 75	Demand Exit: 11 % (8)	Balanced: 5	Demand Entry: 2 % (5)	**Entry** 230		
Entry 128	Demand Entry: 11 % (14)	Balanced: 14	Demand Exit: 6 % (14)	**Exit** 229		
220 - Multifamily Housing (Low-Rise)				**310 - Hotel**		
Exit 75	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry** 50		
Entry 128	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit** 52		
720 - Medical-Dental Office Building				**820 - Shopping Center**		
Exit 107	Demand Exit: 10 % (11)	Balanced: 11	Demand Entry: 4 % (12)	**Entry** 308		
Entry 41	Demand Entry: 15 % (6)	Balanced: 3	Demand Exit: 1 % (3)	**Exit** 333		
720 - Medical-Dental Office Building				**932 - High-Turnover (Sit-Down) Restaurant**		

Exit	107	Demand Exit: 2 % (2)	Balanced: 1	Demand Entry: 1 % (1)	**Entry**	91
Entry	41	Demand Entry: 15 % (6)	Balanced: 1	Demand Exit: 1 % (1)	**Exit**	56

720 - Medical-Dental Office Building — **934 - Fast-Food Restaurant with Drive-Through Window**

Exit	107	Demand Exit: 2 % (2)	Balanced: 2	Demand Entry: 1 % (2)	**Entry**	204
Entry	41	Demand Entry: 15 % (6)	Balanced: 2	Demand Exit: 1 % (2)	**Exit**	188

720 - Medical-Dental Office Building — **960 - Super Convenience Market/Gas Station**

Exit	107	Demand Exit: 10 % (11)	Balanced: 9	Demand Entry: 4 % (9)	**Entry**	230
Entry	41	Demand Entry: 15 % (6)	Balanced: 2	Demand Exit: 1 % (2)	**Exit**	229

720 - Medical-Dental Office Building — **310 - Hotel**

Exit	107	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	50
Entry	41	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	52

820 - Shopping Center — **932 - High-Turnover (Sit-Down) Restaurant**

Exit	333	Demand Exit: 7 % (23)	Balanced: 6	Demand Entry: 7 % (6)	**Entry**	91
Entry	308	Demand Entry: 12 % (37)	Balanced: 6	Demand Exit: 10 % (6)	**Exit**	56

820 - Shopping Center — **934 - Fast-Food Restaurant with Drive-Through Window**

Exit	333	Demand Exit: 7 % (23)	Balanced: 14	Demand Entry: 7 % (14)	**Entry**	204
Entry	308	Demand Entry: 12 % (37)	Balanced: 19	Demand Exit: 10 % (19)	**Exit**	188

820 - Shopping Center — **960 - Super Convenience Market/Gas Station**

Exit	333	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	230
Entry	308	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	229

820 - Shopping Center — **310 - Hotel**

Exit	333	Demand Exit: 2 % (7)	Balanced: 4	Demand Entry: 8 % (4)	**Entry**	50
Entry	308	Demand Entry: 1 % (3)	Balanced: 3	Demand Exit: 8 % (4)	**Exit**	52

932 - High-Turnover (Sit-Down) Restaurant — **934 - Fast-Food Restaurant with Drive-Through Window**

Exit	56	Demand Exit: 0 % (0)	Balanced: 0	Demand Entry: 0 % (0)	**Entry**	204
Entry	91	Demand Entry: 0 % (0)	Balanced: 0	Demand Exit: 0 % (0)	**Exit**	188

932 - High-Turnover (Sit-Down) Restaurant — **960 - Super Convenience Market/Gas Station**

Exit	56	Demand Exit: 10 % (6)	Balanced: 6	Demand Entry: 12 % (28)	**Entry**	230
Entry	91	Demand Entry: 7 % (6)	Balanced: 6	Demand Exit: 7 % (16)	**Exit**	229

932 - High-Turnover (Sit-Down) Restaurant — **310 - Hotel**

Exit	56	Demand Exit:	3 % (2)	Balanced: 2	Demand Entry:	35 % (18)	**Entry** 50
Entry	91	Demand Entry:	2 % (2)	Balanced: 2	Demand Exit:	34 % (18)	**Exit** 52

934 - Fast-Food Restaurant with Drive-Through Window — **960 - Super Convenience Market/Gas Station**

Exit	188	Demand Exit:	10 % (19)	Balanced: 19	Demand Entry:	12 % (28)	**Entry** 230
Entry	204	Demand Entry:	7 % (14)	Balanced: 14	Demand Exit:	7 % (16)	**Exit** 229

934 - Fast-Food Restaurant with Drive-Through Window — **310 - Hotel**

Exit	188	Demand Exit:	3 % (6)	Balanced: 6	Demand Entry:	35 % (18)	**Entry** 50
Entry	204	Demand Entry:	2 % (4)	Balanced: 4	Demand Exit:	34 % (18)	**Exit** 52

960 - Super Convenience Market/Gas Station — **310 - Hotel**

Exit	229	Demand Exit:	2 % (5)	Balanced: 4	Demand Entry:	8 % (4)	**Entry** 50
Entry	230	Demand Entry:	1 % (2)	Balanced: 2	Demand Exit:	8 % (4)	**Exit** 52

220 - Multifamily Housing (Low-Rise)

	Total Trips	Internal Trips							External Trips
		720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	128 (100%)	1 (1%)	14 (11%)	2 (2%)	5 (4%)	14 (11%)	0 (0%)	36 (28%)	92 (72%)
Exit	75 (100%)	2 (3%)	6 (8%)	3 (4%)	4 (5%)	5 (7%)	0 (0%)	20 (27%)	55 (73%)
Total	203 (100%)	3 (1%)	20 (10%)	5 (2%)	9 (4%)	19 (9%)	0 (0%)	56 (28%)	147 (72%)

720 - Medical-Dental Office Building

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	41 (100%)	2 (5%)	3 (7%)	1 (2%)	2 (5%)	2 (5%)	0 (0%)	10 (24%)	31 (76%)
Exit	107 (100%)	1 (1%)	11 (10%)	1 (1%)	2 (2%)	9 (8%)	0 (0%)	24 (22%)	83 (78%)
Total	148 (100%)	3 (2%)	14 (9%)	2 (1%)	4 (3%)	11 (7%)	0 (0%)	34 (23%)	114 (77%)

820 - Shopping Center

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	308 (100%)	6 (2%)	11 (4%)	6 (2%)	19 (6%)	0 (0%)	3 (1%)	45 (15%)	263 (85%)
Exit	333 (100%)	14 (4%)	3 (1%)	6 (2%)	14 (4%)	0 (0%)	4 (1%)	41 (12%)	292 (88%)
Total	641 (100%)	20 (3%)	14 (2%)	12 (2%)	33 (5%)	0 (0%)	7 (1%)	86 (13%)	555 (87%)

932 - High-Turnover (Sit-Down) Restaurant

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	91 (100%)	3 (3%)	1 (1%)	6 (7%)	0 (0%)	6 (7%)	2 (2%)	18 (20%)	73 (80%)
Exit	56 (100%)	2 (4%)	1 (2%)	6 (11%)	0 (0%)	6 (11%)	2 (4%)	17 (30%)	39 (70%)
Total	147 (100%)	5 (3%)	2 (1%)	12 (8%)	0 (0%)	12 (8%)	4 (3%)	35 (24%)	112 (76%)

934 - Fast-Food Restaurant with Drive-Through Window

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	960 - Super Convenience Market/Gas Station	310 - Hotel	Total	
Entry	204 (100%)	4 (2%)	2 (1%)	14 (7%)	0 (0%)	14 (7%)	4 (2%)	38 (19%)	166 (81%)
Exit	188 (100%)	5 (3%)	2 (1%)	19 (10%)	0 (0%)	19 (10%)	6 (3%)	51 (27%)	137 (73%)
Total	392 (100%)	9 (2%)	4 (1%)	33 (8%)	0 (0%)	33 (8%)	10 (3%)	89 (23%)	303 (77%)

960 - Super Convenience Market/Gas Station

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	310 - Hotel	Total	
Entry	230 (100%)	5 (2%)	9 (4%)	0 (0%)	6 (3%)	19 (8%)	2 (1%)	41 (18%)	189 (82%)
Exit	229 (100%)	14 (6%)	2 (1%)	0 (0%)	6 (3%)	14 (6%)	4 (2%)	40 (17%)	189 (83%)
Total	459 (100%)	19 (4%)	11 (2%)	0 (0%)	12 (3%)	33 (7%)	6 (1%)	81 (18%)	378 (82%)

310 - Hotel

	Total Trips	Internal Trips							External Trips
		220 - Multifamily Housing (Low-Rise)	720 - Medical-Dental Office Building	820 - Shopping Center	932 - High-Turnover (Sit-Down) Restaurant	934 - Fast-Food Restaurant with Drive-Through Window	960 - Super Convenience Market/Gas Station	Total	
Entry	50 (100%)	0 (0%)	0 (0%)	4 (8%)	2 (4%)	6 (12%)	4 (8%)	16 (32%)	34 (68%)
Exit	52 (100%)	0 (0%)	0 (0%)	3 (6%)	2 (4%)	4 (8%)	2 (4%)	11 (21%)	41 (79%)
Total	102 (100%)	0 (0%)	0 (0%)	7 (7%)	4 (4%)	10 (10%)	6 (6%)	27 (26%)	75 (74%)

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
220 - Multifamily Housing (Low-Rise)	147	0	0	147
720 - Medical-Dental Office Building	114	0	0	114

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
820 - Shopping Center	555	25	139	416
932 - High-Turnover (Sit-Down) Restaurant	112	40	45	67
934 - Fast-Food Restaurant with Drive-Through Window	303	50	152	151
960 - Super Convenience Market/Gas Station	378	50	189	189
310 - Hotel	75	0	0	75

ITE DEVIATION DETAILS

Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Landuse — No deviations from ITE.

Methods — No deviations from ITE.

External Trips

220 - Multifamily Housing (Low-Rise) (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

720 - Medical-Dental Office Building (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

820 - Shopping Center (General Urban/Suburban)
The chosen pass-by% (25) is not provided by ITE. ITE recommends 34.

932 - High-Turnover (Sit-Down) Restaurant (General Urban/Suburban)
The chosen pass-by% (40) is not provided by ITE. ITE recommends 43.

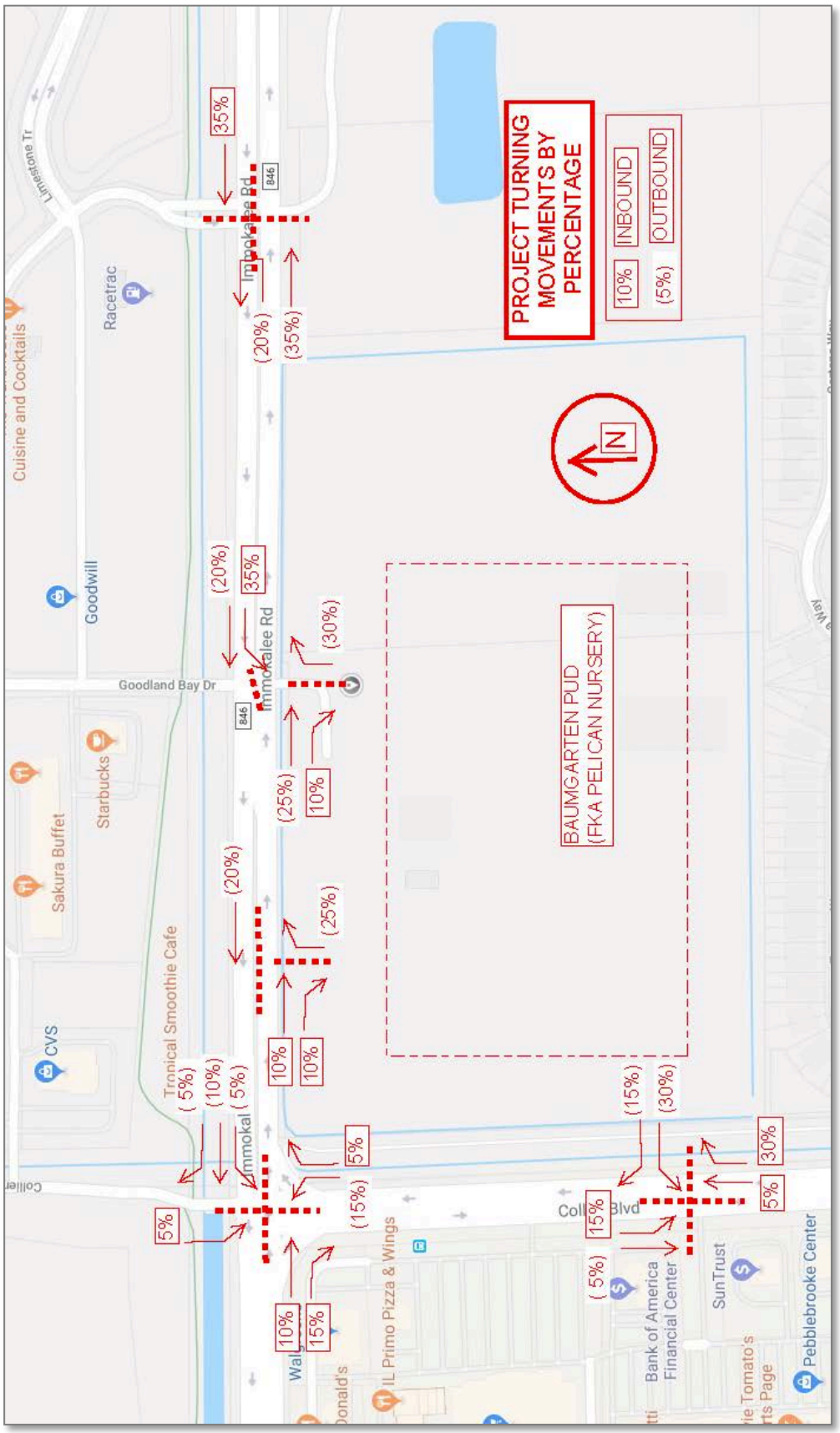
960 - Super Convenience Market/Gas Station (General Urban/Suburban)
The chosen pass-by% (50) is not provided by ITE. ITE recommends 66.

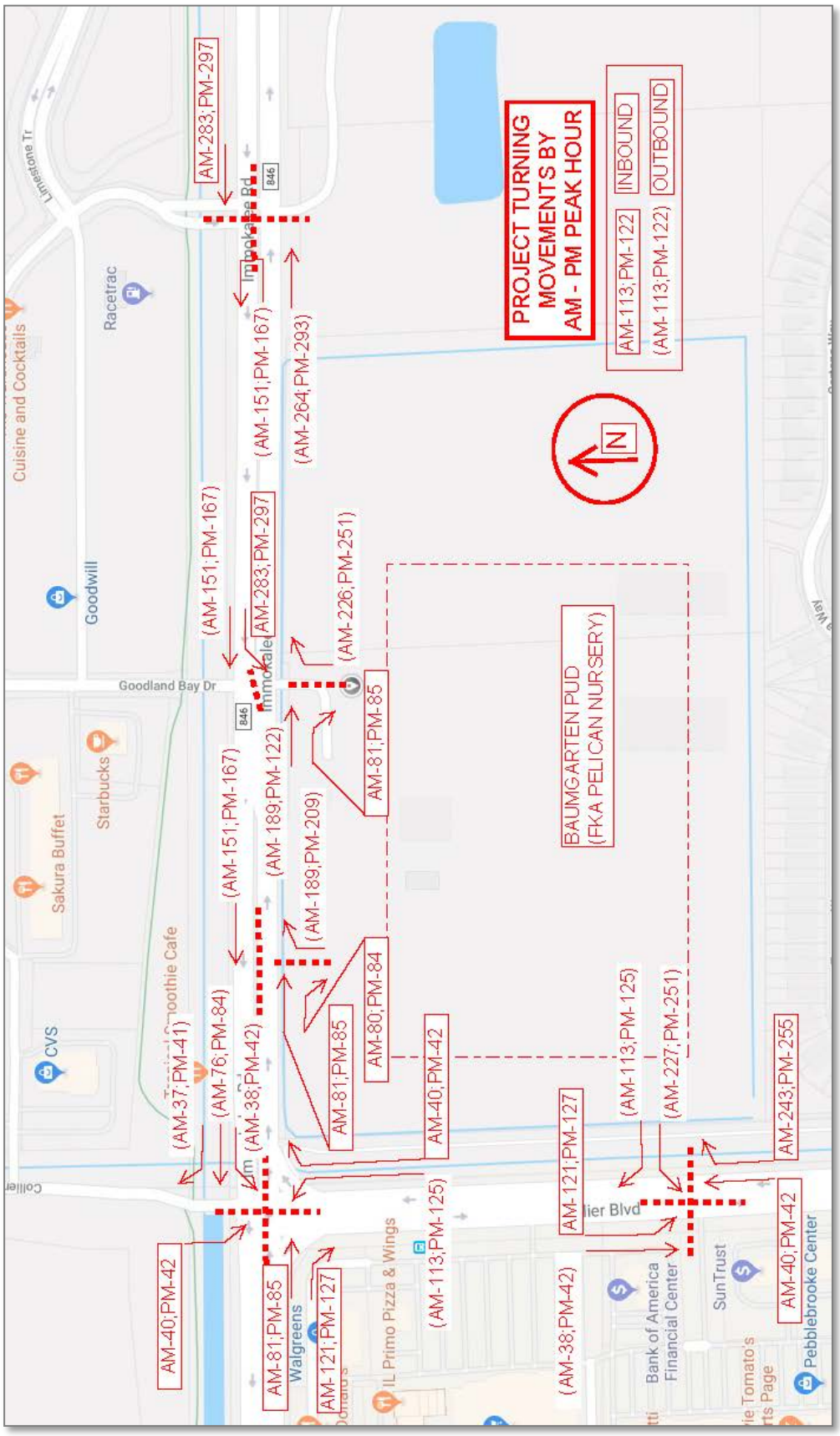
310 - Hotel (General Urban/Suburban)
ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	1052
Total Exiting	1040
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	204
Total Exiting Internal Capture Reduction	204
Total Entering Pass-by Reduction	272
Total Exiting Pass-by Reduction	253
Total Entering Non-Pass-by Trips	576
Total Exiting Non-Pass-by Trips	583

Appendix D: Turning Movement Exhibits


PROJECT TURNING MOVEMENTS BY PERCENTAGE
10% INBOUND
(5%) OUTBOUND
BAUMGARTEN PUD (FKA PELICAN NURSERY)
N
Immokalee Rd
Goodland Bay Dr
Collier Blvd
Limestone Tr
Racetrac
Cuisine and Cocktails
Goodwill
Starbucks
Sakura Buffet
CVS
Tropical Smoothie Cafe
IL Primo Pizza & Wings
Bank of America Financial Center
SunTrust
Pebblebrooke Center
35%
(20%)
(35%)
(30%)
(25%)
10%
(15%)
5%
30%


PROJECT TURNING MOVEMENTS BY AM - PM PEAK HOUR
INBOUND
OUTBOUND
(AM-113;PM-122)
(AM-113;PM-122)
AM-283;PM-297
(AM-151;PM-167)
(AM-264;PM-293)
(AM-151;PM-167)
AM-283;PM-297
(AM-226;PM-251)
AM-81;PM-85
(AM-189;PM-122)
(AM-189;PM-209)
(AM-151;PM-167)
(AM-76;PM-84)
(AM-37;PM-41)
(AM-38;PM-42)
AM-81;PM-85
AM-80;PM-84
AM-40;PM-42
AM-40;PM-42
AM-81;PM-85
AM-121;PM-127
(AM-113;PM-125)
AM-121;PM-127
(AM-113;PM-125)
(AM-227;PM-251)
AM-243;PM-255
(AM-38;PM-42)
AM-40;PM-42
BAUMGARTEN PUD
(FKA PELICAN NURSERY)
N
Cuisine and Cocktails
Racetrac
Goodwill
Goodland Bay Dr
Sakura Buffet
Starbucks
CVS
Walgreens
IL Primo Pizza & Wings
Bank of America
Financial Center
SunTrust
Pebblebrooke Center
Limestone Tr
846

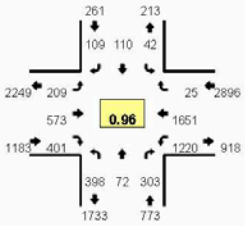
Appendix E: Raw Intersections Turning Movement Counts

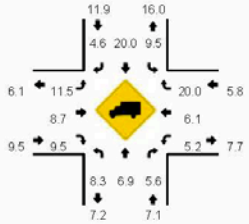
Collier Blvd. and Immokalee Rd. Intersection

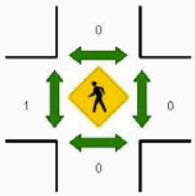
Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

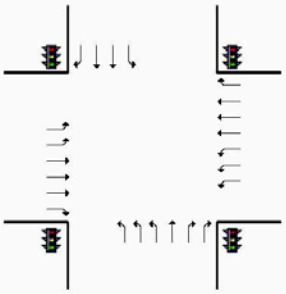
LOCATION: Collier Blvd -- Immokalee Rd — **QC JOB #:** 14599401
CITY/STATE: Naples, FL — **DATE:** Wed, Jan 31 2018

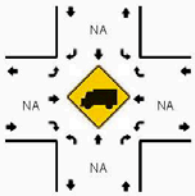
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

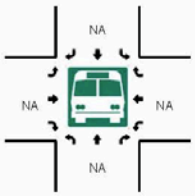












R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Immokalee Rd (Eastbound)					Immokalee Rd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	73	18	51	0	0	11	29	3	0	22	37	171	120	17	36	310	380	7	0	0	1285	
7:15 AM	65	19	62	2	0	18	32	4	0	22	28	140	65	18	19	303	441	3	0	6	1247	
7:30 AM	136	21	83	0	0	9	27	2	0	24	28	126	49	28	48	314	433	1	0	2	1331	
7:45 AM	122	14	107	0	0	4	22	3	0	29	23	136	45	30	19	293	397	4	0	2	1250	5113
8:00 AM	84	11	47	0	0	8	20	3	0	22	33	110	71	30	33	261	367	0	0	5	1105	4933
8:15 AM	94	24	67	0	0	3	18	5	0	21	31	143	71	11	52	217	316	2	0	1	1076	4762
8:30 AM	116	28	76	0	0	7	27	4	0	27	30	193	84	23	47	249	365	1	0	1	1278	4709
8:45 AM	92	19	55	0	0	7	24	0	0	29	37	134	76	14	37	215	248	2	1	0	990	4449

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	544	84	332	0	0	36	108	8	0	96	112	504	196	112	192	1256	1732	4	0	8	5324
Heavy Trucks	40	12	24			16	20	0			24	36	64			48	80	4			368
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

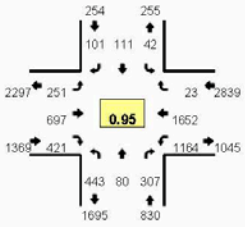
Comments:

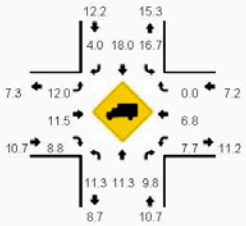
Report generated on 2/7/2018 2:48 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

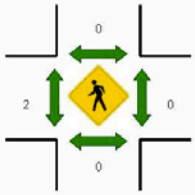
Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

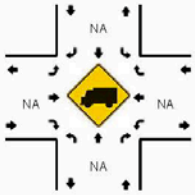
LOCATION: Collier Blvd -- Immokalee Rd — **QC JOB #:** 14599403
CITY/STATE: Naples, FL — **DATE:** Thu, Feb 01 2018

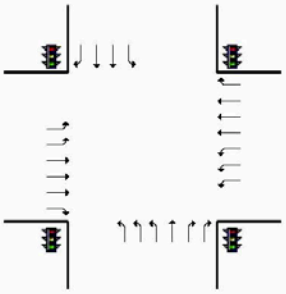
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

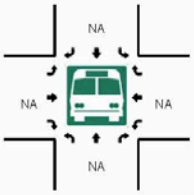












R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Immokalee Rd (Eastbound)					Immokalee Rd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	89	18	48	0	0	15	22	3	0	13	42	162	98	25	52	275	372	3	0	3	1240	
7:15 AM	106	24	81	0	0	6	28	3	0	27	36	187	47	11	29	313	450	2	0	3	1353	
7:30 AM	110	19	80	0	0	5	34	3	0	32	30	189	66	30	33	312	445	4	0	2	1394	
7:45 AM	138	19	98	0	0	14	27	7	2	13	42	159	59	35	37	263	385	2	1	4	1305	5292
8:00 AM	97	20	53	0	0	8	26	4	0	29	30	149	59	19	42	295	397	1	0	1	1230	5282
8:15 AM	82	13	47	0	0	6	26	2	0	30	34	184	71	23	49	211	343	1	0	2	1124	5053
8:30 AM	109	22	70	0	0	7	28	2	0	24	31	125	55	26	64	215	308	1	0	2	1089	4748
8:45 AM	104	16	93	0	0	6	16	2	0	20	41	183	52	17	61	236	270	1	0	1	1119	4562

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	440	76	320	0	0	20	136	12	0	128	120	756	264	120	132	1248	1780	16	0	8	5576
Heavy Trucks	36	4	40			4	20	4			32	72	44			152	120	0			528
Pedestrians		0					0					4					0				4
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

Report generated on 2/7/2018 2:48 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

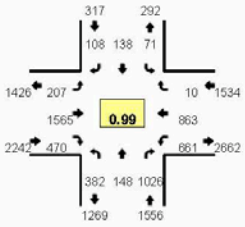
Type of peak hour being reported: Intersection Peak

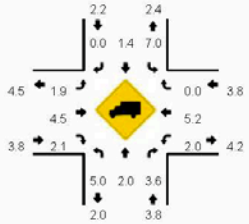
Method for determining peak hour: Total Entering Volume

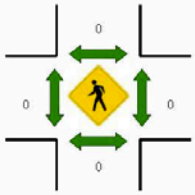
LOCATION: Collier Blvd -- Immokalee Rd
CITY/STATE: Naples, FL

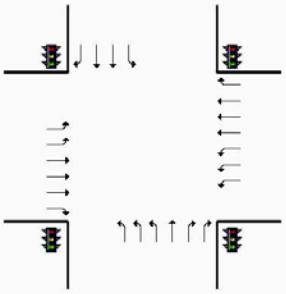
QC JOB #: 14599402
DATE: Wed, Jan 31 2018

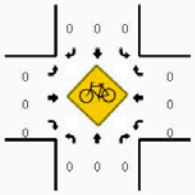
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

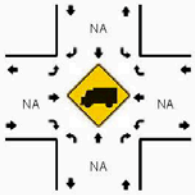


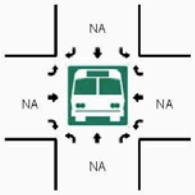












R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Immokalee Rd (Eastbound)					Immokalee Rd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	130	31	195	0	0	16	28	10	0	25	38	354	70	18	39	171	251	5	0	0	1381	
4:15 PM	109	23	187	0	0	23	32	1	0	24	28	322	55	14	45	184	234	1	0	0	1282	
4:30 PM	91	32	204	0	0	21	26	7	0	29	42	347	70	28	46	168	262	3	0	0	1376	
4:45 PM	78	12	189	0	0	23	35	3	0	24	34	326	61	28	35	176	181	1	0	0	1206	5245
5:00 PM	122	44	247	0	0	23	34	2	0	36	38	337	67	23	40	183	234	1	0	0	1431	5295
5:15 PM	82	26	257	0	0	14	37	4	0	23	35	410	79	19	45	170	219	3	0	0	1423	5436
5:30 PM	99	41	248	0	0	19	47	2	0	18	37	400	61	20	72	126	172	2	0	0	1364	5424
5:45 PM	79	37	274	0	0	15	20	3	0	20	24	418	51	11	55	182	238	4	0	0	1431	5649

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	498	176	988	0	0	92	136	8	0	144	152	1348	268	92	160	732	936	4	0	0	5724
Heavy Trucks	20	8	56			12	0	0			16	72	8			20	64	0			276
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

Report generated on 2/7/2018 2:48 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

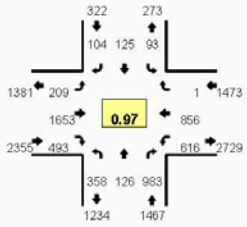
Type of peak hour being reported: Intersection Peak

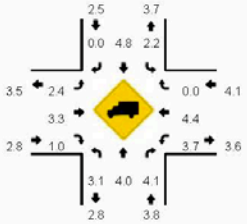
Method for determining peak hour: Total Entering Volume

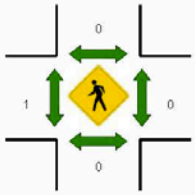
LOCATION: Collier Blvd -- Immokalee Rd
CITY/STATE: Naples, FL

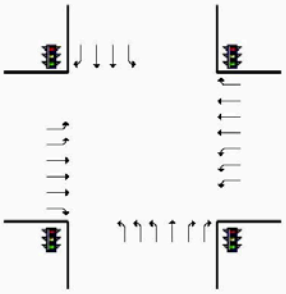
QC JOB #: 14599404
DATE: Thu, Feb 01 2018

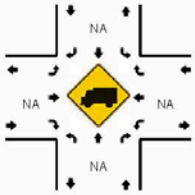
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

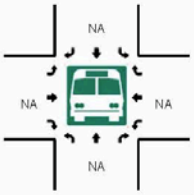












R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Immokalee Rd (Eastbound)					Immokalee Rd (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	172	41	198	0	0	17	29	4	0	22	37	299	77	19	43	241	288	0	0	0	1487	
4:15 PM	92	31	200	0	0	16	40	5	0	20	39	372	85	25	34	168	232	4	0	0	1363	
4:30 PM	78	27	197	0	0	25	27	6	0	26	33	323	72	22	43	176	224	1	0	0	1280	
4:45 PM	110	34	227	0	0	15	25	0	0	23	38	358	48	18	65	180	229	1	0	0	1371	5501
5:00 PM	98	34	216	0	0	21	33	0	0	27	32	426	65	10	48	146	221	1	0	0	1378	5392
5:15 PM	73	28	226	0	0	20	30	4	0	15	43	453	89	19	65	178	200	0	0	0	1443	5472
5:30 PM	102	30	258	0	0	25	40	0	0	26	45	365	62	17	71	135	229	0	0	0	1405	5597
5:45 PM	85	34	283	0	0	27	22	5	0	27	26	409	53	17	40	157	206	0	0	0	1391	5617

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	292	112	904	0	0	80	120	16	0	60	172	1812	356	76	260	712	800	0	0	0	5772
Heavy Trucks	8	12	36			4	8	0			0	60	4			24	40	0			196
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

Report generated on 2/7/2018 2:48 PM

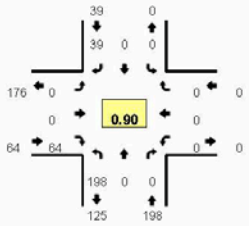
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

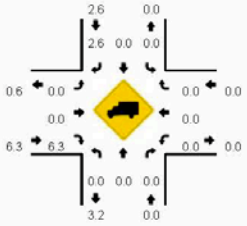
Collier Blvd. and Pebblebrooke Center Driveway Intersection

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

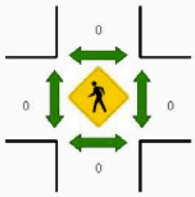
LOCATION: Collier Blvd -- Shopping Center (Turns Only) — **QC JOB #:** 14599405
CITY/STATE: Naples, FL — **DATE:** Wed, Jan 31 2018

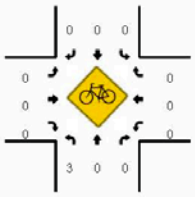
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:45 AM -- 9:00 AM

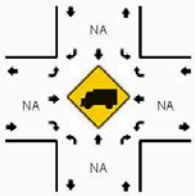


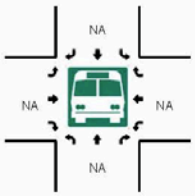


Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES









R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Shopping Center (Turns Only) (Eastbound)					Shopping Center (Turns Only) (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	6	0	0	13	0	0	0	3	0	0	0	0	11	0	0	0	0	0	0	0	33	
7:15 AM	15	0	0	11	0	0	0	2	0	0	0	0	8	0	0	0	0	0	0	0	36	
7:30 AM	17	0	0	14	0	0	0	4	0	0	0	0	7	0	0	0	0	0	0	0	42	
7:45 AM	24	0	0	5	0	0	0	5	0	0	0	0	8	0	0	0	0	0	0	0	42	153
8:00 AM	26	0	0	15	0	0	0	5	0	0	0	0	17	0	0	0	0	0	0	0	63	183
8:15 AM	33	0	0	20	0	0	0	10	0	0	0	0	16	0	0	0	0	0	0	0	79	226
8:30 AM	37	0	0	15	0	0	0	11	0	0	0	0	12	0	0	0	0	0	0	0	75	259
8:45 AM	41	0	0	11	0	0	0	13	0	0	0	0	19	0	0	0	0	0	0	0	84	301

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	164	0	0	44	0	0	0	52	0	0	0	0	76	0	0	0	0	0	0	0	336
Heavy Trucks	0	0	0			0	0	0			0	0	0			0	0	0			0
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

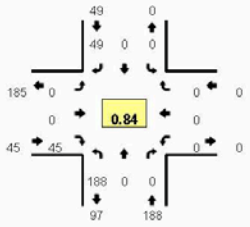
Comments:

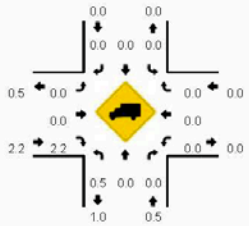
Report generated on 2/7/2018 2:48 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

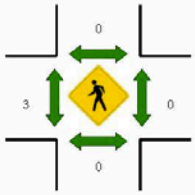
Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

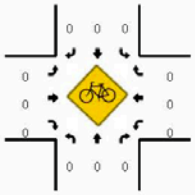
LOCATION: Collier Blvd -- Shopping Center (Turns Only) — **QC JOB #:** 14599407
CITY/STATE: Naples, FL — **DATE:** Thu, Feb 01 2018

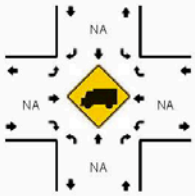
Peak-Hour: 8:00 AM -- 9:00 AM
Peak 15-Min: 8:30 AM -- 8:45 AM

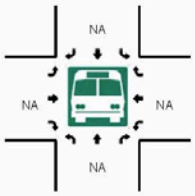












R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Shopping Center (Turns Only) (Eastbound)					Shopping Center (Turns Only) (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	15	0	0	11	0	0	0	4	0	0	0	0	12	0	0	0	0	0	0	0	42	
7:15 AM	12	0	0	12	0	0	0	4	0	0	0	0	11	0	0	0	0	0	0	0	39	
7:30 AM	18	0	0	15	0	0	0	4	0	0	0	0	15	0	0	0	0	0	0	0	52	
7:45 AM	22	0	0	11	0	0	0	4	0	0	0	0	12	0	0	0	0	0	0	0	49	182
8:00 AM	26	0	0	14	0	0	0	12	0	0	0	0	11	0	0	0	0	0	0	0	63	203
8:15 AM	28	0	0	16	0	0	0	6	0	0	0	0	9	0	0	0	0	0	0	0	59	223
8:30 AM	46	0	0	10	0	0	0	15	0	0	0	0	13	0	0	0	0	0	0	0	84	255
8:45 AM	36	0	0	12	0	0	0	16	0	0	0	0	12	0	0	0	0	0	0	0	76	282

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	184	0	0	40	0	0	0	60	0	0	0	0	52	0	0	0	0	0	0	0	336
Heavy Trucks	0	0	0			0	0	0			0	0	0			0	0	0			0
Pedestrians		0					0					4					0				4
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

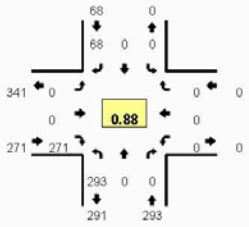
Comments:

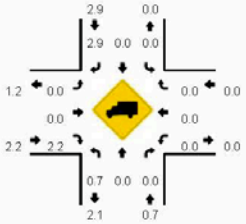
Report generated on 2/7/2018 2:48 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

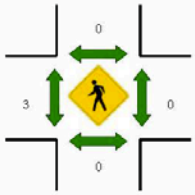
Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

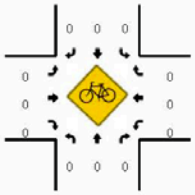
LOCATION: Collier Blvd -- Shopping Center (Turns Only) — **QC JOB #:** 14599406
CITY/STATE: Naples, FL — **DATE:** Wed, Jan 31 2018

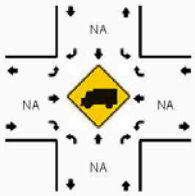
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 4:45 PM -- 5:00 PM

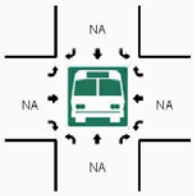












R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Shopping Center (Turns Only) (Eastbound)					Shopping Center (Turns Only) (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	62	0	0	0	0	0	0	19	0	0	0	0	63	0	0	0	0	0	0	0	144	
4:15 PM	71	0	0	0	0	0	0	18	0	0	0	0	66	0	0	0	0	0	0	0	155	
4:30 PM	59	0	0	4	0	0	0	12	0	0	0	0	61	0	0	0	0	0	0	0	136	
4:45 PM	85	0	0	6	0	0	0	15	0	0	0	0	74	0	0	0	0	0	0	0	180	615
5:00 PM	59	0	0	6	0	0	0	11	0	0	0	0	75	0	0	0	0	0	0	0	151	622
5:15 PM	64	0	0	5	0	0	0	20	0	0	0	0	58	0	0	0	0	0	0	0	147	614
5:30 PM	65	0	0	3	0	0	0	22	0	0	0	0	64	0	0	0	0	0	0	0	154	632
5:45 PM	62	0	0	7	0	0	0	16	0	0	0	0	67	0	0	0	0	0	0	0	152	604

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	340	0	0	24	0	0	0	60	0	0	0	0	296	0	0	0	0	0	0	0	720
Heavy Trucks	0	0	0			0	0	0			0	0	4			0	0	0			4
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

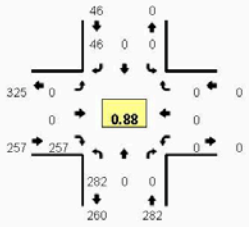
Comments:

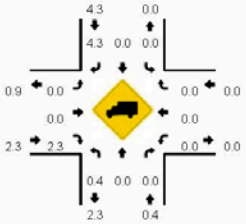
Report generated on 2/7/2018 2:48 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

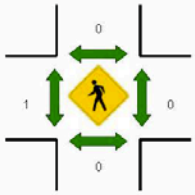
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

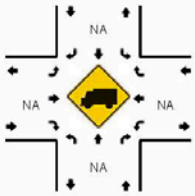
LOCATION: Collier Blvd -- Shopping Center (Turns Only) | **QC JOB #:** 14599408
CITY/STATE: Naples, FL | **DATE:** Thu, Feb 01 2018

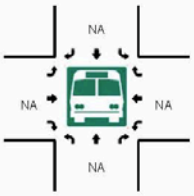
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:00 PM -- 5:15 PM











R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Shopping Center (Turns Only) (Eastbound)					Shopping Center (Turns Only) (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	61	0	0	7	0	0	0	12	0	0	0	0	57	0	0	0	0	0	0	0	137	
4:15 PM	50	0	0	4	0	0	0	16	0	0	0	0	41	0	0	0	0	0	0	0	111	
4:30 PM	62	0	0	9	0	0	0	17	0	0	0	0	72	0	0	0	0	0	0	0	160	
4:45 PM	64	0	0	4	0	0	0	18	0	0	0	0	53	0	0	0	0	0	0	0	139	547
5:00 PM	78	0	0	3	0	0	0	13	0	0	0	0	72	0	0	0	0	0	0	0	166	576
5:15 PM	52	0	0	0	0	0	0	6	0	0	0	0	55	0	0	0	0	0	0	0	113	578
5:30 PM	70	0	0	0	0	0	0	11	0	0	0	0	75	0	0	0	0	0	0	0	156	574
5:45 PM	79	0	0	0	0	0	0	16	0	0	0	0	55	0	0	0	0	0	0	0	150	585

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	312	0	0	12	0	0	0	52	0	0	0	0	298	0	0	0	0	0	0	0	664
Heavy Trucks	4	0	0			0	0	0			0	0	4			0	0	0			8
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

Comments:

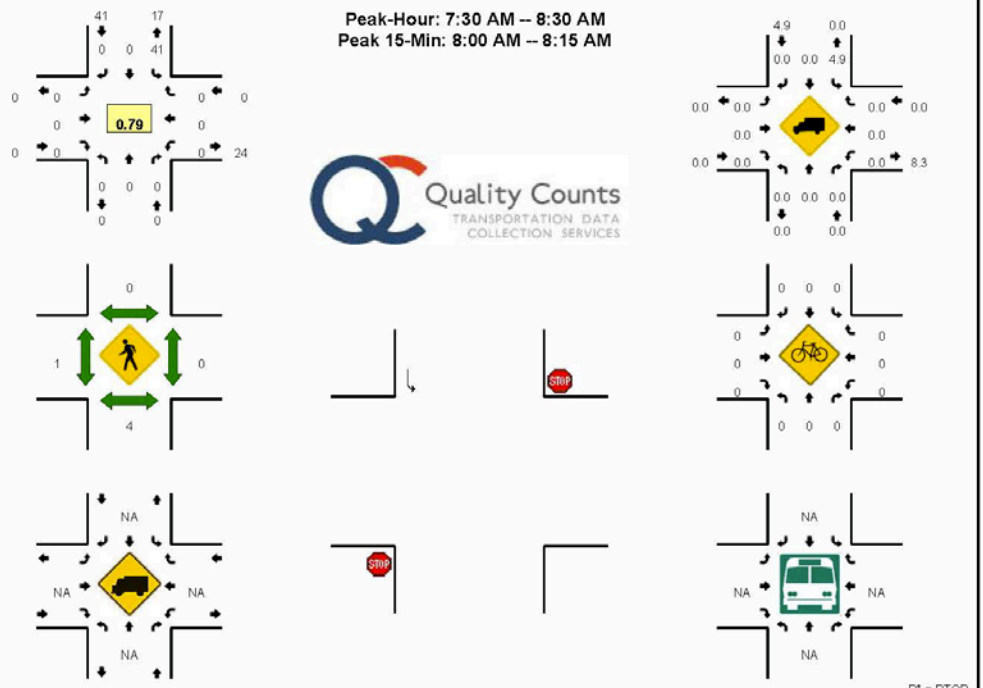
Report generated on 2/7/2018 2:48 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Collier Blvd. and Tuscany Cove Dr. Intersection – SB Left and U turns only

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

LOCATION: Collier Blvd -- Tuscany Cove Dr (SBL+U Only) — **QC JOB #:** 14599409
CITY/STATE: Naples, FL — **DATE:** Wed, Jan 31 2018

Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:00 AM -- 8:15 AM



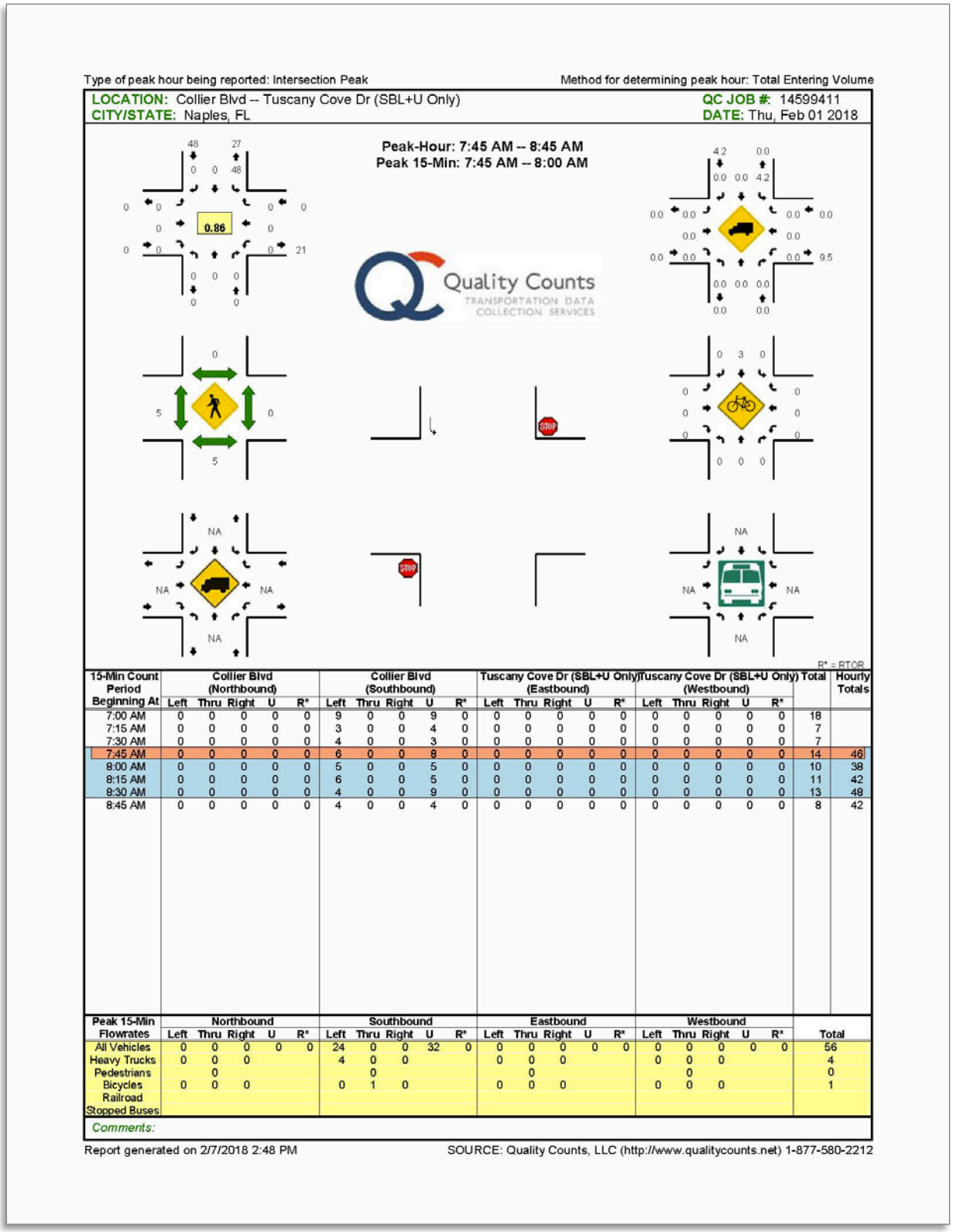
R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Tuscany Cove Dr (SBL+U Only) (Eastbound)					Tuscany Cove Dr (SBL+U Only) (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	0	0	0	0	0	5	0	0	2	0	0	0	0	0	0	0	0	0	0	0	7	
7:15 AM	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	
7:30 AM	0	0	0	0	0	8	0	0	2	0	0	0	0	0	0	0	0	0	0	0	10	
7:45 AM	0	0	0	0	0	5	0	0	2	0	0	0	0	0	0	0	0	0	0	0	7	28
8:00 AM	0	0	0	0	0	7	0	0	6	0	0	0	0	0	0	0	0	0	0	0	13	34
8:15 AM	0	0	0	0	0	4	0	0	7	0	0	0	0	0	0	0	0	0	0	0	11	41
8:30 AM	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	6	37
8:45 AM	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	10	40

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	0	0	0	28	0	0	24	0	0	0	0	0	0	0	0	0	0	0	52
Heavy Trucks	0	0	0			0	0	0			0	0	0			0	0	0			0
Pedestrians		4					0					4					0				8
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad																					
Stopped Buses																					

Comments:

Report generated on 2/7/2018 2:48 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212



Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

LOCATION: Collier Blvd -- Tuscany Cove Dr (SBL+U Only) — **QC JOB #:** 14599411
CITY/STATE: Naples, FL — **DATE:** Thu, Feb 01 2018

Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Tuscany Cove Dr (SBL+U Only) (Eastbound)					Tuscany Cove Dr (SBL+U Only) (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	18	
7:15 AM	0	0	0	0	0	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	7	
7:30 AM	0	0	0	0	0	4	0	0	3	0	0	0	0	0	0	0	0	0	0	0	7	
7:45 AM	0	0	0	0	0	6	0	0	8	0	0	0	0	0	0	0	0	0	0	0	14	46
8:00 AM	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	10	38
8:15 AM	0	0	0	0	0	6	0	0	5	0	0	0	0	0	0	0	0	0	0	0	11	42
8:30 AM	0	0	0	0	0	4	0	0	9	0	0	0	0	0	0	0	0	0	0	0	13	48
8:45 AM	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	8	42

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	0	0	0	24	0	0	32	0	0	0	0	0	0	0	0	0	0	0	56
Heavy Trucks	0	0	0			4	0	0			0	0	0			0	0	0			4
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	1	0			0	0	0			0	0	0			1
Railroad Stopped Buses																					

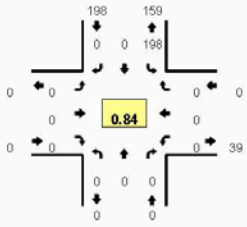
Comments:

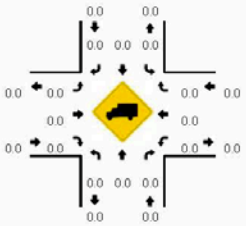
Report generated on 2/7/2018 2:48 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

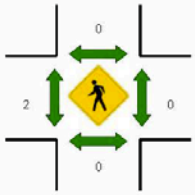
LOCATION: Collier Blvd -- Tuscany Cove Dr (SBL+U Only) — **QC JOB #:** 14599410
CITY/STATE: Naples, FL — **DATE:** Wed, Jan 31 2018

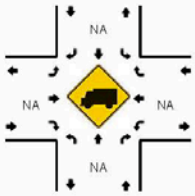
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

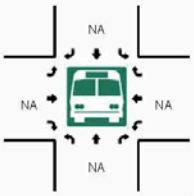




Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES







R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Tuscany Cove Dr (SBL+U Only) (Eastbound)					Tuscany Cove Dr (SBL+U Only) (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	0	0	0	0	0	15	0	0	34	0	0	0	0	0	0	0	0	0	0	0	49	
4:15 PM	0	0	0	0	0	3	0	0	44	0	0	0	0	0	0	0	0	0	0	0	47	
4:30 PM	0	0	0	0	0	11	0	0	34	0	0	0	0	0	0	0	0	0	0	0	45	
4:45 PM	0	0	0	0	0	12	0	0	33	0	0	0	0	0	0	0	0	0	0	0	45	186
5:00 PM	0	0	0	0	0	8	0	0	45	0	0	0	0	0	0	0	0	0	0	0	53	190
5:15 PM	0	0	0	0	0	6	0	0	28	0	0	0	0	0	0	0	0	0	0	0	34	177
5:30 PM	0	0	0	0	0	13	0	0	46	0	0	0	0	0	0	0	0	0	0	0	59	191
5:45 PM	0	0	0	0	0	12	0	0	40	0	0	0	0	0	0	0	0	0	0	0	52	198

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	0	0	0	52	0	0	184	0	0	0	0	0	0	0	0	0	0	0	236
Heavy Trucks	0	0	0			0	0	0			0	0	0			0	0	0			0
Pedestrians		0					0					0					0				0
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0
Railroad Stopped Buses																					

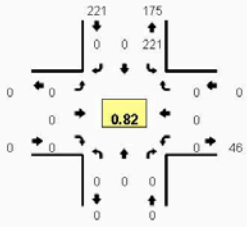
Comments:

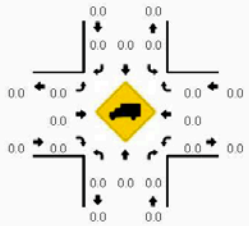
Report generated on 2/7/2018 2:48 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak — Method for determining peak hour: Total Entering Volume

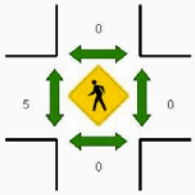
LOCATION: Collier Blvd -- Tuscany Cove Dr (SBL+U Only) — **QC JOB #:** 14599412
CITY/STATE: Naples, FL — **DATE:** Thu, Feb 01 2018

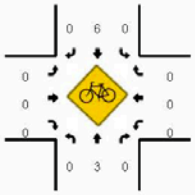
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

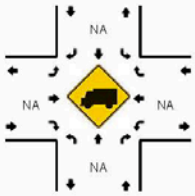


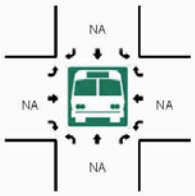


Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES









R* = RTOR

15-Min Count Period Beginning At	Collier Blvd (Northbound)					Collier Blvd (Southbound)					Tuscany Cove Dr (SBL+U Only) (Eastbound)					Tuscany Cove Dr (SBL+U Only) (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	0	0	0	0	0	12	0	0	39	0	0	0	0	0	0	0	0	0	0	0	51	
4:15 PM	0	0	0	0	0	12	0	0	43	0	0	0	0	0	0	0	0	0	0	0	55	
4:30 PM	0	0	0	0	0	14	0	0	34	0	0	0	0	0	0	0	0	0	0	0	48	
4:45 PM	0	0	0	0	0	12	0	0	39	0	0	0	0	0	0	0	0	0	0	0	51	205
5:00 PM	0	0	0	0	0	8	0	0	59	0	0	0	0	0	0	0	0	0	0	0	67	221
5:15 PM	0	0	0	0	0	15	0	0	31	0	0	0	0	0	0	0	0	0	0	0	46	212
5:30 PM	0	0	0	0	0	12	0	0	41	0	0	0	0	0	0	0	0	0	0	0	53	217
5:45 PM	0	0	0	0	0	6	0	0	30	0	0	0	0	0	0	0	0	0	0	0	36	202

Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	
All Vehicles	0	0	0	0	0	32	0	0	236	0	0	0	0	0	0	0	0	0	0	0	268
Heavy Trucks	0	0	0			0	0	0			0	0	0			0	0	0			0
Pedestrians		0					0					0					0				0
Bicycles	0	1	0			0	2	0			0	0	0			0	0	0			3
Railroad																					
Stopped Buses																					

Comments:

Report generated on 2/7/2018 2:48 PM — SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix F: FDOT 2017 Peak Season Factor Category Report – Excerpt

2017 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 0300 COLLIER COUNTYWIDE

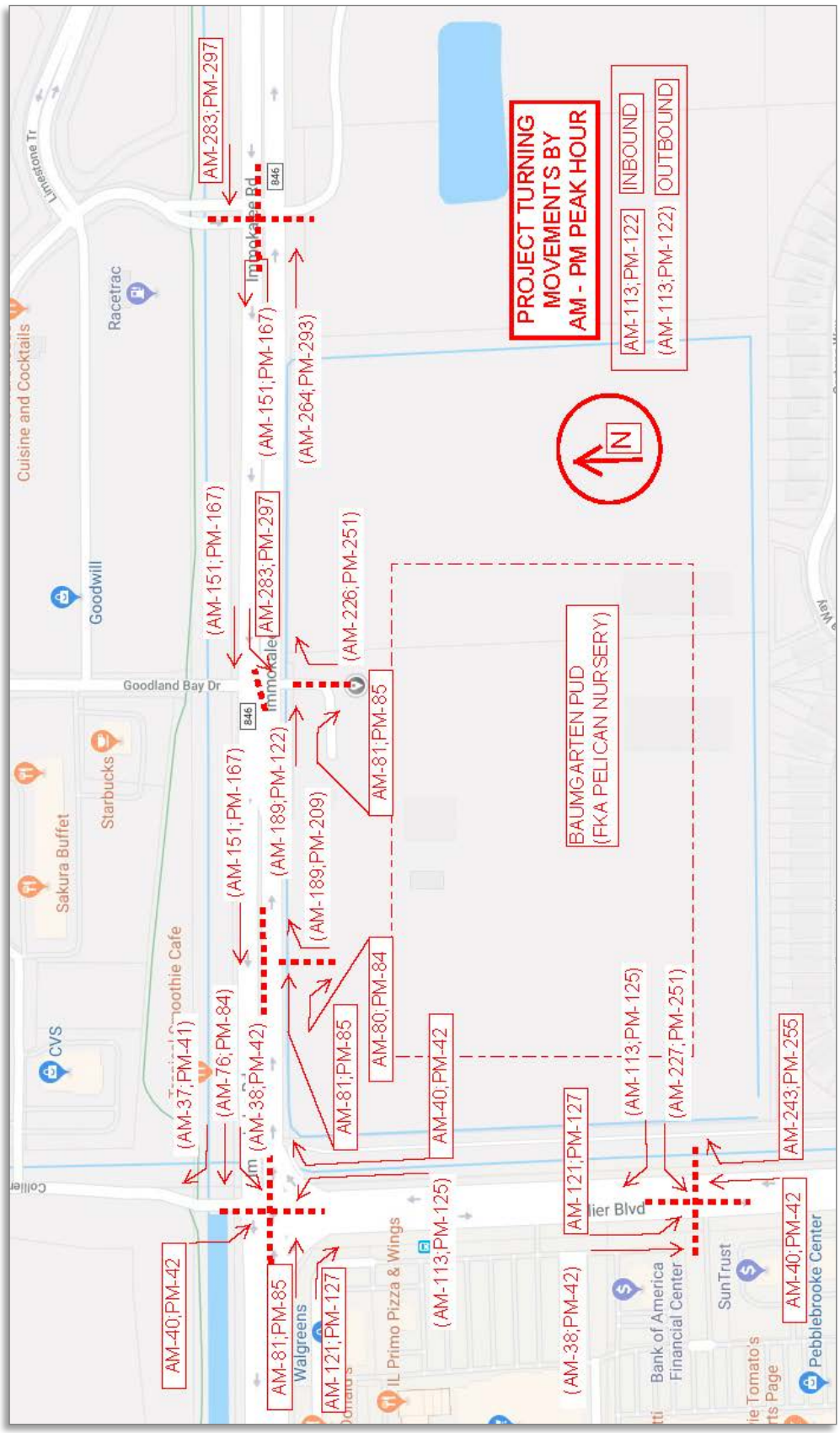
MOCF: 0.88

WEEK	DATES	SF	PSCF
1	01/01/2017 - 01/07/2017	1.05	1.19
2	01/08/2017 - 01/14/2017	0.99	1.13
3	01/15/2017 - 01/21/2017	0.93	1.06
* 4	01/22/2017 - 01/28/2017	0.91	1.03
* 5	01/29/2017 - 02/04/2017	0.89	1.01
* 6	02/05/2017 - 02/11/2017	0.87	0.99
* 7	02/12/2017 - 02/18/2017	0.86	0.98
* 8	02/19/2017 - 02/25/2017	0.86	0.98
* 9	02/26/2017 - 03/04/2017	0.85	0.97
*10	03/05/2017 - 03/11/2017	0.85	0.97
*11	03/12/2017 - 03/18/2017	0.85	0.97
*12	03/19/2017 - 03/25/2017	0.86	0.98
*13	03/26/2017 - 04/01/2017	0.88	1.00
*14	04/02/2017 - 04/08/2017	0.89	1.01
*15	04/09/2017 - 04/15/2017	0.91	1.03
*16	04/16/2017 - 04/22/2017	0.92	1.05
17	04/23/2017 - 04/29/2017	0.94	1.07
18	04/30/2017 - 05/06/2017	0.96	1.09
19	05/07/2017 - 05/13/2017	0.97	1.10
20	05/14/2017 - 05/20/2017	0.99	1.13
21	05/21/2017 - 05/27/2017	1.02	1.16
22	05/28/2017 - 06/03/2017	1.06	1.20
23	06/04/2017 - 06/10/2017	1.09	1.24
24	06/11/2017 - 06/17/2017	1.13	1.28
25	06/18/2017 - 06/24/2017	1.11	1.26
26	06/25/2017 - 07/01/2017	1.09	1.24
27	07/02/2017 - 07/08/2017	1.07	1.22
28	07/09/2017 - 07/15/2017	1.06	1.20
29	07/16/2017 - 07/22/2017	1.06	1.20
30	07/23/2017 - 07/29/2017	1.06	1.20
31	07/30/2017 - 08/05/2017	1.07	1.22
32	08/06/2017 - 08/12/2017	1.07	1.22
33	08/13/2017 - 08/19/2017	1.08	1.23
34	08/20/2017 - 08/26/2017	1.16	1.32
35	08/27/2017 - 09/02/2017	1.24	1.41
36	09/03/2017 - 09/09/2017	1.32	1.50
37	09/10/2017 - 09/16/2017	1.40	1.59
38	09/17/2017 - 09/23/2017	1.35	1.53
39	09/24/2017 - 09/30/2017	1.31	1.49
40	10/01/2017 - 10/07/2017	1.26	1.43
41	10/08/2017 - 10/14/2017	1.22	1.39
42	10/15/2017 - 10/21/2017	1.17	1.33
43	10/22/2017 - 10/28/2017	1.15	1.31
44	10/29/2017 - 11/04/2017	1.12	1.27
45	11/05/2017 - 11/11/2017	1.09	1.24
46	11/12/2017 - 11/18/2017	1.06	1.20
47	11/19/2017 - 11/25/2017	1.06	1.20
48	11/26/2017 - 12/02/2017	1.05	1.19
49	12/03/2017 - 12/09/2017	1.05	1.19
50	12/10/2017 - 12/16/2017	1.05	1.19
51	12/17/2017 - 12/23/2017	1.01	1.15
52	12/24/2017 - 12/30/2017	0.97	1.10
53	12/31/2017 - 12/31/2017	0.93	1.06

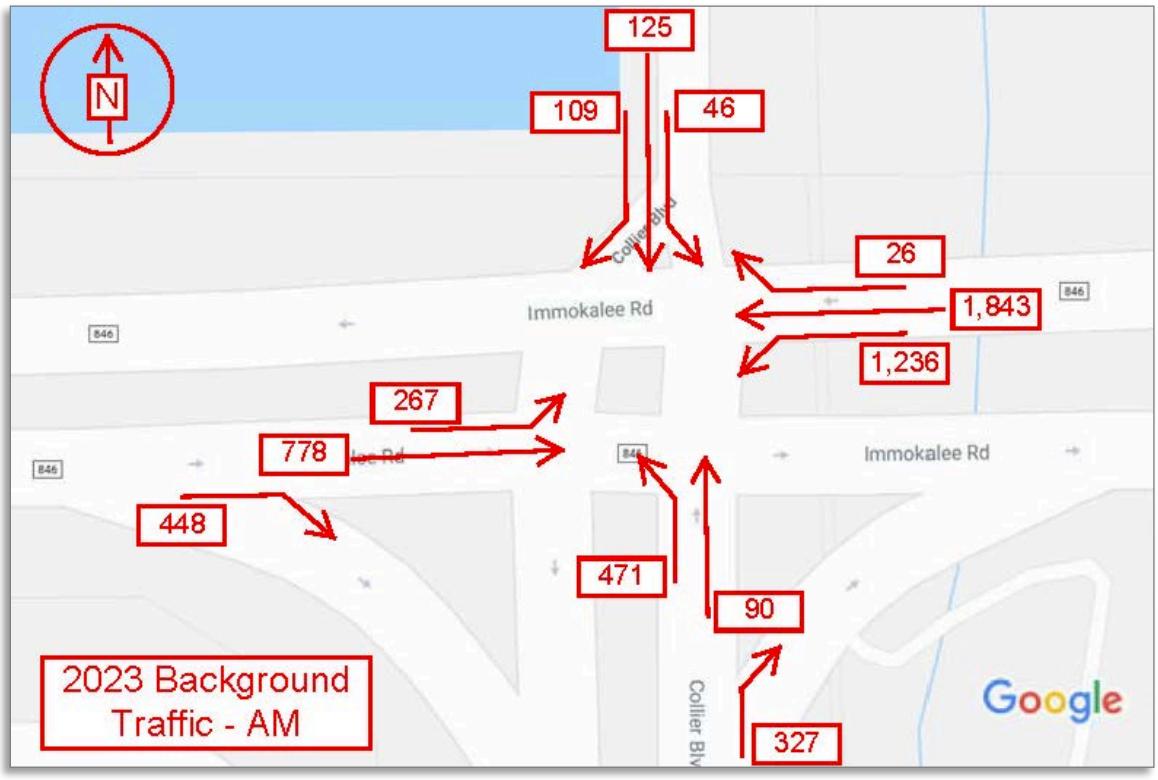
* PEAK SEASON

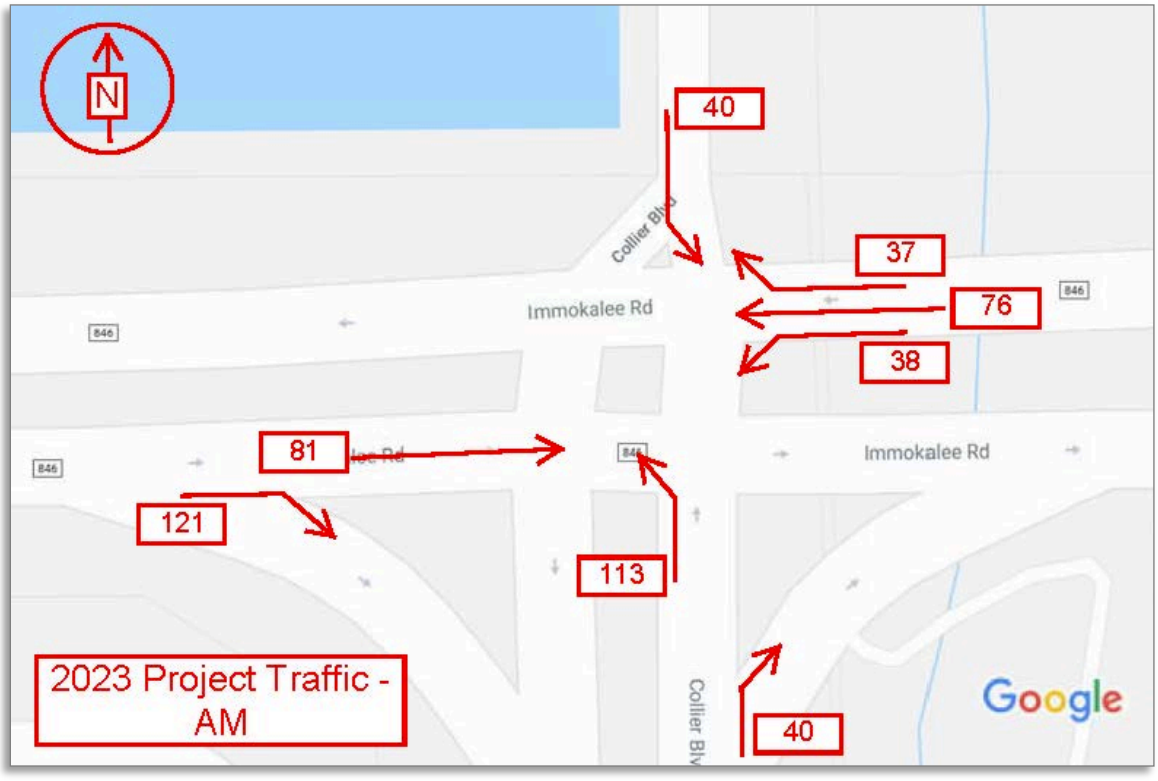
02-MAR-2018 15:35:04 830UPD 1_0300_PKSEASON.TXT

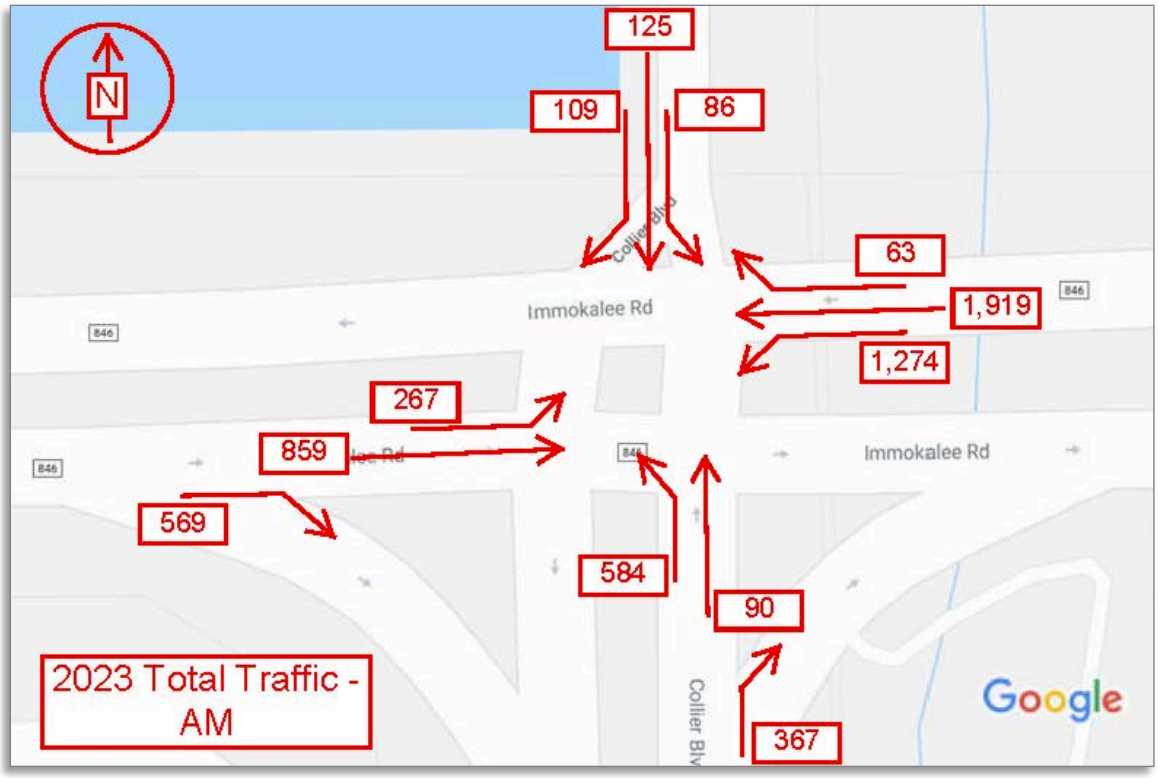
Appendix G: Intersections Projected Traffic at Buildout Conditions


PROJECT TURNING MOVEMENTS BY AM - PM PEAK HOUR
AM-113;PM-122 INBOUND
(AM-113;PM-122) OUTBOUND
BAUMGARTEN PUD (FKA PELICAN NURSERY)
N
Limestone Tr
Racetrac
Cuisine and Cocktails
Goodwill
Goodland Bay Dr
Sakura Buffet
Starbucks
CVS
Walgreens
IL Primo Pizza & Wings
Bank of America Financial Center
SunTrust
Pebblebrooke Center
846
AM-283;PM-297
(AM-151;PM-167)
(AM-264;PM-293)
(AM-226;PM-251)
AM-81;PM-85
(AM-189;PM-209)
(AM-189;PM-122)
AM-80;PM-84
AM-40;PM-42
(AM-37;PM-41)
(AM-76;PM-84)
(AM-38;PM-42)
AM-81;PM-85
AM-121;PM-127
(AM-113;PM-125)
AM-40;PM-42
(AM-38;PM-42)
(AM-227;PM-251)
AM-243;PM-255
AM-40;PM-42

Collier Blvd. and Immokalee Rd. Intersection

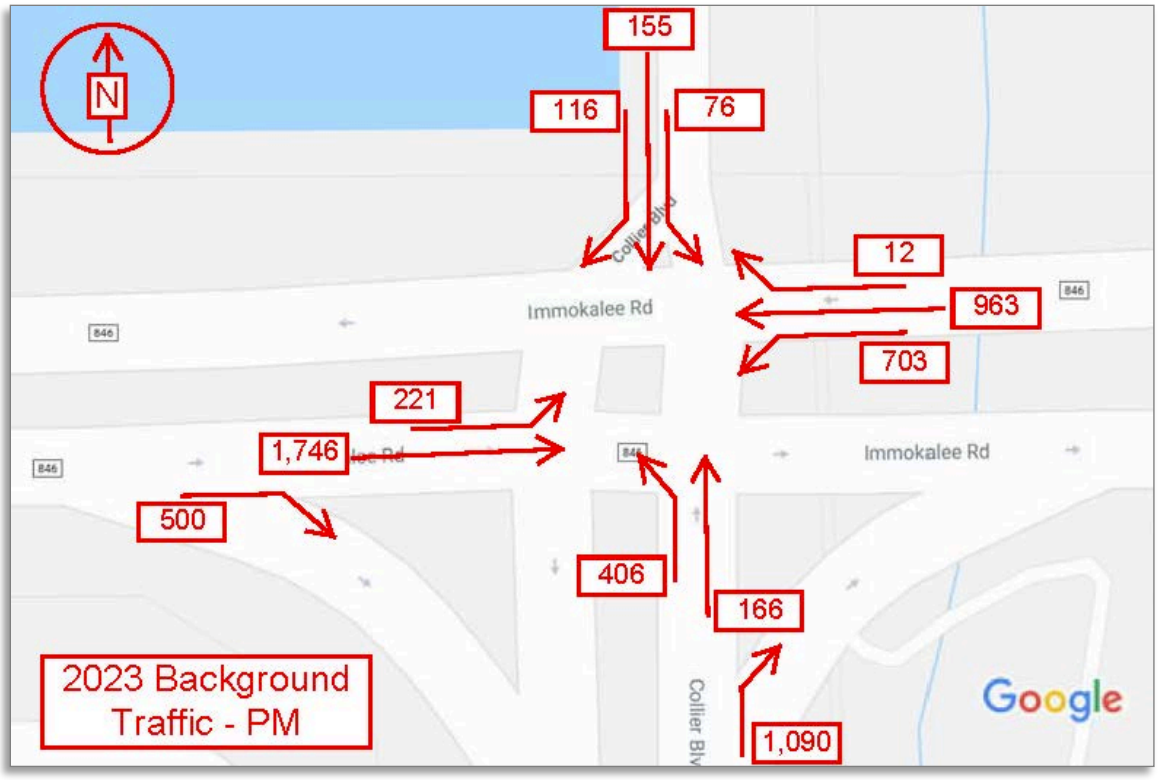


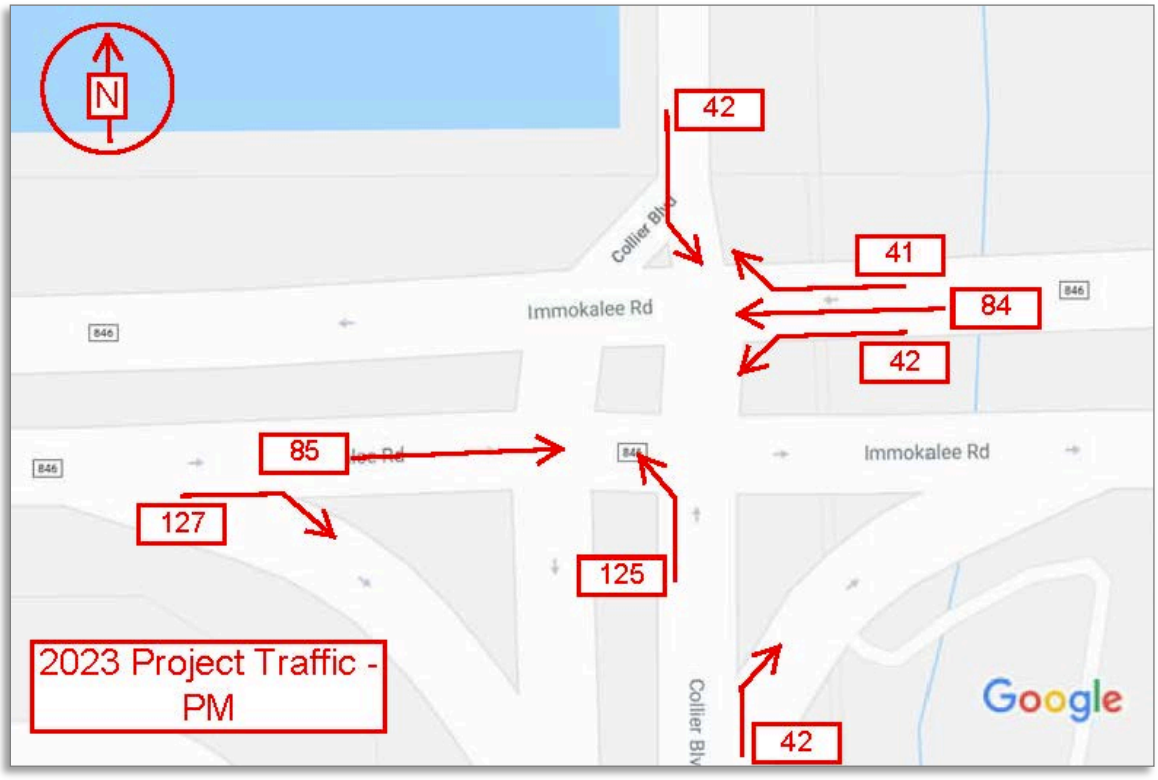


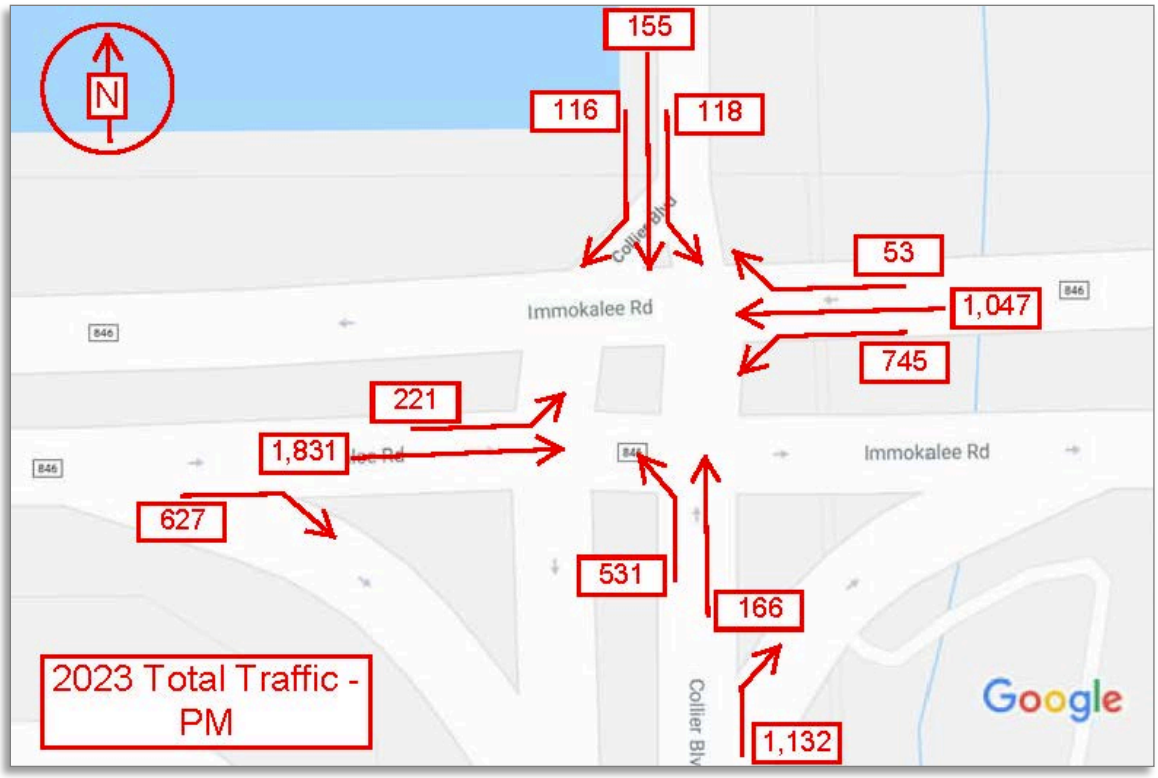


PROJECT - INTERSECTION TURNING MOVEMENT COUNTS - WITH FULL OPENING (SIGNAL) AT PEBBLEBROOKE AND CR 951
INTERSECTION - COLLIER BLVD AND IMMOKALEE RD
COUNT DATA - DATE - 02-01-2018
COUNT DATA - TIME - 7.00 AM - 9.00 AM
PEAK HOUR - 7.00 AM - 8.00 AM

AM PEAK HOUR FUTURE TRAFFIC																
	IMMOKALEE BOULEVARD								COLLIER BOULEVARD							
	WESTBOUND				EASTBOUND				SOUTHBOUND				NORTHBOUND			
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL
TMCs	1,164	1,652	23	2,839	251	697	421	1,369	42	111	101	254	443	80	307	830
PSCF	1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01	
2018 BACKGROUND VOLUME	**1,176**	**1,669**	**24**	**2,869**	**254**	**704**	**426**	**1,384**	**43**	**113**	**103**	**259**	**448**	**81**	**311**	**840**
GROWTH RATE	1.0%	2.0%	1.0%		1.0%	2.0%	1.0%		1.0%	2.0%	1.0%		1.0%	2.0%	1.0%	
YEARS TO BUILD-OUT	5	5	5		5	5	5		5	5	5		5	5	5	
2023 BACKGROUND	1,236	1,843	26	3,105	267	778	448	1,493	46	125	109	280	471	90	327	888
PROJECT TURNING VOLUMES	38	76	37	151	0	81	121	202	40	0	0	40	113	0	40	153
2023 BACKGROUND + PROJECT	**1,274**	**1,919**	**63**	**3,256**	**267**	**859**	**569**	**1,695**	**86**	**125**	**109**	**320**	**584**	**90**	**367**	**1,041**


N
155
116
76
12
963
703
Immokalee Rd
846
221
1,746
500
406
166
1,090
Collier Blvd
2023 Background Traffic - PM
Google

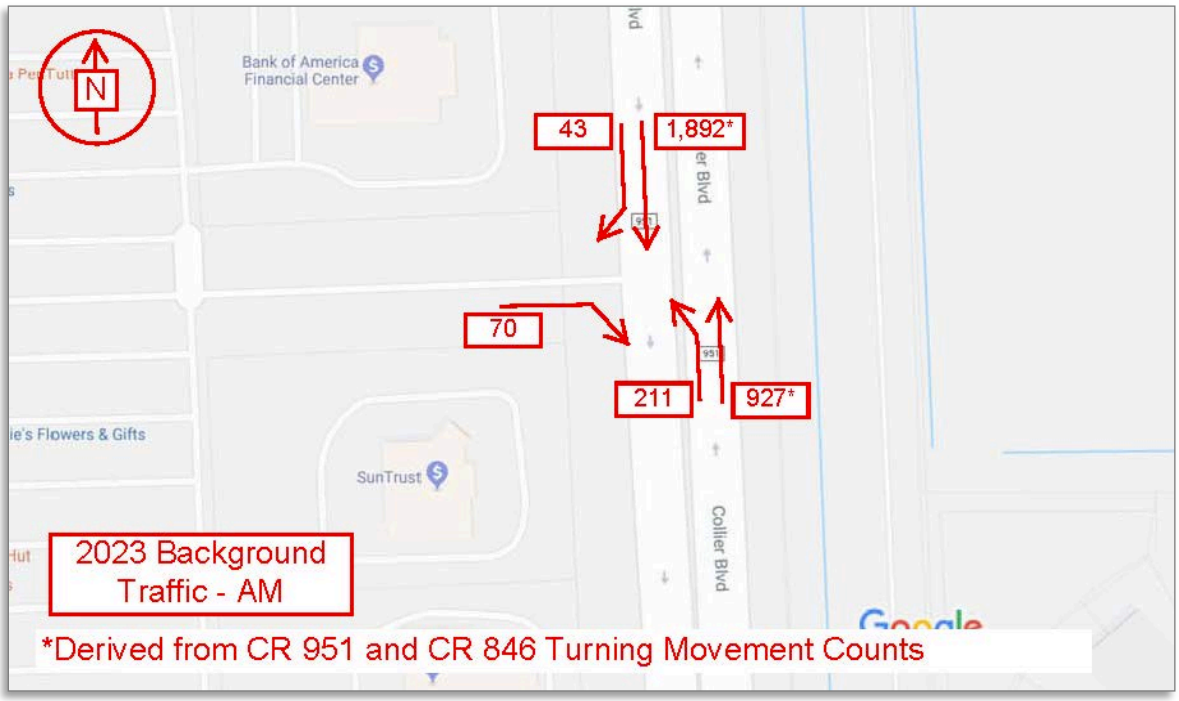

N
42
41
84
42
Immokalee Rd
846
85
127
125
42
Collier Blvd
2023 Project Traffic - PM
Google

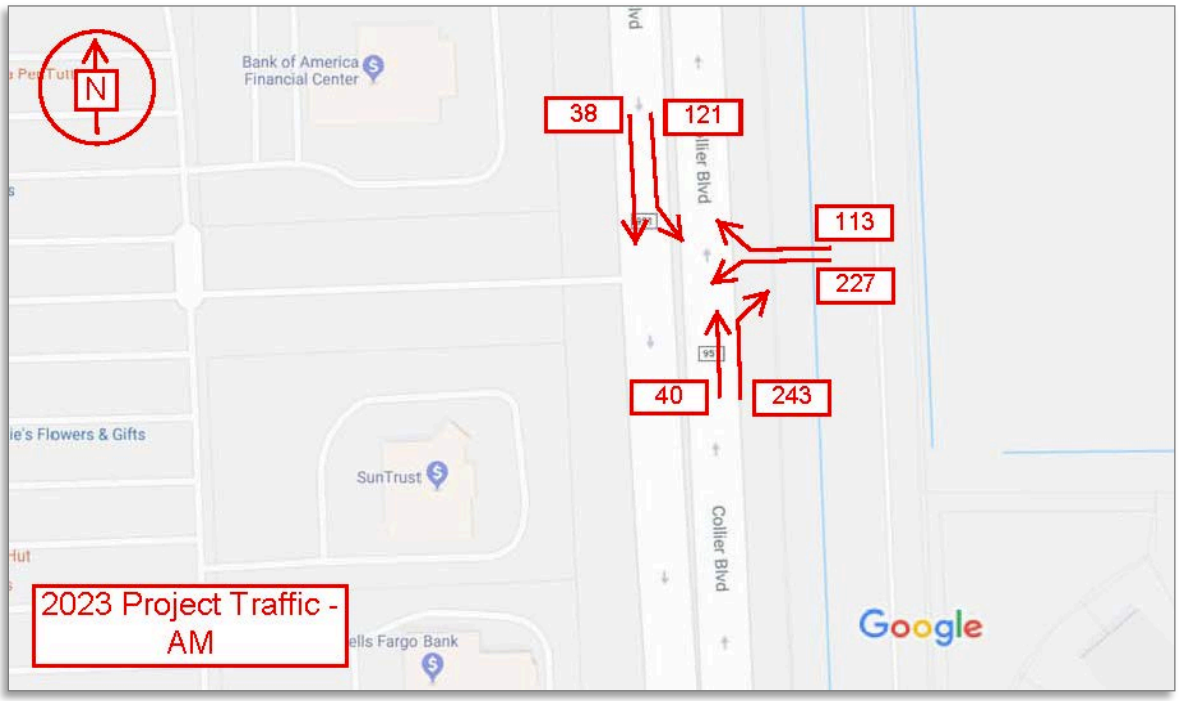


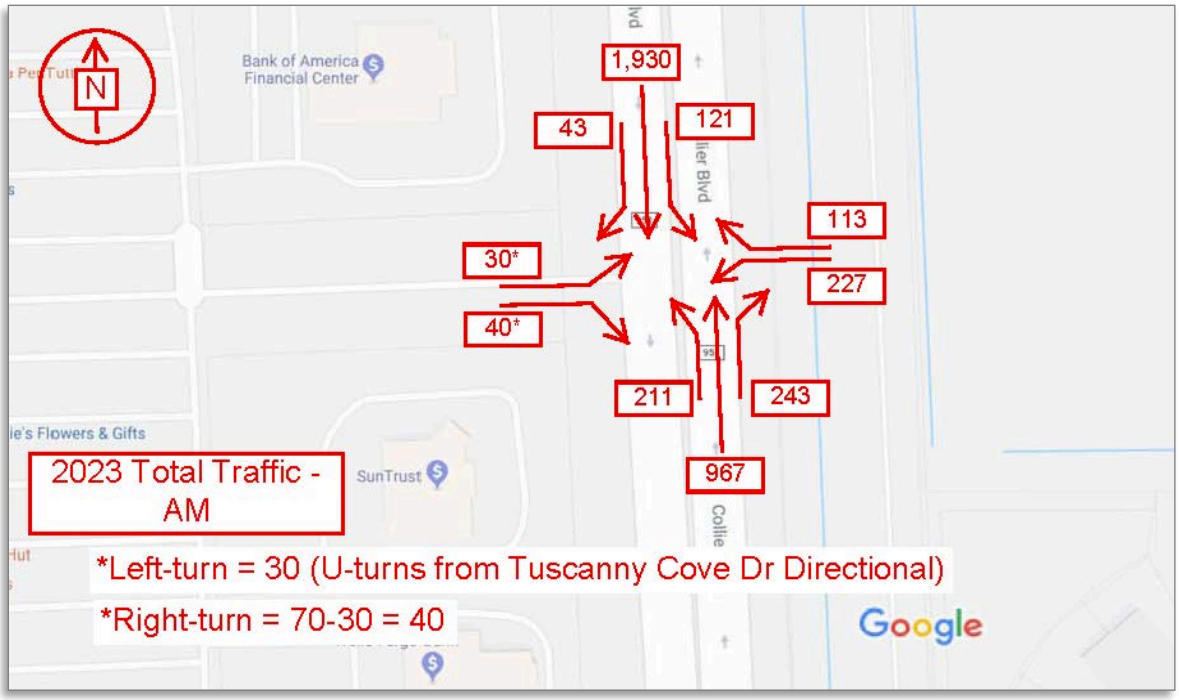
PROJECT - INTERSECTION TURNING MOVEMENT COUNTS - WITH FULL OPENING (SIGNAL) AT PEBBLEBROOKE AND CR 951
INTERSECTION - COLLIER BLVD AND IMMOKALEE RD
COUNT DATA - DATE - 01-31-2018
COUNT DATA - TIME - 4.00 PM - 6.00 PM
PEAK HOUR - 5.00 PM - 6.00 PM

PM PEAK HOUR FUTURE TRAFFIC																
	IMMOKALEE BOULEVARD								COLLIER BOULEVARD							
	WESTBOUND				EASTBOUND				SOUTHBOUND				NORTHBOUND			
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL
TMCs	661	863	10	1,534	207	1,565	470	2,242	71	138	108	317	382	148	1,026	1,556
PSCF	1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01	
2018 BACKGROUND VOLUME	**668**	**872**	**11**	**1,551**	**210**	**1,581**	**475**	**2,266**	**72**	**140**	**110**	**322**	**386**	**150**	**1,037**	**1,573**
GROWTH RATE	1.0%	2.0%	1.0%		1.0%	2.0%	1.0%		1.0%	2.0%	1.0%		1.0%	2.0%	1.0%	
YEARS TO BUILD-OUT	5	5	5		5	5	5		5	5	5		5	5	5	
2023 BACKGROUND	703	963	12	1,678	221	1,746	500	2,467	76	155	116	347	406	166	1,090	1,662
PROJECT TURNING VOLUMES	42	84	41	167	0	85	127	212	42	0	0	42	125	0	42	167
2023 BACKGROUND + PROJECT	**745**	**1,047**	**53**	**1,845**	**221**	**1,831**	**627**	**2,679**	**118**	**155**	**116**	**389**	**531**	**166**	**1,132**	**1,829**

Collier Blvd. and Pebblebrooke Center Driveway Intersection



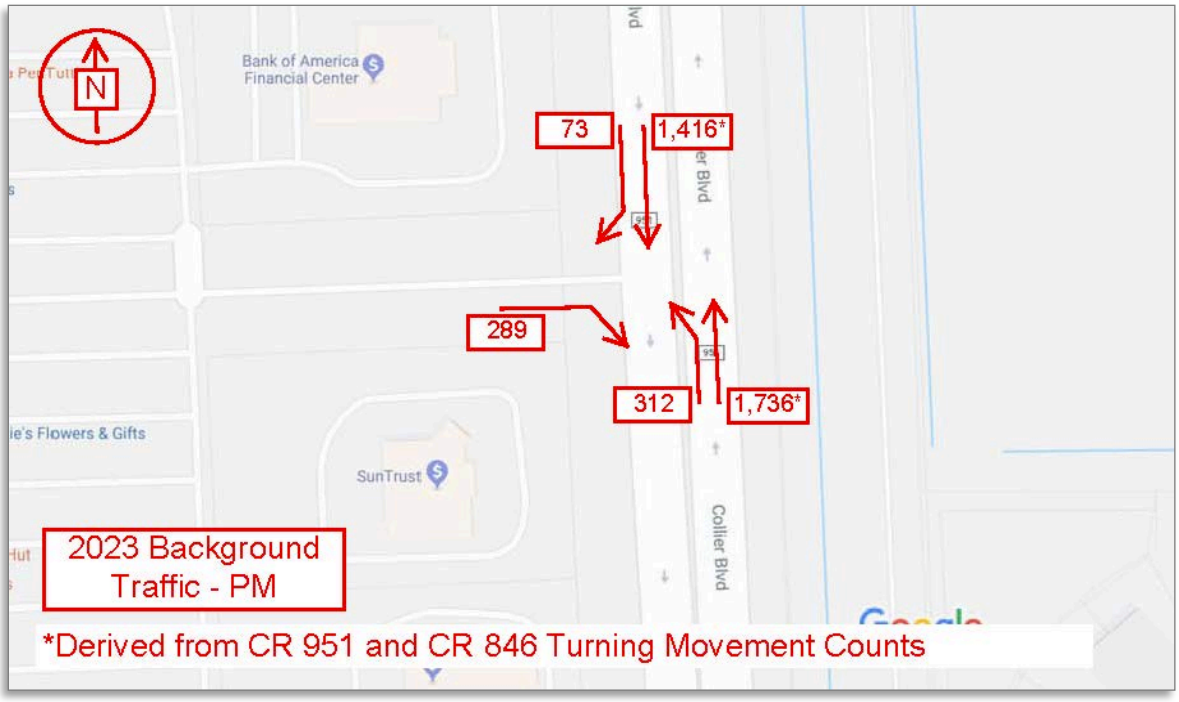


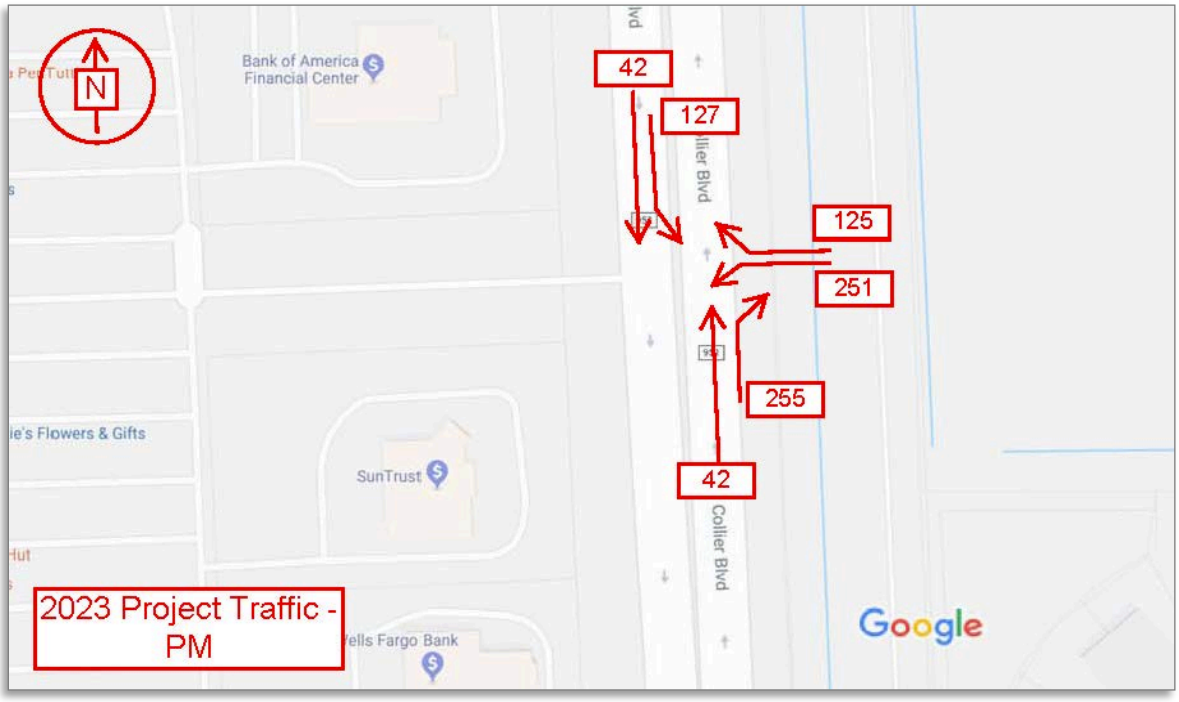


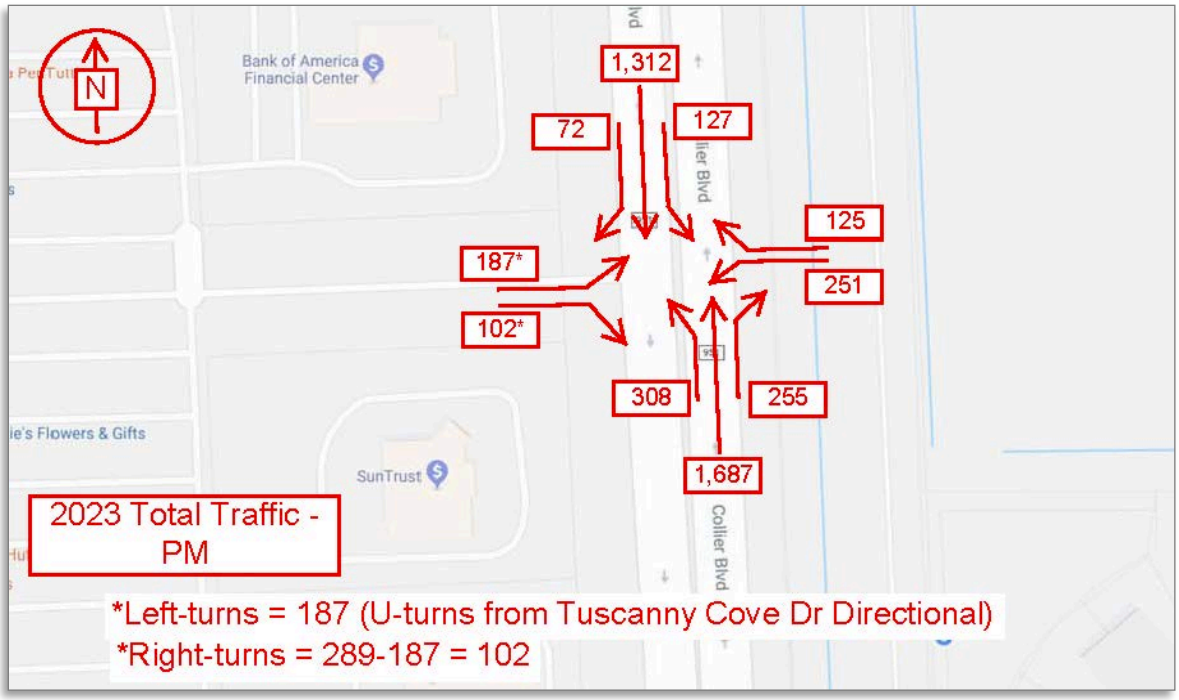
PROJECT - INTERSECTION TURNING MOVEMENT COUNTS - WITH PROJECT
INTERSECTION - COLLIER BOULEVARD AND SHOPPES OF PEBBLEBROOKE
COUNT DATA - DATE - 01-31-2018
COUNT DATA - TIME - 7.00 AM - 9.00 AM
PEAK HOUR - 8.00 AM - 9.00 AM

AM PEAK HOUR FUTURE TRAFFIC																
	PELICAN NURSEY PROJECT				SHOPPES OF PEBBLEBROOKE				COLLIER BOULEVARD							
	WESTBOUND				EASTBOUND				SOUTHBOUND				NORTHBOUND			
	LEFT	**THRU**	**RIGHT**	**TOTAL**	**LEFT***	**THRU**	**RIGHT***	**TOTAL***	**LEFT**	**THRU****	**RIGHT**	**TOTAL**	**LEFT**	**THRU*****	**RIGHT**	**TOTAL**
TMCs	0	0	0	0	27	0	37	64	0	1,696	39	1,735	198	830	0	1,028
PSCF	1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01	
2018 PEAK SEASON VOLUME	**0**	**0**	**0**	**0**	**28**	**0**	**38**	**66**	**0**	**1,713**	**40**	**1,753**	**200**	**839**	**0**	**1,039**
GROWTH RATE	1.0%	2.0%	1.0%		1.0%	2.0%	1.0%		1.0%	2.0%	1.0%		1.0%	2.0%	1.0%	
YEARS TO BUILD-OUT	5	5	5		5	5	5		5	5	5		5	5	5	
2023 BACKGROUND	0	0	0	0	30	0	40	70	0	1,892	43	1,935	211	927	0	1,138
PROJECT TURNING VOLUMES	227	0	113	340	0	0	0	0	121	38	0	159	0	40	243	283
2023 BACKGROUND + PROJECT	**227**	**0**	**113**	**340**	**30**	**0**	**40**	**70**	**121**	**1,930**	**43**	**2,094**	**211**	**967**	**243**	**1,421**

* - Per TMC 64 right-turns only; with signal configuration left turns = 27 (from U-turns at Tuscany Code Dr and CR 951 intersection;
** - Derived from TMC at CR CR 846 and CR 951 intersection = 1,164+421+111=1,696
*** - Derived from TMC at CR CR 846 and CR 951 intersection = 830


N
Bank of America Financial Center
73
1,416*
289
312
1,736*
SunTrust
Collier Blvd
2023 Background Traffic - PM
*Derived from CR 951 and CR 846 Turning Movement Counts


N
Bank of America Financial Center
42
127
125
251
255
42
SunTrust
Collier Blvd
2023 Project Traffic - PM
Google

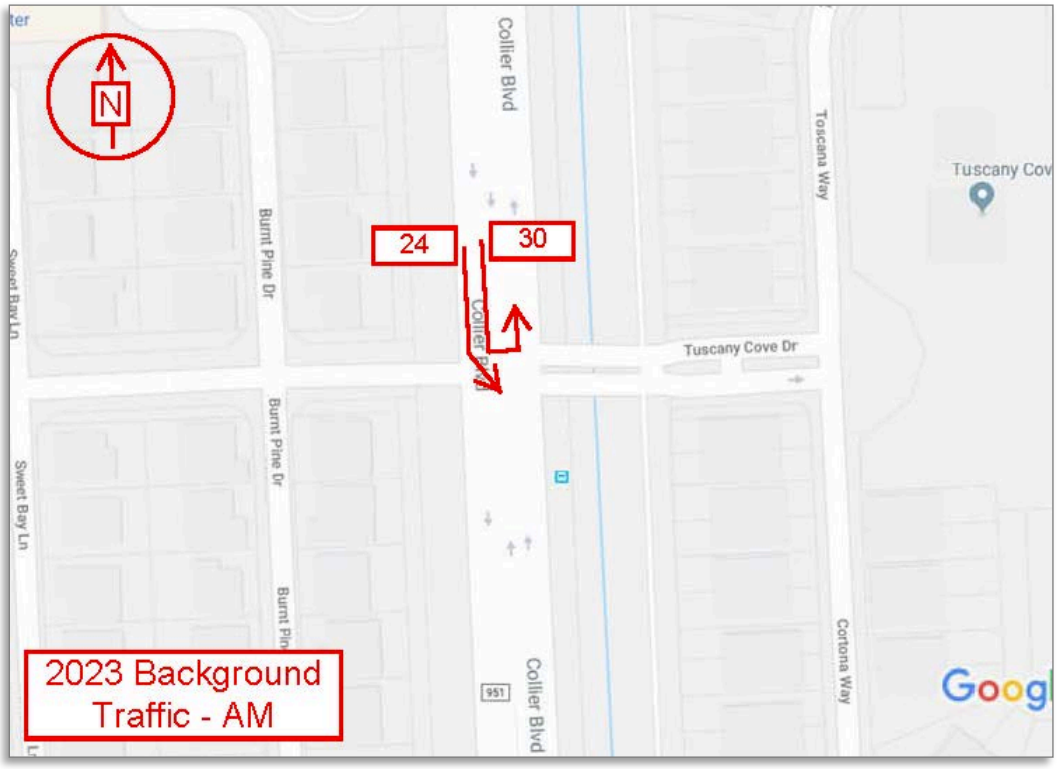


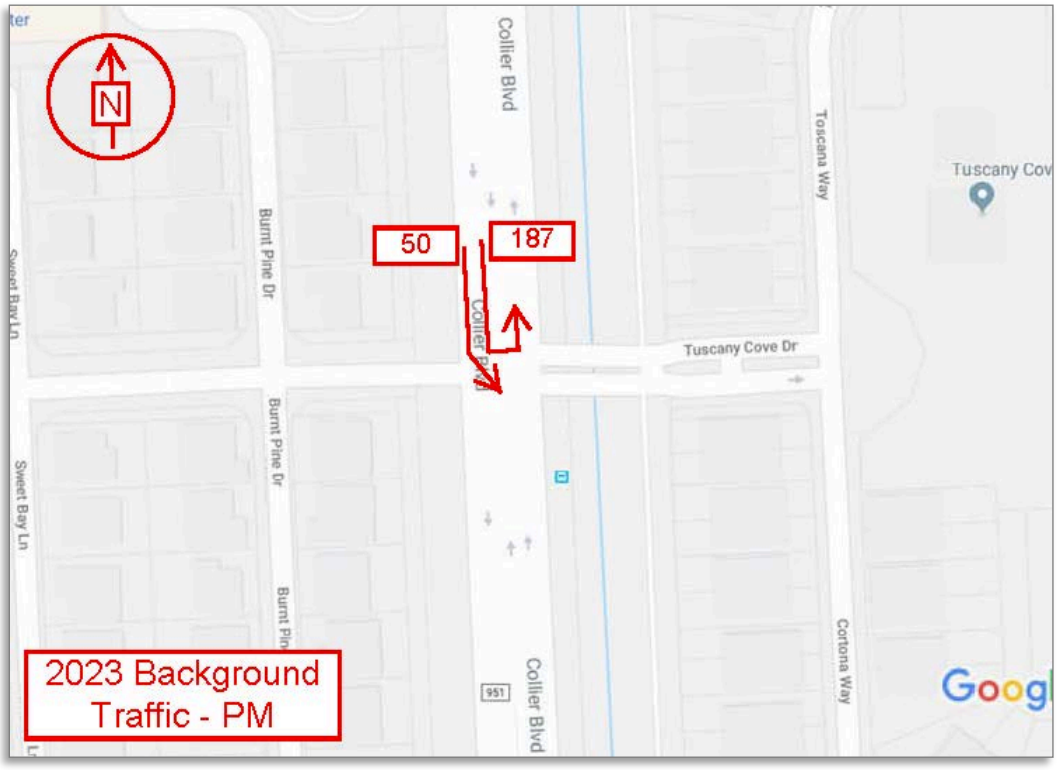
PROJECT - INTERSECTION TURNING MOVEMENT COUNTS - WITH PROJECT
INTERSECTION - COLLIER BOULEVARD AND SHOPPES OF PEBBLEBROOKE
COUNT DATA - DATE - 01-31-2018
COUNT DATA - TIME - 4.00 PM - 6.00 PM
PEAK HOUR - 4.45 PM - 5.45 PM

PM PEAK HOUR FUTURE TRAFFIC																
	PELICAN NURSEY PROJECT				SHOPPES OF PEBBLEBROOKE				COLLIER BOULEVARD							
	WESTBOUND				EASTBOUND				SOUTHBOUND				NORTHBOUND			
	LEFT	THRU	RIGHT	TOTAL	LEFT*	THRU	RIGHT*	TOTAL*	LEFT	THRU**	RIGHT	TOTAL	LEFT	THRU***	RIGHT	TOTAL
TMCs	0	0	0	0	175	0	96	271	0	1,269	68	1,337	293	1,556	0	1,849
PSCF	1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01		1.01	1.01	1.01	
2018 PEAK SEASON VOLUME	**0**	**0**	**0**	**0**	**177**	**0**	**97**	**274**	**0**	**1,282**	**69**	**1,351**	**296**	**1,572**	**0**	**1,868**
GROWTH RATE	1.0%	2.0%	1.0%		1.0%	2.0%	1.0%		1.0%	2.0%	1.0%		1.0%	2.0%	1.0%	
YEARS TO BUILD-OUT	5	5	5		5	5	5		5	5	5		5	5	5	
2023 BACKGROUND	0	0	0	0	187	0	102	289	0	1,416	73	1,489	312	1,736	0	2,048
PROJECT TURNING VOLUMES	251	0	125	376	0	0	0	0	127	42	0	169	0	42	255	297
2023 BACKGROUND + PROJECT	**251**	**0**	**125**	**376**	**187**	**0**	**102**	**289**	**127**	**1,458**	**73**	**1,658**	**312**	**1,778**	**255**	**2,345**

* - Per TMC 271 right-turns only; with signal configuration left turns = 175 (from U-turns at Tuscany Code Dr and CR 951 intersection;
** - Derived from TMC at CR CR 846 and CR 951 intersection = 661+470+138=1,269
*** - Derived from TMC at CR CR 846 and CR 951 intersection = 1.556

Collier Blvd. and Tuscany Cove Dr. Intersection – SB Left and U turns only





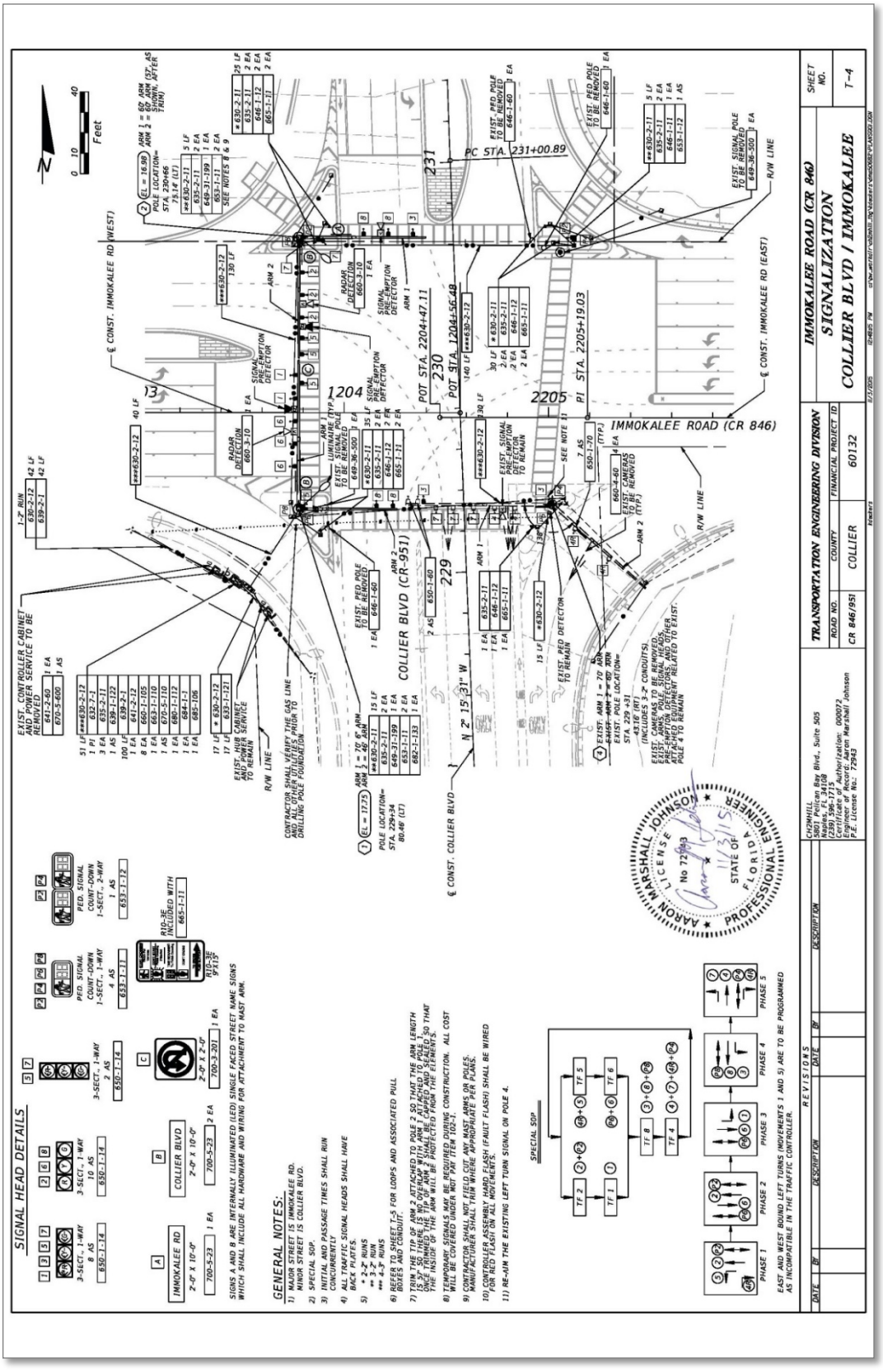
PROJECT - INTERSECTION TURNING MOVEMENT COUNTS - SB LT AND UT MOVEMENTS
INTERSECTION - COLLIER BOULEVARD AND TUSCANY COVE DRIVE
COUNT DATA - DATE - 02-01-2018
COUNT DATA - TIME - 7.00 AM - 9.00 AM
PEAK HOUR - 7.45 AM - 8.45 AM

AM PEAK HOUR FUTURE TRAFFIC									
	COLLIER BOULEVARD								
	SOUTHBOUND					NORTHBOUND			
	LEFT	**U-TURN**	**THRU**	**RIGHT**	**TOTAL**	**LEFT**	**THRU**	**RIGHT**	**TOTAL**
TMCs	21	27	0	0	48	0	0	0	0
PSCF	1.01	1.01	1.01	1.01		1.01	1.01	1.01	
2018 PEAK SEASON VOLUME	**22**	**28**	**0**	**0**	**50**	**0**	**0**	**0**	**0**
GROWTH RATE	1.0%	1.0%	2.0%	1.0%		1.0%	2.0%	1.0%	
YEARS TO BUILD-OUT	5	5	5	5		5	5	5	
2023 BACKGROUND	24	30	0	0	54	0	0	0	0
PROJECT TURNING VOLUMES	0	0	0	0	0	0	0	0	0
2023 BACKGROUND + PROJECT	**24**	**30**	**0**	**0**	**54**	**0**	**0**	**0**	**0**

PROJECT - INTERSECTION TURNING MOVEMENT COUNTS - SB LT AND UT MOVEMENTS
INTERSECTION - COLLIER BOULEVARD AND TUSCANY COVE DRIVE
COUNT DATA - DATE - 02-01-2018
COUNT DATA - TIME - 4.00 PM - 6.00 PM
PEAK HOUR - 4.15 PM - 5.15 PM

PM PEAK HOUR FUTURE TRAFFIC									
	COLLIER BOULEVARD								
	SOUTHBOUND					NORTHBOUND			
	LEFT	**U-TURN**	**THRU**	**RIGHT**	**TOTAL**	**LEFT**	**THRU**	**RIGHT**	**TOTAL**
TMCs	46	175	0	0	221	0	0	0	0
PSCF	1.01	1.01	1.01	1.01		1.01	1.01	1.01	
2018 PEAK SEASON VOLUME	**47**	**177**	**0**	**0**	**224**	**0**	**0**	**0**	**0**
GROWTH RATE	1.0%	1.0%	2.0%	1.0%		1.0%	2.0%	1.0%	
YEARS TO BUILD-OUT	5	5	5	5		5	5	5	
2023 BACKGROUND	50	187	0	0	237	0	0	0	0
PROJECT TURNING VOLUMES	0	0	0	0	0	0	0	0	0
2023 BACKGROUND + PROJECT	**50**	**187**	**0**	**0**	**237**	**0**	**0**	**0**	**0**

Appendix H: Collier Blvd. & Immokalee Rd. Intersection – Approved Signalization Plan


SIGNAL HEAD DETAILS
GENERAL NOTES:
IMMOKALEE ROAD (CR 846)
SIGNALIZATION
COLLIER BLVD / IMMOKALEE
COLLIER BLVD (CR-951)
IMMOKALEE RD (EAST)
IMMOKALEE RD (WEST)
TRANSPORTATION ENGINEERING DIVISION
CR 846/951
COLLIER
60132
T-4

Appendix I: Intersection Analyses – Synchro Studio 9

Collier Blvd. and Immokalee Rd. Intersection – Year 2018 Background Conditions

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	254	704	426	1176	1669	24	448	81	311	43	113	103
Future Volume (vph)	254	704	426	1176	1669	24	448	81	311	43	113	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	550		400	760		580	540		515	330		330
Storage Lanes	2		1	3		1	2		1	1		1
Taper Length (ft)	100			140			100			50		
Lane Util. Factor	0.97	0.91	1.00	0.94	0.91	1.00	0.94	1.00	0.88	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Right Turn on Red			No			No			Yes			No
Satd. Flow (RTOR)									314			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3220			3645			1891			2183	
Travel Time (s)		48.8			55.2			28.7			33.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	267	741	448	1238	1757	25	472	85	327	45	119	108
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	pt+ov	Prot	NA	Free
Protected Phases	1	6		5	2		7	4	45	3	8	
Permitted Phases			Free			Free						Free
Total Split (s)	27.0	53.0		43.0	69.0		26.0	52.0		22.0	48.0	
Total Lost Time (s)	5.4	5.4		5.4	5.4		5.4	5.4		5.4	5.4	
Act Effct Green (s)	16.5	25.0	120.0	46.0	54.5	120.0	17.3	16.0	67.4	13.8	9.8	120.0
Actuated g/C Ratio	0.14	0.21	1.00	0.38	0.45	1.00	0.14	0.13	0.56	0.12	0.08	1.00
v/c Ratio	0.57	0.70	0.28	0.65	0.76	0.02	0.66	0.34	0.19	0.22	0.41	0.07
Control Delay	55.7	48.8	0.4	32.8	30.0	0.0	54.7	57.6	2.2	54.0	59.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.7	48.8	0.4	32.8	30.0	0.0	54.7	57.6	2.2	54.0	59.5	0.1
LOS	E	D	A	C	C	A	D	E	A	D	E	A
Approach Delay		35.2			30.9			35.5			35.0	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	103	198	0	275	399	0	124	64	2	32	47	0
Queue Length 95th (ft)	163	271	0	373	527	0	183	127	27	77	87	0
Internal Link Dist (ft)		3140			3565			1811			2103	
Turn Bay Length (ft)	550		400	760		580	540		515	330		330
Base Capacity (vph)	627	2046	1583	1912	2734	1583	869	734	2349	249	1274	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.36	0.28	0.65	0.64	0.02	0.54	0.12	0.14	0.18	0.09	0.07

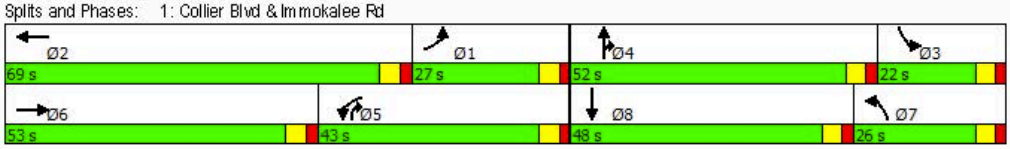
Intersection Summary
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 120

CR 846 - CR 951 Int - 2018 Backgr AM Pk Hr 02/27/2018 Baseline Synchro 9 Report
Page 1

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 32.9	Intersection LOS: C
Intersection Capacity Utilization 68.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Collier Blvd & Immokalee Rd



Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1581	475	668	872	11	386	150	1037	72	140	110
Future Volume (vph)	210	1581	475	668	872	11	386	150	1037	72	140	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	550		400	760		580	540		515	330		330
Storage Lanes	2		1	3		1	2		1	1		1
Taper Length (ft)	100			140			100			50		
Lane Util. Factor	0.97	0.91	1.00	0.94	0.91	1.00	0.94	1.00	0.88	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Right Turn on Red			No			No			Yes			No
Satd. Flow (RTOR)									479			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3220			3645			1891			2183	
Travel Time (s)		48.8			55.2			28.7			33.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	221	1664	500	703	918	12	406	158	1092	76	147	116
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	pt+ov	Prot	NA	Free
Protected Phases	1	6		5	2		7	4	45	3	8	
Permitted Phases			Free			Free						Free
Total Split (s)	20.0	61.0		32.0	73.0		16.7	32.3		44.7	60.3	
Total Lost Time (s)	5.4	5.4		5.4	5.4		5.4	5.4		5.4	5.4	
Act Effct Green (s)	49.5	55.1	135.3	26.5	32.1	135.3	20.9	20.8	52.7	11.3	11.1	135.3
Actuated g/C Ratio	0.37	0.41	1.00	0.20	0.24	1.00	0.15	0.15	0.39	0.08	0.08	1.00
v/c Ratio	0.18	0.80	0.32	0.72	0.76	0.01	0.53	0.55	0.79	0.52	0.51	0.07
Control Delay	32.4	40.0	0.5	56.8	52.8	0.0	55.1	61.1	24.6	73.5	66.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.4	40.0	0.5	56.8	52.8	0.0	55.1	61.1	24.6	73.5	66.9	0.1
LOS	C	D	A	E	D	A	E	E	C	E	E	A
Approach Delay		31.0			54.1			35.6			45.5	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	68	471	0	209	279	0	118	131	288	66	66	0
Queue Length 95th (ft)	119	599	0	277	338	0	157	212	408	124	108	0
Internal Link Dist (ft)		3140			3565			1811			2103	
Turn Bay Length (ft)	550		400	760		580	540		515	330		330
Base Capacity (vph)	1255	2099	1583	985	2552	1583	771	371	1467	516	1442	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.79	0.32	0.71	0.36	0.01	0.53	0.43	0.74	0.15	0.10	0.07

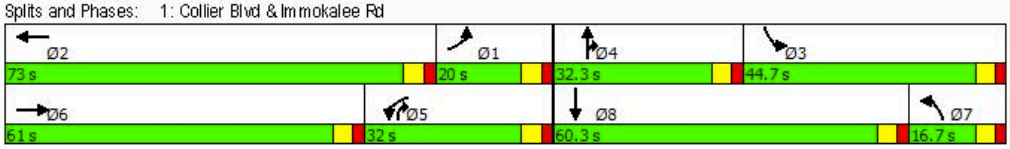
Intersection Summary
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 135.3

CR 846 - CR 951 Int - 2018 Backgr PM Pk Hr 02/27/2018 Baseline Synchro 9 Report
Page 1

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 39.4	Intersection LOS: D
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Collier Blvd & Immokalee Rd



Collier Blvd. and Immokalee Rd. Intersection – Year 2023 Background Conditions

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	267	778	448	1236	1843	26	471	90	327	46	125	109
Future Volume (vph)	267	778	448	1236	1843	26	471	90	327	46	125	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	550		400	760		580	540		515	330		330
Storage Lanes	2		1	3		1	2		1	1		1
Taper Length (ft)	100			140			100			50		
Lane Util. Factor	0.97	0.91	1.00	0.94	0.91	1.00	0.94	1.00	0.88	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Right Turn on Red			No			No			Yes			No
Satd. Flow (RTOR)									290			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3220			3645			1891			2183	
Travel Time (s)		48.8			55.2			28.7			33.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	281	819	472	1301	1940	27	496	95	344	48	132	115
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	pt+ov	Prot	NA	Free
Protected Phases	1	6		5	2		7	4	45	3	8	
Permitted Phases			Free			Free						Free
Total Split (s)	27.0	53.0		43.0	69.0		26.0	52.0		22.0	48.0	
Total Lost Time (s)	5.4	5.4		5.4	5.4		5.4	5.4		5.4	5.4	
Act Effct Green (s)	16.0	27.4	129.9	52.4	63.8	129.9	18.1	16.6	74.3	14.3	10.3	129.9
Actuated g/C Ratio	0.12	0.21	1.00	0.40	0.49	1.00	0.14	0.13	0.57	0.11	0.08	1.00
v/c Ratio	0.67	0.76	0.30	0.65	0.78	0.02	0.71	0.40	0.20	0.25	0.47	0.07
Control Delay	63.0	53.4	0.5	34.3	30.9	0.0	60.2	61.0	3.4	56.8	63.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.0	53.4	0.5	34.3	30.9	0.0	60.2	61.0	3.4	56.8	63.8	0.1
LOS	E	D	A	C	C	A	E	E	A	E	E	A
Approach Delay		39.3			32.0			39.4			37.8	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	118	239	0	314	483	0	143	78	11	37	56	0
Queue Length 95th (ft)	172	297	0	415	625	0	194	139	39	82	95	0
Internal Link Dist (ft)		3140			3565			1811			2103	
Turn Bay Length (ft)	550		400	760		580	540		515	330		330
Base Capacity (vph)	572	1869	1583	2011	2498	1583	794	670	2299	231	1164	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.44	0.30	0.65	0.78	0.02	0.62	0.14	0.15	0.21	0.11	0.07

Intersection Summary
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 129.9

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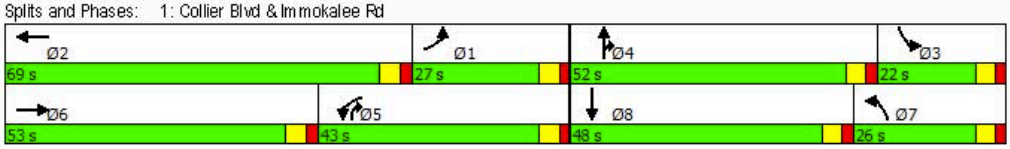
Page 1

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 35.3	Intersection LOS: D
Intersection Capacity Utilization 74.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Collier Blvd & Immokalee Rd



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Page 2

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	1746	500	703	963	12	406	166	1090	76	155	116
Future Volume (vph)	221	1746	500	703	963	12	406	166	1090	76	155	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	550		400	760		580	540		515	330		330
Storage Lanes	2		1	3		1	2		1	1		1
Taper Length (ft)	100			140			100			50		
Lane Util. Factor	0.97	0.91	1.00	0.94	0.91	1.00	0.94	1.00	0.88	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Right Turn on Red			No			No			Yes			No
Satd. Flow (RTOR)									468			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3220			3645			1891			2183	
Travel Time (s)		48.8			55.2			28.7			33.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	233	1838	526	740	1014	13	427	175	1147	80	163	122
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	pt+ov	Prot	NA	Free
Protected Phases	1	6		5	2		7	4	45	3	8	
Permitted Phases			Free			Free						Free
Total Split (s)	20.0	61.0		32.0	73.0		16.7	32.3		44.7	60.3	
Total Lost Time (s)	5.4	5.4		5.4	5.4		5.4	5.4		5.4	5.4	
Act Effct Green (s)	46.8	55.8	138.3	26.7	35.7	138.3	22.3	22.5	54.6	11.7	11.8	138.3
Actuated g/C Ratio	0.34	0.40	1.00	0.19	0.26	1.00	0.16	0.16	0.39	0.08	0.09	1.00
v/c Ratio	0.20	0.90	0.33	0.77	0.77	0.01	0.53	0.58	0.83	0.54	0.54	0.08
Control Delay	35.9	46.1	0.6	59.9	52.1	0.0	55.5	61.9	27.7	74.9	68.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.9	46.1	0.6	59.9	52.1	0.0	55.5	61.9	27.7	74.9	68.2	0.1
LOS	D	D	A	E	D	A	E	E	C	E	E	A
Approach Delay		36.0			54.9			37.9			46.9	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	78	576	0	230	317	0	126	147	334	71	76	0
Queue Length 95th (ft)	129	#732	0	295	367	0	167	234	467	130	118	0
Internal Link Dist (ft)		3140			3565			1811			2103	
Turn Bay Length (ft)	550		400	760		580	540		515	330		330
Base Capacity (vph)	1161	2051	1583	962	2493	1583	805	363	1458	504	1409	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.90	0.33	0.77	0.41	0.01	0.53	0.48	0.79	0.16	0.12	0.08

Intersection Summary	
Area Type:	Other
Cycle Length: 170	
Actuated Cycle Length: 138.3	

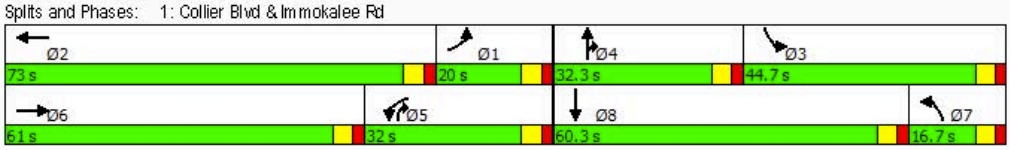
CR 846 - CR 951 Int - 2023 Backgr PM Pk Hr 02/27/2018 Baseline Synchro 9 Report
Page 1

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 42.3	Intersection LOS: D
Intersection Capacity Utilization 89.6%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Collier Blvd & Immokalee Rd



Collier Blvd. and Immokalee Rd. Intersection – Year 2023 Background with Project Conditions

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	267	859	569	1274	1919	63	584	90	367	86	125	109
Future Volume (vph)	267	859	569	1274	1919	63	584	90	367	86	125	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	550		400	760		580	540		515	330		330
Storage Lanes	2		1	3		1	2		1	1		1
Taper Length (ft)	100			140			100			50		
Lane Util. Factor	0.97	0.91	1.00	0.94	0.91	1.00	0.94	1.00	0.88	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Right Turn on Red			No			No			Yes			No
Satd. Flow (RTOR)									165			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3220			3645			1891			2183	
Travel Time (s)		48.8			55.2			28.7			33.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	281	904	599	1341	2020	66	615	95	386	91	132	115
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	pt+ov	Prot	NA	Free
Protected Phases	1	6		5	2		7	4	45	3	8	
Permitted Phases			Free			Free						Free
Total Split (s)	27.0	53.0		43.0	69.0		26.0	52.0		22.0	48.0	
Total Lost Time (s)	5.4	5.4		5.4	5.4		5.4	5.4		5.4	5.4	
Act Effct Green (s)	16.0	29.9	132.4	49.8	63.7	132.4	20.7	12.5	67.7	18.6	10.4	132.4
Actuated g/C Ratio	0.12	0.23	1.00	0.38	0.48	1.00	0.16	0.09	0.51	0.14	0.08	1.00
v/c Ratio	0.68	0.79	0.38	0.72	0.83	0.04	0.79	0.54	0.26	0.37	0.48	0.07
Control Delay	64.6	53.6	0.7	38.8	33.9	0.0	62.4	68.9	10.7	58.5	64.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.6	53.6	0.7	38.8	33.9	0.0	62.4	68.9	10.7	58.5	64.8	0.1
LOS	E	D	A	D	C	A	E	E	B	E	E	A
Approach Delay		37.6			35.2			44.8			41.1	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	120	269	0	345	534	0	182	79	55	72	57	0
Queue Length 95th (ft)	173	324	0	448	671	0	242	140	95	138	95	0
Internal Link Dist (ft)		3140			3565			1811			2103	
Turn Bay Length (ft)	550		400	760		580	540		515	330		330
Base Capacity (vph)	560	1830	1583	1875	2445	1583	780	656	2181	247	1140	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.49	0.38	0.72	0.83	0.04	0.79	0.14	0.18	0.37	0.12	0.07

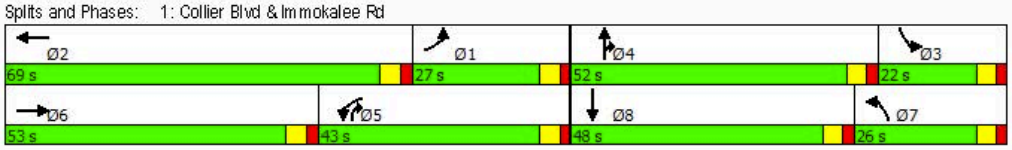
Intersection Summary	
Area Type:	Other
Cycle Length: 170	
Actuated Cycle Length: 132.4	

CR 846 - CR 951 Int - Backgr AM Pk Hr w PJ (Signal Access) 02/27/2018 Baseline Synchro 9 Report
Page 1

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 37.7	Intersection LOS: D
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Collier Blvd & Immokalee Rd



CR 846 - CR 951 Int - Backgr AM Pk Hr w PJ (Signal Access) 02/27/2018 Baseline Synchro 9 Report
Page 2

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd

11/19/2018

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	1831	627	745	1047	53	531	166	1132	118	155	116
Future Volume (vph)	221	1831	627	745	1047	53	531	166	1132	118	155	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	550		400	760		580	540		515	330		330
Storage Lanes	2		1	3		1	2		1	1		1
Taper Length (ft)	100			140			100			50		
Lane Util. Factor	0.97	0.91	1.00	0.94	0.91	1.00	0.94	1.00	0.88	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	4990	5085	1583	4990	1863	2787	1770	3539	1583
Right Turn on Red			No			No			Yes			No
Satd. Flow (RTOR)									365			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3220			3645			1891			2183	
Travel Time (s)		48.8			55.2			28.7			33.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	233	1927	660	784	1102	56	559	175	1192	124	163	122
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	pt+ov	Prot	NA	Free
Protected Phases	1	6		5	2		7	4	45	3	8	
Permitted Phases			Free			Free						Free
Total Split (s)	20.0	61.0		32.0	73.0		16.7	32.3		44.7	60.3	
Total Lost Time (s)	5.4	5.4		5.4	5.4		5.4	5.4		5.4	5.4	
Act Effct Green (s)	42.6	55.6	146.3	26.6	39.6	146.3	30.3	26.9	58.9	15.5	12.1	146.3
Actuated g/C Ratio	0.29	0.38	1.00	0.18	0.27	1.00	0.21	0.18	0.40	0.11	0.08	1.00
v/c Ratio	0.23	1.00	0.42	0.86	0.80	0.04	0.54	0.51	0.89	0.66	0.56	0.08
Control Delay	42.3	64.7	0.8	69.1	54.5	0.0	54.1	60.5	37.4	79.7	72.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.3	64.7	0.8	69.1	54.5	0.0	54.1	60.5	37.4	79.7	72.3	0.1
LOS	D	E	A	E	D	A	D	E	D	E	E	A
Approach Delay		47.9			58.8			44.4			53.0	
Approach LOS		D			E			D			D	
Queue Length 50th (ft)	87	667	0	260	358	0	170	152	448	116	80	0
Queue Length 95th (ft)	140	#845	0	#643	407	0	217	243	#649	187	122	0
Internal Link Dist (ft)		3140			3565			1811			2103	
Turn Bay Length (ft)	550		400	760		580	540		515	330		330
Base Capacity (vph)	1000	1933	1583	907	2351	1583	1034	342	1340	475	1328	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	1.00	0.42	0.86	0.47	0.04	0.54	0.51	0.89	0.26	0.12	0.08

Intersection Summary
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 146.3

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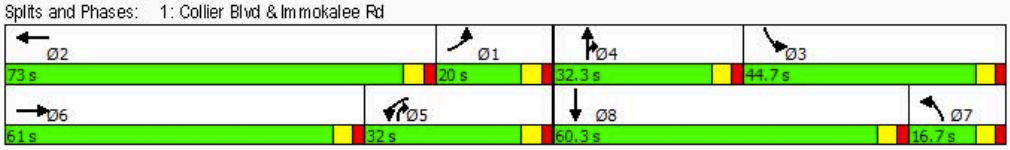
Synchro 9 Report
Page 1

Lanes, Volumes, Timings
1: Collier Blvd & Immokalee Rd 11/19/2018

Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 50.2	Intersection LOS: D
Intersection Capacity Utilization 95.0%	ICU Level of Service F
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Collier Blvd & Immokalee Rd



Collier Blvd. and Pebblebrooke Center/Project Access Intersection – Year 2023 Background with Project Conditions

Lanes, Volumes, Timings
3: Shoppes /Access & Collier Blvd. 02/19/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	40	227	0	113	211	967	243	121	1930	43
Future Volume (vph)	30	0	40	227	0	113	211	967	243	121	1930	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	235		290	240		285
Storage Lanes	1		0	1		0	2		1	2		1
Taper Length (ft)	50			50			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1770	1583	0	3433	5085	1583	3433	5085	1583
Flt Permitted	0.769			0.377			0.950			0.950		
Satd. Flow (perm)	1432	1583	0	702	1583	0	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		347			472				270			119
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		275			260			792			1100	
Travel Time (s)		7.5			7.1			12.0			16.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	44	0	252	126	0	234	1074	270	134	2144	48
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4					6			2
Total Split (s)	10.4	31.4		30.0	51.0		36.6	60.0	60.0	48.6	72.0	72.0
Total Lost Time (s)	5.4	5.4		5.4	5.4		5.4	5.4	5.4	5.4	5.4	5.4
Act Effct Green (s)	9.3	5.5		30.0	24.0		13.9	35.0	35.0	46.0	67.1	67.1
Actuated g/C Ratio	0.07	0.04		0.24	0.19		0.11	0.27	0.27	0.36	0.53	0.53
v/c Ratio	0.28	0.11		0.73	0.19		0.62	0.77	0.43	0.11	0.80	0.05
Control Delay	45.9	0.6		56.2	0.6		62.8	46.5	6.0	30.9	29.1	0.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.9	0.6		56.2	0.6		62.8	46.5	6.0	30.9	29.1	0.1
LOS	D	A		E	A		E	D	A	C	C	A
Approach Delay		20.0			37.7			42.0			28.6	
Approach LOS		B			D			D			C	
Queue Length 50th (ft)	21	0		185	0		100	311	0	40	558	0
Queue Length 95th (ft)	51	0		284	0		145	350	63	71	671	0
Internal Link Dist (ft)		195			180			712			1020	
Turn Bay Length (ft)							235		290	240		285
Base Capacity (vph)	117	601		385	872		847	2197	837	1255	2680	890
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.07		0.65	0.14		0.28	0.49	0.32	0.11	0.80	0.05

Intersection Summary	
Area Type:	Other
Cycle Length: 170	
Actuated Cycle Length: 127.3	

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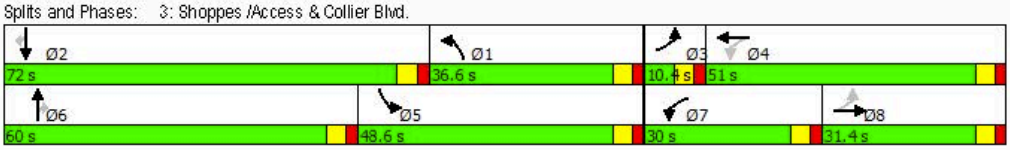
Page 1

Lanes, Volumes, Timings
3: Shoppes /Access & Collier Blvd. 02/19/2019

Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 34.1	Intersection LOS: C
Intersection Capacity Utilization 76.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: Shoppes /Access & Collier Blvd.



CR 951 PJ Access - 2023 AM Backgr w/ Pj 02/15/2019 Baseline Synchro 9 Report
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Lanes, Volumes, Timings
3: Shoppes /Access & Collier Blvd. 02/19/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	0	102	251	0	125	312	1778	255	127	1458	73
Future Volume (vph)	187	0	102	251	0	125	312	1778	255	127	1458	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	235		290	240		285
Storage Lanes	1		0	1		0	2		1	2		1
Taper Length (ft)	50			50			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt		0.850			0.850				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1583	0	1770	1583	0	3433	5085	1583	3433	5085	1583
Flt Permitted	0.727			0.671			0.950			0.950		
Satd. Flow (perm)	1354	1583	0	1064	1583	0	3433	5085	1583	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		483			505				147			85
Link Speed (mph)		25			25			45			45	
Link Distance (ft)		275			260			792			1100	
Travel Time (s)		7.5			7.1			12.0			16.7	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	208	113	0	279	139	0	347	1976	283	141	1620	81
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4					6			2
Total Split (s)	19.0	48.0		20.0	49.0		51.0	55.0	55.0	47.0	51.0	51.0
Total Lost Time (s)	5.4	5.4		5.4	5.4		5.4	5.4	5.4	5.4	5.4	5.4
Act Effct Green (s)	18.6	5.5		21.6	7.0		15.5	49.6	49.6	11.5	45.6	45.6
Actuated g/C Ratio	0.18	0.05		0.21	0.07		0.15	0.48	0.48	0.11	0.44	0.44
v/c Ratio	0.70	0.21		0.86	0.24		0.67	0.81	0.34	0.37	0.72	0.11
Control Delay	47.9	0.9		62.2	1.0		48.0	26.1	9.1	44.8	25.9	4.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	0.9		62.2	1.0		48.0	26.1	9.1	44.8	25.9	4.1
LOS	D	A		E	A		D	C	A	D	C	A
Approach Delay		31.3			41.9			27.2			26.4	
Approach LOS		C			D			C			C	
Queue Length 50th (ft)	117	0		164	0		112	388	49	44	309	0
Queue Length 95th (ft)	#209	0		#296	0		159	486	111	75	390	26
Internal Link Dist (ft)		195			180			712			1020	
Turn Bay Length (ft)							235		290	240		285
Base Capacity (vph)	306	938		324	962		1522	2453	839	1389	2255	749
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.12		0.86	0.14		0.23	0.81	0.34	0.10	0.72	0.11

Intersection Summary
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 102.9

CR 951 PJ Access - 2023 PM Backgr w/ Pj 02/18/2019 Baseline Synchro 9 Report
Page 1

Lanes, Volumes, Timings
3: Shoppes /Access & Collier Blvd. 02/19/2019

Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 28.3	Intersection LOS: C
Intersection Capacity Utilization 76.7%	ICU Level of Service D
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Shoppes /Access & Collier Blvd.