

Atlantico at Palmetto Bay Traffic Consumption Analysis

March 2, 2016



DPA has undertaken a Traffic Consumption Analysis for this project to establish project significance on the external roadway network, and determine roadways and intersections to be analyzed in their traffic study. The project is located at 17945 SW 97th Avenue in the village of Palmetto Bay, FL and is proposing 285 residential units and 6,988 SF of specialty retail. The project replaces a closed bank with Drive thru.

The following information is provided to support the consumption analysis:

1. Trip Generation for the proposed uses;
2. Cardinal Distribution for the area;
3. Resulting Project Distribution
4. Service Volume and Adjustments for each roadway analyzed;
5. Supporting FDOT Generalized Service Volumes; and,
6. Project Consumption.

The analysis shows that the project is significant on all segments of SW 97th Avenue between US 1 and SW 184th Street. The analysis will include the following two roadway segments:

1. Franjo Road (SW 97th Avenue) between US 1 and SW 180th Street; and,
2. Franjo Road (SW 97th Avenue) between SW 180th Street and SW 184th Street.

The following adjacent intersections will be analyzed:

1. Franjo Road (SW 97th Avenue)/US 1
2. Franjo Road (SW 97th Avenue)/ SW 180th Street
3. Franjo Road (SW 97th Avenue)/SW 184th Street

Summary of Multi-Use Trip Generation
Average Weekday Driveway Volumes (Unadjusted for Internal Trips)

Project: Atlantico at Palmetto Bay
Phase:

Open Date:
Analysis Date:

Description: Proposed #16127

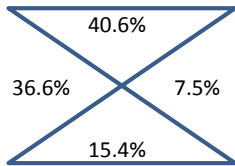
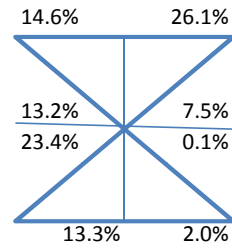
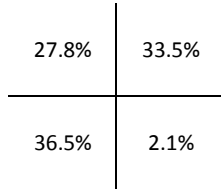
ITE:Land Use	24 Hour Two-Way Volume	AM Pk Hour		PM Pk Hour	
		Enter	Exit	Enter	Exit
826: Specialty Retail Center 6.988 Th.Sq.Ft. GFA [R]	310	0	0	8	11
223: Mid-Rise Apartment 285 Dwelling Units [R]	0	26	60	66	45
Total Driveway Volume	310	26	60	74	56
Total Peak Hour Pass-By Trips		0	0	0	0
Total Peak Hour Vol. Added to Adjacent Streets		26	60	74	56

Note: A zero indicates no data available.
Source: Institute of Transportation Engineers
Trip Generation Manual, 9th Edition, 2012

TRIP GENERATION 2013, TRAFFICWARE, LLC

EXHIBIT 3 CARDINAL DISTRIBUTION

TAZ 1126			
DIRECTION	2010	2040	2018
NNE	26.40%	25.10%	26.05%
ENE	7.30%	8.00%	7.49%
ESE	0.00%	0.20%	0.05%
SSE	2.20%	1.60%	2.04%
SSW	13.10%	14.00%	13.34%
WSW	23.70%	22.50%	23.38%
WNW	13.90%	11.30%	13.21%
NNW	13.50%	17.50%	14.57%



SERVICE VOLUMES

ROADWAY		DIRECTION		Adjustements		Speed Limit	Class	SV
				Non-State	Unidivided wo LT lanes			
US 1	N of Franjo	1-Way	3L			45	I	3,624 ¹
	S of Franjo	1-Way	3L			45	I	3,624 ¹
Franjo/97 Av	US 1-180 th Streeet	2-Way	2LU	-10%	-20%	30	II	1,015
	180 th -184 th Streeet	2-Way	2LU	-10%	-20%	30	II	1,015
	184 th Streeet-South	2-Way	2LU	-10%	-20%	30	II	1,015
SW 94 th Av	180 th -184 th Streeet	2-Way	2LU	-10%	-20%	30	II	1,015
SW 184 th Street	US 1-97 th Av	2-Way	4LU	-10%	-5%	40	I	3,061
	97 th -94 th Av	2-Way	2LU	-10%	-20%	40	I	1,152
	E of 94 th Av	2-Way	2LU	-10%	-20%	40	I	1,152

¹ **Source:** *Traffic Impact Analysis for Downtown Redevelopmetn Task Force* , February 2015.

Generalized **Peak Hour Two-Way** Volumes for Florida's
Urbanized Areas¹

TABLE 4

12/18/12

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Lanes	B	C	D	E	
Lanes	Median	B	C	D	E	4	4,120	5,540	6,700	7,190	
2	Undivided	*	1,510	1,600	**	6	6,130	8,370	10,060	11,100	
4	Divided	*	3,420	3,580	**	8	8,230	11,100	13,390	15,010	
6	Divided	*	5,250	5,390	**	10	10,330	14,040	16,840	18,930	
8	Divided	*	7,090	7,210	**	12	14,450	18,880	22,030	22,860	
Class II (35 mph or slower posted speed limit)						Freeway Adjustments					
Lanes	Median	B	C	D	E	Auxiliary Lanes		Ramp			
2	Undivided	*	660	1,330	1,410	Present in Both Directions		Metering			
4	Divided	*	1,310	2,920	3,040	+ 1,800		+ 5%			
6	Divided	*	2,090	4,500	4,590						
8	Divided	*	2,880	6,060	6,130						
Non-State Signalized Roadway Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
(Alter corresponding state volumes by the indicated percent.)						Lanes	Median	B	C	D	E
Non-State Signalized Roadways - 10%						2	Undivided	770	1,530	2,170	2,990
						4	Divided	3,300	4,660	5,900	6,530
						6	Divided	4,950	6,990	8,840	9,790
Median & Turn Lane Adjustments						Uninterrupted Flow Highway Adjustments					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	Exclusive left lanes	Adjustment factors		
2	Divided	Yes	No	+5%		2	Divided	Yes	+5%		
2	Undivided	No	No	-20%		Multi	Undivided	Yes	-5%		
Multi	Undivided	Yes	No	-5%		Multi	Undivided	No	-25%		
Multi	Undivided	No	No	-25%							
-	-	-	Yes	+ 5%							
One-Way Facility Adjustment											
Multiply the corresponding two-directional volumes in this table by 0.6											
BICYCLE MODE ²						¹ Values shown are presented as peak hour two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)											
Paved Shoulder/Bicycle											
Lane Coverage	B	C	D	E		² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.					
0-49%	*	260	680	1,770							
50-84%	190	600	1,770	>1,770							
85-100%	830	1,770	>1,770	**		³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.					
PEDESTRIAN MODE ²											
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						* Cannot be achieved using table input value defaults.					
Sidewalk Coverage											
0-49%	*	*	250	850							
50-84%	*	150	780	1,420		** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.					
85-100%	340	960	1,560	>1,770							
BUS MODE (Scheduled Fixed Route) ³						Source: Florida Department of Transportation Systems Planning Office www.dot.state.fl.us/planning/systems/sm/los/default.shtm					
(Buses in peak hour in peak direction)											
Sidewalk Coverage											
0-84%	> 5	≥ 4	≥ 3	≥ 2							
85-100%	> 4	≥ 3	≥ 2	≥ 1							

PROJECT CONSUMPTION

ATLANTICO AT PALMETTO BAY

ROADWAY		% PROJECT TRAFFIC		PROJECT TRIPS		SV	% CONSUMPTION	
				AM	PM		AM	PM
US 1	N of Franjo	41%	Outbound	25	23	3,624	0.7%	0.6%
	S of Franjo	36%	Inbound	9	27	3,624	0.3%	0.7%
Franjo/97 Av	US 1-180th Street	41%	2-way	35	53	1,015	3.5%	5.3%
	180th-184th Street	53%	2-way	46	69	1,015	4.5%	6.8%
	184th Street-South	2%	2-way	2	3	1,015	0.2%	0.3%
SW 94th Av	180th-184th Street	6%	2-way	5	8	1,015	0.5%	0.8%
SW 184th Street	US 1-97th Av	49%	2-way	42	64	3,061	1.4%	2.1%
	97th-94th Av	2%	2-way	2	3	1,152	0.1%	0.2%
	E of 94th Av	8%	2-way	7	10	1,152	0.6%	0.9%