APPENDIX Q

FDOT and Collier County Correspondence
RE: I-75/Everglades Boulevard Interchange Justification Report, April 2012

Dear Mr. Casalanguida:

This letter is in response to your request for a new interchange along I-75 at Everglades Boulevard in Collier County. The Department has performed a thorough review of your I-75 at Everglades Boulevard Interchange Justification Report (IJR) submitted on April 27, 2012. The approving authority for a new access on the interstate system is Federal Highway (FHWA). FHWA has eight (8) policy points that need to be satisfactorily addressed in order to obtain approval for the new access. Based on our review, it appears that the current proposal does not satisfactorily address these 8 policy points and some major issues still remain in order for the Department to forward such a proposal to FHWA. A copy of the FHWA 8 policy points and all of our comments are attached to this letter. The major issues identified by the Department are as follows:

1. Traffic Distribution (FHWA Points 1 and 3): The addition of the new interchange between SR 29 and CR 951 will lead to increased traffic volumes on the I-75 mainline. The magnitude of increase in volumes is significant and constitutes a lane call change on I-75 between the existing interchanges. As shown in the IJR, in the design year 2039, the AADTs on I-75 between SR 29 and CR 951 are expected to be 41,500 under the No Build (Alternative 1), and 65,900 with the interchange at Everglades Blvd interchange (Build Alternative 4). In addition to increased demand on the interstate mainline, adjacent interchanges within the study area see an increase in volumes on ramps to/from the east. For instance, in 2039, the CR 951 ramps to/from the east experience an AADT increase of 14,600 vehicles per day over the No Build.

The traffic volumes and travel patterns shown in the IJR indicate that the trips accessing the interstate at the proposed interchange are exiting locally. A review of the AADT changes between Alternative 1 and Alternative 4 indicates that more than 70% of the traffic accessing the new interchange will likely exit the freeway at either CR 951 or Golden Gate Parkway interchanges. This increase in short-distance trips on the freeway is contrary to FDOT and FHWA policies of maintaining the interstate as a primary route for regional and interstate trips.

2. Roadway Geometry Improvements (FHWA Point 5): Many assumptions have been made in the IJR about capacity improvements on I-75 as well as on the local roadway network that are currently not in Collier County's Long Range Transportation Plan (LRTP). For instance 6 laning of I-75 was assumed from CR 951 to Everglades Boulevard that is currently not planned and is actually not needed until beyond 2039 without the proposed interchange. Additionally, different geometry for each alternative has been analyzed making it difficult to compare results across all alternatives.

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3. **Need (FHWA Point 1):** The proposal does not show a strong need for the new interchange at Everglades Boulevard. The volumes at the proposed interchange in design year 2039 are not high enough to warrant a new interchange. No safety concerns have been noted within the project area. Also, except for a few ramp locations, the existing interchanges appear to provide satisfactory access in the design year 2039 under the No Build scenario. The proposed interchange does not seem to provide any relief to the adjacent interchange ramps. In fact as noted earlier in this letter, the proposed interchange burdens the adjacent interchanges while providing traffic relief to the local street system.

4. **Other Alternatives Considered (FHWA Point 2):** The current proposal does not adequately evaluate other reasonable alternatives in lieu of the new interchange. Even though, the IJR evaluates improvements to two east-west corridors, Green Boulevard and White Lake Boulevard, additional improvements to the adjacent interchanges and north-south local street system should be considered before making a recommendation for the new interchange.

5. **Funding:** It must be noted that any capacity improvement necessitated by this proposal above and beyond currently planned and programmed improvements must have a funding source identified. The conceptual funding plan identifies funding sources for construction of a new interchange and widening of Everglades Boulevard, however, no funding sources are identified for the network-wide improvements necessitated by the proposed interchange such as widening the I-75 mainline, widening ramps at CR 951.

6. **Environmental Constraints (FHWA Point 8):** Typically in an IJR, there is discussion of existing environmental constraints that could potentially have a fatal impact on project implementation. While there is a brief discussion of existing land use types and conservation areas, there is no discussion related to impacts to panther habitats, existing wetlands, flood plains and cultural features. It should be noted that during the ETDM screening process, several agencies raised major concerns about the impacts associated with this interchange on the Everglades Area and the panther habitats as well as other endangered species. This led to the Department’s ongoing Cumulative Effects Evaluation (CEE) study. A brief discussion on the progression of the study is appropriate.

The issues listed above are significant. The Applicant should reevaluate the proposal to determine if modifications can be made to satisfy all of FHWA’s “8 points” and the additional comments contained herein. The proposal should be resubmitted once all concerns are addressed. Please contact me at 863-519-2913 or via email amarilys.perez@dot.state.fl.us if you would like to discuss our comments.

Regards,

Amarilys “Amy” Alonso-Perez, P.E.
Systems Planning Administrator-DIRC Chair

Attachments: 1) FHWA 8 Policy Points
              2) Complete list of Department’s review comments

cc: H. Walker, Central Office Systems Planning
Comments for I-75/Everglades Boulevard Interchange
Justification Report (IJR) (April 2012)

Comment 1: Cover Page: Please remove consultant name from cover page and anywhere else in the document.

Comment 2: Executive Summary: Consider moving the Executive Summary before the Table of Contents in the report; this format is the generally accepted format as described in the FDOT Interchange Handbook.

Comment 3: Page viii, Paragraph 3: Please state the source of the 60% growth rate.

Comment 4: Page ix: Please include a brief response to each of the FHWA requirements.

Comment 5: Figure 1-1: Please add a scale bar to the figure.

Comment 6: Figure 1-2: Please add a scale bar to the figure. Additionally, it is recommended that the location of the proposed interchange is highlighted in the middle and bottom portions of the figure.

Comment 7: Page 2-1: Please expand the methodology section to provide a summary of the methodology used to develop the IJR. As stated in the FDOT Interchange Handbook, "The discussion should provide sufficient detail for the reader to understand the processes used." Providing the MLOU as an appendix is insufficient as it only provides a brief summary of proposed methods. This section should provide detailed discussion on the methods used.

Comment 8: Page 3-1: Please provide a brief introductory paragraph for the Existing Conditions section. Because this chapter covers a wide variety of topics, it is useful to provide the reader with a brief summary of the topics to be discussed.

Comment 9: Page 3-1, Section 3.1: Please provide a Figure showing the existing land uses as described in this section.

Comment 10: Page 3-2, Section 3.2: Please include functional classification for all roadways within the project area of influence.

Comment 11: Page 3-3, Section 3.3: Consider revising the sentences used to reference figures. They currently state that "interchange geometrics are schematically illustrated"; however, currently only ramp terminal intersection geometry is shown in Figure 3-2.

Comment 12: Page 3-5, Section 3.5: Please move the final bullet point to this page.

Comment 13: Page 3-6, Figure 3-2: The channelized right turn at the I-75/Golden Gate Pkwy ramp terminal intersection is omitted from the figure. All other channelized right turn lanes are shown, please revise the figure. Additionally, it is recommended to show
the Everglades Boulevard overpass in this figure and all other figures relating to existing conditions.

Comment 14: Page 3-6, Figure 3-2: Please at a note that this figure is “Not To Scale”. Add note to all other applicable figures.

Comment 15: Page 3-11, Table 3-3: SR 951 and CR 951 are both used in this table, please use one designation for this roadway throughout the document for consistency.

Comment 16: Page 3-13, Figure 3-4: Please add arterial AADTs to this figure.

Comment 17: Page 3-14, Paragraph 2: This paragraph states that the peak hour volumes were adjusted in the same manner as the AADTs. As per the Project Traffic Forecasting Handbook, it is acceptable to adjust the project traffic counts based on other available data sources (FDOT FTI DVD) but it is not necessary to adjust the peak hour volumes in the same manner. (Please refer to Section 2 of the Handbook for traffic adjustment guidelines) This adjustment is making an assumption that the peak hour variance in traffic between the two sources is identical to the daily variance. If hourly data was available from the FTI, perhaps this comparison could be made and an adjustment factor could be derived. It is not necessary to adjust existing conditions peak hour volumes unless there are perceived problems with the count data, however a 2% reduction in traffic should not have an impact on traffic operations (especially when volumes are already low).

Comment 18: Page 3-14, Paragraph 2: “The a.m. and p.m. peak hour ramp volumes for the SR 29, CR 951, and Golden Gate Parkway interchanges obtained from the peak hour turning movement counts were multiplied by the weekly adjustment factors obtained from the 2008 Peak Season Factor Category Report.” The seasonal factors found on the Peak Season Factor Category Report are only applicable to daily traffic. Peak hour traffic counts should not be adjusted using these factors.

Comment 19: Page 3-17, Figure 3-5: The north arrow is missing from this figure.

Comment 20: Figures 3-5 and 3-6: Page 3-14 states that the peak hour ramp volumes were derived from turning movement counts. However, when the turning movement volumes shown on Figure 3-6 are compared to the ramp volumes on Figure 3-5 there are several locations where these volumes do not balance between the ramp and the terminal intersection:

- SR 29 WB Off Ramp PM peak hour
- SR 29 EB Off Ramp PM peak hour
- CR 951 EB On Ramp AM peak hour
- Golden Gate Parkway NB Off Ramp AM and PM peak hours

Additionally, please check the balancing between the ramp terminal intersections at SR 29 in the PM peak hour.

Comment 21: Figure 3-6: Please add the peak hour volumes for the EB to NB and WB to NB ramps at Golden Gate Parkway to the figure.
Comment 22: Page 3-14, Paragraph 4: The paragraph states that the traffic factors were developed using unadjusted traffic count data. Axle correction factors should be applied, where appropriate, before calculating existing traffic factors. In locations with high truck volumes, unadjusted traffic counts (no axle correction) could be significantly different than axle corrected volumes.

Comment 23: Page 3-19, Table 3-5: Please add the 2008 FDOT FTI traffic factors to the table.

Comment 24: Page 3-22, Section 3.7: Is the 6% heavy vehicle input derived from the average daily value of 12.2% stated on page 3-20? If so, please briefly discuss for clarity.

Comment 25: Page 3-24: The document states that a PHF of 0.90 was used for the freeway analysis. The mainline counts provided in Appendix B have PHFs ranging from 0.87 to 0.99 with an average PHF of 0.93. Please provide an explanation of how this PHF was selected.

Comment 26: Page 3-25, Tables 3-8 and 3-9: Please add text in this Section clarifying why the existing year analysis was done using 2 lanes on the freeway in each direction. The existing year for the IJR is 2008. The IROX project for I-75 widening to 6 lanes was completed in August 2010. Therefore it is ok for the analysis to be done using 2 lanes on the freeway in each direction but this should be highlighted in the report to avoid confusion.

Comment 27: General – Intersection Analysis: The intersection analysis tables report an overall v/c ratio for study intersections that are signalized. However, the HCS documentation provided does not include this MOE. Please provide backup documentation which includes the overall v/c or provide an explanation in the text as to how this value was derived.

Comment 28: Page 3-26, Table 3-10: Based on comparison with results provided in Appendix C, please correct the following typos:
- Golden Gate Parkway NB On/Off Ramps WB TH AM Avg. delay is reported as 6.7 this value should be 8.2
- Golden Gate Parkway NB On/Off Ramps EB TH AM Avg. delay is reported as 8.2, this value should be 6.7
- Golden Gate Parkway SB On/Off Ramps EB TH PM v/c is reported as 0.56, this value should be 0.92
- Golden Gate Parkway SB On/Off Ramps SB LT PM v/c is reported as 0.19, this value should be 0.91
- Golden Gate Parkway SB On/Off Ramps SB RT PM v/c is reported as 0.19, this value should be 0.77

Comment 29: Existing Conditions Section: Existing crash data is required to be part of this section as per FDOT's Interchange Handbook. Please provide the required historical crash analysis for I-75 within the project area of influence.

Additionally, typically there is discussion of existing environmental constraints that could potentially impact project implementation. While there is a brief discussion of existing
land use types and conservation areas, there should also be an inspection of existing wetlands, flood plains and cultural features included.

**Comment 30:** Page 4-1, last paragraph: The paragraph discusses growth in the county between 2000 and 2007. Census data from 2010 is now available. Furthermore, the 2010 census information reflects a downward trend in population growth in Collier County between 2007 and 2010 (2010 Census Population: 321,520). Additionally, employment for Collier County (as reported in the BEBR 2011 Florida Statistical Abstract) decreased significantly between 2000 and 2010 with reported employment of 100,292 in 2009 and 99,912 in 2010. This represents a net decrease in employment in Collier County in the 10 year period. Please provide an explanation as to why the latest available population and employment information was not utilized in this IJR.

**Comment 31:** Page 4-2, Table 4-1: Please add a footnote to this table sourcing the information provided.

**Comment 32:** Page 4-2: Have Collier County’s population projections been revised to account for the economic downturn? The first sentence of the paragraph states that the 2019 population is projected to be 407,100 by 2019; however, BEBR population projections indicate that this population would not be reached in Collier County until after 2023. Additionally, the employment projection of 200,000 would require 2010 employment levels to more than double which is highly unlikely given the current economic climate.

The second paragraph goes on to state very high population and employment growth rates projected for the study area between 2007 and 2019 (4.1% and 10.5% respectively). Given that this area, under existing conditions, is almost completely undeveloped east of CR 951 and includes several designated conservation lands, is it appropriate to assume such high growth rates in this rural area?

The third paragraph discusses the growth in the county between 2019 and 2039 and states that the projected population within Collier County is expected to be 542,500 by 2039; however current BEBR medium forecasts estimate the Collier County population at 506,300 in 2040. Extrapolating from BEBR forecasts, the Collier County population is not expected to reach 542,500 until after 2046.

The introduction of this IJR states that Golden Gates Estates was platted for single family dwelling development in the 1950s and 1960s; based on review of aerial photograph, it has seen little to no development east of CR 951 in the last 50 years. Additionally, Collier and Lee Counties were some of the hardest hit counties in the nation in terms of the economic downturn. There are currently many vacant homes in both counties. Is it reasonable to assume that this area is expected to suddenly have a burst of both residential and commercial development that would support the growth rates assumed for this IJR?

**Comment 33:** Page 4-3, Tables 4-2 and 4-3: Please add the source of information to these tables.

**Comment 34:** Figures 4-1 through 4-6: Please add the source of the data to each figure’s legend.
Comment 35: Figure 5-1: It is recommended to increase the font size and/or symbology of the road labels in this figure, especially in regards to the subject roadways for Alternatives 3A and 3B.

Comment 36: Figures 6-3 to 6-5: Please add road labels for Green Boulevard and White Lake Boulevard to these figures.

Comment 37: Page 6-10, Paragraph 1: Correct the typo in the fourth sentence, “...trips on I-75 that exit/enter Collier Collier...”

Comment 38: Page 6-10, Paragraph 3: The paragraph states that the average screenline volumes were used as the metric of comparison to determine the reasonableness of traffic variation between alternatives. Using the average volume in effect reduces the magnitude of the variance between alternatives. The no-build scenario (Alternative 1) should be used for comparison as it includes identical network geometry to the other alternatives except for the “build” scenario under study. Additionally, the MLOU specifically states that comparison of model volumes would be No-Build Alternative vs. New Interchange Alternatives. Comparison of the screenline volumes against Alternative 1 indicates that there are several screen lines with volume differences greater than the stated ±11 percent with some as much as 20% difference. Please provide a discussion as to why the average screenline volume was used for criteria or revise this paragraph.

Comment 39: Page 6-12, Table 6-3: Please correct the heading of the table as it states “2019 AADT Volumes” and the table shows 2039 volumes.

Comment 40: Future Year AADTs: Page ix of the Executive Summary states “The implementation of a new interchange is expected to improve the peak period traffic operations on the study area’s primary roadways (i.e., CR 951, Immokalee Road, and Golden Gate Boulevard). This suggests that traffic is likely to divert off local roadways to the interstate given the opportunity of an additional interchange. However, there is no discussion of the AADT volumes on these arterials. Please provide this discussion and revise figures to include AADTs on arterial roadways to support this claim.

Comment 41: Page 6-21, Paragraph 2: The paragraph states that the AADTs indicate a demand for a new interchange between SR 29 and CR 951. However, review of the AADT changes between Alternative 1 and Alternatives 4 and 5 indicate that more than 70% of the traffic accessing the new interchange will likely exit the freeway at either CR 951 or Golden Gate Parkway, resulting in as few as 5,000 daily trips utilizing the interchange for long distance trips. This indicates that the demand utilizing the new interchange will likely be accessing the same local arterial network that the proposal is said to relieve. Additionally, the AADT volumes clearly indicate that the new interchange would have an adverse affect on the other service interchanges within the project study area.

Comment 42: Page 6-32, Paragraph 3: Traffic factors are typically selected through the review of historical traffic factors and project calculated traffic factors. Please provide additional discussion on how these factors were developed for the IJR.

Comment 43: Figure 6-20: Review of the peak hour volumes versus the AADTs reveal several locations where rounding is a bit off. However, at the ramps to/from the north at
Golden Gate Parkway seem to have the peak direction switched. Please revise the peak hour volumes at this location or provide an explanation as to why the peak direction would change north of this interchange.

**Comment 44:** Figure 6-21: Similar to Figure 6-20, the peak hour volumes on Figure 6-21 have several rounding inconsistencies. In addition to rounding errors, the peak hour volumes on the ramps north of Golden Gate Parkway seem to have calculation errors. The peak and off peak direction volumes as reported on Figure 6-21 are 1,588 and 2,107 respectively. However, calculation of the peak hour volumes using K and D result in the following:

Ramp AADT = 16,800 per ramp

AM Peak Hour Volume (northbound) = 16,800 x 2 x 0.56 x 0.11 = 2,070
PM Peak Hour Volume (northbound) = 16,800 x 2 x (1 − 0.56) x 0.11 = 1,626

Please correct these calculation errors.

**Comment 45:** Figures 6-22 to 6-32: Rounding inconsistencies are present throughout and similar calculation errors to those described in Comment 44 seem to be present at the ramps north of Golden Gate Parkway. Please correct.

**Comment 46:** Section 6, Future Year Traffic: Were peak hour traffic volumes developed for Alternatives 3a and 3b for the Interim Year? If so, please provide these volumes in figures. If not, please provide an explanation as to why.

**Comment 47:** Section 6, Future Year Traffic: Please provide figures with peak hour turning movement volumes for all years and all alternatives in this section.

**Comment 48:** Future Year Traffic Operations: Analysis results for the future year mainline operations are only provided for the peak direction. However, the signed MLOU states “Level of service analyses will be conducted for both the am and pm peak hours for all three analysis years – 2019, 2029, and 2039.” Please explain the deviation from the approved methodology.

**Comment 49:** Page 7-5, Table 7-3: The correct volume for the I-75 mainline segment between SR 29 and CR 951 in Alternative 5 is 2,106, please correct this typo.

**Comment 50:** Page 7-6, Paragraph 2: This paragraph states that the CR 951 eastbound off ramp was assumed to be two lanes because the peak hour demand exceeded capacity. This demand is stated to be 2,107 vph however, based on the figures provided; this ramp never serves that traffic volume.

Additionally, no assumptions should be made about future improvements to adjacent interchanges. The alternatives analysis portion of the IJR is what supports the claim that the interchange proposal does not negatively impact the surrounding system. If these impacts are mitigated by capacity improvement assumptions, it negates the intention of the analysis. Geometry for adjacent interchanges should be determined by current planned and programmed improvements.
Comment 51: Future year ramp analyses: For locations with lane adds/drops, HCM specifies that the operations are determined by capacity checks not only upstream and downstream of the merge/diverge but also the capacity of the ramp itself. Please provide volume to capacity information for the merging/diverging movements at the applicable ramps.

Comment 52: Future year ramp analyses: Based on existing geometry, the SB Off Ramp at Golden Gate Parkway should be analyzed as a typical two lane off ramp – using HCS merge/diverge module. The lane drop does not occur at the ramp, therefore a major merge/diverge or ramp roadway capacity check is not applicable. Please revise the future year analyses and provide updated results.

Comment 53: Page 7-11, Table 7-5: The analysis results reported for the CR 951 EB Off Ramp for the PM peak hour is D; however, the backup documentation provided in Appendix H shows LOS C. Please correct this typo.

Comment 54: Page 7-15, Section 7.2.2: This section states assumptions of laneage on I-75 and interchanges within the project study area. All mainline and interchange geometry (except for the proposed interchange) should be based on planned and programmed improvements. See Comment 50.

Comment 55: Page 7-32, First Bullet: The bullet only mentions the PM peak hour. However, the southbound off ramp to Golden Gate Parkway is expected to operate at LOS D during both peaks in 2029 under Alternative 4.

Comment 56: Figures 7-11 through 7-15, 7-17 through 7-24: Please provide the turning movement volumes for the northbound ramps at Golden Gate Parkway (i.e. EBR to I-75 NB, and WBR to I-75 Northbound).

Comment 57: Figure 7-11: The NBR and reciprocal WBL turning movements at the Golden Gate Parkway interchange are very low and are, in fact, lower than the existing counts. The westbound through movement at the northbound ramp terminal is also lower than the existing counts. Additionally, the NBR at the CR 951 eastbound ramp terminal intersection is lower than the existing count in the PM peak hour. Please provide an explanation for the negative growth in these turning movements.

Comment 58: Figures 7-12 and 7-13: The NBR and reciprocal WBL turning movements at the Golden Gate Parkway interchange are very low and are, in fact, lower than the existing counts. The westbound through movement at the northbound ramp terminal is also lower than the existing counts. Please provide an explanation for the negative growth in these turning movements.

Comment 59: Figure 7-14: The NBR turning movement in the PM peak and the eastbound and westbound through movements in the AM Peak at the Golden Gate Parkway interchange are lower than the existing counts. Please provide an explanation for the negative growth in these turning movements.

Comment 60: Figure 7-14: The EBL turning volume from the eastbound off ramp at the proposed interchange should be shown as the northbound through movement at the westbound ramp terminal intersection.
Comment 61: General Comparison of Alternative 1 volumes vs. Alternative 4 Volumes: Comparison of AADTs and peak hour volumes between Alternatives 1 and 4 reveal the following:

1. The addition of a new interchange between SR 29 and CR 951 will increase volumes on the I-75 mainline. While some increase in volumes is expected with a new interchange, the magnitude of increase in volumes constitutes a lane call change on I-75 between the existing interchanges. In the Design Year 2039, the AADTs on I-75 between SR 29 and CR 951 are expected to be 41,500 in the No Build (Alternative 1), and 65,900 in Build Alternative 4 (Everglades Blvd interchange).

2. In addition to increased demand on the interstate mainline, adjacent interchanges within the study area see an increase in volumes on ramps to/from the east. In 2039, the CR 951 ramps to/from the east experience an AADT increase of 14,600 vehicles per day over the No Build. Similarly, Golden Gate Parkway experiences an AADT increase of 5,800 vehicles per day over the No Build. Peak hour volumes follow the same trends as AADTs. Typically, adding new access to the interstate is expected to relieve adjacent interchanges, but the proposed interchange has the opposite effect.

3. Review of network-wide link AADTs indicate that the proposed interchange will provide some relief to the local roadway network, specifically on CR 951 and Golden Gate Boulevard; however increased demand on the freeway negatively impacts operations over the No Build alternative.

4. AADTs on the freeway links at the eastern and western-most ends of the project are consistent between alternatives. This indicates that the trips accessing the interstate at the proposed interchange are exiting locally. This increase in short-distance trips on the freeway is contrary to FDOT and FHWA policies of maintaining the interstate as a primary route for regional and interstate trips.

If the proposed interchange is to be approved, the resulting changes in travel patterns would require additional capacity to be added to the I-75 mainline and at the I-75/CR 951 interchange ramps. Many assumptions have been made in the study about capacity improvements on I-75 as well as on the local roadway network. However, it must be noted that any capacity improvement necessitated by this proposal above and beyond currently planned and programmed improvements must have a funding source identified. Currently, funding for the proposed interchange and widening of Everglades Boulevard is covered under Collier County MPO's 2035 LRTP Cost Feasible Plan.

Comment 62: Figure 7-15: The NBR turning movement, the reciprocal WBL turning movement and the eastbound and westbound through movements in the AM Peak at the Golden Gate Parkway interchange are lower than the existing counts. Please provide an explanation for the negative growth in these turning movements.

Comment 63: Figure 7-15: The EBL turning volume from the eastbound off ramp at the proposed interchange should be shown as the northbound through movement at the westbound ramp terminal intersection.

Comment 64: Figure 7-20: The SBL at the Golden Gate Parkway southbound ramp terminal is lower than the 2019 volume in the AM peak hour. Please provide an explanation for the negative growth.
Comment 65: Figures 7-20 and 7-21: The EBL turning volume from the eastbound off ramp at the proposed interchange should be shown as the northbound through movement at the westbound ramp terminal intersection.

Comment 66: Figure 7-22: The following 2029 peak hour volumes are lower than the existing year peak hour volumes:
- NBR at Golden Gate Parkway NB Ramps (AM and PM)
- WBL at Golden Gate Parkway SB Ramps (AM and PM)
- NBR at CR 951 EB Ramps (PM)

The following 2029 peak hour volumes are lower than the 2019 peak hour volumes:
- SBL at Golden Gate Parkway SB Ramps (AM and PM)
- WBL at CR 951 WB Ramps (AM and PM)
- NBR at CR 951 EB Ramps (AM and PM)
- NBR at SR 29 EB Ramps (AM and PM)
- WBL at SR 29 EB Ramps (AM and PM)

Please provide an explanation of the negative growth rates under the No Build alternative for the interim year.

Comment 67: Figure 7-23: The following 2029 peak hour volumes are lower than the existing year peak hour volumes:
- EBT at Golden Gate Parkway NB Ramps (AM)

The following 2029 peak hour volumes are lower than 2019 peak hour volumes:
- NBR at SR 29 EB Ramps (AM and PM)
- WBL at SR 29 WB Ramps (AM and PM)

The following 2029 peak hour volumes are higher than 2039 peak hour volumes:
- SBL at Golden Gate Parkway SB Ramps (AM)

Please provide an explanation for the inconsistent growth between forecast years.

Comment 68: Figure 7-23: The EBL turning volume from the eastbound off ramp at the proposed interchange should be shown as the northbound through movement at the westbound ramp terminal intersection.

Comment 69: Figure 7-24: The following 2029 peak hour volumes are lower than the existing year peak hour volumes:
- EBT at Golden Gate Parkway NB Ramps (AM)

The following 2029 peak hour volumes are lower than 2019 peak hour volumes:
- NBR at SR 29 EB Ramps (AM and PM)
- WBL at SR 29 WB Ramps (AM and PM)

The following 2029 peak hour volumes are equal to the 2039 peak hour volumes:
- SBL at CR 951 EB Ramps (AM and PM)
- WBR at CR 951 WB Ramps (AM and PM)

The following 2029 peak hour volumes are higher than 2039 peak hour volumes:
• SBL at Golden Gate Parkway SB Ramps (AM)

Comment 70: Figure 7-24: The EBL turning volume from the eastbound off ramp at the proposed interchange should be shown as the northbound through movement at the westbound ramp terminal intersection.

Comment 71: Figure 7-10: Please add language to the text stating the resource used to determine the future year intersection geometry for the analysis. Review of the proposed short-term improvements to the CR 951 interchange does not match the assumed geometry at CR 951 for this study. If additional intersection improvements were assumed at the study area intersections, these need to be specifically stated in the text.

The westbound off ramp at CR 951 shows dual WBL and dual WBR for the opening year. However, documentation of analysis and lane calls reported in Table 7-17 vary by alternative. Please clarify which alternatives are shown in the figure or revise analysis and figure accordingly.

Comment 72: Figure 7-10: The Desoto Boulevard interchange is not depicted in this figure. Please provide a note on the figure that indicates the interchange was omitted due to free-flow conditions at the ramp terminals.

Comment 73: General – Opening Year Intersection Analysis: HCS Documentation provided shows that the PHFs used in the analysis are inconsistent. For example, a PHF of 0.95 was used for the CR 951 NB Ramp terminal and a PHF of 0.90 was used for the CR 951 SB Ramp terminal. Please provide an explanation for the inconsistency or revise the analysis as necessary.

Comment 74: General – Opening Year Intersection Analysis: HCS Documentation for the Golden Gate Parkway SB Ramp terminal intersection indicates that the EBR turning movement was included in the analysis. However, this movement was not included in the report tables. Additionally, this movement is free-flow under the existing condition. Was the assumption made for the future conditions that this movement would be under signal control? If so please provide that discussion in the text. If not, the analysis should be revised omitting the movement so that it does not contribute to overall intersection delay.

Comment 75: General – Opening Year Intersection Analysis: Please add a statement to the text about the free-flow operations of the Desoto Boulevard interchange (Alternative 5) to clarify why there are no results for the proposed interchange in Alternative 5.

Comment 76: Table 7-17: The Alternative 4 analysis for Golden Gate Parkway SB On/Off Ramps was coded with three (3) SBR turn lanes. However, Table 7-17 and Figure 7-10 report two (2) lanes for the SBR movement. Please revise the analysis and correct the results in the table.

Comment 77: Table 7-18: Please correct the following Typos:
- Golden Gate Parkway NB Off Ramps – WB TH: Alternative 3B LOS is reported as “A” this value should be “B”.
- Golden Gate Parkway SB On/Off Ramps – WB LT: The v/c ratio for Alternative 3B is reported as “0.60”, please correct the typo.
• Golden Gate Parkway SB On/Off Ramps – WB TH: Alternative 3B delay is reported as 19.0, this value should be 19.2 according to HCS documentation provided.

Comment 78: Page 7-41: The discussion on the results for signalized intersections is very brief. Please provide a short discussion of how the signal timings for these intersections were modified, if at all, from the existing condition to accommodate future year traffic (i.e. optimized cycle lengths, phase splits, etc.).

Comment 79: Page 7-41, Paragraph 3: This paragraph discusses intersection geometry for Golden Gate Parkway and CR 951 and provides a reference to Figure 7-16 which depicts the discussed geometry. However, the geometry for SR 29 and the proposed interchange is not discussed. Does this imply that the geometry at these two interchanges is expected to stay the same between 2019 and 2039? If so, please add a statement to the text. If not, please provide a discussion and figure for the geometric changes. Additionally, please briefly state the sources used or assumptions made for the future year intersection geometry at Golden Gate Parkway and CR 951 and describe the capacity improvements made between the analysis years.

Comment 80: Figure 7-16: Please make the following revisions to the figure:
• Add the geometry for the southbound approach of the Golden Gate Parkway/I-75 SB ramp terminal intersection to the figure.
• The HCS documentation and Tables 7-19 and 7-20 indicate that three (3) EBL turn lanes were coded for the CR 951/I-75 EB Ramp terminal intersection. Revise the figure to show the correct number of turn lanes.
• Add the NBR turn lane at the CR 951/I-75 EB Ramp terminal intersection to the figure.

Comment 81: Table 7-19: HCS documentation for the Alternative 1 analysis of SR 29 EB On/Off Ramps EB LT movement shows a delay of 1016 seconds. Please revise the table to include the actual delay reported instead of “>999”.

Comment 82: Table 7-19 and 7-20: Please add overall intersection delay and LOS for the signalized intersections to these tables. Additionally, please include all signalized right turn movements to the tables (i.e. Golden Gate Parkway NBR at the northbound off ramp) as these contribute to overall intersection delay and LOS.

Comment 83: General – Design Year Intersection Analysis: HCS Documentation provided shows that the PHFs used in the analysis are inconsistent. For example, a PHF of 0.95 was used for the Golden Gate Parkway NB Ramp terminal and a PHF of 0.97 was used for the Golden Gate Parkway SB Ramp terminal. Please provide an explanation for the inconsistency or revise the analysis as necessary.

Comment 84: General – HCS Analysis: Documentation of the HCS analysis shows that version of HCS+ used in the analysis is not the same across all documentation. Based on the documentation, both HCS+ version 5.21 and version 5.6 were used. It is important to use the latest version of the software especially since there were some major changes with patch 5.3. Because there are sometimes changes in algorithms between software versions, it is important to use the same version across all analyses in order to provide an accurate comparison of results. It is recommended that all analyses
completed in HCS+ version 5.21 be converted to the latest version and revise results as necessary.

**Comment 85:** Table 7-20: HCS documentation for the Alternative 1 analysis of SR 29 EB On/Off Ramps EB LT movement shows a delay of 1763 seconds. Please revise the table to include the actual delay reported instead of “>999”.

**Comment 86:** Table 7-20: HCS documentation for the Alternative 3A analysis of SR 29 EB On/Off Ramps EB LT movement shows a delay of 1364 seconds. Please revise the table to include the actual delay reported instead of “>999”.

**Comment 87:** Table 7-20: HCS documentation for the Alternative 3B analysis of SR 29 EB On/Off Ramps EB LT movement shows a delay of 1466 seconds. Please revise the table to include the actual delay reported instead of “>999”.

**Comment 88:** Table 7-19: The v/c ratio for Alternative 4 Golden Gate Parkway SB On/Off Ramps EB TH movement is reported as 0.65, this value should be 0.69 based on the HCS documentation provided.

**Comment 89:** Table 7-19: Please correct the typo for the number of lanes for the Golden Gate Parkway NB Off-Ramp EB TH movement under Alternative 5. This value is shown as 2 but should be 3. Additionally, the NB LT movement should have 2 lanes. The value shown in the table is 3.

**Comment 90:** Table 7-19: Please correct the typos for the number of lanes for the Golden Gate Parkway SB Off/On Ramp movements under Alternative 5 as follows:
- WB LT is shown as 4 lanes, this should be 1 lane
- WB TH is shown as 1 lane, this should be 3 lanes
- SB LT is shown as 3 lanes, this should be 2 lanes

**Comment 91:** Table 7-19: Please remove the “(1)” note for the signalized analysis of the Everglades Boulevard EB On/Off Ramps.

**Comment 92:** Page 7-50, Paragraph 2: This paragraph states “Only one movement (the southbound left-turn movement at the CR 951 interchange) is projected to operate at LOS F in the am peak hour...” This statement is not true; the SBR turning movement is also expected to operate at LOS F in the AM peak hour for all alternatives.

This paragraph also states that the v/c ratio for the SBL turning movement at the CR 951 interchange remains under 1.0. While this is true, the v/c ratio experiences a significant increase (nearly double) under Alternatives 4 and 5. Delay for this movement is also increased by almost 10s/vehicle.

**Comment 93:** Page 7-50, Paragraph 3: Please state whether the 2019 or 2029 assumed geometry was used for the Interim Year analysis.

**Comment 94:** Page 7-56, Paragraph 2: While it is true that, in general, no significant differences in overall LOS occur between alternatives, there are significant differences in delay, v/c, and LOS for some movements at the ramp terminal intersections under Alternatives 4 and 5. For example, the EB Off ramp movements at CR 951 degrade from LOS D to LOS E under the Build alternatives. Please consider revising the text.
Comment 95: Page 7-56, Paragraph 3: This paragraph states that the peak hour queue estimates were obtained from the HCS Back of Queue Worksheets. Please provide these sheets as an appendix so that the information in Section 7.4 and specifically Table 7-23 can be verified.

Comment 96: Page 7-56, Paragraph 4: The queues listed in the paragraph for the Everglades Boulevard interchange seem to be PM peak hour queues, based on Table 7-23. Please add text to this paragraph stating that the maximum projected queues at the proposed interchange occur in the PM peak hour.

Comment 97: Page 7-58: Please clarify the first sentence by adding “the p.m. peak hour” before “95th-percentile queue”.

Comment 98: Page 8-1: The portions of Section 8.1.1 dealing with development of Daily Traffic for study area roadways should be moved to Chapter 6.0 of the document. Analysis of study area roadways and intersections should be moved to Chapter 7.0 of the document.

Comment 99: Section 8.1.2: This section should be moved to Chapter 7.0 so that all future year operational analysis is contained in one chapter of the document.

Comment 100: Section 8.1.1 and Tables 8-1 and 8-2: It would be helpful to the reader to show these AADTs on the roadway network. This would provide for easier comparison of AADTs between alternatives as well as visualization of how traffic patterns change based on the proposed interchange.

Comment 101: Tables 8-1 and 8-2: Please provide link AADTs on either side of I-75 at CR 951, SR 29, and Golden Gate Parkway.

Comment 102: Tables 8-1 and 8-2: Review of the link AADTs in the table indicate that the proposed interchange would benefit the local roadway network only. The addition of the proposed interchange is expected to increase volumes on the I-95 mainline and adjacent interchanges leading to an increase in short distance trips on the interstate. This goes against FHWA policies. It is clear from the traffic distribution presented in the tables, that improvements to the local roadway network would benefit future growth in the area without degrading the interstate.

Comment 103: Page 8-4, Paragraph 3: Please state in the text whether Class I, Class II, or Class III Arterial criteria was assumed for the analysis in Table 8-3.

Comment 104: Table 8-3: Footnotes for Table 8-3 include the LOS threshold for LOS E/F, however the generalized service volume tables do not provide LOS E thresholds for Class I arterials (all other thresholds are based on 4 lane divided Class I arterial). Please provide the source for the LOS E/F threshold as the table indicates “Not applicable for the level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached.”

Comment 105: Table 8-3: The AADT volumes shown for all segments except Desoto Blvd to Everglades Blvd to not match the volumes provided in Table 8-2. Please revise these tables to match or provide an explanation for the inconsistency.
Comment 106: Table 8-3: Based on the guidance provided in the footnote to the generalized service volume tables (see quote in Comment 103) all LOS values in Table 8-3 below LOS D should be re-assigned as LOS F.

Comment 107: Page 8-6, Paragraph 2: The paragraph states "It should be noted that some of the intersections located within the study area were projected to operate over capacity with their existing geometry for one of more of the alternatives. Consequently, the approach that was taken in this study was to determine the minimum at-grade geometric improvements required at each intersection for each alternative analyzed." Typically, each alternative is analyzed using the existing plus committed roadway network to determine the proposed project’s expected impact on the network. Analyzing the future year demand on an improved network mitigates the impact of the proposed project. Additionally, analyzing different geometry for each alternative makes comparison of results across alternatives impossible. It is recommended that the all future year analysis be conducted with the existing plus committed roadway network (plus the proposed project under the build alternatives) so that a true comparison between alternatives can be made.

Comment 108: Section 8.1.2: Peak hour volumes were used in the analysis of study area intersections, however these volumes are not presented anywhere in the document. Please provide figures showing the peak hour volumes at the key study area intersections.

Comment 109: Page 8-6, Last Paragraph: The paragraph states that a PHF of 0.90 was used at most intersections in 2019 and a PHF of 0.95 was used at most intersections in 2039. Please explain why some intersections vary from these assumed PHFs.

Comment 110: Page 8-6, Paragraph 2: The paragraph states that the minimum at-grade geometric improvements were implemented at the study intersections; however, review of the associated tables shows that there are several movements operating at LOS E or LOS F. Please explain the criteria used to determine the "minimum" improvements.

Comment 111: Page 8-7, Paragraph 2: Remove the word "respectively" from the following sentence: "Table 8-8 summarizes the results of the Golden Gate Boulevard signalized intersection analyses, respectively."

Comment 112: General Future Year Conditions – This document assumes many roadway improvements to the I-75 mainline, study area interchange ramps, and study area intersections. Is there a funding source for these improvements? No unfunded improvements should be assumed for the alternatives analysis.

Comment 113: Page 8-29, Paragraph 1: This paragraph states that based on the analysis, a new interchange is expected to improve roadway network operations. However, all analysis was conducted under assumed roadway geometry that provides capacity improvements beyond the existing plus committed roadway network. This claim cannot be made for the condition unless funding is available for the assumed improvements.
Comment 114: Page 8-29, Paragraph 2: The paragraph states that implementation of a new interchange would significantly reduce average trip length for study area residents traveling east of SR 29 on I-75. However, the magnitude of trips to/from the east utilizing the new interchange under the Build alternatives is only approximately 3,000 vehicles daily, which is significantly lower than those traveling to/from the west within the study area. As such, reducing travel times for trips to/from the east is not a significant need.

Comment 115: Page 8-29, Paragraph 5: This paragraph states that the travel time comparisons represent the total time required to reach the SR 29 interchange to the east or the CR 951 interchange to the west. However, based on the roadway network, it seems that the more logical path to the west would have residents accessing I-75 at the Pine Ridge Road interchange, this interchange is a shorter distance from the TAZs shown in the referenced figures and has fewer signalized intersections along the travel route (with the exception of Alternative 3B). Perhaps this interchange should be used as the western interchange for travel time comparisons.

Comment 116: Section 8.2: All travel time analysis is based on TAZs 526 and 145, however no information is provided on the percentages of study area trips originating from these zones. Under No-Build conditions, AADTs north of I-75 on Everglades Boulevard and Desoto Boulevard are very low (3,200 vpd, and 6,700 vpd respectively in 2039). Based on the information provided, it seems that the majority of the trips that would be served by the new interchange would be originating from TAZs outside of those used for the travel time analysis. Please provide details on the trips from the selected TAZs as well as a discussion on why these TAZs were chosen.

Comment 117: Table 8-16: Review of the table shows that there is very little difference in VMT, VHT, and the ratio of VMT/VHT between Alternatives 3A, 3B, and 4 for both 2019 and 2039. For example, the differences in 2039 VMT and VHT between Alternative 3A and Alternative 4 are approximately 0.6% and 1.5%, respectively. Differences of this magnitude are statistically insignificant and indicate that Alternatives 3A, 3B, and 4 would basically provide the same benefit in terms of reduction in VMT and VHT over the No-Build scenario.

Comment 118: Page 8-37: Discussion of the different interchange concepts along with concept drawings should be included in Chapter 5.

Comment 119: A conceptuel signing plan should also be included in Chapter 5 for each of the interchange alternatives.

Comment 120: Page 8-48, Paragraph 3: This paragraph seems unfinished. It states that a GIS review was conducted to determine mitigation for wetland impacts and impacts to panther habitats however it does not provide the results of the GIS review or any other information. Please expand on this paragraph or remove it from the document.

Comment 121: Section 10.1: The conceptual funding plan identifies funding sources for construction of a new interchange and widening of Everglades Boulevard, however, no funding sources are identified for the network-wide improvements necessitated by the proposed interchange (i.e. widening the I-75 mainline, widening ramps at CR 951, providing additional turn lanes on the local roadway network, etc.). Also please include a table listing all needed improvements for each alternative (for example, additional 2 lanes needed on I-75 from CR 951 to Everglades).
Comment 122: Page 11-1 and 11-2: The numbering on the eight FHWA policy points starts at 3, please correct this formatting error.
E.1.1 Existing system is incapable of accommodating the traffic
The need being addressed by the request cannot be adequately satisfied by existing
interchanges to the Interstate, and/or local roads and streets in the corridor can neither
provide the desired access, nor can they be reasonably improved (such as access
control along surface streets, improving traffic control, modifying ramp terminals and
intersections, adding turn bays or lengthening storage) to satisfactorily accommodate
the design-year traffic demands (23 CFR 625.2(a)).

E.1.2 All reasonable alternatives to a new interchange have been considered
The need being addressed by the request cannot be adequately satisfied by reasonable
transportation system management (such as ramp metering, mass transit, and HOV
facilities), geometric design, and alternative improvements to the Interstate without the
proposed change(s) in access (23 CFR 625.2(a)).

E.1.3 Proposal does not adversely impact operational safety of the existing
freeway
An operational and safety analysis has concluded that the proposed change in access
does not have a significant adverse impact on the safety and operation of the Interstate
facility (which includes mainline lanes, existing, new, or modified ramps, ramp
intersections with crossroad) or on the local street network based on both the current
and the planned future traffic projections. The analysis shall, particularly in urbanized
areas, include at least the first adjacent existing or proposed interchange on either side
of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The
crossroads and the local street network, to at least the first major intersection on either
side of the proposed change in access, shall be included in this analysis to the extent
necessary to fully evaluate the safety and operational impacts that the proposed change
in access and other transportation improvements may have on the local street network
(23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access must
include a description and assessment of the impacts and ability of the proposed
changes to safely and efficiently collect, distribute and accommodate traffic on the
Interstate facility, ramps, intersection of ramps with crossroad, and local street network
(23 CFR 625.2(a) and 655.603(d)). Each request must also include a conceptual plan of
the type and location of the signs proposed to support each design alternative (23
U.S.C. 109(d), and 23 CFR 655.603(d)).

E.1.4 A full interchange with all traffic movements at a public road is provided
The proposed access connects to a public road only and will provide for all traffic
movements. Less than “full interchanges” may be considered on a case-by-case basis
for applications requiring special access for managed lanes (e.g., transit, HOVs, HOT
lanes) or park and ride lots. The proposed access will be designed to meet or exceed
current standards for federal aid projects on the interstate system (23 CFR 625.2(a),
625.4(a)(2), and 655.603(d)).
E.1.5 The proposal is consistent with local and regional plans
The proposal considers and is consistent with local and regional land use and transportation plans. Prior to receiving final approval, all requests for new or revised access must be included in an adopted Metropolitan Transportation Plan, in the adopted Statewide or Metropolitan Transportation Improvement Program (STIP or TIP), and the Congestion Management Process within transportation management areas, as appropriate, and as specified in 23 CFR part 450, and the transportation conformity requirements of 40 CFR parts 51 and 93.

E.1.6 Consistency with State Highway Master Plans
In corridors where the potential exists for future multiple interchange additions, a comprehensive corridor or network study must accompany all requests for new or revised access with recommendations that address all of the proposed and desired access changes within the context of a longer-range system or network plan (23 U.S.C. 109(d), 23 CFR 625.2(a), 655.603(d), and 771.111).

E.1.7 Coordinated with the area's development
When a new or revised access point is due to a new, expanded, or substantial change in current or planned future development or land use, requests must demonstrate appropriate coordination has occurred between the development and any proposed transportation system improvements (23 CFR 625.2(a) and 655.603(d)). The request must describe the commitments agreed upon to assure adequate collection and dispersion of the traffic resulting from the development with the adjoining local street network and Interstate access point (23 CFR 625.2(a) and 655.603(d)).

E.1.8 Request needs to consider planning and environmental constraints
The proposal can be expected to be included as an alternative in the required environmental evaluation, review and processing. The proposal should include supporting information and current status of the environmental processing (23 CFR 771.111).
September 27, 2012

Florida Department of Transportation
Attn: Amy Alfonso-Perez, P.E.,
Systems Planning Administrator-DIRC Chair
801 North Broadway Avenue
Bartow, FL 33830

RE: Responses to FDOT’s Comments on Collier County’s Preliminary Draft IJR

Dear Amy:

Please see our responses below to the concerns raised in FDOT’s letter dated July 16, 2012 with Collier County’s Preliminary Draft IJR.

#1. Traffic Distribution (FHWA Points 1 and 3): The addition of the new interchange between SR 29 and CR 951 will lead to increased traffic volumes on the I-75 mainline. The magnitude of increase in volumes is significant and constitutes a lane call change on I-75 between the existing interchanges. As shown in the IJR, in the design year 2039, the AADT’s on I-75 between SR 29 and CR 951 are expected to be 41,500 under the No Build (Alternative 1), and 65,900 with the interchange at Everglades Blvd interchange (Build Alternative 4). In addition to increased demand on the interstate mainline, adjacent interchanges within the study area see an increase in volumes on ramps to/from the east. For instance, in 2039, the CR 951 ramps to/from the east experience an AADT increase of 14,600 vehicles per day over the No Build.

The traffic volumes and travel patterns shown in the IJR indicate that the trips accessing the interstate at the proposed interchange are exiting locally. A review of the AADT changes between Alternative 1 and Alternative 4 indicates that more than 70% of the traffic accessing the new interchange will likely exit the freeway at either the CR 951 or Golden Gate Parkway interchanges. This increase in short-distance trips on the freeway is contrary to FDOT and FHWA policies of maintaining the interstate as a primary route for regional and interstate trips.

Response: The implementation of a new interchange on I-75 between SR 29 and CR 951 will increase the future traffic volumes on the I-75 mainline as a result of the improved access conditions for the study area. The increased volumes on the CR 951 interchange ramps to/from the east and the Golden Gate Parkway interchange ramps to/from the south are also a direct result of the improved access provided by the new interchange. The existing AADT volumes on these ramps are extremely low as a result of the poor access that currently exists within the study area.
Traffic that would enter I-75 via the Everglades Boulevard interchange, the rural region of Collier County and exit via the CR 951 interchange or the Golden Gate Parkway interchange, the urban region of Collier County, would travel approximately 9.0 miles or 12.0 miles, respectively. Traffic that would enter I-75 via the Everglades Boulevard interchange and exit via the SR 29 interchange would also travel approximately 12.0 miles. Traffic that would enter I-75 via the Desoto Boulevard interchange in the rural region and exit via the CR 951 interchange or the Golden Gate Parkway interchange in the urban region would travel either 10.7 miles or 14.0 miles; while traffic that would enter I-75 via the Desoto Boulevard interchange and exit via the SR 29 interchange would travel 10.5 miles. Collier County does not feel that trips of these lengths are “short distance” trips. These trips are connecting two different regions. The urban region of the county is currently being serviced by three interchanges, whereas Golden Gate Estates, which has its own master plan, has no access to I-75. The Golden Gate Area Master Plan, Policy 6.1.2 (adopted 10/26/04 by Ord. No. 2004-71) states: Collier County shall coordinate with the Florida Department of Transportation to initiate a study of a potential interchange in the vicinity of I-75 and Everglades Boulevard. And, Policy 7.3.1 (adopted 10/26/04 by Ord. No. 2004-71) states: By 2006, the Collier County Bureau of Emergency Services, the Collier County Transportation Division, Golden Gate Fire Control and Rescue District, and other appropriate Federal, State or local agencies, shall begin establishing one or more of the following routes for emergency evacuation purposes:

a. An I-75 Interchange at Everglades Boulevard.
b. Improved emergency access from Everglades Boulevard to I-75.
c. Construction of a north-south bridge on 23rd Street, SW, between White Boulevard and Golden Gate Boulevard.

Thus, Collier County has realized the importance of an I-75 interchange at Everglades Boulevard for many years and has approved the Collier County Comprehensive Plan to address the interchange. In addition, as noted in the attached letters, the local emergency agencies have also recognized the need for the interchange to be able to provide the health, safety and welfare services to the residents of Collier County.

The existing spacing between the CR 951 interchange and the Golden Gate Parkway interchange is approximately 3.3 miles and the existing spacing between the Golden Gate Parkway interchange and the Pine Ridge Road interchange is approximately 2.6 miles. The existing spacing between the Pine Ridge Road interchange and the Immokalee Road interchange is approximately 4.2 miles while the existing spacing between the Immokalee Road interchange and the Bonita Beach Road interchange (which is located in Lee County) is approximately 4.1 miles. The spacing between the proposed interchange and the immediately adjacent interchanges (i.e., CR 951 and SR 29) is more than double the spacing between any of the other existing interchanges in Collier County or south Lee County and consequently, the trip lengths associated with the new interchange would be more than double the trip lengths associated with the other four interchanges discussed above.
Trips made between the CR 951 interchange and the Immokalee Road interchange are approximately 10.0 miles in length and basically traverse the entire existing urbanized portion of the County. Trips that would be made between the Everglades Boulevard interchange and the CR 951 interchange would only be 1.0 mile shorter in length than these trips. Regional trips made between the CR 951 interchange in Collier County and the Bonita Beach Road interchange in Lee County would be approximately 14.0 miles in length. This trip length is only 2.0 miles longer than the trip length associated with trips made between the Everglades Boulevard interchange and the Golden Gate Parkway interchange.

#2. Roadway Geometry Improvements (FHWA Point 5): Many assumptions have been made in the IJR about capacity improvements on I-75 as well as on the local roadway network that are currently not in Collier County's Long Range Transportation Plan (LRTP). For instance, 6-laning of I-75 was assumed from CR 951 to Everglades Boulevard that is currently not planned and is actually not needed until beyond 2039 without the proposed interchange. Additionally, different geometry for each alternative has been analyzed making it difficult to compare results across all alternatives.

Response: The six-laning of I-75 between the proposed interchange and the CR 951 interchange was not assumed. The initial analysis of the I-75 mainline in this area was conducted using the existing laneage (i.e., four lanes). The results of the design year (2039) analysis indicated that this portion of I-75 was projected to operate at an unacceptable level of service. Consequently, a second analysis was conducted to determine if an acceptable level of service could be obtained with an additional lane in each direction. Based on these results, the IJR documented the need for additional capacity on this portion of I-75 due to the additional access provided by the new interchange.

Different geometry was analyzed at some locations to determine the geometrics required for each alternative to accommodate the projected traffic volumes. In this way, the total geometric requirements for the study area could be compared to determine whether the improvements with a new interchange would be more or less than the improvements with a new arterial roadway alternative.

#3. Need (FHWA Point 1): The proposal does not show a strong need for the new interchange at Everglades Boulevard. The volumes at the proposed interchange in design year 2039 are not high enough to warrant a new interchange. No safety concerns have been noted within the project area. Also, except for a few ramp locations, the existing interchanges appear to provide satisfactory access in the design year 2039 under the No Build scenario. The proposed interchange does not seem to provide any relief to the adjacent interchange ramps. In fact as noted earlier in this letter, the proposed interchange burdens the adjacent interchanges while providing traffic relief to the local street system.

Response: The need for the new interchange is a direct result of the lack of adequate access to I-75 for the existing and future study area population. The locations of and distance between the only two existing interchanges in the eastern portion of Collier County require study area residents to make extremely long trips (both in terms of distance and time) to access I-75. Study area residents living in the vicinity of the Everglades Boulevard/Golden Gate Boulevard intersection, must travel over 29 miles to access the I-75/SR 29 interchange and
over 11 miles to access either the I-75/Pine Ridge Road interchange or the I-75/CR 951 interchange. This is illustrated in Figure 1.

The implementation of a new interchange is also expected to provide a significant benefit with respect to improving mobility in the eastern portion of Collier County. The increased accessibility to I-75 is projected to result in a reduction in study area vehicle-miles of travel (VMT) and vehicle-hours of travel (VHT). These reductions in VMT and VHT are also anticipated to result in significant reductions in total vehicle emissions and fuel consumption over the 20-year period from 2019 to 2039 and estimates of these reductions will be incorporated into the revised version of the Draft IJR. These mobility-based system performance measures are explicitly recognized in the FDOT’s Interchange Handbook.

The design year traffic volumes indicate that approximately 29,000 vehicles/day (vpd) are projected to use the Everglades Boulevard interchange. This design year volume is 78% of the design year AADT volume that was projected for the I-75/Golden Gate Parkway interchange (approximately 37,000 vpd) in the FHWA-approved Golden Gate Parkway IJR. The projected design year AADT volume for the Everglades Boulevard interchange is also approximately equal to the 2010 AADT volume at the Golden Gate Parkway interchange – which has proven to be a worthwhile transportation improvement within Collier County. Collier County is not aware of any minimum volume threshold that must be achieved to warrant a new interchange.

Safety concerns within the study area were discussed in the draft IJR. The 2011 wildfires that cut off access to Golden Gate Boulevard for residents living on Everglades Boulevard south of this road and trapped the evacuating residents was documented. The study area’s inadequate means of emergency egress for severe storms (including hurricanes), wildfires and other circumstances that would necessitate a mass evacuation by the residents is a significant component of the need for additional interstate access. As was discussed in this draft IJR, there are four fire districts that either serve the project area or have boundaries that are within 2 miles of I-75 within the project area. Each of these fire districts has expressed support for a new interchange and highlighted additional public safety benefits including reduced transport times for victims of vehicle accidents, trauma injuries, hunting accidents, as well as mutual aid between the adjacent fire districts. Specific information regarding the 3,649 call incidents received from study area residents by the Collier County Fire/EMS Stations and Sherriff’s Offices during the period between January 1, 2009 and May 15, 2012 is documented in a June 19, 2012 letter from the County to FDOT District One Secretary Billy Hattaway (copy previously provided). This letter also discusses current emergency response travel distances/travel times associated with the various fire/EMS stations and Sherriff’s offices and the reduced distances and times that could be achieved with a new interchange. This information will be incorporated into the revised version of the Draft IJR. The public safety benefit of this new interchange with respect to hurricane/wildfire evacuation time and emergency service vehicle response time cannot be overstated. (Please see attached letters of support.)

#4. Other Alternatives Considered (FHWA Point 2): The current proposal does not adequately evaluate other reasonable alternatives in lieu of the new interchange. Even though the IJR evaluates improvements to two east-west corridors, Green Boulevard and White Lake Boulevard, additional
improvements to the adjacent interchanges and north-south local street system should be considered before making a recommendation for the new interchange.

**Response:** Additional improvements to the adjacent interchanges will not provide any better access to I-75 in terms of reducing the travel distances and travel times that the study area residents must incur while accessing the interstate for either routine (i.e., daily) trips or emergency evacuation trips. The purpose of the new interchange is to provide better access to the portion of I-75 that runs east/west and that is the reason why alternative east-west roadways were developed. The non-interchange alternatives that were developed and evaluated in the draft IJR were more than just “improvements” to two east-west corridors—they involved the construction of new four-lane roadways. New north-south roadways will also not improve the study area’s access to I-75. A southern extension of Wilson Boulevard is included in the Collier MPO’s 2035 Needs Plan; however, this extension turns west and ties into White Lake Boulevard/Landfill Road. This improvement would be similar to Alternative 3 (just shifted further to the west) that was evaluated in the draft IJR.

#5. Funding: It must be noted that any capacity improvement necessitated by this proposal above and beyond currently planned and programmed improvements must have a funding source identified. The conceptual funding plan identifies funding sources for construction of a new interchange and widening of Everglades Boulevard, however, no funding sources are identified for the network-wide improvements necessitated by the proposed interchange such as widening the I-75 mainline, widening ramps at CR 951.

**Response:** The widening of the I-75 mainline is not currently funded because until the IJR analyses were conducted, the need for additional capacity on this portion of I-75 was not identified. However, now that the results of the IJR are documented, Collier County is fully committed to working with FDOT to identify and secure the additional funding that would be needed to widen this portion of I-75. As discussed in Section 10.1 of the draft IJR, the portion of I-75 east of the CR 951 interchange is currently tolled and; therefore, toll revenues could be used to fund a portion of the cost of the I-75 widening. Multiple alternative tolling scenarios exist which could include tolling both the westbound on-ramp and the eastbound off-ramp or possibly all four ramps. Until a traffic and revenue study is conducted, the portion of the total I-75 widening cost that could potentially be funded from toll revenues cannot be determined. Once this revenue is quantified, the amount of the remaining funding that would be required can also be quantified and potential funding strategies can be developed. We believe that the PD&E study is the appropriate mechanism to use to conduct this type of financial evaluation, as well as document the environmental consequences of the widening. During the PD&E study, coordination between the District, Central Office and Florida’s Turnpike Enterprise will be undertaken and a request will be made for the Turnpike Enterprise to conduct a traffic and revenue study.

The FDOT is currently constructing some minor operational improvements to the eastbound and westbound off-ramps at the I-75/CR 951 interchange. The eastbound off-ramp is being widened to provide dual left-turn lanes and triple right-turn lanes, while the westbound off-ramp is being widened to provide dual left-turn and right-turn lanes. This construction is occurring simultaneously with the widening (i.e., eight-laning) of CR 951 from SR 84 to north of the interchange and the widening (i.e., six-laning) of SR 84 from Radio Road to CR 951. In
addition, the FDOT is also conducting an Interchange Modification Report/PD&E study for the entire interchange to determine the geometric improvements that should be provided at this location to accommodate the traffic demand in the year 2035. The funding for the IMR/PD&E Study that is currently ongoing is approximately $896,000 while the funding for the final design is approximately $5.75 million. Lastly, the FDOT will also be adding one additional turn lane on the southbound off-ramp at the I-75/Golden Gate Parkway interchange. The design phase is scheduled to start in 2013 and the FDOT’s budget for the design is approximately $200,000. Construction is scheduled to occur after the design plans are finished (i.e., in 2014) and the FDOT’s construction budget is approximately $1.7 million.

#6. Environmental Constraints (FHWA Point 8): Typically in an IJR, there is discussion of existing environmental constraints that could potentially have a fatal impact on project implementation. While there is a brief discussion of existing land use types and conservation areas, there is no discussion related to impacts to panther habitats, existing wetlands, flood plains and cultural features. It should be noted that during the ETDM screening process, several agencies raised major concerns about the impacts associated with this interchange on the Everglades Area and the panther habitats as well as other endangered species. This led to the Department’s ongoing Cumulative Effects Evaluation (CEE) study. A brief discussion on the progression of the study is appropriate.

Response: In Section 8.7 of the draft IJR, it states that the preliminary results of the CEE study are currently under review by the ETDM Dispute Resolution Sub-Team (DRST). It also states that the results of the study indicate that only minimal differences in the amount and location of future development are projected to occur for the “with” and “without” Everglades Boulevard interchange scenarios. Future development is expected to occur in and around currently developed areas. These minimal differences in the projected future development patterns result in only minimal differences in the amount of suitable habitat that will be available for the critical species that were included in the study.

It should be noted that this CEE study, which began in May of 2010, is a “first-of-its-kind” study for FDOT District One. FDOT reports that they conducted 3 public meetings and 5 DRST meetings, and have spent $700,000 on the study. The study area encompassed approximately 975,000 acres in eastern Collier County and extended out a distance of 25 miles from the location of the existing Everglades Boulevard overpass at I-75 (please see attached study area map). Some of the additional key findings that were documented in the CEE Study’s Technical Memorandum No. 3 (dated January 2012) include the following:

- Conservation lands comprise approximately 535,000 acres (55.0%) of the study area. Approximately 61,000 acres (6.0% of the study area) are currently proposed for conservation easements. These conservation and restoration programs are projected to continue and provide environmental benefits to the region.
- Implementation of the Rural Lands Stewardship Area (RLSA) program by Collier County has placed over 50,000 acres of land into conservation areas.
- Focusing future transportation improvements along existing facilities (instead of constructing new roadways) will minimize future habitat fragmentation associated with surface transportation. Impacts to habitat connectivity can be maintained by the
incorporation of conservation measures such as wildlife crossings to further minimize the effects of future transportation improvements.

- Collier County land development (i.e., zoning) regulations are expected to continue to govern future growth in residential and commercial development within a majority of the study area. These regulations will ultimately influence potential effects of foreseeable actions on the resources within the study area. Growth management policies that balance development rights with conservation of the remaining native habitat are envisioned to benefit the environmental resources within the study area.

The Closing Statement in the CEE Technical Memorandum 3, Page 47, states: “There is little difference in the pattern of these land use changes “with” an interchange and “without” an interchange. No substantive changes in development patterns are expected based on the location of the interchange – Everglades Boulevard or Desoto Boulevard.” And “The presence of an interchange at I-75 in the vicinity of Everglades Boulevard is not expected to significantly change future development patterns and corresponding effects on the environmental resources within the study area.” (Emphasis added.) Therefore, in accordance with the CEE, we don’t see that there will be significant additional environmental issues with an I-75 interchange at Everglades Boulevard.

It should also be noted that the I-75/Everglades Boulevard PD&E study will be required to further evaluate the potential direct and cumulative environmental impacts associated with the implementation of a new interchange.

Our responses to the additional comments raised by FDOT are attached. Once you have reviewed these responses, please let me know when you would be available to meet for a discussion regarding the same. If you have any questions, please feel free to contact me.

Sincerely,

Nick Casalanguida, Administrator
Collier County Growth Management Division
2800 North Horseshoe Drive
Naples, FL 34104

Attachment: Responses to FDOT’s comments on Collier County’s Preliminary Draft IJR
Comments for I-75/Everglades Boulevard Interchange
Justification Report (JIR) (April 2012)

Comment 1: Cover Page: Please remove consultant name from cover page and anywhere else in the document.
Response: The consultant name will be removed from the document.

Comment 2: Executive Summary: Consider moving the Executive Summary before the Table of Contents in the report; this format is the generally accepted format as described in the FDOT Interchange Handbook.
Response: The Executive Summary will be moved ahead of the Table of Contents in the document.

Comment 3: Page vii, Paragraph 3: Please state the source of the 60% growth rate.
Response: The growth rate that was being discussed in this paragraph refers to the growth in population projected to occur by the Collier MPO in the period 2019-2039. This value is actually over 50% - not 60%. The typo will be corrected.

Comment 4: Page ix: Please include a brief response to each of the FHWA requirements.
Response: A brief response to each of the FHWA requirements will be provided.

Comment 5: Figure 1-1: Please add a scale bar to the figure.
Response: A scale will be added to Figure 1-1.

Comment 6: Figure 1-2: Please add a scale bar to the figure. Additionally, it is recommended that the location of the proposed interchange is highlighted in the middle and bottom portions of the figure.
Response: A scale will be added to Figure 1-2 and the location of the proposed interchange in the middle and bottom portions of the Figure will be highlighted.

Comment 7: Page 2-1: Please expand the methodology section to provide a summary of the methodology used to develop the JIR. As stated in the FDOT Interchange Handbook, “The discussion should provide sufficient detail for the reader to understand the processes used.” Providing the MLOU as an appendix is insufficient as it only provides a brief summary of proposed methods. This section should provide detailed discussion on the methods used.
Response: The methodology section will be expanded to provide a summary of the methodology used to develop the JIR.

Comment 8: Page 3-1: Please provide a brief introductory paragraph for the Existing Conditions section. Because this chapter covers a wide variety of topics, it is useful to provide the reader with a brief summary of the topics to be discussed.
Response: A brief introductory paragraph will be added to the beginning of the Existing Conditions section summarizing the various topics discussed in this section.

Comment 9: Page 3-1, Section 3.1: Please provide a Figure showing the existing land uses as described in this section.
Response: A figure will be added to this section depicting the existing land uses.

Comment 10: Page 3-2, Section 3.2: Please include functional classification for all roadways within the project area of influence.
Response: The functional classifications of the roadways located within the project area of influence will be added to this section of the document.

Comment 11: Page 3-3, Section 3.3: Consider revising the sentences used to reference figures. They currently state that “interchange geometrics are schematically illustrated”; however, currently only ramp terminal intersection geometry is shown in Figure 3-2.
Response: The sentences will be revised to state that the interchange ramp terminal intersection geometrics are illustrated in Figure 3-2.
Comment 12: Page 3-5, Section 3.5: Please move the final bullet point to this page.
Response: The final bullet point will be moved to the same page as the other four bullet points.

Comment 13: Page 3-6, Figure 3-2: The channelized right turn at the I-75/Golden Gate Pkwy ramp terminal intersection is omitted from the figure. All other channelized right turn lanes are shown, please revise the figure. Additionally, it is recommended to show the Everglades Boulevard overpass in this figure and all other figures relating to existing conditions.
Response: The channelized westbound right-turn at the I-75/Golden Gate Parkway ramp terminal intersection will be added to Figure 3-2. The Everglades Boulevard overpass will also be added to this figure as well as the other figures relating to existing conditions.

Comment 14: Page 3-6, Figure 3-2: Please at a note that this figure is “Not to Scale”. Add note to all other applicable figures.
Response: A note will be added to this figure and all other applicable figures that are not to scale.

Comment 15: Page 3-11, Table 3-3: SR 951 and CR 951 are both used in this table; please use one designation for this roadway throughout the document for consistency.
Response: The references to SR 951 in this table will be revised to CR 951.

Comment 16: Page 3-13, Figure 3-4: Please add arterial AADTs to this figure.
Response: Arterial AADTs will be added to this figure.

Comment 17: Page 3-14, Paragraph 2: This paragraph states that the peak hour volumes were adjusted in the same manner as the AADTs. As per the Project Traffic Forecasting Handbook, it is acceptable to adjust the project traffic counts based on other available data sources (FDOT FTI DVD) but it is not necessary to adjust the peak hour volumes in the same manner. (Please refer to Section 2 of the Handbook for traffic adjustment guidelines) This adjustment is making an assumption that the peak hour variance in traffic between the two sources is identical to the daily variance. If hourly data was available from the FTI, perhaps this comparison could be made and an adjustment factor could be derived. It is not necessary to adjust existing conditions peak hour volumes unless there are perceived problems with the count data, however a 2% reduction in traffic should not have an impact on traffic operations (especially when volumes are already low).
Response: Since the peak hour volumes were low and only a minor reduction (2%) was applied, we agree that there should not be any impact on the existing traffic operations. The existing conditions peak hour analyses will be revised by using the unadjusted peak hour volumes.

Comment 18: Page 3-14, Paragraph 2: “The a.m. and p.m. peak hour ramp volumes for the SR 29, CR 951, and Golden Gate Parkway interchanges obtained from the peak hour turning movement counts were multiplied by the weekly adjustment factors obtained from the 2008 Peak Season Factor Category Report.” The seasonal factors found on the Peak Season Factor Category Report are only applicable to daily traffic. Peak hour traffic counts should not be adjusted using these factors.
Response: See response to Comment No. 17.

Comment 19: Page 3-17, Figure 3-5: The north arrow is missing from this figure.
Response: A north arrow will be added to this figure.

Comment 20: Figures 3-5 and 3-6: Page 3-14 states that the peak hour ramp volumes were derived from turning movement counts. However, when the turning movement volumes shown on Figure 3-6 are compared to the ramp volumes on Figure 3-5 there are several locations where these volumes do not balance between the ramp and the terminal intersection:
- SR 29 WB Off Ramp PM peak hour
- SR 29 EB Off Ramp PM peak hour
- CR 951 EB On Ramp AM peak hour
- Golden Gate Parkway NB Off Ramp AM and PM peak hours