



Traffic Impact Statement

Pelican Nursery Property Planned Unit Development (PUD) Rezone

Collier County, FL
05/11/2017

Prepared for:

Peninsula Engineering
2600 Golden Gate Parkway
Naples, FL 34105
Phone: 239-403-6700

Prepared by:

Trebilcock Consulting Solutions, PA
1205 Piper Boulevard, Suite 202
Naples, FL 34110
Phone: 239-566-9551
Email: ntrebilcock@trebilcock.biz

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.

Norman J. Trebilcock, AICP, P.E.
FL Registration No. 47116
Trebilcock Consulting Solutions, PA
1205 Piper Boulevard, Suite 202
Naples, FL 34110
Company Cert. of Auth. No. 27796

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APPENDICES

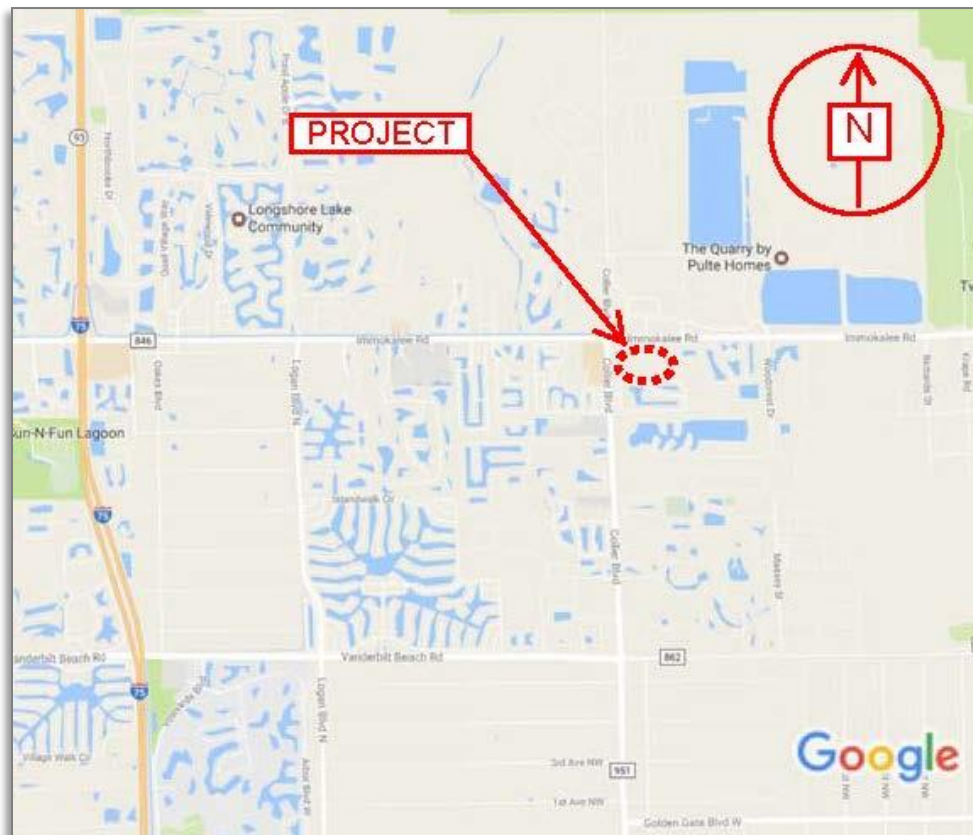
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Project Description

The Pelican Nursery Property project is an existing nursery zoned A – Agricultural. The subject parcel has a total gross area of approximately 55.56 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 **Fig. 1 – Project Location Map**.

Fig. 1 – Project Location Map



The Pelican Nursery Project proposes to rezone the existing parcel to allow for commercial and residential development. The TIS will use the highest of two potential development scenarios: **Scenario 1** consists of 112 dwelling unit (du) apartments, 30,000 square feet of 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. **Scenario 2** consists of 300 dwelling unit (du) apartments, 147,000 sf shopping center, 6,000 sf (20 pumps) convenience market with gasoline pumps and a 7,000 sf fast-food restaurant

with drive through window. The proposed master site plans are illustrated in **Appendix A: Project Master Site Plans**.

For purposes of this evaluation, the project build-out year is assumed to be consistent with the Collier County 2022 planning horizon.

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) 853 – Convenience Market with Gasoline Pumps between two variables: the store Gross Floor Area (GFA) and the number of Fueling Positions (fp). For the LUC 853 – fueling positions is the conservative estimate of the two trip generations and it is used for the purposes of this report.

The associated common recreation amenities are considered passive incidental to the residential development and are not included in the trip generation analysis. The potential development program for Scenario 1 is illustrated in **Table 1A** and the potential development program for Scenario 2 is illustrated in **Table 1B**.

Table 1A
Development Program – Scenario 1

ITE Land Use	ITE Land Use Code	Total Size
Apartment	220	112 dwelling units
General Office	710	30,000 sf
Shopping Center	820	147,000 sf
Convenience Market with Gasoline Pumps	853	6,000 sf, 20 fueling positions
Home Improvement Superstore	230	135,000 sf
Fast-Food Restaurant with Drive-Through Window	934	7,000 sf

Table 1B
Development Program – Scenario 2

ITE Land Use	ITE Land Use Code	Total Size
Apartment	220	300 dwelling units
Shopping Center	820	147,000 sf
Convenience Market with Gasoline Pumps	853	6,000 sf, 20 fueling positions
Fast-Food Restaurant with Drive-Through Window	934	7,000 sf

A methodology meeting was held with the Collier County Transportation Planning staff on April 20, 2017, via email (refer to **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 northbound Collier Boulevard.
- **Immokalee Road:** West access – new right-in/right-out access onto eastbound Immokalee Road proposed. East access – existing directional left-in/right-in/right-out access onto eastbound Immokalee Road to remain.

Trip Generation

The project's site trip generation is based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition. 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 are provided in **Appendix C: Trip Generation Calculations ITE 9th Edition**.

The **internal capture** accounts for a reduction in external traffic because of the interaction between the multiple land uses in a site. ITE guidelines are used for the calculation of internal capture. For the purposes of this analysis and following Collier County TIS Guidelines recommendations, the overall internal capture rate does not exceed 20%.

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 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.

This analysis calculates LUC 934 and LUC 853 pass-by daily rates at 40% and AM and PM peak hour rates at 50%. Shopping center and home improvement superstore daily pass-by trips are calculated at 15% of the gross traffic with AM and PM peak hour at 25% of the gross trips.

Table 2A
Trip Generation (Scenario 1) – Average Weekday

Proposed Development		24 Hour Two-Way Volume	AM Peak Hour			PM Peak Hour		
Land Use	Size		Enter	Exit	Total	Enter	Exit	Total
Apartment	112 du ⁽¹⁾	802	12	47	59	51	28	79
General Office Building	30,000 sf	526	64	9	73	19	93	112
Shopping Center	147,000 sf	8,724	122	75	197	372	404	776
Convenience Market with Gasoline Pumps	20 fp ⁽²⁾	10,852	166	165	331	191	190	381
Home Improvement Superstore	135,000 sf	4,150	115	86	201	154	161	315
Fast-Food Restaurant with Drive-Through Window	7,000 sf	3,473	162	156	318	119	110	229
Total Scenario 1		28,527	641	538	1,179	906	986	1,892
Internal Capture		N/A ⁽³⁾	(38)	(38)	(76)	(64)	(64)	(128)
External Traffic		28,527	603	500	1,103	842	922	1,764
Pass-by Traffic		(7,662)	(208)	(188)	(396)	(262)	(280)	(542)
Net External Traffic		20,865	395	312	707	580	642	1,222

Note(s): ⁽¹⁾ Dwelling unit.

⁽²⁾ Fueling position.

⁽³⁾ Daily internal capture rates are not available in the 3rd Edition Trip Generation Handbook.

Table 2B
Trip Generation (Scenario 2) – Average Weekday

Proposed Development		24 Hour Two-Way Volume	AM Peak Hour			PM Peak Hour		
Land Use	Size		Enter	Exit	Total	Enter	Exit	Total
Apartment	300 du ⁽¹⁾	1,942	30	121	151	119	64	183
Shopping Center	147,000 sf	8,724	122	75	197	372	404	776
Convenience Market with Gasoline Pumps	20 fp ⁽²⁾	10,852	166	165	331	191	190	381
Fast-Food Restaurant with Drive-Through Window	7,000 sf	3,473	162	156	318	119	110	229
Total Scenario 2		24,991	480	517	997	801	768	1,569
Internal Capture		N/A ⁽³⁾	(21)	(21)	(42)	(34)	(34)	(68)
External Traffic		24,991	459	496	955	767	734	1,501
Pass-by Traffic		(7,039)	(186)	(174)	(360)	(235)	(240)	(475)
Net External Traffic		17,952	273	322	595	532	494	1,026

Note(s): ⁽¹⁾ Dwelling unit.

⁽²⁾ Fueling position.

⁽³⁾ Daily internal capture rates are not available in the 3rd Edition Trip Generation Handbook.

As illustrated by **Table 2A** and **Table 2B**, the net external traffic of Scenario 1 is greater than the net external traffic of Scenario 2; therefore, the trip generation for Scenario 1 is utilized for the analysis of this report due to its greater traffic impact.

Trip Distribution and Assignment

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

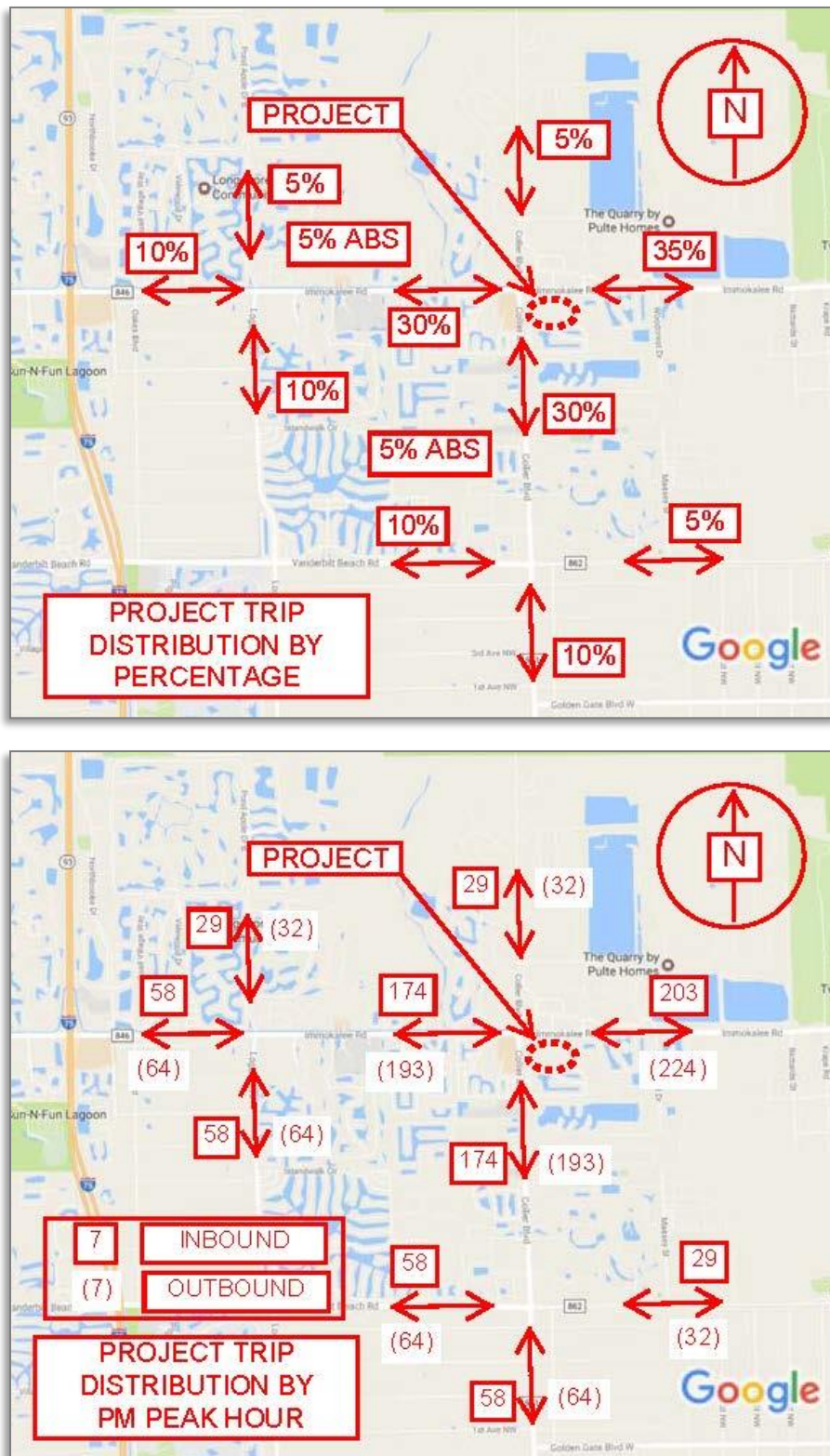
The site-generated trip distribution is shown in **Table 3, Project Traffic Distribution for Peak Hour** and is graphically depicted in **Fig. 2 – Project Distribution by Percentage and by PM Peak Hour**.

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%	<u>EB – 203</u>	WB – 224
Immokalee Rd.	43.2	Logan Blvd. to Collier Blvd.	30%	WB – 174	<u>EB – 193</u>
Immokalee Rd.	43.1	I-75 to Logan Blvd..	10%	WB – 58	<u>EB – 64</u>
Collier Blvd.	N/A ¹	North of Immokalee Rd.	5%	SB – 29	NB – 32
Collier Blvd.	30.1	Immokalee Rd. to Vanderbilt Beach Rd.	30%	<u>NB – 174</u>	SB – 193
Collier Blvd.	30.2	Vanderbilt Beach Golden Gate Blvd.	10%	NB – 58	<u>SB – 64</u>
Vanderbilt Beach Rd.	N/A ¹	East of Collier Blvd.	5%	EB – 29	WB – 32
Vanderbilt Beach Rd.	112.0	Logan Blvd. to Collier Blvd.	10%	<u>EB – 58</u>	WB – 64
Logan Blvd. N	N/A ¹	North of Immokalee Rd.	5%	SB – 29	NB – 32
Logan Blvd. N	50.0	Immokalee Rd. to Vanderbilt Beach Rd.	10%	<u>NB – 58</u>	SB – 64

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

Fig. 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 from annual traffic counts (estimated from 2008 through 2016), whichever is greater. Another way to derive the background traffic is to use the 2016 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 2022.

Table 4
Background Traffic without Project (2016 - 2022)

Roadway Link	CC AUIR Link ID #	Roadway Link Location	2016 AUIR Pk Hr, Pk Dir Background Traffic Volume (trips/hr)	Projected Traffic Annual Growth Rate (%/yr)*	Growth Factor	2022 Projected Pk Hr, Peak Dir Background Traffic Volume w/out Project (trips/hr) Growth Factor**	Trip Bank	2022 Projected Pk Hr, Peak Dir Background Traffic Volume w/out Project (trips/hr) Trip Bank***
Immokalee Rd.	44.0	East of Collier Blvd.	1,620	2.00%	1.1262	1,824	706	<u>2,326</u>
Immokalee Rd.	43.2	Logan Blvd. to Collier Blvd.	1,960	4.00%	1.2653	2,480	603	<u>2,563</u>
Immokalee Rd.	43.1	I-75 to Logan Blvd..	2,410	3.93%	1.2602	<u>3,037</u>	474	2,884
Collier Blvd.	30.1	Immokalee Rd. to Vanderbilt Beach Rd.	1,450	3.28%	1.2137	1,760	524	<u>1,974</u>
Collier Blvd.	30.2	Vanderbilt Beach Golden Gate Blvd.	1,200	2.0%	1.1262	1,351	166	<u>1,366</u>
Vanderbilt Beach Rd.	112.0	Logan Blvd. to Collier Blvd.	1,230	4.0%	1.2653	<u>1,556</u>	246	1,476
Logan Blvd. N	50.0	Immokalee Rd. to Vanderbilt Beach Rd.	590	4.0%	1.2653	<u>747</u>	30	620

Note(s): *Annual Growth Rate - from 2016 AUIR, 2% minimum. **Growth Factor = (1+Annual Growth Rate)⁶. 2022 Projected Volume = 2016 AUIR Volume x Growth Factor. ***2022 Projected Volume= 2016 AUIR Volume + Trip Bank. The projected 2022 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 2016 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 2016 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	E	3,500 (EB)	6D
Collier Blvd.	30.1	Immokalee Rd. to Vanderbilt Beach Rd.	6D	E	3,000 (NB)	6D
Collier Blvd.	30.2	Vanderbilt Beach 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 net new generated 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 2022 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 2022

Roadway Link	CC AUIR Link ID #	Roadway Link Location	2016 Peak Dir, Peak Hr Capacity Volume	Roadway Link, Peak Dir, Peak Hr (Project Vol Added)*	2022 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 – 203	2,529	6.2%	No	No
Immokalee Rd.	43.2	Logan Blvd. to Collier Blvd.	3,200 (EB)	WB – 174	2,737	5.4%	No	No
Immokalee Rd.	43.1	I-75 to Logan Blvd..	3,500 (EB)	WB – 58	3,095	1.7%	No	No
Collier Blvd.	30.1	Immokalee Rd. to Vanderbilt Beach Rd.	3,000 (NB)	NB – 174	2,148	5.8%	No	No
Collier Blvd.	30.2	Vanderbilt Beach Golden Gate Blvd.	3,000 (SB)	NB – 58	1,424	1.9%	No	No
Vanderbilt Beach Rd.	112.0	Logan Blvd. to Collier Blvd.	3,000 (EB)	EB – 58	1,624	1.9%	No	No
Logan Blvd. N	50.0	Immokalee Rd. to Vanderbilt Beach Rd.	1,000 (NB)	NB – 58	805	5.8%	No	No

Note(s): *N/A= not applicable; estimated no net new traffic generated by proposed PUDA conditions; **2022 Projected Volume= 2022 background (refer to **Table 4**) + Project Volume added.

Site Access Turn Lane Analysis

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

- **Collier Boulevard (CR 951):** Proposed full access connection onto northbound Collier Boulevard. This proposed full median opening allows a reasonable solution to alleviate traffic congestion at this location.
- **Immokalee Road:** West access – new right-in/right-out access onto eastbound Immokalee Road proposed. East access – existing directional left-in/right-in/right-out access onto eastbound Immokalee Road to remain.

For details see **Appendix A: Approved Master Site Plan.**

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. 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” – 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. Similar to 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 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.

Project access is typically evaluated for turn lane warrants based on the Collier County Right-of-way Manual: (a) two-lane roadways – 40vph for right-turn lane/20vph for left-turn lane; and (b) multi-lane divided roadways – right turn lanes shall always be provided: and (c) when new median openings are permitted, they shall always include left-turn lanes.

Turn lane lengths required at build-out conditions 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 estimated project trips at driveway locations are illustrated in **Appendix D: Project Turning Movements Exhibits.**

North Entrances – West Site Access – Immokalee Road

A dedicated eastbound right-turn lane is warranted as the project meets the multi-lane criteria. The proposed project is expected to generate 60 and 84vph right-turning movements during the AM and PM peak hour, respectively. At the minimum, the turn lane should be 290 feet long (which includes a minimum of 50 feet of storage).

North Entrances – East Site Access – Immokalee Road

A dedicated eastbound right-turn lane is warranted as the project meets the multi-lane criteria. There is an existing right-turn lane approximately 240 feet long. The proposed project is expected to generate 61 and 84vph right-turning movements during the AM and PM peak hour, respectively. At the minimum, the turn lane should be 290 feet long (which includes a minimum of 75 feet of storage). As such, the existing right-turn lane would need to be extended a minimum of 50 feet to accommodate projected traffic at this location.

A dedicated westbound left-turn lane is warranted as the project meets the multi-lane criteria. There is an existing left-turn lane approximately 360 feet long. The proposed project is expected to generate 211 and 295vph left-turning movements during the AM and PM peak hour, respectively. At the minimum, the turn lane should be 490 feet long (which includes a minimum of 250 feet of storage).

West Entrance - Site Access – Collier Boulevard

A dedicated northbound right-turn lane is warranted as the project meets the multi-lane criteria. The proposed project is expected to generate 181 and 253vph right-turning movements during the AM and PM peak hour, respectively. At the minimum, the turn lane should be 365 feet long (which includes a minimum of 125 feet of storage).

A dedicated southbound left-turn lane is warranted as the project meets the multi-lane criteria. The proposed project is expected to generate 90 and 126vph left-turning movements during the AM and PM peak hour, respectively. At the minimum, the turn lane should be 365 feet long (which includes a minimum of 125 feet of storage).

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.

Collier Boulevard (CR 951) and Immokalee Road (CR 846) intersection is currently under design by others and it is not part of this traffic analysis.

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

There is an existing eastbound U-turn/left-turn lane approximately 340 feet long serving this intersection. The proposed project is expected to generate 100 and 184vph U-turning movements during the AM and PM peak hour, respectively. At the minimum, the turn lane should be 415 feet long (which includes a minimum of 175 feet of storage). As such, the existing left-turn lane would need to be extended to accommodate projected traffic at this location.

Improvement Analysis

Based on the link analysis and trip distribution, 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 net new generated 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 2022 future build-out conditions. There is adequate and sufficient roadway capacity to accommodate the proposed development without adversely affecting adjacent roadway network level of service.

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.

Mitigation of Impact

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

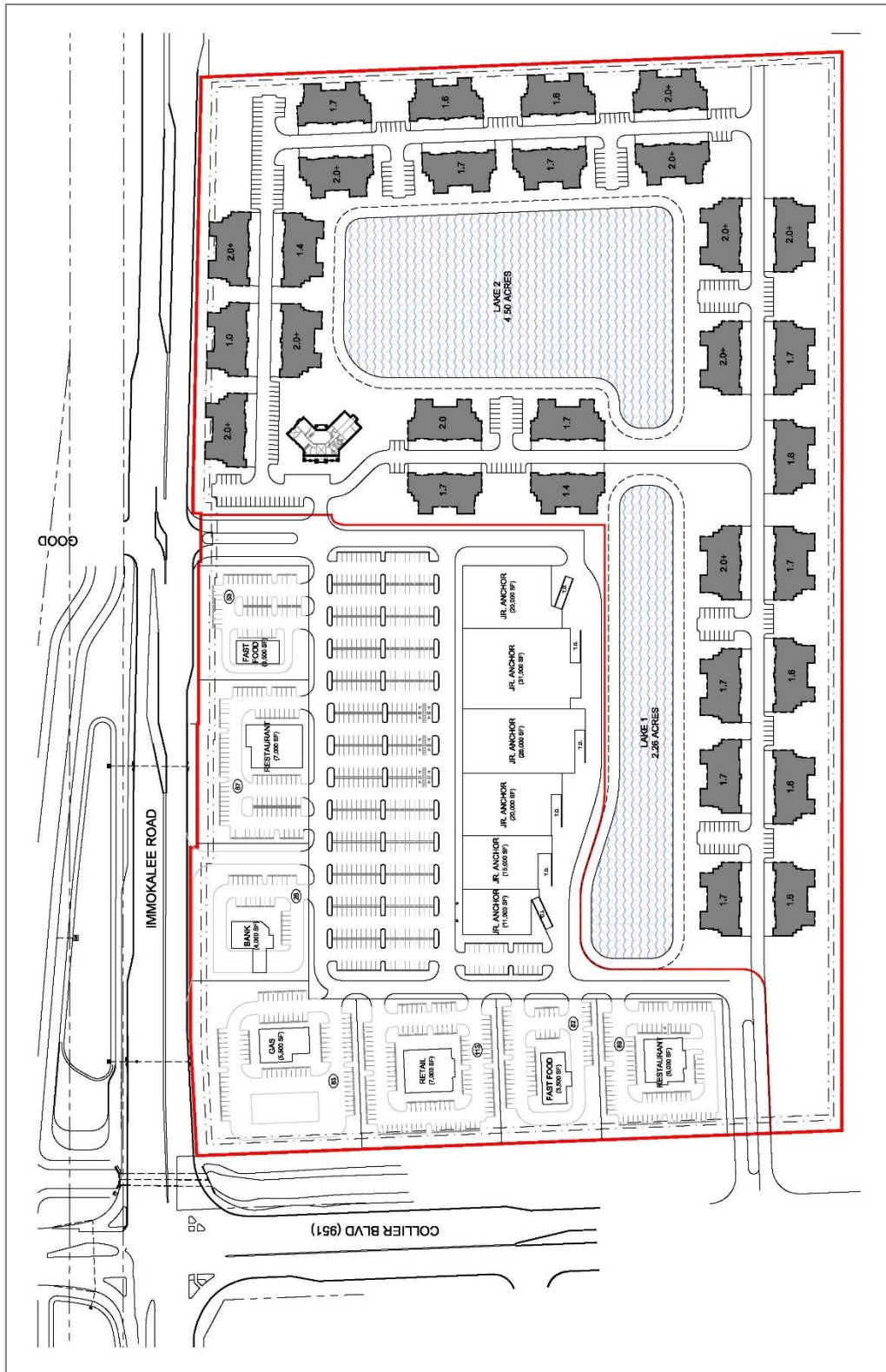
Appendix A: Project Master Site Plans

(2 Sheets)

Master Site Plan – Scenario 1



Master Site Plan – Scenario 2



Appendix B: Initial Meeting Checklist (Methodology Meeting)

(5 Sheets)

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

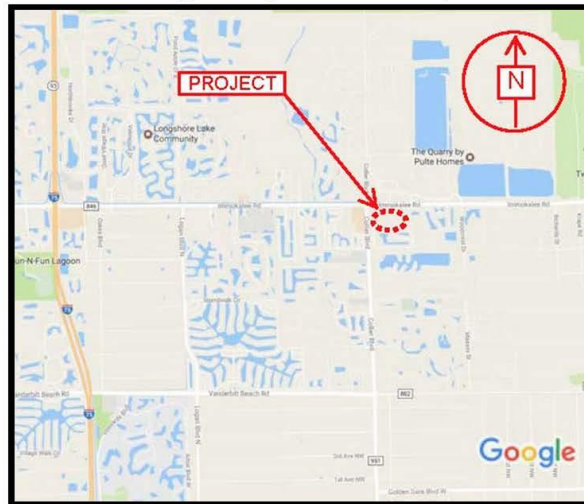
Description: Project proposes to rezone the existing parcel to allow for commercial and residential development. The TIS will use the highest of 2 potential development scenarios: **Scenario 1** – 112 du residential apartments, 30,000 sf general office, 147,000 sf shopping center, 6,000 sf (20 pumps) 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.

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

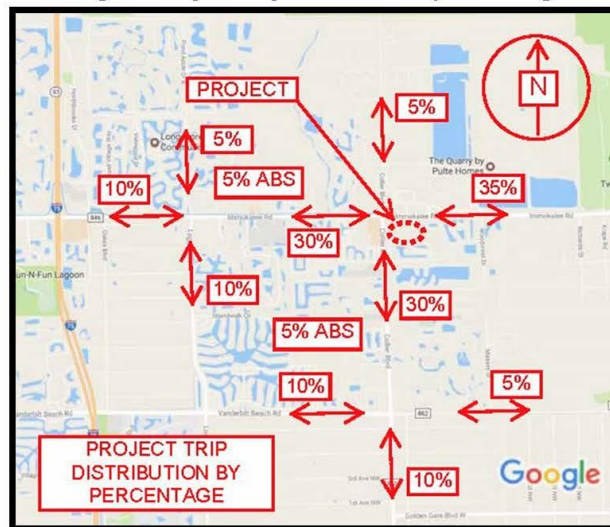
Site-trip generation: OTISS Software

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



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/AReview process: N/ARequirements: N/A

Miscellaneous: N/A

Small Scale Study – No Fee

Minor Study - \$750.00

Major Study - \$1500.00

Methodology Fee \$500

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

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.

Appendix C: Trip Generation Calculations

ITE 9th Edition

(15 Sheets)

Pelican Nursery Property – PUD Rezone – TIS – May 2017

Project Name: Pelican Nursery Property - Scenario 1
 Date: 4/19/2017
 State/Province:
 Country:
 Analyst's Name:

No:
 City:
 Zip/Postal Code:
 Client Name:
 Edition: ITE-TGM 9th Edition

LAND USE	SIZE	WEEKDAY		AM PEAK HOUR		PM PEAK HOUR	
		Entry	Exit	Entry	Exit	Entry	Exit
220 - Apartment	112 ⁽¹⁾	401	401	12	47	51	28
Reduction		0	0	0	0	0	0
Internal		0	0	0	3	4	2
Pass-by		0	0	0	0	0	0
Non-pass-by		401	401	12	44	47	26
710 - General Office Building	30 ⁽²⁾	263	263	64	9	19	93
Reduction		0	0	0	0	0	0
Internal		0	0	3	1	1	27
Pass-by		0	0	0	0	0	0
Non-pass-by		263	263	61	8	18	66
820 - Shopping Center	147 ⁽³⁾	4362	4362	122	75	372	404
Reduction		0	0	0	0	0	0
Internal		0	0	2	2	12	13
Pass-by		654	655	30	18	90	98
Non-pass-by		3708	3707	90	55	270	293
853 - Convenience Market with Gasoline Pumps	20 ⁽⁴⁾	5426	5426	166	165	191	190
Reduction		0	0	0	0	0	0
Internal		0	0	3	5	10	7
Pass-by		2170	2171	82	80	90	92
Non-pass-by		3256	3255	81	80	91	91
862 - Home Improvement Superstore	135 ⁽³⁾	2075	2075	115	86	154	161
Reduction		0	0	0	0	0	0
Internal		0	0	9	11	10	6
Pass-by		311	312	26	19	36	39
Non-pass-by		1764	1763	80	56	108	116
934 - Fast-Food Restaurant with Drive-Through Window	7 ⁽⁴⁾	1737	1736	162	156	119	110
Reduction		0	0	0	0	0	0
Internal		0	0	21	16	27	9
Pass-by		695	694	70	71	46	51
Non-pass-by		1042	1042	71	69	46	50
Total		14264	14263	641	538	906	986
Total Reduction		0	0	0	0	0	0
Total Internal		0	0	38	38	64	64
Total Pass-by		3830	3832	208	188	262	280
Total Non-pass-by		10434	10431	395	312	580	642

(1) Dwelling Units
 (2) 1000 Sq. Feet Gross Floor Area
 (3) 1000 Sq. Feet Gross Leasable Area
 (4) Vehicle Fueling Positions

PROJECT NAME: PELICAN NURSERY PROPERTY - SCENARIO 1
 ANALYSIS NAME:

LAND USE	INDEPENDENT VARIABLE	SIZE	TIME PERIOD	METHOD	ENTRY	EXIT	TOTAL
220 - Apartment	<input type="text" value="Dwelling Units"/>	112	<input type="text" value="Weekday"/>	Best Fit (LIN) $T = 6.06(X) + 123.56$	401	401	802
710 - General Office Building	<input type="text" value="1000 Sq. Feet Gros"/>	30	<input type="text" value="Weekday"/>	Best Fit (LOG) $\ln(T) = 0.76\ln(X) + 3.68$	263	263	526
820 - Shopping Center	<input type="text" value="1000 Sq. Feet Gros"/>	147	<input type="text" value="Weekday"/>	Best Fit (LOG) $\ln(T) = 0.65\ln(X) + 5.83$	4362	4362	8724
853 - Convenience Market with Gasoline Pumps	<input type="text" value="Vehicle Fueling Pos"/>	20 ⁽⁴⁾	<input type="text" value="Weekday"/>	Average 542.6	5426	5426	10852
862 - Home Improvement Superstore	<input type="text" value="1000 Sq. Feet Gros"/>	135	<input type="text" value="Weekday"/>	Average 30.74	2075	2075	4150
934 - Fast-Food Restaurant with Drive-Through Window	<input type="text" value="1000 Sq. Feet Gros"/>	7	<input type="text" value="Weekday"/>	Average 496.12	1737	1736	3473

(0) indicates size out of range.

220 - Apartment				710 - General Office Building				820 - Shopping Center			
Exit	401	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	263		
Entry	401	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	263		
220 - Apartment				820 - Shopping Center							
Exit	401	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	4362		
Entry	401	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	4362		
220 - Apartment				853 - Convenience Market with Gasoline Pumps							
Exit	401	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	5426		
Entry	401	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	5426		
220 - Apartment				862 - Home Improvement Superstore							
Exit	401	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	2075		
Entry	401	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	2075		
220 - Apartment				934 - Fast-Food Restaurant with Drive-Through Window							
Exit	401	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	1737		
Entry	401	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	1736		
710 - General Office Building				820 - Shopping Center							
Exit	263	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	4362		
Entry	263	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	4362		
710 - General Office Building				853 - Convenience Market with Gasoline Pumps							
Exit	263	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	5426		
Entry	263	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	5426		
710 - General Office Building				862 - Home Improvement Superstore							
Exit	263	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	2075		
Entry	263	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	2075		
710 - General Office Building				934 - Fast-Food Restaurant with Drive-Through Window							
Exit	263	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	1737		
Entry	263	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	1736		
820 - Shopping Center				853 - Convenience Market with Gasoline Pumps							
Exit	4362	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	5426		
Entry	4362	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	5426		
820 - Shopping Center				862 - Home Improvement Superstore							
Exit	4362	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	2075		
Entry	4362	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	2075		
820 - Shopping Center				934 - Fast-Food Restaurant with Drive-Through Window							
Exit	4362	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	1737		
Entry	4362	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	1736		
853 - Convenience Market with Gasoline Pumps				862 - Home Improvement Superstore							
Exit	5426	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	2075		
Entry	5426	Demand Entry:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Exit:	<input type="text" value="0"/> % (0)	Exit	2075		
853 - Convenience Market with Gasoline Pumps				934 - Fast-Food Restaurant with Drive-Through Window							
Exit	5426	Demand Exit:	<input type="text" value="0"/> % (0)	Balanced:	0	Demand Entry:	<input type="text" value="0"/> % (0)	Entry	1737		

862 - Home Improvement Superstore

Exit 2075 Demand Exit: 0 % (0)

Balanced: 0

934 - Fast-Food Restaurant with Drive-Through Window

Demand Entry: 0 % (0)

Entry 1737

Entry 2075 Demand Entry: 0 % (0)

Balanced: 0

Demand Exit: 0 % (0)

Exit 1736

220 - Apartment

INTERNAL TRIPS

TOTAL TRIPS

710 - General Office Building

820 - Shopping Center

853 - Convenience Market with Gasoline Pumps

862 - Home Improvement Superstore

934 - Fast-Food Restaurant with Drive-Through Window

Total

EXTERNAL TRIPS

Entry 401 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 401 (100%)

Exit 401 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 401 (100%)

Total 802 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 802 (100%)

710 - General Office Building

INTERNAL TRIPS

TOTAL TRIPS

220 - Apartment

820 - Shopping Center

853 - Convenience Market with Gasoline Pumps

862 - Home Improvement Superstore

934 - Fast-Food Restaurant with Drive-Through Window

Total

EXTERNAL TRIPS

Entry 263 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 263 (100%)

Exit 263 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 263 (100%)

Total 526 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 526 (100%)

820 - Shopping Center

INTERNAL TRIPS

TOTAL TRIPS

220 - Apartment

710 - General Office Building

853 - Convenience Market with Gasoline Pumps

862 - Home Improvement Superstore

934 - Fast-Food Restaurant with Drive-Through Window

Total

EXTERNAL TRIPS

Entry 4362 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 4362 (100%)

Exit 4362 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 4362 (100%)

Total 8724 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 8724 (100%)

853 - Convenience Market with Gasoline Pumps

INTERNAL TRIPS

TOTAL TRIPS

220 - Apartment

710 - General Office Building

820 - Shopping Center

862 - Home Improvement Superstore

934 - Fast-Food Restaurant with Drive-Through Window

Total

EXTERNAL TRIPS

Entry 5426 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 5426 (100%)

Exit 5426 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 5426 (100%)

Total 10852 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 10852 (100%)

862 - Home Improvement Superstore

INTERNAL TRIPS

TOTAL TRIPS

220 - Apartment

710 - General Office Building

820 - Shopping Center

853 - Convenience Market with Gasoline Pumps

934 - Fast-Food Restaurant with Drive-Through Window

Total

EXTERNAL TRIPS

Entry 2075 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 2075 (100%)

Exit 2075 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 2075 (100%)

Total 4150 (100%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 0 (0%) 4150 (100%)

934 - Fast-Food Restaurant with Drive-Through Window

		220 - Apartment	710 - General Office Building	820 - Shopping Center	Market with Gasoline Pumps	Improvement Superstore	Total	
Entry	1737 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1737 (100%)
Exit	1736 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1736 (100%)
Total	3473 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3473 (100%)

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 - Apartment	802	<input type="text" value="0"/> %	0	802
710 - General Office Building	526	<input type="text" value="0"/> %	0	526
820 - Shopping Center	8724	<input type="text" value="15"/> %	1309	7415
853 - Convenience Market with Gasoline Pumps	10852	<input type="text" value="40"/> %	4341	6511
862 - Home Improvement Superstore	4150	<input type="text" value="15"/> %	623	3527
934 - Fast-Food Restaurant with Drive-Through Window	3473	<input type="text" value="40"/> %	1389	2084

PROJECT NAME: PELICAN NURSERY PROPERTY - SCENARIO 1

ANALYSIS NAME:

LAND USE	INDEPENDENT VARIABLE	SIZE	TIME PERIOD	METHOD	ENTRY	EXIT	TOTAL
220 - Apartment	<input type="text" value="Dwelling Units"/>	112	<input type="text" value="Weekday, Peak Hour"/>	Best Fit (LIN) $T = 0.49(X) + 3.73$	12	47	59
710 - General Office Building	<input type="text" value="1000 Sq. Feet Gross"/>	30	<input type="text" value="Weekday, A.M. Peak Hour"/>	Best Fit (LOG) $\ln(T) = 0.8\ln(X) + 1.57$	64	9	73
820 - Shopping Center	<input type="text" value="1000 Sq. Feet Gross"/>	147	<input type="text" value="Weekday, Peak Hour"/>	Best Fit (LOG) $\ln(T) = 0.61\ln(X) + 2.24$	122	75	197
853 - Convenience Market with Gasoline Pumps	<input type="text" value="Vehicle Fueling Post"/>	20 ⁽⁰⁾	<input type="text" value="Weekday, Peak Hour"/>	Average 16.57	166	165	331
862 - Home Improvement Superstore	<input type="text" value="1000 Sq. Feet Gross"/>	135	<input type="text" value="Weekday, Peak Hour"/>	Average 1.49	115	86	201
934 - Fast-Food Restaurant with Drive-Through Window	<input type="text" value="1000 Sq. Feet Gross"/>	7	<input type="text" value="Weekday, Peak Hour"/>	Average 45.42	162	156	318

⁽⁰⁾ indicates size out of range. The time periods do not match.

220 - Apartment			710 - General Office Building		
Exit	47	Demand Exit: <input type="text" value="2"/> % (1)	Balanced: 1	Demand Entry: <input type="text" value="3"/> % (2)	Entry 64
Entry	12	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="1"/> % (0)	Exit 9
220 - Apartment			820 - Shopping Center		
Exit	47	Demand Exit: <input type="text" value="1"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="17"/> % (21)	Entry 122
Entry	12	Demand Entry: <input type="text" value="2"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="14"/> % (11)	Exit 75
220 - Apartment			853 - Convenience Market with Gasoline Pumps		
Exit	47	Demand Exit: <input type="text" value="1"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="17"/> % (28)	Entry 166
Entry	12	Demand Entry: <input type="text" value="2"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="14"/> % (23)	Exit 165
220 - Apartment			862 - Home Improvement Superstore		
Exit	47	Demand Exit: <input type="text" value="1"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="17"/> % (20)	Entry 115
Entry	12	Demand Entry: <input type="text" value="2"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="14"/> % (12)	Exit 86
220 - Apartment			934 - Fast-Food Restaurant with Drive-Through Window		
Exit	47	Demand Exit: <input type="text" value="4"/> % (2)	Balanced: 2	Demand Entry: <input type="text" value="4"/> % (6)	Entry 162
Entry	12	Demand Entry: <input type="text" value="1"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="1"/> % (2)	Exit 156
710 - General Office Building			820 - Shopping Center		
Exit	9	Demand Exit: <input type="text" value="3"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="4"/> % (5)	Entry 122
Entry	64	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="3"/> % (2)	Exit 75
710 - General Office Building			853 - Convenience Market with Gasoline Pumps		
Exit	9	Demand Exit: <input type="text" value="3"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="4"/> % (7)	Entry 166
Entry	64	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="3"/> % (5)	Exit 165
710 - General Office Building			862 - Home Improvement Superstore		
Exit	9	Demand Exit: <input type="text" value="3"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="4"/> % (5)	Entry 115
Entry	64	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="3"/> % (3)	Exit 86
710 - General Office Building			934 - Fast-Food Restaurant with Drive-Through Window		
Exit	9	Demand Exit: <input type="text" value="13"/> % (1)	Balanced: 1	Demand Entry: <input type="text" value="5"/> % (8)	Entry 162
Entry	64	Demand Entry: <input type="text" value="3"/> % (2)	Balanced: 2	Demand Exit: <input type="text" value="6"/> % (9)	Exit 156
820 - Shopping Center			853 - Convenience Market with Gasoline Pumps		
Exit	75	Demand Exit: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="0"/> % (0)	Entry 166
Entry	122	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="0"/> % (0)	Exit 165
820 - Shopping Center			862 - Home Improvement Superstore		
Exit	75	Demand Exit: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="0"/> % (0)	Entry 115
Entry	122	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="0"/> % (0)	Exit 86
820 - Shopping Center			934 - Fast-Food Restaurant with Drive-Through Window		
Exit	75	Demand Exit: <input type="text" value="3"/> % (2)	Balanced: 2	Demand Entry: <input type="text" value="10"/> % (16)	Entry 162
Entry	122	Demand Entry: <input type="text" value="2"/> % (2)	Balanced: 2	Demand Exit: <input type="text" value="3"/> % (5)	Exit 156
853 - Convenience Market with Gasoline Pumps			862 - Home Improvement Superstore		
Exit	165	Demand Exit: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="0"/> % (0)	Entry 115
Entry	166	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="0"/> % (0)	Exit 86
853 - Convenience Market with Gasoline Pumps			934 - Fast-Food Restaurant with Drive-Through Window		
Exit	165	Demand Exit: <input type="text" value="3"/> % (5)	Balanced: 5	Demand Entry: <input type="text" value="10"/> % (16)	Entry 162

862 - Home Improvement Superstore				934 - Fast-Food Restaurant with Drive-Through Window			
Exit	86	Demand Exit:	13 % (11)	Balanced:	11	Demand Entry:	50 % (81)
Entry	115	Demand Entry:	8 % (9)	Balanced:	9	Demand Exit:	14 % (22)
220 - Apartment							
INTERNAL TRIPS							
TOTAL TRIPS		710 - General Office Building	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	862 - Home Improvement Superstore	934 - Fast-Food Restaurant with Drive-Through Window	EXTERNAL TRIPS
Entry	12 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	12 (100%)
Exit	47 (100%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	2 (4%)	44 (94%)
Total	59 (100%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	2 (3%)	56 (95%)
710 - General Office Building							
INTERNAL TRIPS							
TOTAL TRIPS		220 - Apartment	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	862 - Home Improvement Superstore	934 - Fast-Food Restaurant with Drive-Through Window	EXTERNAL TRIPS
Entry	64 (100%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	2 (3%)	61 (95%)
Exit	9 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (11%)	8 (89%)
Total	73 (100%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)	3 (4%)	69 (95%)
820 - Shopping Center							
INTERNAL TRIPS							
TOTAL TRIPS		220 - Apartment	710 - General Office Building	853 - Convenience Market with Gasoline Pumps	862 - Home Improvement Superstore	934 - Fast-Food Restaurant with Drive-Through Window	EXTERNAL TRIPS
Entry	122 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (2%)	120 (98%)
Exit	75 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (3%)	73 (97%)
Total	197 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	4 (2%)	193 (98%)
853 - Convenience Market with Gasoline Pumps							
INTERNAL TRIPS							
TOTAL TRIPS		220 - Apartment	710 - General Office Building	820 - Shopping Center	862 - Home Improvement Superstore	934 - Fast-Food Restaurant with Drive-Through Window	EXTERNAL TRIPS
Entry	166 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (2%)	163 (98%)
Exit	165 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (3%)	160 (97%)
Total	331 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	8 (2%)	323 (98%)
862 - Home Improvement Superstore							
INTERNAL TRIPS							
TOTAL TRIPS		220 - Apartment	710 - General Office Building	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	934 - Fast-Food Restaurant with Drive-Through Window	EXTERNAL TRIPS
Entry	115 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	9 (8%)	106 (92%)
Exit	86 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	11 (13%)	75 (87%)
Total	201 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	20 (10%)	181 (90%)
934 - Fast-Food Restaurant with Drive-Through Window							

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 - Apartment	56	<input type="text" value="0"/> %	0	56
710 - General Office Building	69	<input type="text" value="0"/> %	0	69
820 - Shopping Center	193	<input type="text" value="25"/> %	48	145
853 - Convenience Market with Gasoline Pumps	323	<input type="text" value="50"/> %	162	161
862 - Home Improvement Superstore	181	<input type="text" value="25"/> %	45	136
934 - Fast-Food Restaurant with Drive-Through Window	281	<input type="text" value="50"/> %	141	140

PROJECT NAME

PELICAN NURSERY PROPERTY - SCENARIO 1

ANALYSIS NAME:

PM Peak Hour

LAND USE	INDEPENDENT VARIABLE	SIZE	TIME PERIOD	METHOD	ENTRY	EXIT	TOTAL
220 - Apartment	Dwelling Units	112	Weekday, Peak Hou	<div>Best Fit (LIN)</div> <div>T = 0.55(X) + 17.65</div>	51	28	79
710 - General Office Building	1000 Sq. Feet Gros	30	Weekday, P.M. Pea	<div>Best Fit (LIN)</div> <div>T = 1.12(X) + 78.45</div>	19	93	112
820 - Shopping Center	1000 Sq. Feet Gros	147	Weekday, Peak Hou	<div>Best Fit (LOG)</div> <div>Ln(T) = 0.67Ln(X) + 3.31</div>	372	404	776
853 - Convenience Market with Gasoline Pumps	Vehicle Fueling Pos	20 ^(U)	Weekday, Peak Hou	<div>Average</div> <div>19.07</div>	191	190	381
862 - Home Improvement Superstore	1000 Sq. Feet Gros	135	Weekday, Peak Hou	<div>Average</div> <div>2.33</div>	154	161	315
934 - Fast-Food Restaurant with Drive-Through Window	1000 Sq. Feet Gros	7	Weekday, Peak Hou	<div>Average</div> <div>32.65</div>	119	110	229

(U) indicates size out of range.

The time periods do not match.

NCHRP 684											
220 - Apartment				710 - General Office Building				820 - Shopping Center			
Exit	28	Demand Exit:	2 % (1)	Balanced:	1	Demand Entry:	3 % (1)	Entry	19	Demand Exit:	1 % (1)
Entry	51	Demand Entry:	0 % (0)	Balanced:	0	Demand Exit:	1 % (1)	Exit	93		
220 - Apartment				853 - Convenience Market with Gasoline Pumps				862 - Home Improvement Superstore			
Exit	28	Demand Exit:	1 % (0)	Balanced:	0	Demand Entry:	17 % (63)	Entry	372	Demand Exit:	14 % (57)
Entry	51	Demand Entry:	2 % (1)	Balanced:	1	Demand Exit:	14 % (27)	Exit	190		
220 - Apartment				934 - Fast-Food Restaurant with Drive-Through Window				820 - Shopping Center			
Exit	28	Demand Exit:	1 % (0)	Balanced:	0	Demand Entry:	17 % (26)	Entry	154	Demand Exit:	14 % (23)
Entry	51	Demand Entry:	2 % (1)	Balanced:	1	Demand Exit:	14 % (23)	Exit	161		
220 - Apartment				853 - Convenience Market with Gasoline Pumps				862 - Home Improvement Superstore			
Exit	28	Demand Exit:	4 % (1)	Balanced:	1	Demand Entry:	4 % (5)	Entry	119	Demand Exit:	1 % (1)
Entry	51	Demand Entry:	1 % (1)	Balanced:	1	Demand Exit:	1 % (1)	Exit	110		
710 - General Office Building				820 - Shopping Center				853 - Convenience Market with Gasoline Pumps			
Exit	93	Demand Exit:	9 % (8)	Balanced:	8	Demand Entry:	10 % (37)	Entry	372	Demand Exit:	10 % (40)
Entry	19	Demand Entry:	1 % (0)	Balanced:	0	Demand Exit:	10 % (40)	Exit	404		
710 - General Office Building				862 - Home Improvement Superstore				934 - Fast-Food Restaurant with Drive-Through Window			
Exit	93	Demand Exit:	9 % (8)	Balanced:	8	Demand Entry:	10 % (19)	Entry	191	Demand Exit:	10 % (19)
Entry	19	Demand Entry:	1 % (0)	Balanced:	0	Demand Exit:	10 % (19)	Exit	190		
710 - General Office Building				853 - Convenience Market with Gasoline Pumps				862 - Home Improvement Superstore			
Exit	93	Demand Exit:	9 % (8)	Balanced:	8	Demand Entry:	10 % (15)	Entry	154	Demand Exit:	10 % (16)
Entry	19	Demand Entry:	1 % (0)	Balanced:	0	Demand Exit:	10 % (16)	Exit	161		
710 - General Office Building				934 - Fast-Food Restaurant with Drive-Through Window				853 - Convenience Market with Gasoline Pumps			
Exit	93	Demand Exit:	3 % (3)	Balanced:	3	Demand Entry:	5 % (6)	Entry	119	Demand Exit:	6 % (7)
Entry	19	Demand Entry:	1 % (0)	Balanced:	0	Demand Exit:	6 % (7)	Exit	110		
820 - Shopping Center				862 - Home Improvement Superstore				934 - Fast-Food Restaurant with Drive-Through Window			
Exit	404	Demand Exit:	0 % (0)	Balanced:	0	Demand Entry:	0 % (0)	Entry	191	Demand Exit:	0 % (0)
Entry	372	Demand Entry:	0 % (0)	Balanced:	0	Demand Exit:	0 % (0)	Exit	190		
820 - Shopping Center				934 - Fast-Food Restaurant with Drive-Through Window				853 - Convenience Market with Gasoline Pumps			
Exit	404	Demand Exit:	0 % (0)	Balanced:	0	Demand Entry:	0 % (0)	Entry	154	Demand Exit:	0 % (0)
Entry	372	Demand Entry:	0 % (0)	Balanced:	0	Demand Exit:	0 % (0)	Exit	161		
820 - Shopping Center				853 - Convenience Market with Gasoline Pumps				862 - Home Improvement Superstore			
Exit	404	Demand Exit:	3 % (12)	Balanced:	12	Demand Entry:	10 % (12)	Entry	119	Demand Exit:	10 % (12)

853 - Convenience Market with Gasoline Pumps				862 - Home Improvement Superstore			
Exit	190	Demand Exit:	0 % (0)	Balanced:	0	Demand Entry:	0 % (0)
Entry	191	Demand Entry:	0 % (0)	Balanced:	0	Demand Exit:	0 % (0)
853 - Convenience Market with Gasoline Pumps				934 - Fast-Food Restaurant with Drive-Through Window			
Exit	190	Demand Exit:	3 % (6)	Balanced:	6	Demand Entry:	10 % (12)
Entry	191	Demand Entry:	1 % (2)	Balanced:	2	Demand Exit:	5 % (6)
862 - Home Improvement Superstore				934 - Fast-Food Restaurant with Drive-Through Window			
Exit	161	Demand Exit:	3 % (5)	Balanced:	5	Demand Entry:	10 % (12)
Entry	154	Demand Entry:	1 % (2)	Balanced:	2	Demand Exit:	3 % (3)
220 - Apartment							
INTERNAL TRIPS							
TOTAL TRIPS		710 - General Office Building	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	862 - Home Improvement Superstore	934 - Fast-Food Restaurant with Drive-Through Window	EXTERNAL TRIPS
Entry	51 (100%)	0 (0%)	1 (2%)	1 (2%)	1 (2%)	1 (2%)	47 (92%)
Exit	28 (100%)	1 (4%)	0 (0%)	0 (0%)	0 (0%)	1 (4%)	26 (93%)
Total	79 (100%)	1 (1%)	1 (1%)	1 (1%)	1 (1%)	2 (3%)	73 (92%)
710 - General Office Building							
INTERNAL TRIPS							
TOTAL TRIPS		220 - Apartment	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	862 - Home Improvement Superstore	934 - Fast-Food Restaurant with Drive-Through Window	EXTERNAL TRIPS
Entry	19 (100%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	18 (95%)
Exit	93 (100%)	0 (0%)	8 (9%)	8 (9%)	8 (9%)	3 (3%)	66 (71%)
Total	112 (100%)	1 (1%)	8 (7%)	8 (7%)	8 (7%)	3 (3%)	84 (75%)
820 - Shopping Center							
INTERNAL TRIPS							
TOTAL TRIPS		220 - Apartment	710 - General Office Building	853 - Convenience Market with Gasoline Pumps	862 - Home Improvement Superstore	934 - Fast-Food Restaurant with Drive-Through Window	EXTERNAL TRIPS
Entry	372 (100%)	0 (0%)	8 (2%)	0 (0%)	0 (0%)	4 (1%)	360 (97%)
Exit	404 (100%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	12 (3%)	391 (97%)
Total	776 (100%)	1 (0%)	8 (1%)	0 (0%)	0 (0%)	16 (2%)	751 (97%)
853 - Convenience Market with Gasoline Pumps							
INTERNAL TRIPS							
TOTAL TRIPS		220 - Apartment	710 - General Office Building	820 - Shopping Center	862 - Home Improvement Superstore	934 - Fast-Food Restaurant with Drive-Through Window	EXTERNAL TRIPS
Entry	191 (100%)	0 (0%)	8 (4%)	0 (0%)	0 (0%)	2 (1%)	181 (95%)
Exit	190 (100%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)	6 (3%)	183 (96%)
Total	381 (100%)	1 (0%)	8 (2%)	0 (0%)	0 (0%)	8 (2%)	364 (96%)

INTERNAL TRIPS								
TOTAL TRIPS	220 - Apartment	710 - General Office Building	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	934 - Fast-Food Restaurant with Drive-Through Window	Total	EXTERNAL TRIPS	
Entry	154 (100%)	0 (0%)	8 (5%)	0 (0%)	2 (1%)	10 (6%)	144 (94%)	
Exit	161 (100%)	1 (1%)	0 (0%)	0 (0%)	5 (3%)	6 (4%)	155 (96%)	
Total	315 (100%)	1 (0%)	8 (3%)	0 (0%)	7 (2%)	16 (5%)	299 (95%)	

934 - Fast-Food Restaurant with Drive-Through Window

INTERNAL TRIPS								
TOTAL TRIPS	220 - Apartment	710 - General Office Building	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	862 - Home Improvement Superstore	Total	EXTERNAL TRIPS	
Entry	119 (100%)	1 (1%)	3 (3%)	12 (10%)	6 (5%)	27 (23%)	92 (77%)	
Exit	110 (100%)	1 (1%)	0 (0%)	4 (4%)	2 (2%)	9 (8%)	101 (82%)	
Total	229 (100%)	2 (1%)	3 (1%)	16 (7%)	8 (3%)	36 (16%)	193 (84%)	

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 - Apartment	73	<input type="text" value="0"/> %	0	73
710 - General Office Building	84	<input type="text" value="0"/> %	0	84
820 - Shopping Center	751	<input type="text" value="25"/> %	188	563
853 - Convenience Market with Gasoline Pumps	364	<input type="text" value="50"/> %	182	182
862 - Home Improvement Superstore	299	<input type="text" value="25"/> %	75	224
934 - Fast-Food Restaurant with Drive-Through Window	193	<input type="text" value="50"/> %	97	96

Project Name:		Pelican Nursery Property - Scenario 2		No:			
Date:		4/19/2017		City:			
State/Province:				Zip/Postal Code:			
Country:				Client Name:			
Analyst's Name:				Edition:		ITE-TGM 9th Edition	

LAND USE	SIZE	WEEKDAY		AM PEAK HOUR		PM PEAK HOUR	
		Entry	Exit	Entry	Exit	Entry	Exit
220 - Apartment	300 ⁽¹⁾	971	971	30	121	119	64
Reduction		0	0	0	0	0	0
Internal		0	0	2	7	5	5
Pass-by		0	0	0	0	0	0
Non-pass-by		971	971	28	114	114	59
820 - Shopping Center	147 ⁽²⁾	4362	4362	122	75	372	404
Reduction		0	0	0	0	0	0
Internal		0	0	3	3	5	14
Pass-by		654	655	30	18	92	97
Non-pass-by		3708	3707	89	54	275	293
853 - Convenience Market with Gasoline Pumps	20 ⁽³⁾	5426	5426	166	165	191	190
Reduction		0	0	0	0	0	0
Internal		0	0	4	6	3	8
Pass-by		2170	2171	81	80	94	91
Non-pass-by		3256	3255	81	79	94	91
934 - Fast-Food Restaurant with Drive-Through Window	7 ⁽⁴⁾	1737	1736	162	156	119	110
Reduction		0	0	0	0	0	0
Internal		0	0	12	5	21	7
Pass-by		695	694	75	76	49	52
Non-pass-by		1042	1042	75	75	49	51
Total		12496	12495	480	517	801	768
Total Reduction		0	0	0	0	0	0
Total Internal		0	0	21	21	34	34
Total Pass-by		3519	3520	186	174	235	240
Total Non-pass-by		8977	8975	273	322	532	494

(1) Dwelling Units
(2) 1000 Sq. Feet Gross Leasable Area
(3) Vehicle Fueling Positions
(4) 1000 Sq. Feet Gross Floor Area

PROJECT NAME: PELICAN NURSERY PROPERTY - SCENARIO 2								
ANALYSIS NAME: <div>Weekday</div>								
LAND USE	INDEPENDENT VARIABLE	SIZE	TIME PERIOD	METHOD	ENTRY	EXIT	TOTAL	
220 - Apartment	<div>Dwelling Units</div>	300	<div>Weekday</div>	<div>Best Fit (LIN)</div> <div>T = 6.06(X) + 123.56</div>	971	971	1942	
820 - Shopping Center	<div>1000 Sq. Feet Gros</div>	147	<div>Weekday</div>	<div>Best Fit (LOG)</div> <div>Ln(T) = 0.65Ln(X) + 5.83</div>	4362	4362	8724	
853 - Convenience Market with Gasoline Pumps	<div>Vehicle Fueling Pos</div>	20 ⁽⁰⁾	<div>Weekday</div>	<div>Average</div> <div>542.6</div>	5426	5426	10852	
934 - Fast-Food Restaurant with Drive-Through Window	<div>1000 Sq. Feet Gros</div>	7	<div>Weekday</div>	<div>Average</div> <div>496.12</div>	1737	1736	3473	
(0) indicates size out of range.								

220 - Apartment			820 - Shopping Center		
Exit 971	Demand Exit: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="0"/> % (0)	Entry 4362	
Entry 971	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="0"/> % (0)	Exit 4362	
220 - Apartment			853 - Convenience Market with Gasoline Pumps		
Exit 971	Demand Exit: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="0"/> % (0)	Entry 5426	
Entry 971	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="0"/> % (0)	Exit 5426	
220 - Apartment			934 - Fast-Food Restaurant with Drive-Through Window		
Exit 971	Demand Exit: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="0"/> % (0)	Entry 1737	
Entry 971	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="0"/> % (0)	Exit 1736	
820 - Shopping Center			853 - Convenience Market with Gasoline Pumps		
Exit 4362	Demand Exit: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="0"/> % (0)	Entry 5426	
Entry 4362	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="0"/> % (0)	Exit 5426	
820 - Shopping Center			934 - Fast-Food Restaurant with Drive-Through Window		
Exit 4362	Demand Exit: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="0"/> % (0)	Entry 1737	
Entry 4362	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="0"/> % (0)	Exit 1736	
853 - Convenience Market with Gasoline Pumps			934 - Fast-Food Restaurant with Drive-Through Window		
Exit 5426	Demand Exit: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Entry: <input type="text" value="0"/> % (0)	Entry 1737	
Entry 5426	Demand Entry: <input type="text" value="0"/> % (0)	Balanced: 0	Demand Exit: <input type="text" value="0"/> % (0)	Exit 1736	
220 - Apartment					
TOTAL TRIPS		INTERNAL TRIPS			
		820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	934 - Fast-Food Restaurant with Drive-Through Window	Total
Entry	971 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Exit	971 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	1942 (100%)	0 (0%)	0 (0%)	0 (0%)	1942 (100%)
820 - Shopping Center					
TOTAL TRIPS		INTERNAL TRIPS			
		220 - Apartment	853 - Convenience Market with Gasoline Pumps	934 - Fast-Food Restaurant with Drive-Through Window	Total
Entry	4362 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Exit	4362 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	8724 (100%)	0 (0%)	0 (0%)	0 (0%)	8724 (100%)
853 - Convenience Market with Gasoline Pumps					
TOTAL TRIPS		INTERNAL TRIPS			
		220 - Apartment	820 - Shopping Center	934 - Fast-Food Restaurant with Drive-Through Window	Total
Entry	5426 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Exit	5426 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	10852 (100%)	0 (0%)	0 (0%)	0 (0%)	10852 (100%)

Entry	5426 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5426 (100%)
Exit	5426 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5426 (100%)
Total	10852 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	10852 (100%)

934 - Fast-Food Restaurant with Drive-Through Window

TOTAL TRIPS		INTERNAL TRIPS			EXTERNAL TRIPS	
		220 - Apartment	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	Total	
Entry	1737 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1737 (100%)
Exit	1736 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1736 (100%)
Total	3473 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3473 (100%)

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 - Apartment	1942	<input type="text" value="0"/> %	0	1942
820 - Shopping Center	8724	<input type="text" value="15"/> %	1309	7415
853 - Convenience Market with Gasoline Pumps	10852	<input type="text" value="40"/> %	4341	6511
934 - Fast-Food Restaurant with Drive-Through Window	3473	<input type="text" value="40"/> %	1389	2084

PROJECT NAME: PELICAN NURSERY PROPERTY - SCENARIO 2							
ANALYSIS NAME: AM Peak Hour							
LAND USE	INDEPENDENT VARIABLE	SIZE	TIME PERIOD	METHOD	ENTRY	EXIT	TOTAL
220 - Apartment	Dwelling Units	300	Weekday, Peak Hour	Best Fit (LIN) $T = 0.49(X) + 3.73$	30	121	151
820 - Shopping Center	1000 Sq. Feet Gross	147	Weekday, Peak Hour	Best Fit (LOG) $\ln(T) = 0.61\ln(X) + 2.24$	122	75	197
853 - Convenience Market with Gasoline Pumps	Vehicle Fueling Pos	20 ⁽⁰⁾	Weekday, Peak Hour	Average 16.57	166	165	331
934 - Fast-Food Restaurant with Drive-Through Window	1000 Sq. Feet Gross	7	Weekday, Peak Hour	Average 45.42	162	156	318

(0) indicates size out of range.

220 - Apartment

Exit 121 Demand Exit: 1 % (1)

Entry 30 Demand Entry: 2 % (1)

220 - Apartment

Exit 121 Demand Exit: 1 % (1)

Entry 30 Demand Entry: 2 % (1)

220 - Apartment

Exit 121 Demand Exit: 4 % (5)

Entry 30 Demand Entry: 1 % (0)

820 - Shopping Center

Exit 75 Demand Exit: 0 % (0)

Entry 122 Demand Entry: 0 % (0)

820 - Shopping Center

Exit 75 Demand Exit: 3 % (2)

Entry 122 Demand Entry: 2 % (2)

853 - Convenience Market with Gasoline Pumps

Exit 165 Demand Exit: 3 % (5)

Entry 166 Demand Entry: 2 % (3)

220 - Apartment

820 - Shopping Center

Balanced: 1

Balanced: 1

Balanced: 5

Balanced: 0

Balanced: 2

Balanced: 5

Balanced: 3

820 - Shopping Center

Balanced: 1

Balanced: 1

Balanced: 5

Balanced: 0

Balanced: 2

Balanced: 3

820 - Shopping Center

Balanced: 5

Balanced: 0

Balanced: 2

Balanced: 0

Balanced: 5

Balanced: 3

820 - Shopping Center

Balanced: 2

Balanced: 2

Balanced: 5

Balanced: 3

820 - Shopping Center

Balanced: 2

Balanced: 2

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820 - Shopping Center

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820 - Shopping Center

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820 - Shopping Center

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Balanced: 2

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820 - Shopping Center

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820 - Shopping Center

Entry	166 (100%)	1 (1%)	0 (0%)	3 (2%)	4 (2%)	162 (98%)
Exit	165 (100%)	1 (1%)	0 (0%)	5 (3%)	6 (4%)	159 (96%)
Total	331 (100%)	2 (1%)	0 (0%)	8 (2%)	10 (3%)	321 (97%)

934 - Fast-Food Restaurant with Drive-Through Window

TOTAL TRIPS		INTERNAL TRIPS			EXTERNAL TRIPS	
		220 - Apartment	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	Total	
Entry	162 (100%)	5 (3%)	2 (1%)	5 (3%)	12 (7%)	150 (93%)
Exit	156 (100%)	0 (0%)	2 (1%)	3 (2%)	5 (3%)	151 (97%)
Total	318 (100%)	5 (2%)	4 (1%)	8 (3%)	17 (5%)	301 (95%)

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 - Apartment	142	<input type="text" value="0"/> %	0	142
820 - Shopping Center	191	<input type="text" value="25"/> %	48	143
853 - Convenience Market with Gasoline Pumps	321	<input type="text" value="50"/> %	161	160
934 - Fast-Food Restaurant with Drive-Through Window	301	<input type="text" value="50"/> %	151	150

PROJECT NAME: PELICAN NURSERY PROPERTY - SCENARIO 2

ANALYSIS NAME:

LAND USE	INDEPENDENT VARIABLE	SIZE	TIME PERIOD	METHOD	ENTRY	EXIT	TOTAL
220 - Apartment	<input type="text" value="Dwelling Units"/>	300	<input type="text" value="Weekday, Peak Hou"/>	<input type="text" value="Best Fit (LIN)"/> $T = 0.55(X) + 17.65$	119	64	183
820 - Shopping Center	<input type="text" value="1000 Sq. Feet Gros"/>	147	<input type="text" value="Weekday, Peak Hou"/>	<input type="text" value="Best Fit (LOG)"/> $\ln(T) = 0.67\ln(X) + 3.31$	372	404	776
853 - Convenience Market with Gasoline Pumps	<input type="text" value="Vehicle Fueling Pos"/>	20 ⁽⁰⁾	<input type="text" value="Weekday, Peak Hou"/>	<input type="text" value="Average"/> 19.07	191	190	381
934 - Fast-Food Restaurant with Drive-Through Window	<input type="text" value="1000 Sq. Feet Gros"/>	7	<input type="text" value="Weekday, Peak Hou"/>	<input type="text" value="Average"/> 32.65	119	110	229

(0) indicates size out of range.

220 - Apartment

Exit 64Demand Exit: 1% (1)

Entry 119Demand Entry: 2% (2)

220 - Apartment

Exit 64Demand Exit: 1% (1)

Entry 119Demand Entry: 2% (2)

220 - Apartment

Exit 64Demand Exit: 4% (3)

Entry 119Demand Entry: 1% (1)

820 - Shopping Center

Exit 404Demand Exit: 0% (0)

Entry 372Demand Entry: 0% (0)

820 - Shopping Center

Exit 404Demand Exit: 3% (12)

Entry 372Demand Entry: 1% (4)

853 - Convenience Market with Gasoline Pumps

Exit 190Demand Exit: 3% (6)

Entry 191Demand Entry: 1% (2)

220 - Apartment

820 - Shopping Center

Balanced: 1

Balanced: 2

820 - Shopping Center

Balanced: 1

Balanced: 2

820 - Shopping Center

Balanced: 3

Balanced: 1

853 - Convenience Market with Gasoline Pumps

Balanced: 0

Balanced: 0

820 - Shopping Center

Balanced: 12

Balanced: 4

853 - Convenience Market with Gasoline Pumps

Balanced: 6

Balanced: 2

820 - Shopping Center

Demand Entry: 17% (63)

Demand Exit: 14% (57)

853 - Convenience Market with Gasoline Pumps

Demand Entry: 17% (32)

Demand Exit: 14% (27)

934 - Fast-Food Restaurant with Drive-Through Window

Demand Entry: 4% (5)

Demand Exit: 1% (1)

820 - Shopping Center

Entry 372

Exit 404

853 - Convenience Market with Gasoline Pumps

Entry 191

Exit 190

934 - Fast-Food Restaurant with Drive-Through Window

Entry 119

Exit 110

820 - Shopping Center

Entry 372

Exit 404

853 - Convenience Market with Gasoline Pumps

Entry 191

Exit 190

934 - Fast-Food Restaurant with Drive-Through Window

Entry 119

Exit 110

TOTAL TRIPS

820 - Shopping Center

853 - Convenience Market with Gasoline Pumps

934 - Fast-Food Restaurant with Drive-Through Window

Total

EXTERNAL TRIPS

Entry

119 (100%)

2 (2%)

2 (2%)

1 (1%)

5 (4%)

114 (96%)

Exit

64 (100%)

1 (2%)

1 (2%)

3 (5%)

5 (8%)

59 (92%)

Total

183 (100%)

3 (2%)

3 (2%)

4 (2%)

10 (5%)

173 (95%)

TOTAL TRIPS

220 - Apartment

853 - Convenience Market with Gasoline Pumps

934 - Fast-Food Restaurant with Drive-Through Window

Total

EXTERNAL TRIPS

Entry

372 (100%)

1 (0%)

0 (0%)

4 (1%)

5 (1%)

367 (99%)

Exit

404 (100%)

2 (0%)

0 (0%)

12 (3%)

14 (3%)

390 (97%)

Total

776 (100%)

3 (0%)

0 (0%)

16 (2%)

19 (2%)

757 (98%)

TOTAL TRIPS

853 - Convenience Market with Gasoline Pumps

EXTERNAL TRIPS

INTERNAL TRIPS

EXTERNAL TRIPS

Entry	191 (100%)	1 (1%)	0 (0%)	2 (1%)	3 (2%)	188 (98%)
Exit	190 (100%)	2 (1%)	0 (0%)	6 (3%)	8 (4%)	182 (96%)
Total	381 (100%)	3 (1%)	0 (0%)	8 (2%)	11 (3%)	370 (97%)

934 - Fast-Food Restaurant with Drive-Through Window

TOTAL TRIPS		INTERNAL TRIPS			EXTERNAL TRIPS	
		220 - Apartment	820 - Shopping Center	853 - Convenience Market with Gasoline Pumps	Total	
Entry	119 (100%)	3 (3%)	12 (10%)	6 (5%)	21 (18%)	98 (82%)
Exit	110 (100%)	1 (1%)	4 (4%)	2 (2%)	7 (6%)	103 (94%)
Total	229 (100%)	4 (2%)	16 (7%)	8 (3%)	28 (12%)	201 (88%)

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 - Apartment	173	<input type="text" value="0"/> %	0	173
820 - Shopping Center	757	<input type="text" value="25"/> %	189	568
853 - Convenience Market with Gasoline Pumps	370	<input type="text" value="50"/> %	185	185
934 - Fast-Food Restaurant with Drive-Through Window	201	<input type="text" value="50"/> %	101	100

Project Name: Pelican Nursery - SF vs Pumps Compare
Date: 4/12/2017
State/Province:
Country:
Analyst's Name:

No:
City:
Zip/Postal Code:
Client Name:
Edition: ITE-TGM 9th Edition

LAND USE	SIZE	AM PEAK HOUR		PM PEAK HOUR	
		Entry	Exit	Entry	Exit
853 - Convenience Market with Gasoline Pumps	6 ⁽¹⁾	123	123	153	153
Reduction		0	0	0	0
Internal		0	0	0	0
Pass-by		77	78	0	0
Non-pass-by		46	45	153	153
853 - Convenience Market with Gasoline Pumps - 1	20 ⁽²⁾	166	165	191	190
Reduction		0	0	0	0
Internal		0	0	0	0
Pass-by		105	104	0	0
Non-pass-by		61	61	191	190
Total		289	288	344	343
Total Reduction		0	0	0	0
Total Internal		0	0	0	0
Total Pass-by		182	182	0	0
Total Non-pass-by		107	106	344	343

(1) 1000 Sq. Feet Gross Floor Area
(2) Vehicle Fueling Positions

Appendix D: Turning Movement Exhibits

(2 Sheets)

