

MEMORANDUM

DATE: September 10, 2013

TO: Jody McDaniel Planner II, Community Planning

FROM: Lurise Bannister Planner II, Transportation Section

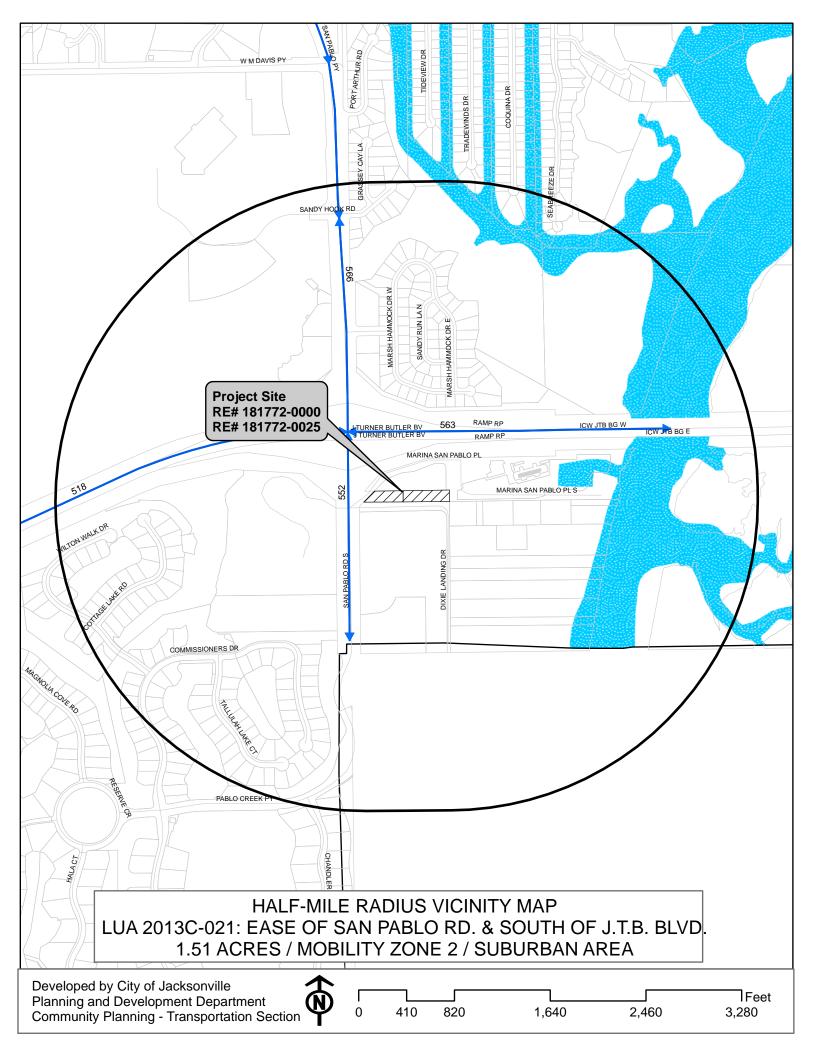
SUBJECT: Transportation Impact Analysis for LUA 2013C-021

This traffic impact analysis was conducted for Comprehensive Plan Amendment (CPA), a 1.51 acre site located at the corner of J. Turner Butler Boulevard and San Pablo Road in Jacksonville, Florida. The real estate numbers for the parcels as identified by the City of Jacksonville Property Appraiser's office are 181771-0000 and 181772 (Vicinity Map attached).

Trip generation was estimated using the *ITE Trip Generation Manual*, 9th Edition. The current land use for this property is Residential/Professional/Institutional (RPI) which allows 0.5 FAR per acre. This could result in a total 32,888 square feet of office/institutional use (ITE Land Use Code 710), on the 1.51 acre site. The number of trips expected to be generated by the existing potential use is 363 daily and 49 PM peak hour trips. The proposed land use is Community/General Commercial (CGC) which allows 0.35 FAR per acre. The proposed use of property is for a 23,031 commercial use space (ITE Land Use Code 820). The proposed land use will generate 2,222 daily and 190 PM peak hour trips. A 15% pass-by capture percentage was applied. There were 1,859 net daily and 141 PM peak hour trips for the roadway link analysis. A copy of the Trip Generation table is attached as **Table A**.

Trip distribution was conducted using the most recent version of the North Florida Transportation Planning Organization's NERPM model. **Table B** shows the resultant trip distribution percentages for each of the study area links. The results in **Table C** include the complete roadway characteristics, the amendment daily traffic for each link, the total traffic with 5-year growth, and the new proposed level of service of the roadway link.

San Pablo Road is the directly accessed functionally classified roadway to be impacted by this project. San Pablo has a maximum daily service volume of 39,800 vpd and a 2012 daily traffic volume of 4,974 vpd and is currently operating at an acceptable LOS C. This road segment currently has sufficient capacity to accommodate the expected traffic volumes proposed by this development.



Produced by:	Planning and Development Department		LB
opplication Number:	2013C-021		
Ordinance Number:		Date	9/13/2013

Table A

Trip Generation Estimation

Number of Acres	ITE Land Use Code 820	Potential Number of Units (X) 23,021	Independent Variable (Units) 1,000 SF of GLA	Estimation Method (Rate or Equation) Ln(T) = 0.67 Ln(X) +5.83 / 1000 Ln(T) = 0.65 Ln(X) +3.31 / 1000	Gross Trips PM/Daily 224 2,614	Less Internal Trips 0.00% 0.00%	* Less Pass-By Trips 15.00% 15.00% Total Section 3 Section 2 - Section 1	Net New PM Peak Trip Ends 190 190 141	Net New Daily Trip Ends 2,222 2,222 2,222 1,859
of Acres	Land Use Code	Number of Units (X)	Variable (Units)	(Rate or Equation) Ln(T) = 0.67 Ln(X) +5.83 / 1000	PM/Daily 224	Internal Trips 0.00%	Pass-By Trips 15.00%	PM Peak Trip Ends	Daily Trip Ends
of Acres	Land Use Code	Number of Units (X)	Variable (Units)	(Rate or Equation) Ln(T) = 0.67 Ln(X) +5.83 / 1000	PM/Daily 224	Internal Trips 0.00%	Pass-By Trips 15.00%	PM Peak Trip Ends	Daily Trip Ends
of Acres	Land Use Code	Number of Units (X)	Variable (Units)	(Rate or Equation) Ln(T) = 0.67 Ln(X) +5.83 / 1000	PM/Daily 224	Internal Trips 0.00%	Pass-By Trips 15.00%	PM Peak Trip Ends	Daily Trip Ends
of Acres	Land Use Code	Number of Units (X)	Variable (Units)	(Rate or Equation)	PM/Daily	Internal Trips	Pass-By Trips	PM Peak Trip Ends	Daily
	Land Use	Number of Units	Variable			Internal	Pass-By	PM Peak	Daily
Number			Independent	Estimation Method	Gross Trips				
							I		
							Total Section 2	49	363
		02,000		T = 11.03 (X) / 1000	363	0.00%	0.00%	10	363
1 51	710	32,888	1 000 SE OE GLA	T = 1.49 (X) / 1000	49	0.00%	0.00%	49	
	Code	(X)	(Units)						
of Acres	Use	of Units	Variable	(Rate or Equation)	Gloss Tips	Trips	Trips	Trip Ends	Daily Trip End
Niversham	ITE	Potential	la den en de st	Entire stine Marth and	Oren Tring	Less	* Less	Net New	Net New
							Total Section 1	0	0
							5	Ũ	
1.51							0	0	0
	0000	(77)	(01110)						
Number of Acres	Land Use Code	Number of Units	Independent Variable (Units)	Estimation Method (Rate or Equation)	Gross Trips	Internal Trips	Pass-By Trips	PM Peak Trip Ends	Net New Daily Trip Ends
	1.51 Number	of Acres Use Code 1.51 Number ITE Land of Acres Code	Number of Acres Land Use Code Number of Units (X) 1.51	Number of Acres Land Use Code Number of Units (X) Independent Variable (Units) 1.51	Number of Acres Land Use Code Number of Units (X) Independent Variable (Units) Estimation Method (Rate or Equation) 1.51	Number of Acres Land Use Code Number of Units (X) Independent Variable (Units) Estimation Method (Rate or Equation) Gross Trips 1.51	Number of Acres Land Use Code Number of Units Independent Variable (Units) Estimation Method (Rate or Equation) Gross Trips Internal Trips 1.51	Number of Acres Land Use Code Number of Units (X) Independent Variable (Units) Estimation Method (Rate or Equation) Gross Trips Internal Trips Pass-By Trips 1 1 1 1 1 1 1 1.51 1 1 1 1 1 1.51 1 1 1 1 1 1.51 1 1 1 1 1 1.51 1 1 1 1 1 1.51 1 1 1 1 1 1.51 710 32,888 1,000 SF OF GLA T = 1.49 (X) / 1000 49 0.00% 0.00%	Number of Acres Land Use Code Number of Units Independent Variable (Units) Estimation Method (Rate or Equation) Gross Trips Internal Trips Pass-By Trips PM Peak Trip Ends 1 1 1 1 1 1 1 1 1.51 1 1 1 1 1 1 1 1.51 1 1 1 1 1 1 1 1.51 1 1 1 1 1 1 1 1.51 1 1 1 1 1 1 1 1.51 710 32,888 1,000 SF OF GLA T = 1.49 (X) / 1000 49 0.00% 0.00% 49

Source: Trip Generation, 9th Edition, ITE * Pass-by Trip % - COJ Planning & Development Department

9/1	7/201	3
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	Produced by:	Planning and Development Department			LB
2013C-01	Application Number:	2013C-021			
	Ordinance Number:		0	Date	9/12/2013

Table B

Net New Daily External Trip Distribution

а	b			(b*c)	(0*0)
141	1,859	= Total Net New External Trips (Table A)	C	(b*c)	(a*c)
			Percent of	Net New	Net New
			Total Net	Daily	Peak Hour
Link ID	Roadway Name	From / To	New Daily	External	External
2.19			Amendment	Amendment	Amendment
			Trips	Trips	Trips
552	SAN PABLO RD	J. TURNER BUTLER BLVD TO ST. JOHNS COUNTY LINE	98.50%	1831	139
518	J TURNER BUTLER BLVD (SR 202)	HODGES BLVD TO SAN PABLO RD	50.40%	937	71
563	J TURNER BUTLER BLVD (SR 202)	SAN PABLO RD TO INTRACOASTAL WATERWAY	17.12%	318	24
566	SAN PABLO RD	WM DAVIS PKWY/PORT ARTHUR TO J TURNER BUTLER BLVD	31.25%	581	44

BOLD Indicates Directly Accessed Segment(s)

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Application Number:	2013C-021	
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Table C

Roadway Link Analysis

Link ID	Road		Roadway	State or		Adopted Service Volume		Background T		Amended Trips	Total Trips	Percent Capacity Used	Pk Hour LOS with
Number	Name	Termini	Classification	Non-State	Number		Daily	1 Year	Volumes w/	Daily	Daily	with Amened	Land Use
				Road	of Lanes	Daily	Volumes	Growth %*	5 yr Growth	External	External	Trips	Change
						а	b	C	d	е	f	g	h
552	SAN PABLO RD	J. TURNER BUTLER BLVD TO ST. JOHNS COUNTY LINE	Minor Arterial	CITY	4	39,800	4,974	7.61%	7,177	1,831	9,008	22.63%	С
518	J TURNER BUTLER BLVD (SR 202)	HODGES BLVD TO SAN PABLO RD	Freeway	FDOT	6	116,600	77,500	1.70%	84,315	937	85,252	73.12%	С
563	J TURNER BUTLER BLVD (SR 202)	SAN PABLO RD TO INTRACOASTAL WATERWAY	Freeway	FDOT	4	77,900	59,500	1.90%	65,371	318	65,690	84.33%	C
566	SAN PABLO RD	WM DAVIS PKWY/PORT ARTHUR TO J TURNER BUTLER BLVD	Minor Arterial	CITY	6	59,900	33,888	0.95%	35,529	581	36,109	60.28%	C

* As determined from Trend Analysis or FDOT LOS Report BOLD Indicates Directly Accessed Segment (s)

Data from City of Jacksonville Road Most recent Links Status Report dated 9/1/2013 Data from 2012 FDOT LOS Report dated 9/1/2013

Major Intersections List

SIS Interchanges/ SHS Intersections within Impact Area

