

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT VI

General Comments

1. **COMMENT:** The ramp operational analysis will have to be reviewed after sufficient documentation on the development of ramp volumes is provided. This would apply to the existing, future background, and future with project analyses.

APPLICANT RESPONSE: FDOT District VI Attachment 1 – Ramp Volumes provides traffic projections for the ramps analyzed.

2. **COMMENT:** We require separate maps showing project distribution (percent) and project traffic assignment (number of project trips).

APPLICANT RESPONSE: FDOT District VI Attachment 2 – Project Distribution and FDOT District VI Attachment 3 – Project Assignment provide project traffic assignment and project traffic distribution maps as requested.

3. **COMMENT:** The ADA must identify developer funding of the HEFT/NW 170th Street interchange. The ADA must also identify the level of development at which the interchange is required to be open to traffic. The level of development is needed since tracking the number of trips is very difficult for a local government to administer. Preferable to this approach is identifying a date that the interchange needs to be open to traffic, given that it may take two years to design, permit, and construct the project.

APPLICANT RESPONSE: The sensitivity analysis provided in Appendix 21-14 (R) – Sensitivity Analysis found in the response to the First Statement of Information Needed submitted April 15th, 2008, was prepared to demonstrate the amount of development that can be supported prior to the need for an interchange on the HEFT at NW 170 Street. The analysis shows that without the interchange, development generating up to 2,000 pm peak hour trips can be supported by the street network. The Applicant contemplates that the development order issued for the Beacon Countyline DRI will contain a condition that will limit development to the issuance of certificates of occupancy for an equivalent amount of development which generates 2,000 pm peak hour net new external trips prior to commence of construction of an interchange on the HEFT at NW 170 Street. The following sample mix of land uses would generate 2,000 pm peak hour two-way trips:

<u>Land Use</u>	<u>Sample Intensity</u>
Warehouse	3,000,000 Square Feet
Retail	100,000 Square Feet
Office	225,000 Square Feet

Furthermore, the sensitivity analysis was performed for the build-out year (2018).

Identifying committed funding for the interchange is not feasible at this time. That will require extensive discussions with Florida's Turnpike Enterprise. However, the Applicant has agreed that the DRI will not proceed through build-out until the interchange is constructed.

Capacity Assumptions:

12. **COMMENT:** Segment, intersection and ramp operational analyses will be thoroughly reviewed in the next round after the previously stated comments are addressed.

Applicant response: This comment has been acknowledged by the Applicant.

KAI response: KAI was unable to review the ramp operational analysis because ramp volume development information was not provided in the appendices. The applicant should provide a table with existing and projected ramp volume development. The ramp analyses will be re-reviewed after this additional information is submitted.

APPLICANT RESPONSE: FDOT District VI Attachment 1 – Ramp Volumes provides traffic projections for the ramps analyzed.

Year 2018 Future Traffic Conditions (without the project)

18. **COMMENT:** Segment, intersection and ramp operational analyses will be thoroughly reviewed in the next round after the previously stated comments are addressed.

Applicant response: This comment has been acknowledged by the Applicant.

KAI response: KAI was unable to review the ramp operational analysis because ramp volume development information was not provided in the appendices. The applicant should provide a table with existing and projected ramp volume development. The ramp analyses will be re-reviewed after this additional information is submitted.

APPLICANT RESPONSE: FDOT District VI Attachment 1 – Ramp Volumes provides traffic projections for the ramps analyzed.

Year 2018 Future Traffic Conditions (with the project)

23. **COMMENT:** In addition to the appendix material provided, a map depicting the projects trip distribution and traffic assignment should be included. It appears (based on appendices and tables) that the total traffic distribution to/from the site does not equal 100%.

Applicant response: A map showing the project assignment has been included as Attachment 21-4.

KAI response: Not addressed. A project assignment and a project distribution map (one of each) must be provided. These maps must depict the entire study area, not just the roadways adjacent to the proposed development.

APPLICANT RESPONSE: FDOT District VI Attachment 2 – Project Distribution and FDOT District VI Attachment 3 – Project Assignment provide the information requested.

25. **COMMENT:** Segment, intersection and ramp operational analyses will be thoroughly reviewed in the next round after the previously stated comments are addressed.

Applicant response: This comment has been acknowledged by the Applicant.

KAI response: We were unable to review the ramp operational analysis because ramp volume development information was not provided in the appendices. The applicant should provide a table with existing and projected ramp volume development. The ramp analyses will be re-reviewed after this additional information is submitted.

APPLICANT RESPONSE: FDOT District VI Attachment 1 – Ramp Volumes provides traffic projections for the ramps analyzed.

HEFT/NW 170th Street Sensitivity Analysis

26. **COMMENT:** It is understood that the purpose of the sensitivity analysis was to determine the appropriate year/build-out size that the HEFT/170th interchange should be constructed. The current technical analysis applied is unclear and appears unacceptable to determine the year the interchange is needed. Two options for an acceptable revised analysis are discussed below:

1. Analyze the system without the interchange (with adjusted trip distribution, etc.). Once the system breaks, that is the year the interchange should be constructed. Then an analysis should be performed with the new distribution based on the inclusion of the interchange. The developer's proportionate share of the interchange should be calculated and incorporated into the report.
2. If the developer is unwilling to proceed without an interchange, than no sensitivity analysis is necessary as this implies the interchange will need to be constructed by year of project build-out. A proportionate share calculation is sufficient under this option.

Applicant response (for 26.1 and 26.2): It was agreed during discussions with all reviewing the number of trips that can be supported prior to the construction and opening of the interchange as opposed to a specific date. Further description of the analysis has been included in pages 21-22 and 21-28(R).

KAI response: The development order must identify the amount of development (square footage per land use) that can be built prior to the opening of the interchange. The development order must also contain a year by which the interchange must be open to traffic or alternatively state at what percentage of the build-out is it necessary to begin constructing the interchange so that it is open to traffic at the appropriate time.

The applicant must acknowledge funding of the interchange in the submittal under Section H. This interchange is not planned for and if the applicant is applying their project trips to they must identify funding.

APPLICANT RESPONSE: The sensitivity analysis provided in **Appendix 21-14 (R) – Sensitivity Analysis found in the response to the First Statement of Information Needed submitted April 15th, 2008**, was prepared to show how much development can be supported prior to the need for an interchange on the HEFT at NW 170 Street. Please see the response to Comment 3, above, for further information.

Additional Comments Based on April 2008 SIN1 Submittal

27. **COMMENT:** Based on KAI’s review of Tables 21-7(R) and 21-8(R), the following segments were found significant and failing under Future Traffic Conditions with Project Scenario:

- HEFT from I-75 to NW 170th Street (northbound)
- HEFT from NW 170th Street to Okeechobee Road (southbound)
- HEFT from Okeechobee Rd to NW 106th Street (southbound)
- HEFT from NW 106th Street to NW 74th Street (southbound)
- NW 170th Street from NW 87th Avenue to NW 77th Avenue (eastbound)
- W 68th Street/NW 122nd Street from NW 97th Avenue to NW 87th Avenue (eastbound)

In the revision, the one-way “% consumption” column must be included in Table 21-8(R). Additionally, the applicant must calculate their proportionate-share towards all identified failing and segments, ramps and intersections.

APPLICANT RESPONSE: Table 21-8 (R) – Future Traffic Conditions with Project found in **Question 21 – Transportation** includes the one-way “Percent Consumption”, as requested.

During the Second Sufficiency review of the Beacon Countyline DRI, several agencies requested that proportionate share calculations be included as part of the response. A meeting was held and a preliminary agreement was reached on the impact of HB 7203 (2006) on the analysis of revised **Question 21 – Transportation**, further discussions of its impact on proportionate share are needed. The impact of this bill will be further discussed once the analyses and data are generally found to be sufficient, to justify the next level of analysis required to establish an agreement as to mitigation and proportionate share. At that time the Applicant and review agencies meet to discuss the Development Order. Also, review comments during the second sufficiency resulted in a significant revision of **Question 21 – Transportation**. Proportionate share calculations will be prepared and provided once each of the agencies' review of **Question 21 – Transportation** is finalized.

28. **COMMENT:** It is unclear who is responsible for the identified ramp improvements listed in Table 21-9(R). The applicant must clearly state which ramps they are significant on (5% or more of the ramp capacity – for planning purposes the Department will agree to a 1,600 vph capacity for a one-lane ramp). In addition,

the applicant must provide proportionate-share calculations where significant and adverse on a ramp.

APPLICANT RESPONSE: The Applicant intends to address mitigation options once the agency review indicates a comfort level with the underlying analysis. Please review the response to Comment 27, above, for further information regarding proportionate share calculations.

- 29. COMMENT:** It is unclear under Section F what projects are needed to mitigate the proposed development's impacts on the existing + committed network under the build-out year. In the revised submittal, the applicant must state who is responsible for all improvements needed at project build-out. Proportionate-share calculations must also be included under this section.

APPLICANT RESPONSE: Table 21-8 (R) – Future Traffic Conditions with Project found in revised **Question 21 – Transportation** includes the one-way percent Consumption, as requested.

The Applicant intends to mitigate project impacts through a proportionate share approach. Such an analysis will be prepared and provided upon this traffic analysis being found generally sufficient. Please review the response to Comment 27, above, for further information regarding proportionate share calculations.

FDOT District VI Attachment 1

Ramp Volumes

**FDOT District VI Attachment 1
Ramp Volumes
Beacon Countyline DRI**

Express way	Ramp	PM PEAK HOUR																						
		Count		Seasonal Factor	Truck Factor	Growth Rate	Existing (1)	Source	Growth Rate (2)	Back ground	Diver sions	Country Lakes DRI	Doral Place	Islands at Doral	FEC	Dun woody	Gra ham East	Gra ham West	Blue Grass Lakes	E Miramar DRI	Comm Devs	Future w/o Project	Pro ject	Future w/ Project
		Day 1	Day 2																					
HEFT / I-75	NEB HEFT Mainline (before Diverge)						5,713	Table 21-1	6.0%	7,908	0	28	5	34	255	8	6	23	0	127	485	8,393	466	8,859
	I-75 NB On-Ramp	2,333	2,321	1.02	1.029	4.2%	2,542	Sta 6083	4.2%	3,187	0	28	2	15	102	0	0	0	0	146	3,333	329	3,662	
	NB I-75 Mainline (after Merge)						8,441	Table 21-1	2.3%	9,572	0	347	6	15	102	37	34	61	0	40	640	10,213	329	10,542
	SWB HEFT Mainline (after Merge)						3,934	Table 21-1	6.0%	5,446	0	79	10	69	138	16	12	46	0	257	627	6,073	209	6,282
	I-75 SB Off-Ramp	1,387	1,377	1.02	1.029	4.2%	1,510	Sta 6084	4.2%	1,893	0	79	3	30	55	0	0	0	0	167	2,060	148	2,208	
	SB I-75 Mainline (before Diverge)						7,039	Table 21-1	2.3%	7,982	0	987	12	30	55	75	69	123	0	80	1,431	9,413	148	9,561
HEFT / NW 170 Street	NB Before Diverge						5,713	Table 21-1	6.0%	7,908	-35	28	5	46	287	0	0	0	24	127	517	8,390	164	8,554
	NB Off Ramp						0		6.0%	0	51	0	0	12	32	0	0	0	24	0	68	119	164	283
	NB On Ramp						0		6.0%	0	86	0	0	0	0	8	6	23	0	0	37	123	486	609
	NB After Merge						5,713	Table 21-1	6.0%	7,908	0	28	5	34	255	8	6	23	0	127	486	8,394	486	8,880
	SB Before Diverge						3,934	Table 21-1	6.0%	5,446	0	79	10	69	138	16	12	46	0	257	627	6,073	222	6,295
	SB Off Ramp						0		6.0%	0	109	0	0	0	16	12	46	0	0	74	183	222	405	
	SB On Ramp						0		6.0%	0	59	0	0	25	17	0	0	0	21	0	63	122	333	455
	SB After Merge						3,934	Table 21-1	6.0%	5,446	-50	79	10	94	155	0	0	0	21	257	616	6,012	333	6,345
I-75 / NW 138 Street	NW 138 STREET EB ON RAMP	887	NA	1.04	1.046	NA	964	TM Count	2.3%	1,005	0	0	0	0	259	0	75	211	0	0	545	1,583	770	2,353
	I75 EB (after merge)						5,053	Table 21-1	2.3%	5,730	0	8	8	0	259	0	75	211	8	80	649	6,895	770	7,665
	NW 138 STREET WB OFF RAMP	683	689	1.04	1.046	2.3%	763	Sta 6075	2.3%	866	0	0	0	0	140	0	75	104	0	0	318	1,158	343	1,501
	I75 WB (before diverge)						6,059	Table 21-1	2.3%	6,871	0	8	4	0	140	0	75	104	8	40	379	7,391	343	7,734
I-75 / SR 826	I 75 EB before Diverge						5,053	Table 21-1	2.3%	5,730	0	503	8	0	259	0	95	211	8	80	394	6,895	770	7,665
	I75 EB to SR 826 SB Ramp (3)	1,584	1,646	1.08	1.025	1.9%	1,811	Sta 6071	1.9%	2,004	0	271	8	0	0	0	0	0	40	40	2,324	273	2,597	
	Gratigny WB to SR 826 SB Ramp (3)	1,660	1,660	1.04			920	Sta 6266	1.9%	1,018	0	0	34	51	0	0	0	0	0	0	1,103	0	1,103	
	Combined Ramp @ Merge	843	853	1.04	1.025	1.9%	2,731	Sum	1.9%	3,023	0	0	42	51	0	0	0	0	0	40	40	3,427	273	3,700
	SR 826 SB after Merge						7,031	Table 21-1	1.4%	7,592	-31	271	73	128	0	37	67	173	28	40	346	8,379	273	8,652
	SR 826 NB before Diverge						9,040	Table 21-1	1.4%	9,761	-39	95	37	63	0	75	136	352	31	20	614	10,531	122	10,653
	SR 826 NB to I 75 WB Ramp	2,986	2,869	1.04	1.025	1.9%	3,177	Sta 6085	1.9%	3,388	0	95	4	0	0	0	0	0	0	20	20	3,508	122	3,630
	I 75 WB After Merge						6,059	Table 21-1	2.3%	6,871	0	177	4	0	140	0	47	104	8	40	199	7,391	343	7,734

(1) Adjusted to 100th highest hour conditions, to 2007 by applying the average growth rate of both expressways, and by truck factor consistent with the roadway segments analyzed in the ADA.

(2) Average growth rate of expressways used for the ramp

(3) These two single lane ramps merge into a 2 lane ramp before merging into SR 826

FDOT District VI Attachment 1
Ramp Volumes
Beacon Countyline DRI

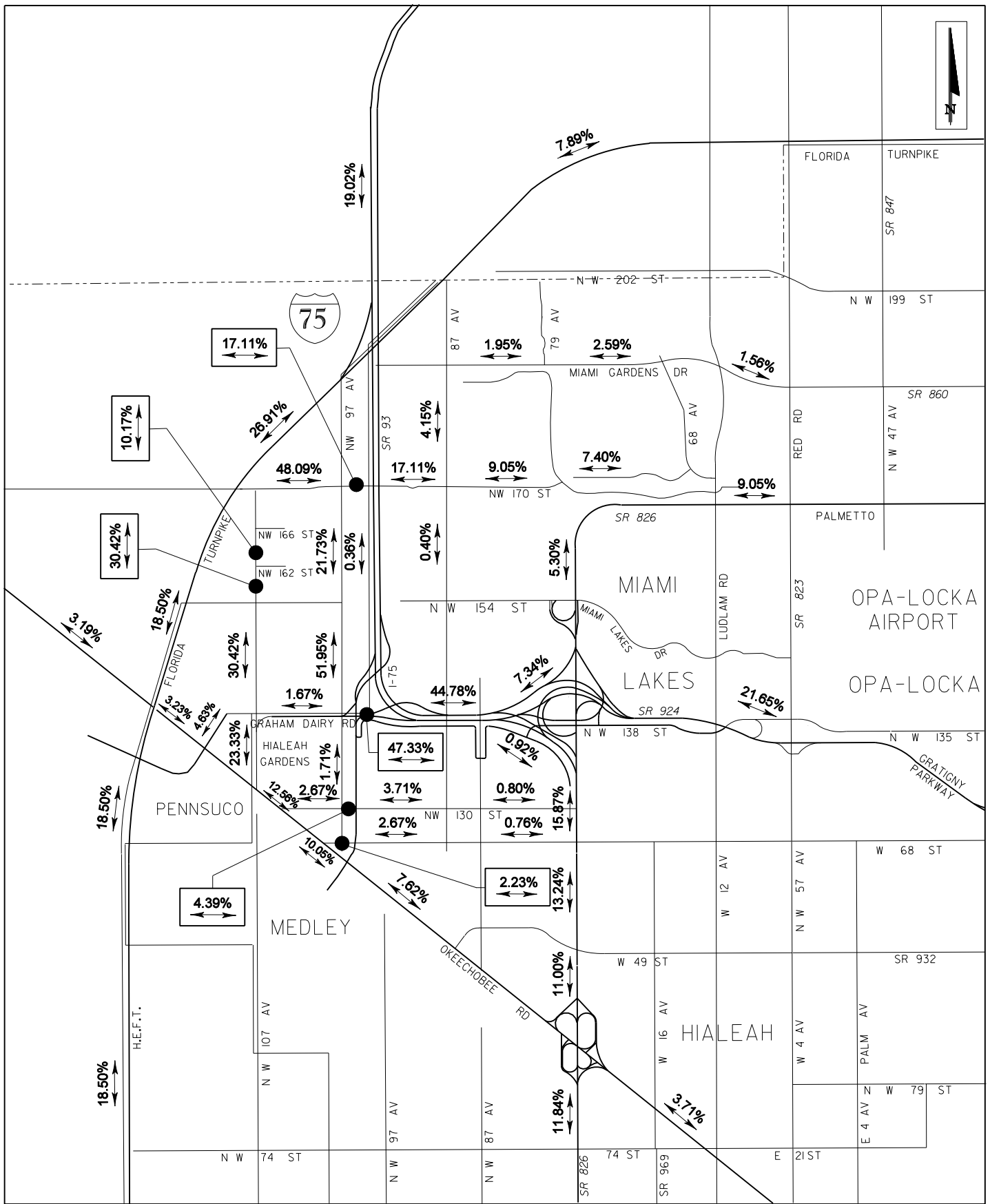
Express way	Ramp	AM PEAK HOUR																							
		Count		Seasonal Factor	Truck Factor	Growth Rate	Existing (1)	Source	Growth Rate (2)	Back ground	Diver sions	Country Lakes DRI	Doral Place	Islands at Doral	FEC	Dun woody	Gra ham East	Gra ham West	Blue Grass Lakes	E Miramar DRI	Comm Devs	Future w/o Project	Pro ject	Future w/ Project	
		Day 1	Day 2																						
HEFT / I-75	NEB HEFT Mainline (before Diverge)	3,624	NA	1.00	1.029	6.0%	3,951	Sta 9934 (4)	6.0%	5,470	0	36	10	72	58	24	20	69	0	257	546	6,016	95	6,111	
	I-75 NB On-Ramp	1,266	1,204	1.04	1.029	4.2%	1,410	Sta 6083	4.2%	1,768	0	36	3	15	23	0	0	0	0	0	77	1,844	67	1,911	
	NB I-75 Mainline (after Merge)						5,824	Sum	2.3%	6,604	0	445	12	31	23	114	113	186	0	80	1,004	7,609	67	7,676	
	NB I-75 Mainline (before Merge)	4,301	4,155	1.02	1.046	2.3%	4,413	Sta 2503	2.3%	5,005	0	410	9	0	0	114	113	186	0	80	911	5,916	0	5,916	
		3,675																							
	SWB HEFT Mainline (after Merge)	5,550	NA	1.00	1.029	6.0%	6,051	Sta 9934***	2.3%	8,375	0	24	2	14	210	5	4	14	0	127	401	8,776	381	9,157	
	I-75 SB Off-Ramp	2,962	2,827	1.04	1.029	4.2%	3,300	Sta 6084	1.9%	4,136	0	24	1	6	84	0	0	0	0	0	115	4,251	270	4,521	
						11,801	Sum	2.3%	13,382	0	300	3	6	84	23	23	38	0	40	517	13,899	270	14,169		
I-75 / NW 138 Street	NW 138 STREET EB ON RAMP I75 EB (after merge)						1,122	Sta 5076 AM/PM Ratio	1.9%	1,245	0	0	0	0	58	0	75	65	0	0	198	1,403	137	1,540	
							6,295	Sta 2501AM SB/PM NB Ratio	1.9%	7,139	0	15	2	0	58	0	75	65	15	3	234	7,468	137	7,605	
	NW 138 STREET WB OFF RAMP I75 WB (before diverge)	573	574	1.04	1.046	2.3%	638	Sta 6075	1.9%	724	0	0	0	0	213	0	75	319	0	0	607	1,394	532	1,926	
						4,893	Sta 2501AM NB/PM SB Ratio	1.9%	4,102	0	6	9	0	0	213	0	75	319	6	60	688	5,063	0	5,063	
I-75/SR 826	I 75 EB before Diverge						6,295	Sta 2501AM SB/PM NB Ratio	0	7,139	0	153	2	0	58	0	32	65	4	3	105	7,457	770	8,227	
	I75 EB to SR 826 SB Ramp (3)	1,991	1,963	1.04	1.025	1.9%	2,172	Sta 6071	0	2,403	0	82	2	0	0	0	0	0	2	2	2,489	273	2,762		
		1,976	1,924	1.08																					
	Gratigny WB to SR 826 SB Ramp (3)	571	561	1.04	1.025	1.9%	614	Sta 6266	0	655	0	0	7	11	0	0	0	0	0	0	0	673	0	673	
	Combined Ramp @ Merge						2,764	Sum	0	3,058	0	0	9	0	0	0	0	0	0	0	0	3,162	273	3,435	
	SR 826 SB after Merge	5,446	5,404	1.04	1.003	1.4%	5,768	Sta 6575	0	6,229	-25	82	16	26	0	113	223	532	16	2	886	7,215	273	7,488	
		5,511																							
	SR 826 NB before Diverge	4,677	4,606	1.04	1.003	1.4%	4,919	Sta 6575	0	5,311	-21	122	74	134	0	23	46	109	10	30	219	5,840	122	5,962	
	4,669																								
SR 826 NB to I 75 WB Ramp	1,432	1,490	1.04	1.003	1.4%	1,545	Sta 6085	0	1,710	0	122	9	0	0	0	0	0	0	30	30	1,871	122	1,993		
						4,893	Sta 2501AM NB/PM SB Ratio	0	5,549	0	227	9	0	0	213	0	156	319	3	60	539	6,536	343	6,879	

- (1) Adjusted to 100th highest hour conditions, to 2007 by applying the average growth rate of both expressways, and by truck factor consistent with the roadway segments analyzed in the ADA.
- (2) Average growth rate of expressways used for the ramp
- (3) These two single lane ramps merge into a 2 lane ramp before merging into SR 826
- (4) Continuous Count Station-Count for the first 2 Weeks of May

FDOT District VI Attachment 1
Project Volume on Ramps in Study Area
Beacon Countyline DRI

Expressway	Ramp	Project Traffic	Analyze
HEFT	NW 57 Avenue EB Off-Ramp	7	No
	NW 57 Avenue EB On-Ramp	0	No
	NW 57 Avenue WB Off-Ramp	0	No
	NW 57 Avenue WB On-Ramp	3	No
	Okeechobee Rd NB Off-Ramp	0	No
	Okeechobee Rd NB On-Ramp	0	No
	Okeechobee Rd SB Off-Ramp	0	No
	Okeechobee Rd SB On-Ramp	0	No
	NW 106 Street NB Off-Ramp	0	No
	NW 106 Street NB On-Ramp	0	No
	NW 106 Street SB Off-Ramp	0	No
	NW 106 Street SB On-Ramp	0	No
	NW 74 Street NB Off-Ramp	0	No
	NW 74 Street NB On-Ramp	4	No
NW 74 Street SB Off-Ramp	3	No	
NW 74 Street SB On-Ramp	0	No	
I-75	NB Off-Ramp to EB Miramar Parkway	76	No
	NB Off-Ramp to WB Miramar Parkway	133	No
	SB Off-Ramp to EB Miramar Parkway	0	No
	SB Off-Ramp to WB Miramar Parkway	0	No
	Miramar Parkway EB On-Ramp to NB I-75	0	No
	Miramar Parkway WB On-Ramp to NB I-75	0	No
	Miramar Parkway EB On-Ramp to SB I-75	42	No
	Miramar Parkway WB On-Ramp to SB I-75	26	No
	NW 186 Street NB Off-Ramp	3	No
	NW 186 Street NB On-Ramp	0	No
	NW 186 Street SB Off-Ramp	0	No
	NW 186 Street SB On-Ramp	2	No
	NW 138 Street NB On-Ramp	6	No
	NW 138 Street EB On-Ramp	401	Yes
NW 138 Street WB Off-Ramp	168	No	
NW 138 Street SB Off-Ramp	1	No	
EB Off-Ramp to NB Palmetto Expressway	64	No	
EB Off-Ramp to SB Palmetto Expressway	133	No	
Palmetto Expressway (SR 826)	NW 57 Avenue EB Off-Ramp	8	No
	NW 57 Avenue EB On-Ramp	0	No
	NW 57 Avenue WB Off-Ramp	3	No
	NW 57 Avenue WB On-Ramp	0	No
	NW 67 Avenue EB Off-Ramp	6	No
	NW 67 Avenue EB On-Ramp	34	No
	NW 67 Avenue WB Off-Ramp	2	No
	NW 67 Avenue WB On-Ramp	25	No
	Miami Lakes Drive NB Off-Ramp	10	No
	Miami Lakes Drive NB On-Ramp	0	No
	Miami Lakes Drive SB Off-Ramp	0	No
	Miami Lakes Drive SB On-Ramp	15	No
	NB Off-Ramp to EB Gratin Parkway	0	No
	NB Off-Ramp to WB I-75	64	No
	SB Off-Ramp to WB I-75	27	No
	SB Off-Ramp to EB Gratin Parkway	0	No
	NW 138 Street SB Off-Ramp	1	No
	NW 122 Street NB Off-Ramp	0	No
	NW 122 Street NB On-Ramp	19	No
	NW 122 Street SB Off-Ramp	27	No
	NW 122 Street SB On-Ramp	0	No
	NW 103 Street NB Off-Ramp	0	No
	NW 103 Street NB On-Ramp	31	No
	NW 103 Street SB Off-Ramp	14	No
	NW 103 Street SB On-Ramp	3	No
	Okeechobee Road NB Off-Ramp (East)	0	No
	Okeechobee Road NB Off-Ramp (West)	7	No
	Okeechobee Road NB On-Ramp	6	No
	Okeechobee Road SB Off-Ramp (East)	0	No
	Okeechobee Road SB Off-Ramp (West)	13	No
	Okeechobee Road SB On-Ramp	40	No
	South River Drive NB Off-Ramp (East)	0	No
	South River Drive NB Off-Ramp (West)	0	No
	South River Drive NB On-Ramp	3	No
South River Drive SB Off-Ramp (East)	10	No	
South River Drive SB Off-Ramp (West)	1	No	
South River Drive SB On-Ramp	0	No	
NW 74 Street NB Off-Ramp	0	No	
NW 74 Street NB On-Ramp	3	No	
NW 74 Street SB Off-Ramp	13	No	
NW 74 Street SB On-Ramp	0	No	
Gratin Parkway	WB Off-Ramp to NB Palmetto Expressway	0	No
	WB Off-Ramp to SB Palmetto Expressway	0	No
	NW 57 Avenue EB Off-Ramp	71	No
	NW 57 Avenue EB On-Ramp	0	No
	NW 57 Avenue WB Off-Ramp	0	No
NW 57 Avenue WB On-Ramp	27	No	

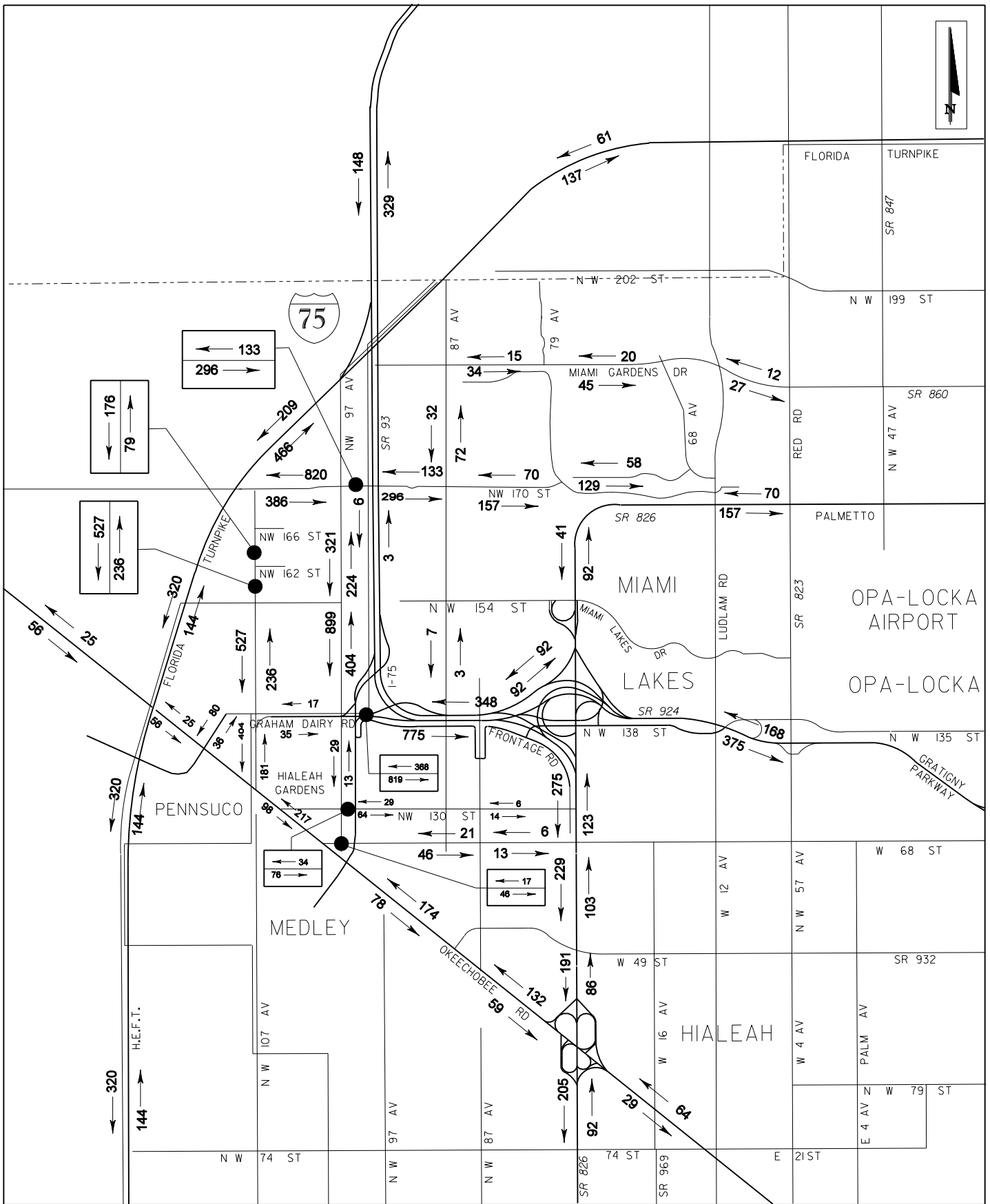
FDOT District VI Attachment 2
Project Distribution



Source: David Plummer & Associates

FDOT District VI Attachment 2
 PROJECT DISTRIBUTION
 Beacon Countyline DRI

FDOT District VI Attachment 3
Project Assignment



Source: David Plummer & Associates

FDOT District VI Attachment 3
 PROJECT ASSIGNMENT
 Beacon Countyline DRI