

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT VI

General Comments

1. **The analysis has numerous errors in the reporting of traffic counts, number of lanes, and service volumes.**

The analysis has been revised to correct any errors in traffic counts, number of lanes and service volumes.

2. **The applicant's use of unfunded improvements in the analysis is unacceptable, and only serves to lengthen the time and expense needed to complete the review. It is a long standing policy of the SFRPC that the ADA can only use committed improvements in the first three years of the TIP as the network for the analysis.**

The analysis has been revised after discussion with FDOT District VI to provide more explanation on the network analysis.

3. **The applicant has not addressed the issue of the timing of the construction of the HEFT/NW 170th Street interchange.**

The timing of the construction the HEFT/NW 170th Street interchange will take place as discussed and agreed upon at the pre-application conference on June 5th, 2007.

Existing Conditions

Study Area

4. **The analysis should include NW 186th Street and the interchange at NW 186th and I-75.**

The analysis has been revised to include NW 186th Street as requested. Please note that Project Consumption is considerably less than significant (less than 3% verse 5%) for all roadway links analyzed. Please note that the model estimated project volume on the ramps at the I-75/Miami Gardens Drive interchange is 12 vehicles per hour during the PM peak. It was agreed during methodology discussions (consistent with FDOT's *Site Impact Handbook* recommendations) that ramp analysis would be performed for ramps where the project traffic is projected to be 200 vehicles per hour (vph). Further analysis of the interchange is, therefore, not warranted.

Traffic Volumes

5. **The applicant should indicate the data collection year on Exhibit 21-2.**

Exhibit 21-2 (R) has been revised to indicate the year of the data shown.

6. **In Exhibit 21-2, the I-75 volume between NW 138th Street and SR 826 is not consistent with the lane configuration assumption. The 112,000 count was taken within the SR 826 and I-75 interchange (1,000 feet west of SR 826), where the facility narrows to 3 lanes; however, 5 lanes were assumed in the analysis. The volume should be adjusted to indicate 117,000 for the segment between NW 138th**

Street and SR 826. (This volume was developed by taking the 112,000 count within the interchange and adding/subtracting the on and off-ramp volumes to/from SR 826).

Consistent with the Miami-Dade Concurrency Management Database, station #2500 was used for I-75 between NW 138 Street and SR 826. The count label: I-75, 1,000' west of Palmetto Expressway, suggests the count is taken between interchanges. Nevertheless, link analysis and Exhibit 21-2 (R) have been updated to reflect the adjusted volume as requested. The results show that this segment of I-75 continues to operate within the adopted levels of service standard.

- 7. In Exhibit 21-2, the volume reported on I-75 north of the HEFT (146,500) is the 2006 count located within the I-75/HEFT interchange (200' north of the HEFT). The 2006 count further north on I-75, south of Miramar Parkway, increases to 163,000 (count station #2000). The applicant should adjust the analysis to reflect the 163,000 count.**

Consistent with the Miami-Dade Concurrency Management Database, station 2503 was used for I-75 north of HEFT to the Miami-Dade/Broward Countyline. Again, the count label: I-75, 200' north of the HEFT, suggests the count is taken between interchanges. Nevertheless, link analysis and Exhibit 21-2 (R) were revised to reflect the volume at station #2000, as requested. The conclusions on this link are consistent with the previous findings.

- 8. The SR 826 westernmost 2006 count depicted on Exhibit 21-2, before the facility travels north and south, is too low and should be adjusted to indicate 135,313. The 102,500 reported volume was taken from a count station further downstream, south of the NW 154th interchange. Based on the continuous unit count station (#0137) located 2,600 feet west of NW 67th Avenue, the volume is 135, 313.**

Consistent with the Miami-Dade Concurrency Management Database, Exhibit 21-2 (R) shows the traffic count for station #576 between NW 138 Street and NW 67 Avenue. The link analysis however did reflect the count for station # 0137. Exhibit 21-2 (R) has been revised to reflect the count at this station.

- 9. The growth rate used to adjust all 2006 counts to 2007 conditions should be included in the body of the report.**

The following background growth rates listed in page 21-17 (R) of the report were used to update 2006 traffic counts to 2007 conditions:

HEFT	6.0%
I-75	2.3%
SR 826	1.4%
Miami-Dade County surface streets	0.6%

- 10. The minimum K factor FDOT will accept on the FIHS roadways is 0.90. The volumes should be adjusted on the facilities where a lower K factor was applied.**

During methodology discussions, Kittelson and Associates recommended, and the Applicant agreed, that the published K_{100} and D_{100} factors would be checked against the following minimum acceptable values:

- Large Urbanized and other urbanized areas:
- Freeways – 0.085
- Highways – 0.09

K and D factors used in the analysis abide by these guidelines, except for one link on I-75. The K factor for that link has been revised to be consistent with the adjacent links and the minimums listed above.

- 11. A table summarizing how the volumes were developed should be provided. Currently, year 2006 AADT's are summarized in a figure and the remaining information in appendices. A table breaking down how the PM peak hour volumes were developed should be included in the DRI.**

Example:

2006 AADT or PM Count	% growth	Adjusted 2007 AADT or PM Count (where applicable)	K/D Factor (where applicable)	2007 PM Peak Hour	Growth Rate	Committed Trips	2018 Background Traffic (PM Peak)	Project Distribution	Project Net New Trips	Project Pass-by and Diverted Trips	2018 Total Traffic (PM Peak)
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A table has been prepared and is included as Attachment 21-2 (included in **Question 21 – Transportation**) to show each component of the traffic forecasts developed for future (2018) traffic conditions.

Lane Configurations

- 12. The I-75 segments from Miramar Parkway to the HEFT and from NW 138th Street to SR 826, are 8 lanes as indicated in Exhibit 21-2. The applicant should adjust the analysis for these segments to reflect 8 lanes not 10 lanes.**

The portion of I-75 between NW 138 Street and SR 826 operates as a 10 lane facility. Lanes to and from the ramps at the interchanges on either side extend through the length of the segment. The previously submitted analysis showed that 10 lanes will meet the demand for future conditions with Project. However, since 2 of these lanes can be considered auxiliary, HCS+ freeway analysis was performed for this segment to determine the adequacy of 8 lanes. Worksheets are included in Appendix 21-3 (R). The analysis shows that this segment of I-75 will meet the adopted LOS standard for future conditions with project.

The portion between Miramar Parkway and HEFT is 10 lanes through portions but not in its entirety. The number of lanes and Service Volume reported were changed to reflect an 8 lane capacity. As previously recommended, 12 lanes are needed on this segment to meet adopted level of service standards.

13. **All service volumes should be double checked to ensure they correspond to their laneage (ex: Gragny Expressway is reported as a 3 lane divided; however, a maximum service volume for a 4 lane divided highway was used in the analysis).**

The service volume for Gragny Parkway was revised to reflect a 6 lane divided facility. The facility will continue to operate within the adopted level of service standard.

Capacity Assumptions

14. **The service volume assumed for the HEFT is higher than those reported in the FDOT generalized tables. The applicant should revise the HEFT service volumes to be consistent with the generalized tables.**

The service volumes used on HEFT reflect those reported in the FDOT generalized tables for Freeways with interchange spacing greater than or equal to 2 miles apart. Through the limits of the study area, and including the proposed interchange, all segments of HEFT meet the above reference interchange spacing.

Operational Analyses

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

This comment has been acknowledged by the Applicant.

Recommended Improvements

16. **The applicant has identified several improvements under existing conditions. Although these recommendations are noted by the FDOT, they are not relevant to future year analyses unless funding is committed.**

*** (See comment #15 and #23) All improvement projects identified in the DRI ADA that are not in the 3-year work program or 5-year CIE must have proportionate share calculations or developer commitments cited. The projects cannot be assumed in place under background conditions (i.e., year 2018 without the project).**

It was agreed during discussions with reviewing agencies that the improvements needed to eliminate backlogs will be discussed in the text, but will not be included in the analysis of future traffic conditions. Tables depicting roadway segment analysis have been revised to reflect this.

Year 2018 Future Traffic Conditions (without the project)

Growth Rate

17. **It is not clear that the HEFT volumes were grown 6% per year between 2006 and 2012 and 2.3% per year between 2012 and 2018. The applicant should include a volume summary table for each segment of the HEFT that shows 2006, 2012, and 2018 volumes.**

Half of the estimated 6% background growth rate was used on HEFT between 2007 and 2018, as agreed upon during methodology discussions. The components of future (2018) traffic conditions are provided in Attachment 21-2 located in **Question 21 - Transportation**.

Committed Development

- 18. Maps for each committed development depicting their trip distribution and volume assignment are needed in the appendix.**

Appendix 21-10 (R) has been revised to include the requested maps.

Planned Improvements

- 19. Per DRI rules, FDOT will only accept projects that are committed in the 3-year work program and 5-year CIE. The applicant should revise the analysis with the non-programmed projects removed (i.e., those projects listed on pages 21-10, 27, and 28).**

See response to Comment 16 above.

- 20. All roadway improvements summarized in Table 2 should be double checked against documents provided in Appendix 3 for consistency (e.g.: the planned improvement on Okeechobee Road between East of W 12th Street and W 19th Street is “landscaping”, not “add lanes & reconstruction”).**

The improvement mentioned above has been completed. The remaining tasks are landscape and design. The analysis for this segment shows the number of lanes currently built. Table 21-2 (R) has been revised to reflect this.

Operational Analyses

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

The Applicant will encourage all purchasers within the Project to coordinate with the South Florida Commuter Services (SFCS), funded by the Florida Department of Transportation, to provide assistance to commuters through the following services:

- Work Plan Needs Assessment and Program Development
- Carpooling Programs
- Vanpooling Programs
- Emergency Ride Home Services
- Transit Trip Planning Services
- Employee Tax Benefit Assistance

In addition, the following TDMs will be implemented with the intent to reduce single occupant vehicle trips to the development:

- An accessible internal pedestrian access system which will connect the site to bus stops to be dedicated within the project.
- On-site management staff will promote and/or coordinate carpooling and vanpooling among employees.
- Managers will have the ability to implement incentives such as priority parking for carpools and/or vanpools.
- On-site management and concierge staff will disseminate information on transit services available to both employees and guests, including (but not limited to) bus services and Tri-Rail Train Services.
- Management staff will provide a liaison with SFCS to develop and maintain an effective TDM program.
- The nature of the uses proposed in this development encourages the staggered work hours, where different work groups are assigned to begin work at different hours. This strategy spreads the demand for travel from the peak-hours of the street to other times in the day.

Year 2018 Future Traffic Conditions (with the project)

Trip Generation and Distribution/Assignment

- 22. In order to apply a transit trip reduction to the trip generation, a letter from the City of Hialeah should be included in the appendix regarding their commitment to extend existing transit services to the site. Although this was included in the methodology, it is unreasonable to assume that this project can support the countywide average of 1.5% transit utilization.**

This comment has been acknowledged by the Applicant.

- 23. The applicant should demonstrate in a figure that (1) all pass-by trips were removed from NW 170th Street and NW 97th Avenue only, and (2) that the 8% pass-by trip reduction does not exceed 10% of the total roadway traffic.**

Appendix 21-6 (R) has been revised to include the assignment of pass-by and diverted linked trips, as requested.

- 24. Diverted trips are unlikely to be generated by this development because the retail portion is not regional in size.**

It was agreed during methodology discussions that *diverted linked trips* would constitute less than 10% of the retail trips, diverted volumes would not exceed 10% of the volume on the streets where the diversions are taken, and diversions would be limited to/from the Homestead Extension of the Florida Turnpike (HEFT). Diverted linked trips used in the analysis constitute 5% of the external retail trips for the Project and diversions were taken from HEFT only.

- 25. The assumed warehouse internalization is high. The applicant should (1) provide the ITE internalization matrix used to calculate the internalization rates, and (2) cite the ITE documentation which supports the warehouse internalization rates applied to the project trip generation estimate.**

Table 21-4 (R) provided in the ADA is based on the ITE internalization guidelines. It was agreed during discussions with the reviewer that internalization between the warehouse and retail components would be eliminated. Table 21-4 has been revised to reflect this. The resulting data has been transferred into the official ITE internalization matrix form and is provided as Attachment 21-3.

- 26. The applicant should provide a map depicting the project trip distribution and traffic assignment. Our review indicates that the total traffic distribution to and from the site does not equal 100%.**

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

- 27. The “% Consumption” summarized in Table 21-7 should be calculated for each direction (i.e., NB and SB, or EB and WB). For example, NB I-75 between Miramar Parkway and HEFT should show a project capacity consumption of 5.3% (i.e., 491/9340). The analysis should be revised accordingly.**

Table 21-7 (R) has been revised to show one-way and two-way consumption.

Planned Improvements

- 28. Per DRI rules, FDOT will only accept projects that are committed in the 3-year work program and 5-year CIE. A proportionate share contribution should be calculated for all other improvements (i.e., those projects listed on pages 21-10, 27, and 28).**

It was agreed during discussions with reviewing agencies that the improvements needed to eliminate backlogs will be discussed in the text, but will not be included in the analysis of future traffic conditions. Tables depicting roadway segment analysis have been revised to reflect this.

Operational Analyses

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

The comment has been acknowledged.

HEFT/NW 170th Street Interchange Sensitivity Analysis

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

It was agreed during discussions with all reviewing agencies that the sensitivity analysis provided is acceptable in determining 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).

31. **Analyze the system without the interchange (with adjusted trip distribution, etc.). The year that roadway segments are overloaded is the year the interchange should be constructed. An analysis should then be performed with the new distribution based on the inclusion of the interchange. The developer's proportionate share of the interchange design and construction cost should be calculated and incorporated into the report.**

It was agreed during discussions with all reviewing agencies that the sensitivity analysis provided is acceptable in determining 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).

32. **If the developer is unwilling to proceed without an interchange, then no sensitivity analysis is necessary as this implies the interchange will be constructed by the opening year of the project. A proportionate share calculation for the interchange design and construction cost is sufficient under this option.**

It was agreed during discussions with all reviewing agencies that the sensitivity analysis provided is acceptable in determining 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).