I-75 Interchange Justification

Environmental Concerns
I-75 Interchange Justification
Environmental Concerns
Closing Statement

The population in the study area is expected to continue to increase through 2039. This increase in human population is expected to result in the continued conversion of natural and agricultural lands to residential and commercial land uses. 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.

These future land use changes are expected to result in the reduction of the value and availability of habitats that are used by focal species within the study area. The reduction of value and availability of habitats used by focal species is expected to be very similar “with” an interchange and “without” an interchange.

Conservation lands are expected to cover over 60% of the study area by 2039. This large area of conservation lands is expected to substantially contribute to the future sustainability of the environmental resources within the study area. Continuation of land acquisition, preservation and management programs in concert with local land development rules and state and federal environmental regulations will aid in the balancing land use changes and associated impacts with environmental resource sustainability.

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.
I-75 Interchange Justification

IJR Study Area
I-75 Interchange Justification
Extended Interchange Spacing – Desoto

Study Area Boundary
Florida Panther National Wildlife Refuge
Picayune Strand State Forest

Bonita Beach Rd
Immacolato Rd
Golden Gate Blvd
Pine Ridge Rd
Davis Blvd

4.1 miles
4.2 miles
2.6 miles
10.5 miles
10.7 miles
3.3 miles
I-75 Interchange Justification Access

Figure 1: Average Trip Lengths

- Average Trip Length from Area ‘A’ to the I-75/Pine Ridge Rd Interchange = 11.2 miles.
- Average Trip Length from Area ‘A’ to the I-75/SR 29 Interchange = 29.2 miles.
- Average Trip Length from Area ‘A’ to the I-75/CR 951 Interchange = 11.8 miles.
All four areas combined = an additional 15,909 Dwelling Units at build-out

Future Growth (# of Dwelling Units)

I-75 Interchange Justification

- Orangetree
  - 2,273 (2039)
  - + 1,276 at build-out

- Golden Gate Estates
  - 15,212 (2039)
  - + 5,349 at build-out

- Big Cypress
  - 9,414 (2039)
  - + 7,209 at build-out

- Wilson Blvd.
  - 401,950 sq. ft. shopping center

- Deserto Blvd.
  - 190,000 sq. ft. shopping center
I-75 Interchange Justification
Anticipated Schedule

Approximately 7 years from IJR approval to Interchange Opening
FHWA’s statement on GHG Emissions

http://www.fhwa.dot.gov/environment/climate_change/mitigation/
The Intergovernmental Panel on Climate Change (IPCC) estimates that in the absence of additional climate policies to reduce GHG emissions, baseline global GHG emissions from human sources will increase between 25 percent and 90 percent between 2000 and 2030, with CO$_2$ emissions from energy use growing between 40 and 110 percent over the same period.

Mitigation strategies include: **Reduce travel activity** by reducing growth in vehicle miles traveled. **Improve system and operational efficiencies** by optimizing the design, construction, operation, and use of transportation networks.
FHWA 8 Points – #1: The existing interchanges and/or local roads in the corridor can neither provide the necessary access nor be improved to satisfactorily accommodate the design year traffic demands while at the same time providing the access intended by the interchange proposal.

- A new interchange will provide access to I-75 for the existing and future residents living in the eastern portion of Collier County who now travel between 11 miles and 29 miles to access one of the existing interchanges.
- Capacity improvements to the existing roadway network will not reduce the travel distances that study area residents will incur when accessing I-75; therefore, the existing roadway network cannot provide the access intended with the new interchange.
- A new interchange will reduce the vehicle miles of travel and vehicle hours of travel within the study area; thereby significantly reducing greenhouse gas emissions and fuel consumption.
- New I-75 access will significantly reduce emergency response times and save lives (especially for those residents who would not contact an emergency responder but would take themselves or another individual to a hospital).
FHWA 8 Points – #2: All reasonable alternatives to a new interchange have been considered.

- Transportation Systems Management improvements will not provide better (i.e., more direct) study area access to I–75.
- Improvements to the existing interchanges are needed even without a new interchange.
- Several alternatives were evaluated that did not include a new interchange. These alternatives provided new four-lane east/west roadways that extended from CR 951 to Everglades Boulevard.
- The implementation of a new east/west road will not reduce the travel distance required to access I–75 via SR 29 for travel to/from the east and will only result in minor reductions in travel distance for residents accessing I–75 for travel to/from the west.
- Several portions of the study area roadway network will still be overcapacity prior to the design year, even with the implementation of a new east/west road.
- Constructing new east/west roadways will increase future habitat fragmentation for critical species.
A new interchange at Everglades Boulevard would be located approximately 12 miles to the west of the SR 29 interchange and approximately 9 miles to the east of the CR 951 interchange. These large distances between interchanges will allow for proper advanced signing of the exit ramps.

The proposed interchange would be located on a tangent section of I-75 and since there are no vertical curves upstream or downstream of the interchange location, there will not be any problems with sight distance.

A conceptual plan indicating the types and locations of the signs on I-75 will be included in the IJR document for each of the preliminary interchange concepts.

The design year (2039) traffic volumes indicate that approximately 29,000 vehicles/day are projected to use the Everglades Boulevard interchange.

The results of the design year peak hour traffic analyses indicate that the portion of I-75 between the CR 951 interchange and the Everglades Boulevard interchange will need to be widened from the existing four lanes to six lanes to provide Level of Service C on the mainline.
FHWA 8 Points – #4: A full interchange with all traffic movements at a public road is provided.

- Both of the evaluated locations for the new interchange – Everglades Boulevard and Desoto Boulevard – are public roads that are maintained by Collier County.
- The proposed interchange will be a “full” interchange. Access to and from I-75 will be provided in both the eastbound and westbound directions.
- The interchange geometrics included in the preliminary interchange concepts are consistent with the design standards contained in the FDOT’s Roadway Plans Preparation Manual.
- No design exceptions or variations are anticipated to be needed with any of the interchange concepts that have been developed.
FHWA 8 Points – #5: The interchange proposal considers and is consistent with local and regional plans.

- The proposed interchange is included in the Collier MPO’s 2035 Financially Feasible LRTP as a fully funded improvement.
- This improvement has officially been prioritized as the #1 project on the County’s federal legislative agenda for the past five years.
- The proposed interchange is also included in the Collier/Lee MPO’s Joint Regional Transportation Network and is consistent with Collier County’s Comprehensive Plan.
- The County is committed to maintaining current land use controls to prohibit any commercialization of the interchange area.
FHWA 8 Points – #6: In areas where the potential exists for future or multiple interchange additions, all requests for new access are supported by a comprehensive interstate network study.

- There are no other new interchanges currently being planned or programmed within Collier County by either public or private entities.
- Two alternative locations for a single new access point on I-75 were evaluated in this IJR – Everglades Boulevard and Desoto Boulevard.
- Two existing interchanges located west/north of the proposed interchange (CR 951 and Golden Gate Parkway) and one interchange located east of the proposed interchange (SR 29) were included in the IJR traffic analysis.
FHWA 8 Points – #7: The request for new access generated by new or expanded development demonstrates appropriate coordination between the development and related or otherwise required transportation system improvements.

- The request for this new interchange is not being driven by any specific private development either planned/approved or under review.
- The proposed interchange is intended to serve the existing population within the study area, as well as the future population and employment that the Collier MPO has forecasted for the study area.
- The majority of the future growth in Collier County population and employment is projected to occur in the portion of the County east of CR 951.
- The population and employment in the eastern portion of the County is projected to increase regardless of whether a new interchange is constructed on I-75 because this area primarily consists of platted single family lots.
FHWA 8 Points – #8: The request for new access contains information relative to the planning requirements and the status of environmental processing of the proposal.

- This IJR includes a discussion of the results of the ETDM Programming Screen that was conducted for the proposed interchange by the FDOT’s Environmental Technical Advisory Team (ETAT), as well as the latest results from the FDOT’s Cumulative Effects Evaluation (CEE) Study that was conducted to address the environmental concerns raised by several of the ETAT members.
- The CEE Study results 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.
- 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 CEE Study.
- If conditional approval of the IJR is granted by FHWA, the FDOT-funded PD&E Study that is currently on hold will be initiated. This PD&E Study will identify more specifically the potential direct environmental impacts associated with a new interchange and the appropriate mitigation strategies.
FDOT’s Concern – Increased traffic volumes on the I–75 Mainline and adjacent interchanges (on the ramps to/from the east) constitutes a lane call change on I–75.

- The existing AADT volumes on the I–75 mainline east of the CR 951 interchange and on the ramps to and from the east/south at the CR 951 and Golden Gate Parkway interchanges are very low as a result of the poor access that currently exists within the study area.
- The IJR does show that as a direct result of the improved access conditions for the study area, a new interchange will increase the future traffic volumes on this portion of the I–75 mainline. However, the portion of I–75 between the new interchange and the CR 951 interchange is projected to operate at LOS C in the interim year (2029) with the existing mainline laneage.
- Six lanes will be needed on the mainline to maintain LOS C sometime between 2031 and 2034.
FDOT’s Concern – The IJR indicates that a majority of the traffic accessing the new interchange to and from the west will likely exit I-75 at either the CR 951 or Golden Gate Parkway interchanges, which increases the short-distance trips on the freeway.

- The distances traveled from the proposed interchange locations in the rural region of Collier County to the two adjacent interchanges located in the urban region of Collier County range from 9 to 14 miles. These are not “short-distance” trips.
- The existing spacing between the CR 951, Golden Gate Parkway, and Immokalee Road interchanges in Collier County and the Bonita Beach Road interchange in Lee County are 2.6 miles, 4.2 miles and 4.1 miles, respectively. The distances between the proposed interchange and the immediately adjacent interchanges are more than double the distances between the existing interchanges in the western portion of Collier County and the southern portion of Lee County.
FDOT’s Concern – The required capacity improvements on I–75 noted in the IJR are not in the Collier MPO’s 2035 Financially Feasible Long Range Transportation Plan and are not needed until beyond 2039 without the proposed interchange.

- The six-laning of the I–75 mainline is not currently funded because until the IJR analyses were conducted, the need for additional capacity on I–75 between the proposed interchange and the CR 951 interchange had not been identified. Now that the results of the IJR are known, 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.
FDOT’s Concern – The proposal does not show a strong need for the new interchange at Everglades Blvd. and burdens the adjacent interchanges while providing traffic relief to the local street system.

- 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.
- Approximately 29,000 vehicles/day are projected to use the Everglades Boulevard interchange in the design year.
- The IJR traffic analysis indicates that improvements to the existing interchanges will be needed in the future *with or without the new interchange*.
- The traffic analyses also indicate that the design year peak hour operations at the existing interchanges are not projected to be significantly different *with or without the new interchange*. 
FDOT’s Concern – The proposal does not adequately evaluate other reasonable alternatives in lieu of the new interchange.

- Additional improvements to the adjacent interchanges will not provide any better access to I–75 in terms of reducing the travel distances and times that the study area residents must incur while accessing I–75. The purpose of the new interchange is to provide better access to the portion of I–75 that runs east–west; therefore, new north/south roadways will also not improve the study area’s access to I–75.

- Two non-interchange alternatives were developed and evaluated as a part of the IJR. Both of these alternatives involved the construction of new four-lane east/west arterials that extended from CR 951 to Everglades Boulevard. The impact of these new east–west roadways on the study area roadway network were evaluated along with preliminary wetland mitigation costs, panther habitat mitigation costs, construction costs, and right–of–way acquisition costs.
FDOT’s Concern – 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 widening of the I-75 mainline is not currently funded because until the IJR analysis were conducted, the need for additional capacity on this portion of I-75 was not identified.
- 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 and 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 be quantified and a funding strategy can be developed.
- The County believes that the PD&E study is the appropriate mechanism to use to conduct this type of financial evaluation.
FDOT’s Concern – Typically in an IJR, there is discussion of existing environmental constraints that could potentially have a fatal impact on project implementation.

▶ Section 8.7 of the draft IJR states that the preliminary results of the Cumulative Effects Evaluation (CEE) study are currently under review by the ETDM Dispute Resolution Sub-Team. However, the closing statement in the CEE Technical Memorandum No. 3 states that “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”.

Community Support

- June 2009 Public Meeting:
  345 people signed in. A large number of people did not sign in due to long lines at the sign-in table. Attendees were asked to complete a comment sheet and state whether they are in favor of the interchange or not. 286 were in favor; 9 were not.

- November 4, 2010 Public Meeting:
  223 individuals/families signed in. Out of 44 comments provided, 42 were in favor.
December 6, 2012

Nick Casalanguida, Deputy Administrator
Collier County Transportation
2800 North Horseshoe Drive
Naples, Florida 34104

RE: I-75/Everglades Boulevard Interchange Justification Report, April 2012 and Response to FDOT Comments dated September 27, 2012

Dear Mr. Casalanguida:

This letter is in response to your letter dated September 27, 2012, and your presentation to our District One Interchange Review Staff Meeting on October 29, 2012. After our review of the materials presented, the Department cannot support your request for a new interchange at Everglades Boulevard at this time.

The Interstate System is designed to provide the highest level of service in terms of safety and mobility, requiring strict adherence to access control policies. New or modified access to the Interstate System will be considered by the Department and FHWA for approval if the eight policy points are satisfactorily met. Your case for “adequate access” is not one of the eight policy points. Convenient access could be a supporting measure, but not the primary reason for requesting access. In order to meet Policy Point One a new access to the interstate must show that the existing adjacent interchanges and interstate system cannot serve the future travel demand without major geometric improvements. The Interchange Justification Report (IJR) does not satisfy this criterion. There is adequate capacity on the existing adjacent interchanges within the study area to serve travel demand in the opening year (2019) and in the design year (2039) NO BUILD condition. A new interchange is not recommended at this time if the current cost feasible network can satisfy the need. While the Department does not support the new interchange at this time, as land use and development patterns change and the existing interchanges cannot satisfy the need, a new interchange can be reevaluated in the future. Please work through the Collier Metropolitan Planning Organization and Mr. Johnny Limbaugh to develop your next steps.

The Department both shares and supports your concerns for timely emergency response and efficient wildfire evacuation through your request to permanently maintain the break in limited access at Everglades Boulevard for emergency responders to quickly access incidents. Once we obtain your local resolution stating public purpose, we can assemble the package to forward your request to FHWA. If approval to break the limited access right-of-way line is granted, Collier County’s safety concerns about response times should be addressed.
The Department recommends off-system improvements should be further evaluated. The interstate access funding can be redirected to County bridge and roadway projects in the Golden Gate Estates area to alleviate travel times to I-75. The Department will continue to work with Collier County to assist in the development of those projects.

If you have any further questions, please feel free to contact Amy Perez at 863-519-2913 or Amarilys.Perez@dot.state.fl.us.

Regards,

Billy L. Hattaway, P.E.
District Secretary

cc: H. Walker, Central Office Systems Planning