

DESTINATION BEACH RESORT REZONING
SUPPLEMENTAL TRAFFIC STUDY

Project #16537

March 5, 2018

Prepared by:
DAVID PLUMMER & ASSOCIATES, INC.
2149 McGregor Boulevard
Fort Myers, Florida 33901



DESTINATION BEACH RESORT REZONING **SUPPLEMENTAL TRAFFIC STUDY**

Introduction

Destination Beach Resort (hereafter referred to as the Project) is a proposed redevelopment project located adjacent to Times Square within the downtown core of the Town of Fort Myers Beach, Florida. The Project includes the triangle-shaped property generally bounded by the Matanzas Pass Bridge and Estero Boulevard to the west and south, Crescent Street to the east and Fifth Avenue to the north. Destination Beach Resort also includes beachfront property situated off Estero Boulevard and Crescent Street, Exhibits 1a and 1b.

The redevelopment of the Estero Boulevard - Time Square Area has been an on-going effort of the Town and Lee County. The Matanzas Pass Bridge (San Carlos Boulevard), Old San Carlos Boulevard, and the section of Estero Boulevard from the bridge to Crescent Street have been the subject of numerous traffic circulation studies, evaluations and recommendations over the past decades. As a result, the proposed Destination Beach Resort redevelopment plan represents the implementation of the goals and objectives of the Fort Myers Beach Comprehensive Plan.

Purpose of Supplemental Traffic Study

The original Traffic Impact Statement (ZTIS) dated March 8, 2017 was submitted to the Town of Fort Myers Beach as part of the rezoning application. The ZTIS was then revised (November 15, 2017) and submitted in response to review comments and recommendations from the Town. In response to additional review comments and recommendations received from the Town (Appendix H), the final ZTIS dated January 23, 2018 - Revised was prepared for final submittal and presentation to the Fort Myers Beach Local Planning Agency (LPA).

This supplemental traffic study was prepared in response to specific review comments and recommendations provided by Tetra Tech (Appendix I), the co-reviewer of the ZTIS on behalf of the Town of Fort Myers Beach. The supplemental analysis reflects: i) the recent release of the Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition; ii) the release of the Highway Capacity Software (HCS7 or Synchro) of 2017 that implements the Highway Capacity Manual 6th Edition (HCM6); iii) to provide additional documentation for the modal split assumptions of beach traffic that frequent the existing businesses on the subject property; iv) to provide additional documentation for the existing beach parking trip generation at Helmerich Plaza; and v) to include a traffic mitigation plan.

Executive Summary

The findings of the Supplemental Traffic Study are as follows.

1. The proposed Destination Beach Resort reflects the implementation of the redevelopment vision of Times Square, Estero Boulevard and downtown Fort Myers Beach. This is the same as compared to the final ZTIS.
2. Future traffic conditions with the Proposed Development will not cause Estero Boulevard to exceed the minimum LOS standard established by Policy 7-I-2 of the Comprehensive Plan for the Town of Fort Myers Beach. This is the same result as compared to the final ZTIS.
3. During the critical PM peak hour, the trip generation of the Proposed Development will add 15 new vehicles to the trip generation of the Existing Development. The resultant Proposed Development traffic contributes 3.6% of the total traffic circulation within the study area. This is a reduction of 2 trips as compared to the 17 new vehicles added by the Proposed Development that was indicated in the final ZTIS.
4. There are no substantive changes resulting from the analysis indicated in this Supplemental Traffic Study as compared to the final ZTIS.

Study Area

Roadway Under Study

Estero Boulevard is a Lee County maintained arterial road that provides access to the Town of Fort Myers Beach from San Carlos Boulevard to Hickory Boulevard. It is a two-lane roadway throughout Estero Island.

Intersections Under Study

The intersections analyzed in the study are listed below and further depicted in Exhibit 2. A total of 3 intersections were analyzed and evaluated in the ZTIS.

Destination Beach Resort Rezoning		
Major Street	Minor Street	Type
Estero Boulevard	Fifth Street	Directional Movement, 4-Way Intersection, Unsignalized
	Crescent Street	Full Movement, T-Intersection, Unsignalized
Fifth Street	Crescent Street	Full Movement, T-Intersection, Unsignalized

Project Access

The proposed rezoning includes two access points that connect the parking areas to the external road network, Exhibit 1b.

- Access 1 has full inbound access on the west side of Crescent Street and full outbound access on the south side of Fifth Street. Access 1 serves as the main entrance to the Project.
- Access 2 is a full access on the north side of Fifth Street where additional parking is provided.

The proposed rezoning includes additional access points on Fifth Street to accommodate a service vehicle drive lane. Also included in the proposed rezoning is a parking lot on the beachside of Estero Boulevard. However, this parking lot is intended for public use and not for the Project.

Development Scenarios and Description

For purposes of the rezoning request, the trip generation analysis compares two development scenarios of the subject property as discussed below.

- Existing (Occupied) Development with Current Zoning
- Proposed Development with Rezoning

Existing (Occupied) Development

The Existing (Occupied) Development scenario reflects an existing hotel, restaurants/bars, retail establishments, and public beach parking currently in operation.

At the request of the Town of Fort Myers Beach, only occupied structures (at the time of this study) were considered for this scenario. Therefore, this scenario does not reflect the full potential occupancy of existing commercial buildings located on the subject property.

Proposed Development

The proposed Destination Beach Resort development is comprised of a hotel resort with supporting uses such as a spa and restaurant. The Proposed Development also includes a separate bayside commercial building as well as a beachside restaurant and bar located within a publicly accessible commercial recreation facility. The commercial recreation facility is considered to be a supporting use to the Destination Beach Resort and the beachside restaurant and bar.

Destination Beach Resort is being designed to be a pedestrian focal point of Times Square with direct linkages to the beach and adjacent social/recreational activities along Estero Boulevard. At-grade parking has been incorporated into the design to accommodate on-site parking demand. Additional public parking will be provided which will improve overall beach access for the general public.

The development parameters summary by land use and size associated with the two development scenarios are as follows.

Development Parameters Summary		
Land Use	Existing (Occupied) Development	Proposed Development
Resort Hotel (occupied rooms)	70	290
Specialty Retail (sq. ft.)	8,940	1,800
Restaurant (sq. ft.)	0	19,750
Bar (sq. ft.)	2,896	1,955
Public Beach Parking (stalls)	186	0

Trip Generation

The trip generation associated with the development scenarios discussed above was estimated based on trip rates from the Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition (Appendix A). Internal trip capture for mixed-use developments were estimated based on the procedures described in the Institute of Transportation Engineers (ITE), Trip Generation Handbook, 3rd Edition (Appendix B), where applicable.

It should be noted that the ITE trip generation rates are reflective of national averages under typical urban/suburban conditions. Therefore, the strict application of the ITE trip rates would grossly overestimate the trip generation associated with the Existing (occupied) and proposed Project. In order to more accurately reflect the walk/bike travel of beachgoers and Fort Myers Beach residents alike, the vehicular trip generation associated with each land use was reduced by 55%. This 55% reduction was derived based on statements provided by the existing business owners/operators that the “majority” of their patrons arrive/leave by non-vehicular means as they are already on the beach or come from nearby hotels or residences (Appendix J). This 55% reduction is arbitrarily low in that it represents the majority (i.e., over 50%) but it is more likely that the walk/bike mode for all trip-making on Fort Myers Beach and in particular, within Times Square, is considerably greater than 55%. Nonetheless, this adjustment was applied consistently for both the existing (occupied) and proposed Project for fair and equitable comparisons.

The complete trip generation assumptions including the public parking generation and calculation worksheets for the Existing (Occupied) Development and Proposed Development are provided in Appendix C. The trip generation estimates are summarized in Exhibits 3 and 4 for the Existing (Occupied) and Proposed Developments, respectively.



Existing (Occupied) Development

The trip generation characteristics associated with the Existing (Occupied) Development scenario reflects resort hotel units, commercial uses, and public beach parking that are currently in operation as of January, 2018. These businesses are typically located in stand-alone structures that are spread out within the downtown core. The patrons of the existing businesses generally arrive by foot, bike or trolley by beachgoers, tourists and from near-by residents. Business owners at the site have indicated the majority of their patrons arrive by foot, Appendix J.

Based on these factors and using ITE trip generation rates, the trip generation associated with the Existing (Occupied) Development was estimated. The resultant trip generation analysis is presented in Exhibit 3 and summarized below.

Existing (Occupied) Development ⁽¹⁾									
Trip Generation Summary									
Trip Type	AM Peak Hour			PM Peak Hour			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
Total ⁽²⁾	71	23	94	98	99	197	1,202	1,198	2,400
Mixed-Use Internal ⁽³⁾	0	0	0	13	13	26	148	142	290
Hotel	0	0	0	2	1	3	16	14	30
Restaurant	0	0	0	6	6	12	68	66	134
Retail	0	0	0	5	6	11	64	62	126
External Non-Auto ⁽⁴⁾	18	8	26	22	18	40	193	195	388
External Auto ⁽⁵⁾	53	15	68	63	68	131	861	861	1,722
Pass-By Auto ⁽⁶⁾	0	0	0	1	0	1	5	5	10
Net New Auto ⁽⁷⁾	53	15	68	62	68	130	856	856	1,712

Footnotes:

- (1) Existing (Occupied) Development.
- (2) ITE, Trip Generation, 10th Edition.
- (3) ITE, Trip Generation Handbook, 3rd Edition:
AM ICR = 0%; PM ICR = 13%.
- (4) External Non-Auto/Multimodal (PCE) trips including walk, bike and trolley:
AM Non-Auto = 28%; PM Non-Auto = 23%; Daily Non-Auto = 18%
- (5) External Auto = Total (2) – Mixed-Use Internal (3) – External Non-Auto (4).
- (6) Low retail pass-by trips reflective of inconvenient parking and access.
- (7) Net New trips on the road network = External Auto (5) - Pass-by (6).

The Existing (Occupied) Development scenario is estimated to generate 68 net new auto trips during the AM peak hour, 130 net new auto trips during the PM peak hour and 1,712 net new auto trips on a typical weekday. The traffic data and assumptions are documented in Appendix C.

It should be noted that the difference in the above daily trip generation as compared to those indicated in the ZTIS was primarily attributed to the latest parking trip generation study, as presented in Appendix C.

Proposed Development

The trip generation associated with the Proposed Development scenario is characterized by the reliance on multimodal travel and with reduced pedestrian and automobile conflict. Destination Beach Resort includes its own amenities such as a restaurant and spa but these are not anticipated to generate traffic as stand-alone uses. The hotel guests are provided with on-site resort amenities along with direct access to Times Square, the beach, and the commercial recreation facility without the need to drive. In addition, no retail pass-by trips deduction was assumed as the resort discourages the reliance on automobile traffic. Non-Hotel patrons to Destination Beach Resort are expected to arrive by foot, bike or trolley by beachgoers, tourists and from near-by residents.

The resultant trip generation analysis is presented in Exhibit 4 and summarized below.

Proposed Development ⁽¹⁾ Trip Generation Summary									
Trip Type	AM Peak Hour			PM Peak Hour			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
Total ⁽²⁾	190	120	310	196	162	358	1,936	1,934	3,870
Mixed-Use Internal ⁽³⁾	6	6	12	16	16	32	178	174	352
Hotel	3	3	6	6	7	13	75	74	149
Restaurant	3	3	6	8	8	16	87	86	173
Retail	0	0	0	2	1	3	16	14	30
External Non-Auto ⁽⁴⁾	102	63	165	100	81	181	967	968	1,935
External Auto ⁽⁵⁾	82	51	133	80	65	145	791	792	1,583
Pass-By Auto ⁽⁶⁾	0	0	0	0	0	0	1	1	2
Net New Auto ⁽⁷⁾	82	51	133	80	65	145	790	791	1,581

Footnotes:

- (1) Proposed Development with rezoning.
- (2) ITE, Trip Generation, 10th Edition.
- (3) ITE, Trip Generation Handbook, 3rd Edition:
AM ICR = 4%; PM ICR = 9%.
- (4) External Non-Auto/Multimodal (PCE) trips including walk, bike and trolley:
AM Non-Auto = 55%; PM Non-Auto = 56%; Daily Non-Auto = 55%.
- (5) External Auto = Total (2) – Mixed-Use Internal (3) – External Non-Auto (4).
- (6) No retail pass-by trips reflective of inconvenient parking and access.
- (7) Net New trips on the road network = External Auto (5) - Pass-by (6).

The Proposed Development scenario is estimated to generate 133 net new auto trips during the AM peak hour, 145 net new auto trips during the PM peak hour and 1,581 net new auto trips on a typical weekday. These net new vehicle trips are circulated on the public road network.

Trip Generation Comparison

The Proposed Development is expected to generate 65 and 15 more net new external trips during the AM peak hour and PM peak hour, respectively, as compared to the Existing (Occupied) Development.

Proposed Development versus Existing (Occupied) Development (Net New Auto Trips)			
Scenario	AM Peak	PM Peak	Daily
Existing (Occupied)	68	130	1,712
Proposed Development	133	145	1,581
Trip Difference With Proposed Development	+65	+15 ⁽¹⁾	-11

Footnote:

- (1) The difference was +17 trips indicated in, Destination Beach Resort Rezoning Traffic Impact Statement, January 23, 2018 – Revised.

As indicated above, the increase of 15 trips during the critical PM peak hour is 2 trips less than the added 17 trips indicated in the final ZTIS.

Project Trip Distribution / Assignment

Project trips were distributed to the external road network as depicted in Exhibit 5 and summarized as follows.

- 65% of net new external vehicular trips distributed to and off Fort Myers Beach.
- 30% of net new external vehicular trips distributed to and from south island.
- 5% of net new external vehicular trips distributed to and from the north end.

Estero Boulevard Segment Analysis

The segment analysis for this ZTIS is performed in accordance with Policy 7-I-2 of the Comprehensive Plan for the Town of Fort Myers Beach which states the following.

“The peak capacity of Estero Boulevard’s congested segments is 1,300 vehicles per hour. The minimum acceptable level-of-service standard for Estero Boulevard shall be that average monthly traffic flows from 10:00 A.M. to 5:00 P.M. during each month do not exceed that level for more than four calendar months in any continuous twelve month period. Measurements from the Permanent Count Station at Donora Boulevard shall be used for this standard.”



The complete segment analysis is depicted in Exhibit 6a and includes the following scenarios.

- Existing Traffic Conditions (2016 Traffic Count Data).
- Future Background Traffic without Development.
- Future Traffic Conditions with Existing (Occupied) Development
- Future Traffic Conditions with Proposed Development.

In the absence of specific criteria to evaluate Project impacts in the Town of Fort Myers Beach, the Lee County measurement was used as a reference for Estero Boulevard, which is a County maintained road. The Lee County ZTIS guidelines identify a roadway significant impact as Project traffic that consumes 10% or more of the roadway service volume at LOS C. The link specific 2-way service volume at LOS C for the segment under study is 1,162 vehicles per hour, Appendix D.

The LOS conditions and roadway impacts for Estero Boulevard are summarized below.

<u>Roadway Segment Level of Service ⁽¹⁾ and Significant Impact ⁽²⁾</u>			
Scenario	Consecutive Months Exceeding 1,300 vph	Project Traffic ⁽³⁾ as % of SV @ LOS C	Significant Impact ⁽²⁾ (Yes or No)
Existing Conditions	0	N/A	N/A
Future Background Traffic without Development	0	N/A	N/A
Future Conditions with Existing (Occupied) Development	0	3.4%	No
Future Conditions with Proposed Development	0	3.7%	No

Footnotes:

- (1) Per the Town of Fort Myers Beach Comprehensive Plan Policy 7-I-2. The peak capacity of Estero Boulevard’s congested segments is 1,300 vehicles per hour. The minimum acceptable level-of-service standard for Estero Boulevard shall be that average monthly traffic flows from 10:00 A.M. to 5:00 P.M. during each month do not exceed that level for more than four calendar months in any continuous twelve-month period. Measurements from the permanent count station at Donora Boulevard shall be used for this standard.
- (2) Lee County ZTIS significant impact with service volume consumptions of 10% or more.
- (3) Two-way Project traffic based on PM peak hour trip generation and assignment.

Existing Traffic Conditions

The latest AADT count reported for PCS 44 in the 2016 Lee County Traffic Count Report was used to establish current traffic volumes for Estero Boulevard (Appendix D). Existing AADT was converted to average monthly traffic flows from 10:00 A.M. to 5:00 P.M. using the adjustment factors provided for PCS 44.



The average monthly traffic flows from 10:00 AM to 5:00 PM under existing traffic conditions is under the minimum LOS standard of 1,300 vehicles per hour for all months in 2016. The peak month has a volume to capacity ratio of 0.73.

Future Traffic Conditions without Development

Background traffic projections to 2020 (Project buildout of 2019 plus 1 year) were developed based on long-term growth trends derived from the historic traffic counts between 2007 and 2016 reported in the 2016 Lee County Traffic Count Report for PCS 44 (Appendix E). The resultant growth rate from the historic growth trend analysis was -1.50%. Rather than using a negative value, a growth rate of 1% per year was applied to the existing AADT to project 2020 AADT. The 2020 AADT was converted to average monthly traffic flows from 10 A.M. to 5:00 P.M. using the adjustment factors provided for PCS 44.

The average monthly traffic flows from 10:00 AM to 5:00 PM under future traffic conditions without development is under the minimum LOS standard for all months in 2020. The peak month has a volume to capacity ratio of 0.76.

Future Traffic Conditions with Existing (Occupied) Development

The PM peak hour net new external vehicular trips generated by the Existing (Occupied) Development were added to the future background traffic with the assumption that 30% (Exhibit 5) of the total trip generation would be the project trip assignment applied to Estero Boulevard at PCS 44. The total combined future traffic for each month was compared to the minimum LOS standard to determine the traffic impacts.

The average monthly traffic flows from 10:00 AM to 5:00 PM under future traffic conditions with the Existing (Occupied) Development is under the minimum LOS standard for all months in 2020. The peak month has a volume to capacity ratio of 0.79. The Existing (Occupied) Development trips consume 3.4% of the 2-way service volume at LOS C.

Future Traffic Conditions with Proposed Development

The PM peak hour net new external vehicular trips generated by the Proposed Development were added to the future background traffic with the assumption that 30% (Exhibit 5) of the total trip generation would be the peak project trip assignment applied to Estero Boulevard. The total combined future traffic for each month was compared to the minimum LOS standard to determine the traffic impacts.

The average monthly traffic flows from 10:00 AM to 5:00 PM under future traffic conditions with the Proposed Development is under the minimum LOS standard for all months in 2020. The peak month has a volume to capacity ratio of 0.79. The Proposed Development trips consume 3.7% of the 2-way service volume at LOS C.

The trips associated with the Proposed Development do not consume more than 10% of the two-way service volume at LOS C on Estero Boulevard. In addition, the adopted LOS standard on Estero Boulevard is not exceeded with the Project.

Daily Traffic Volumes on Estero Boulevard

As requested by the reviewer, Exhibit 6b is provided showing 24-hour traffic volumes on Estero Boulevard during peak months of the year. Peak hour traffic volumes and data from PCS 44 were used to extrapolate the 24-hour traffic volumes which includes future background traffic and Project traffic for both the Existing (Occupied) Development and Proposed Development.

Intersection Analysis

Synchro was used to perform the HCM6 analysis of the intersections under study. For unsignalized (TWSC) intersections, the Intersection Capacity Utilization (ICU) LOS was reported to better reflect the overall operations of the intersection. The complete HCM and ICU analysis output are in Appendix G and includes the following scenarios.

- Existing Traffic Conditions (2016 Turning Movement Data)
- Future Traffic Conditions with Proposed Development

The Town of Fort Myers Beach does not appear to have an established LOS standard for intersections. Therefore, LOS E was considered to be the minimum acceptable LOS. This LOS standard is consistent with Lee County’s standards. The intersection LOS analysis is summarized as the following.

Intersection Level of Service					
Scenario	Estero Blvd/ Fifth St¹	Estero Blvd/ Crescent St⁽¹⁾	Fifth St/ Crescent St⁽²⁾	Fifth St/ Access 1⁽¹⁾	Fifth St/ Access 2⁽¹⁾
Existing Conditions	B	B	A	N/A	N/A
Proposed Development	B	C	A	A/A ⁽³⁾	A

Footnotes:

- (1) Unsignalized (TWSC) Intersection – ICU LOS of overall intersection reported.
- (2) Unsignalized (AWSC) Intersection – HCM overall LOS reported.
- (3) Inbound / Outbound.

As shown above, all intersections under study are expected to operate at a level of service better than LOS E under existing conditions and future conditions with the Proposed Development. However, the side streets under stop control are expected to experience delay.



Existing 2016 Traffic Conditions

Intersection turning movement counts for the AM and PM peak hours were conducted by DPA in September 2016. At the time of the counts, the roadway construction on Estero Boulevard near the intersections under study was completed. The turning movement counts are provided in Appendix F and include the following intersections.

- Estero Boulevard/ Fifth Street
- Estero Boulevard/ Crescent Street
- Fifth Street/ Crescent Street

Although the turning movement counts were performed during off season, the counts were adjusted to a common peak hour and then seasonally adjusted, using adjustment factors from the appropriate permanent count station, so that the counts represent 2016 peak season, peak hour volumes. During the time of this study, the resultant 2016 peak season, peak hour volumes (Exhibit 7) served as the most current data available.

Under existing traffic conditions, all intersections operate at a level of service better than LOS E.

Future Traffic Conditions with Proposed Development

The 2016 peak season, peak hour volumes were projected to the year 2020 (Project buildout of 2019 plus 1 year) based on long-term growth trends derived from the historic traffic counts between 2007 and 2016 reported in the 2016 Lee County Traffic Count Report for PCS 44 (Appendix E). The resultant growth rate was -1.50% so a growth rate of 1% per year was used in this study to project 2020 background traffic. The resultant 2020 background traffic volumes at the intersections under study are shown in Exhibit 8.

The background traffic projections were combined with Project traffic to derive the total future volume for the Proposed Development scenario. Exhibit 10 depicts the total combined and Project trips for the Proposed Development.

Under future traffic conditions with Proposed Development, all intersections (including Project accesses) operate at a level of service better than LOS E.

Estero Boulevard/Crescent Street Intersection

The left-turn movements at this intersection are expected to experience typical operational delay under existing and future conditions. However, gaps within the traffic stream along Estero Boulevard are often created due to the slow-moving vehicles (and driver courtesy) that would allow left-turning vehicles to either enter or exit Crescent Street to and from Estero Boulevard without excessive delay.

Times Square Network Analysis

The Project's traffic composition in relation to the total traffic within the Times Square study area was reviewed to demonstrate the Project's impacts on the surrounding road network. Exhibits 9 and 10 depict Project traffic as a percent of the total circulating traffic within the Times Square study area during the PM peak hour. This information is summarized in the following table.

Project Traffic as a Percent of Total Traffic at Times Square – PM Peak	
Scenario	%
Existing (Occupied) Development	3.2%
Proposed Development	3.6%

As requested by the reviewer, Exhibit 11 is provided showing total circulating traffic within the Times Square area over a 24-hour period.

The proposed development will replace traffic associated with the existing development, and add only 15 vehicles to the total traffic within the Times Square study area during the critical peak hour.

Mitigation Plan

The Project is expected to fully mitigate its off-site impacts through the payment of road impact fees, as specified in the Town of Fort Myers Beach Land Development Code (LDC), at the time of permitting. The Project will be fully responsible for site-related improvements such as access connections to the adjacent public road network.

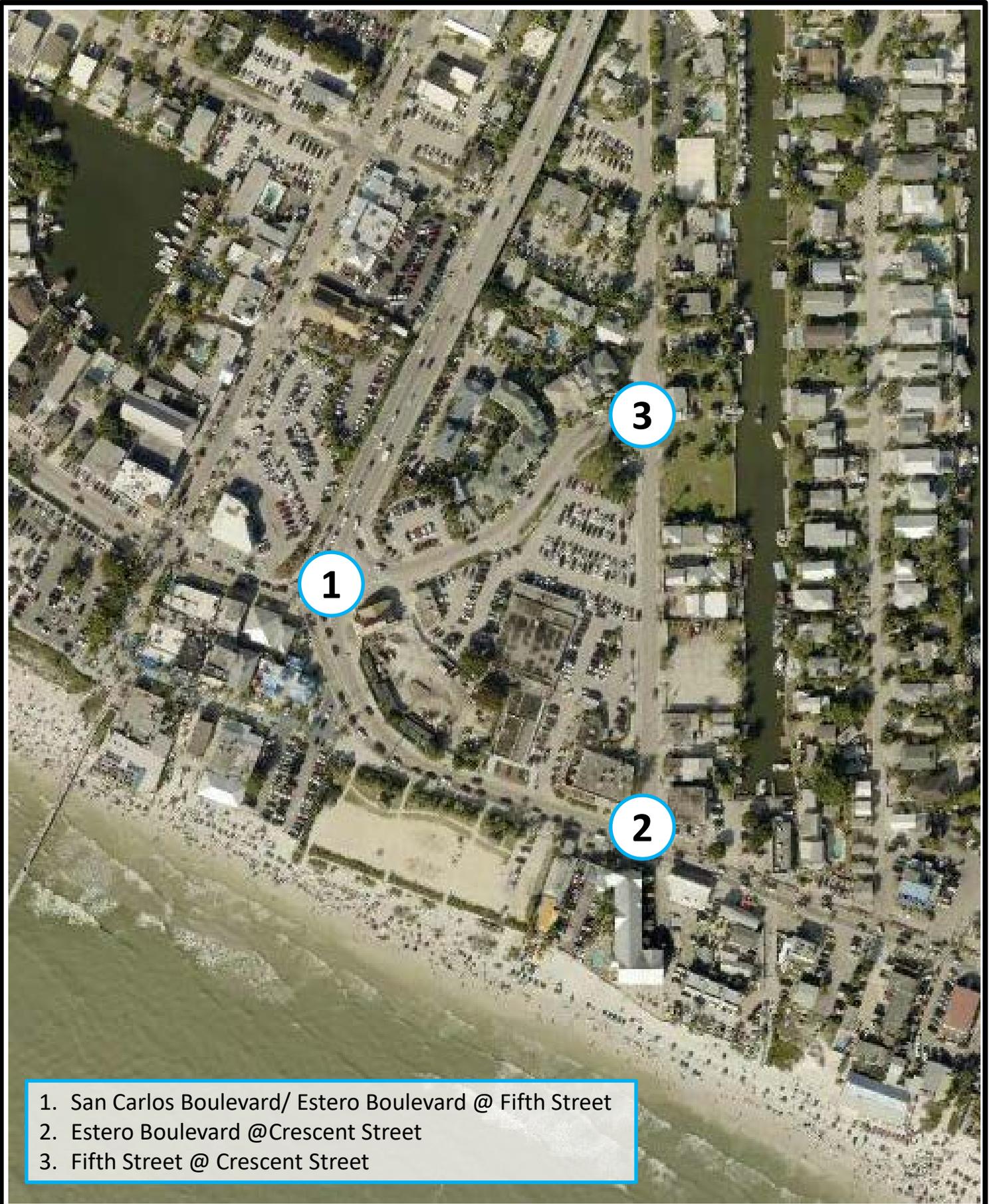
Findings

The findings of the Supplemental Traffic Study are as follows.

1. The proposed Destination Beach Resort reflects the implementation of the redevelopment vision of Times Square, Estero Boulevard and downtown Fort Myers Beach. This is the same as compared to the final ZTIS.
2. Future traffic conditions with the Proposed Development will not cause Estero Boulevard to exceed the minimum LOS standard established by Policy 7-I-2 of the Comprehensive Plan for the Town of Fort Myers Beach. This is the same result as compared to the final ZTIS.
3. During the critical PM peak hour, the trip generation of the Proposed Development will add 15 new vehicles to the trip generation of the Existing Development. The resultant

Proposed Development traffic contributes 3.6% of the total traffic circulation within the study area. This is a reduction of 2 trips as compared to the 17 new vehicles added by the Proposed Development that was indicated in the final ZTIS.

4. There are no substantive changes resulting from the analysis indicated in this Supplemental Traffic Study as compared to the final ZTIS.



- 1. San Carlos Boulevard/ Estero Boulevard @ Fifth Street
- 2. Estero Boulevard @Crescent Street
- 3. Fifth Street @ Crescent Street



DESTINATION BEACH
RESORT

Intersections Under Study

16537/14A/1116

EXHIBIT 3

**DESTINATION BEACH RESORT
EXISTING (OCCUPIED) DEVELOPMENT - TOTAL PROJECT
TRIP GENERATION⁽¹⁾**

	LUC	SIZE	UNITS	AM PEAK HOUR ⁽¹⁰⁾				PM PEAK HOUR ⁽¹¹⁾				DAILY			
				In	Out	Total	%	In	Out	Total	%	In	Out	Total	%
Retail															
Bayside - Shopping Center (General Urban/Suburban)	820	5,840	1000 Sq. Ft. GLA	3	2	5		11	11	22		110	110	220	
Beachside - Shopping Center (General Urban/Suburban)	820	3,100	1000 Sq. Ft. GLA	2	1	3		6	6	12		59	58	117	
Trips				5	3	8		17	17	34		169	168	337	
NCHRP Internal Capture ⁽²⁾				0	0	0	0%	5	6	11	32%	64	62	126	
External				5	3	8		12	11	23		105	106	211	
Non-Auto Trip Reduction ⁽³⁾				3	2	5	55%	7	6	13	55%	58	58	116	
Driveway Volume				2	1	3		5	5	10		47	48	95	
Pass-by ⁽⁴⁾				0	0	0	10%	1	0	1	10%	5	5	10	
Net New External				2	1	3		4	5	9		42	43	85	
Restaurant															
Drinking Place (General Urban/Suburban)	925	2,900	1000 Sq. Ft. GFA	0	0	0	⁽⁵⁾	22	11	33		165	164	329 ⁽⁶⁾	
Trips				0	0	0		22	11	33		165	164	329	
NCHRP Internal Capture ⁽²⁾				0	0	0	0%	6	6	12	36%	68	66	134	
External				0	0	0		16	5	21		97	98	195	
Non-Auto Trip Reduction ⁽³⁾				0	0	0	55%	9	3	12	55%	53	54	107	
Driveway Volume				0	0	0		7	2	9		44	44	88	
Pass-by ⁽⁴⁾				0	0	0	0%	0	0	0	0%	0	0	0	
Net New External				0	0	0		7	2	9		44	44	88	
Hotel															
Beachside - Resort Hotel (General Urban/Suburban) ⁽⁷⁾	330	70	Occupied Rooms	27	10	37		13	18	31		165	164	329 ⁽⁸⁾	
Trips				27	10	37		13	18	31		165	164	329	
NCHRP Internal Capture ⁽²⁾				0	0	0	0%	2	1	3	10%	16	14	30	
External				27	10	37		11	17	28		149	150	299	
Non-Auto Trip Reduction ⁽³⁾				15	6	21	55%	6	9	15	55%	82	83	165	
Driveway Volume				12	4	16		5	8	13		67	67	134	
Pass-by ⁽⁴⁾				0	0	0	0%	0	0	0	0%	0	0	0	
Net New External				12	4	16		5	8	13		67	67	134	
Non-NCHRP Land Uses⁽⁹⁾															
Public Beach Parking ⁽⁹⁾	N/A	186	Parking Stall	39	10	49		46	53	99		703	702	1,405	
Trips				39	10	49		46	53	99		703	702	1,405	
External				39	10	49		46	53	99		703	702	1,405	
Non-Auto Trip Reduction ⁽³⁾				0	0	0	0%	0	0	0	0%	0	0	0	
Driveway Volume				39	10	49		46	53	99		703	702	1,405	
Pass-by ⁽⁴⁾				0	0	0	0%	0	0	0	0%	0	0	0	
Net New External				39	10	49		46	53	99		703	702	1,405	
				In	Out	Total	%	In	Out	Total	%	In	Out	Total	%
TOTAL				71	23	94		98	99	197		1,202	1,198	2,400	
NCHRP INTERNAL CAPTURE⁽²⁾				0	0	0	0%	13	13	26	13%	148	142	290	
EXTERNAL				71	23	94		85	86	171		1,054	1,056	2,110	
NON-AUTO TRIP REDUCTION				18	8	26	28%	22	18	40	23%	193	195	388	
DRIVEWAY VOLUME				53	15	68		63	68	131		861	861	1,722	
PASS-BY - AUTOMOBILE TRIPS⁽³⁾				0	0	0	0%	1	0	1	1%	5	5	10	
NET NEW EXTERNAL AUTOMOBILE TRIPS				53	15	68		62	68	130		856	856	1,712	

Footnotes:

- (1) Trip generation estimate based on ITE Trip Generation (10th Edition). A fitted curve equation used if available and applicable per ITE guidelines.
- (2) Consistent with NCHRP internal capture calculations. ITE, Trip Generation Handbook - An ITE Proposed Recommended Practice (3rd Edition). Chapter 6 - Trip Generation for Mixed-Use Development. PM rates used for daily internal capture estimate.
- (3) Reduction reflects pedestrian and bicycle trips to / from immediate vicinity, reflective of a beach community.
- (4) ITE average retail pass-by rate capped at 10% for retail uses.
- (5) ITE does not offer AM trip generation rates for LUC 925 Drinking Place. Assumed not applicable for AM time period (7 - 9 AM).
- (6) ITE does not offer weekday trip generation rates for LUC 925 Drinking Place. A weekday trip generation rate of 113.6 is used (assumes PM peak hour rate is 10% of the weekday).
- (7) Pierview Hotel was originally permitted as a 70 unit hotel, but is currently operated as only having 58 hotel rooms. Therefore, only 58 hotel rooms were assumed as occupied in this traffic impact analysis. 12 hotel rooms are assumed as occupied for Kings Landing/ Mermaid.
- (8) ITE does not offer weekday trip generation rates for LUC 330 Resort Hotel. A weekday trip generation rate of 4.7 is used (assumes PM peak hour rate is 10% of the weekday).
- (9) ITE trip generation estimates for beach parking not provided. Trip generation is based on observations by parking maintenance agents.
- (10) Peak hour of adjacent street traffic, one hour between 7 and 9 AM.
- (11) Peak hour of adjacent street traffic, one hour between 4 and 6 PM.

EXHIBIT 4

**DESTINATION BEACH RESORT
PROPOSED DEVELOPMENT - TOTAL PROJECT
TRIP GENERATION⁽¹⁾**

	LUC	SIZE	UNITS	AM PEAK HOUR ⁽⁸⁾				PM PEAK HOUR ⁽⁹⁾				DAILY			
				In	Out	Total	%	In	Out	Total	%	In	Out	Total	%
Retail															
Bayside - Shopping Center (General Urban/Suburban)	820	1,800	1000 Sq. Ft. GLA	1	1	2		3	4	7		34	34	68	
Trips															
NCHRP Internal Capture ⁽²⁾				1	1	2		3	4	7		34	34	68	
External				0	0	0	0%	2	1	3	43%	16	14	30	
Non-Auto Trip Reduction ⁽³⁾				1	1	2		1	3	4		18	20	38	
Driveway Volume				1	1	2	55%	1	2	3	55%	10	11	21	
Pass-by ⁽⁴⁾				0	0	0		0	1	1		8	9	17	
Net New External				0	0	0	10%	0	0	0	10%	1	1	2	
				0	0	0		0	1	1		7	8	15	
Restaurant															
Beachside - Drinking Place (General Urban/Suburban)	925	1,960	1000 Sq. Ft. GFA	0	0	0	⁽⁵⁾	15	7	22		112	111	223 ⁽⁶⁾	
Beachside - High-Turnover (Sit-Down) Restaurant (General Urban/Suburb)	932	19,750	1000 Sq. Ft. GFA	108	88	196		120	73	193		1,108	1,108	2,216	
Trips															
NCHRP Internal Capture ⁽²⁾				108	88	196		135	80	215		1,220	1,219	2,439	
External				3	3	6	3%	8	8	16	7%	87	86	173	
Non-Auto Trip Reduction ⁽³⁾				105	85	190		127	72	199		1,133	1,133	2,266	
Driveway Volume				58	47	105	55%	70	40	110	55%	623	623	1,246	
Pass-by ⁽⁴⁾				47	38	85		57	32	89		510	510	1,020	
Net New External				0	0	0	0%	0	0	0	0%	0	0	0	
				47	38	85		57	32	89		510	510	1,020	
Hotel															
Beachside - Resort Hotel (General Urban/Suburban)	330	290	Occupied Rooms	81	31	112		58	78	136		682	681	1,363 ⁽⁷⁾	
Trips															
NCHRP Internal Capture ⁽²⁾				81	31	112		58	78	136		682	681	1,363	
External				3	3	6	5%	6	7	13	10%	75	74	149	
Non-Auto Trip Reduction ⁽³⁾				78	28	106		52	71	123		607	607	1,214	
Driveway Volume				43	15	58	55%	29	39	68	55%	334	334	668	
Pass-by ⁽⁴⁾				35	13	48		23	32	55		273	273	546	
Net New External				0	0	0	0%	0	0	0	0%	0	0	0	
				35	13	48		23	32	55		273	273	546	
				In	Out	Total	%	In	Out	Total	%	In	Out	Total	%
TOTAL				190	120	310		196	162	358		1,936	1,934	3,870	
NCHRP INTERNAL CAPTURE ⁽²⁾				6	6	12	4%	16	16	32	9%	178	174	352	
EXTERNAL				184	114	298		180	146	326		1,758	1,760	3,518	
NON-AUTO TRIP REDUCTION				102	63	165	55%	100	81	181	56%	967	968	1,935	
DRIVEWAY VOLUME				82	51	133		80	65	145		791	792	1,583	
PASS-BY - AUTOMOBILE TRIPS ⁽⁵⁾				0	0	0	0%	0	0	0	0%	1	1	2	
NET NEW EXTERNAL AUTOMOBILE TRIPS				82	51	133		80	65	145		790	791	1,581	

Footnotes:

- (1) Trip generation estimate based on ITE Trip Generation (10th Edition). A fitted curve equation used if available and applicable per ITE guidelines.
- (2) Consistent with NCHRP internal capture calculations. ITE, Trip Generation Handbook - An ITE Proposed Recommended Practice (3rd Edition). Chapter 6 - Trip Generation for Mixed-Use Development. PM rates used for daily internal capture estimate.
- (3) Reduction reflects pedestrian and bicycle trips to / from immediate vicinity, reflective of a beach community.
- (4) ITE average retail pass-by rate capped at 10% for retail uses.
- (5) ITE does not offer AM trip generation rates for LUC 925 Drinking Place. Assumed not applicable for AM time period (7 - 9 AM).
- (6) ITE does not offer weekday trip generation rates for LUC 925 Drinking Place. A weekday trip generation rate of 113.6 is used (assumes PM peak hour rate is 10% of the weekday).
- (7) ITE does not offer weekday trip generation rates for LUC 330 Resort Hotel. A weekday trip generation rate of 4.7 is used (assumes PM peak hour rate is 10% of the weekday).
- (8) Peak hour of adjacent street traffic, one hour between 7 and 9 AM.
- (9) Peak hour of adjacent street traffic, one hour between 4 and 6 PM.

EXHIBIT 6a

**DESTINATION BEACH RESORT
ESTERO BOULEVARD SEGMENT CAPACITY ANALYSIS¹**

PCS 44 - Estero Blvd north of Donora Blvd²
2016 AADT = 12,400 VPD

Growth Rate³ = 1.0% → 2020 AADT = 12896 VPD

Hour	NB	SB	Total
0	0.80%	0.65%	0.73%
1	0.54%	0.41%	0.48%
2	0.39%	0.29%	0.34%
3	0.24%	0.26%	0.25%
4	0.29%	0.36%	0.33%
5	0.79%	0.79%	0.79%
6	2.03%	1.99%	2.01%
7	4.92%	4.23%	4.57%
8	6.22%	6.15%	6.19%
9	6.65%	7.23%	6.94%
10	6.87%	7.38%	7.13%
11	6.76%	7.21%	6.98%
12	6.56%	7.24%	6.90%
13	6.49%	7.07%	6.78%
14	6.59%	7.23%	6.91%
15	6.72%	7.05%	6.89%
16	6.74%	6.70%	6.72%
17	6.40%	6.57%	6.49%
18	5.72%	5.81%	5.77%
19	5.24%	4.92%	5.08%
20	4.78%	3.92%	4.35%
21	4.03%	2.99%	3.51%
22	2.78%	2.30%	2.54%
23	1.44%	1.25%	1.34%

Month of Year	Fraction
January	1.07
February	1.06
March	1.08
April	1.11
May	1.01
June	0.99
July	1.05
August	0.89
September	0.82
October	0.93
November ⁶	1.00
December ⁶	1.00

Average Monthly Vehicles per Hour Calculated per Policy 7-I-2 of the Comp. Plan for the Town of FMB

→ Average Hourly % (10 AM - 5 PM) = $\frac{7.13+6.98+6.90+6.78+6.91+6.89+6.72}{7} = 6.90\%$

→ Monthly Average Veh/Hour (10 AM - 5 PM) = $6.90\% * 2020 AADT * Monthly Fraction + \frac{6.90\%}{6.72\%} * Development PM Peak Traffic$

Average Monthly Vehicles per Hour

Month	Background		With Development Trips (2020) ⁵	
	2016	2020	Existing (Occupied) Development	Proposed Development
January	916	952	992	997
February	907	943	983	988
March	924	961	1001	1006
April	950	988	1028	1033
May	864	899	939	944
June	847	881	921	926
July	899	935	975	980
August	762	792	832	837
September	702	730	770	775
October	796	828	868	873
November ⁶	856	890	930	935
December ⁶	856	890	930	935

Development Scenario	Project Trip Assignment Peak Hour 2-Way ⁴	
	%	Trips
Existing (Occupied) Development	30%	39
Proposed Development	30%	44
Difference from Existing (Occupied)		5

Town Capacity Standard Not Exceeded with Proposed Development

Footnotes:

- (1) Per the Town of Fort Myers Beach Comprehensive Plan Policy 7-I-2. The peak capacity of Estero Boulevard's congested segments is 1,300 vehicles per hour. The minimum acceptable level-of-service standard for Estero Boulevard shall be that average monthly traffic flows from 10:00 A.M. to 5:00 P.M. during each month do not exceed that level for more than four calendar months in any continuous twelve-month period. Measurements from the permanent count station at Donora Boulevard shall be used for this standard.
- (2) Lee County Traffic Count Report 2016 - PCS 44 traffic data encircled in red.
- (3) Linear growth rate. Growth rate developed from Lee County Traffic Count Report 2016 Historical AADT.
- (4) Based on the Project PM peak hour trip generation and assignment.
- (5) 2020 projected average monthly volume plus peak hour, 2-way Project traffic.
- (6) Monthly fraction not provided by Lee County Traffic Count Report 2016. Assume monthly fraction of 1.0.

EXHIBIT 6b

DESTINATION BEACH RESORT

ESTERO BOULEVARD SEGMENT ANALYSIS - HOURLY TRAFFIC DISTRIBUTION DURING PEAK MONTHS¹

PCS 44 - Estero Blvd north of Donora Blvd²
 2016 AADT = 12,400 VPD

Growth Rate³ = 1.0% → 2020 AADT = 12896 VPD

Hour	NB	SB	Total
0	0.80%	0.65%	0.73%
1	0.54%	0.41%	0.48%
2	0.39%	0.29%	0.34%
3	0.24%	0.26%	0.25%
4	0.29%	0.36%	0.33%
5	0.79%	0.79%	0.79%
6	2.03%	1.99%	2.01%
7	4.92%	4.23%	4.57%
8	6.22%	5.15%	6.19%
9	6.65%	7.23%	6.94%
10	6.87%	7.39%	7.13%
11	6.76%	7.21%	6.98%
12	6.56%	7.24%	6.90%
13	6.49%	7.07%	6.78%
14	6.59%	7.23%	6.91%
15	6.72%	7.05%	6.89%
16	6.74%	6.70%	6.72%
17	6.40%	6.57%	6.49%
18	5.72%	5.81%	5.77%
19	5.24%	4.92%	5.08%
20	4.78%	4.92%	4.30%
21	4.03%	2.99%	3.51%
22	2.78%	2.30%	2.54%
23	1.44%	1.25%	1.34%

Month of Year	Fraction
January	1.07
February	1.06
March	1.08
April	1.11
May	1.01
June	0.99
July	1.05
August	0.99
September	0.82
October	0.93
November	1.00
December	1.00

Average Vehicles per Hour Calculated Using PCS 44 Data

→ Background Monthly Veh/Hour = 2020 AADT * Total Hourly % * Monthly Fraction

→ Project Traffic Monthly Veh/Hour = (ITE Total Daily Traffic - ITE AM and PM Peak Hour Traffic) * Ratio of Hourly % to \sum Hourly % (Not Including AM and PM Peak Hour Hourly %) * Monthly Fraction

→ Total Monthly Veh/Hour = Background Monthly Veh/Hour + Project Traffic Monthly Veh/Hour

2020 Average Vehicles per Hour⁵

Hour	Existing (Occupied) - Total Traffic												Proposed - Total Traffic																	
	Unadjusted Month			January			February			March			April			Unadjusted Month			January			February			March			April		
	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total
0	94	4	98	101	4	105	100	4	104	102	4	106	104	4	108	94	3	97	101	3	104	100	3	103	102	3	105	104	3	107
1	62	3	65	66	3	69	66	3	69	67	3	70	69	3	72	62	2	64	66	2	68	66	2	68	67	2	69	69	2	71
2	44	2	46	47	2	49	47	2	49	48	2	50	49	2	51	44	2	46	47	2	49	47	2	49	48	2	50	49	2	51
3	32	1	33	34	1	35	34	1	35	35	1	36	36	1	37	32	1	33	34	1	35	34	1	35	35	1	36	36	1	37
4	43	2	45	46	2	48	46	2	48	46	2	48	48	2	50	43	1	44	46	1	47	46	1	47	46	1	47	48	1	49
5	102	4	106	109	4	113	108	4	112	110	4	114	113	4	117	102	4	106	109	4	113	108	4	112	110	4	114	113	4	117
6	259	11	270	277	12	289	275	12	287	280	12	292	287	12	299	259	9	268	277	10	287	275	10	285	280	10	290	287	10	297
7	589	24	613	630	26	656	624	25	649	636	26	662	654	27	681	589	21	610	630	22	652	624	22	646	636	23	659	654	23	677
8	798	20	818	854	21	875	846	21	867	862	22	884	866	22	908	798	40	838	854	43	897	846	42	888	862	43	905	886	44	930
9	895	37	932	958	40	998	949	39	988	967	40	1007	993	41	1034	895	31	926	958	33	991	949	33	982	967	33	1000	993	34	1027
10	919	38	957	983	41	1024	974	40	1014	993	41	1034	1020	42	1062	919	32	951	983	34	1017	974	34	1008	993	35	1028	1020	36	1056
11	900	37	937	963	40	1003	954	39	993	972	40	1012	999	41	1040	900	31	931	963	33	996	954	33	987	972	33	1005	999	34	1033
12	890	36	926	952	39	991	943	38	981	961	39	1000	988	40	1028	890	31	921	952	33	985	943	33	976	961	33	994	988	34	1022
13	874	36	910	935	39	974	926	38	964	944	39	983	970	40	1010	874	30	904	935	32	967	926	32	958	944	32	976	970	33	1003
14	891	37	928	953	40	993	944	39	983	962	40	1002	989	41	1030	891	31	922	953	33	986	944	33	977	962	33	995	989	34	1023
15	889	36	925	951	39	990	942	38	980	960	39	999	987	40	1027	889	31	920	951	33	984	942	33	975	960	33	993	987	34	1021
16	867	39	906	928	42	970	919	41	960	936	42	978	962	43	1005	867	44	911	928	47	975	919	47	966	936	48	984	962	49	1011
17	837	34	871	896	36	932	887	36	923	904	37	941	929	38	967	837	29	866	896	31	927	887	31	918	904	31	935	929	32	961
18	744	30	774	796	32	828	789	32	821	804	32	836	826	33	859	744	26	770	796	28	824	789	28	817	804	28	832	826	29	855
19	655	27	682	701	29	730	694	29	723	707	29	736	727	30	757	655	23	678	701	25	726	694	24	718	707	25	732	727	26	753
20	561	23	584	600	25	625	595	24	619	606	25	631	623	26	649	561	20	581	600	21	621	595	21	616	606	22	628	623	22	645
21	453	19	472	485	20	505	480	20	500	489	21	510	503	21	524	453	16	469	485	17	502	480	17	497	489	17	506	503	18	521
22	328	13	341	351	14	365	348	14	362	354	14	368	364	14	378	328	11	339	351	12	363	348	12	360	354	12	366	364	12	376
23	173	7	180	185	7	192	183	7	190	187	8	195	192	8	200	173	6	179	185	6	191	183	6	189	187	6	193	192	7	199

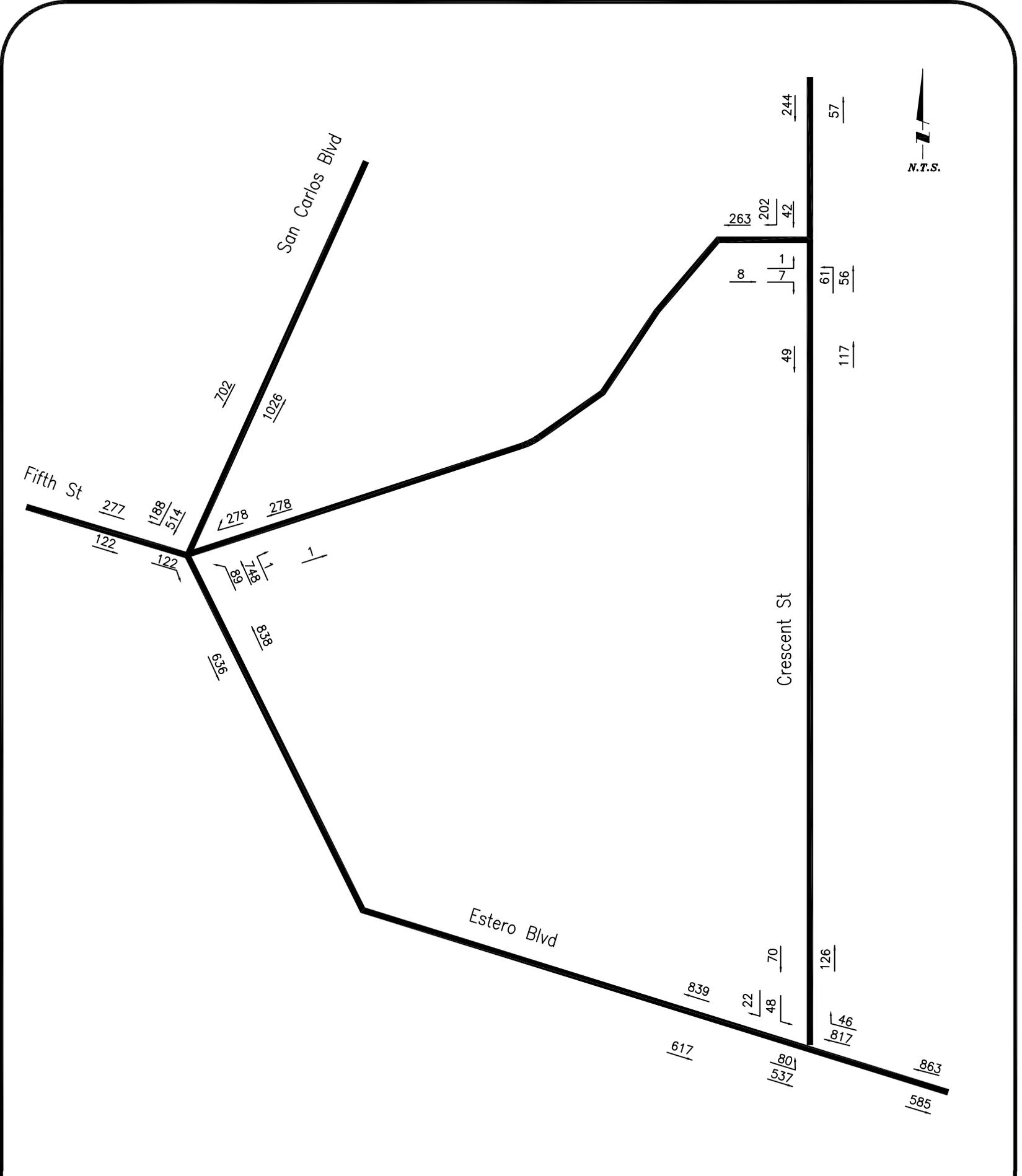
Development Scenario	Project Trip Assignment Peak Hour 2-Way ⁴		
	%	AM	PM
Existing (Occupied) Development	30%	AM	20
		PM	39
Proposed Development	30%	AM	40
		PM	44
Difference from Existing (Occupied)		AM	20
		PM	5

ITE AM Peak Hour of Adjacent Street Traffic occurs between 7 and 9 AM.

ITE PM Peak Hour of Adjacent Street Traffic occurs between 4 and 6 PM.

Footnotes:

- Per the Town of Fort Myers Beach Comprehensive Plan Policy 7-i-2. The peak capacity of Estero Boulevard's congested segments is 1,300 vehicles per hour. The minimum acceptable level-of-service standard for Estero Boulevard shall be that average monthly traffic flows from 10:00 A.M. to 5:00 P.M. during each month do not exceed that level for more than four calendar months in any continuous twelve-month period. Measurements from the permanent count station at Donora Boulevard shall be used for this standard.
- Lee County Traffic Count Report 2016 - PCS 44 traffic data encircled in red.
- Linear growth rate. Growth rate developed from Lee County Traffic Count Report 2016 Historical AADT.
- Based on the Project peak hour trip generation and assignment.
- 2020 projected average monthly volume plus peak hour, 2-way Project traffic.
- Monthly fraction not provided by Lee County Traffic Count Report 2016. Assume monthly fraction of 1.0.

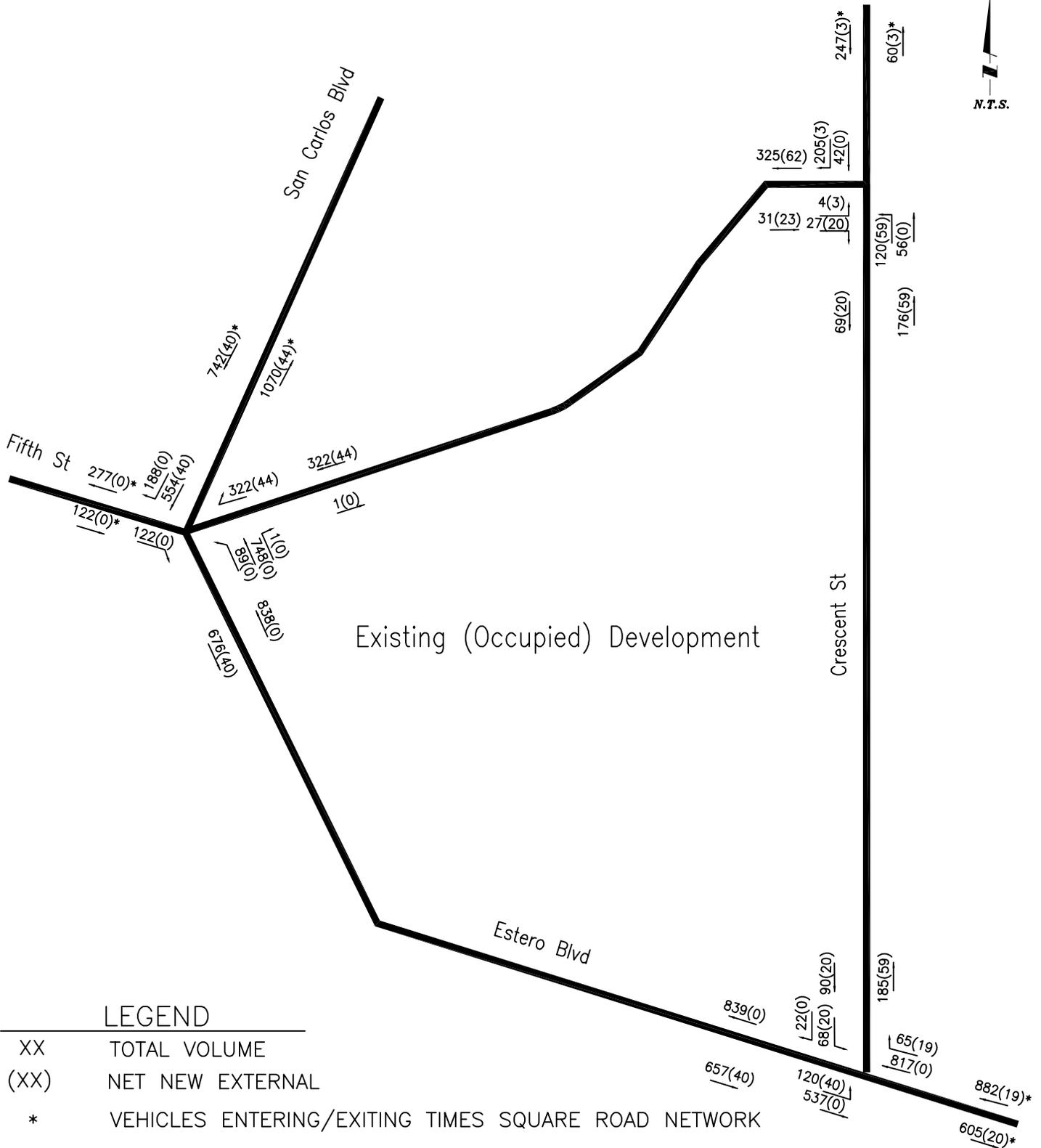


DESTINATION BEACH RESORT

PROJECTED 2020
BACKGROUND TRAFFIC VOLUMES
PM PEAK HOUR

16537/33C/0118

8



LEGEND

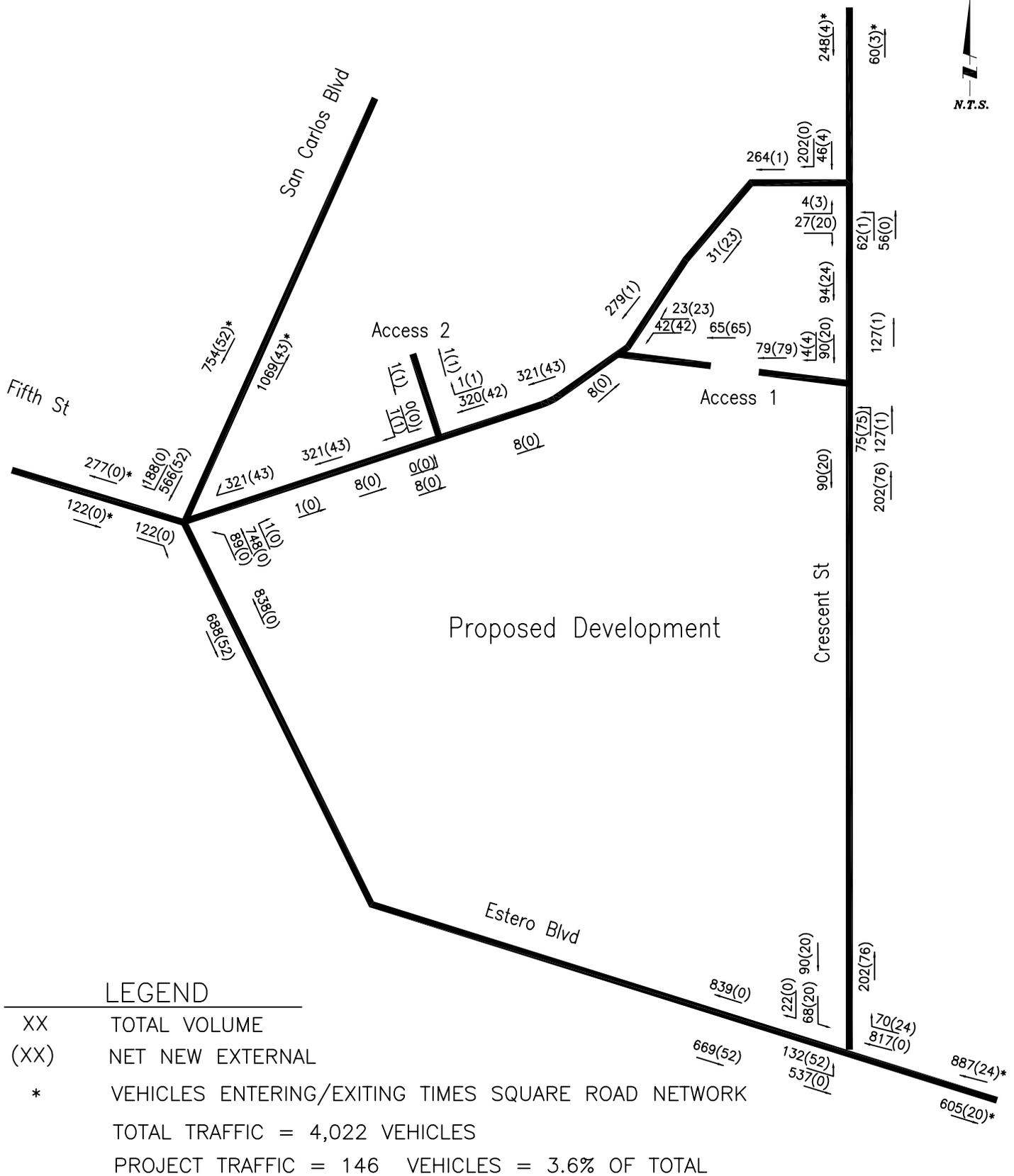
- XX TOTAL VOLUME
 - (XX) NET NEW EXTERNAL
 - * VEHICLES ENTERING/EXITING TIMES SQUARE ROAD NETWORK
- TOTAL TRAFFIC = 4,005 VEHICLES
 PROJECT TRAFFIC = 129 VEHICLES = 3.2% OF TOTAL



DESTINATION BEACH RESORT

FUTURE 2020 PM PEAK
 TRAFFIC VOLUMES
 WITH EXISTING DEVELOPMENT

16537/37D/0318



LEGEND

- XX TOTAL VOLUME
 - (XX) NET NEW EXTERNAL
 - * VEHICLES ENTERING/EXITING TIMES SQUARE ROAD NETWORK
- TOTAL TRAFFIC = 4,022 VEHICLES
- PROJECT TRAFFIC = 146 VEHICLES = 3.6% OF TOTAL



DESTINATION BEACH RESORT

FUTURE 2020 PM PEAK
TRAFFIC VOLUMES
WITH PROPOSED DEVELOPMENT

16537/36E/0318

EXHIBIT 11

DESTINATION BEACH RESORT

TIMES SQUARE NETWORK ANALYSIS - HOURLY TRAFFIC DISTRIBUTION DURING PEAK MONTHS¹

PCS 44 - Estero Blvd north of Donora Blvd²

Hour	NB	SB	Total	Month of Year	Fraction
0	0.80%	0.65%	0.73%	January	1.07
1	0.54%	0.41%	0.48%	February	1.06
2	0.39%	0.23%	0.34%	March	1.08
3	0.24%	0.26%	0.25%	April	1.11
4	0.29%	0.36%	0.33%	May	1.01
5	0.79%	0.79%	0.79%	June	0.99
6	2.03%	1.99%	2.01%	July	1.05
7	4.92%	4.23%	4.57%	August	0.99
8	6.22%	8.15%	6.19%	September	0.82
9	6.65%	7.23%	6.94%	October	0.93
10	6.87%	7.39%	7.13%	November	1.00
11	6.76%	7.21%	6.98%	December	1.00
12	6.56%	7.24%	6.90%		

Average Vehicles per Hour Calculated Using PCS 44 Data

→ Background Monthly Veh/Hour = $\frac{PM\ Peak\ Network\ Circulating\ Traffic}{Peak\ Hour\ \%} \times Hourly\ \%$

→ Project Traffic Monthly Veh/Hour = $(ITE\ Total\ Daily\ Traffic - ITE\ AM\ and\ PM\ Peak\ Hour\ Traffic) \times Ratio\ of\ Hourly\ \% \text{ to } \sum Hourly\ \% (Not\ Including\ AM\ and\ PM\ Peak\ Hour\ Hourly\ \%) \times Monthly\ Fraction$

→ Total Monthly Veh/Hour = Background Monthly Veh/Hour + Project Traffic Monthly Veh/Hour

2020 Average Vehicles per Hour⁵

Development Scenario	Project Trip Assignment Peak Hour 2-Way ⁴	
	%	Trips
Existing (Occupied) Development	AM	68
	PM	130
Proposed Development	AM	133
	PM	145
Difference from Existing (Occupied)	AM	65
	PM	15

ITE AM Peak Hour of Adjacent Street Traffic occurs between 7 and 9 AM.

ITE PM Peak Hour of Adjacent Street Traffic occurs between 4 and 6 PM.

Vehicles entering/exiting Times Square road network during PM peak: 3,876

Hour	Existing (Occupied) - Total Traffic															Proposed - Total Traffic														
	Unadjusted Month			January			February			March			April			Unadjusted Month			January			February			March			April		
	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total	Back-ground	Project	Total			
0	421	13	434	450	14	464	446	14	460	455	14	469	467	14	481	421	11	432	450	12	462	446	12	458	455	12	467	467	12	479
1	277	8	285	296	9	305	294	8	302	299	9	308	307	9	316	277	7	284	296	7	303	294	7	301	299	8	307	307	8	315
2	196	6	202	210	6	216	208	6	214	212	6	218	218	7	225	196	5	201	210	5	215	208	5	213	212	5	217	218	6	224
3	144	4	148	154	4	158	153	4	157	156	4	160	160	4	164	144	4	148	154	4	158	153	4	157	156	4	160	160	4	164
4	190	6	196	203	6	209	201	6	207	205	6	211	211	7	218	190	5	195	203	5	208	201	5	206	205	5	210	211	6	217
5	456	14	470	488	15	503	483	15	498	492	15	507	506	16	522	456	12	468	488	13	501	483	13	496	492	13	505	506	13	519
6	1159	35	1194	1240	37	1277	1229	37	1266	1252	38	1290	1286	39	1325	1159	30	1189	1240	32	1272	1229	32	1261	1252	32	1284	1286	33	1319
7	2636	80	2716	2821	86	2907	2794	85	2879	2847	86	2933	2926	89	3015	2636	69	2705	2821	74	2895	2794	73	2867	2847	75	2922	2926	77	3003
8	3570	66	3636	3820	73	3893	3784	72	3856	3856	73	3929	3963	75	4038	3570	133	3703	3820	142	3962	3784	141	3925	3856	144	4000	3963	148	4111
9	4003	122	4125	4283	131	4414	4243	129	4372	4323	132	4455	4443	135	4578	4003	104	4107	4283	111	4394	4243	112	4355	4323	112	4435	4443	115	4558
10	4112	125	4237	4400	134	4534	4359	133	4492	4441	135	4576	4564	139	4703	4112	107	4219	4400	114	4514	4359	113	4472	4441	116	4557	4564	119	4683
11	4026	123	4149	4308	132	4440	4268	130	4398	4348	133	4481	4469	137	4606	4026	105	4131	4308	112	4420	4268	111	4379	4348	113	4461	4469	117	4586
12	3980	121	4101	4259	129	4388	4219	128	4347	4298	131	4429	4418	134	4552	3980	104	4084	4259	111	4370	4219	110	4329	4298	112	4410	4418	115	4533
13	3911	119	4030	4185	127	4312	4146	126	4272	4224	129	4353	4341	132	4473	3911	102	4013	4185	109	4294	4146	108	4254	4224	110	4334	4341	113	4454
14	3986	122	4108	4265	131	4396	4225	129	4354	4305	132	4437	4424	135	4559	3986	104	4090	4265	111	4376	4225	110	4335	4305	112	4417	4424	115	4539
15	3974	121	4095	4252	129	4381	4212	128	4340	4292	131	4423	4411	134	4545	3974	103	4077	4252	110	4362	4212	109	4321	4292	111	4403	4411	114	4525
16	3876	130	4006	4147	139	4296	4109	138	4247	4186	140	4326	4302	144	4446	3876	145	4021	4147	155	4302	4109	154	4263	4186	157	4343	4302	161	4463
17	3743	114	3857	4005	122	4127	3968	121	4089	4042	123	4165	4155	127	4282	3743	97	3840	4005	104	4109	3968	103	4071	4042	105	4147	4155	108	4263
18	3328	102	3430	3561	109	3670	3528	108	3636	3594	110	3704	3694	113	3807	3328	87	3415	3561	93	3654	3528	92	3620	3594	94	3688	3694	97	3791
19	2930	89	3019	3135	95	3230	3106	94	3200	3164	96	3260	3252	99	3351	2930	76	3006	3135	81	3216	3106	81	3187	3164	82	3246	3252	84	3336
20	2509	77	2586	2685	82	2767	2660	82	2742	2710	83	2793	2785	85	2870	2509	65	2574	2685	70	2755	2660	69	2729	2710	70	2780	2785	72	2857
21	2025	62	2087	2167	66	2233	2147	66	2213	2187	67	2254	2248	69	2317	2025	53	2078	2167	57	2224	2147	56	2203	2167	57	2244	2248	59	2307
22	1465	45	1510	1568	48	1616	1553	48	1601	1582	49	1631	1626	50	1676	1465	38	1503	1568	41	1609	1553	40	1593	1582	41	1623	1626	42	1668
23	773	24	797	827	26	853	819	25	844	835	26	861	858	27	885	773	20	793	827	21	848	819	21	840	835	22	857	858	22	880
Total	57690	1730	59420	61729	1850	63579	61154	1832	62986	62305	1868	64173	64034	1920	65954	57690	1586	59276	61729	1694	63423	61154	1679	62833	62305	1712	64017	64034	1760	65794

Footnotes:

- Per the Town of Fort Myers Beach Comprehensive Plan Policy 7-1-2. The peak capacity of Estero Boulevard's congested segments is 1,300 vehicles per hour. The minimum acceptable level-of-service standard for Estero Boulevard shall be that average monthly traffic flows from 10:00 A.M. to 5:00 P.M. during each month do not exceed that level for more than four calendar months in any continuous twelve-month period. Measurements from the permanent count station at Donora Boulevard shall be used for this standard.
- Lee County Traffic Count Report 2016 - PCS 44 traffic data encircled in red.
- Linear growth rate. Growth rate developed from Lee County Traffic Count Report 2016 Historical AADT.
- Based on the Project peak hour trip generation and assignment.
- 2020 projected average monthly volume plus peak hour, 2-way Project traffic.
- Monthly fraction not provided by Lee County Traffic Count Report 2016. Assume monthly fraction of 1.0.

APPENDIX A

ITE TRIP GENERATION
DATA AND RATES

Land Use: 330

Resort Hotel

Description

A resort hotel is similar to a hotel (Land Use 310) in that it provides sleeping accommodations, restaurants, cocktail lounges, retail shops, and guest services. The primary difference is that a resort hotel caters to the tourist and vacation industry, often providing a wide variety of recreational facilities/programs (golf courses, tennis courts, beach access, or other amenities) rather than convention and meeting business. Hotel (Land Use 310), all suites hotel (Land Use 311), business hotel (Land Use 312), and motel (Land Use 320) are related uses.

Additional Data

Nine studies provided information on room occupancy at the time of data collection. The average occupancy rate for these sites was approximately 88 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.

The sites were surveyed in the 1980s and the 1990s in California, Florida, and South Carolina.

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.

Source Numbers

270, 381, 436

Resort Hotel (330)

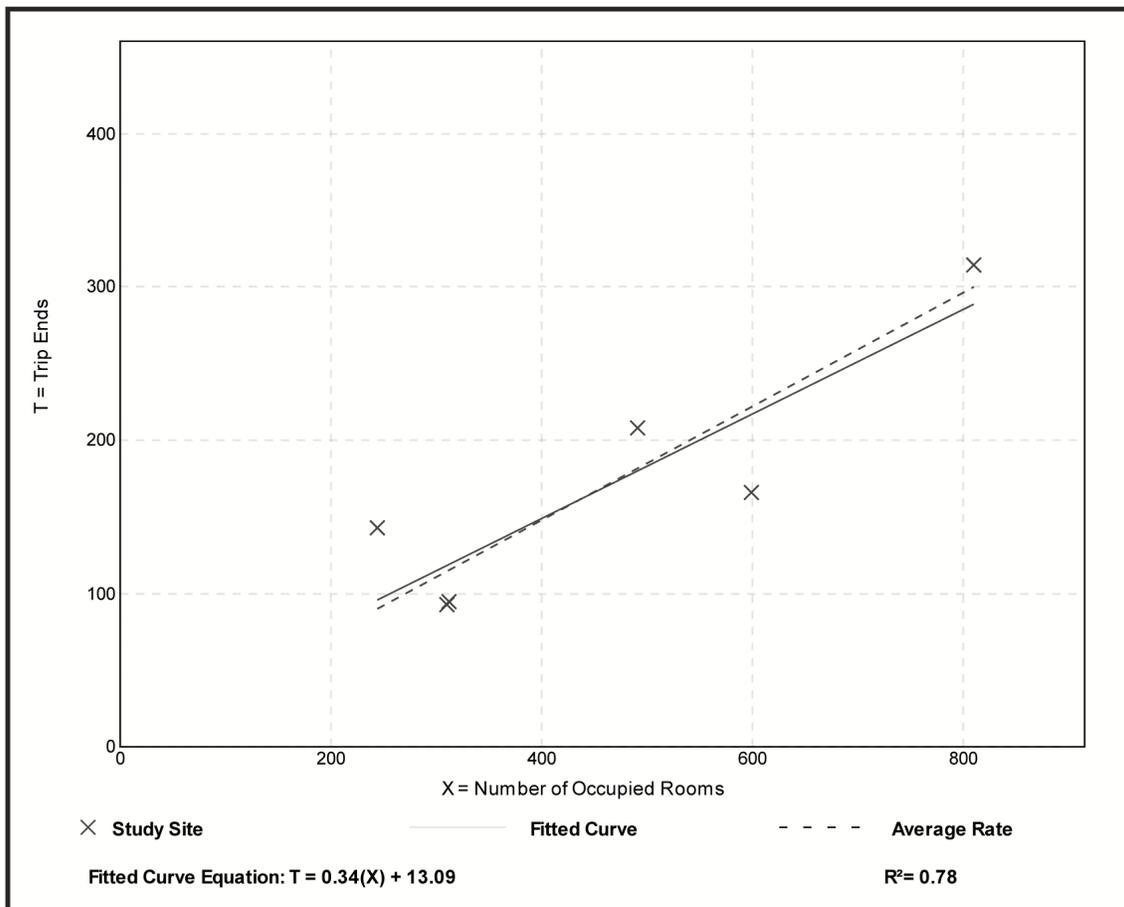
Vehicle Trip Ends vs: Occupied Rooms
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban
 Number of Studies: 6
 Avg. Num. of Occupied Rooms: 461
 Directional Distribution: 72% entering, 28% exiting

Vehicle Trip Generation per Occupied Room

Average Rate	Range of Rates	Standard Deviation
0.37	0.28 - 0.59	0.10

Data Plot and Equation



Resort Hotel (330)

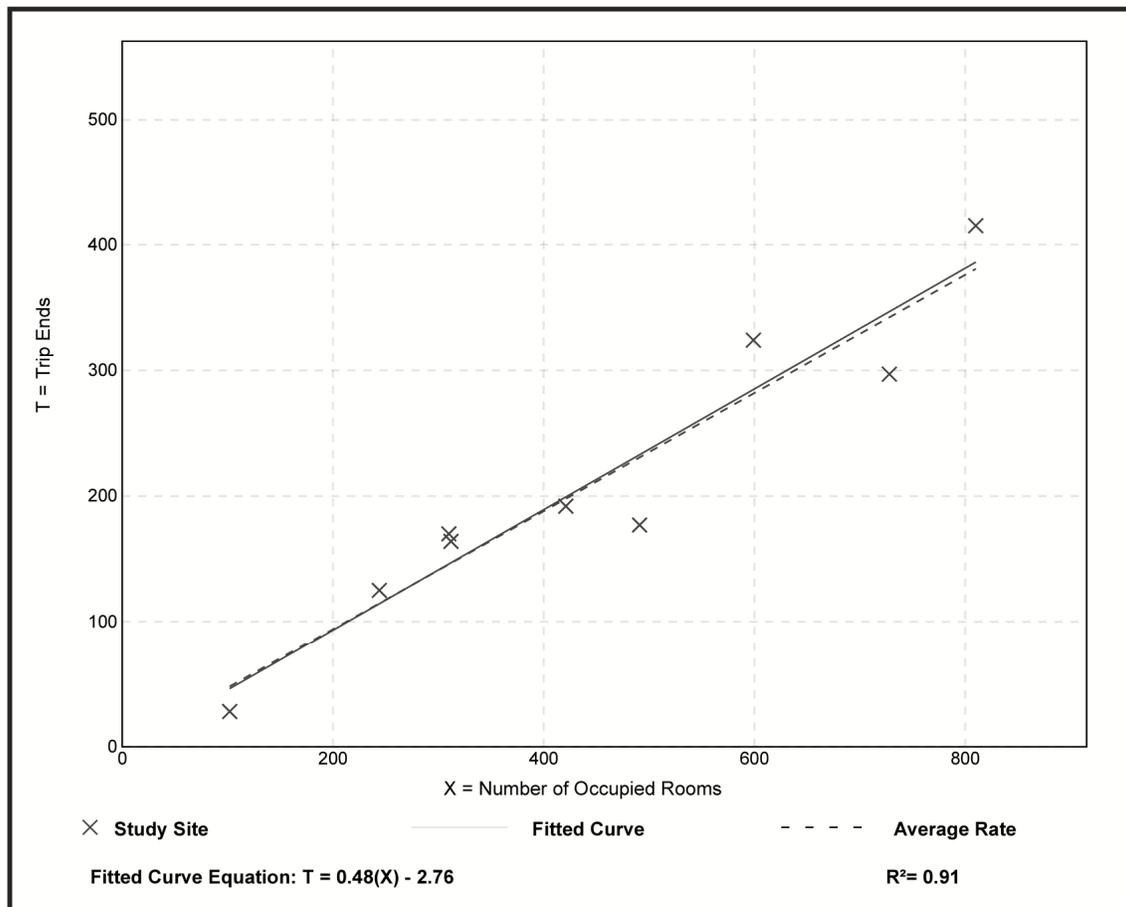
Vehicle Trip Ends vs: Occupied Rooms
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban
 Number of Studies: 9
 Avg. Num. of Occupied Rooms: 446
 Directional Distribution: 43% entering, 57% exiting

Vehicle Trip Generation per Occupied Room

Average Rate	Range of Rates	Standard Deviation
0.47	0.27 - 0.55	0.08

Data Plot and Equation



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

Shopping Center (820)

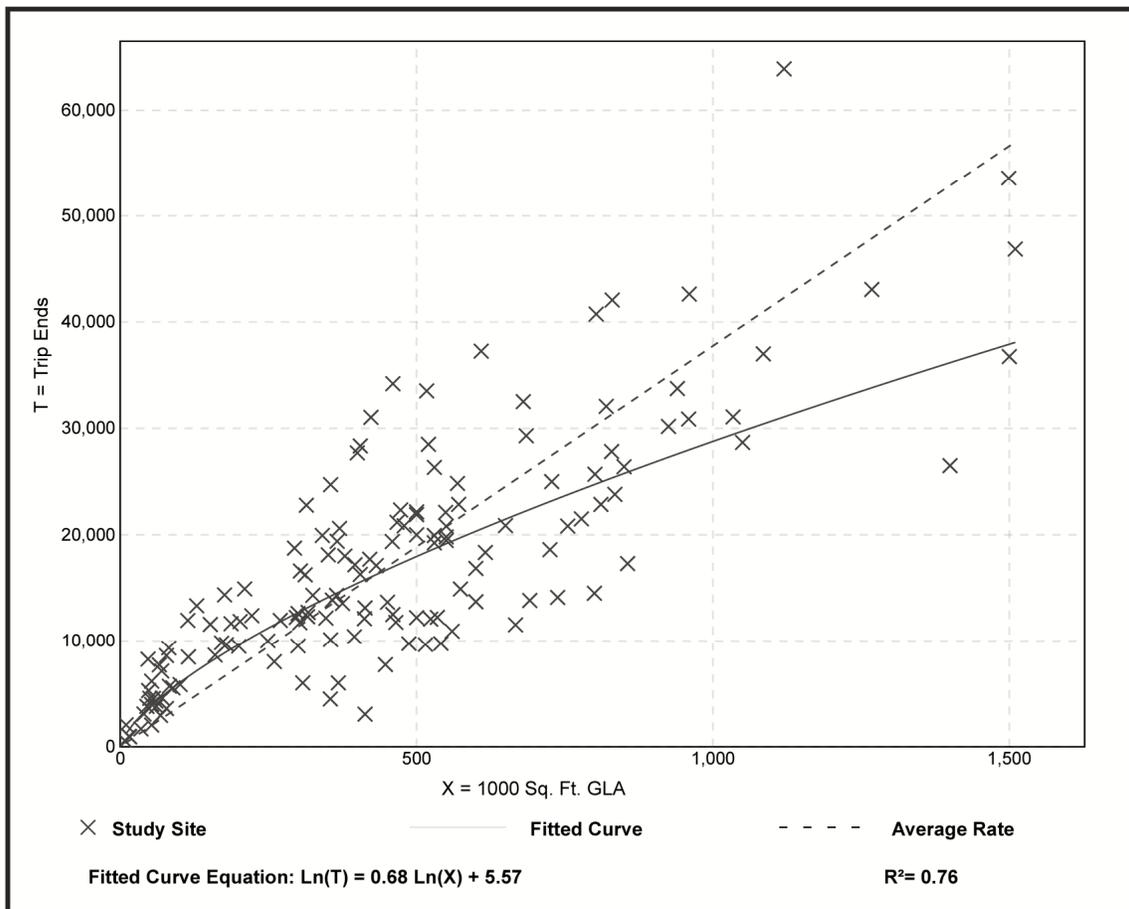
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 147
1000 Sq. Ft. GLA: 453
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
37.75	7.42 - 207.98	16.41

Data Plot and Equation



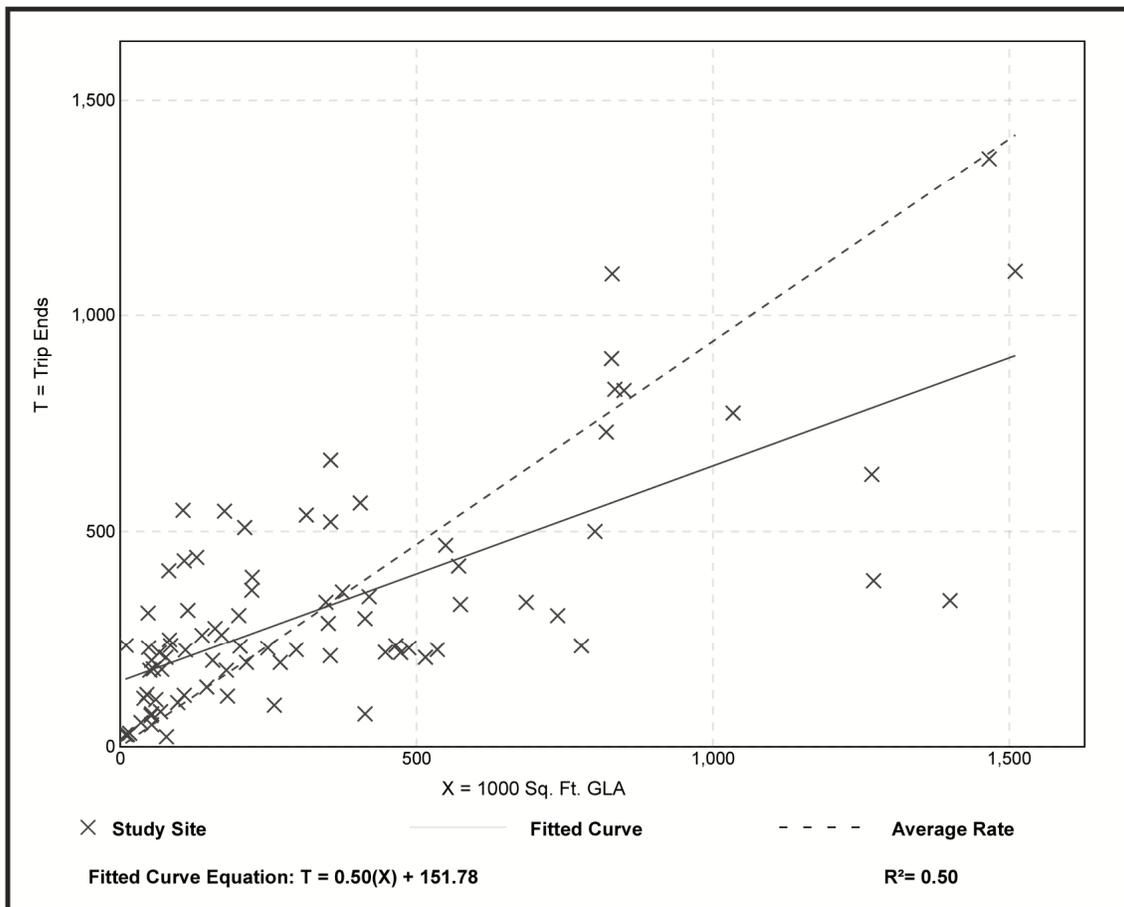
Shopping Center (820)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 84
 1000 Sq. Ft. GLA: 351
 Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
0.94	0.18 - 23.74	0.87

Data Plot and Equation



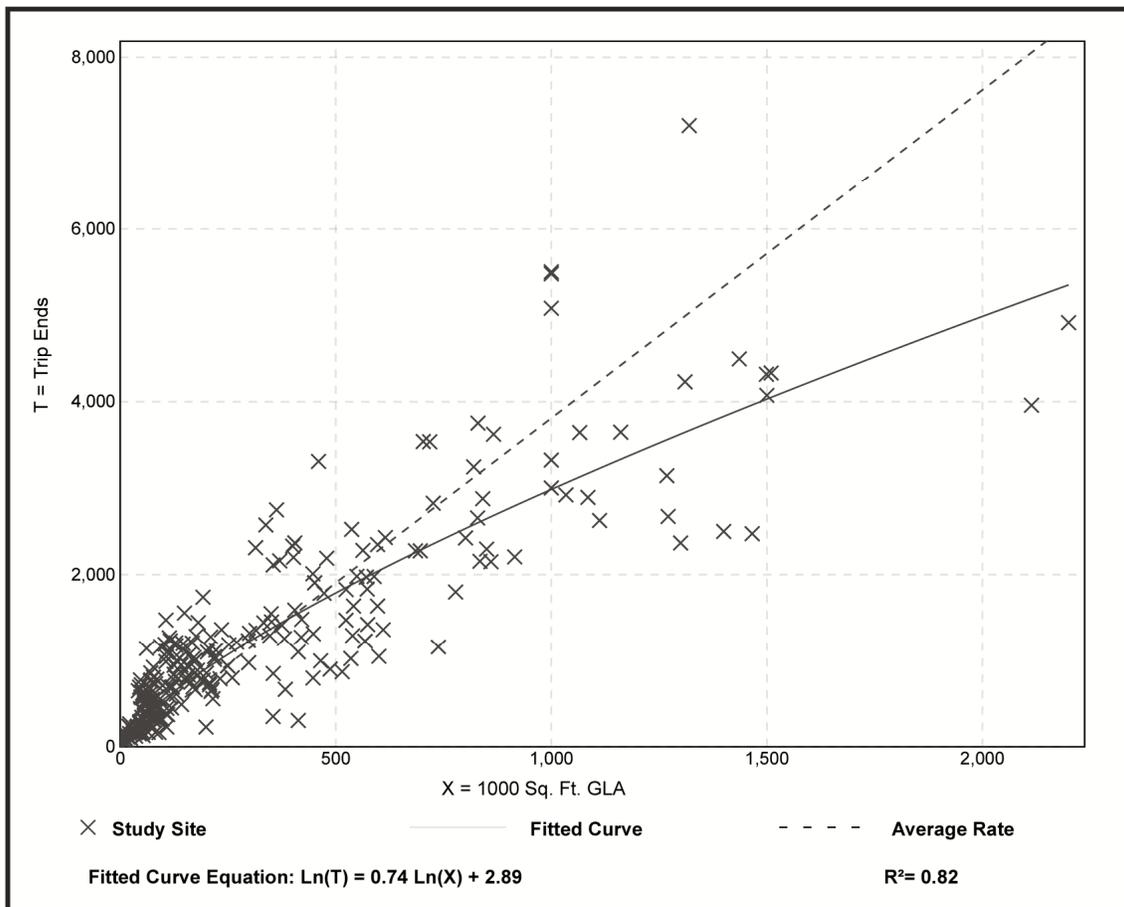
Shopping Center (820)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 261
 1000 Sq. Ft. GLA: 327
 Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.81	0.74 - 18.69	2.04

Data Plot and Equation



Land Use: 925 Drinking Place

Description

A drinking place contains a bar, where alcoholic beverages and food are sold, and possibly some type of entertainment, such as music, television screens, video games, or pool tables. Establishments that specialize in serving food but also have bars are not included in this land use.

Additional Data

All data for this land use were collected on Mondays through Thursdays.

The sites were surveyed in the 1980s and the 1990s in Colorado, Oregon, and South Dakota.

Source Numbers

291, 358, 583

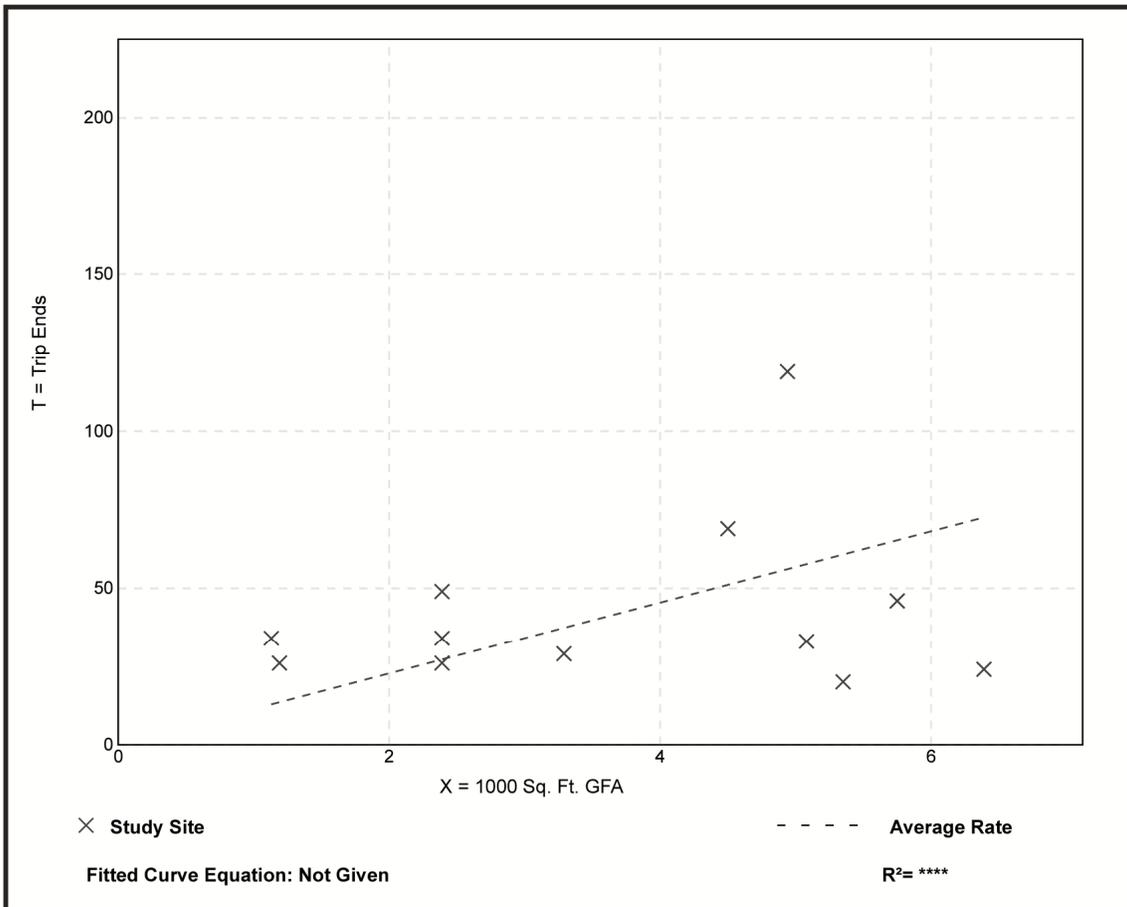
Drinking Place (925)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 12
 1000 Sq. Ft. GFA: 4
 Directional Distribution: 66% entering, 34% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.36	3.74 - 30.09	7.81

Data Plot and Equation



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

High-Turnover (Sit-Down) Restaurant (932)

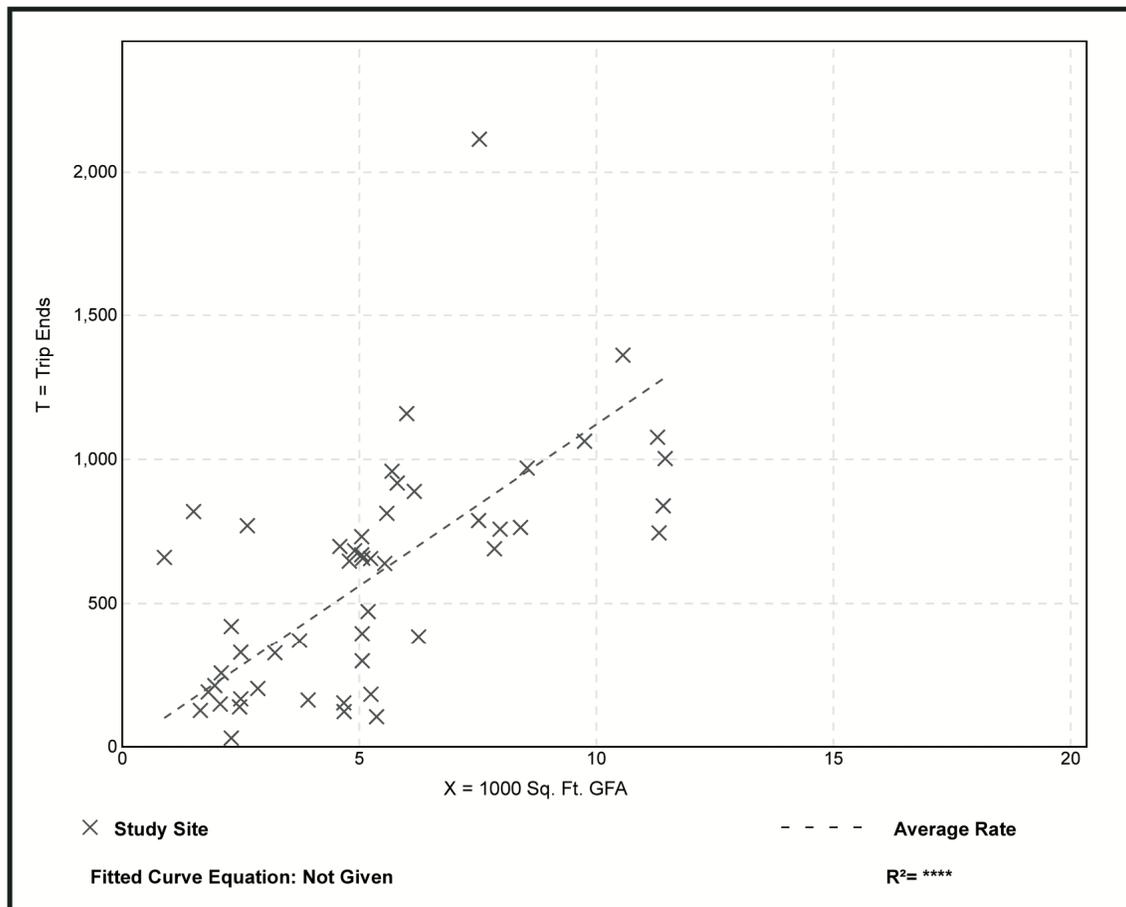
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 50
1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
112.18	13.04 - 742.41	72.51

Data Plot and Equation



High-Turnover (Sit-Down) Restaurant (932)

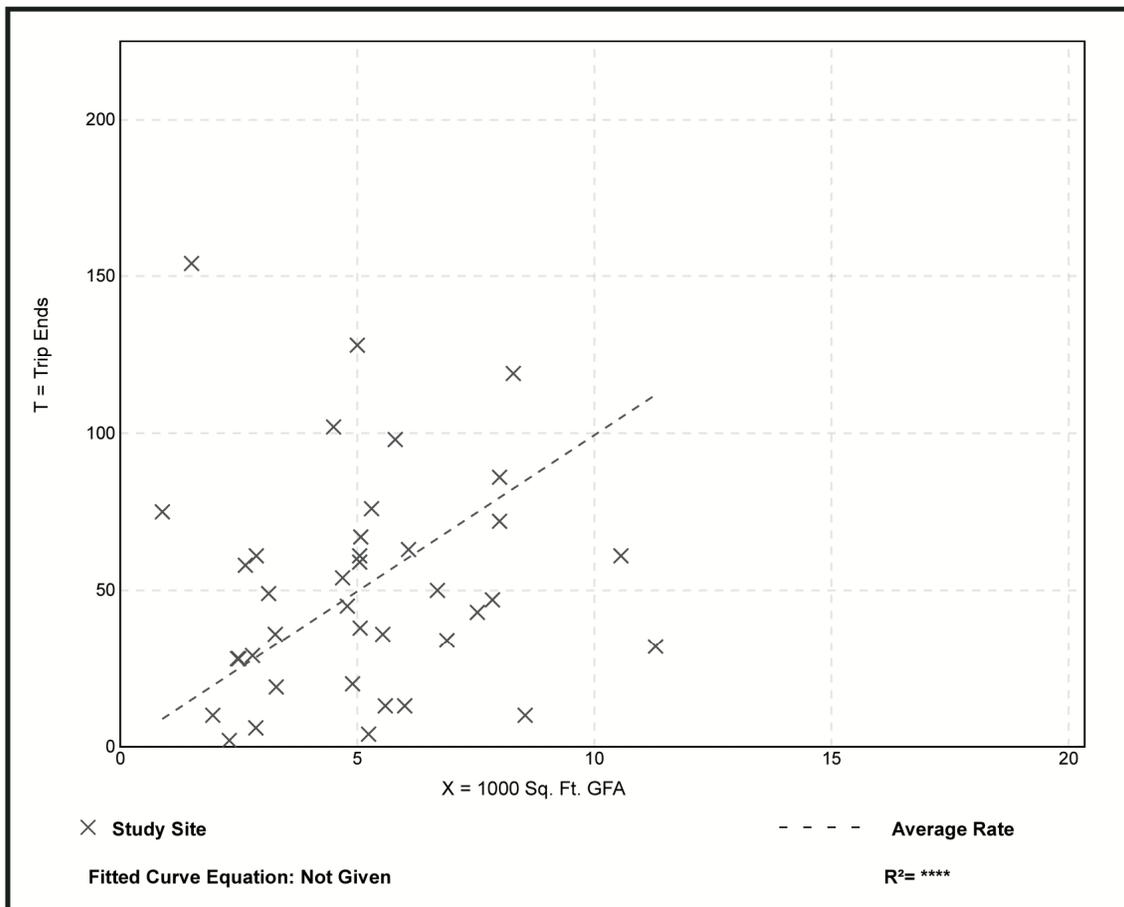
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban
 Number of Studies: 39
 1000 Sq. Ft. GFA: 5
 Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.94	0.76 - 102.39	11.33

Data Plot and Equation



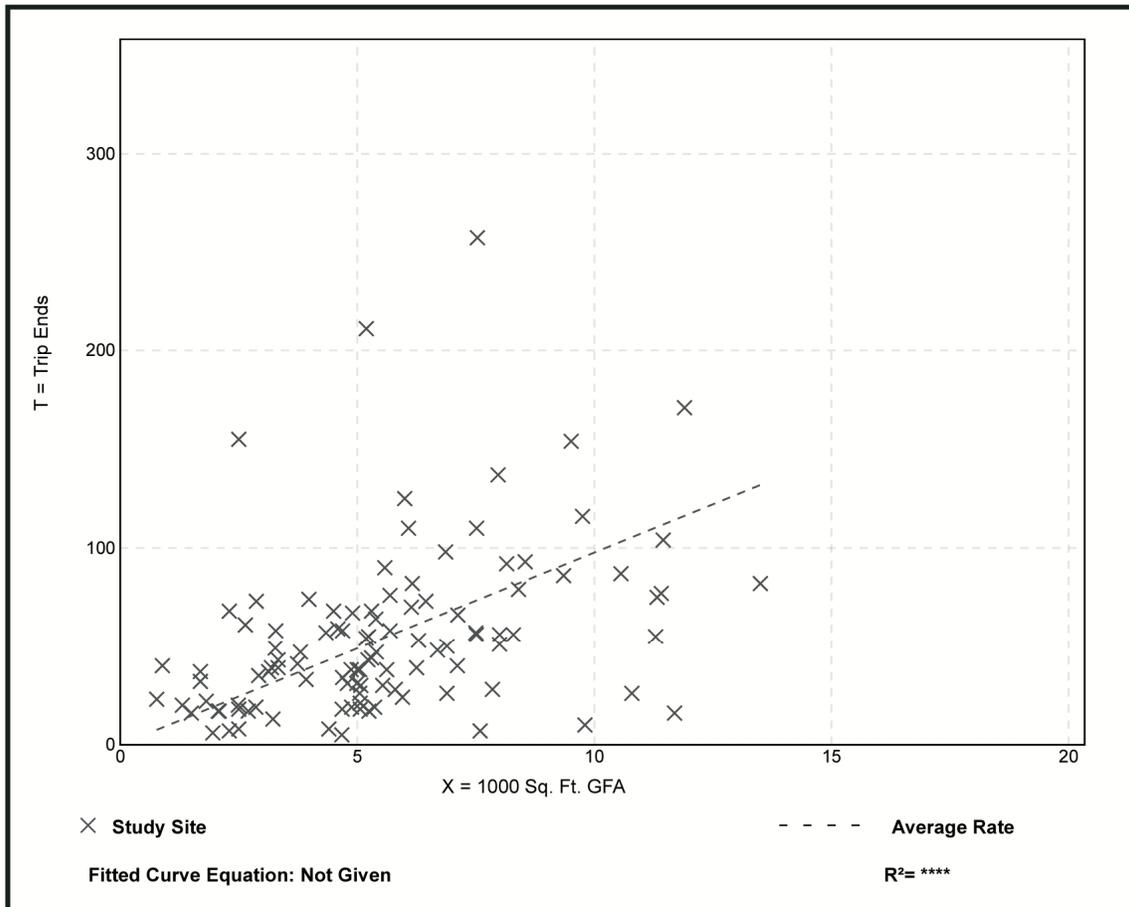
High-Turnover (Sit-Down) Restaurant (932)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 107
 1000 Sq. Ft. GFA: 6
 Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.77	0.92 - 62.00	7.37

Data Plot and Equation



APPENDIX B

ITE TRIP GENERATION HANDBOOK
MIXED-USE DEVELOPMENT TRIP CAPTURE RATES

**Table 6.1 Unconstrained Internal Person Trip Capture Rates
for Trip Origins within a Mixed-Use Development**

		WEEKDAY	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Retail	28%	20%
	To Restaurant	63%	4%
	To Cinema/Entertainment	0%	0%
	To Residential	1%	2%
	To Hotel	0%	0%
From RETAIL	To Office	29%	2%
	To Restaurant	13%	29%
	To Cinema/Entertainment	0%	4%
	To Residential	14%	26%
	To Hotel	0%	5%
From RESTAURANT	To Office	31%	3%
	To Retail	14%	41%
	To Cinema/Entertainment	0%	8%
	To Residential	4%	18%
	To Hotel	3%	7%
From CINEMA/ENTERTAINMENT	To Office	0%	2%
	To Retail	0%	21%
	To Restaurant	0%	31%
	To Residential	0%	8%
	To Hotel	0%	2%
From RESIDENTIAL	To Office	2%	4%
	To Retail	1%	42%
	To Restaurant	20%	21%
	To Cinema/Entertainment	0%	0%
	To Hotel	0%	3%
From HOTEL	To Office	75%	0%
	To Retail	14%	16%
	To Restaurant	9%	68%
	To Cinema/Entertainment	0%	0%
	To Residential	0%	2%

Source: Bochner, B., K. Hooper, B. Sperry, and R. Dunphy. NCHRP Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*. Washington, DC: Transportation Research Board, Tables 99 and 100, 2011.

**Table 6.2 Unconstrained Internal Person Trip Capture Rates
for Trip Destinations within a Mixed-Use Development**

		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Retail	4%	31%
	From Restaurant	14%	30%
	From Cinema/Entertainment	0%	6%
	From Residential	3%	57%
	From Hotel	3%	0%
To RETAIL	From Office	32%	8%
	From Restaurant	8%	50%
	From Cinema/Entertainment	0%	4%
	From Residential	17%	10%
	From Hotel	4%	2%
To RESTAURANT	From Office	23%	2%
	From Retail	50%	29%
	From Cinema/Entertainment	0%	3%
	From Residential	20%	14%
	From Hotel	6%	5%
To CINEMA/ENTERTAINMENT	From Office	0%	1%
	From Retail	0%	26%
	From Restaurant	0%	32%
	From Residential	0%	0%
	From Hotel	0%	0%
To RESIDENTIAL	From Office	0%	4%
	From Retail	2%	46%
	From Restaurant	5%	16%
	From Cinema/Entertainment	0%	4%
	From Hotel	0%	0%
To HOTEL	From Office	0%	0%
	From Retail	0%	17%
	From Restaurant	4%	71%
	From Cinema/Entertainment	0%	1%
	From Residential	0%	12%

Source: Bochner, B., K. Hooper, B. Sperry, and R. Dunphy. NCHRP Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*. Washington, DC: Transportation Research Board, Tables 101 and 102, 2011.

APPENDIX C
TRIP GENERATION

HELMERICH PARKING COUNT DATA

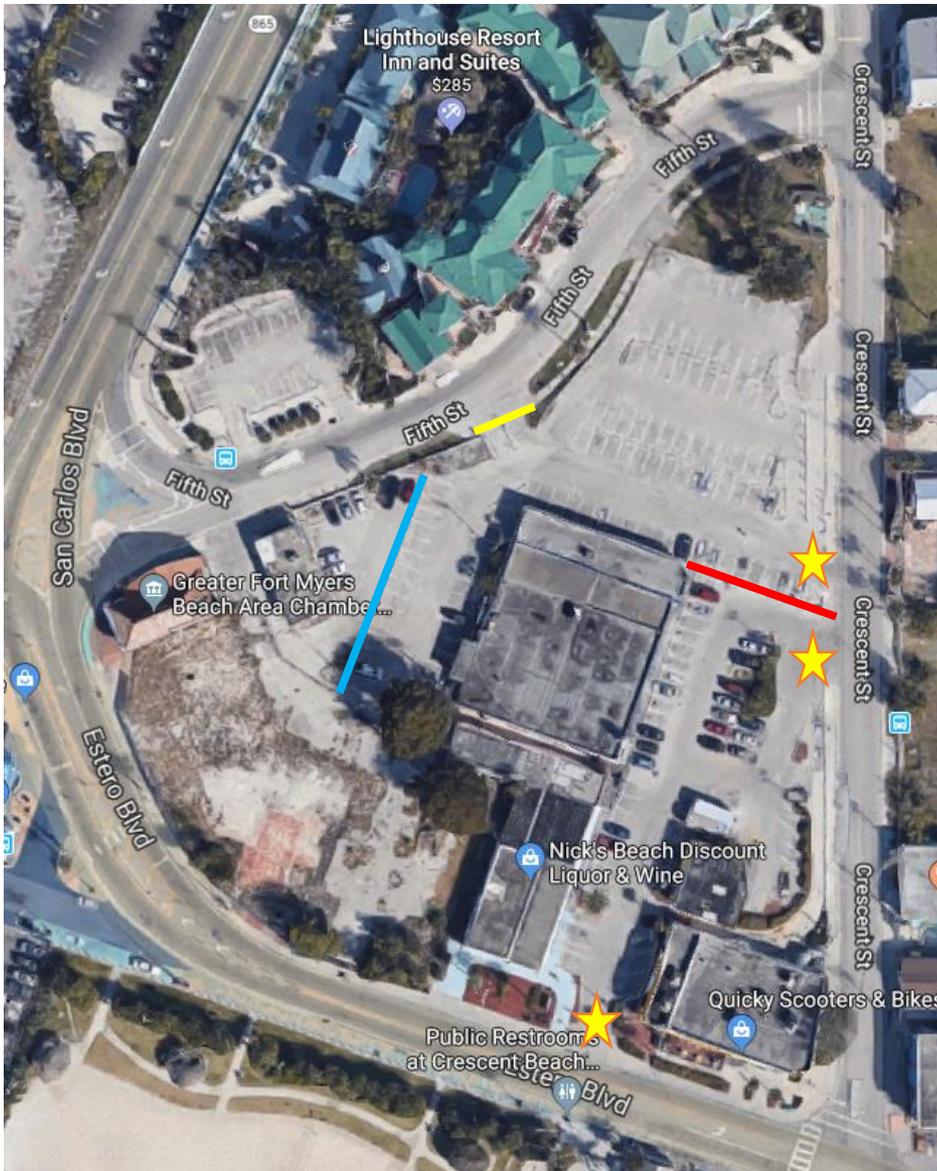
Helmerich Traffic Data

2-21-18

Hour	In	Out	Total (In+Out)	Notes (if needed)
8a-9a	38	12	50	
9a-10a	30	10	40	
10a-11a	65	18	83	
11a-Noon	76	22	98	Full
Noon-1p	73	73	146	
1p-2p	54	57	111	
2p-3p	50	52	102	
3p-4p	23	39	62	
4p-5p	25	46	71	
5p-6p	31	25	56	
6p-7p	16	32	58	48
7p-8p	20	24	44	

2-22-18

Hour	In	Out	Total (In+Out)	Notes (if needed)
8a-9a	23	4	27	
9a-10a	56	7	63	
10a-11a	69	20	89	
11a-Noon	60	52	112	Full
Noon-1p	35	37	72	
1p-2p	28	32	60	
2p-3p	24	30	54	
3p-4p	25	25	50	
4p-5p	29	53	82	
5p-6p	40	58	98	
6p-7p	19	29	48	
7p-8p	45	30	75	



- Concrete Barriers
- Concrete Bumpers
- Chain, driveway closed
- ★ Open driveways, incl in counts

Helmerich Public Beach Parking Trip Generation

Hour	Wednesday, 2/21/18			Thursday, 2/22/18			Average			Average (divided by 79%) ⁽¹⁾			
	In	Out	Total (In+Out)	In	Out	Total (In+Out)	In	Out	Total (In+Out)	In	Out	Total (In+Out)	
8a-9a	38	12	50	23	4	27	31	8	39	39	10	49	AM Peak Hour
9a-10a	30	10	40	56	7	63	43	9	52	54	11	65	
10a-11a	65	18	83	69	20	89	67	19	86	85	24	109	
11a-Noon	76	22	98	60	52	112	68	37	105	86	47	133	
Noon-1p	73	73	146	35	37	72	54	55	109	68	70	138	
1p-2p	54	57	111	28	32	60	41	45	86	52	57	109	PM Peak Hour
2p-3p	50	52	102	24	30	54	37	41	78	47	52	99	
3p-4p	23	39	62	25	25	50	24	32	56	30	41	71	
4p-5p	25	46	71	29	53	82	27	50	77	34	63	97	
5p-6p	31	25	56	40	58	98	36	42	78	46	53	99	
6p-7p	16	32	48	19	29	48	18	31	49	23	39	62	
7p-8p	20	24	44	45	30	75	33	27	60	42	34	76	
Total										606	501	1107	

Daily Trip Generation Derived from PCS 44 Hourly Percentages

PCS 44	
Hour	Hourly %
0	0.73%
1	0.48%
2	0.34%
3	0.25%
4	0.33%
5	0.79%
6	2.01%
7	4.57%
8	6.19%
9	6.94%
10	7.13%
11	6.98%
12	6.90%
13	6.78%
14	6.91%
15	6.89%
16	6.72%
17	6.49%
18	5.77%
19	5.08%
20	4.35%
21	3.51%
22	2.54%
23	1.34%

→ **78.8%** of total day
Total daily = 1107/78.8% = 1405

Footnote:

(1) Parking observations covered 79% of total available beach parking.

TRIP GENERATION CALCULATIONS

DESTINATION BEACH RESORT
EXISTING (OCCUPIED) DEVELOPMENT - TOTAL PROJECT
TRIP GENERATION⁽¹⁾

	LUC	SIZE	UNITS	AM PEAK HOUR ⁽¹⁰⁾					PM PEAK HOUR ⁽¹¹⁾					DAILY							
				Rate/Equation	In	Out	Total	%	Rate/Equation	In	Out	Total	%	Rate/Equation	In	Out	Total	%			
Retail																					
Bayside - Shopping Center (General Urban/Suburban)	820	5,840	1000 Sq. Ft. GLA	Average	62%	3	38%	2	5	Average	48%	11	52%	11	22	Average	50%	110	50%	110	220
Beachside - Shopping Center (General Urban/Suburban)	820	3,100	1000 Sq. Ft. GLA	Average	62%	2	38%	1	3	Average	48%	6	52%	6	12	Average	50%	59	50%	58	117
Trips						5	3	8			17	17	34			169	168	337			
NCHRP Internal Capture ⁽²⁾						0	0	0	0%		5	6	11	32%		64	62	126	37%		
Office						0	0	0			0	0	0			0	0	0			
Restaurant						0	0	0			5	5	10			58	57	115			
Cinema/Entertainment						0	0	0			0	0	0			0	0	0			
Residential						0	0	0			0	0	0			0	0	0			
Hotel						0	0	0			0	1	1			6	5	11			
External						5	3	8			12	11	23			105	106	211			
Non-Auto Trip Reduction ⁽³⁾						3	2	5	55%		7	6	13	55%		58	58	116	55%		
Driveway Volume						2	1	3			5	5	10			47	48	95			
Pass-by ⁽⁴⁾						0	0	0	10%		1	0	1	10%		5	5	10	10%		
Net New External						2	1	3			4	5	9			42	43	85			
Restaurant																					
Drinking Place (General Urban/Suburban)	925	2,900	1000 Sq. Ft. GFA	N/A	50%	0	50%	0	0 ⁽⁵⁾	Average	66%	22	34%	11	33	Custom	50%	165	50%	164	329 ⁽⁶⁾
Trips						0	0	0			22	11	33			165	164	329			
NCHRP Internal Capture ⁽²⁾						0	0	0	0%		6	6	12	36%		68	66	134	41%		
Office						0	0	0			0	0	0			0	0	0			
Retail						0	0	0			5	5	10			58	57	115			
Cinema/Entertainment						0	0	0			0	0	0			0	0	0			
Residential						0	0	0			0	0	0			0	0	0			
Hotel						0	0	0			1	1	2			10	9	19			
External						0	0	0			16	5	21			97	98	195			
Non-Auto Trip Reduction ⁽³⁾						0	0	0	55%		9	3	12	55%		53	54	107	55%		
Driveway Volume						0	0	0			7	2	9			44	44	88			
Pass-by ⁽⁴⁾						0	0	0	0%		0	0	0	0%		0	0	0	0%		
Net New External						0	0	0			7	2	9			44	44	88			
Hotel																					
Beachside - Resort Hotel (General Urban/Suburban) ⁽⁷⁾	330	70	Occupied Rooms	Fitted Curve	72%	27	28%	10	37	Fitted Curve	43%	13	57%	18	31	Custom	50%	165	50%	164	329 ⁽⁸⁾
Trips						27	10	37			13	18	31			165	164	329			
NCHRP Internal Capture ⁽²⁾						0	0	0	0%		2	1	3	10%		16	14	30	9%		
Office						0	0	0			0	0	0			0	0	0			
Retail						0	0	0			1	0	1			6	5	11			
Restaurant						0	0	0			1	1	2			10	9	19			
Cinema/Entertainment						0	0	0			0	0	0			0	0	0			
Residential						0	0	0			0	0	0			0	0	0			
External						27	10	37			11	17	28			149	150	299			
Non-Auto Trip Reduction ⁽³⁾						15	6	21	55%		6	9	15	55%		82	83	165	55%		
Driveway Volume						12	4	16			5	8	13			67	67	134			
Pass-by ⁽⁴⁾						0	0	0	0%		0	0	0	0%		0	0	0	0%		
Net New External						12	4	16			5	8	13			67	67	134			
Non-NCHRP Land Uses ⁽⁴⁾																					
Public Beach Parking ⁽⁹⁾	N/A	186	Parking Stall	Count Data	80%	39	20%	10	49	Count Data	46%	46	54%	53	99	Count Data	50%	703	50%	702	1,405
Trips						39	10	49			46	53	99			703	702	1,405			
External						39	10	49			46	53	99			703	702	1,405			
Non-Auto Trip Reduction ⁽³⁾						0	0	0	0%		0	0	0	0%		0	0	0	0%		
Driveway Volume						39	10	49			46	53	99			703	702	1,405			
Pass-by ⁽⁴⁾						0	0	0	0%		0	0	0	0%		0	0	0	0%		
Net New External						39	10	49			46	53	99			703	702	1,405			

	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>%</u>		<u>In</u>	<u>Out</u>	<u>Total</u>	<u>%</u>		<u>In</u>	<u>Out</u>	<u>Total</u>	<u>%</u>
TOTAL	71	23	94			98	99	197			1,202	1,198	2,400	
NCHRP INTERNAL CAPTURE ⁽²⁾	0	0	0	0%		13	13	26	13%		148	142	290	12%
EXTERNAL	71	23	94			85	86	171			1,054	1,056	2,110	
NON-AUTO TRIP REDUCTION	18	8	26	28%		22	18	40	23%		193	195	388	18%
DRIVEWAY VOLUME	<u>53</u>	<u>15</u>	<u>68</u>			<u>63</u>	<u>68</u>	<u>131</u>			<u>861</u>	<u>861</u>	<u>1,722</u>	
PASS-BY - AUTOMOBILE TRIPS ⁽³⁾	0	0	0	0%		1	0	1	1%		5	5	10	1%
NET NEW EXTERNAL AUTOMOBILE TRIPS	53	15	68			62	68	130			856	856	1,712	

Footnotes:

- (1) Trip generation estimate based on ITE Trip Generation (10th Edition). A fitted curve equation used if available and applicable per ITE guidelines.
- (2) Consistent with NCHRP internal capture calculations. ITE, Trip Generation Handbook - An ITE Proposed Recommended Practice (3rd Edition). Chapter 6 - Trip Generation for Mixed-Use Development. PM rates used for daily internal capture estimate.
- (3) Reduction reflects pedestrian and bicycle trips to / from immediate vicinity, reflective of a beach community.
- (4) ITE average retail pass-by rate capped at 10% for retail uses.
- (5) ITE does not offer AM trip generation rates for LUC 925 Drinking Place. Assumed not applicable for AM time period (7 - 9 AM).
- (6) ITE does not offer weekday trip generation rates for LUC 925 Drinking Place. A weekday trip generation rate of 113.6 is used (assumes PM peak hour rate is 10% of the weekday).
- (7) Pierview Hotel was originally permitted as a 70 unit hotel, but is currently operated as only having 58 hotel rooms. Therefore, only 58 hotel rooms were assumed as occupied in this traffic impact analysis. 12 hotel rooms are assumed as occupied for Kings Landing/ Mermaid.
- (8) ITE does not offer weekday trip generation rates for LUC 330 Resort Hotel. A weekday trip generation rate of 4.7 is used (assumes PM peak hour rate is 10% of the weekday).
- (9) ITE trip generation estimates for beach parking not provided. Trip generation is based on observations by parking maintenance agents.
- (10) Peak hour of adjacent street traffic, one hour between 7 and 9 AM.
- (11) Peak hour of adjacent street traffic, one hour between 4 and 6 PM.

**DESTINATION BEACH RESORT
PROPOSED DEVELOPMENT - TOTAL PROJECT
TRIP GENERATION⁽¹⁾**

	LUC	SIZE	UNITS	AM PEAK HOUR ⁽⁸⁾					PM PEAK HOUR ⁽⁹⁾					DAILY									
				Rate/Equation	In	Out	Total	%	Rate/Equation	In	Out	Total	%	Rate/Equation	In	Out	Total	%					
Retail																							
Beachside - Shopping Center (General Urban/Suburban)	820	1,800	1000 Sq. Ft. GLA	Average	62%	1	38%	1	2		Average	48%	3	52%	4	7		Average	50%	34	50%	34	68
Trips						1	1	2				3	4	7						34	34	68	
NCHRP Internal Capture ⁽²⁾						0	0	0	0%			2	1	3	43%					16	14	30	44%
Office						0	0	0				0	0	0						0	0	0	
Restaurant						0	0	0				2	1	3						14	13	27	
Cinema/Entertainment						0	0	0				0	0	0						0	0	0	
Residential						0	0	0				0	0	0						0	0	0	
Hotel						0	0	0				0	0	0						0	0	0	
External						1	1	2				1	3	4						18	20	38	
Non-Auto Trip Reduction ⁽³⁾						1	1	2	55%			1	2	3	55%					10	11	21	55%
Driveway Volume						0	0	0				0	1	1						8	9	17	
Pass-by ⁽⁴⁾						0	0	0	10%			0	0	0	10%					1	1	2	10%
Net New External						0	0	0				0	1	1						7	8	15	
Restaurant																							
Beachside - Drinking Place (General Urban/Suburban)	925	1,960	1000 Sq. Ft. GFA	N/A	50%	0	50%	0	0 ⁽⁵⁾		Average	66%	15	34%	7	22		Custom	50%	112	50%	111	223 ⁽⁶⁾
Beachside - High-Turnover (Sit-Down) Restaurant (General Urban/Suburb)	932	19,750	1000 Sq. Ft. GFA	Average	55%	108	45%	88	196		Average	62%	120	38%	73	193		Average	50%	1,108	50%	1,108	2,216
Trips						108	88	196				135	80	215						1,220	1,219	2,439	
NCHRP Internal Capture ⁽²⁾						3	3	6	3%			8	8	16	7%					87	86	173	7%
Office						0	0	0				0	0	0						0	0	0	
Retail						0	0	0				1	2	3						14	13	27	
Cinema/Entertainment						0	0	0				0	0	0						0	0	0	
Residential						0	0	0				0	0	0						0	0	0	
Hotel						3	3	6				7	6	13						73	73	146	
External						105	85	190				127	72	199						1,133	1,133	2,266	
Non-Auto Trip Reduction ⁽³⁾						58	47	105	55%			70	40	110	55%					623	623	1,246	55%
Driveway Volume						47	38	85				57	32	89						510	510	1,020	
Pass-by ⁽⁴⁾						0	0	0	0%			0	0	0	0%					0	0	0	0%
Net New External						47	38	85				57	32	89						510	510	1,020	
Hotel																							
Beachside - Resort Hotel (General Urban/Suburban)	330	290	Occupied Rooms	Fitted Curve	72%	81	28%	31	112		Fitted Curve	43%	58	57%	78	136		Custom	50%	682	50%	681	1,363 ⁽⁷⁾
Trips						81	31	112				58	78	136						682	681	1,363	
NCHRP Internal Capture ⁽²⁾						3	3	6	5%			6	7	13	10%					75	74	149	11%
Office						0	0	0				0	0	0						0	0	0	
Retail						0	0	0				0	0	0						2	1	3	
Restaurant						3	3	6				6	7	13						73	73	146	
Cinema/Entertainment						0	0	0				0	0	0						0	0	0	
Residential						0	0	0				0	0	0						0	0	0	
Hotel						78	28	106				52	71	123						607	607	1,214	
External						43	15	58	55%			29	39	68	55%					334	334	668	55%
Non-Auto Trip Reduction ⁽³⁾						35	13	48				23	32	55						273	273	546	
Driveway Volume						0	0	0	0%			0	0	0	0%					0	0	0	0%
Pass-by ⁽⁴⁾						0	0	0				0	0	0						0	0	0	
Net New External						35	13	48				23	32	55						273	273	546	

	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>%</u>		<u>In</u>	<u>Out</u>	<u>Total</u>	<u>%</u>		<u>In</u>	<u>Out</u>	<u>Total</u>	<u>%</u>
TOTAL	190	120	310			196	162	358			1,936	1,934	3,870	
NCHRP INTERNAL CAPTURE ⁽²⁾	6	6	12	4%		16	16	32	9%		178	174	352	9%
EXTERNAL	184	114	298			180	146	326			1,758	1,760	3,518	
NON-AUTO TRIP REDUCTION	102	63	165	55%		100	81	181	56%		967	968	1,935	55%
DRIVEWAY VOLUME	<u>82</u>	<u>51</u>	<u>133</u>			<u>80</u>	<u>65</u>	<u>145</u>			<u>791</u>	<u>792</u>	<u>1,583</u>	
PASS-BY - AUTOMOBILE TRIPS ⁽³⁾	0	0	0	0%		0	0	0	0%		1	1	2	0%
NET NEW EXTERNAL AUTOMOBILE TRIPS	82	51	133			80	65	145			790	791	1,581	

Footnotes:

- (1) Trip generation estimate based on ITE Trip Generation (10th Edition). A fitted curve equation used if available and applicable per ITE guidelines.
- (2) Consistent with NCHRP internal capture calculations. ITE, Trip Generation Handbook - An ITE Proposed Recommended Practice (3rd Edition). Chapter 6 - Trip Generation for Mixed-Use Development. PM rates used for daily internal capture estimate.
- (3) Reduction reflects pedestrian and bicycle trips to / from immediate vicinity, reflective of a beach community.
- (4) ITE average retail pass-by rate capped at 10% for retail uses.
- (5) ITE does not offer AM trip generation rates for LUC 925 Drinking Place. Assumed not applicable for AM time period (7 - 9 AM).
- (6) ITE does not offer weekday trip generation rates for LUC 925 Drinking Place. A weekday trip generation rate of 113.6 is used (assumes PM peak hour rate is 10% of the weekday).
- (7) ITE does not offer weekday trip generation rates for LUC 330 Resort Hotel. A weekday trip generation rate of 4.7 is used (assumes PM peak hour rate is 10% of the weekday).
- (8) Peak hour of adjacent street traffic, one hour between 7 and 9 AM.
- (9) Peak hour of adjacent street traffic, one hour between 4 and 6 PM.

APPENDIX D

**LEE COUNTY LINK-SPECIFIC SERVICE VOLUMES &
TRAFFIC COUNT REPORT 2016 EXCERPTS**

LINK-SPECIFIC SERVICE VOLUMES ON ARTERIALS IN LEE COUNTY (2015 DATA)

ROAD SEGMENT	FROM	TO	TRAFFIC DISTRIC	LENGTH (MILE)	ROAD TYPE	SERVICE VOLUMES (PEAK HOUR PEAK DIRECTION)					SERVICE VOLUMES (PEAK HOUR--BOTH DIRECTIONS)				
						A	B	C	D	E	A	B	C	D	E
COLONIAL BLVD	SIX MILE PKWY	I-75	1	0.5	6LD	0	2,630	3,100	3,100	3,100	0	4,390	5,180	5,180	5,180
	I-75	SR 82	1	2.4	6LD	0	2,280	3,040	3,040	3,040	0	3,800	5,070	5,070	5,070
CORKSCREW RD	US 41	SANDY LN	4	0.5	4LD	0	390	1,900	1,900	1,900	0	760	3,670	3,670	3,670
	SANDY LN	THREE OAKS PKWY	4	0.7	4LD	0	390	1,900	1,900	1,900	0	760	3,670	3,670	3,670
	THREE OAKS PKWY	I-75	4	0.8	4LD	0	390	1,900	1,900	1,900	0	760	3,670	3,670	3,670
	I-75	BEN HILL GRIFFIN PKWY	3	0.5	4LD	0	390	1,900	1,900	1,900	0	760	3,670	3,670	3,670
	BEN HILL GRIFFIN PKWY	WILDCAT RUN DR	3	1.7	2LD	0	820	1,200	1,200	1,200	0	1,580	2,310	2,310	2,310
	WILDCAT RUN DR	ALICO RD	3	2.6	2LN	90	310	570	790	1,140	180	600	1,100	1,520	2,200
	ALICO RD	COUNTY LINE	3	10.4	2LN	90	310	570	790	1,140	180	600	1,100	1,520	2,200
CYPRESS LAKE DR	McGREGOR BLVD	SOUTH POINT BLVD	4	0.4	4LD	0	0	890	1,880	1,940	0	0	1,590	3,360	3,480
	SOUTH POINT BLVD	WINKLER RD	4	0.6	4LD	0	0	890	1,880	1,940	0	0	1,590	3,360	3,480
	WINKLER RD	SUMMERLIN RD	4	0.7	4LD	0	0	890	1,880	1,940	0	0	1,590	3,360	3,480
	SUMMERLIN RD	US 41	4	0.9	6LD	0	0	1,360	2,890	2,940	0	0	2,430	5,170	5,240
DANIELS PKWY	US 41	BIG PINE WAY	4	0.5	6LD	0	0	590	2,480	2,680	0	0	1,100	4,600	4,980
	BIG PINE WAY	METRO PKWY	4	0.6	6LD	0	0	590	2,480	2,680	0	0	1,100	4,600	4,980
	METRO PKWY	SIX MILE PKWY	4	0.8	6LD	0	0	590	2,480	2,680	0	0	1,100	4,600	4,980
	SIX MILE PKWY	PALOMINO DR	4	2.2	6LD	210	2,830	3,040	3,040	3,040	390	5,250	5,650	5,650	5,650
	PALOMINO DR	I-75	4	0.6	6LD	210	2,830	3,040	3,040	3,040	390	5,250	5,650	5,650	5,650
	I-75	TREELINE AVE	3	0.5	6LD	2,510	3,260	3,260	3,260	3,260	4,190	5,420	5,420	5,420	5,420
	TREELINE AVE	CHAMBERLIN PKWY	3	0.8	6LD	2,510	3,260	3,260	3,260	3,260	4,190	5,420	5,420	5,420	5,420
CHAMBERLIN PKWY	SR 82	3	3.8	4LD	1,620	2,160	2,160	2,160	2,160	2,700	3,600	3,600	3,600	3,600	
DEL PRADO BLVD	CAPE CORAL PKWY	SE 46TH ST	5	0.3	6LD	0	0	1,660	2,660	2,660	0	0	3,140	5,000	5,000
	SE 46TH ST	CORONADO PKWY	5	0.7	6LD	0	0	1,660	2,660	2,660	0	0	3,140	5,000	5,000
	CORONADO PKWY	CORNWALLIS PKWY	5	1.3	6LD	0	0	1,660	2,660	2,660	0	0	3,140	5,000	5,000
	CORNWALLIS PKWY	VETERANS PKWY	5	0.8	6LD	0	0	1,660	2,660	2,660	0	0	3,140	5,000	5,000
	VETERANS PKWY	HANCOCK B. PKWY	5	3.0	6LD	0	0	1,640	2,800	2,800	0	0	3,160	5,390	5,390
	HANCOCK B. PKWY	NE 6TH ST	5	0.7	6LD	0	0	2,770	2,800	2,800	0	0	5,330	5,370	5,370
	NE 6TH ST	SR 78	5	0.4	6LD	0	0	2,770	2,800	2,800	0	0	5,330	5,370	5,370
ESTERO BLVD	HICKORY BLVD	AVENIDA PESCADORA	4	2.9	2LN	571	616	644	685	726	1,120	1,208	1,264	1,344	1,424
	AVENIDA PESCADORA	MID ISLAND DR	4	1.2	2LN	571	616	644	685	726	1,120	1,208	1,264	1,344	1,424
	MID ISLAND DR	SAN CARLOS BLVD	4	1.8	2LD	500	568	593	632	671	980	1,113	1,162	1,239	1,316
ESTERO PKWY	US 41	BEN HILL GRIFFIN PKWY	4	2.6	4LD	0	2,000	2,000	2,000	2,000	0	3,850	3,850	3,850	3,850
FOWLER ST	US 41	N AIRPORT RD	1	1.0	6LD	0	0	0	2,040	2,300	0	0	0	3,710	4,180
	N AIRPORT RD	COLONIAL BLVD	1	0.3	6LD	0	0	0	2,040	2,300	0	0	0	3,710	4,180
GLADIOLUS DR	McGREGOR BLVD	PINE RIDGE RD	4	0.5	4LD	0	190	1,840	1,840	1,840	0	360	3,430	3,430	3,430
	PINE RIDGE RD	BASS RD	4	1.6	4LD	0	190	1,840	1,840	1,840	0	360	3,430	3,430	3,430
	BASS RD	WINKLER RD	4	0.8	6LD	0	290	2,780	2,780	2,780	0	540	5,160	5,160	5,160
	WINKLER RD	SUMMERLIN RD	4	0.5	6LD	0	2,060	2,780	2,780	2,780	0	3,890	5,240	5,240	5,240
	SUMMERLIN RD	US 41	4	1.5	6LD	0	2,060	2,780	2,780	2,780	0	3,890	5,240	5,240	5,240

PCS 44 - Estero Blvd north of Donora Blvd

2016 AADT = 12,400 VPD

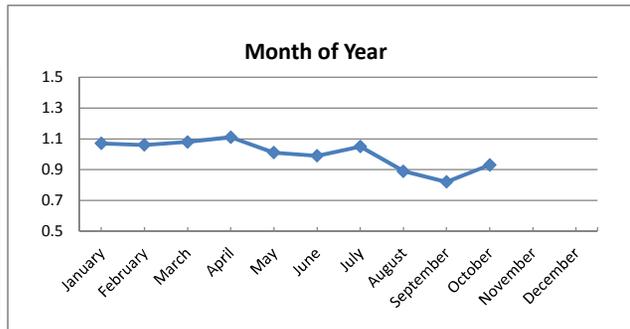
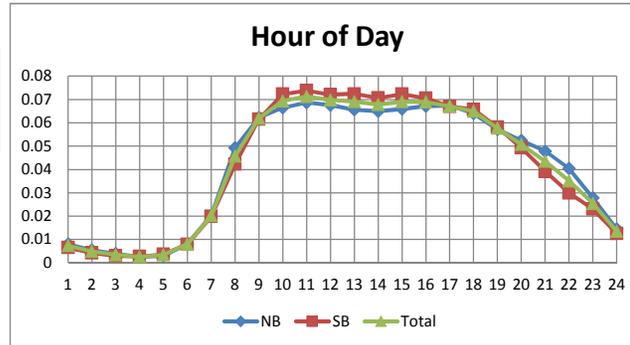
Hour	NB	SB	Total
0	0.80%	0.65%	0.73%
1	0.54%	0.41%	0.48%
2	0.39%	0.29%	0.34%
3	0.24%	0.26%	0.25%
4	0.29%	0.36%	0.33%
5	0.79%	0.79%	0.79%
6	2.03%	1.99%	2.01%
7	4.92%	4.23%	4.57%
8	6.22%	6.15%	6.19%
9	6.65%	7.23%	6.94%
10	6.87%	7.38%	7.13%
11	6.76%	7.21%	6.98%
12	6.56%	7.24%	6.90%
13	6.49%	7.07%	6.78%
14	6.59%	7.23%	6.91%
15	6.72%	7.05%	6.89%
16	6.74%	6.70%	6.72%
17	6.40%	6.57%	6.49%
18	5.72%	5.81%	5.77%
19	5.24%	4.92%	5.08%
20	4.78%	3.92%	4.35%
21	4.03%	2.99%	3.51%
22	2.78%	2.30%	2.54%
23	1.44%	1.25%	1.34%

Month of Year	Fraction
January	1.07
February	1.06
March	1.08
April	1.11
May	1.01
June	0.99
July	1.05
August	0.89
September	0.82
October	0.93
November	
December	

Day of Week	Fraction
Sunday	0.95
Monday	0.97
Tuesday	0.99
Wednesday	0.98
Thursday	1
Friday	1.06
Saturday	1.05

Directional Factor		
AM	0.54	NB
PM	0.51	SB

Design Hour Volume		
#	Volume	Factor
5		9.20
10		9.10
20		9.00
30		8.90
50		8.80
100		8.50
150		8.40
200		8.20



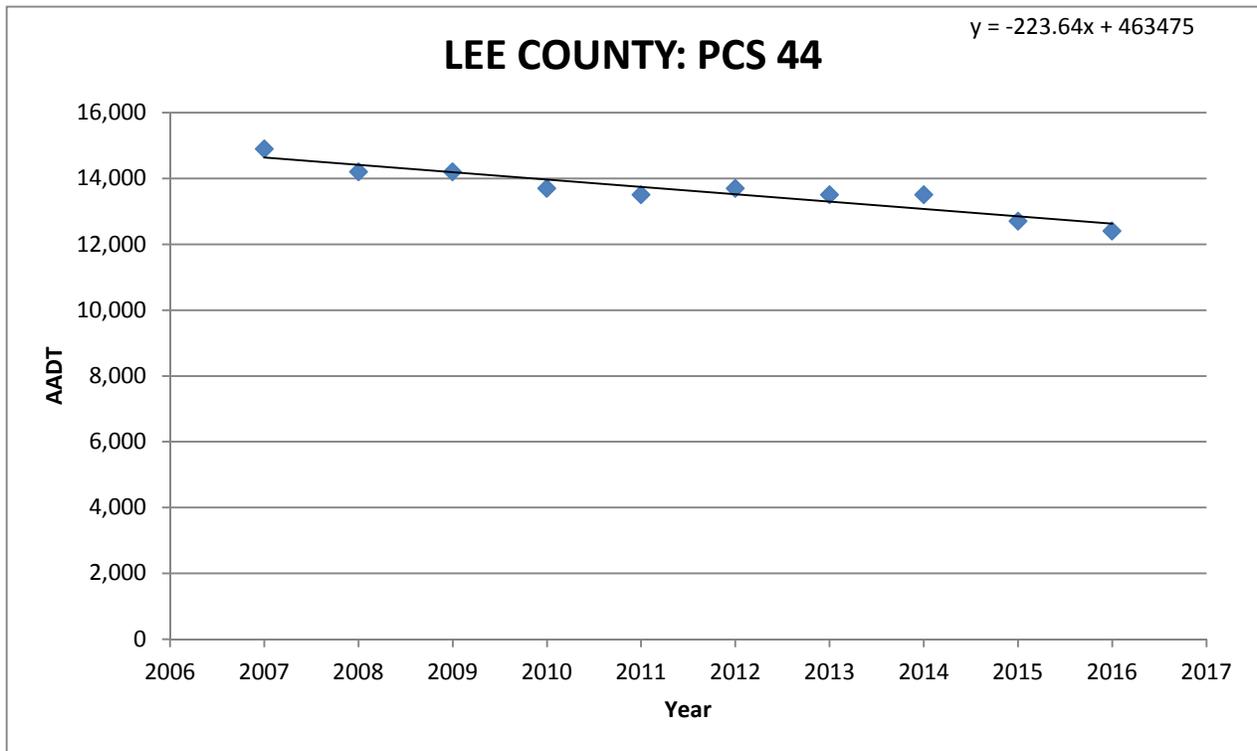
Design Hour Volume		
#	Volume	K Factor
1	1554	12.5
2	1234	10
3	1184	9.5
4	1162	9.4
5	1145	9.2
6	1144	9.2
7	1141	9.2
8	1136	9.2
9	1136	9.2
10	1134	9.1
20	1115	9
25	1108	8.9
30	1106	8.9
35	1103	8.9
40	1100	8.9
45	1094	8.8
50	1089	8.8
75	1075	8.7
100	1059	8.5
125	1047	8.4
150	1036	8.4
175	1025	8.3
200	1013	8.2

APPENDIX E

HISTORICAL AADT GROWTH TREND ANALYSIS

LEE COUNTY: PCS 44
ESTERO BLVD NORTH OF DONORA BLVD

Year	AADT ⁽¹⁾	Equation	Growth
2007	14,900	y_1	-1.50% per year
2008	14,200	x_1	
2009	14,200	14,860	2006
2010	13,700	y_2	2015
2011	13,500	x_2	
2012	13,700	12,847	
2013	13,500		
2014	13,500		
2015	12,700		
2016	12,400		



Footnotes:

(1) Lee County Traffic Count Report 2016

APPENDIX F

INTERSECTION TURNING MOVEMENT COUNTS

TURNING MOVEMENT COUNTS

**DAVID PLUMMER & ASSOCIATES
SUMMARY OF VEHICLE MOVEMENTS**

TRAFFIC COUNT ADJUSTMENT FACTORS

File# _____
Job # 16537

Project name: Times Square Resort
Job number: 16537

Count location: San Carlos Blvd @ Fifth Street @ Estero Blvd
County: Lee
City: Fort Myers Beach
Date: 09/08/2016
Day of Week: Thursday
Weather: Good
Road Condition: Good

Observer: TH/LH
Remark: Illegal EB Fifth Street Lefts / WB Fifth Street Thrus

Intersection Description:
From North (SB): San Carlos Blvd
From South (NB): San Carlos Blvd
From East (WB) Fifth Street
From West (EB) Fifth Street

AM Peak Hour: 9:15 AM to 10:15 AM
PM Peak Hour: 3:30 PM to 4:30 PM

LEE COUNTY ADJUSTMENT FACTOR

Traffic count report: 2015
Permanent count station: 44
Month of count AADT: 0.77
AADT to peak season 1.10

$$\text{Factor} = 1.00 \div 0.77 \times 1.10 = 1.43$$

David Plummer & Associates
Based On
MSHA Highway Information Services Division
Turning Counts Study - Field Sheet

Request No.: Times Square Resort
 Job No.: 16537

Location: San Carlos Blvd @ Fifth Street @ Estero
 Date: 09/08/2014 Thursday
 Recorder: TH/LH
 Interval (dd) : 15
 (In Minutes)

County: Lee
 Town: Fort Myers Beach
 Weather: Good

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	PM PERIOD 12:00PM-7:00PM	Start	End	Volume
		9:15 AM	10:15 AM	1166		3:30 PM	4:30 PM	1308

Street Name-->	San Carlos Blvd				San Carlos Blvd				Fifth Street				Fifth Street				GRAND TOTAL
	Southbound				Northbound				Westbound				Eastbound				
HOUR	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	
7:15 AM				0				0				0				0	0
7:30 AM				0				0				0				0	0
7:45 AM	0	122	34	156	5	66	0	71	0	0	17	17	0	0	9	9	253
8:00 AM	0	114	33	147	13	76	0	89	0	0	11	11	0	0	7	7	254
8:15 AM	0	103	32	135	7	64	1	72	0	0	20	20	0	0	7	7	234
8:30 AM	0	118	26	144	8	63	1	72	0	0	13	13	0	0	7	7	236
8:45 AM	0	115	51	166	14	64	0	78	0	0	22	22	0	0	16	16	282
9:00 AM	0	104	39	143	6	82	0	88	0	0	21	21	0	0	15	15	267
9:15 AM	0	105	52	157	6	86	0	92	0	0	27	27	0	0	11	11	287
9:30 AM	0	93	33	126	5	98	3	106	0	0	22	22	1	0	22	23	277
9:45 AM	0	104	34	138	13	102	0	115	0	2	23	25	1	0	16	17	295
10:00 AM	0	99	42	141	11	85	0	96	0	0	24	24	0	0	13	13	274
10:15 AM	0	128	33	161	20	92	2	114	0	1	33	34	1	0	10	11	320
10:30 AM	0	99	29	128	13	91	0	104	0	0	25	25	0	0	16	16	273
10:45 AM				0		0		0				0				0	0
11:00 AM				0		0		0				0				0	0
11:15 AM				0				0				0				0	0
11:30 AM				0				0				0				0	0
11:45 AM				0				0				0				0	0
12:00 PM				0				0				0				0	0
12:15 PM				0				0				0				0	0
12:30 PM				0				0				0				0	0
12:45 PM				0				0				0				0	0
1:00 PM				0				0				0				0	0
1:15 PM				0				0				0				0	0
1:30 PM				0				0				0				0	0
1:45 PM				0				0				0				0	0
2:00 PM				0				0				0				0	0
2:15 PM				0				0				0				0	0
2:30 PM				0				0				0				0	0
2:45 PM				0				0				0				0	0
3:00 PM				0				0				0				0	0
3:15 PM				0				0				0				0	0
3:30 PM				0				0				0				0	0
3:45 PM	1	89	36	126	16	120	1	137	0	0	54	54	0	0	24	24	341
4:00 PM	0	83	31	114	15	119	0	134	0	0	42	42	0	0	13	13	303
4:15 PM	0	82	28	110	16	134	0	150	0	0	45	45	1	0	26	27	332
4:30 PM	0	92	32	124	13	130	0	143	0	0	46	46	0	0	19	19	332
4:45 PM	0	79	24	103	14	112	1	127	1	0	48	49	0	0	17	17	296
5:00 PM	0	99	33	132	14	113	1	128	0	0	35	35	0	1	13	14	309
5:15 PM	0	81	29	110	19	102	0	121	0	0	58	58	0	0	20	20	309
5:30 PM	0	100	34	134	20	125	0	145	0	0	40	40	1	0	22	23	342
5:45 PM	0	112	25	137	25	103	0	128	0	1	22	23	1	0	21	22	310
6:00 PM	0	95	41	136	18	112	0	130	0	0	25	25	1	0	14	15	306
6:15 PM	0	96	39	135	19	99	2	120	0	0	29	29	0	0	25	25	309
6:30 PM	0	91	28	119	13	81	2	96	0	0	33	33	1	0	20	21	269

TOTAL	1	2403	818	3222	323	2319	14	2656	1	4	735	740	8	1	383	392	7010
AM Peak Vol	0	424	142	566	49	377	5	431	0	3	102	105	3	0	61	64	1166
PM Peak Vol	1	346	127	474	60	503	1	564	0	0	187	187	1	0	82	83	1308

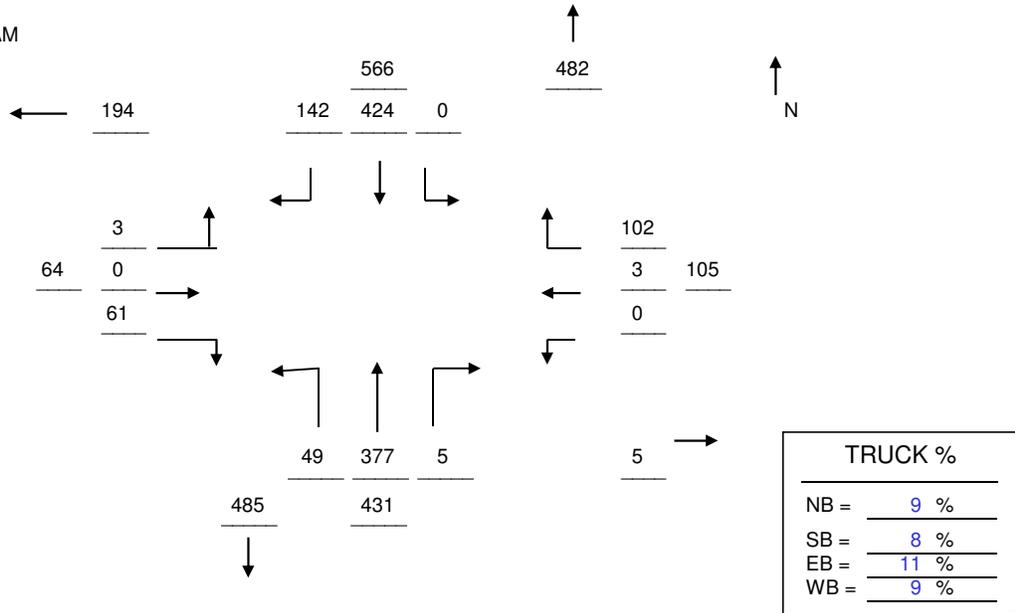
Peak Hour Factor (PHF)																	
AM Peak Hour		0.88				0.94				0.77				0.70			0.91
PM Peak Hour		0.94				0.94				0.87				0.77			0.96

DPA RAW TURNING MOVEMENT DIAGRAM

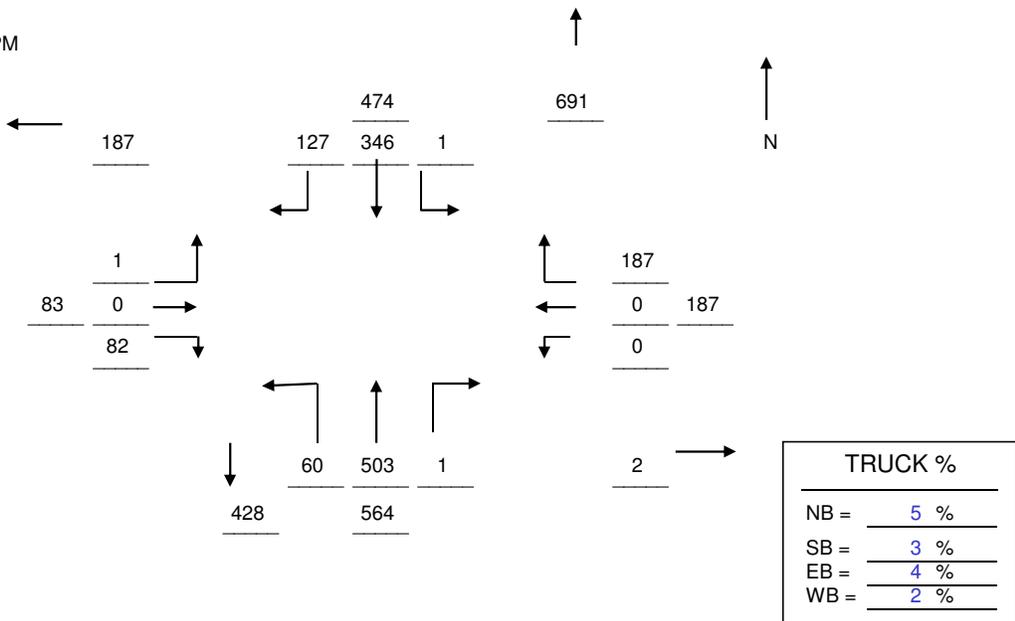
LOCATION: San Carlos Blvd @ Fifth Street @ Estero Blvd
 COUNTY : Lee
 OBSERVER: TH/LH

CITY: Fort Myers Beach
 DATE: 09/08/2016 Thursday

AM Peak Hour
 9:15 AM 10:15 AM



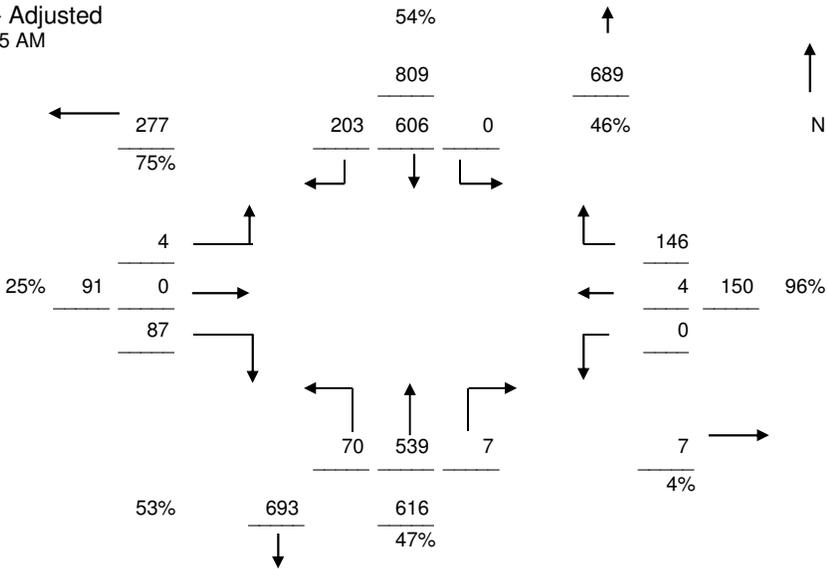
PM Peak Hour
 3:30 PM 4:30 PM



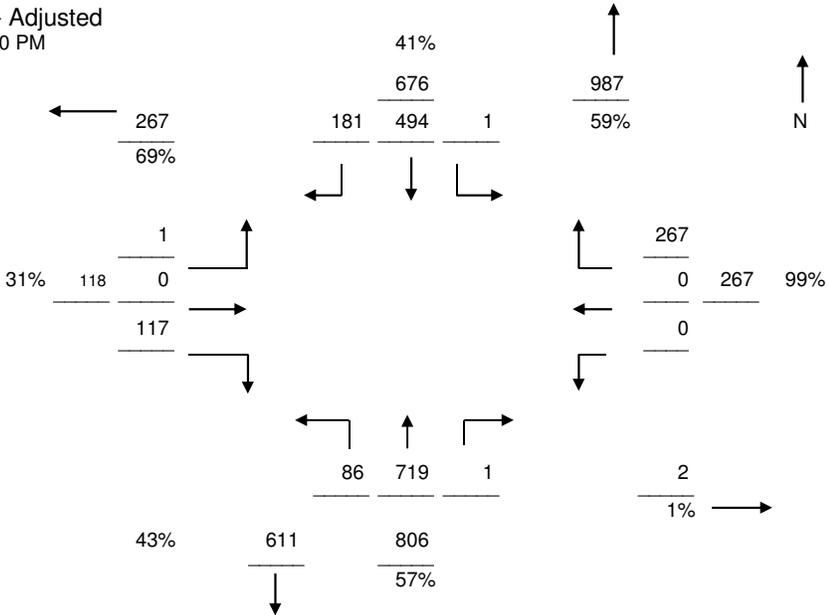
DPA ADJUSTED TURNING MOVEMENT DIAGRAM

LOCATION:	San Carlos Blvd @ Fifth Street @ Estero Blvd	REPORT:	2015
COUNTY :	Lee	STATION:	44
OBSERVER:	TH/LH	MONTHLY:	0.77
		ANNUAL:	1.10
		ADJUSTMENT FACTOR:	1.43

AM Peak Hour - Adjusted
9:15 AM 10:15 AM



PM Peak Hour - Adjusted
3:30 PM 4:30 PM



**DAVID PLUMMER & ASSOCIATES
SUMMARY OF VEHICLE MOVEMENTS**

TRAFFIC COUNT ADJUSTMENT FACTORS

File# _____
Job # 16537

Project name: Times Square Resort
Job number: 16537

Count location: Estero Blvd @ Crescent Street
County: Lee
City: Fort Myers Beach
Date: 09/08/2016
Day of Week: Thursday
Weather: Good
Road Condition: Good

Observer: DC/RC
Remark: None

Intersection Description:
From North (SB): Crescent Street
From South (NB): Motel Parking Lot
From East (WB): Estero Blvd
From West (EB): Estero Blvd

AM Peak Hour: 9:30 AM to 10:30 AM
PM Peak Hour: 5:15 PM to 6:15 PM

LEE COUNTY ADJUSTMENT FACTOR

Traffic count report: 2015
Permanent count station: 44
Month of count AADT: 0.77
AADT to peak season 1.10

$$\text{Factor} = 1.00 \div 0.77 \times 1.10 = 1.43$$

David Plummer & Associates
Based On
MSHA Highway Information Services Division
Turning Counts Study - Field Sheet

Request No.: Times Square Resort
 Job No.: 16537

Location: Estero Blvd @ Crescent Street
 Date: 09/08/2016 Thursday
 Recorder: DC/RC
 Interval (dd): 15
 (In Minutes)

County: Lee
 Town: Fort Myers Beach
 Weather: Good

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	PM PERIOD 12:00PM-7:00PM	Start	End	Volume
		9:30 AM	10:30 AM	968		5:15 PM	6:15 PM	1056

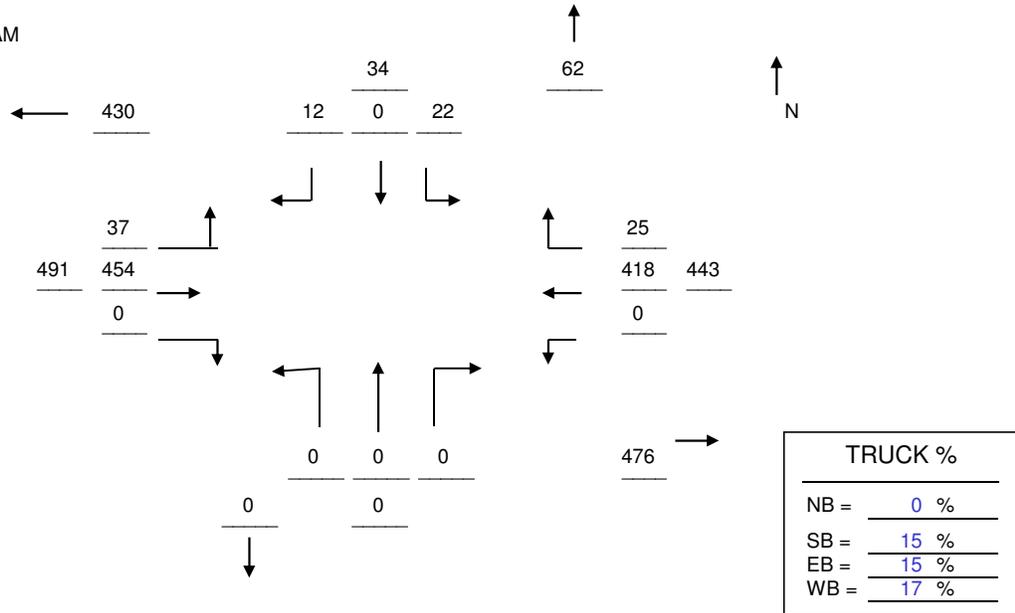
Street Name-->	Crescent Street				Motel Parking Lot				Estero Blvd				Estero Blvd				GRAND TOTAL
	Southbound				Northbound				Westbound		Eastbound						
HOUR	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	
7:15 AM				0				0				0				0	0
7:30 AM				0				0				0				0	0
7:45 AM	1	0	1	2	0	0	0	0	0	68	2	70	3	133	0	136	208
8:00 AM	1	0	2	3	0	0	0	0	0	106	4	110	2	135	0	137	250
8:15 AM	0	0	0	0	0	0	0	0	0	55	2	57	5	101	0	106	163
8:30 AM	5	0	2	7	0	0	1	1	0	75	1	76	3	135	1	139	223
8:45 AM	6	0	2	8	0	0	0	0	1	91	6	98	8	132	0	140	246
9:00 AM	2	0	2	4	0	0	0	0	0	72	3	75	7	116	0	123	202
9:15 AM	12	0	4	16	0	0	0	0	0	96	9	105	7	144	0	151	272
9:30 AM	4	0	2	6	0	0	0	0	0	102	2	104	6	118	1	125	235
9:45 AM	2	0	2	4	0	0	0	0	0	119	11	130	8	98	0	106	240
10:00 AM	5	0	2	7	0	0	0	0	0	87	2	89	5	113	0	118	214
10:15 AM	5	0	3	8	0	0	0	0	0	110	9	119	17	127	0	144	271
10:30 AM	10	0	5	15	0	0	0	0	0	102	3	105	7	116	0	123	243
10:45 AM				0				0				0				0	0
11:00 AM				0				0				0				0	0
11:15 AM				0				0				0				0	0
11:30 AM				0				0				0				0	0
11:45 AM				0				0				0				0	0
12:00 PM				0				0				0				0	0
12:15 PM				0				0				0				0	0
12:30 PM				0				0				0				0	0
12:45 PM				0				0				0				0	0
1:00 PM				0				0				0				0	0
1:15 PM				0				0				0				0	0
1:30 PM				0				0				0				0	0
1:45 PM				0				0				0				0	0
2:00 PM				0				0				0				0	0
2:15 PM				0				0				0				0	0
2:30 PM				0				0				0				0	0
2:45 PM				0				0				0				0	0
3:00 PM				0				0				0				0	0
3:15 PM				0				0				0				0	0
3:30 PM				0				0				0				0	0
3:45 PM	9	0	5	14	2	0	0	2	0	144	9	153	11	93	1	105	274
4:00 PM	5	0	3	8	0	0	0	0	0	112	5	117	8	94	0	102	227
4:15 PM	12	0	4	16	0	0	0	0	0	151	8	159	15	95	0	110	285
4:30 PM	6	0	3	9	0	0	0	0	0	143	9	152	20	79	0	99	260
4:45 PM	12	0	4	16	1	0	0	1	0	129	12	141	6	78	2	86	244
5:00 PM	9	0	4	13	0	0	0	0	0	112	7	119	12	94	0	106	238
5:15 PM	10	0	3	13	1	0	0	1	0	126	4	130	12	90	0	102	246
5:30 PM	9	0	3	12	0	0	0	0	0	137	3	140	17	89	0	106	258
5:45 PM	9	0	3	12	0	0	0	0	0	123	5	128	7	115	0	122	262
6:00 PM	11	0	5	16	0	0	0	0	0	142	6	148	12	104	0	116	280
6:15 PM	8	0	8	16	2	0	0	2	0	112	7	119	19	100	0	119	256
6:30 PM	6	0	3	9	0	0	0	0	1	82	6	89	14	120	0	134	232
TOTAL	159	0	75	234	6	0	1	7	2	2596	135	2733	231	2619	5	2855	5829
AM Peak Vol	22	0	12	34	0	0	0	0	0	418	25	443	37	454	0	491	968
PM Peak Vol	37	0	19	56	2	0	0	2	0	514	21	535	55	408	0	463	1056
Peak Hour Factor (PHF)																	
AM Peak Hour	0.57				0.00				0.85				0.85				0.89
PM Peak Hour	0.88				0.25				0.90				0.95				0.94

DPA RAW TURNING MOVEMENT DIAGRAM

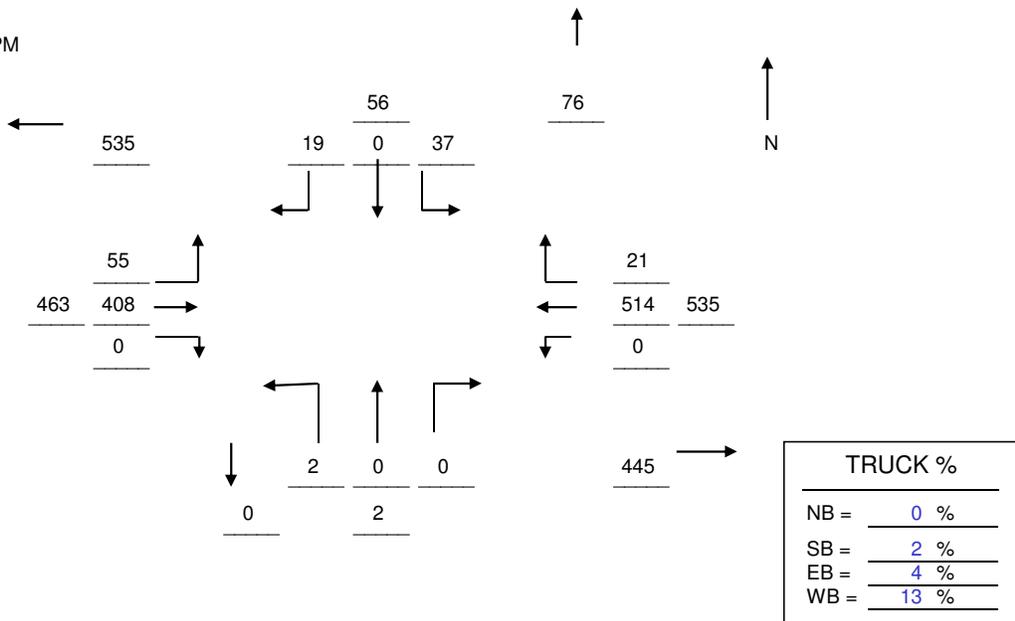
LOCATION: Estero Blvd @ Crescent Street
 COUNTY : Lee
 OBSERVER: DC/RC

CITY: Fort Myers Beach
 DATE: 09/08/2016 Thursday

AM Peak Hour
 9:30 AM 10:30 AM



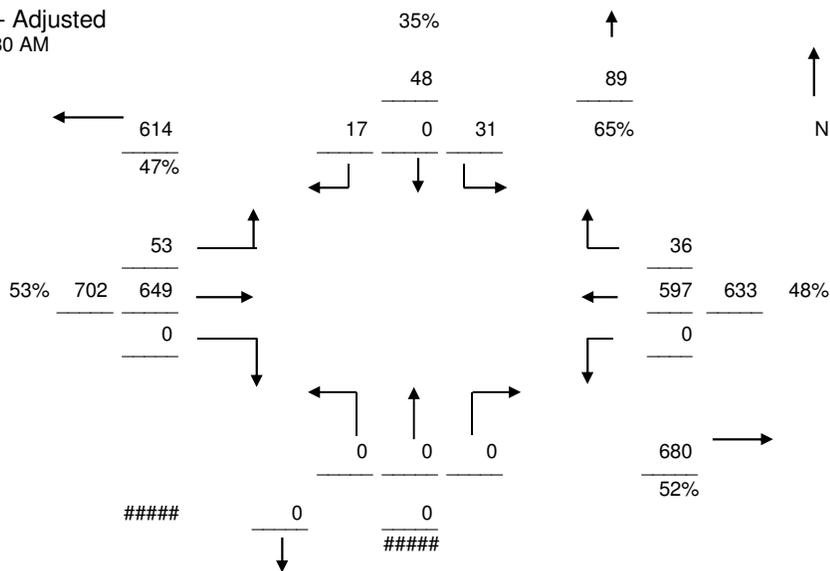
PM Peak Hour
 5:15 PM 6:15 PM



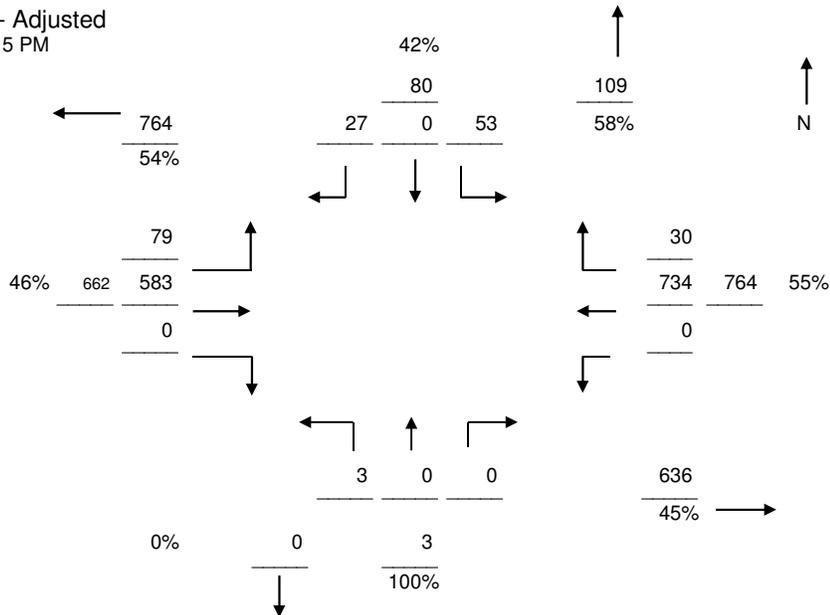
DPA ADJUSTED TURNING MOVEMENT DIAGRAM

LOCATION:	Estero Blvd @ Crescent Street	REPORT:	2015
COUNTY :	Lee	STATION:	44
OBSERVER:	DC/RC	MONTHLY:	0.77
		ANNUAL:	1.10
		ADJUSTMENT FACTOR:	1.43

AM Peak Hour - Adjusted
9:30 AM 10:30 AM



PM Peak Hour - Adjusted
5:15 PM 6:15 PM



**DAVID PLUMMER & ASSOCIATES
SUMMARY OF VEHICLE MOVEMENTS**

TRAFFIC COUNT ADJUSTMENT FACTORS

File# _____
Job # 16537

Project name: Times Square Resort
Job number: 16537

Count location: Fifth Street @ Crescent Street
County: Lee
City: Fort Myers Beach
Date: 09/08/2016
Day of Week: Thursday
Weather: Good
Road Condition: Good

Observer: PW
Remark: None

Intersection Description:
From North (SB): Crescent Street
From South (NB): Crescent Street
From East (WB): None
From West (EB): Fifth Street

AM Peak Hour: 9:30 AM to 10:30 AM
PM Peak Hour: 4:30 PM to 5:30 PM

LEE COUNTY ADJUSTMENT FACTOR

Traffic count report: 2015
Permanent count station: 44
Month of count AADT: 0.77
AADT to peak season 1.10

$$\text{Factor} = 1.00 \div 0.77 \times 1.10 = 1.43$$

David Plummer & Associates
Based On
MSHA Highway Information Services Division
Turning Counts Study - Field Sheet

Request No.: Times Square Resort
 Job No.: 16537

Location: Fifth Street @ Crescent Street
 Date: 09/08/2014 Thursday
 Recorder: PW
 Interval (dd) : 15
 (In Minutes)

County: Lee
 Town: Fort Myers Beach
 Weather: Good

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	PM PERIOD 12:00PM-7:00PM	Start	End	Volume
		9:30 AM	10:30 AM	163		4:30 PM	5:30 PM	263

Street Name-->	Crescent Street Southbound				Crescent Street Northbound				None Westbound				Fifth Street Eastbound				GRAND TOTAL
	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	
7:15 AM				0				0				0				0	0
7:30 AM				0				0				0				0	0
7:45 AM	0	0	10	10	3	2	0	5	0	0	0	0	0	0	0	0	15
8:00 AM	0	2	11	13	3	2	0	5	0	0	0	0	0	0	0	0	18
8:15 AM	0	0	17	17	0	6	0	6	0	0	0	0	1	0	0	1	24
8:30 AM	0	3	11	14	3	1	0	4	0	0	0	0	0	0	4	4	22
8:45 AM	1	1	14	16	6	3	0	9	0	0	0	0	0	0	3	3	28
9:00 AM	0	5	14	19	10	6	0	16	0	0	0	0	0	0	1	1	36
9:15 AM	0	8	19	27	8	6	0	14	0	0	0	0	0	0	4	4	45
9:30 AM	0	5	18	23	5	5	0	10	0	0	0	0	1	0	3	4	37
9:45 AM	0	2	19	21	6	10	0	16	0	0	0	0	0	0	0	0	37
10:00 AM	0	7	18	25	2	3	0	5	0	0	0	0	0	0	0	0	30
10:15 AM	0	7	25	32	7	12	0	19	0	0	0	0	2	0	4	6	57
10:30 AM	0	9	21	30	5	2	0	7	0	0	0	0	0	0	2	2	39
10:45 AM				0				0				0					0
11:00 AM				0				0				0					0
11:15 AM				0				0				0					0
11:30 AM				0				0				0					0
11:45 AM				0				0				0					0
12:00 PM				0				0				0					0
12:15 PM				0				0				0					0
12:30 PM				0				0				0					0
12:45 PM				0				0				0					0
1:00 PM				0				0				0					0
1:15 PM				0				0				0					0
1:30 PM				0				0				0					0
1:45 PM				0				0				0					0
2:00 PM				0				0				0					0
2:15 PM				0				0				0					0
2:30 PM				0				0				0					0
2:45 PM				0				0				0					0
3:00 PM				0				0				0					0
3:15 PM				0				0				0					0
3:30 PM				0				0				0					0
3:45 PM	0	6	38	44	12	9	0	21	0	0	0	0	1	0	1	2	67
4:00 PM	0	10	33	43	8	9	0	17	0	0	0	0	0	0	0	0	60
4:15 PM	0	8	33	41	12	10	0	22	0	0	0	0	0	0	2	2	65
4:30 PM	0	4	32	36	9	10	0	19	0	0	0	0	0	0	2	2	57
4:45 PM	0	11	37	48	14	10	0	24	0	0	0	0	1	0	3	4	76
5:00 PM	0	6	24	30	13	6	0	19	0	0	0	0	0	0	2	2	51
5:15 PM	0	7	50	57	7	7	0	14	0	0	0	0	2	0	2	4	75
5:30 PM	0	11	29	40	12	7	0	19	0	0	0	0	1	0	1	2	61
5:45 PM	0	9	14	23	5	7	0	12	0	0	0	0	0	0	2	2	37
6:00 PM	0	9	20	29	15	13	0	28	0	0	0	0	1	0	1	2	59
6:15 PM	0	12	16	28	18	5	0	23	0	0	0	0	3	0	2	5	56
6:30 PM	0	6	25	31	9	10	0	19	0	0	0	0	1	0	1	2	52

TOTAL	1	148	548	697	192	161	0	353	0	0	0	0	14	0	40	54	1104
AM Peak Vol	0	25	83	108	20	27	0	47	0	0	0	0	2	0	6	8	163
PM Peak Vol	0	35	140	175	46	30	0	76	0	0	0	0	4	0	8	12	263

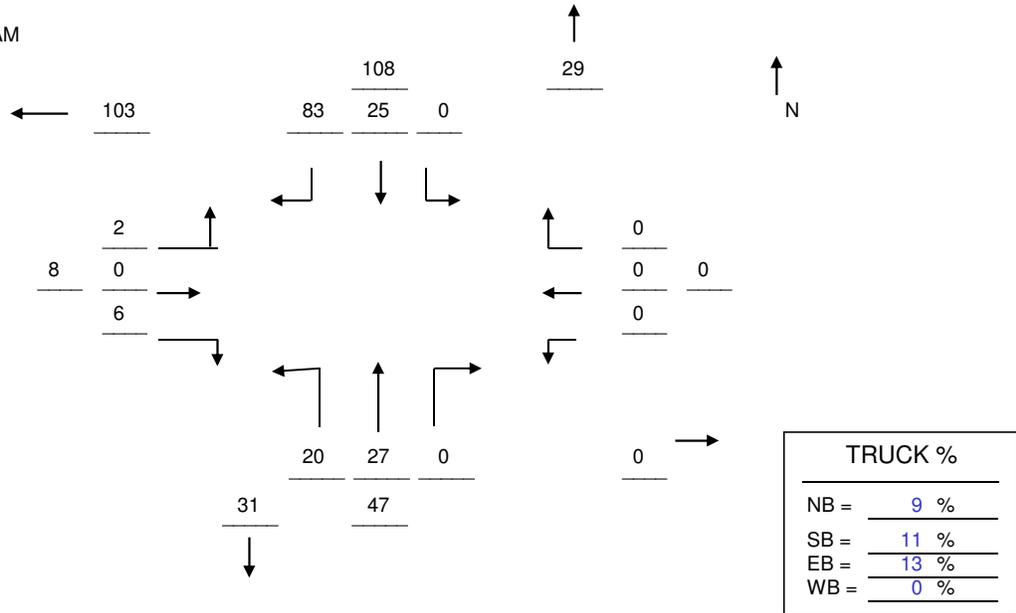
Peak Hour Factor (PHF)																	
AM Peak Hour		0.84				0.62				0.00				0.33			0.71
PM Peak Hour		0.77				0.79				0.00				0.75			0.87

DPA RAW TURNING MOVEMENT DIAGRAM

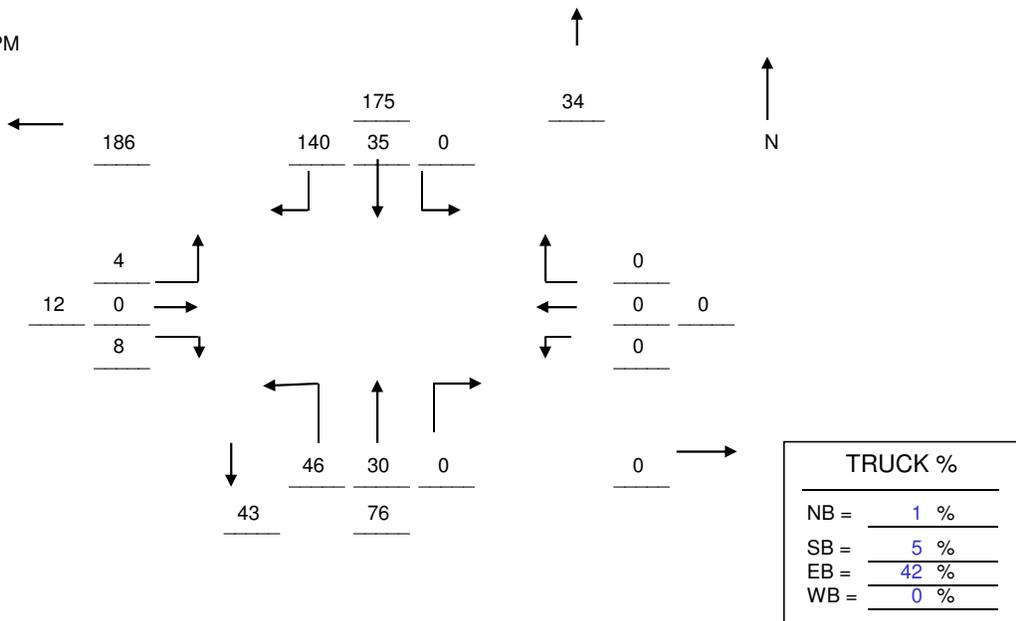
LOCATION: Fifth Street @ Crescent Street
 COUNTY : Lee
 OBSERVER: PW

CITY: Fort Myers Beach
 DATE: 09/08/2016 Thursday

AM Peak Hour
 9:30 AM 10:30 AM



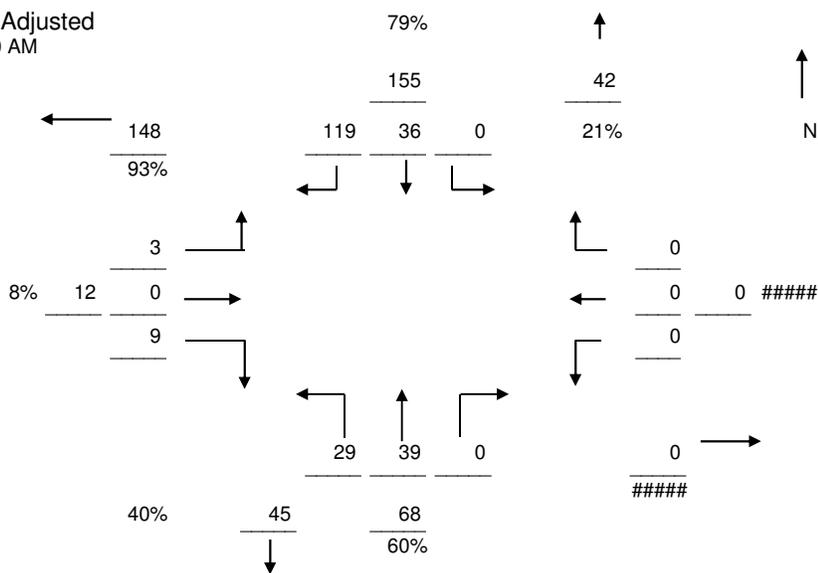
PM Peak Hour
 4:30 PM 5:30 PM



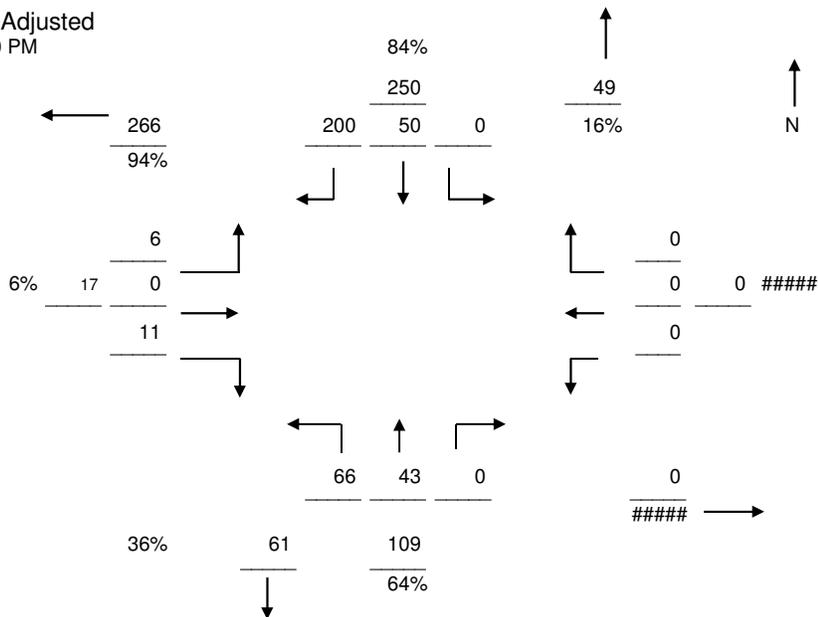
DPA ADJUSTED TURNING MOVEMENT DIAGRAM

LOCATION:	Fifth Street @ Crescent Street	REPORT:	2015
COUNTY :	Lee	STATION:	44
OBSERVER:	PW	MONTHLY:	0.77
		ANNUAL:	1.10
		ADJUSTMENT FACTOR:	1.43

AM Peak Hour - Adjusted
9:30 AM 10:30 AM



PM Peak Hour - Adjusted
4:30 PM 5:30 PM



TURNING MOVEMENT COUNTS
FIXED PM PEAK HOUR (3:30 PM – 4:30 PM)

**DAVID PLUMMER & ASSOCIATES
SUMMARY OF VEHICLE MOVEMENTS**

TRAFFIC COUNT ADJUSTMENT FACTORS

File# _____
Job # 16537

Project name: Times Square Resort
Job number: 16537

Count location: San Carlos Blvd @ Fifth Street @ Estero Blvd
County: Lee
City: Fort Myers Beach
Date: 09/08/2016
Day of Week: Thursday
Weather: Good
Road Condition: Good

Observer: TH/LH
Remark: Illegal EB Fifth Street Lefts / WB Fifth Street Thrus

Intersection Description:
From North (SB): San Carlos Blvd
From South (NB): San Carlos Blvd
From East (WB) Fifth Street
From West (EB) Fifth Street

AM Peak Hour: 9:15 AM to 10:15 AM
PM Peak Hour: 3:30 PM to 4:30 PM

LEE COUNTY ADJUSTMENT FACTOR

Traffic count report: 2015
Permanent count station: 44
Month of count AADT: 0.77
AADT to peak season 1.10

$$\text{Factor} = 1.00 \div 0.77 \times 1.10 = 1.43$$

David Plummer & Associates
Based On
MSHA Highway Information Services Division
Turning Counts Study - Field Sheet

Request No.: Times Square Resort
 Job No.: 16537

Location: San Carlos Blvd @ Fifth Street @ Estero
 Date: 09/08/2014 Thursday
 Recorder: TH/LH
 Interval (dd) : 15
 (In Minutes)

County: Lee
 Town: Fort Myers Beach
 Weather: Good

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	PM PERIOD 12:00PM-7:00PM	Start	End	Volume
		9:15 AM	10:15 AM	1166		3:30 PM	4:30 PM	1308

Street Name-->	San Carlos Blvd				San Carlos Blvd				Fifth Street				Fifth Street				GRAND TOTAL
	Southbound				Northbound				Westbound				Eastbound				
HOUR	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	
7:15 AM				0				0				0				0	0
7:30 AM				0				0				0				0	0
7:45 AM	0	122	34	156	5	66	0	71	0	0	17	17	0	0	9	9	253
8:00 AM	0	114	33	147	13	76	0	89	0	0	11	11	0	0	7	7	254
8:15 AM	0	103	32	135	7	64	1	72	0	0	20	20	0	0	7	7	234
8:30 AM	0	118	26	144	8	63	1	72	0	0	13	13	0	0	7	7	236
8:45 AM	0	115	51	166	14	64	0	78	0	0	22	22	0	0	16	16	282
9:00 AM	0	104	39	143	6	82	0	88	0	0	21	21	0	0	15	15	267
9:15 AM	0	105	52	157	6	86	0	92	0	0	27	27	0	0	11	11	287
9:30 AM	0	93	33	126	5	98	3	106	0	0	22	22	1	0	22	23	277
9:45 AM	0	104	34	138	13	102	0	115	0	2	23	25	1	0	16	17	295
10:00 AM	0	99	42	141	11	85	0	96	0	0	24	24	0	0	13	13	274
10:15 AM	0	128	33	161	20	92	2	114	0	1	33	34	1	0	10	11	320
10:30 AM	0	99	29	128	13	91	0	104	0	0	25	25	0	0	16	16	273
10:45 AM				0		0		0				0				0	0
11:00 AM				0		0		0				0				0	0
11:15 AM				0				0				0				0	0
11:30 AM				0				0				0				0	0
11:45 AM				0				0				0				0	0
12:00 PM				0				0				0				0	0
12:15 PM				0				0				0				0	0
12:30 PM				0				0				0				0	0
12:45 PM				0				0				0				0	0
1:00 PM				0				0				0				0	0
1:15 PM				0				0				0				0	0
1:30 PM				0				0				0				0	0
1:45 PM				0				0				0				0	0
2:00 PM				0				0				0				0	0
2:15 PM				0				0				0				0	0
2:30 PM				0				0				0				0	0
2:45 PM				0				0				0				0	0
3:00 PM				0				0				0				0	0
3:15 PM				0				0				0				0	0
3:30 PM				0				0				0				0	0
3:45 PM	1	89	36	126	16	120	1	137	0	0	54	54	0	0	24	24	341
4:00 PM	0	83	31	114	15	119	0	134	0	0	42	42	0	0	13	13	303
4:15 PM	0	82	28	110	16	134	0	150	0	0	45	45	1	0	26	27	332
4:30 PM	0	92	32	124	13	130	0	143	0	0	46	46	0	0	19	19	332
4:45 PM	0	79	24	103	14	112	1	127	1	0	48	49	0	0	17	17	296
5:00 PM	0	99	33	132	14	113	1	128	0	0	35	35	0	1	13	14	309
5:15 PM	0	81	29	110	19	102	0	121	0	0	58	58	0	0	20	20	309
5:30 PM	0	100	34	134	20	125	0	145	0	0	40	40	1	0	22	23	342
5:45 PM	0	112	25	137	25	103	0	128	0	1	22	23	1	0	21	22	310
6:00 PM	0	95	41	136	18	112	0	130	0	0	25	25	1	0	14	15	306
6:15 PM	0	96	39	135	19	99	2	120	0	0	29	29	0	0	25	25	309
6:30 PM	0	91	28	119	13	81	2	96	0	0	33	33	1	0	20	21	269

TOTAL	1	2403	818	3222	323	2319	14	2656	1	4	735	740	8	1	383	392	7010
AM Peak Vol	0	424	142	566	49	377	5	431	0	3	102	105	3	0	61	64	1166
PM Peak Vol	1	346	127	474	60	503	1	564	0	0	187	187	1	0	82	83	1308

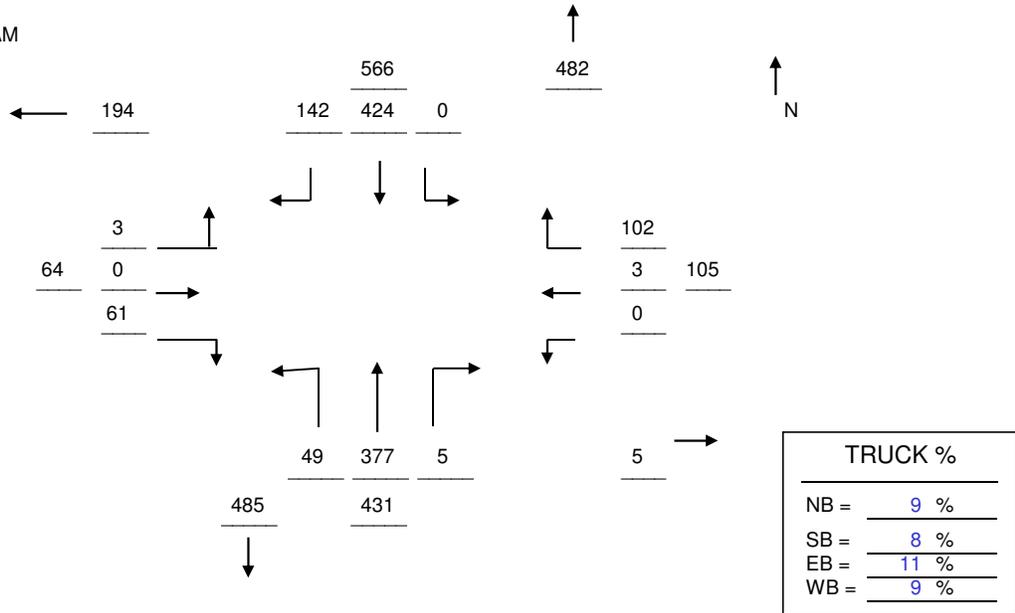
Peak Hour Factor (PHF)																	
AM Peak Hour		0.88				0.94				0.77				0.70			0.91
PM Peak Hour		0.94				0.94				0.87				0.77			0.96

DPA RAW TURNING MOVEMENT DIAGRAM

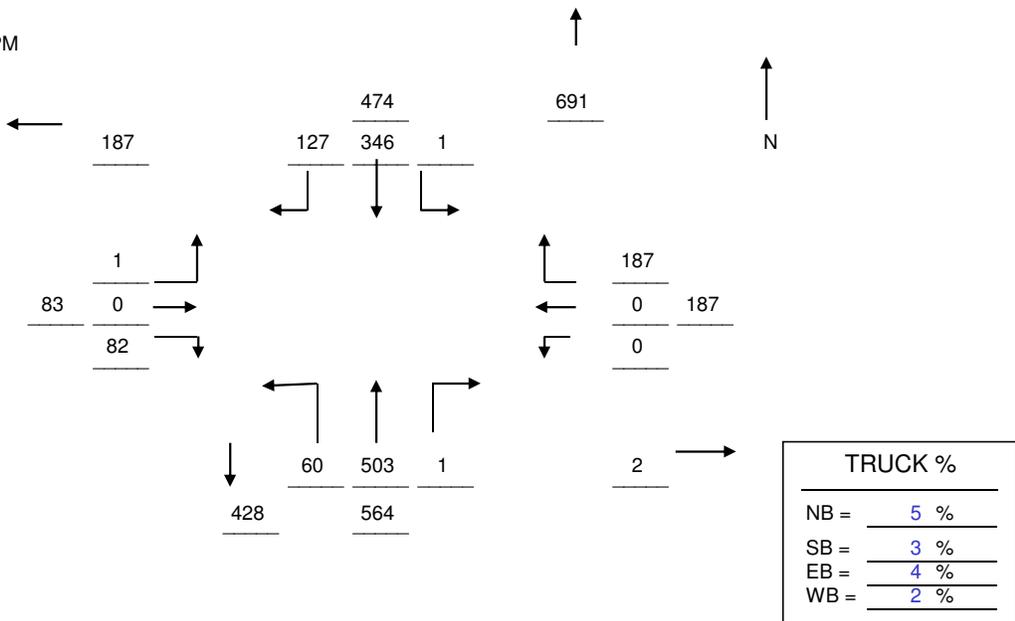
LOCATION: San Carlos Blvd @ Fifth Street @ Estero Blvd
 COUNTY : Lee
 OBSERVER: TH/LH

CITY: Fort Myers Beach
 DATE: 09/08/2016 Thursday

AM Peak Hour
 9:15 AM 10:15 AM



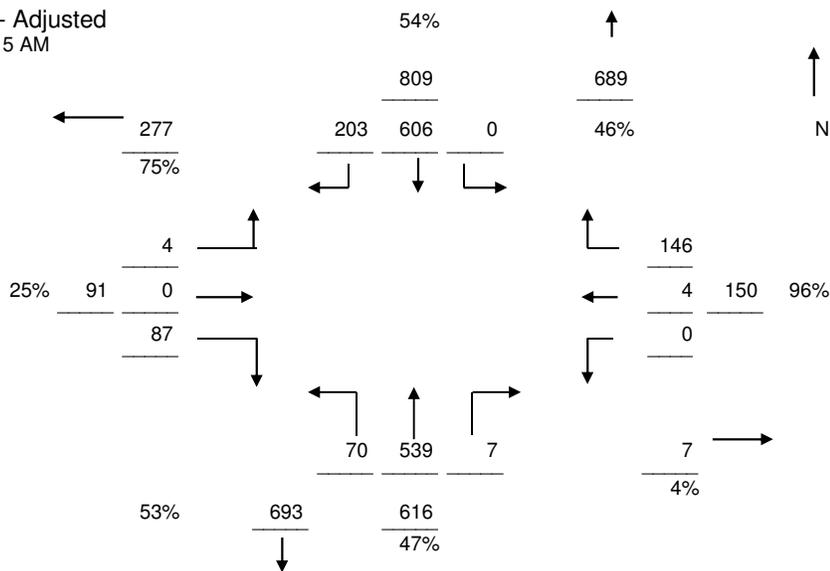
PM Peak Hour
 3:30 PM 4:30 PM



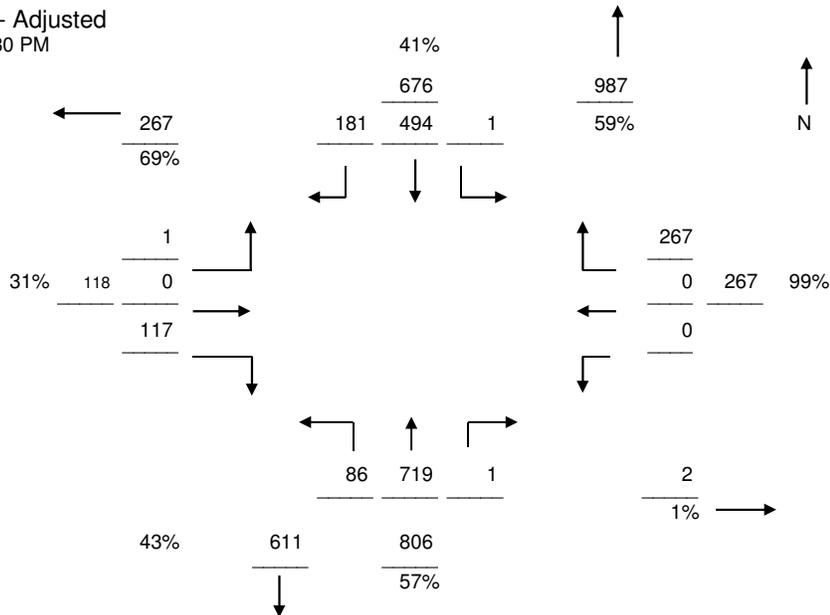
DPA ADJUSTED TURNING MOVEMENT DIAGRAM

LOCATION:	San Carlos Blvd @ Fifth Street @ Estero Blvd	REPORT:	2015
COUNTY :	Lee	STATION:	44
OBSERVER:	TH/LH	MONTHLY:	0.77
		ANNUAL:	1.10
		ADJUSTMENT FACTOR:	1.43

AM Peak Hour - Adjusted 9:15 AM 10:15 AM



PM Peak Hour - Adjusted 3:30 PM 4:30 PM



**DAVID PLUMMER & ASSOCIATES
SUMMARY OF VEHICLE MOVEMENTS**

TRAFFIC COUNT ADJUSTMENT FACTORS

File# _____
Job # 16537

Project name: Times Square Resort
Job number: 16537

Count location: Estero Blvd @ Crescent Street
County: Lee
City: Fort Myers Beach
Date: 09/08/2016
Day of Week: Thursday
Weather: Good
Road Condition: Good

Observer: DC/RC
Remark: None

Intersection Description:
From North (SB): Crescent Street
From South (NB): Motel Parking Lot
From East (WB): Estero Blvd
From West (EB): Estero Blvd

AM Peak Hour: 9:30 AM to 10:30 AM
PM Peak Hour: 3:30 PM to 4:30 PM

LEE COUNTY ADJUSTMENT FACTOR

Traffic count report: 2015
Permanent count station: 44
Month of count AADT: 0.77
AADT to peak season 1.10

$$\text{Factor} = 1.00 \div 0.77 \times 1.10 = 1.43$$

David Plummer & Associates
Based On
MSHA Highway Information Services Division
Turning Counts Study - Field Sheet

Request No.: Times Square Resort
 Job No.: 16537

Location: Estero Blvd @ Crescent Street
 Date: 09/08/2016 Thursday
 Recorder: DC/RC
 Interval (dd) : 15
 (In Minutes)

County: Lee
 Town: Fort Myers Beach
 Weather: Good

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	PM PERIOD 12:00PM-7:00PM	Start	End	Volume
		9:30 AM	10:30 AM	968		3:30 PM	4:30 PM	1046

Street Name-->	Crescent Street				Motel Parking Lot				Estero Blvd				Estero Blvd				GRAND TOTAL
	Southbound				Northbound				Westbound		Eastbound						
HOUR	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	
7:15 AM				0				0				0				0	0
7:30 AM				0				0				0				0	0
7:45 AM	1	0	1	2	0	0	0	0	0	68	2	70	3	133	0	136	208
8:00 AM	1	0	2	3	0	0	0	0	0	106	4	110	2	135	0	137	250
8:15 AM	0	0	0	0	0	0	0	0	0	55	2	57	5	101	0	106	163
8:30 AM	5	0	2	7	0	0	1	1	0	75	1	76	3	135	1	139	223
8:45 AM	6	0	2	8	0	0	0	0	1	91	6	98	8	132	0	140	246
9:00 AM	2	0	2	4	0	0	0	0	0	72	3	75	7	116	0	123	202
9:15 AM	12	0	4	16	0	0	0	0	0	96	9	105	7	144	0	151	272
9:30 AM	4	0	2	6	0	0	0	0	0	102	2	104	6	118	1	125	235
9:45 AM	2	0	2	4	0	0	0	0	0	119	11	130	8	98	0	106	240
10:00 AM	5	0	2	7	0	0	0	0	0	87	2	89	5	113	0	118	214
10:15 AM	5	0	3	8	0	0	0	0	0	110	9	119	17	127	0	144	271
10:30 AM	10	0	5	15	0	0	0	0	0	102	3	105	7	116	0	123	243
10:45 AM				0				0				0				0	0
11:00 AM				0				0				0				0	0
11:15 AM				0				0				0				0	0
11:30 AM				0				0				0				0	0
11:45 AM				0				0				0				0	0
12:00 PM				0				0				0				0	0
12:15 PM				0				0				0				0	0
12:30 PM				0				0				0				0	0
12:45 PM				0				0				0				0	0
1:00 PM				0				0				0				0	0
1:15 PM				0				0				0				0	0
1:30 PM				0				0				0				0	0
1:45 PM				0				0				0				0	0
2:00 PM				0				0				0				0	0
2:15 PM				0				0				0				0	0
2:30 PM				0				0				0				0	0
2:45 PM				0				0				0				0	0
3:00 PM				0				0				0				0	0
3:15 PM				0				0				0				0	0
3:30 PM				0				0				0				0	0
3:45 PM	9	0	5	14	2	0	0	2	0	144	9	153	11	93	1	105	274
4:00 PM	5	0	3	8	0	0	0	0	0	112	5	117	8	94	0	102	227
4:15 PM	12	0	4	16	0	0	0	0	0	151	8	159	15	95	0	110	285
4:30 PM	6	0	3	9	0	0	0	0	0	143	9	152	20	79	0	99	260
4:45 PM				0				0				0				0	0
5:00 PM				0				0				0				0	0
5:15 PM				0				0				0				0	0
5:30 PM				0				0				0				0	0
5:45 PM				0				0				0				0	0
6:00 PM				0				0				0				0	0
6:15 PM				0				0				0				0	0
6:30 PM				0				0				0				0	0

TOTAL	85	0	42	127	2	0	1	3	1	1633	85	1719	132	1829	3	1964	3813
AM Peak Vol	22	0	12	34	0	0	0	0	0	418	25	443	37	454	0	491	968
PM Peak Vol	32	0	15	47	2	0	0	2	0	550	31	581	54	361	1	416	1046

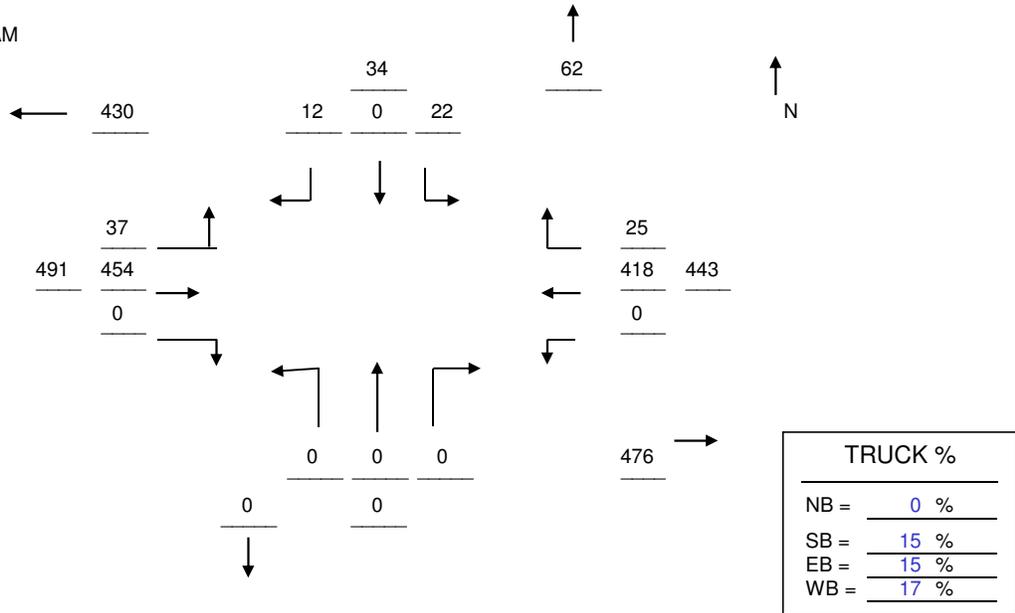
Peak Hour Factor (PHF)																	
AM Peak Hour	0.57				0.00					0.85				0.85			0.89
PM Peak Hour	0.73				0.25					0.91				0.95			0.92

DPA RAW TURNING MOVEMENT DIAGRAM

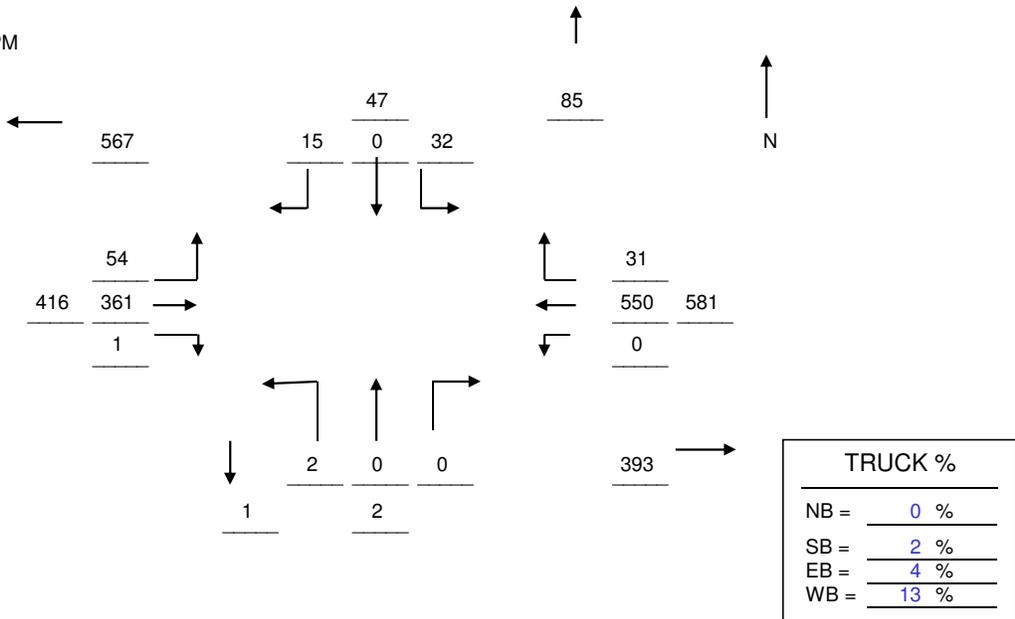
LOCATION: Estero Blvd @ Crescent Street
 COUNTY : Lee
 OBSERVER: DC/RC

CITY: Fort Myers Beach
 DATE: 09/08/2016 Thursday

AM Peak Hour
 9:30 AM 10:30 AM



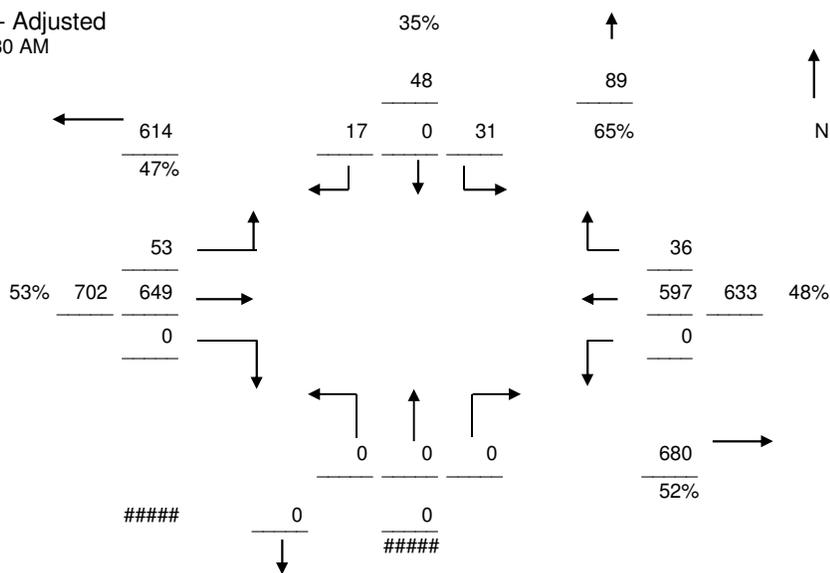
PM Peak Hour
 3:30 PM 4:30 PM



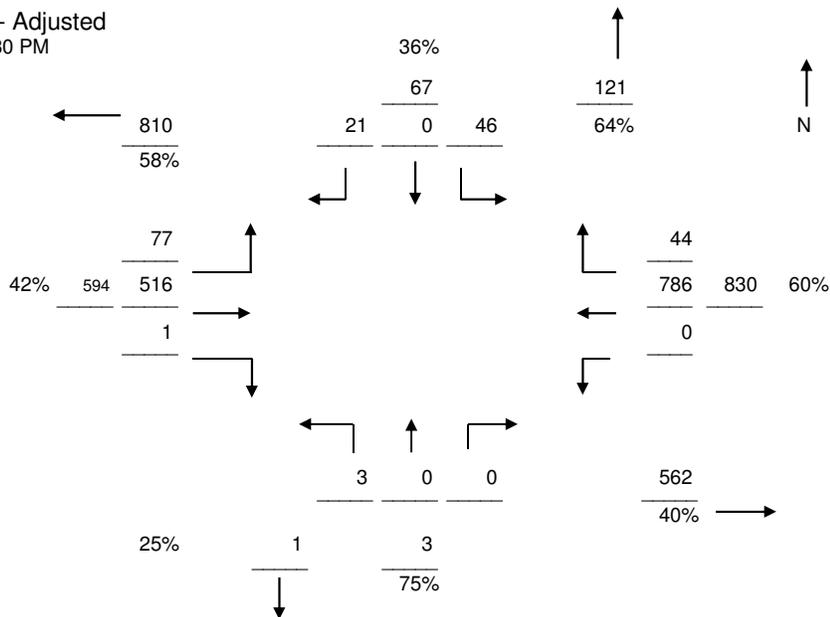
DPA ADJUSTED TURNING MOVEMENT DIAGRAM

LOCATION:	Estero Blvd @ Crescent Street	REPORT:	2015
COUNTY :	Lee	STATION:	44
OBSERVER:	DC/RC	MONTHLY:	0.77
		ANNUAL:	1.10
		ADJUSTMENT FACTOR:	1.43

AM Peak Hour - Adjusted
9:30 AM 10:30 AM



PM Peak Hour - Adjusted
3:30 PM 4:30 PM



**DAVID PLUMMER & ASSOCIATES
SUMMARY OF VEHICLE MOVEMENTS**

TRAFFIC COUNT ADJUSTMENT FACTORS

File# _____
Job # 16537

Project name: Times Square Resort
Job number: 16537

Count location: Fifth Street @ Crescent Street
County: Lee
City: Fort Myers Beach
Date: 09/08/2016
Day of Week: Thursday
Weather: Good
Road Condition: Good

Observer: PW
Remark: None

Intersection Description:
From North (SB): Crescent Street
From South (NB): Crescent Street
From East (WB): None
From West (EB): Fifth Street

AM Peak Hour: 9:30 AM to 10:30 AM
PM Peak Hour: 3:30 PM to 4:30 PM

LEE COUNTY ADJUSTMENT FACTOR

Traffic count report: 2015
Permanent count station: 44
Month of count AADT: 0.77
AADT to peak season 1.10

$$\text{Factor} = 1.00 \div 0.77 \times 1.10 = 1.43$$

David Plummer & Associates
Based On
MSHA Highway Information Services Division
Turning Counts Study - Field Sheet

Request No.: Times Square Resort
 Job No.: 16537

Location: Fifth Street @ Crescent Street
 Date: 09/08/2016 Thursday
 Recorder: PW
 Interval (dd): 15
 (In Minutes)

County: Lee
 Town: Fort Myers Beach
 Weather: Good

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Start	End	Volume	PM PERIOD 12:00PM-7:00PM	Start	End	Volume
		9:30 AM	10:30 AM	163		3:30 PM	4:30 PM	249

Street Name-->	Crescent Street				Crescent Street				None				Fifth Street				GRAND TOTAL
	Southbound				Northbound				Westbound				Eastbound				
HOUR	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	
7:15 AM				0				0				0				0	0
7:30 AM				0				0				0				0	0
7:45 AM	0	0	10	10	3	2	0	5	0	0	0	0	0	0	0	0	15
8:00 AM	0	2	11	13	3	2	0	5	0	0	0	0	0	0	0	0	18
8:15 AM	0	0	17	17	0	6	0	6	0	0	0	0	1	0	0	1	24
8:30 AM	0	3	11	14	3	1	0	4	0	0	0	0	0	0	4	4	22
8:45 AM	1	1	14	16	6	3	0	9	0	0	0	0	0	0	3	3	28
9:00 AM	0	5	14	19	10	6	0	16	0	0	0	0	0	0	1	1	36
9:15 AM	0	8	19	27	8	6	0	14	0	0	0	0	0	0	4	4	45
9:30 AM	0	5	18	23	5	5	0	10	0	0	0	0	1	0	3	4	37
9:45 AM	0	2	19	21	6	10	0	16	0	0	0	0	0	0	0	0	37
10:00 AM	0	7	18	25	2	3	0	5	0	0	0	0	0	0	0	0	30
10:15 AM	0	7	25	32	7	12	0	19	0	0	0	0	2	0	4	6	57
10:30 AM	0	9	21	30	5	2	0	7	0	0	0	0	0	0	2	2	39
10:45 AM				0				0				0				0	0
11:00 AM				0				0				0				0	0
11:15 AM				0				0				0				0	0
11:30 AM				0				0				0				0	0
11:45 AM				0				0				0				0	0
12:00 PM				0				0				0				0	0
12:15 PM				0				0				0				0	0
12:30 PM				0				0				0				0	0
12:45 PM				0				0				0				0	0
1:00 PM				0				0				0				0	0
1:15 PM				0				0				0				0	0
1:30 PM				0				0				0				0	0
1:45 PM				0				0				0				0	0
2:00 PM				0				0				0				0	0
2:15 PM				0				0				0				0	0
2:30 PM				0				0				0				0	0
2:45 PM				0				0				0				0	0
3:00 PM				0				0				0				0	0
3:15 PM				0				0				0				0	0
3:30 PM				0				0				0				0	0
3:45 PM	0	6	38	44	12	9	0	21	0	0	0	0	1	0	1	2	67
4:00 PM	0	10	33	43	8	9	0	17	0	0	0	0	0	0	0	0	60
4:15 PM	0	8	33	41	12	10	0	22	0	0	0	0	0	0	2	2	65
4:30 PM	0	4	32	36	9	10	0	19	0	0	0	0	0	0	2	2	57
4:45 PM				0				0				0				0	0
5:00 PM				0				0				0				0	0
5:15 PM				0				0				0				0	0
5:30 PM				0				0				0				0	0
5:45 PM				0				0				0				0	0
6:00 PM				0				0				0				0	0
6:15 PM				0				0				0				0	0
6:30 PM				0				0				0				0	0

TOTAL	1	77	333	411	99	96	0	195	0	0	0	0	5	0	26	31	637
AM Peak Vol	0	25	83	108	20	27	0	47	0	0	0	0	2	0	6	8	163
PM Peak Vol	0	28	136	164	41	38	0	79	0	0	0	0	1	0	5	6	249

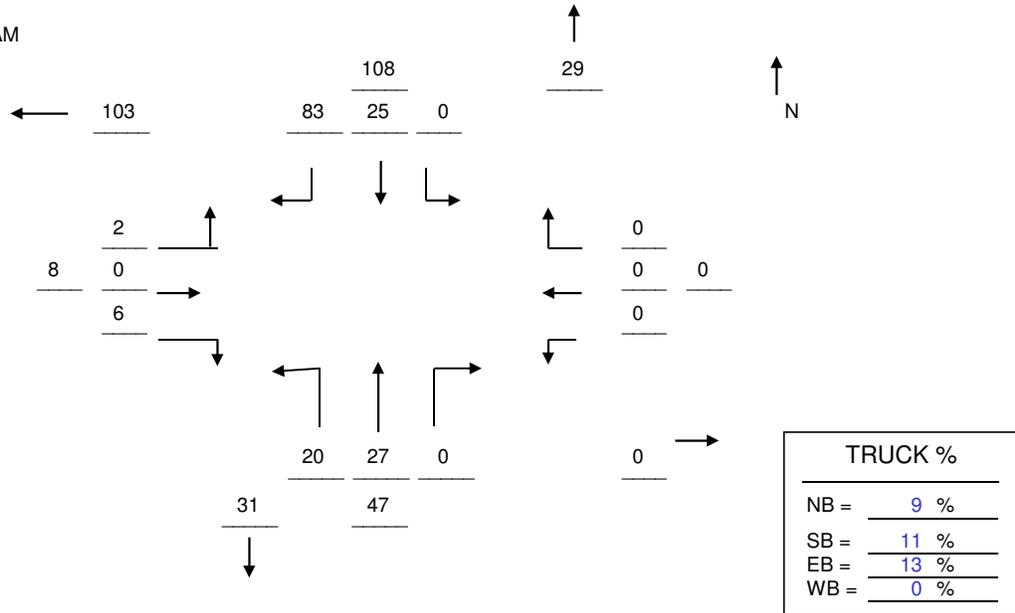
Peak Hour Factor (PHF)																	
AM Peak Hour	0.84				0.62				0.00				0.33				0.71
PM Peak Hour	0.93				0.90				0.00				0.75				0.93

DPA RAW TURNING MOVEMENT DIAGRAM

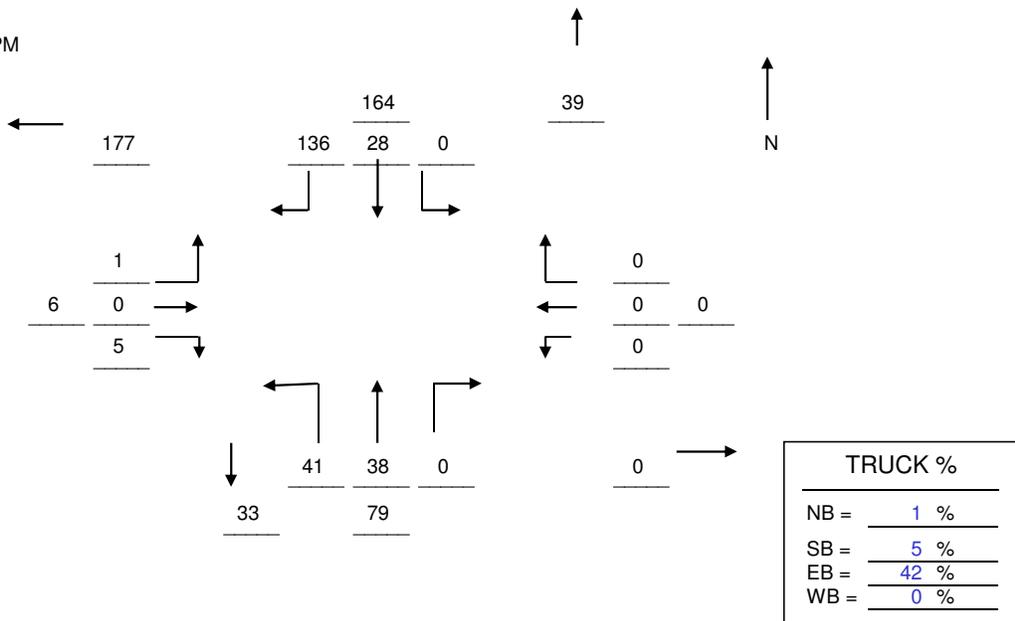
LOCATION: Fifth Street @ Crescent Street
 COUNTY : Lee
 OBSERVER: PW

CITY: Fort Myers Beach
 DATE: 09/08/2016 Thursday

AM Peak Hour
 9:30 AM 10:30 AM



PM Peak Hour
 3:30 PM 4:30 PM



APPENDIX G
SYNCHRO/HCM
INTERSECTION ANALYSIS OUTPUT

HCM 6th TWSC
22: Estero Blvd/San Carlos Blvd & Fifth St

02/28/2018

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↘			↖	↖
Traffic Vol, veh/h	0	0	117	0	0	267	86	719	1	0	494	181
Future Vol, veh/h	0	0	117	0	0	267	86	719	1	0	494	181
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	Yield
Storage Length	-	-	0	-	-	0	100	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	4	4	2	2	2	5	5	5	3	3	3
Mvmt Flow	0	0	127	0	0	290	93	782	1	0	537	197

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	537	-	-	783	537	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.24	-	-	6.22	4.15	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.336	-	-	3.318	2.245	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	540	0	0	394	1016	-	-	0	-	-
Stage 1	0	0	-	0	0	-	-	-	-	0	-	-
Stage 2	0	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	540	-	-	394	1016	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB				
HCM Control Delay, s	13.7		35.7		0.9		0				
HCM LOS	B		E								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1016	-	-	540	394	-	-
HCM Lane V/C Ratio	0.092	-	-	0.236	0.737	-	-
HCM Control Delay (s)	8.9	-	-	13.7	35.7	-	-
HCM Lane LOS	A	-	-	B	E	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.9	5.8	-	-

Lanes, Volumes, Timings
 9: Estero Blvd & Crescent St

02/28/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	77	516	786	44	46	21
Future Volume (vph)	77	516	786	44	46	21
Satd. Flow (prot)	1736	1827	1670	0	1724	0
Flt Permitted	0.950				0.967	
Satd. Flow (perm)	1736	1827	1670	0	1724	0
Lane Group Flow (vph)	84	561	902	0	73	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Control Type:	Unsignalized
Intersection Capacity Utilization	62.1% ICU Level of Service B
Analysis Period (min)	15

HCM 6th TWSC
9: Estero Blvd & Crescent St

02/28/2018

Intersection

Int Delay, s/veh 1.7

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations						
Traffic Vol, veh/h	77	516	786	44	46	21
Future Vol, veh/h	77	516	786	44	46	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	4	13	13	2	2
Mvmt Flow	84	561	854	48	50	23

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	902	0	-	0	1607	878
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	729	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	745	-	-	-	116	347
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	477	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	745	-	-	-	103	347
Mov Cap-2 Maneuver	-	-	-	-	218	-
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	477	-

Approach EB WB SB

HCM Control Delay, s	1.4	0	25.6
HCM LOS			D

Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1

Capacity (veh/h)	745	-	-	-	247
HCM Lane V/C Ratio	0.112	-	-	-	0.295
HCM Control Delay (s)	10.4	-	-	-	25.6
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.4	-	-	-	1.2

Lanes, Volumes, Timings
6: Crescent St & Fifth St

02/28/2018



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	7	59	54	40	194
Future Volume (vph)	1	7	59	54	40	194
Satd. Flow (prot)	1170	0	0	1834	1607	0
Flt Permitted	0.994			0.975		
Satd. Flow (perm)	1170	0	0	1834	1607	0
Lane Group Flow (vph)	9	0	0	123	254	0
Sign Control	Stop			Stop	Stop	

Intersection Summary

Control Type: Unsignalized

Intersection Capacity Utilization 33.5% ICU Level of Service A

Analysis Period (min) 15

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	7	59	54	40	194
Future Vol, veh/h	1	7	59	54	40	194
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	42	42	1	1	5	5
Mvmt Flow	1	8	64	59	43	211
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.9	8	7.9
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	52%	12%	0%
Vol Thru, %	48%	0%	17%
Vol Right, %	0%	88%	83%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	113	8	234
LT Vol	59	1	0
Through Vol	54	0	40
RT Vol	0	7	194
Lane Flow Rate	123	9	254
Geometry Grp	1	1	1
Degree of Util (X)	0.144	0.012	0.254
Departure Headway (Hd)	4.226	4.868	3.594
Convergence, Y/N	Yes	Yes	Yes
Cap	848	740	995
Service Time	2.258	2.868	1.631
HCM Lane V/C Ratio	0.145	0.012	0.255
HCM Control Delay	8	7.9	7.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0	1

Lanes, Volumes, Timings
 22: Estero Blvd/San Carlos Blvd & Fifth St

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	122	0	0	278	89	748	1	0	514	188
Future Volume (vph)	0	0	122	0	0	321	89	748	1	0	566	188
Satd. Flow (prot)	0	0	1580	0	0	1611	1719	1810	0	0	1845	1568
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	1580	0	0	1611	1719	1810	0	0	1845	1568
Lane Group Flow (vph)	0	0	133	0	0	349	97	814	0	0	615	204
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Control Type: Unsignalized												
Intersection Capacity Utilization 63.3%						ICU Level of Service B						
Analysis Period (min) 15												

HCM 6th TWSC
 22: Estero Blvd/San Carlos Blvd & Fifth St

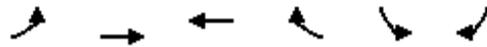
Intersection												
Int Delay, s/veh	11.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↘			↖	↖
Traffic Vol, veh/h	0	0	122	0	0	278	89	748	1	0	514	188
Future Vol, veh/h	0	0	122	0	0	321	89	748	1	0	566	188
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	Yield
Storage Length	-	-	0	-	-	0	100	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	4	4	2	2	2	5	5	5	3	3	3
Mvmt Flow	0	0	133	0	0	349	97	813	1	0	615	204

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	615	-	-	814	615	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.24	-	-	6.22	4.15	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.336	-	-	3.318	2.245	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	488	0	0	378	950	-	-	0	-	-
Stage 1	0	0	-	0	0	-	-	-	-	0	-	-
Stage 2	0	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	488	-	-	378	950	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB				
HCM Control Delay, s	15.1		62.4		1		0				
HCM LOS	C		F								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	950	-	-	488	378	-
HCM Lane V/C Ratio	0.102	-	-	0.272	0.923	-
HCM Control Delay (s)	9.2	-	-	15.1	62.4	-
HCM Lane LOS	A	-	-	C	F	-
HCM 95th %tile Q(veh)	0.3	-	-	1.1	9.8	-

Lanes, Volumes, Timings
 9: Estero Blvd & Crescent St



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	80	537	817	46	48	22
Future Volume (vph)	132	537	817	70	68	22
Satd. Flow (prot)	1736	1827	1663	0	1736	0
Flt Permitted	0.950				0.964	
Satd. Flow (perm)	1736	1827	1663	0	1736	0
Lane Group Flow (vph)	143	584	964	0	98	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Control Type:	Unsignalized
Intersection Capacity Utilization	64.2% ICU Level of Service C
Analysis Period (min)	15

HCM 6th TWSC
 9: Estero Blvd & Crescent St

Intersection

Int Delay, s/veh 3.3

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations						
Traffic Vol, veh/h	80	537	817	46	48	22
Future Vol, veh/h	132	537	817	70	68	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	4	13	13	2	2
Mvmt Flow	143	584	888	76	74	24

Major/Minor Major1 Major2 Minor2

Conflicting Flow All	964	0	-	0	1796	926
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	870	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	706	-	-	-	88	326
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	410	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	706	-	-	-	~ 70	326
Mov Cap-2 Maneuver	-	-	-	-	162	-
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	410	-

Approach EB WB SB

HCM Control Delay, s 2.2 0 44.4
 HCM LOS E

Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1

Capacity (veh/h)	706	-	-	-	185
HCM Lane V/C Ratio	0.203	-	-	-	0.529
HCM Control Delay (s)	11.4	-	-	-	44.4
HCM Lane LOS	B	-	-	-	E
HCM 95th %tile Q(veh)	0.8	-	-	-	2.7

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes, Volumes, Timings

6: Crescent St & Fifth St



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	7	61	56	42	202
Future Volume (vph)	4	27	62	56	46	202
Satd. Flow (prot)	1172	0	0	1832	1610	0
Flt Permitted	0.994			0.974		
Satd. Flow (perm)	1172	0	0	1832	1610	0
Lane Group Flow (vph)	33	0	0	128	270	0
Sign Control	Stop			Stop	Stop	

Intersection Summary

Control Type: Unsignalized

Intersection Capacity Utilization 34.3%

ICU Level of Service A

Analysis Period (min) 15

HCM 6th AWSC
6: Crescent St & Fifth St

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	7	61	56	42	202
Future Vol, veh/h	4	27	62	56	46	202
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	42	42	1	1	5	5
Mvmt Flow	4	29	67	61	50	220
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.2	8.1	8.1
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	53%	13%	0%
Vol Thru, %	47%	0%	19%
Vol Right, %	0%	87%	81%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	118	31	248
LT Vol	62	4	0
Through Vol	56	0	46
RT Vol	0	27	202
Lane Flow Rate	128	34	270
Geometry Grp	1	1	1
Degree of Util (X)	0.153	0.046	0.273
Departure Headway (Hd)	4.284	4.922	3.651
Convergence, Y/N	Yes	Yes	Yes
Cap	830	732	973
Service Time	2.346	2.922	1.716
HCM Lane V/C Ratio	0.154	0.046	0.277
HCM Control Delay	8.1	8.2	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.1	1.1

Lanes, Volumes, Timings
 5: Crescent St & Access 1 Inbound



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↕	↕	
Traffic Volume (vph)	0	0	0	126	70	0
Future Volume (vph)	0	0	75	127	90	4
Satd. Flow (prot)	0	0	0	1829	1853	0
Flt Permitted				0.982		
Satd. Flow (perm)	0	0	0	1829	1853	0
Lane Group Flow (vph)	0	0	0	220	102	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Control Type: Unsignalized	
Intersection Capacity Utilization 10.0%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings
 11: Fifth St & Access 1 Outbound



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	0	0	8	0	0	278
Future Volume (vph)	42	23	8	0	0	279
Satd. Flow (prot)	1718	0	1863	0	0	1863
Flt Permitted	0.969					
Satd. Flow (perm)	1718	0	1863	0	0	1863
Lane Group Flow (vph)	71	0	9	0	0	303
Sign Control	Stop		Free			Free

Intersection Summary

Control Type: Unsignalized	
Intersection Capacity Utilization 24.6%	ICU Level of Service A
Analysis Period (min) 15	

HCM 6th TWSC
 11: Fifth St & Access 1 Outbound

Intersection

Int Delay, s/veh 1.9

Movement NWL NWR NET NER SWL SWT

Lane Configurations						
Traffic Vol, veh/h	0	0	8	0	0	278
Future Vol, veh/h	42	23	8	0	0	279
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	25	9	0	0	303

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	312	9	0	-	-	-
Stage 1	9	-	-	-	-	-
Stage 2	303	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	681	1073	-	0	0	-
Stage 1	1014	-	-	0	0	-
Stage 2	749	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	681	1073	-	-	-	-
Mov Cap-2 Maneuver	681	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	749	-	-	-	-	-

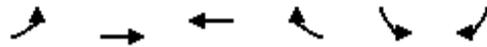
Approach NW NE SW

HCM Control Delay, s 10.1 0 0
 HCM LOS B

Minor Lane/Major Mvmt NETNWLn1 SWT

Capacity (veh/h)	-	782	-
HCM Lane V/C Ratio	-	0.09	-
HCM Control Delay (s)	-	10.1	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.3	-

Lanes, Volumes, Timings
 13: Fifth St & Access 2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	8	278	0	0	0
Future Volume (vph)	0	8	320	1	0	1
Satd. Flow (prot)	0	1863	1863	0	1611	0
Flt Permitted						
Satd. Flow (perm)	0	1863	1863	0	1611	0
Lane Group Flow (vph)	0	9	349	0	1	0
Sign Control		Free	Free		Stop	

Intersection Summary	
Control Type: Unsignalized	
Intersection Capacity Utilization 24.6%	ICU Level of Service A
Analysis Period (min) 15	

HCM 6th TWSC
 13: Fifth St & Access 2

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	0	8	278	0	0	0
Future Vol, veh/h	0	8	320	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	348	1	0	1

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	349	0	358
Stage 1	-	-	349
Stage 2	-	-	9
Critical Hdwy	4.12	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	3.518
Pot Cap-1 Maneuver	1210	-	640
Stage 1	-	-	714
Stage 2	-	-	1014
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1210	-	640
Mov Cap-2 Maneuver	-	-	640
Stage 1	-	-	714
Stage 2	-	-	1014

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1210	-	-	-	694
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Control Delay (s)	0	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

APPENDIX H

SUFFICIENCY REVIEW COMMENTS AND RESPONSES

DAVID PLUMMER & ASSOCIATES, INC.

TRANSPORTATION • CIVIL • STRUCTURAL • ENVIRONMENTAL

Memorandum

To: Tina Ekblad
From: Deven Long
Date: July 07, 2017
RE: **Independent Resort Rezoning Traffic Impact Statement - #17502**
Response to Town of Fort Myers Beach Transportation Comments
cc: John Hafner, Adam Olson, Chris Flagg, Tom Torgerson, Amanda Brock, Russell Schropp, Stephen Leung

DPA is in receipt of Town of Fort Myers Beach Development Review comments dated April 20, 2017 (refer to Attachment A of this memorandum) for the above referenced Project. DPA would like to offer the following response to the “Traffic Impact Statement” section starting on Page 4.

- 1. In the Trip Generation forecasts in Appendix C, for the Pre-Demolition scenario, it is unclear why there are two separate lines for the same Land Use 826 – these sizes should be combined into a single line item. For the Build Per Code scenario, it is unclear why there are two separate retail uses, especially since this is a conceptual scenario. In general, Land Use 820 is used for large retail areas, such as malls or big-box general retailers. For this site, Land Use 826 Specialty Retail, would be more appropriate for all general uses on the site for all three scenarios.**

Response

The land use designations for the Pre-Demolition scenario were divided by location in proximity to Estero Boulevard which was either bayside or beachside. Since the three retail locations were at distinct locations with independent parking, the trip generation estimates were performed independently. Furthermore, Land Use 820 was assumed in the Pre-Demolition scenario to best reflect the general retail uses that occupied the bayside parcel at that time.

In the Build Per Code scenario, Land Use 820 (general retail) was used to reflect to most intense development allowed under the current zoning.

- 2. The report applies reductions to trip generation forecasts based on foot and bicycle traffic, but does not explain how these percentages were arrived at. Additionally, the reductions applied to the Proposed Development (55%) during AM and PM) are higher than the reductions applied to the Pre-Demolition and Build Per Code (47% AM; 46% PM) conditions).**

Response

Vehicular trip reductions are reflective of the beach community and the pedestrian focal point of Times Square. Due to its beach location, the prior development did not generate the level of vehicle trips of the typical retail establishments reflective of the ITE trip rates. Similarly, the Build Per Code and Proposed Development are not expected to generate the level of vehicle trips reflective of the ITE trip rates.

This is because all three development scenarios are not marketed as standalone attractions. Instead, they are amenities catering to the guests and visitors of Fort Myers Beach, which is the primary attraction. Retail customers, as an example, are most likely to arrive by foot, bike, or trolley by beachgoers, tourists and from near-by residents. The same rationale of “beach capture” applies to restaurant customers and hotel visitors as most of them are there for the beach and to tour Times Square area by foot.

A 55% non-auto trip reduction rate was assumed for hotel and restaurant lands uses. A 45% non-auto trip reduction rate was assumed for retail land uses. A lower rate was used for retail since pass-by was assumed. It was preferable to avoid underestimating net-new external trips associated with retail land uses.

- 3. The internal capture calculations were not included – just the rate information available in Trip Generation Handbook, 3rd Edition. Given the higher internal capture rates for the Proposed Development, it is preferable for the calculation spreadsheets to be included in the report.**

Response

The review comment suggests that the use of “Figure 6.2 Spreadsheet Tool” of the ITE Handbook is preferred to demonstrate the internal capture calculations. DPA would like to note that internal capture calculations were performed by the Trafficware trip generation software (see Appendix C of the traffic study) which replicates the procedure and results of the spreadsheets from the ITE Handbook/NCHRP Report 684. Exhibits 3, 4 & 5 of the traffic study have been expanded to show the internal capture calculations consistent with the ITE Handbook and are provided in Attachment B of this response.

- 4. The Build Per Code scenario should be reviewed for feasibility – It has a very large retail size that may technically fit on the site, but would not allow room for other necessities, such as parking, open space requirements or setbacks. Trip generation comparisons with this scenario should be considered cautiously because of this, and the comparison between the Pre-Demolition and Proposed Development scenarios should be looked at closer because they are reasonable expectations for the site.**

Response

The Build Per Code development scenario, deemed feasible or not, is consistent with the intensities allowed under the current zoning.

- 5. The report did not state the basis for the proposed trip generation (i.e. based on existing traffic patterns), but just provided a statement as to how the trips were distributed.**

Response

The trip distribution and assignment were based on existing traffic patterns entering and exiting the road network under study as depicted in Attachment C of this response.

Based on the existing traffic count, the Project traffic was mostly distributed to the north, off of the island. This path makes sense because it is the shortest path to the airport, most of Lee County and to the Cities of Fort Myers and Cape Coral. The bulk of the remaining trips are coming from south Estero Island and beaches to the south. It was assumed that a small percentage of trips would be attracted to the north end of Estero Island, where there is a public park and other attractions.

- 6. The report focuses more on the trip generation comparison between the Build Per Code and Proposed Development scenarios, citing the reduction of trips the Proposed Development would have. The difference in trips is not as significant when comparing to the Pre-Demolition scenario, and the Proposed Development is forecast to generate significantly more trips during the AM peak hour.**

Response

The comparison of the Build Per Code Development (current zoning) and the Proposed Development (proposed zoning) is critical to cite for the purposes of this zoning traffic study. It demonstrates that the Proposed Development will have a lesser impact on traffic compared to the development allowed under the current zoning.

The report also cited the comparison to the Pre-Demolition development. The Proposed Development generates less traffic in the PM peak hour, but as the reviewer notes, it does generate

more traffic in the AM peak hour. However, there is less background traffic during the AM peak hour. The important thing to recognize is that the Proposed Development is on a scale, in terms of generated traffic, similar to the development that once existed on the same properties.

- 7. It appears that only PM peak hour operational analyses were performed. Typically both AM and PM operational analyses are performed, especially when there is a significant increase in forecast traffic during the AM peak hour.**

Response

The standard practice for zoning traffic studies in Lee County is to perform the operational analysis based only on the critical peak hour (K₁₀₀). In this case, the critical peak hour corresponds to the PM peak hour which is verified by the traffic counts. Also, the trip generation of the development scenarios is highest for the PM peak hour (except the Proposed Development which is 1 trip less than the AM peak hour).

Overall intersection operations under AM peak hour conditions will be no worse than the PM peak hour since there is less traffic associated within this period.

Attachment A

Town of Fort Myers Beach Development Review Comments

2149 MCGREGOR BOULEVARD
FORT MYERS, FLORIDA 33901
TELEPHONE: 239 332-2617, FAX: 239 332-2645
E-MAIL: dpafm@dplummer.com



EXCEEDING
CLIENT
EXPECTATIONS



Town of Fort Myers Beach

Dennis Boback
Mayor

Tracey Gore
Vice Mayor

Bruce Butcher
Council Member

Anita Cereceda
Council Member

Joanne Shamp
Council Member

Tina M. Ekblad
C/O Morris Depew
2891 Center Pointe Drive, Unit 100
Fort Myers, FL. 33916

April 20, 2017

RE: DCI17-0001 Sufficiency Review

Dear Tina,

Town staff has reviewed the proposed Commercial Planned Development rezoning information that was submitted to the Town on March 30th, 2017, and the Town finds that additional information is required before the application can be reviewed and scheduled for the required public hearings.

Please respond to each sufficiency review comment. If you do not provide the requested supplements or corrections within 60 calendar days of this letter, the Code requires that this application be considered withdrawn. If additional time is needed, the applicant may ask for additional time. Please feel free to contact me if you have any questions.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT

Matthew A. Noble
Principal Planner

DCI17-0001 Sufficiency Comments:

Evidence of Unified Control and Property Ownership: The submitted application includes ownership information for TPI-FMB I, II, III, however the property appraiser lists Grand Resort Ft Myers Beach LLC. The submittal included an exhibit entitled “TPI-FMB Commercial Planned Development” that lists the various ownerships for the parcels involved in the proposed application. Please clarify and revise this table as necessary.

Legal Description and Boundary Survey: The provided description for Parcel No. 3 is not a metes and bounds legal description. Please provide a metes and bounds legal description for parcel No. 3. In addition, the Sketch and Description refers to “Two Parcels” not three. Please revise to refer to three parcels. Staff would also ask the applicant to review the Description for Parcel No. 2 which includes N.19’24’24”W. but appears to be NE in the Sketch. Please revise as necessary.

Master Concept Plan (MCP): Please clearly delineate any proposed replacement public beach accesses. Proposed dedications, if any, including public beach access, boat ramps, park or recreation areas, open space, or other easements must be depicted on the MCP (34-212(4)(1)). The current proposed MCP makes no mention of public access way placement and the number of public access ways to be placed on site. Please show on the MCP where the public will be able to access the beach when the proposed development is complete.

Staff notes that Canal Street is a Town right of way and that an application to vacate the street is necessary to utilize this property. No vacation application has been submitted. Similarly, a replat of the subject property is also required.

Please provide an exhibit that clearly delineates the location and size of any areas proposed to be utilized for consumption on premises (COP). Please include an exhibit that includes proposed hours of operation for the COP use areas.

Please include the 1978 and 1991 Coastal Construction Control Lines on the MCP. Will any development phases be utilized? The MCP must include the maximum height of any proposed buildings or structures using the Town’s Land Development Code’s (LDC) means of measuring height (see 34-631)(34-212(4)(b)).

The MCP does not show any buffering around the building or parking area. Per Fort Myers Beach LDC Sec. 34-1745, some land uses are required to provide perimeter buffers. Per Sec. 34-2015(2) all parking lots must be designed in accordance with the buffer, landscaping, drainage and other requirements of this code. In LDC section 10-416(d)(2) buffer requirements for a parking lot adjacent to a right-of-way are a minimum buffer width of 15 feet, a minimum number of 5 trees per 100 linear feet, and a shrub hedge (Type D).

Sec. 10-416(b)(1)(b) states that perimeter building edge buffering is required for all newly built commercial developments in the downtown area of Fort Myers Beach. Building edge planting must be installed and maintained along at least 50 percent of the length of all walls that face on-site parking areas with more than 25 parking spaces. The planting areas must be at least 5 feet wide and may consist of landscape areas or adequately drained raised planters or planter boxes. Please adjust the MCP accordingly to reflect these requirements or seek a Deviation.

Drainage and Stormwater Management Plan: The proposed plans currently do not show any drainage and/or stormwater plans to be built along with the described structures. Per LDC Sec. 34-212(4)(i), the general location of stormwater management areas must be shown on the proposed MCP. Please revise the MCP showing the location of proposed curbs and gutters, inlets, culverts, swales, ditches, water control structures, water retention or detention areas, and other drainage or water management structures or facilities.

Property Development Regulations: Property Development Regulations specific to the proposal were not submitted as part of the March 30th rezoning application. The application states that the Downtown zoning district was utilized in the development of the MCP. Please provide an exhibit that contains the property development regulations that the applicant will use for the proposed property development.

Development Parameters: The only development parameters that the application contained were located in the Traffic Impact Statement as well as on the tables on the MCP. Please provide an exhibit that clearly specifies the development that is being proposed. This exhibit should contain the number of units proposed for each use, i.e. hotel or motel units, gross square feet of types of commercial uses, and maximum floor area ratios (34-212(4)).

Parking Plan and Parking Requirements: A parking plan is required for all uses, except single-family and two-family dwelling units. A parking plan has not been submitted as part of the proposed rezoning, please provide a parking plan. The parking plan must include calculations based on the LDC's required parking spaces (34-2020). The applicant has raised the issue of "Parking Location" and the code section (34-676(b)) requirement that parking be placed in rear yards and that the development is proposing parking underneath the hotel building. Section 34-676(b)(2) provides that off-street parking may be provided under commercial or mixed-use buildings provided that the parking area is acceptably screened.

Signage: In reviewing the proposed design plans there is an insufficient amount of information to complete a review of the plans. In exhibit "Sign Locations" proposed signs D, A, and G appear as if they cross into the EC District. Please show the 1978 Coastal Construction Control Line in the proposed placement of the signs to show if placement occurs in the EC District per Sec.6-366 (b) and Sec. 30-93(c)(1) of the LDC.

Lighting: In order to make a determination of the proposal's code consistency with lighting on and adjacent to the beach, a lighting plan must be submitted to demonstrate consistency with the Town's regulations for sea turtles. Please create such a lighting plan and submit to the Town for review per LDC Sec. 14-76(2). The location, number, wattage, elevation, orientation, and all types of proposed exterior artificial light sources must be included on the lighting plan.

Dune Walkovers: The current version of the MCP does not show any dune walk over placement for the new proposed public walkthrough areas which cut into the dune landscape. Please show dune walkover placement in the MCP per LDC Sec. 6-366(d). All walkovers must meet these criteria in addition to state approval: (1) Walkovers must be placed perpendicular to the dune or no more than 30 degrees from perpendicular. New walkovers cannot be placed closer than 150 feet to the nearest walkover. (2) Walkovers must be supported on posts embedded to a sufficient depth to provide structural stability. These posts may not be encased in concrete. (3) Walkovers cannot exceed four feet in width when serving single-family homes or six feet in width otherwise. (4) Walkovers must be elevated at least two feet above the highest point of the dune and dune vegetation and must extend to the seaward toe of any existing dune and dune vegetation. (5) Walkovers must be constructed in a manner that minimizes short-term disturbance of the dune system. Any dune vegetation destroyed during construction must be replaced with similar native vegetation that is suitable for beach and dune stabilization.

The proposed design plans should be modified. The "Illustrative Site Plan", The "Perspective Site Plan", and "Scene Six-View from Beach toward Social Club" show planted palm trees within the natural dune line. Please remove them and replace with native Florida dune vegetation per LDC Sec. 14-3(a)(2). Examples of appropriate vegetation include, but are not limited to, sea oats, railroad vine, panic grass, beach elder, and dune sunflower.

Pedestrian Oriented Development: The proposed plan currently does not meet the Old San Carlos Blvd. – Crescent St. Master Plan in that the predominant usage for the street level area on Crescent Street is parking. The proposed plan provides for no street level activity along Crescent Street. Please consider adding street level commercial or hotel ancillary uses in the AE zoned area of Crescent Street which would act like liner buildings in front of the proposed parking area.

Utilities: No information has been provided by the applicant from the utility providers as to the availability (capacity) of utilities to serve the proposed project. Per LDC Sec. 10-154(7)(j) a statement indicating the proposed method intended to provide water, sewer, electricity, telephone, refuse collection, and street lighting, including but not limited to, a plan showing the location and size of all water mains and services, fire hydrants, sewer mains and services, and pumping stations, together with plan and profile drawings showing the depth of utility lines and points where utility lines cross one another or cross storm drain or water management facilities. Please provide letters of availability from the utility service providers.

Lee Tran/Mass Transit/Lee County: The project narrative provides that “The proposed site design also includes a trolley pull off near the intersection of Fifth and Crescent Streets and under the proposed hotel building should Lee Tran desire to add a stop in this location.” Has the applicant coordinated with Lee Tran?

The application proposes an overhead pedestrian crossing of Estero Boulevard. Has the applicant coordinated this aspect of the proposed project with Lee County Department of Transportation (DOT)? Please provide evidence of coordination with DOT and Lee Tran such as review memorandums.

Schedule of Deviations: Deviation #1 does not provide number of hotel units but only “SF of guest units.” Staff notes that the subject property does not meet the location that is eligible for exceptional circumstances as described in the comprehensive plan (Policy 4-C-6). Please revise the deviation to refer to 34-1803(a)(1).

The justification provided for Deviation #2 has not convinced staff of the need for this requested Deviation.

Traffic Impact Statement:

- 1) In the Trip Generation forecasts in Appendix C, for the Pre-Demolition scenario, it is unclear why there are two separate lines for the same Land Use 826 – these sizes should be combined into a single line item. For the Build Per Code scenario, it is unclear why there are two separate retail uses, especially since this is a conceptual scenario. In general, Land Use 820 is used for large retail areas, such as malls or big-box general retailers. For this site, Land Use 826 Specialty Retail, would be more appropriate for all general retail uses on the site for all three scenarios.
- 2) The report applies reductions to trip generation forecasts based on foot and bicycle traffic, but does not explain how these percentages were arrived at. Additionally, the reductions applied to the Proposed Development (55% during AM and PM) are higher than the reductions applied to the Pre-Demolition and Build Per Code (47% AM; 46% PM) conditions.
- 3) The internal capture calculations were not included – just the rate information available in Trip Generation Handbook, 3rd Edition. Given the higher internal capture rates for the Proposed Development, it is preferable for the calculation spreadsheets to be included in the report.
- 4) The Build Per Code scenario should be reviewed for feasibility – it has a very large retail size that may technically fit on the site, but would not allow room for other necessities, such as parking, open space requirements or setbacks. Trip generation comparisons with this scenario should be considered cautiously because of this, and the

comparison between the Pre-Demolition and Proposed Development scenarios should be looked at closer because they are reasonable expectations for the site.

- 5) The report did not state the basis for the proposed trip generation (i.e. based on existing traffic patterns), but just provided a statement as to how the trips were distributed.
- 6) The report focuses more on the trip generation comparison between the Build Per Code and Proposed Development scenarios, citing the reduction of trips the Proposed Development would have. The difference in trips is not as significant when comparing to the Pre-Demolition scenario, and the Proposed Development is forecast to generate significantly more trips during the AM peak hour.
- 7) It appears that only PM peak hour operational analyses were performed. Typically both AM and PM operational analyses are performed, especially when there is a significant increase in forecast traffic during the AM peak hour.

Attachment B
Trip Generation Spreadsheets
(with Internal Capture Calculations)

2149 MCGREGOR BOULEVARD
FORT MYERS, FLORIDA 33901
TELEPHONE: 239 332-2617, FAX: 239 332-2645
E-MAIL: dpafm@dplummer.com



EXHIBIT 5 - EXPANDED
INDEPENDENT RESORT
PROPOSED DEVELOPMENT PROGRAM - TOTAL PROJECT
TRIP GENERATION⁽¹⁾

Hotel	LUC	SIZE	AM PEAK HOUR				Destination To - From	Origin From - To	PM PEAK HOUR				Destination To - From	Origin From - To	DAILY			
			In	Out	Total	%			In	Out	Total	%			In	Out	Total	%
			<u>Unbalanced ICR</u>				<u>Unbalanced ICR</u>				<u>Unbalanced ICR</u>							
Bayside Resort Hotel	330	290 Occupied Rooms	78	31	109 ⁽⁵⁾			61	81	142 ⁽⁶⁾			905	905	1,810 ⁽⁷⁾			
Trips			78	31	109			61	81	142			905	905	1,810			
Internal Capture ⁽²⁾			3	3	6	5.5%		6	7	13	9.2%		98	69	167	9.2%		
Restaurant			3	3	6	5.5%	4%	9%	6	7	13	9.2%	71%	68%	96	68	164	9.1%
Retail			0	0	0	0%	0%	14%	0	0	0	0.0%	17%	16%	2	1	3	0.2%
Non-Auto Trip Reduction ⁽³⁾			43	17	60	55%			34	45	79	55%			498	498	996	55%
Pass-by - Automobile trips ⁽⁴⁾			0	0	0	0%			0	0	0	0%			0	0	0	0%
External			32	11	43				21	29	50			311	339	650		
Restaurant																		
Beachside Restaurant	932	19.75 Gross Floor Area 1000 SF	117	96	213 ⁽⁸⁾			117	78	195 ⁽⁸⁾			1,256	1,255	2,511 ⁽⁸⁾			
Beachside Bar	925	1.96 Gross Floor Area 1000 SF	0	0	0 ⁽⁹⁾			15	7	22 ⁽¹⁰⁾			111	111	222 ⁽¹¹⁾			
Trips			117	96	213			132	85	217			1367	1366	2,733			
Internal Capture ⁽²⁾			3	3	6	2.8%		8	7	15	6.9%		80	116	196	7.2%		
Hotel			3	3	6	2.8%	6%	3%	7	6	13	6.0%	5%	7%	68	96	164	6.0%
Retail			0	0	0	0%	50%	14%	1	1	2	0.9%	29%	41%	12	20	32	1.2%
Non-Auto Trip Reduction ⁽³⁾			64	53	117	55%			73	47	120	55%			752	751	1,503	55%
Pass-by - Automobile trips ⁽⁴⁾			0	0	0	0%			0	0	0	0%			0	0	0	0%
External			50	40	90				52	32	84			547	519	1,066		
Retail																		
Bayside Specialty Retail	826	1.8 Gross Leasable Area 1000 SF	0	1	1 ⁽¹²⁾			2	3	5 ⁽¹³⁾			40	40	80 ⁽¹³⁾			
Internal Capture ⁽²⁾			0	1	1			2	3	5			40	40	80			
Hotel			0	0	0	0%		1	1	2	40%			21	14	35	44%	
Restaurant			0	0	0	0%	4%	0%	0	0	0	0%	2%	5%	1	2	3	3.8%
Retail			0	0	0	0%	8%	13%	1	1	2	40%	50%	29%	20	12	32	40.0%
Non-Auto Trip Reduction ⁽³⁾			0	0	0	45%			1	1	2	45%			18	18	36	45%
Pass-by - Automobile trips ⁽⁴⁾			0	0	0	0%			0	0	0	0%			0	0	0	0%
External			0	1	1				1	2	3			21	20	41		
			<u>In</u>	<u>Out</u>	<u>Total</u>	<u>%</u>		<u>In</u>	<u>Out</u>	<u>Total</u>	<u>%</u>		<u>In</u>	<u>Out</u>	<u>Total</u>	<u>%</u>		
TOTAL			195	128	323			195	169	364			2,312	2,311	4,623			
INTERNAL CAPTURE ⁽²⁾			6	6	12	4%		15	15	30	8%		199	199	398	9%		
NON-AUTO TRIP REDUCTION ⁽³⁾			107	70	177	55%		108	93	201	55%		1,268	1,267	2,535	55%		
DRIVEWAY VOLUME			82	52	134			72	61	133			845	845	1,690			
PASS-BY - AUTOMOBILE TRIPS ⁽⁴⁾			0	0	0	0%		0	0	0	0%		0	0	0	0%		
NET NEW EXTERNAL AUTOMOBILE TRIPS			82	52	134			72	61	133			845	845	1,690			

Footnotes:

- (1) Trip generation estimate based on ITE Trip Generation (9th Edition) using Trafficware software.
- (2) ITE, Trip Generation Handbook - An ITE Proposed Recommended Practice (3rd Edition), Chapter 6 - Trip Generation for Mixed-Use Development.
- (3) Reduction reflects pedestrian and bicycle trips to / from immediate vicinity.
- (4) ITE average retail pass-by rate capped at 10% for retail and specialty retail uses.
- (5) ITE LUC 330 Resort Hotel fitted curve equation applied.
- (6) ITE LUC 330 Resort Hotel fitted curve not provided by ITE - Average rate applied.
- (7) ITE does not offer weekday trip generation rates for LUC 330 Resort Hotel. A custom rate has been developed based on the PM peak hour and weekday rates for LUC 310 Hotel.
 - a) The PM peak hour rate for LUC 310 Hotel is 0.70 trips per occupied room.
 - b) The PM peak hour rate for LUC 330 Resort Hotel is 0.49 per occupied room.
 - c) The PM peak hour rate for LUC 330 Resort Hotel is 70% of the PM peak hour rate for LUC 310 Hotel.
 - d) The weekday trip generation rate for LUC 330 Resort Hotel is derived by multiplying the weekday trip generation rate for LUC 310 Hotel (8.92) by 0.70.
 - e) The resultant weekday trip generation rate for LUC 330 Resort Hotel is 6.24.
- (8) ITE LUC 932 High-Turnover (Sit-Down) Restaurant fitted curve not provided by ITE - Average rate applied.
- (9) ITE does not offer AM peak hour trip generation rates for LUC 925 Drinking Place. An AM peak hour trip generation rate of 0 is assumed for LUC 925 Drinking Place.
- (10) ITE LUC 926 Drinking Place fitted curve not provided by ITE - Average rate applied.
- (11) ITE does not offer weekday trip generation rates for LUC 925 Drinking Place. A weekday trip generation rate of 113.4 is used (assumes PM peak hour rate is 10% of the weekday).
- (12) ITE does not offer AM peak hour trip generation rates for LUC 826 Specialty Retail. A custom rate has been developed based on the AM and PM peak hour rates for LUC 820 Shopping Center.
 - a) The PM peak hour rate for LUC 820 Shopping Center is 3.71 trips per 1,000 GSF.
 - b) The PM peak hour rate for LUC 826 Specialty Retail is 2.71 trips per 1,000 GSF.
 - c) The PM peak hour rate for LUC 826 Specialty Retail is 73% of the PM peak hour rate for LUC 810 Shopping Center.
 - d) The AM peak hour trip generation rate for LUC 826 Specialty Retail is derived by multiplying the AM peak hour trip generation rate for LUC 820 Shopping Center (0.96) by 0.73.
 - e) The resultant AM peak hour trip generation rate for LUC 826 Specialty Retail is 0.70.
- (13) ITE LUC 826 Specialty Retail fitted curve equation applied.

Attachment C

Existing Traffic Distribution
On Road Network Under Study

2149 MCGREGOR BOULEVARD
FORT MYERS, FLORIDA 33901
TELEPHONE: 239 332-2617, FAX: 239 332-2645
E-MAIL: dpafm@dplummer.com

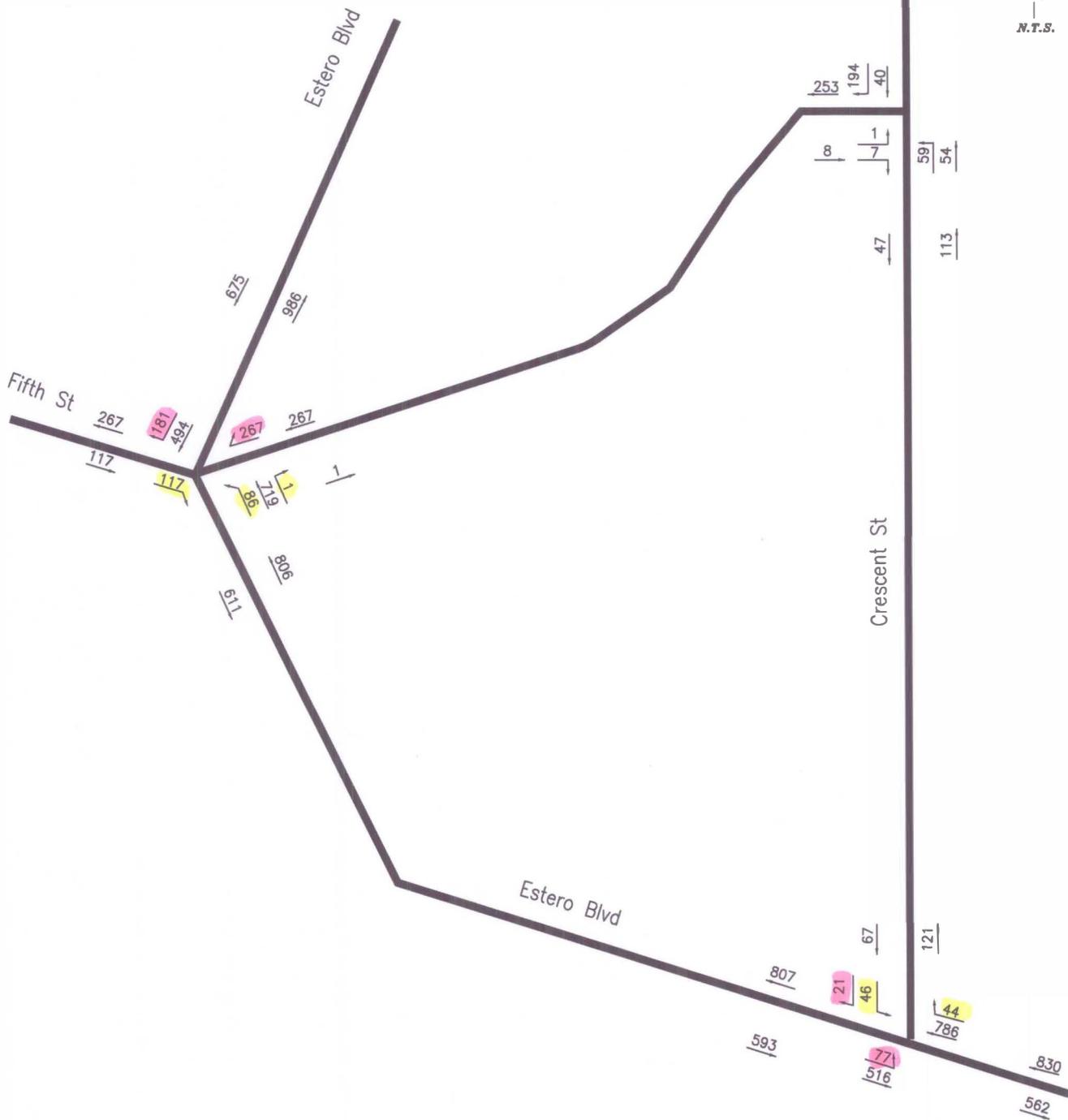


EXCEEDING
CLIENT
EXPECTATIONS



Trips entering and exiting study road network - From Estero Blvd. north = 546 trips - 65%

Trips entering and exiting study road network - From Estero Blvd. south = 294 trips - 35%



INDEPENDENT RESORT

EXISTING 2016
TRAFFIC VOLUMES
PM PEAK HOUR

16537/32A/0217

8

DAVID PLUMMER & ASSOCIATES, INC.

TRANSPORTATION • CIVIL • STRUCTURAL • ENVIRONMENTAL

Memorandum

To: Tina Ekblad
From: Deven Long
Date: November 10, 2017
RE: **Independent Resort Rezoning Traffic Impact Statement - #16537
Response to Town of Fort Myers Beach Transportation Comments**
cc: John Hafner, Adam Olson, Chris Flagg, Tom Torgerson, Amanda Brock, Russell Schropp, Stephen Leung

DPA is in receipt of Town of Fort Myers Beach Development Review comments for the above referenced Project provided by Tetra Tech (Attachment A) and Spikowski Planning Associates (Attachment B). DPA would like to offer the following response to the review comments.

Tetra Tech Review Comments

- 1. The response provided still does not adequately explain why Land Use 820 would be acceptable for some portions of the site and Land Use 826 would be acceptable for other portions under the various scenarios. Given the average sizes of developments utilized by ITE to develop trip generation rates, Land Use 826 would be more appropriate for the entire retail portion of the pre-demolition and proposed development scenarios.**

Response

For the Pre-Demolition Development, the bayside property was characterized by a traditional shopping plaza that, in the opinion of the applicant, reflects the ITE description of Shopping Center (LUC 820) more appropriately than Specialty Retail (LUC 826). Similarly, the beachside retail uses reflect the ITE description of Specialty Retail (LUC 826) more appropriately than Shopping Center (LUC 820). In addition, using a mix of both land uses avoids the extremes of assuming 100% general retail (high trip generation) or 100% specialty retail (low trip generation).

For the Build Per Code Development, a mix of the two retail uses was considered more appropriate than assuming 100% general retail or 100% specialty retail.

It was agreed during the 9/26/17 meeting with Town Staff and in subsequent email correspondence

that assuming a mix of specialty and general retail uses is appropriate for the Pre-Demolition and Build Per Code Developments.

- 2. There is no dispute that a portion of the visitors to the site would arrive by either foot or bicycle. However, an explanation or basis is still not provided as to how these rates were selected, or why they would be different between the various scenarios, especially since no pass-by reductions are allowed for Land Use 826. Again, to provide a consistent, objective comparison between the various speculative scenarios, consistent methodology should be used for all evaluations. A basis for these rates should also be provided and documented in the report – as they are provided currently, they appear arbitrary by nature.**

Response

Consistent methodology and assumptions were utilized when referencing the combined non-auto and pass-by trip reductions. For the Per-Demolition, Build Per Code, and Proposed Development scenarios, the total combined non-auto and pass-by trip reduction rate was 55% for the overall trip generation during all time periods.

Modifications for trip reduction rates were performed to accommodate the supplemental Existing (Occupied) Development scenario for two reasons.

1. Public beach parking trip generation is 100% vehicular trips by nature and cannot benefit from a non-auto trip reduction.
2. It was necessary to reduce non-auto trip reduction rates for the beachside bar (PM and weekday time periods). A net reduction rate of 55% results in negative trips for this particular land use, which is not appropriate.

- 3. Internal capture calculations should be revised based on modifications to trip generation forecasts and bike\pedestrian reductions discussed above.**

Response

Internal capture calculations have been revised in response to changes in the Build Per Code Development parameters and are included in the revised report dated November 10, 2017. Internal capture calculations are also included for the supplemental Existing (Occupied) Development scenario.

DPA would like to note that the internal capture calculations are performed prior to non-auto trip reductions and, therefore, are an independent calculation.

- 4. Feasible developments should be considered for all development scenarios – otherwise there is no point in performing the comparison, as the results do not provide an objective basis of comparison.**

Response

As agreed during the 9/26/17 meeting with Town Staff, the Build Per Code Development has been revised to reflect reasonably feasible parameters that would better allow room for other necessities, such as parking, open space requirements, and setbacks.

- 5. The response is sufficient – adequate information on trip distribution based on existing traffic patterns is provided.**

Response

This comment is acknowledged.

- 6. The comparison between trip generation forecasts for the various scenarios should be revised in conjunction with revisions to trip generation forecasts and trip reductions, as appropriate.**

Response

Trip generation comparisons and subsequent analysis has been revised in conjunction with revisions to trip generation forecasts and trip reductions. These updates are reflected in the revised report dated 11/10/17.

- 7. The response provided is accepted.**

Response

This comment is acknowledged.

Spikowski Planning Associates Review Comments

- 1. Traffic Impact Statement (TIS):** The technical aspects of the traffic impact statement are being reviewed for the town by the consulting firm Tera Tech; here I would like to add some broader observations.

The LDC requires that a traffic impact statement “survey current and anticipated traffic conditions and public transportation in order to identify potential traffic problems posed by the proposed development.” (LDC 10-286(a)).

The applicant’s TIS addresses many important points, such as expected traffic at each intersection and the development’s expected compliance with the town’s minimum level-of-service standard. The TIS then concludes that this development “will not significantly or adversely impact the Time Square roadway circulation system” (without defining ‘significantly’ or ‘adversely’). In support of its conclusion, the TIS contains analyses showing that the proposed development will generate fewer vehicle trips than two specific scenarios: 17% fewer trips than “Pre-Demolition Development” and 71% fewer trips than “Build Per Code Development.”

There are several problems with this approach. Foremost, the TIS does not contain the required analysis of “current and anticipated traffic conditions,” which would portray the traffic impacts of the proposed development when it is added to the existing traffic on the street network. Instead, the proposed development is compared to two specific scenarios (neither of which are “current conditions”).

Response:

Since the Town’s LDC only provides general guidance for requirements regarding traffic impact statements, the adopted methodology relies on using Lee County standards to assess the traffic impacts of the Proposed Development. This was agreed upon during the methodology meeting held with DPA and Town Staff.

Traffic Study Guidelines for Planned Development Rezoning (AC 13-17) is the governing code outlining the requirements for a zoning traffic impact statement in Lee County. Per AC 13-17, the minimum analysis required is reflective of the development allowed by the proposed zoning. However, standard practice accepted by Lee County is to perform analysis for both the current zoning (Build Per Code Development) and the proposed zoning (Proposed Development). These two scenarios, which are reflected in the ZTIS, are typically the minimum requirements for rezoning applications in Lee County. These two scenarios provide the critical points of comparison to demonstrate the traffic impacts of a proposed rezoning versus the traffic impacts allowed under the current zoning.

Per AC 13-17, an impact is considered significant if Project volumes exceed 10% of the LOS "C"

service volumes for a given roadway. An impact is considered adverse if traffic conditions with Project volumes exceed the adopted LOS standard. In the revised report, the conclusion remains the same; the Proposed Development will not significantly or adversely impact the Times Square roadway circulation system (based on Lee County Standards)

Current traffic conditions were surveyed as part of existing turning movement counts which were adjusted to reflect peak season conditions. Furthermore, a projected growth rate was applied to the existing volumes to develop future background volumes without any development located on the subject property. Project traffic associated with the Pre-Demolition, Build Per Code, and Proposed Development scenarios were then added to future background volumes to assess the associated traffic impacts. These items were included in the original report.

To address the request made by the reviewer during the 9/26/17 meeting and in subsequent email correspondence, supplemental analysis has been performed to reflect the Existing (Occupied) Development. This analysis includes the trip generation of the Existing (Occupied) Development, Project traffic volumes, and a comparison to the other development scenarios (see revised report dated 11/10/17).

The first scenario, “Pre-Demolition Development,” includes traffic from existing development on the site (as it should), but also includes traffic from previously existing beach-front hotels and Seafarer’s Mall as they existed before Hurricane Charley. This scenario should not be substituted for current traffic conditions; in the intervening years, Lee County purchased the properties that formerly contained those beach-front hotels and Seafarer’s Mall. The beach properties are now Crescent Beach Family Park; future plans for the Seafarer’s Mall site are still unknown. Traffic that might have been generated from those properties is not relevant to this application.

Response:

The Pre-Demolition provides the historic perspective of Times Square that existed for decades until Hurricane Charley. It allows those familiar with the Pre-Demolition Development to have a sense of scale as compared to the Proposed Development. The Proposed Development will generate less traffic than the Pre-Demolition Development that used to be on the subject property which is a finding that many Town residents will be able to directly relate to and can easily process.

The second scenario, “Build Per Code Development,” is described as development to the “maximum potential level of development on the subject property allowed under current zoning.” This idea of this scenario is intriguing and might be relevant as a supplement to the TIS, but as presented it is extremely misleading - current zoning allows nowhere near the amount of developed assumed for this scenario, as pointed out in Tetra Tech’s review comments. These development levels would not be practical even if the existing CPD zoning

on the bay side were replaced by Downtown zoning. The extensive constraints on developing this site without CPD zoning are demonstrated by several pages of analysis submitted by the applicant in support of Deviation #1. Regrettably, this portion of the TIS succeeds only in generating smoke; it fails to shed light on traffic impacts of the proposed development.

Response

As agreed during the 9/26/17 meeting with Town Staff, the Build Per Code Development has been revised to reflect reasonably feasible parameters (allowed under the current zoning) that would better allow room for other necessities, such as parking, open space requirements, and setbacks.

As stated previously, the current zoning (Build Per Code Development) provides the primary point of comparison to assess traffic impacts associated with proposed rezoning. The main purpose of a zoning TIS is to identify whether or not the proposed zoning causes additional impacts when compared to current zoning. For the Proposed Development, it does not cause additional impacts and produces less traffic than what is technically allowed (in terms of generated traffic) under the current zoning.

The third scenario, analyzed in the TIS is the proposed development, including the 290 rooms in the hotel. This scenario also includes ancillary uses: 23,505 square feet of retail, bars, and restaurants- a fraction of the 117,081 square feet of ancillary resort and commercial space that is proposed in this application. The third scenario also does not include traffic from up to 225 people who will be able to use the beach facility while not guests of the resort. If any of these discrepancies are justifiable, the TIS should explain why.

Response

The ITE description of a resort hotel includes provisions for sleeping accommodations, restaurants, cocktail lounges, retail shops, and guest services. Therefore, the ancillary resort and commercial space cited by the reviewer is accounted for by the ITE land use code for Resort Hotel.

For the purposes of the traffic study, the commercial recreation facility is considered to be a supporting use to the Independent Resort and the beachside restaurant and bar. As a standalone use without the resort, restaurant and bar, and the beach, it would not serve as an attraction. Patrons will be attracted to the facility for the uses already accounted for in the trip generation estimates.

The proposed CPD includes an impressive variety of features that will minimize traffic impacts from the proposed development, including all-valet parking; employee parking off-site; closing existing access points on Estero Boulevard and Crescent Street; a commitment to build sidewalks; extensive on-site resort amenities for guests; and thoughtful accommodations for pedestrians and public transit. Still, the TIS needs to fulfill its basic

purpose of comparing current traffic conditions with anticipated conditions when the development, as proposed, is fully occupied.

Response:

The revised TIS dated 11/10/17 provides all analysis required for a typical zoning TIS (including supplemental analysis) reflective of the adopted methodology and additional requests made by Town Staff and reviewers.

- 2. Roundabout: A roundabout at the foot of the Sky Bridge is not contemplated by this application. If a roundabout were constructed, incoming traffic would be able to turn immediately left on Fifth Street and enter this resort without traveling on Estero Boulevard and then needing to turn left on Crescent Street. The traffic impacts of the report on Estero Boulevard would be greatly reduced with a roundabout.**

Florida DOT may be able to willing to construct this roundabout and may be able to do so within the existing right-of-way, thus reducing travel on Estero Boulevard without any direct involvement from this developer. However, it is also possible that additional right-of-way would be required, for instance a corner of former Ocean Jewels building, which this application proposes to retain and upgrade. In the event, an opportunity would have been lost to determine any such right-of-way needs before upgrades are made to that building.

Response:

The study of a roundabout at the foot of the bridge would be more appropriately addressed by FDOT's San Carlos Boulevard PD&E Study.

Attachment A

Town of Fort Myers Beach Development Review Comments
Tetra Tech

2149 MCGREGOR BOULEVARD
FORT MYERS, FLORIDA 33901
TELEPHONE: 239 332-2617, FAX: 239 332-2645
E-MAIL: dpafm@dplummer.com



EXCEEDING
CLIENT
EXPECTATIONS

From: Matt Noble [<mailto:matt@fmbgov.com>]

Sent: Wednesday, August 30, 2017 2:49 PM

To: Tina Ekblad <tekblad@m-da.com>

Cc: Kara Stewart <Kara@fmbgov.com>; Messner, Brett <Brett.Messner@tetrattech.com>; Nelson, Daniel <Danny.Nelson@tetrattech.com>; Bill Spikowski <bill@spikowski.com>

Subject: Missing TetraTech Comments

Good afternoon. TetraTech's comments are below, sorry for the confusion.

Master Concept Plan:

1. No proposed utilities or connections to existing utilities are shown.
2. Please advise, if grading, landscaping, paving, or other applications are performed which would interfere with the existing drainage pattern, a proposed grading plan, including spot elevations, and a stormwater management plan, are required.
3. Tidal water elevations and FFE do not appear to be provided.

Parking Requirements:

4. There does not appear to be any mention of the proposed number of accessible parking spaces. The Americans with Disabilities Act (ADA) may require additional accessible parking spaces be provided. It appears as though there are 362 parking spaces proposed as part of this project, split between multiple facilities. If this were one parking facility, a total of at least 8 accessible parking spaces would need to be provided. But it is imperative that the number of parking spaces required to be accessible is to be calculated separately for each parking facility.

Patty,

Please see below:

1. The response provided still does not adequately explain why Land Use 820 would be acceptable for some portions of the site and Land Use 826 would be acceptable for other portions under the various scenarios. Given the average sizes of developments utilized by ITE to develop trip generation rates, Land Use 826 would be more appropriate for the entire retail portion of the pre-demolition and proposed development scenarios.
2. There is no dispute that a portion of the visitors to the site would arrive by either foot or bicycle. However, an explanation or basis is still not provided as to how these rates were selected, or why they would be different between the various scenarios, especially since no pass-by reductions are allowed for Land Use 826. Again, to provide a consistent, objective comparison between the various speculative scenarios, consistent methodology should be used for all evaluations. A basis for these rates should also be provided and documented in the report – as they are provided currently, they appear arbitrary by nature.
3. Internal capture calculations should be revised based on modifications to trip generation forecasts and bike\pedestrian reductions discussed above.

4. Feasible developments should be considered for all development scenarios – otherwise there is no point in performing the comparison, as the results do not provide an objective basis of comparison.
5. The response is sufficient – adequate information on trip distribution based on existing traffic patterns is provided.
6. The comparison between trip generation forecasts for the various scenarios should be revised in conjunction with revisions to trip generation forecasts and trip reductions, as appropriate.
7. The response provided is accepted.

Matthew A. Noble, AICP
Principal Planner
Town of Fort Myers Beach
(239)765-0202 Ext. 1305
matt@fortmyersbeachfl.gov

Beginning May 3rd: New email address Matt@fmbgov.com. Please add to your contact list and remove previous Matt@fortmyersbeachfl.gov.

Attachment B

Town of Fort Myers Beach Development Review Comments
Spikowski Planning Associates

2149 MCGREGOR BOULEVARD
FORT MYERS, FLORIDA 33901
TELEPHONE: 239 332-2617, FAX: 239 332-2645
E-MAIL: dpafm@dplummer.com



EXCEEDING
CLIENT
EXPECTATIONS



Town of Fort Myers Beach

Dennis Boback
Mayor

Tracey Gore
Vice Mayor

Bruce Butcher
Council Member

Anita Cereceda
Council Member

Joanne Shamp
Council Member

Tina M. Ekblad
C/O Morris Depew
2891 Center Pointe Drive, Unit 100
Fort Myers, FL. 33916

August 4, 2017

RE: DCI17-0001 Sufficiency Review

Dear Tina,

Town staff has reviewed the proposed Commercial Planned Development rezoning information that was submitted to the Town on July 12th, 2017, and the Town finds that additional information is required before the application can be reviewed and scheduled for the required public hearings.

Please respond to each sufficiency review comment. If you do not provide the requested supplements or corrections within 60 calendar days of this letter, the Code requires that this application be considered withdrawn. If additional time is needed, the applicant may ask for additional time. Please feel free to contact me if you have any questions.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT

Matthew A. Noble
Principal Planner

POLICY 4-C-4 BUILDING HEIGHTS: The Land Development Code shall limit the height of new buildings under most conditions to two stories above flood elevation (exceptions may include the buildback situations (see Policies 4-D-1 and 4-E-1), and different heights may be applied to officially designated redevelopment areas such as Times Square, Red Coconut/Gulf View Colony, and Villa Santini Plaza). In those few cases where individual parcels of land are so surrounded by tall buildings on lots that are contiguous (or directly across a street) that this two-story height limit would be unreasonable, landowners may seek relief through the planned development rezoning process, which requires a public hearing and notification of adjacent property owners. The town will approve, modify, or deny such requests after evaluating the level of unfairness that would result from the specific circumstances and the degree the specific proposal conforms with all aspects of this comprehensive plan, including its land-use and design policies, pedestrian orientation, and natural resource criteria. Particular attention would be paid to any permanent view corridors to Gulf or Bay waters that could be provided in exchange for allowing a building to be taller than two stories. In each case, the town shall balance the public benefits of the height limit against other public benefits that would result from the specific proposal.

This application should be amended to add one or more new deviation requests that would specify the maximum height in stories and in feet of each building that would exceed the LDC's height limit for this property, and to use the LDC's terminology for counting stories in all diagrams, in narrative justifications for deviations, and on the Master Concept Plan. For instance, the main resort building will contain three full stories that sit on top of an extremely tall ground story of stacked parking; the LDC deems this to be a four-story building (see LDC 34-631(a)(1)). Architectural features above the top story may exceed the height limit measured in feet only if they meet the size limits in 34-631(b)(2). Rooftop decks do not qualify for this special allowance; the "rooftop private event area" shown on sheet C-103 of the Master Concept Plan is presumably a rooftop deck.

TRAFFIC IMPACT STATEMENT (TIS): The technical aspects of the traffic impact statement are being reviewed for the town by the consulting firm Tetra Tech; here I would like to add some broader observations.

The LDC requires that a traffic impact statement "survey current and anticipated traffic conditions and public transportation in order to identify potential traffic problems posed by the proposed development." (LDC 10-286(a)).

The applicant's TIS addresses many important points, such as expected traffic at each intersection and the development's expected compliance with the town's minimum level-of-service standard. The TIS then concludes that this development "will not significantly or adversely impact the Times Square roadway circulation system" (without defining 'significantly' or 'adversely'). In support of its conclusion, the TIS contains analyses showing that the proposed development will generate fewer vehicle trips than two specific scenarios: 17% fewer trips than "Pre-Demolition Development" and 71% fewer trips than "Build Per Code Development."

There are several problems with this approach. Foremost, the TIS does not contain the required analysis of “current and anticipated traffic conditions,” which would portray the traffic impacts of the proposed development when it is added to existing traffic on the street network. Instead, the proposed development is compared to two specific scenarios (neither of which are “current conditions”).

The first scenario, “Pre-Demolition Development,” includes traffic from existing development on the site (as it should), but also includes traffic from previously existing beach-front hotels and Seafarer’s Mall as they existed before Hurricane Charley. This scenario should not be substituted for current traffic conditions; in the intervening years, Lee County purchased the properties that formerly contained those beach-front hotels and Seafarer’s Mall. The beach properties are now Crescent Beach Family Park; future plans for the Seafarer’s Mall site are still unknown. Traffic that might have been generated from those properties is not relevant to this application.

The second scenario, “Build Per Code Development,” is described as development to the “maximum potential level of development on the subject property allowed under current zoning.” This idea of this scenario is intriguing and might be relevant as a supplement to the TIS, but as presented it is extremely misleading – current zoning allows nowhere near the amount of development assumed for this scenario, as pointed out in Tetra Tech’s review comments. These development levels would not be practical even if the existing CPD zoning on the bay side were replaced by Downtown zoning. The extensive constraints on developing this site without CPD zoning are demonstrated by several pages of analysis submitted by the applicant in support of Deviation #1. Regrettably, this portion of the TIS succeeds only in generating smoke; it fails to shed any light on traffic impacts of the proposed development.

The third scenario analyzed in the TIS is the proposed development, including the 290 rooms in the hotel. This scenario also include ancillary uses: 23,505 square feet of retail, bars, and restaurants – a fraction of the 117,081 square feet of ancillary resort and commercial space that is proposed in this application. The third scenario also does not include traffic from up to 225 people who will be able to use the beach facility while not guests of the resort. If any of these discrepancies are justifiable, the TIS should explain why.

The proposed CPD includes an impressive variety of features that will minimize traffic impacts from the proposed development, including all-valet parking; employee parking off-site; closing existing access points on Estero Boulevard and Crescent Street; a commitment to build sidewalks; extensive on-site resort amenities for guests; and thoughtful accommodations for pedestrians and public transit. Still, the TIS needs to fulfill its basic purpose of comparing current traffic conditions with anticipated conditions when the development, as proposed, is fully occupied.

ROUNDABOUT: A roundabout at the foot of the Sky Bridge is not contemplated by this application. If a roundabout were constructed, incoming traffic would be able to turn immediately left on Fifth Street and enter this resort without traveling on Estero Boulevard and then needing to turn left on Crescent Street. The traffic impacts of the resort on Estero Boulevard would be greatly reduced with a roundabout.

Florida DOT may be able to willing to construct this roundabout and may be able to do so within the existing right-of-way, thus reducing travel on Estero Boulevard without any direct involvement from this developer. However, it is also possible that additional right-of-way would be required, for instance a corner of the former Ocean Jewels building, which this application proposes to retain and upgrade. In this event, an opportunity would have been lost to determine any such right-of-way needs before upgrades are made to that building.

FLOODPLAIN ISSUES: FEMA's changes to the floodplain maps for Fort Myers Beach in 2008 eroded the town's ability to continue improving its original pedestrian-oriented spine along Estero Boulevard. The most significant change was moving landward the line that separates the VE zones (where new buildings have to be elevated much higher to resist wave velocity) from the AE zones which apply to the rest of the town. In AE zones, it is still possible to build ground-floor retail shops and restaurants, even though they have to be "dry floodproofed." In VE zones, the ground floor of new buildings can be used for parking and storage but little else.

The 2008 changes moved the dividing line from just seaward of Estero Boulevard to just landward. The original FEMA proposal would have moved the line much further landward; the town's formal intervention and engineering input was enough to reduce the amount of land being changed considerably but not enough to keep the north side of Estero Boulevard out of a VE zone.

However, FEMA offers landowners a continuing opportunity to challenge the floodplain boundaries on their land. Given proper engineering justification, FEMA will immediately revise the floodplain maps. Two landowners near the subject property have recently obtained such revisions for their land: 150 Old San Carlos (Winds building) and 1028 Fifth Street (Teeki Hut building). Both properties were removed from the VE zone and placed back into an AE zone. The same logic and data that supported those revisions would seem to support a similar revision that would move the VE zone boundary back to Estero Boulevard in front of this development, which could allow this CPD application to place pedestrian-oriented uses along the sidewalk on the north side of Estero Boulevard, as discussed in the next section.

ESTERO BOULEVARD ISSUES (NORTH SIDE) (including Deviation #3): The front of the main resort complex abuts the sidewalk on the north side of Estero Boulevard. If constructed, the current design would be a significant inhibiting factor for the town's numerous to revitalize the immediate area. Even before Seafarer's Mall was demolished and McDonalds moved out, the north side of this block suffered from the dilapidated Helmerich Plaza, whose driveway and dismal appearance seemed to repel pedestrians. The situation has only gotten worse.

All previous proposals for redeveloping this property included continuous shops on the ground floor along Estero Boulevard. In recent years, the promise of this concept has nearly been extinguished, first due to the change to the FEMA boundaries, and later to the chilly reception to a coastal protection structure that might have loosened FEMA restrictions for the entire Times Square area. The suggestion above about petitioning FEMA to adjust the VE boundary for this site offers reasonable prospects for resurrecting this concept. My suggestion is that any approval of this CPD conditionally authorize ground-level shops and entertainment along the north side of Estero Boulevard and offer the town's support for FEMA map revisions that could make this

APPENDIX I

TETRA TECH REVIEW COMMENTS

Stephen Leung

From: Thatcher, Michael [michael.thatcher@tetratech.com]
Sent: Friday, February 16, 2018 3:44 PM
To: Stephen Leung
Cc: Messner, Brett; Jason Green (jason@fmbgov.com); Chris Flagg; Deven Long
Subject: Re: TPI-FMB Traffic

Stephen –

Tetra Tech has no issues with your proposal to use Land Use 820 for all retail space on both the existing and proposed sites.

Thank you, and have a great weekend!

Michael D. Thatcher, PE, ENV SP | Civil Engineer
Direct: [\(407\) 480-3978](tel:4074803978) | Main: [\(407\) 839-3955](tel:4078393955) | michael.thatcher@tetratech.com

Tetra Tech | Complex World, Clear Solutions
United States Infrastructure | 201 E. Pine Street, Suite 1000, Orlando, FL 32801 | www.tetratech.com

Please consider the environment before printing. [Read More.](#)

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

On Feb 16, 2018, at 3:20 PM, Stephen Leung <stephen.leung@dplummer.com> wrote:

Gentlemen,

As per your request below, we are preparing a supplemental TIS reflective of methodologies/procedures from: i) ITE, [Trip Generation](#) (10th Edition) and; ii) [Highway Capacity Manual](#) (HCM) 6th Edition.

Regarding the trip generation assumptions, Tetra Tech had previously expressed that, “...**In general, Land Use 820 is used for large retail areas, such as malls or big-box general retailers. For this site, Land Use 826 Specialty Retail, would be more appropriate for all general uses on the site...**”. As you are aware, LUC 826 – Specialty Retail has been eliminated from ITE, [Trip Generation](#) (10th Edition). As such, we propose that LUC 820 – General Retail (General Urban/Suburban) rates be applied to all of the existing and proposed retail uses on the site. The appropriate adjustments to reflect the high propensity for peds/bikes/trolley travel on FMB/Times Square will be documented and applied. Please confirm.

Please advise if you have any other questions or concerns regarding the supplemental TIS.

Thank you.

Stephen Leung

Vice President - General Manager

DAVID PLUMMER & ASSOCIATES

Transportation • Civil • Structural • Environmental

2149 McGregor Boulevard

Fort Myers, Florida 33901

Phone: 239-332-2617 Fax: 239-332-2645

www.dplummer.com

From: Thatcher, Michael [<mailto:michael.thatcher@tetrattech.com>]
Sent: Monday, February 5, 2018 1:36 PM
To: Chris Flagg <chris@tpihospitality.com>
Cc: Messner, Brett <Brett.Messner@tetrattech.com>
Subject: RE: TPI Traffic

Chris –

In reply to your written responses, depicted **in red text**, please find below, our follow-up comments to your email dated February 2, 2018.

- Regarding the use of HCM 6th Edition and the 10th Edition of Trip Generation, the responses below state older versions were used for consistency. Since previous versions of the report were never approved, there is no need for this consistency – again, we are not reviewing an updated report to one that was previously approved, but rather trying to ensure an accurate and appropriate analysis and design for a proposed development are performed.
- Customized trip generation rates should not be used, as explained in our previous comments. If information on a particular land use is not available in the latest version of Trip Generation, information for a similar use should be substituted. The only exception being the assumption that 10% of the Daily trips occurs during the PM peak hour – this is accepted practice in the industry. However, there is no industry basis for the arbitrary rates determined from subjective comparisons between different peak periods of the day. The fact that different rates are provided for different periods of the day is direct proof that land uses experience different peaks throughout the day that are not comparable to one another.
- The request for the internal capture worksheets\spreadsheets was because the current version of Trip Generation does not provide information on Daily internal capture rates (as indicated in the supporting information in the report), yet it was calculated and documented in the report, and at higher rates than the peak periods. Detailed supporting information should be provided on Daily internal capture calculations.
- There are some concerns raised by the parking response provided:
 - First, it states that “...during AM peak hour of peak season,...”, which implies that the average AM condition would experience lower demand than what was assumed in the trip generation forecast. As with all land uses, Trip Generation provides information on what could be anticipated during normal, everyday conditions during typical daily peak traffic conditions, and not during peak demand for the facility. Restaurants and retail facilities experience different peaks throughout the year (especially during the holiday shopping season), yet traffic data from these periods are not used for determining the everyday forecast rates provided in Trip Generation. Based on the statement below, a lower forecast for the amount of traffic generated by the parking areas should be determined and used.
 - Second, it is unclear how during the AM period a maximum of 99 cars arrive to park, but an assumed, unsubstantiated reduction of 19 vehicles (“...for an unknown number of cars that could have been captured before the AM peak hour.”) leads to the adjusted capture rate of 60 vehicles.

-
- Third, for the PM peak hour, it is assumed that new arrivals is a quarter of the total departures, yet the report states 25 (nearly half outbound trips), and this is not provided by the parking operator, but rather assumed by the respondent. This inbound traffic assumption appears high given the number of outbound vehicles.
 - The non-auto\multimodal percentages were not consistently applied to the existing condition for the PM and Daily forecasts for the restaurant use, resulting in higher forecasts for the existing uses and lower differences between the existing and proposed uses.
 - For the operational analysis, again since there was never an approved study for the development, the consistency concern is invalid. Additionally, ICU is not the industry standard for evaluating the operation of intersections – the HCM is. Until corrections are made to the trip forecast, it cannot be determined the impact it would have on the report conclusions.

Please feel free to reach out, should you have any questions. Thank you.

Michael D. Thatcher, PE, ENV SP | Civil Engineer
Direct: (407) 480-3978 | Main: (407) 839-3955 | michael.thatcher@tetrattech.com

Tetra Tech | Complex World, Clear Solutions
United States Infrastructure | 201 E. Pine Street, Suite 1000, Orlando, FL 32801 | www.tetrattech.com

Please consider the environment before printing. [Read More.](#)

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

<image003.jpg>

From: Chris Flagg [<mailto:chris@tpihospitality.com>]
Sent: Friday, February 02, 2018 1:33 PM
To: Thatcher, Michael <michael.thatcher@tetrattech.com>
Cc: Messner, Brett <Brett.Messner@tetrattech.com>
Subject: RE: TPI Traffic

Michael, I will call you momentarily. Here are written responses – your questions in blue text, answers in red text. –Chris.

1) Trip generation forecasts should be prepared utilizing information and methodologies specified in the latest version (10th Edition) of Trip Generation by ITE. Forecasts for each component of the developments (both existing and proposed) should be provided in the tables in the body of the report for ease of checking, rather than lumping them all together and then applying reductions. Pass-by rates should only be applied to uses for which they are listed. Custom rates for peak hour generation should not be used - data for similar uses may be substituted but should not be adjusted. For retail\service uses it is accepted practice to assume 10% of the daily traffic occurs during the PM peak hour, or multiply PM peak hour generation by 10 for the Daily forecast.

It is acknowledged that the ITE Trip Generation 10th Edition was available in October 2017. However, to be consistent with the methodology and review of the TIS, the updated traffic study relied on the ITE 9th Edition. Any differences in the comparison between the Existing (Occupied) and Proposed

Developments resulting from the updates in the ITE 10th Edition will not change the conclusions of the study.

Forecasts for each component of the developments (both existing and proposed) are in fact provided in the report for ease of checking, please see Exhibits 3-4. The reductions are applied by land use category before the totals are calculated. For ease of reading, the tables in pages 5-6 are simply a summarization of the detailed trip generation calculations shown in Exhibits 3-4, as indicated in the report.

For the Existing (Occupied) Development, pass-by rates are only assumed for retail land uses and assumed 10% for all time periods. No pass-by was assumed for the 1800 SF of retail in the Proposed Development since it will mainly support the resort hotel and pedestrian traffic.

Assumptions for the custom rates are provided in the footnotes of Exhibits 3 and 4 and are discussed below.

- ITE does not offer weekday trip generation rates for LUC 330 Resort Hotel. A custom rate has been developed based on the PM peak hour and weekday rates for LUC 310 Hotel.
 - The PM peak hour rate for LUC 310 Hotel is 0.70 trips per occupied room.
 - The PM peak hour rate for LUC 330 Resort Hotel is 0.49 per occupied room.
 - The PM peak hour rate for LUC 330 Resort Hotel is 70% of the PM peak hour rate for LUC 310 Hotel.
 - The weekday trip generation rate for LUC 330 Resort Hotel is derived by multiplying the weekday trip generation rate for LUC 310 Hotel (8.92) by 0.70.
 - The resultant weekday trip generation rate for LUC 330 Resort Hotel is 6.24.
- ITE does not offer weekday trip generation rates for LUC 925 Drinking Place. A weekday trip generation rate of 113.4 is used (assumes PM peak hour rate is 10% of the weekday).
- ITE does not offer AM peak hour trip generation rates for LUC 826 Specialty Retail. A custom rate has been developed based on the AM and PM peak hour rates for LUC 820 Shopping Center.
 - The PM peak hour rate for LUC 820 Shopping Center is 3.71 trips per 1,000 GSF.
 - The PM peak hour rate for LUC 826 Specialty Retail is 2.71 trips per 1,000 GSF.
 - The PM peak hour rate for LUC 826 Specialty Retail is 73% of the PM peak hour rate for LUC 810 Shopping Center.
 - The AM peak hour trip generation rate for LUC 826 Specialty Retail is derived by multiplying the AM peak hour trip generation rate for LUC 820 Shopping Center (0.96) by 0.73.
 - The resultant AM peak hour trip generation rate for LUC 826 Specialty Retail is 0.70.

2) Internal capture calculations should be performed via spreadsheet method as outlined in Chapter 6, Section 6.5 Process for Estimating Mixed-Use Trip Generation of Trip Generation Handbook, 3rd Edition by ITE.

The spreadsheets in Exhibits 3 and 4 utilize the same recommended procedures and rates for internal capture estimates as the NCHRP 684 Internal Trip Capture Estimation Tool (the referenced spreadsheet tool). Appendix F of the ITE Trip Generation Handbook includes an example application of the recommended process.

ITE does not require the use of the spreadsheet tool and using it will merely replicate the results shown in Exhibits 3 and 4.

3) Supporting information on the amount of traffic from the existing beach parking during the AM and PM peak hours, as well as daily, should be provided. As it is currently stated in the report, it appears

anecdotal in nature. Receipt based counts would be acceptable, although the nature of the parking operations appears that records would only be generated upon vehicle arrival and not upon departure. As it is currently reported, beach parking traffic accounts for the majority of the traffic generated by the existing development.

AM Peak

The parking operator reported that during AM peak hour of peak season, the public parking can capture as many as 1 car per minute. There are three public parking lots:

- Lighthouse surface lot – 21 public stalls
- Helmrich surface lot – 147 public stalls
- Kings Landing (between Pierview Hotel and Mermaids Bar) – 18 public stalls

Assuming a capture rate of 1 car per minute, these three lots could potentially capture 99 cars per hour:

- 21 cars at Lighthouse
- 60 cars at Helmich
- 18 cars at Kings Landing
- = 99 cars total

An adjustment (reduction of 19 cars per hour) was made to the maximum capture rate of 99 cars per hour to account for an unknown number of cars that could have been captured before the AM peak hour. With this adjustment, an AM peak capture rate of 60 cars per hour was concluded in the report.

PM Peak

The parking operator further reported that during PM peak hour of peak season, the public parking departure rate is in line with the AM peak capture rate. Therefore, the analysis assumed a departure rate of 60 cars per PM peak hour, which equals the concluded capture rate during AM peak hour.

Furthermore, the parking operator further noted that new cars are also captured during the PM peak hour for a sunset walk on the beach or dinner at a Times Square restaurant. No hard data is available for number of new captures, so an assumption of 15 new captures was made in the analysis.

Net conclusion was 85 total vehicular public parking traffic during the PM peak hour, which is the sum of PM peak hour departures (60) plus PM peak hour captures (15).

4) It is still unclear how external non-auto\multimodal percentages were arrived at for both scenarios (existing and proposed), while also contradictory for the existing development. For the existing development, the report includes the statement "The patrons of the existing businesses generally arrive by foot, bike or trolley..." yet the external percentages are 21%, 29% and 34% for the AM, PM and Daily traffic forecasts, respectively. Generally, patrons arrive by non-auto means yet only account for about a third of the total traffic. By comparison, the proposed development benefits from a 55% reduction during all periods. It is unclear within the report why there would be such a dramatic increase in non-auto use for the proposed development when it consists of similar uses to the existing development. Again, there is no basis for this difference, other than the statement that the development "...is characterized by the reliance on multimodal travel..." So the proposed development has a higher reliance because it needs the higher reliance on non-auto traffic?

Exhibits 3 and 4 show the non-auto trip reduction assumptions for each land use category. The reduction is applied by land use category and is the same for land uses found in both the Existing (Occupied) and Proposed Developments. The non-auto trip reduction rates are summarized as follows.

- Hotel – 55%
- Restaurant – 55%

-
- Retail – 45%
 - Public Beach Parking – 0%

The resultant non-auto trip reduction for the Proposed Development appears higher than the Existing (Occupied). This is due to the public beach parking in the Existing (Occupied) Development which cannot take advantage of the non-auto trip reduction.

5) Until the trip generation forecasts for the existing and proposed development are rectified, the operational impacts on the adjacent street system cannot be determined. Furthermore, all operational analyses should be performed in accordance with the 6th Edition of the Highway Capacity Manual, and not the 2010 edition.

The 2010 Edition of the Highway Capacity Manual was the current edition at the time of the original traffic study and continues to be referenced for consistency. Furthermore, the report focuses on the ICU analysis for unsignalized intersections. This type of analysis is not associated with the Highway Capacity Manual and, therefore, is not affected by the updates in the Highway Capacity Manual. Furthermore, any differences between the cited HCM editions will not change the conclusions of the study.

From: Thatcher, Michael [<mailto:michael.thatcher@tetrattech.com>]
Sent: Friday, February 2, 2018 12:18 PM
To: Chris Flagg <chris@tpihospitality.com>
Cc: Messner, Brett <Brett.Messner@tetrattech.com>
Subject: RE: TPI Traffic

Chris –

Our traffic reviewer is currently unavailable, but I can field your call and any questions you may have, and pass them along, as necessary.

Shoot me a call at your earliest convenience, and we can discuss: (407) 480-3978.

Thanks.

Michael D. Thatcher, PE, ENV SP | Civil Engineer
Direct: (407) 480-3978 | Main: (407) 839-3955 | michael.thatcher@tetrattech.com

Tetra Tech | Complex World, Clear Solutions
United States Infrastructure | 201 E. Pine Street, Suite 1000, Orlando, FL 32801 | www.tetrattech.com

Please consider the environment before printing. [Read More.](#)

This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

<image001.jpg>

From: Messner, Brett
Sent: Friday, February 02, 2018 1:13 PM

To: Thatcher, Michael <michael.thatcher@tetrattech.com>

Subject: Fwd: TPI Traffic

Can you coordinate?

Sent from my iPhone

Begin forwarded message:

From: Chris Flagg <chris@tpihospitality.com>

Date: February 2, 2018 at 12:59:14 PM EST

To: "brett.messner@tetrattech.com" <brett.messner@tetrattech.com>

Subject: FW: TPI Traffic

Hi Brett,

I received your TPI-FMB traffic questions from Jason Green via Tina Ekblad. I have been the one working with Plummer & Assoc. on the revised traffic study. I believe I can address most of these over a phone call.

Are you available for a call this afternoon? Anytime except 2-3p EST works for me.

Chris

<image002.jpg>

From: Green [<mailto:green@fmbgov.com>]

Sent: Thursday, February 1, 2018 3:33 PM

To: Tina Ekblad <tekblad@m-da.com>

Subject: TPI Traffic

Tina,

I received comments from TT related to the TIS that your team submitted last week. Please see below. If you have questions or wish to address any of this at this time, I suggest contacting Brett directly 239-390-1467 or brett.messner@tetrattech.com

Jason

Jason,

Comments on the revised traffic study dated January 23, 2018:

1) Trip generation forecasts should be prepared utilizing information and methodologies specified in the latest version (10th Edition) of Trip Generation by ITE. Forecasts for each component of the developments (both existing and proposed) should be provided in the tables in the body of the report for ease of checking, rather than lumping them all together and then applying reductions. Pass-by rates should only be applied to uses for which they are listed. Custom rates for peak hour generation should

not be used - data for similar uses may be substituted but should not be adjusted. For retail\service uses it is accepted practice to assume 10% of the daily traffic occurs during the PM peak hour, or multiply PM peak hour generation by 10 for the Daily forecast.

2) Internal capture calculations should be performed via spreadsheet method as outlined in Chapter 6, Section 6.5 Process for Estimating Mixed-Use Trip Generation of Trip Generation Handbook, 3rd Edition by ITE.

3) Supporting information on the amount of traffic from the existing beach parking during the AM and PM peak hours, as well as daily, should be provided. As it is currently stated in the report, it appears anecdotal in nature. Receipt based counts would be acceptable, although the nature of the parking operations appears that records would only be generated upon vehicle arrival and not upon departure. As it is currently reported, beach parking traffic accounts for the majority of the traffic generated by the existing development.

4) It is still unclear how external non-auto\multimodal percentages were arrived at for both scenarios (existing and proposed), while also contradictory for the existing development. For the existing development, the report includes the statement "The patrons of the existing businesses generally arrive by foot, bike or trolley..." yet the external percentages are 21%, 29% and 34% for the AM, PM and Daily traffic forecasts, respectively. Generally, patrons arrive by non-auto means yet only account for about a third of the total traffic. By comparison, the proposed development benefits from a 55% reduction during all periods. It is unclear within the report why there would be such a dramatic increase in non-auto use for the proposed development when it consists of similar uses to the existing development. Again, there is no basis for this difference, other than the statement that the development "...is characterized by the reliance on multimodal travel..." So the proposed development has a higher reliance because it needs the higher reliance on non-auto traffic?

5) Until the trip generation forecasts for the existing and proposed development are rectified, the operational impacts on the adjacent street system cannot be determined. Furthermore, all operational analyses should be performed in accordance with the 6th Edition of the Highway Capacity Manual, and not the 2010 edition.

Note: Florida has a very broad public records law. Most written communications to or from Fort Myers Beach officials regarding Town business are public records available to the public and media upon request. Your email communications and email address may be subject to public disclosure.

*** Please update my contact information in your address book and direct your messages to my new email address ending in @fmbgov.com ***

APPENDIX J

EXISTING BUSINESS OWNER STATEMENT
CUSTOMER MODE OF TRAVEL

The majority of our customers are from pedestrian traffic. They do not drive to the bike shop.

Mark Allen 2/19/18

The majority of our customers are from pedestrian traffic. They do no drive to the Liquor Store

A handwritten signature consisting of a large, stylized loop followed by a horizontal line extending to the right.

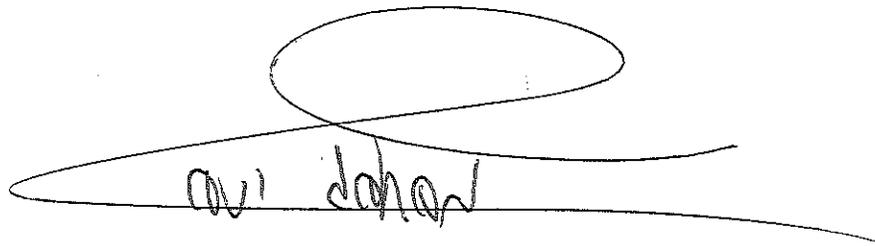
2-19-18

The majority of our customers are from pedestrian traffic. They do not drive to the realtor office.

Scott Lewis

I agree to the above. ↷

The majority of our customers are from pedestrian traffic. They do not drive to Sunny's gifts.

A handwritten signature in black ink, consisting of a large, stylized loop at the top and a long, horizontal stroke below it. The name "avi dahan" is written in a cursive script across the middle of the horizontal stroke.

avi dahan

2-10-18