



Florida Department of
TRANSPORTATION

Interchange Access Request User's Guide

Systems Planning Office

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Table of Contents

Preface	1
Purpose	1
Scope	1
Organization	2
Distribution, Updates and Contact	3
Chapter 1 IAR Overview and Process	4
1.1 FHWA’s Interstate System Access Policy	4
1.1.1 FHWA’s Interest with Changes in Interstate System Access	4
1.1.2 FHWA’s Eight Policy Requirements	4
1.1.3 FHWA Policy Implementation	5
1.2 Florida Statutes, FDOT Rules, Policies and Procedures	5
1.2.1 Florida Statute	5
1.2.2 FDOT Rules	5
1.2.3 FDOT Policies	5
1.2.4 FDOT Procedures	6
1.3 Interchange Access Points	9
1.4 Stakeholders	9
1.4.1 Requester	9
1.4.2 Interchange Review Coordinator (IRC)	10
1.4.3 State Interchange Review Coordinator (SIRC)	10
1.4.4 FHWA	10
1.4.5 Interchange Coordination Meetings	11
1.5 Types of Interchange Access Requests and Documentation	11
1.5.1 Methodology Letter of Understanding (MLOU)	11
1.5.2 Interchange Justification Report (IJR)	11
1.5.3 Interchange Modification Report (IMR)	12
1.5.4 Interchange Operational Analysis Report (IOAR)	13
1.5.5 Non-Interstate Access Request (Non-IAR)	13
1.6 Locked Gate Access	14
1.7 Acceptance Authorities	14
1.7.1 IRC Authority	14
1.7.2 FDOT and FHWA Authorities	15
1.8 IAR Review Process	18
1.9 IAR Review Time frame	19
1.10 Performance Management of Programmatic IAR	19
Chapter 2 Methodology Letter of Understanding	21
2.1 Project Initiation	21
2.2 Methodology Meetings	21

2.3 Determination of the Need and Type of MLOU	21
2.4 Contents of MLOU	22
2.4.1 Project Purpose and Need.....	22
2.4.2 Area of Influence (AOI).....	22
2.4.3 Analysis Years.....	23
2.4.4 Coordination.....	24
2.4.5 Data Collection.....	25
2.4.6 Travel Demand Model Selection and Forecasting.....	25
2.4.7 Traffic Operational Analysis.....	25
2.4.8 Safety Analysis.....	26
2.4.9 Performance Measures.....	26
2.4.10 Environmental Considerations.....	27
2.4.11 Design Exceptions and Variation.....	27
2.4.12 Conceptual Signing Plan.....	28
2.4.13 FHWA’s Eight Policy Points.....	28
2.5 Review and Acceptance of MLOU	28
2.6 MLOU Qualifying Provisions	28
Chapter 3 Interchange Access Report	29
3.1 Documentation Requirements	29
3.2 Analysis of Existing Conditions	29
3.3 Considered Alternatives	30
3.4 Travel Demand Forecasting	31
3.5 Evaluation of Alternatives	32
3.6 Design Exceptions and Variations	32
3.7 Local Transportation Plans and Planning Studies	32
3.8 Funding Plan	33
3.9 Access Management Agreement for the Interchange Cross Streets	33
3.10 Intergovernmental Coordination	34
3.11 Environment Considerations	35
3.12 Review of the Report	35
3.13 Quality Control	35
3.14 Processing for Acceptance Decision	39
Chapter 4 IAR Re-evaluations	40
4.1 Re-evaluation	40
4.1.1 Change in Approved Access Design Concept.....	40
4.1.2 Change in Conditions.....	42
4.1.3 Time Lapse Before Construction.....	42
4.2 Documentation	42
Chapter 5 Explanation of FHWA Policy Points	44

List of Appendices

Appendix A Template for MLOU	A-1
Appendix B Template for Statement of Technical Review (QC Certification) and Quality Control Checklist Template.....	B-1
Appendix C Acronyms and Definitions.....	C-1

List of Figures

Figure 1-1 Interchange Access Request Process Steps.....	8
Figure 1-2 Determination of Programmatic versus Non-Programmatic IAR	20
Figure 2-1 Area of Influence Along Mainline and Crossroad.....	23
Figure 3-1 QA/QC Process Flowchart for IARs.....	37

List of Tables

Table 1-1: Acceptance Authorities for Programmatic IARs on Interstate System	16
Table 1-2: Acceptance Authorities for Non-Programmatic IARs	17
Table 3-1: Considered Alternatives.....	30
Table 3-2: Quality Control Checklist and Review Log	38
Table 4-1: Re-evaluation Types and Requirements for IARs	43

Preface

The Florida Department of Transportation (FDOT) and the Federal Highway Administration (FHWA) have a substantial investment in limited access facilities, particularly the interstate system. An FHWA Policy Statement related to the justification and document preparation of the need for additional access to the interstate system was published in the Federal Register on October 22, 1990, (55 FR 42670) and subsequently modified on February 11, 1998, (63 FR 7045) and on August 27, 2009 (74 FR 20679). Any proposal to change the access to these facilities potentially can have an adverse impact on their ability to effectively and safely accommodate travel demand in a corridor. To ensure access decisions are properly administered, FHWA and FDOT have adopted policies and requirements regarding interchange access requests and approvals on limited access facilities. The acceptability determination of any proposal on the interstate system shall be determined by FHWA through the process outlined in the Federal Register or by the FDOT chief engineer through an expedited approval process as agreed upon in the Programmatic Agreement (PA) between the FHWA Florida Division and FDOT.

The FHWA Interstate System Access Informational Guide can be found at <http://www.fhwa.dot.gov/design/interstate/pubs/access/access.pdf>.

Purpose

FDOT Procedure No. 525-030-160, New or Modified Interchanges, defines the state and federal requirements and processes to be followed in the development of an Interchange Access Request (IAR). Full compliance with the requirements and process defined in FDOT Procedure No. 525-030-160 is required for the consideration of any interchange access proposal. FDOT Procedure No. 525-030-160 and this User's Guide are applicable to new or modified access to the following facilities:

- Interstate Highway System and
- Non-interstate limited access facilities on the State Highway System (SHS).

The purpose of this User's Guide is to provide guidance on how to prepare documents that support requests for new or modified access to the Interstate Highway System and non-interstate limited access facilities on the SHS. This User's Guide also provides information on the IAR process that shall consider the needs of the system at a regional level while maintaining the integrity of the highway network.

This User's Guide provides guidance on preparing and processing IARs

This User's Guide shall be used by local agencies, consultants, FHWA, FDOT and staff from other agencies when developing and reviewing new or modified interchange access proposals on limited access facilities. This User's Guide precedes the 2002 Interchange Handbook, Policy Resource Documents and Technical Resource Documents.

Scope

Any proposed change in access to the interstate system must be submitted by FDOT to the FHWA

Florida Division Office for a determination of engineering and operational acceptability under Title 23, United States Code, (23 U.S.C.) Highways Section 106 and Section 111, and 23 CFR 625.2(a). The acceptability determination shall be determined by FHWA through the process outlined in the 74 Federal Register 43743 (August 27, 2009) or by the FDOT chief engineer through an expedited approval process as agreed upon in the PA between the FHWA Florida Division and FDOT executed on April 2nd, 2015.

This expedited approval process between FHWA and FDOT for access requests on the interstate system for certain types of projects allows the FDOT chief engineer or acting chief engineer to make a determination of engineering and operational acceptability for IARs. The FHWA Florida Division Office would concur with the chief engineer's determination and accept the IARs under the provisions of 23 U.S.C. within five business days of notification of FDOT's determination.

Organization

This User's Guide is organized into five chapters and two appendices:

- **Chapter 1: IAR Overview and Process** — This chapter discusses FHWA and FDOT policies supporting the need for the IARs and related Florida statutes, rules, procedures and the Programmatic Agreement between FHWA and FDOT regarding review and approval of IARs. This chapter also discusses where the IAR process applies and various types of IARs and examples. Finally, this chapter defines the various stakeholders involved in this process and who have the authority to sign and accept the IAR.
- **Chapter 2 Methodology Letter of Understanding (MLOU)** — This chapter provides guidance on the preparation of the MLOU. Elements of the MLOU are discussed in detail.
- **Chapter 3: Interchange Access Report** — This chapter provides guidance on developing documentation required for an IAR. The contents of the Interchange Access Report are discussed in detail.
- **Chapter 4: IAR Re-evaluations** — This chapter discusses three different conditions that trigger re-evaluations of the previously approved IARs. Documentations required to support re-evaluations also are discussed.
- **Chapter 5: Explanation of FHWA Policy Points** — This chapter provides an explanation of what needs to be included in the IAR to fulfill FHWA's eight policy points. All eight points are discussed.
- **Appendix A** — MLOU Template
- **Appendix B** — Template for Statement of Technical Review and Quality Control Checklist
- **Appendix C** — Acronyms and Definitions

Distribution, Updates and Contact

This document is available online at [Systems Planning Website](#) under [Documents & Publications](#).

For updates and questions regarding this User's Guide and example studies, contact:

Florida Department of Transportation
Systems Planning Office, Mail Station 19
605 Suwannee Street
Tallahassee, FL 32309
ATTN: State Interchange Review Coordinator (SIRC)

For more information regarding District Interchange Review Coordinators, visit <http://www.dot.state.fl.us/planning/systems/programs/sm/intjus/default.shtm>

Users of this guide are encouraged to submit questions and requests for modifications to this User's Guide to the SIRC at the above address. The option to submit requests and suggestions online will be made available in the future. The User's Guide will be updated to incorporate all current addenda and any other needed updates every three years, or as needed. This effort will be coordinated through the interchange review coordinators (IRC) of each district and the Turnpike Enterprise. Users of this guide are encouraged to check the website prior to using this User's Guide to ensure the latest process and technical requirements are being followed.

Chapter 1

IAR Overview and Process

1.1 FHWA's Interstate System Access Policy

According to Title 23, United States Code, Highways Section 111 (23 U.S.C. 111), all agreements between the secretary of the U.S. Department of Transportation (USDOT) and the state DOTs for construction of projects on the Interstate Highway System shall contain a clause providing that the state will not add any points of access to, or exit from, the project in addition to those approved by the secretary in the plans for such a project without prior approval of the secretary. The secretary has delegated the authority to administer 23 U.S.C. 111 to the federal highway administrator pursuant to Title 49, Code of Federal Regulations, Section 1.48(b)(10) (49 CFR 1.48(b)(10)). A policy statement consolidating a series of policy memoranda, including guidance for justifying and documenting the need for additional access to the existing sections of the Interstate Highway System, was published in the Federal Register on October 22, 1990, titled "Access to the Interstate System," and was then modified on February 11, 1998, and August 27, 2009.

1.1.1 FHWA's Interest with Changes in Interstate System Access

It is in the national interest to preserve and enhance the Interstate Highway System to meet the needs of the 21st century by assuring that it provides the highest level of service in terms of safety and mobility. FHWA's interest is to ensure all new or revised access points:

- are considered using a decision-making process that is based on information and analysis of the planning, environmental, design, safety and operational effects of the proposed change;
- support the intended purpose of the Interstate Highway System;
- do not have an adverse impact on the safety or operations of the Interstate Highway System and connect to the local roadway networks or other elements of the transportation system; and
- are designed to applicable standards.

1.1.2 FHWA's Eight Policy Requirements

FHWA's eight policy points are required to be fulfilled to substantiate any access request that is submitted for approval considerations. The policy points are outlined in the FHWA Interstate System Access Informational Guide that can be found at <http://www.fhwa.dot.gov/design/interstate/pubs/access/access.pdf>. FHWA's decision to approve a request is dependent on the request proposal satisfying and documenting the policy points requirements. As such, the eight policy points shall be documented appropriately in the IAR.

The policy points are listed and discussed in detail in **Chapter 5** of this guide.

1.1.3 FHWA Policy Implementation

The FHWA Florida Division Office requires that all requests for new or revised access submitted for FHWA consideration contain sufficient information to allow FHWA to independently evaluate the request and ensure all pertinent factors and alternatives have been appropriately considered. The level of acceptance for an IAR varies with the type of request and the complexity of the project and its impact. To streamline the review process, the IAR is required to include a section that describes how the proposed access is consistent with all eight policy points.

1.2 Florida Statutes, FDOT Rules, Policies and Procedures

Several Florida statutes, FDOT rules, policies and procedures apply to access requests. FDOT provides specific direction for the development of IARs through rules, policies and procedures outlined in this User's Guide. This direction is provided to ensure statewide consistency in the technical analysis, documentation and review processes.

1.2.1 Florida Statute

Requests for new or modified interchanges must meet the requirements of the Authority to Establish and Regulate Limited Access Facilities — [§338.01, F.S.](#), which authorizes transportation and expressway authorities of the state, counties and municipalities to provide and regulate limited access facilities for public use.



1.2.2 FDOT Rules

Rule Chapter 14-97 F.A.C., SHS Access Management Classification System and Standards provides guidance on the adoption of an access classification system and standards to implement the State Highway System Access Management Act of 1988 for the regulation and control of vehicular ingress to and egress from the SHS. This includes interchange spacing standards and other criteria for medians and driveways adjacent to the interchange.



The spacing of existing interchanges on existing highway facilities may preclude exact conformance and do not require a design variation. Access management spacing standards should always be a project goal. Therefore, a discussion on compliance with standards and mitigation strategies must be provided within the IAR.

New interchanges on existing facilities that do not meet spacing requirements outlined in Rule Chapter 14-97 F.A.C. shall require a design variation at the discretion of the department.

Interchanges for new limited access facilities shall be reviewed by the IRC during the planning and preliminary engineering phases for operational performance, safety and compliance with Rule Chapter 14-97 F.A.C.

1.2.3 FDOT Policies

FDOT has implemented [Policy Statement 000-525-015](#), Approval of New or Modified Access to Limited Access Highways on the State Highway System (SHS), to minimize the addition of new access points to

limited access facilities to maximize operation and safety of transportation movements.

1.2.4 FDOT Procedures

Reference is made in this section to various procedures that must be considered in the preparation of an IAR.

- **Topic No. 525-030-120: Project Traffic Forecasting** — This procedure provides instructions for using design traffic criteria to forecast corridor traffic and project traffic. The selection of the most appropriate analysis method(s) must be coordinated with FDOT before conducting the study. District planning offices will be responsible for carrying out the traffic forecasting process.
- **Topic No. 525-030-160: New or Modified Interchanges** — This procedure set forth the state and federal requirements and processes to be used for determination of engineering and operational acceptability associated with adding or modifying interchange access to limited access facilities on Florida’s SHS. Full compliance with the requirements and processes in this procedure is required for any IAR.
- **Topic No. 525-030-020a: Tolling for New and Existing Facilities on the State Highway System (SHS)** — This procedure set forth the state requirements and processes to be used for tolling determination on Florida’s SHS. An IAR is required for a new interchange or a proposed modification to an existing interchange.
- **Topic No. 525-030-260: SIS Highway Component Standards and Criteria** — This procedure addresses the responsibilities of the various offices within FDOT to develop and implement the SIS. It also defines the requirements for coordination with the local government and Metropolitan Planning Organization (MPO) transportation planning process. Such coordination is needed to ensure IARs are consistent with the Strategic Intermodal System (SIS) Master Plan and Action Plan for the affected facilities
- **Topic No. 650-000-001: Project Development and Environment (PD&E) Manual** — This manual describes in detail the process by which transportation projects are developed by the department to fully meet the requirements of the National Environmental Policy Act (NEPA), Council of Environmental Quality (CEQ) and other related federal and state laws, rules and regulations. The manual aids project analysts and project managers in understanding all aspects of the project development process and its requirements, such as engineering and environmental analyses, public involvement and documentation.

IAR PROCESS

The determination of engineering and operational acceptability and approval of IARs may be conducted in a one-step process or two-step process:

1. **One-step process:** An access request can be submitted concurrent with the Project Development and Environment (PD&E) study. Final approval of the IAR shall be given upon verification that the justification and documentation supporting the request meet FHWA’s eight policy requirements and FDOT’s procedure for new or modified interchanges.

2. **Two-step process:** The first step constitutes an acceptance of the IAR. The acceptance provides a determination of engineering and operational acceptability by complying with FHWA's eight policy points and FDOT's procedure for new or modified interchanges. The determination of engineering and operational acceptability indicates the access proposal is a viable alternative to include in the environmental analysis stage of the project. It should be noted, however, that full compliance with the guidelines and process outlined in this User's Guide does not ensure acceptance. The acceptance decision on each IAR is based on interchange need and FDOT and FHWA policies. If FDOT and FHWA determine an IAR project is acceptable, project development may proceed with the NEPA evaluation or PD&E study phase.

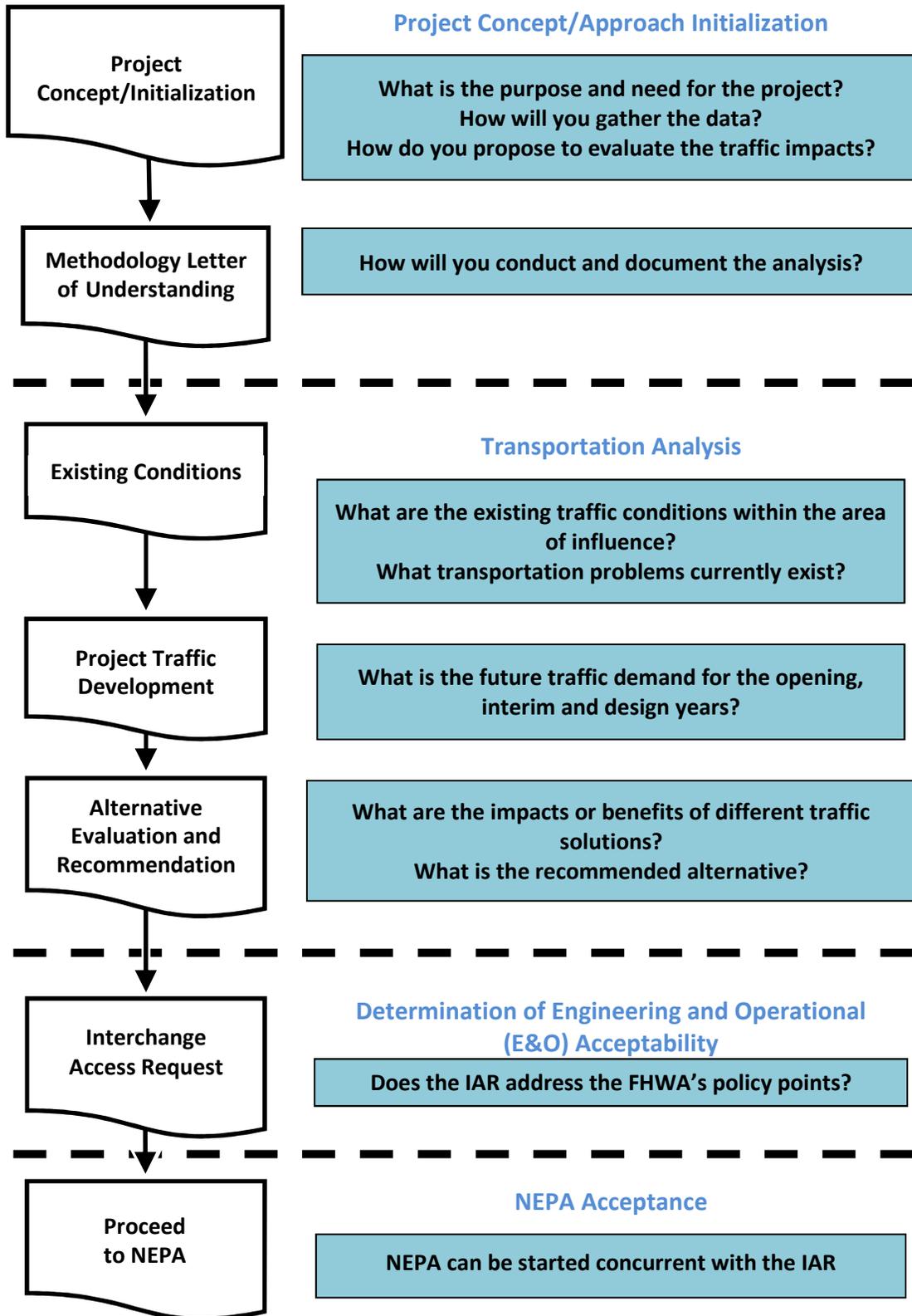
The process for completing NEPA/PD&E procedure is beyond the scope of this User's Guide and FDOT Procedure No. 525-030-160

The second step constitutes final FHWA approval that occurs upon completion of the NEPA document (PD&E study) for the IAR proposal and the verification that the design of the preferred NEPA alternative matches the design of the accepted IAR proposal. All NEPA projects are federal actions, and as such, require that the NEPA procedures are followed. Approval is contingent upon compliance with applicable federal requirements, specifically the PD&E Manual. Completion of the NEPA process is considered approval of the project location design concept described in the environmental document. FHWA action is required for access change requests on the interstate system. For non-interstate limited access facilities on the State Highway System (SHS) that do not have federal funding, a State Environmental Impact Report (SEIR) is required. The process for completing a PD&E study can be found at <http://www.dot.state.fl.us/emo/pubs/pdeman/pdeman1.shtm>.

The two-step process offers flexibility to obtaining the engineering and operational acceptability determination prior to completing the environmental review and approval process. In which case, applicants can determine if an access proposal is acceptable for inclusion as an alternative in the environmental process.

The major steps involved in an IAR process and its relationship to NEPA is depicted in **Figure 1-1**. The NEPA phase can either precede or be developed concurrently with the IAR.

Figure 1-1 Interchange Access Request Process Steps



1.3 Interchange Access Points

Each break in the control of access to the interstate system right of way is considered to be an access point. Per FHWA policy, each entrance or exit point, including “locked gate” access and access to collector-distributor roads or ramps, is considered to be an access point. For example, a diamond interchange configuration has four access points.

Each entrance or exit point is an access point

Per FHWA policy, ramps providing access to rest areas, information centers, and weigh stations within the interstate system are not considered access points. Access to or from these facilities and local roads and adjoining property is prohibited. The only allowed exception is for access to adjacent publicly owned conservation and recreation areas, if access to these areas is only available through the rest area, as allowed under 23 CFR 752.5(d).

Interchange reconfiguration is considered to be a change in access even though the number of actual points of access may not change. For example, changing a cloverleaf interchange into a diamond interchange is considered a revised access. Slip ramps to/from general lanes and express lanes are not considered interchange access points unless a direct connection is provided to/from the express lanes and the interchange ramp. The FHWA policy on access points definition can be accessed at <http://www.fhwa.dot.gov/design/interstate/pubs/access/access.pdf>.

1.4 Stakeholders

A fundamental component of the IAR process is its management and coordination. Close coordination between stakeholders at various stages of the IAR process is necessary for a successful acceptance of the IAR. The various stakeholders involved in the IAR process are described in this section.

1.4.1 Requester

A requester may be the department, a local government or a transportation authority (toll authority, port authority, etc.). For projects initiated by private developers, local government becomes the requester. The District IRC should be more involved in development driven projects and must involve SIRC early in the project.

A requester can be FDOT, local government or transportation authority

In all cases, the requester has the responsibility for collecting any data required, documenting the need for the new or modified interchange access and developing the engineering and operational analysis required by the acceptance authority to make a decision on the IAR. Additionally, the requester is responsible for conducting quality control reviews for the IAR deliverables before submitting them to the IRC. Specifically, the requester has to:

- reach an agreement with the IRC and other applicable acceptance authorities on the type of IAR to better define study design or scope of work;
- develop, sign and submit to the IRC a Methodology Letter of Understanding (MLOU) documenting the agreed upon study methodology;

- perform appropriate quality control;
- develop and submit to the IRC a draft Interchange Access Report containing the results documenting the analysis of safety and operation of the access proposal, as agreed in the MLOU;
- respond to or resolve all comments and requests for additional information from reviewers, and revise the IAR documents accordingly; and
- sign and submit a final IAR document to the IRC for an acceptance decision.

1.4.2 Interchange Review Coordinator (IRC)

Each district and the Florida's Turnpike Enterprise (FTE) appoint an interchange review coordinator (IRC). The IRC is the primary point of contact for all requesters, inside and outside the department, requesting new or modified interchanges on the existing SHS limited access facilities within their districts. The IRC acts as a liaison to other offices within the district. The IRC also serves in a review and processing role for IARs. The IRC and the requester are responsible for quality control for the IAR documents. By serving in the review-and-processing role, the IRC is responsible for ensuring the IARs meet quality objectives.

IRC is the point of contact for all requesters and is responsible for quality control

For all IARs, the IRC establishes the basis for acceptance, the evaluation criteria, the level of coordination needed and the scope of the technical analysis and documentation, which is documented in the MLOU. The IRC arranges a technical review for the engineering, operational, environmental and safety impacts of the IAR. Every district shall include the following offices in review of the IAR: environmental management office (EMO), design, traffic operations, structures, right of way (ROW), maintenance and program management. The IRC shall seek assistance from these offices in reviewing portions of the IAR relevant to their disciplines. The IRC determines if a request can continue in the access-request process based on the information submitted with the IAR document and the outcome of the technical review.

The IRC is required to conduct regular meetings to discuss milestones and status for the IAR projects.

1.4.3 State Interchange Review Coordinator (SIRC)

The SIRC's role is to provide guidance for rules, policies and procedures related to IAR, reviews, ensure consistency and coordinate with the FHWA and districts' IRCs and the FTE IRC. For IARs that are reviewed and approved through the Programmatic Agreement process, the SIRC will be responsible for notifying FHWA about the approval decision.

1.4.4 FHWA

FHWA is responsible for protecting the structural and operational integrity of the interstate system. The FHWA district transportation engineer (DTE), representing the district in which the IAR is located, is the FHWA Florida Division Office's point of contact for that project. The DTE also is responsible for reviewing the IAR and making a recommendation to FHWA staff on the acceptance.

1.4.5 Interchange Coordination Meetings

Development of an IAR should take an interdisciplinary approach that combines the strengths of different technical staff within the district. As such, it is recommended that the IRCs hold regular district interchange coordination meetings to discuss proposals for change in access requests. Staff from other division offices within the district such as EMO, design, traffic operations, structures, ROW, maintenance and program management must be invited to attend coordination meetings. These meetings must be held during the development of IAR study design (or MLOU stage) and when the draft IAR report is ready for review. FHWA DTE and SIRC must also be invited to participate in the interchange coordination meetings.

Interchange coordination meetings must be held for each IAR proposal

1.5 Types of Interchange Access Requests and Documentation

An IAR's purpose is to demonstrate that the project is needed and is viable based on traffic, engineering, safety, financial and other criteria. Any IAR should start by developing an analysis approach that is followed to determine the impact of the access proposal to the mobility and safety of the limited access facility. The MLOU and types of IARs are defined in this section:

1.5.1 Methodology Letter of Understanding (MLOU)

The MLOU provides a dialogue among the requester, IRC, SIRC and FHWA to identify the parameters and primary areas of focus for preparing an IAR. The MLOU is intended to define the project's purpose and need and type of IAR report. MLOU also establishes analysis assumptions and traffic analysis approach required to prepare the IAR. The purpose of the MLOU is to document the procedures to be followed in the IAR development and mitigate risk. The intent of the MLOU is not to serve as a scope of work for the project. The requester needs to understand that any work done prior to signing of the MLOU is at risk.

An MLOU is optional for IOAR and is determined on a case-by-case basis

The MLOU is required for an Interchange Justification Report (IJR) and Interchange Modification Report (IMR). The MLOU is optional for an Interchange Operational Analysis Report (IOAR) and is determined on a case-by-case basis by the IRC in consultation with the SIRC and FHWA DTE. The decision to prepare an MLOU for IOAR is based on the scope of the project and the level of traffic analysis effort. Such a decision is reached after discussions between the requester, IRC, SIRC and FHWA DTE. **Appendix A** provides an outline of a typical MLOU.

1.5.2 Interchange Justification Report (IJR)

An IJR is required when the proposed action is intended to provide a new access to a limited access facility. Such action requires the highest level of analysis and documentation to justify the need for and operational impacts of the proposed access. The IJR quantifies the magnitude and significance of impacts of the proposed new access on the mainline and mitigation, if needed.

An IJR is required for the following situations:

- new system interchanges providing access between two limited access facilities;
- new service interchanges providing access between a non-limited access local roadway network (arterial, collector or local road) and the limited access facility;
- new partial interchanges or new ramps to and from continuous frontage roads that create a partial interchange within the existing limited access right of way.

1.5.3 Interchange Modification Report (IMR)

An IMR is required for a proposed action to modify configuration or travel patterns at an existing interchange. The extent and complexity of the proposed modification will determine the level of analysis and documentation required. The level of analysis and documentation requirements are determined and agreed upon in the MLOU.

A Systems Interchange Modification Report (SIMR) may be needed when a series of closely spaced interchanges that are operationally interrelated are being analyzed for an IAR. Such an effort may be used to support the development of a corridor PD&E study, either following or concurrently with the SIMR development. It is important to understand that the purpose of an SIMR is to evaluate impacts of closely spaced interchanges. If an IMR is prepared for an interchange included in a previously approved SIMR, it shall follow the requirements outlined in this guide. The limits of an SIMR should be chosen carefully and in discussion with SIRC and FHWA.

An IMR or SIMR may be required for the following situations (where examples are provided, they are not intended to be all-inclusive):

- Modification to the geometric configuration of an interchange.
 - Adding new ramp(s)
 - Abandoning/removing ramp(s)
- Completion of basic movements at an existing partial interchange.
- Modification of existing interchange ramp to provide access to a different local road that requires a break in the limited access right-of-way.
- Managed lanes access to an existing interchange that provides direct connection to the crossroad or express-express lane ramp connections.
- Any changes that result in an increase in the number of lanes at the gore point of an on-ramp within a weaving area as determined by the Highway Capacity Manual (HCM) weaving methodology.

1.5.4 Interchange Operational Analysis Report (IOAR)

An IOAR is prepared to document traffic and safety analysis of minor modifications to the existing access points that do not change existing interchange configuration or travel patterns. The examples of interchange improvements that require an IOAR are listed below. The determination of an IOAR versus IMR requirement is critical, as the level of effort could vary significantly. Therefore, the requester shall

coordinate with the IRC, SIRC and FHWA in making this determination. The determination to prepare an IOAR or IMR shall be done at the beginning of the project during the MLOU stage.

The following types of interchange improvements require an IOAR:

- Addition of a lane (or lanes) to an existing **on-ramp** while maintaining existing lanes at gore point.
- Any proposal that results in the shortening of an **off-ramp**.
- Replacement of an unsignalized free-flow, right-turn lane on an **off ramp** with a signalized right turn or installation of a signal or roundabout to a stop-controlled ramp terminal lane.
- Any changes that result in an increase in the number of lanes at the gore point of an on-ramp outside the weaving area as determined by the Highway Capacity Manual (HCM) weaving methodology.

1.5.5 Non-Interstate Access Request (Non-IAR)

The following examples of improvements **do not require** an access request, and they are called non-IAR:

- Addition of storage lanes at the terminus of existing **off-ramps** with the crossroad
- Relocation or shifting of the ramp termini (i.e., moving the ramp end that connects with the crossroad) along the same roadway, which does not result in a shortening of an **off-ramp**.
- Extension of an acceleration lane, deceleration lane or recovery lane at the interstate connection point not within the weaving area of an adjacent interchange.
- Extension of an **on-ramp** as an auxiliary lane extending to downstream interchange.
- Access (slip ramps) between express lanes and general use lanes on the interstate highway. The existing interchanges are not modified, in which case no direct connection between express lanes and crossroad is provided. This does not constitute preparation of an IAR per FHWA's Interstate System Access Informational Guide. The operations and safety of the access points shall be evaluated and documented in a Corridor Traffic Analysis Report (CTAR) in lieu of the IAR.
- Implementation of ramp metering or other active control of vehicles entering the interstate highway.
- Construction of new signing, striping and/or resurfacing of an interstate **on-ramp** or **off-ramp**, where geometric features are not changed.
- Installation of a roadside guardrail and concrete barriers (such as for resurfacing and safety projects).
- Addition of through lane(s) on a crossroad at a ramp terminal.
- Widening of an existing off-ramp to add lane(s) at the diverge point from the mainline.
- "In-kind" bridge replacement/modification without changing laneage.
- Construction of overpasses or grade-separated structures without ramps along interstate facilities.

- Interchanges that are proposed within a new limited access facility and do not connect to an existing limited access.

Although an access request is not required for the above improvements that are performed in the interstate system, coordination with the FHWA Florida Division Office is required for informational purposes. This coordination shall be scheduled at the start of the project to determine the level of analysis effort. The IRC shall coordinate with SIRC and FHWA at the beginning of the project to make a determination whether the improvement requires an IAR or should be classified as a non-IAR. It is the responsibility of the IRC to ensure operational analyses for the non-IAR improvements are conducted and documented.

Traffic and safety analysis may not be required on the following non-IAR improvements:

- Construction of new signing, striping and/or resurfacing of an interstate on-ramp or off-ramp, where geometric features are not changed.
- Installation of roadside guardrail and concrete barriers (such as for resurfacing and safety projects).
- “In-kind” bridge replacement/modification without changing laneage.

1.6 Locked Gate Access

All requests for a locked gate access require submission of a general use permit through the district maintenance office. The IRC shall review the request only after the maintenance office is satisfied with the purpose and need for the locked gate access. The IRC shall forward the request to FHWA for determination of the engineering and operational acceptability only after being satisfied with the maintenance office recommendations. Requests for locked gate access shall satisfy FHWA’s eight policy points.

Information and factors used by the district maintenance office to make a recommendation for a locked gate access include but are not limited to:

- purpose and need for the locked gate access;
- review of possible access alternatives to confirm the feasibility of the proposed access;
- number, type, duration and frequency of vehicles proposed to use the locked gate; and
- ownership and lessee of the property contiguous to the locked gate.

1.7 Acceptance Authorities

1.7.1 IRC Authority

The IRC has the primary responsibility for all IAR coordination with the requester, coordination with the SIRC and FHWA (when applicable) during all phases of the IAR. It is essential for the IRC to seek inputs from all applicable district offices such as EMO, design, traffic operations, structures, ROW, maintenance and program management in the IAR review process.

Where the IAR affects a limited access facility of more than one district (including Turnpike Enterprise), or if the interchange access is near a district boundary, all affected district IRCs shall be involved in the IAR

process. It is required that IARs developed by the Turnpike Enterprise or other expressway authorities involve the FDOT local district.

1.7.2 FDOT and FHWA Authorities

FDOT recognizes three forms of IAR approvals:

- Programmatic IARs that apply to projects on interstate highways identified in the Programmatic Agreement between FHWA Florida Division and FDOT regarding the review and approval of specific types of changes in interstate system access, executed on April 2nd, 2015 that was originated from Section 1505 of MAP-21.
- IARs for projects on interstate highways that are not included in the Programmatic Agreement between FHWA Florida Division and FDOT. These IARs are referred to as non-Programmatic IAR in this User's Guide.
- IARs for projects on non-interstate limited access facilities on the SHS.

Programmatic IARs Approval

Section 1505 of MAP-21 has provided the U.S. Department of Transportation (USDOT) secretary the option to allow state DOTs to review and approve IARs on the interstate system. FHWA and FDOT have entered into the Programmatic Agreement to allow FDOT to review and approve certain types of IARs. The Programmatic Agreement will expedite the IAR review process and streamline the project delivery process.

Under the Programmatic Agreement, the FDOT chief engineer is authorized to determine the operational and engineering acceptability for certain types of the IARs that will receive an expedited FHWA approval. **Figure 1.2** shows how to determine projects that shall be reviewed under the Programmatic Agreement. IARs that are to be included in the Programmatic Agreement review process shall be determined early on during conceptualization and initiation stages of the project. The following IARs are included in the Programmatic Agreement:

New service interchanges outside Transportation Management Areas (TMAs)¹; and

- a. Modifications to service interchanges. An exception is when access is provided to a different road not previously served that is located within a TMA; this type of modification is not delegated.
- b. Completion of basic movements at existing partial interchanges.

IOARs will qualify as Programmatic IAR approval. The level of environmental documentation or severity of the impacts associated with the implementation of the project affects project qualification for the Programmatic IAR. As such, FHWA has determined that the following conditions will exempt the programmatic agreement and will require FHWA access review and approval:

- projects requiring environmental impact statement (EIS) under the NEPA. Types of projects that require an EIS are given in Chapter 2 of Part 1 of the FDOT PD&E Manual;
- projects with issues related to National Policy or substantial controversy; and

- any other project as required by FHWA.

For IAR projects that would involve a PD&E study, class of action (COA) shall be determined before continuing with the access request process. It is strongly recommended that IAR features related to social, natural, economic and physical environment are initially screened through the Efficient Transportation Decision Making (ETDM) process to determine the severity of their impacts. The magnitude of environmental impacts affects eligibility of the project to be approved through the programmatic IAR process. Coordination with FHWA DTE is required to ensure projects with substantial controversy on environmental grounds are flagged early during the MLOU development stage.

The acceptance authority for programmatic IAR is the FDOT chief engineer, as shown in **Table 1-1**. SIRC and the IRC must approve the IAR before it is routed to the chief engineer for signature. The assistant secretary for Intermodal Systems Development (ISD) also will sign IARs for new access requests (or IJR). FHWA will approve programmatic IARs by concurring with the chief engineer's determination of engineering and operational acceptability of the IARs.

Table 1-1: Acceptance Authorities for Programmatic IARs on Interstate System

Acceptance Authority	MLOU			IAR		
	IJR	IMR	IOAR ¹	IJR	IMR	IOAR
Requester	✓	✓	✓	✓	✓	✓
District/Turnpike IRC	✓	✓	✓	✓	✓	✓
Central Office SIRC	✓	✓	✓	✓	✓	✓
Chief Engineer (or acting CE)				✓	✓	✓
Assistant Secretary ISD (or acting)				✓		
FHWA				•	•	•

Note: ✓ Reviews and approves the document.
 • Concurs with FDOT chief engineer's determination of engineering and operational acceptability as agreed upon in the Programmatic Agreement. FHWA district transportation engineers should be involved when developing MLOUs.

¹ Examples of projects are identified in **Section 1.5.4**.

¹ TMA as defined in 23 USC 134(i) are all urbanized areas (UZAs) with population greater than 200,000 as determined by the 2010 census.

Non-Programmatic IARs Approval

Projects on the Interstate Highway System that are not included in the Programmatic Agreement will be fully reviewed and approved by the FHWA Florida Division Office as summarized in **Table 1-2**. IARs involving system interchanges, all new partial interchanges and new interchanges within a TMA require concurrence by FHWA headquarters in Washington, D.C.

The following IARs on interstate highways are not approved through the Programmatic Agreement process and require full FHWA review and approval:

- a. new service (freeway to crossroad) interchanges inside TMAs;
- b. new system (freeway to freeway) interchanges;

- c. new partial interchanges;
- d. modifications to system (freeway to freeway) interchange, including express to express lane ramp connections;
- e. closure of individual access points that result in partial interchanges or closure of entire interchanges;
- f. locked gate access; and
- g. projects that are exempted from the Programmatic Agreement.

Table 1-2: Acceptance Authorities for Non-Programmatic IARs

Acceptance Authority	MLOU			IAR					
				Interstate			Non-Interstate		
	IJR	IMR	IOAR ¹	IJR	IMR	IOAR	IJR	IMR	IOAR
Requester	✓	✓	*	✓	✓	✓	✓	✓	✓
District/Turnpike IRC	✓	✓	*	✓	✓	✓	✓	✓	✓
District Secretary (or acting)							✓	✓	✓
Central Office SIRC	✓	✓	*	✓	✓		✓		
Assistant Secretary ISD (or acting)				✓					
FHWA	✓	✓	*	✓	✓	✓			

Note: ✓ Review and approve the document.

* An MLOU will be determined on a case-by-case basis based on discussions between the requester, IRC, SIRC and FHWA district transportation engineer (DTE).

¹ Examples of projects are identified in **Section 1.5.4**.

Non-Interstate System IARs Approval

FHWA is not involved in IARs for projects that are on non-interstate facilities and are funded with no federal funding. Acceptance authorities for non-interstate IARs are summarized in **Table 1-2**. The IRC and district secretary sign IARs at the district level. The district secretary approves IMRs and IOARs while assistant secretary for Intermodal Systems Development (ISD) approves only IJR.

1.8 IAR Review Process

Review of IAR deliverables is necessary to ensure they are of appropriate quality. The requester shall ensure that the IAR's schedule include adequate times for reviews. The review process that is documented in this User's Guide must be followed. Tight schedules or pressure to maintain project schedules shall never compromise the quality of the documents, because poor quality deliverables eventually lead to project delays. For IARs that involve complex projects, interim reviews of technical documents such as model calibration reports and future traffic forecast reports are strongly recommended. Interim review requirements should be determined at the MLOU development stage of the IAR on a case-by-case basis.

Every IAR submittal must be reviewed through the ERC system

All documents related to IARs must be reviewed utilizing the FDOT

Electronic Review Comment (ERC) system. The ERC system is a Web-based application used to track the review process (comments and responses) for the project documents in a database. All IAR documents shall be submitted under the “Interchange Access Request” submittal-type category of the ERC system. Use of ERC system allows requesters, IRCs, SIRC, FHWA and other users to track all comments and responses from the reviewers at any time during the project development process. Information about the ERC application is available at the [FDOT Electronic Review Comment System \(ERC\)](#) website.

The IRC shall coordinate with the requester to ensure the IAR documents are first reviewed at the district level before requesting central office review through the ERC system. IARs that are not processed through the Programmatic Agreement process (or non-programmatic IAR), shall be sent to FHWA for reviews after the review by the central office is completed and all comments have been addressed or resolved. The IRC shall utilize the ERC system to request IAR reviews from FHWA. The review process is summarized as follows:

1. The requester produces the IAR document and submits it to the IRC.
2. The IRC conducts a district internal review through ERC and returns it to the requester with comments.
3. The requester reviews the comments, addresses and resolves the comments and resubmits the document to the IRC.
4. Upon verification that all comments were resolved, the IRC requests the SIRC to review the IAR document through the ERC.
5. The SIRC conducts reviews and returns it to the IRC with comments.
6. The IRC reviews the comments and forwards them to the requester.
7. After corrections are made and upon SIRC signature, the IRC requests that FHWA review the document (if applicable).
8. For Non Programmatic IARs –
 - a) FHWA reviews the document and returns it to the IRC with comments.
 - b) IRC incorporates the comments and resubmits document for FHWA approval.
9. For Programmatic IARS, FHWA concurs with FDOT chief engineer’s determination of E&O.

Reviewers should exercise good professional judgment when reviewing the documents. Comments that are personal preference are discouraged.

1.9 IAR Review Time frame

The following review time frames apply to all IARs:

- The SIRC shall review and comment on the IAR within 10 business days.

- The IRC shall submit the IAR 20 business days before the FHWA Florida Division response is due.

The review times may be longer than the time frames outlined above, depending on the number of project submittals by FDOT to FHWA and conflicting production schedules. For projects that the districts have as high priority, the IRC shall coordinate with FHWA and SIRC about the schedule constraints and priorities early on during the MLOU development stage.

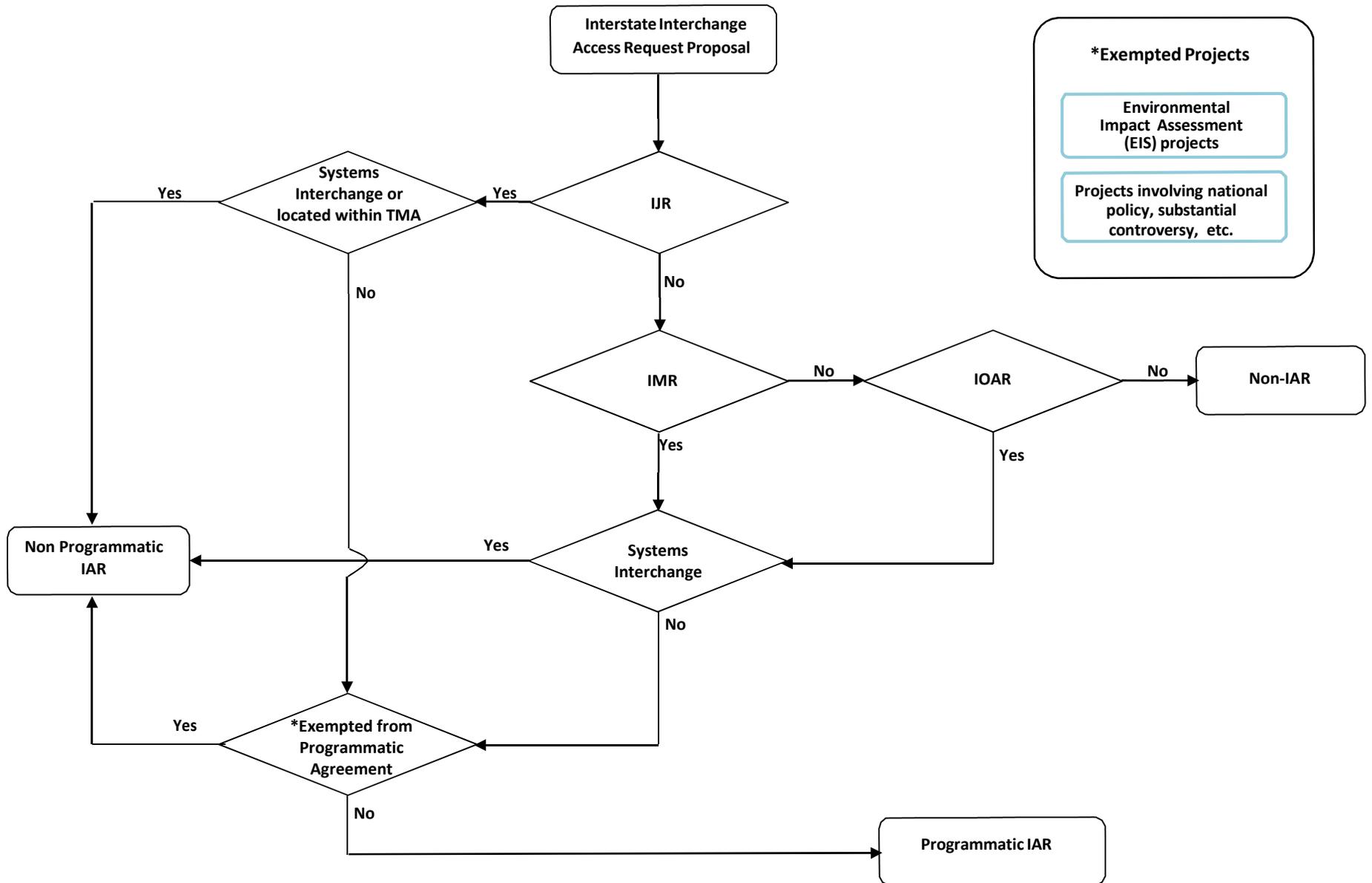
System (freeway to freeway) interchanges, all new partial interchanges and new interchanges within a TMA require concurrence by FHWA headquarters in Washington, D.C. FHWA shall make an IAR operational and engineering acceptability determination or forward to the FHWA headquarters for approval within 40 to 60 business days.

1.10 Performance Management of Programmatic IAR

As part of the requirements of the programmatic agreement, FDOT will conduct annual reviews of the performance of the IAR process and submit to FHWA a report consisting of the following:

- A summary of the results of all IARs that were processed and approved under the terms of the programmatic agreement.
- Verification that the IARs were processed and complied with the programmatic agreement.
- An identification and implementation plan for IAR process improvements.
- A summary of potential IARs in the coming year.

Figure 1-2 Determination of Programmatic versus Non-Programmatic Interchange Access Request



Chapter 2

Methodology Letter of Understanding

2.1 Project Initiation

The IAR process begins with a formal determination of the need for the project. The determination of the need for the project helps to identify performance criteria or deficiencies that are to be addressed by the project. The determination of the need for the project involves coordination between the requester, IRC, SIRC and FHWA division office to define the scope of the IAR and to verify the project is in the adopted MPO's Long-Range Transportation Plan (LRTP). The FHWA DTE shall be informed of all projects at their initiation. Coordination also is needed to identify type of project (IJR, IMR or IOAR), project objectives, determination of Programmatic or non-Programmatic process, performance measures and FHWA involvement. Coordination with project stakeholders is required, even for non-IAR projects.

2.2 Methodology Meetings

When it is determined that the need for the project is reasonable, the requester and IRC may start drafting the Methodology Letter of Understanding (MLOU). The objective of the MLOU is to reach a consensus among the requester, IRC, SIRC and FHWA on the process and analysis to be followed in developing the IAR. The purpose and intent of the MLOU is not to arrive at a pre-determined concept and it should not prohibit the evaluation of viable alternatives. The MLOU shall be signed by all parties to demonstrate agreement on the IAR process.

Methodology meetings shall be conducted to discuss various aspects of the access proposal and to reach an agreement regarding the contents of the MLOU for the access request. The meetings shall include the IRC, SIRC, FHWA, the requester and other project stakeholders including representatives from affected or interested local agencies, regional planning councils and other state agencies. It is essential to discuss any anticipated exceptions or variations to FDOT or FHWA policies, criteria or standards to ensure they would not create a fatal flaw to the IAR acceptance. Any fatal flaws shall be identified and resolved in the preliminary meetings prior to execution of the MLOU to determine whether the requester should proceed with the IAR proposal. The MLOU does not serve as scope of work for the project. Any work done prior to signing the MLOU is at risk.

The meeting minutes should be documented and kept in the project files.

2.3 Determination of the Need and Type of MLOU

The development of an MLOU is guided by the need for the project. It is recommended that the requester gather all project data and information sufficient to determine the type of the IAR prior to preparing the MLOU. An environmental screening tool (EST) may be used to gather environmental information and data about the IAR project. The environmental information may help the IRC determine the type of IAR as per the guidance provided in **Section 1.7** of this User's Guide. Coordination with the acceptance authorities is required to ensure appropriate report type, review process and documentation

before finalizing the preparation of the MLOU.

2.4 Contents of MLOU

The contents of an MLOU are detailed in this section. The required format of the MLOU is provided in **Appendix A**.

2.4.1 Project Purpose and Need

Identification of the purpose and need for adding new or modifying access to a limited access facility is essential to providing appropriate analysis and documentation to justify the acceptance of the change in access. As such, the MLOU should clearly identify the objective, purpose and need for the project. The requester should refer to Chapter 4 of the FDOT [PD&E Manual](#) for guidance on developing and documenting the purpose and need.

The need for an IAR is the same as the need for the project

The purpose and need for the IAR should be the foundation for the purpose and need in the PD&E study. Specifically, the purpose of the access proposal should provide the answer to why the project is considered, along with the necessary supporting evidence. Therefore, the purpose of an IAR should identify transportation problems, issues and concerns and provide guidance on developing alternative improvements that would address such problems. The purpose should focus on the national/regional transportation system, because local economic development or improving the local roadway system functionality, though a factor, is not a primary focus for the IAR.

The need for the IAR provides a rationale for how it addresses the transportation problems identified in the purpose statement. The need is supported by existing data and analysis to justify the project. Existing data, summaries from local transportation comprehensive plans, existing roadway geometry, and statistics such as speed, delay, crash data and project volumes should be used as appropriate to support the need for the project. Utilization of readily available transportation information that does not require extensive data collection or traffic operational analysis is strongly recommended when developing purpose and need for the project.

2.4.2 Area of Influence (AOI)

Once the purpose and need for the project have been identified, the next step is to identify the analysis area of influence (AOI). The area of influence is defined as the area that is anticipated to experience significant changes in traffic operating characteristics as the result of the access proposal. The area of influence shall reflect current and anticipated operational and safety concerns associated with the access request. The area of influence for the IAR shall be finalized in the MLOU phase. **Figure 2-1** provides an example of an area of influence. Factors such as interchange spacing, cross-street signal locations, the extent of congestion, the presence of system interchanges, planned transportation systems and anticipated traffic impacts should be considered when identifying the area of influence.

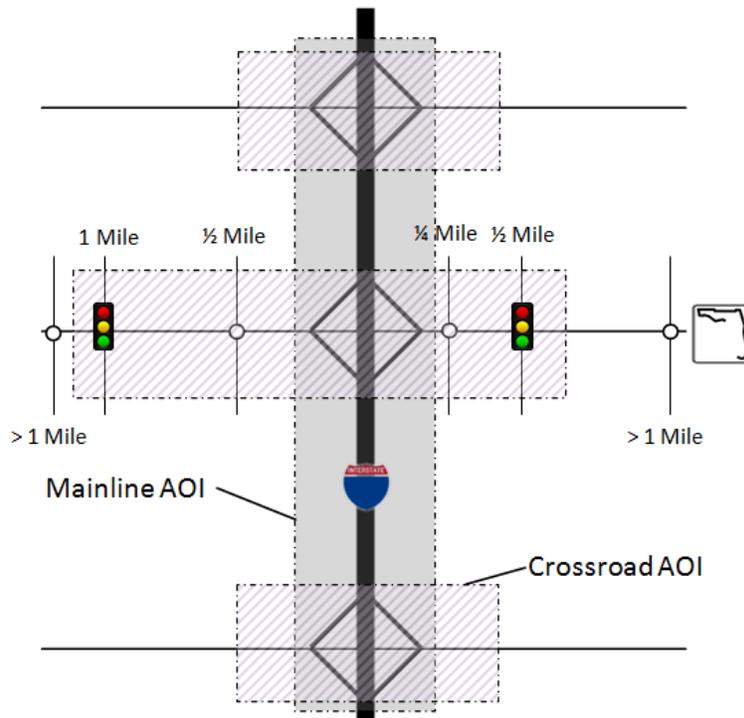
The following guidelines shall be used when defining the area of influence:

- **Area of influence along a limited access mainline** — In urban areas, the area of influence for IJR shall include at least the first adjacent interchange on either side of the proposed access change.

In rural areas, where interchanges are far apart and the proposed access is isolated, extension to adjacent interchanges may not be necessary. For IMRs, the area of influence extends only to the on- and off-ramp gore points of the adjacent interchanges. However, the area of influence can be extended beyond these limits based on operational and safety impacts of the proposed change in access. The limits in this situation should be determined through discussion with the IRC, SIRC and FHWA (if applicable).

- **Area of influence along a crossroad** — The area of influence along the crossroad shall extend at a minimum, up to one half-mile in either direction of the proposed access change. If there are signalized intersections along the crossroad, the area of influence shall extend beyond the half-mile to include at least one signalized intersection in either direction, as determined by the IRC. If the signals are in a coordinated system, the area of influence may be expanded to include the analysis of all affected signals. If there is a Development Regional Impact (DRI) within the vicinity of the access change, the area of influence could be extended to include the DRI area of influence. The area of influence along the crossroad shall be determined by the IRC during the MLOU stage of the project.

Figure 2-1 Area of Influence Along Mainline and Crossroad



2.4.3 Analysis Years

All IARs shall consider existing year, opening year, interim year and design year as traffic analysis years. The need for analysis of interim years shall be decided and agreed when developing the MLOU. The interim year shall be included in projects that have phased construction or fail prior to the design year. Additionally, the analysis methodology and procedure for each analysis year must be agreed to by the requester, IRC, SIRC and FHWA (if applicable) during the MLOU phase. The requester must analyze build

alternatives and the no-build alternative for all analysis years as defined in the MLOU. The analysis years are described below:

- **Existing year** — The existing year is the year the IAR is prepared or a prior year where acceptable data is available. The operational and safety aspects of the existing mainline, interchanges and adjacent arterial system within the area of influence are determined and documented in the existing year analysis. This analysis is used to document existing conditions and deficiencies.
- **Opening year** — The opening year is the first year in which the proposed improvements will be opened to traffic. If the proposed improvements are to be phased, the opening year is the year the first phase of the project will be opened to traffic.
- **Interim year(s)** — The interim year is the opening year of the phased project. Phased interchange improvements require additional interim analysis for the year each phase is anticipated to open to traffic. An interim year also is required when an alternative shows failure prior to the design year. An interim year may not be required if no phased improvements are planned or the preferred alternative provides acceptable operations until the design year.
- **Design year** — The design year for IMR and IJR normally is 20 years after the opening year. The design year is used for all subsequent project phases, such as PD&E study and design. If the proposed project phasing extends beyond the 20-year horizon, the requester is required to show the improvements that will be in place in the design year and the interim 20-year. However, FDOT will only consider alternative phases completed within the 20-year horizon. The design year for an IOAR is at least 10 years after the opening year.

Two additional analysis years are considered for travel demand forecasting. These are the base year and planning horizon year, which are documented when preparing data and traffic forecasts. The outputs from the travel demand forecasting model for the base and planning years are used as the basis to forecast opening, interim, and design year travel demand. Techniques to interpolate or extrapolate travel demand model data to the analysis years shall be documented in the MLOU.

MLOU should include base and planning years of the travel demand model

- **Base year** — The base year is the year for which the selected travel demand forecasting model was calibrated. The most current version (as close to the existing year as possible) of the adopted travel demand forecasting model shall be used.
- **Planning horizon year** — The planning horizon year is the approved forecast or horizon year of the selected travel demand forecasting model.

2.4.4 Coordination

Coordination with other agencies, such as MPOs and other affected entities, is part of the IAR process. Proper coordination helps to avoid conflicts with other new or proposed changes in access or corridor improvements within the vicinity of the IAR project. Additionally, coordination with other agencies could lead to the adjustment of design concepts to meet permitting requirements in later phases of project development. As such, the MLOU shall identify all coordination efforts that will be performed in the IAR process.

2.4.5 Data Collection

Data to be collected for the IAR analysis includes roadway geometrics, travel demand and traffic control. Existing traffic data includes turning movement counts, origin-destination data and heavy vehicle data; speed and travel times data; traffic control data; transit data; crash data; and information on bicycles and pedestrians. Efforts to use existing databases and studies are emphasized. However, field observations should be performed to confirm the reasonableness of the existing data. For further details on the data collection requirements, the requester should refer to the FDOT Traffic Analysis Handbook.

In the event additional data collection is necessary after the MLOU has been approved, the requester is required to develop a supplemental methodology as an addendum to the MLOU. The supplemental methodology for additional data collection shall be approved by the IRC prior to the initiation of data collection. The methodology shall contain the justification for any additional data need, the collection techniques and limitations on use of data.

2.4.6 Travel Demand Model Selection and Forecasting

Model selection and development of demand volume projections shall be done based on the guidelines and techniques published in the [2014 FDOT Project Traffic Forecast Handbook](#), FDOT's [Project Traffic Forecasting Procedure Topic No. 525-030-120](#) and the Traffic Analysis Handbook. The adopted regional travel demand model to be used in the analysis shall be identified in the MLOU. Any deviation from the use of the district's and MPO's approved models or methods shall include documentation to support justification for such deviation. All assumptions used to determine future traffic demand shall also be identified.

2.4.7 Traffic Operational Analysis

Defining the scope of traffic operational analysis is part of the MLOU. The scope of the traffic analysis should, therefore, be supported by the area type, existing traffic operating conditions and analysis tools. Additionally, prior to finalizing the scope of the analysis, an IAR coordination meeting called by the IRC should be held. The coordination meeting also is used to define the purpose and need for the IAR, the goals and objectives of the IAR and the operational analysis limits. Composition of the coordination meeting should include the requester, IRC, SIRC, FHWA DTE and technical staff from the various disciplines in the district.

Area type is defined as rural, transitioning into urban areas or urbanized areas. The requester should reference the FDOT Quality/Level of Service Handbook for more discussion about the area type.

Knowledge of existing operational conditions is essential in determining if the existing facility is oversaturated or undersaturated. Such knowledge is useful to establish the analysis area of influence and to select the type of analysis tool.

Knowledge of existing conditions is essential to determining operating conditions

Proper selection of a traffic analysis tool and approach determines the success of any analysis effort. As such, the requester must possess sufficient knowledge of traffic flow analysis and limitations (strengths and weaknesses) of the traffic analysis tools. The requester should be aware that no single tool can

analyze or model all project scenarios. It is recommended that the analysis effort should correlate the magnitude of the problem. The use of sophisticated tools and approaches should match the complexity of the problem that the analysis is intending to evaluate. Further guidance for tool selection is provided in the FDOT Traffic Analysis Handbook.

2.4.8 Safety Analysis

The safety analysis methodology shall be documented and agreed to in the MLOU. The objective of the safety analysis is to examine the effects of the access proposal on the performance of the facility. As such, the safety analysis should proactively aim at reducing or correcting potential safety problems in the planning and design phases before they are constructed.

Safety analysis shall be performed by analyzing a minimum of five years of historical crash data within the AOI.

This analysis shall identify areas where there may be a safety concern. The study limits of safety analysis are the same as for operational analyses. The safety analysis for existing conditions should include the following:

- Crash type
 - Crash types such as overturns, rear-ends, angle, sideswipes, hitting fixed objects, etc.
 - Most prevalent crash types
 - Crash patterns and crash contributing factors
- Crash severity
 - Fatalities, serious injuries, evident injuries, possible injuries, property damage
- Crash rates and numbers
 - Document the number of crashes and crash rates within the study limits and how the rates compare to statewide averages for similar corridors or interchanges.

The safety analysis for proposed conditions should document how the access request proposal would improve the identified safety problems.

2.4.9 Performance Measures

Performance measures are Measures of Effectiveness (MOEs) used to evaluate the operations and safety performance of an IAR. Identification of the performance measures in the MLOU enhances the focus of the analysis to quantify the benefits and impacts of the IAR. It is recommended that the performance measures be selected to fulfill the purpose and need for the access request. For the performance measures to be useful, they must ultimately provide information that can be used to make investment and management decisions.

*Performance measures
have to be chosen to meet
the need for the IAR*

Level of Service (LOS) Standards for Interchanges

Interchange modifications should result in improved traffic operations. The build alternative shall result in operating conditions equal or better than the no-build. Florida LOS requirements are defined in [Department Policy 000-525-006](#) and are detailed in the current [Quality/Level of Service \(Q/LOS\) Handbook](#). Within the LOS Policy and handbook, specific minimum acceptable standards are given for limited access highways based on the area type and lane restrictions. It is worth mentioning that proving the access proposal would meet minimum LOS standards does not guarantee its acceptability.

Other Performance Measures

Other performance measures that may be evaluated include but are not limited to speed and travel time, queue length, person/vehicle served, control delay, trip length, number of phase failures, percent demand served in peak hour and travel time reliability. It is recommended to establish all MOEs that will be used to evaluate the performance of an IAR in the MLOU. Guidance for performance MOEs selection is provided in the FDOT Traffic Analysis Handbook.

2.4.10 Environmental Considerations

The requirements for documentation of the environmental considerations as part of an IAR process vary by project. Known or potential environmental issues shall be documented, as they affect the IAR approval process. Additionally, known environmental information may be used to identify any fatal-flaw conditions that may impact the selection of the improvement alternative and NEPA decision. Any environmental fatal flaws shall be identified as early as possible in the process to determine whether the requester should proceed with the IAR proposal. If a previous ETDM screening has been completed then the results should be summarized in the MLOU. These results help to determine if there are any significant or fatal environmental impacts. The MLOU should identify a status and schedule of the PD&E study.

2.4.11 Design Exceptions and Variation

The geometry of the roadway is important to the overall operation and safety of the highway network. The geometry of the roadway is affected by traffic and environmental variables such as volumes, speeds, right of way, environmental impacts, etc. Therefore, the geometry of the roadway is an important part of the IAR. While detailed geometric design is performed in later phases of the project, geometric information and conceptual design developed in the IAR should be consistent with the FDOT design criteria and standards outlined in the Plans Preparation Manual (PPM). It should be noted that compliance with design standards and criteria does not guarantee engineering and operational acceptability of the IAR. Rather, the acceptability determination is based on a full evaluation of FHWA's eight policy points.

When developing the MLOU, the requester shall take the following into consideration:

- For all new construction; reconstruction; and resurfacing, restoration, and rehabilitation (3R) projects on the SHS, FDOT design standards (Design Standards, Plan Preparation Manual, Structures Manual, Standard Specifications for Road and Bridge Construction) apply. For design standards not specifically listed in these manuals, American Association of State Highway and

Transportation Officials (AASHTO) design standards shall apply.

- When it becomes necessary to deviate from the department’s criteria and standards, early documentation and approval are required. As such, the MLOU shall identify any anticipated exceptions and variations to FDOT or FHWA design standards, criteria, rules and procedures.

2.4.12 Conceptual Signing Plan

The MLOU shall contain a requester’s commitment to prepare a conceptual signing plan for the IAR. It is very important to note that adequate signing is not a replacement for sound geometry design and engineering judgment. The conceptual signing plan in IARs is intended for planning purposes only and not for PD&E, design or construction. The Manual on Uniform Traffic Control Devices (MUTCD) serves as guidance for preparing the signing plan.

2.4.13 FHWA’s Eight Policy Points

The MLOU shall include a commitment to meet FHWA’s eight policy points.

2.5 Review and Acceptance of MLOU

The review and consideration for acceptance of the MLOU is performed according to FDOT Procedure 525-030-160 and discussed in **Chapter 1** of this User’s Guide. The ERC system shall be used when reviewing the MLOU. For proposals impacting more than one district (i.e., Turnpike proposals or proposals near district boundaries), all affected IRCs shall be part of the signatories of the MLOU. It is important for the MLOU to clarify any review time frame expectation, especially for high-priority projects.

The IRC, SIRC and FHWA (according to **Section 1.7**) shall accept and sign the MLOU after they concur with the MLOU requirements and need to proceed with the IAR. The signed MLOU serves as the notice to proceed for the requester, unless otherwise stipulated by the IRC. Any work performed by the requester prior to the acceptance of the MLOU is considered “at risk” and may not be accepted by the IRC. If a change to the agreed methodology is proposed during the IAR process, then an amendment to the approved MLOU shall be required. The requester shall prepare the amendment only for sections of the MLOU that have changed and submit for approval. The amendment approval shall follow a similar process as of the original MLOU. All parties that signed the original MLOU shall also approve the amendment. An IAR reevaluation shall require submittal of a new MLOU for approval. This is discussed in more detail in **Section 4** of this guide.

2.6 MLOU Qualifying Provisions

The following qualifying provisions shall be stated in each MLOU:

- Coordination of assumptions, procedures, data and outputs for project review during the access request process will be maintained throughout the evaluation process.
- Full compliance with all MLOU requirements does not obligate FDOT or FHWA to accept the IAR.
- The Requester shall inform the approval authorities of any changes to the approved methodology.

Chapter 3

Interchange Access Report

The Interchange Access Report is developed as a stand-alone document consistent with the requirements of the MLOU. If a feasibility study or any other previous report has been prepared, then relevant information from such documents should be summarized and provided in appropriate sections of the IAR report or in the appendices. Most importantly, the report should be clearly written for a reviewer not familiar with the project to understand the intent of the IAR.

FDOT and FHWA will use the information contained in the Interchange Access Report to make a determination of engineering and operational acceptability of the IAR. The determination of engineering and operational acceptability shall only be given when justification and documentation provided in the report successfully address FHWA's eight policy points as stated in the 74 Federal Register 43743 (August 27, 2009).

Acceptability of an IAR is based on full evaluation of the FHWA's eight policy points

3.1 Documentation Requirements

The Interchange Access Report shall address the following items in detail:

- Executive summary (FHWA's eight policy points)
- Purpose and need
- Methodology
- Existing conditions
- Future conditions
- Alternatives analysis
- Funding plan and schedule
- Recommendation

The documentation requirements will be determined by the IRC in cooperation with the acceptance authority during the MLOU development phase. When microsimulation analysis techniques are used, a calibration report shall be prepared and included in the IAR.

3.2 Analysis of Existing Conditions

The purpose of this analysis is to support the need for the project. Also, the analysis of existing conditions provides the baseline operational characteristics for comparison of build and no-build alternatives.

Existing conditions analyses also identify any known environmental or cultural impacts that could be a fatal

flaw to the access proposal or would result in significant mitigation efforts. This analysis includes navigable waterways, wetlands, public lands, contaminated sites, noise-sensitive sites, historical or archaeological sites, threatened and endangered species, contamination, air quality, Section 4 (f) lands and impacts to neighborhoods or any other environmental or cultural factors. The requester shall be responsible for identifying any such fatal flaws as soon as possible and bring them to the attention of the IRC.

3.3 Considered Alternatives

The alternatives to be considered and analysis years required are identified in **Table 3-1**.

Once the existing conditions are known, the requester develops potential improvement concepts that address the purpose and need for the project. It is recommended that the requester schedule a meeting or a workshop with the IRC and acceptance authority to review the considered alternatives. The IRC shall invite staff from other offices such as design, traffic operation, construction, etc., to review and determine the viability of the alternatives in addressing the need for the project.

The IAR build alternatives include strategies providing new access or modifying existing access to limited access facilities. Details of all reasonable build alternatives considered, including those eliminated from further considerations, shall be documented in the IAR report. The documentation for the alternatives eliminated can be minimal like a summary of what was considered, reasons for elimination etc. Build Alternatives meeting purpose and need of the project will have a more detailed description and carried forward for evaluation. If a planning study was prepared prior to the IAR, all reasonable alternatives considered in the study shall be discussed in the IAR. Similarly, alternatives considered during the Alternative Technical Concepts (ATCs) process in a Design-Build (D-B) project shall be documented in the IAR. It is understood that not all of these alternatives can be evaluated in the IAR, but the IAR should include discussion of all reasonable alternatives that were considered and reasons for not carrying them further for evaluation. The alternatives considered in the IAR along with the analysis years shall be agreed to by the IRC, SIRC and FHWA (on interstate facilities).

Table 3-1: Considered Alternatives

Considered Alternatives		Year of Analysis			
		Existing	Opening	Interim	Design
No-Build		✓	✓	*	✓
Build	Preferred Alternative	N/A	✓	*	✓
	Other Alternatives	N/A	✓	*	✓
TSM&O**		N/A	✓	*	N/A

✓: Required; *: May be required as determined by IRC and Acceptance Authorities; N/A: Not applicable

** : Does not apply to D-B and P3 projects, need determined by IRC

The no-build alternative is the existing conditions plus any committed projects in the adopted MPO’s Transportation Improvements Program (TIP), Statewide Transportation Improvement Program (STIP), Local Government Comprehensive Plan (LGCP), MPO Long-Range Transportation Plan, FDOT’s Adopted

Five-Year Work Program and SIS Modal Plan. The committed projects also may include mitigation improvement projects that are elements of approved development orders. Privately funded projects that relieve traffic on state and local highways may be considered if agreed to by the IRC.

The requester must consider the implementation of Transportation Systems Management and Operation (TSM&O) strategies as an alternative in the IAR. For IAR purposes, TSM&O alternatives are relatively low-cost approaches that can satisfy the traffic needs without having to construct or modify an interchange. TSM&O alternatives that may be considered include adding crossroad turn lanes, improving signalization strategies or increasing the number of lanes along a ramp segment that are dropped in advance of the mainline ramp terminal. If a TSM&O alternative provides an acceptable solution in the opening year, the alternative should be analyzed in each of the subsequent analysis years (interim and design). If the TSM&O alternative provides an acceptable solution through the interim year, the alternative would normally be adopted and no further alternatives need be considered.

The TSM&O alternative, by itself may not always satisfy the project need, especially in case of D-B and Public-Private Partnership (P3) projects. In such a situation, the build alternatives evaluated in the IAR may incorporate elements of TSM&O, alternative transportation modes or additional network improvements beyond those planned and programmed.

3.4 Travel Demand Forecasting

Analysis of future conditions involves the preparation of future traffic volumes for all agreed upon alternatives utilizing the travel demand projection models, input data and adjustment procedures as documented in the MLOU. If no travel demand model is available, historic traffic data may be used to develop design traffic by trend analysis.

The specific FDOT procedures and technical criteria for future year traffic forecasting are discussed in detail in the [Project Traffic Forecasting Handbook](#).

Documentation of the future conditions forecast should include, at a minimum, the following:

- Methodology techniques, model refinement and results of the network and project (subarea) model validation efforts.
- Travel-demand forecasts within the area of influence for the proposed opening, interim (if applicable) and design years for all alternatives depicted on maps, line drawings and tables, as agreed to in the MLOU.
- Summary of modifications to land use or socio-economic data files and networks for all analysis years.
- Model output smoothing techniques applied, the method used and the extent of adjustments.
- Post-processing of travel demand model volumes.
- Consistency with DRIs or other major developments affecting the traffic within the area of influence.
- Traffic factors agreed to in the MLOU.

3.5 Evaluation of Alternatives

The evaluation of alternatives for an IAR is a thorough, technical investigation to compare the performance of alternative improvements that are developed to meet the need for the project. Performance measures or MOEs that were identified in the MLOU are used to compare the alternatives. Guidance for selection of appropriate traffic analysis tools used for evaluation of alternatives is provided in the FDOT Traffic Analysis Handbook and agreed to in the MLOU.

The evaluation of alternatives should address, at a minimum, the following:

- system and operational performance,
- safety and
- environmental impacts.

Evaluation of alternatives should be documented to allow independent review of the IAR

Evaluation of alternatives must be consistent with the MLOU. The safety and operational analyses performed in the evaluation of alternatives shall demonstrate that the IAR does not have significant negative impact on the operation of the mainline and adjacent network. The build alternative shall not result in conditions worse than the no-build alternative at any analysis year. Additionally, the analysis should use sufficient data and its documentation should be of sufficient detail to allow independent review of the IAR.

If the project is to be constructed in phases, the analysis must demonstrate that each phase can function independently and does not affect the safety and operational efficiency of the facility.

3.6 Design Exceptions and Variations

Any request for design standard variations or exceptions must be submitted with sufficient engineering, safety and operational analyses in accordance with FDOT PPM and AASHTO design controls and criteria. In addition, any requests for exceptions to policies and procedures must be reviewed and have acceptance decisions when the Interchange Access Report is reviewed to ensure they will not compromise the operation.

Design exceptions must be approved using the following guidelines:

- All known requests for exceptions must be fully documented and justified by the requester during the interchange access request process.
- All exceptions must be done during the PD&E process.
- Exception approvals shall be obtained as described in Section 23.3 of Volume 1 of the PPM. It is noteworthy that approval of an exception does not ensure acceptance of an IAR.

3.7 Local Transportation Plans and Planning Studies

An IAR shall be consistent with the adopted statewide and local transportation plans and other

planning documents. The MPO or other local government plans need to support the IAR proposal and any inconsistencies shall be resolved prior to its submittal for approval.

It is recommended that an interchange master plan or a planning study be prepared prior to development of the IAR proposal. The planning study includes the existing and financially feasible planned interchanges from the MPO or other local government plans and identifies the future multimodal transportation development needs in the corridor. This assists in prioritizing the interchange needs and helps determine the impacts of new access or modification of an existing access to other interchanges in the corridor. An interchange master plan, if prepared, does not replace the formal IAR.

If the access proposal is not consistent with the adopted local transportation plan, the IRC shall examine the discrepancy and determine which access (proposed or local transportation plan access) better serves the public interests, safety and operational performance of the limited access facility. If both are needed, the IRC shall investigate how they can be corrected or reconciled to minimize operational and safety problems.

If the access proposal is not contained in the current local transportation plan, the IRC shall determine the reason and need for the proposed access and determine its impact on the mainline and adjacent interchange operations. If it is decided to move forward with the proposed access, then it will be required to be included in the local transportation plan. In all the above cases, the IAR proposal shall be prepared as per the requirements outlined in this guide.

3.8 Funding Plan

A commitment of funding and inclusion of projects as part of the planning process in the adopted plans (LRTP, STIP or TIP) prior to final approval of the IAR are part of the requirements for determination of the engineering and operational acceptability.

When the project is included in the FDOT 5-Year Work Program or MPO Transportation Improvement Plan (TIP), subsequent phases of the project must be included in the work program. If this is not the case, the funding for successive phases must be identified. The TIP may include a project that is not fully funded only if full funding for the time period to complete the project is identified and fiscally committed in the LRTP.

For projects proposed by a developer, a financial plan prepared by the developer must provide the IRC with enough detail to determine the source of all funds available to finance the access proposal. The District IRC should be more involved in development driven projects and also include SIRC early in the IAR process.

3.9 Access Management Agreement for the Interchange Cross Streets

When the IRC determines it is necessary, the requester may be required to develop an Access Management Agreement with all necessary parties. The agreement will be between FDOT, the local government, the

requester and individual property owners. It may be necessary to include other affected parties. This documented agreement will be based upon an access management plan for the property located up to a minimum distance from the end of the interchange ramps, depending on the access classification of the crossroad. The access management plan shall provide reasonable access to the public road system and maintain the long-term safety and operation of the interchange area. Any planned access to the SHS within the interchange area shall conform to Rules 14-96 and 14-97 F.A.C. Failure to develop and execute the agreement may result to FDOT stopping the IAR review process and/or denying the IAR.

Access management standards require more stringent regulation of driveway connections and median openings in interchange areas. Interchange areas are defined as either ¼ mile from the interchange if the crossroad is a controlled access facility, or up to the first intersection with an arterial road, whichever is less. The distance is measured from the end of the ramp that is farthest from the interchange. These distances may be increased at the discretion of FDOT to improve the operations and safety of the facility.

- Access Class 2 with posted speed limits over 45 mph — 1,320 ft. minimum spacing
- Other access classes with posted speed limits over 45 mph — 660 ft. minimum spacing
- Other access classes with posted speed limits below 45 mph — 440 ft. minimum spacing

3.10 Intergovernmental Coordination

It is important to consider coordination with other agencies during the IAR process. Coordination with stakeholders performed during the IAR process shall be documented.

The IRC shall determine the level of coordination required and the federal, state, regional and local agencies that must be contacted. The IRC also shall define the role of the requester in ensuring required coordination is properly carried out and addressing all appropriate intergovernmental comments. Areas where intergovernmental coordination may be needed include:

- local policies,
- data sources,
- environmental information,
- methodology development,
- proposal review,
- infrastructure and IAR funding commitments,
- consistency with local land-use and transportation plans,
- project-related issues to include access management and land-use coordination in the interchange area,
- signal progression and timing and
- public-involvement information.

3.11 Environment Considerations

The IAR process shall consider all fatal flaws and environmental issues that might influence or impact the NEPA phase of the project. The requirements for documentation of environmental considerations as part of an IAR will vary by project and location. The purpose of providing environmental information is to support the informed decision making process on the potential environmental consequences that may impact future NEPA decisions.

Projects involving IJR and IMR that are the result of the standard MPO or local government planning process are subject to the Planning Screen of the ETDM process. This screening helps to understand the environmental impacts of the proposed improvement and determine if any fatal flaws exist.

For projects that are not included in any local government plan, the IRC shall work with the district ETDM coordinator to ensure the inclusion of these projects in the Planning and/or Programming Screens. This process is required for all NEPA or SEIR projects requesting approval. The IRC shall provide the ETDM coordinator with any information regarding the project including location, limits of study area and need for the project. The ETDM coordinator shall load the project information into the ETDM database and notify the Environmental Technical Advisory Team (ETAT) members of the project for review and comment.

The IRC shall act as the project manager with regard to the ETDM process. It is the IRC's responsibility to ensure that the requester receives any comments from the ETAT members resulting from the screening analysis. These comments shall be addressed in the IAR process and also during the subsequent NEPA phase of the project.

The IAR shall identify the environmental considerations that influenced the outcome of the alternative development and selection process. The environmental discussion may be minimal if the IAR is being conducted concurrent with or late into the process of a PD&E study.

3.12 Review of the Report

When completed, the report is forwarded to the IRC for review and comment as agreed to in the MLOU. Once the IRC's comments are addressed, the report is forwarded to the SIRC for review, comment and acceptance recommendations. The Interchange Access Report is reviewed to ensure compliance with FHWA's eight policy points, the requirements set forth in the MLOU, sufficiency, completeness, correctness, and consistency of the data, analysis and recommendations of the DRI (if required). The review must be done utilizing the ERC system. All IARs shall be reviewed by SIRC per authority tables in Section 1 prior to submittal to FHWA. The CO shall also sign the IARs as per the approval authority tables presented in **Section 1** prior to submittal to FHWA.

3.13 Quality Control

FDOT uses Quality Control (QC) and Quality Assurance (QA) for the deliverables. The implementation of QA/QC procedures is a critical part of the development of IARs. An adequate QA/QC plan helps ensure

that all FDOT and FHWA procedures are followed as well as transparency, completeness and consistency of IAR documents. The project schedule should allow adequate time for QA/QC reviews. The QA/QC guidelines provided in this section will assist the project team in developing alternatives that are operationally viable, safe and constructible. QA/QC procedures shall be followed for every project regardless of schedule. All major project items and deliverables shall be checked for quality control and all QC documentation must be provided to the district IRC upon request.

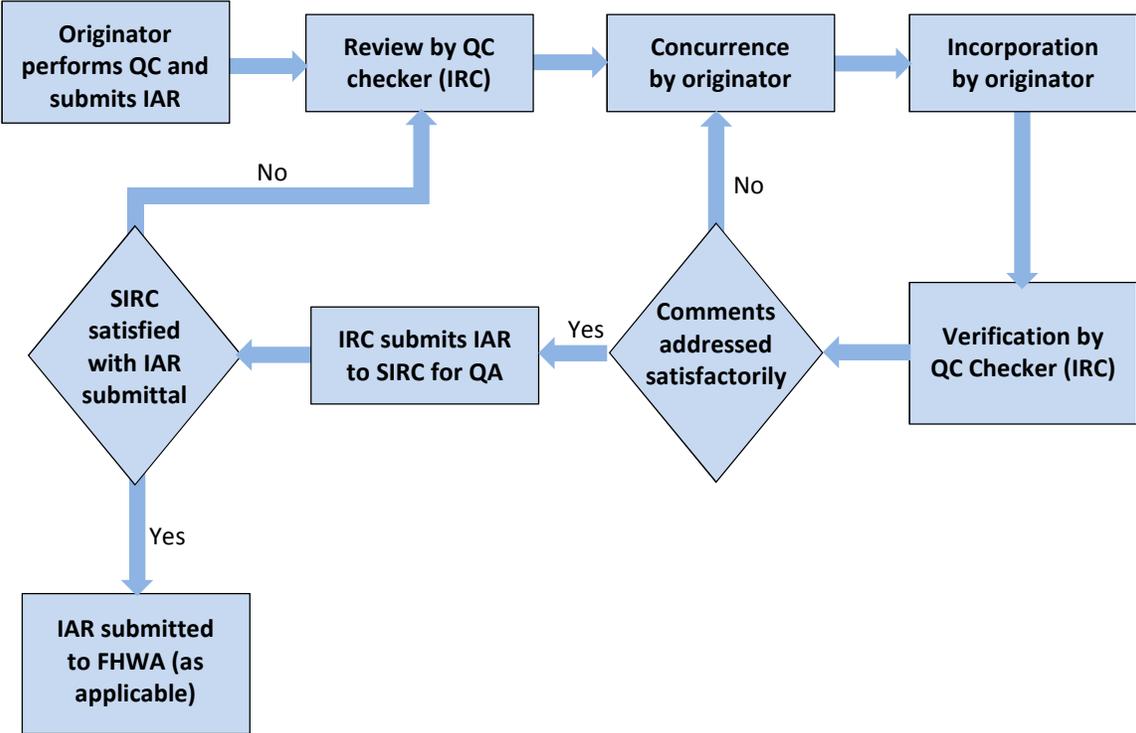
QC shall be performed by the IRC. QC is a detailed review involving checking, incorporating and verifying prior to submittal of any project items or the IAR document. The IRC and FDOT discipline leads involved in the IAR are responsible for ensuring that the QC review is adequately performed.

Two important roles of an IRC's QC responsibility are (1) to ensure the originator's QA/QC plan is being followed adequately and (2) to review project deliverables to ensure they are of appropriate quality and conform with FDOT standards and procedures and FHWA policy points. It is the responsibility of the IRC to ensure that the IAR submittal is being reviewed by experienced and qualified staff. The IRC shall include the following district offices in review of the IAR: EMO, design, traffic operations, structures, ROW, maintenance and program management. The FDOT Project Manager (PM) and district IRC should meet with the consultant PM early in the project to reach a common understanding of QA/QC plan to be followed and submittal requirements. A record of all QA/QC activities shall be kept. QC documentation, including completed checklists, certifications or the reviewers' check set of the reviewed documents, should be provided upon request.

QA is performed by SIRC. QA is the overall review and confirmation of the quality control process to ensure a quality product. SIRC reviews each IAR report submitted for acceptance consideration and its associated analyses to ensure compliance with policies, procedures, standards, guidelines and processes. The SIRC will furnish IRCs with information on areas of compliance, non-compliance and need. Additionally, SIRC, the central office and FHWA develop and conduct IAR trainings for the districts and their consultants. The trainings will be scheduled and located dependent on the need and budget.

The QA/QC process flowchart for IARs is shown in **Figure 3-1**.

Figure 3-1 QA/QC Process Flowchart for IARs



If there are any outstanding comments that cannot be resolved between originator and checker after one round of review, then the issue resolution protocol will be followed.

All IAR submittals to the district IRC shall have a QC review log or stamp showing that a review has been completed prior to submittal. A sample QC checklist and review log is shown below in **Table 3-2**. The major review items are listed in the table and it should not be considered an all-inclusive list. It is the responsibility of the reviewer to perform a complete review of the IAR prior to submittal and additional review items shall be added to the checklist as needed. Finally, these items need to be checked for completion as well as reviewed for correctness in the IAR.

**Table 3-2: Quality Control Checklist and Review Log (Sample)
Interchange Access Request Proposals**

Project Name:

FDOT Project

Manager:

FPID No.

IRC:

No.	ITEM	READY FOR REVIEW	
		CHECKED BY	DATE
1	Travel Demand Forecasting		
	<i>Has the latest version of approved model been used? Have all adjustments made as per FDOT guidelines and MLOU and reviewed?</i>		
	<i>Have the traffic factors been reviewed and checked to make sure K, D and T factors are reasonable?</i>		
	<i>Did the project traffic development follow FDOT Traffic Forecasting Handbook and MLOU?</i>		
	<i>Have existing and future traffic volumes been checked for reasonableness?</i>		
2	Operational Analysis		
	<i>Are the inputs into traffic software correct?</i>		
	<i>Does the validation/calibration of microsimulation properly documented?</i>		
	<i>Are operational analysis results reasonable?</i>		
3	Concept Design		
	<i>Does the proposed design meet minimum design standards?</i>		
	<i>Have the exceptions and variations, if any, justified?</i>		
4	Conceptual Signing Plan		
	<i>Has a conceptual signing plan been reviewed, checked to make sure it can be signed, and meets MUTCD?</i>		
5	FHWA's Eight Policy Points		
	<i>Does the proposal satisfy FHWA's eight policy points?</i>		
6	Report Review		
	<i>Has the report been reviewed for grammatical and editorial errors?</i>		

The IRC shall submit a written Statement of Technical Review for each IAR report certifying that appropriate quality control reviews were conducted and the report satisfies the requirements of FHWA's eight points and FDOT procedure for new or modified interchanges. The statement shall be signed by the requester and the IRC.

The recommended format of the Statement of Technical Review is provided in **Appendix B**.

3.14 Processing for Acceptance Decision

The access request report is deemed ready for signature from the acceptance authority when it complies with FHWA's eight policy points and FDOT policies and procedures. Additionally, all comments and issues raised during document reviews have to be resolved to their satisfaction before IRC transmits the report to the central office for signatures. After the central office signs the access report for a non-programmatic IAR, SIRC forwards the report to FHWA Florida Division Office for signature.

Should the acceptance authority deny the IAR, the IAR is returned to the requester (through IRC) with a written description of comments and issues requiring resolution. It is the IRC's responsibility to determine if the IAR should be pursued further and, if so, to resolve the comments and concerns with the requester.

The SIRC is responsible for notifying the FHWA Florida Division Office about the FDOT review and determination of engineering and operational acceptability decision for programmatic IARs. The notification to FHWA will include:

1. location and type of change on the interstate system,
2. location where information validating acceptability of the IAR may be accessed,
3. verification that the required analysis, review and actions taken in considering and processing the IAR comply with FHWA policy points and programmatic agreement and
4. Acceptability determination by the FDOT chief engineer.

The FHWA Florida Division expedited approval of programmatic IARs will involve concurrence with or objection to the chief engineer's determination of engineering and operational acceptability within five (5) business days of receipt of notification. After receiving FHWA's approval decision, SIRC will inform the IRC about the final decision.

Chapter 4

IAR Re-evaluations

4.1 Re-evaluation

A re-evaluation is performed to document compliance with the state and federal requirements and processes as the result of changes in the project since the approval of the original IAR. Re-evaluations are required for one or more of the following conditions:

- change in approved IAR design concept,
- significant change in conditions (traffic characteristics, land use type, environment) or
- failure of an IAR to progress to the construction phase within eight (8) years of acceptance.

Changes in the project that would affect safety, operations and environment as compared to the approved IAR shall be considered when determining the need and scope for the re-evaluation. It is, therefore, strongly recommended that the requester coordinate with the IRC, SIRC and FHWA to determine the level of work effort required prior to proceeding with the re-evaluation process.

Analysis and documentation prepared for an IAR re-evaluation shall fulfill the requirements identified in FHWA's eight policy points. The IAR re-evaluation format is similar to the original IAR.

A new MLOU shall be prepared for an IAR reevaluation.

A new MLOU documenting the assumptions and methodology shall be prepared for an IAR re-evaluation.

The applicability of PA or non-PA process will need to be re-established during the re-evaluation.

The conditions requiring an IAR re-evaluation and the associated documentation requirements are discussed in detail in the sections below.

4.1.1 Change in Approved Access Design Concept

Changes in design features or design concept that occur after an IAR is accepted shall necessitate the need for re-evaluation of the IAR. The common reasons for design changes of an approved IAR and the minimum requirements for re-evaluation are discussed below.

- i. NEPA or final design phases in which the requester can improve the approved IAR concept.
- ii. Alternative Technical Concept (ATC) or post-contract design change proposed by the design-build (D-B) firm.
- iii. Public-private partnership (P3) project in which the selected team proposes a concept different from the Request for Proposal (RFP).

In all the above conditions, the approved IAR concept serves as the no-build in the re-evaluation and is used as the basis of comparison with the proposed concept. In the case of D-B and P3 projects, the approved IAR concept is included with the RFP and referred as the RFP concept. It is important that the requester preparing the re-evaluation have a clear understanding of the level of effort that will be required when proposing a change in the approved design concept.

Design Changes Due to Environmental Impacts

In cases where the change of an approved design concept occurs during NEPA because of environmental impacts, the re-evaluation shall show the new concept satisfies the E&O requirements and FHWA policy points. The new proposed concept shall be compared with the no-build concept for evaluation purposes.

Design Changes Due to Design or NEPA Evaluation

In cases where the change of an approved design concept occurs during NEPA or the final design phase of the project, in which a new concept is proposed as an improvement over the IAR approved concept, the re-evaluation shall demonstrate that the new concept satisfies the E&O requirements and FHWA's policy points. The new proposed concept shall meet the LOS standards and operate equal to or better than the original IAR approved concept. The requester shall confirm the validity of the traffic volumes in the re-evaluation. Traffic volumes shall be updated if there has been a significant change in traffic conditions since the approval of the original IAR that can result in changes in traffic volumes. A comparison of traffic volumes from the forecasting model used in the original IAR with the new model can be made to determine if a significant change in traffic volumes is anticipated. It is highly recommended that the requester have meetings with IRC, SIRC and FHWA early in the process to come to an agreement over the traffic forecasting methodology to be used in the re-evaluation. The agreed methodology shall be documented in the MLOU and signed by applicable authorities.

The new concept must perform equal to or better than the original approved concept

Design Changes Due to D-B or P3 Alternative Concept

In the case of a change in the approved design concept during D-B or P3 projects, in which a new concept is proposed as an improvement over the IAR approved concept, the re-evaluation shall show that the new concept satisfies the E&O requirements and FHWA's policy points. In these projects, the approved IAR concept is included in the RFP and serves as the no-build alternative for comparison purposes. The new concept proposed by the D-B or P3 team shall perform equal to or better than the original RFP concept and satisfy the FHWA policy points. This means, the re-evaluation shall show that the new concept proposed operates at acceptable LOS standards and satisfies the other MOEs used in the evaluation of the original concept. Project traffic volumes shall be updated if there has been a significant change in traffic conditions since the approval of the RFP concept that can result in a change in traffic volumes. A comparison of traffic volumes from the forecasting model used in the original IAR with the new forecasting model can be made to determine the significance of the change in traffic volumes. It is critical that the requester involve the IRC, SIRC and FHWA early in the process to agree upon the re-evaluation methodology. An MLOU documenting the methodology and procedures to be followed in the re-evaluation shall be prepared and signed by all applicable parties. The analysis performed for the re-evaluation shall, at a minimum, use the same MOEs that were identified in the original RFP evaluation.

4.1.2 Change in Conditions

Changes in projected traffic demand because of a proposed DRI or other land use changes that were not part of the original IAR can necessitate a re-evaluation if it is determined that the design traffic has substantially changed to affect the operation of the interchange. It is important to note that IAR re-evaluations should be consistent with the DRI Development Order or other agreements.

If the development traffic changes within the interchange AOI, resulting in a change in LOS or a need for the improvement, an IAR re-evaluation shall be required. The re-evaluation shall show that the need for the improvement or modification is justified under the new traffic conditions and satisfies the FHWA policy points. The re-evaluation document shall follow the outline of the original IAR. A new MLOU shall be prepared and signed by applicable authorities.

4.1.3 Time Lapse before Construction

A re-evaluation is required if 8 years have lapsed before IAR is constructed

A re-evaluation is required if an accepted IAR has not progressed to construction eight years after receiving a determination of the engineering and operational acceptability. It is noteworthy that an IAR re-evaluation is different than an NEPA re-evaluation.

The re-evaluation shall demonstrate the project need still is viable by considering any changes in the project and conditions that would affect the safety, operations, environment or design criteria used in the original approval. The original access design and any approved design exceptions shall be reviewed. Justification for the design exception or variation for any design elements that do not conform to the current design criteria must be performed during the re-evaluation.

The re-evaluation, because of time lapse, shall update analysis years and traffic data used for the original access request. Other items to be updated in the re-evaluations include the funding plan, project schedule and compliance with FHWA's eight policy points. The re-evaluation document shall follow the outline of the original IAR. A new MLOU shall be prepared and signed by applicable authorities.

4.2 Documentation

The requester is encouraged to contact the IRC and acceptance authorities to discuss specifics and determine whether an IAR re-evaluation is required. If re-evaluation is required, the IRC shall coordinate with the acceptance authorities to determine the type of re-evaluation documents required to update the IAR. After additional coordination with the acceptance authority, the IRC notifies the requester to update the Interchange Access Report. The notification shall include specific items of the previously approved IAR that are to be updated.

The IAR re-evaluation shall follow the outline of the original IAR and conform to the requirements of this guide. The need for an MLOU shall be determined on a case by case basis depending on change in conditions and after discussions with all parties responsible for approving the MLOU. The re-evaluation shall be signed as per the approval authorities identified in **Section 1** of this guide. The IAR re-evaluation scenarios discussed in sections above and the level of effort required is summarized in **Table 4-1** below.

Table 4-1: Re-evaluation Types and Requirements for IARs

Re-evaluation type	Primary reason for re-evaluation	MLOU required*	Traffic update required	Basis for comparison	Documentation level	Satisfy FHWA policy points
NEPA	Environmental impacts	No	No	No-build	Update relevant sections in the IAR such as alternatives, analysis, environmental, FHWA policy points	Yes
NEPA or design phase	Modified design	Yes	Yes	Approved IAR concept	Revised IAR report	Yes
Design-build or P3	Modified design	Yes	Yes*	RFP	Revised IAR report	Yes
Change in conditions	Change in traffic	Yes	Yes	No-build	Revised IAR report	Yes
Time lapse	More than eight years since IAR approval	Yes	Yes	No-build	Revised IAR report	Yes

*To be determined on a case by case basis depending on change in conditions

Chapter 5

FHWA Policy Points

5.1 FHWA 8 Policy Points

Adequate access control to limited access facilities is critical to provide the highest level of services in terms of safety and mobility in these facilities. The new and revised access points shall meet FHWA's eight point requirements. The FHWA policy points are listed in this section. The policy points are included in the FHWA Interstate System Access Informational Guide that can be found at <http://www.fhwa.dot.gov/design/interstate/pubs/access/access.pdf>.

Policy Point 1

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)).

Policy Point 2

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)).

Policy Point 3

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 also must 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)).

Policy Point 4

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 (23 CFR 625.2(a), 625.4(a)(2) and 655.603(d)).

Policy Point 5

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.

Policy Point 6

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).

Policy Point 7

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)).

Policy Point 8

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).

Appendix A

Template for MLOU

Florida Department of Transportation Interchange Access Request

Methodology Letter of Understanding (MLOU)

Type of request: IJR IMR IOAR

Type of Process: Programmatic Non Programmatic

Coordination of assumptions, procedures, data, networks, and outputs for project traffic review during the access request process will be maintained throughout the evaluation process.

Full compliance with all MLOU requirements does not obligate the Acceptance Authorities to accept the IAR.

The Requester shall inform the approval authorities of any changes to the approved methodology in the MLOU and an amendment shall be prepared if determined to be necessary.

1.0 Project Description

Provide background or supporting information that explains the basis for the request.

A. *Purpose and Need Statement*

Provide the Purpose, the Need, and the Goals and Objectives.

B. *Project Location*

Provide project description and a map of the IAR project location.

Exhibit/Figure #

C. *Area of Influence*

Provide a description of the area of influence along the main line and cross street.

Exhibit/Figure # _____

D. *Project Schedule*

Identify the schedule of production activities consistent with a proposed conceptual funding plan and opening year.

2.0 Analysis Years

A. *Traffic Forecasting*

- Base year
- Horizon year

B. *Traffic Operational Analysis*

- Existing year
- Opening year
- Design year

A year of failure analysis shall be performed for Preferred Alternative, in case a failing LOS is obtained in Design Year.

3.0 Alternatives

The No-Build and Build alternatives shall be analyzed in the IAR. Details of all reasonable build alternatives considered, including those eliminated from further considerations, shall be documented. The documentation for the alternatives eliminated can be minimal like a summary of what was considered, reasons for elimination etc. Build Alternatives meeting purpose and need of the project shall have a more detailed description and evaluated in the IAR.

The implementation of TSM&O alternative will be considered in the IAR.

4.0 Data Collection

The type of data that may be used should be identified.

- A. *Transportation System Data*
- B. *Existing and Historical Traffic Data*
- C. *Land Use Data*
- D. *Environmental Data*
- E. *Planned and Programmed Projects*

5.0 Travel Demand Forecasting

A. *Selected Travel Demand Model(s)*

B. *Project Traffic Forecast Development Methodology*

Describe the methodology and assumptions in developing the future year traffic volumes (AADT and DDHV)

C. *Validation Methodology*

Describe the validation methodology using current FDOT procedures and data collection procedure

Identify how modifications to the travel demand forecasting model will be made, including modifications to the facility type and area type for links, modifications to socio-economic data and all input and output modeling files for review.

D. *Adjustment Procedures*

Identify the process used to adjust modeled future year traffic to the defined analysis years. Discuss how trends/growth-rates will be factored into this, if applicable.

E. *Traffic Factors*

- Utilizing recommended ranges identified in the [Project Traffic Forecasting Handbook](#) and [Procedure \(525-030-120\)](#).
- Utilizing other factors, identified below

Roadway	K	D	T	T _f	PHF	MOCF	PHF

Source:

6.0 Traffic Operational Analysis

The area type, traffic conditions, and analysis tools to be used are summarized in this section.

A. *Existing Area Type/Traffic Conditions*

Area Type	Conditions	
	<i>Under-saturated</i>	<i>Saturated</i>
Rural	<input type="checkbox"/>	<input type="checkbox"/>
Urban Areas/Transitioning Urbanized Areas	<input type="checkbox"/>	<input type="checkbox"/>
Urbanized Areas/Central Business District (CBD)	<input type="checkbox"/>	<input type="checkbox"/>

B. *Traffic Analysis Software Used*

Software		System Component					
Name	Version	Freeways				Crossroad	
		Basic Segment	Weaving	Ramp Merge	Ramp Diverge	Arterials	Intersections
HCS/HCM		<input type="checkbox"/>					
Synchro		<input type="checkbox"/>					
SimTraffic		<input type="checkbox"/>					
Corsim		<input type="checkbox"/>					
Vissim		<input type="checkbox"/>					
Other		<input type="checkbox"/>					

C. *Calibration Methodology*

- *Calibration methodology and parameters utilized will be documented.*
- *Calibration Measures of Effectiveness (MOEs) and calibration targets.*

D. *Selection of Measures of Effectiveness (MOE)*

- *The Level of Service criteria for each roadway classification, including mainline, ramps, ramp terminal intersections and the crossroad beyond the interchange ramp terminal intersections are identified below.*
- *In addition to the Level of Service criteria, state other operational MOEs to be utilized for the evaluation of alternatives.*

7.0 Safety Analysis

A. *Detailed crash data within the study area will be analyzed and documented.*

Years:

Source:

8.0 Consistency with Other Plans/Projects

A. *The request will be reviewed for consistency with facility Master Plans, Actions Plans, SIS Plan, MPO Long Range Transportation Plans, Local Government Comprehensive Plans or development applications, etc.*

B. *Where the request is inconsistent with any plan, steps to bring the plan into consistency will be developed.*

C. *The operational relationship of this request to the other interchanges will be reviewed and documented. The following other IARs are located within the area of influence.*

9.0 Environmental Considerations

A. *Status of Environmental Approval and permitting process.*

B. *Identify the environmental considerations that could influence the outcome of the alternative development and selection process.*

10.0 Coordination

Yes	No*	N/A*	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An appropriate effort of coordination will be made with appropriate proposed developments in the area.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Request will identify and include (if applicable) a commitment to complete the other non-interchange/non-intersection improvements that are necessary for the interchange/intersection to function as proposed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Request will document whether the project requires financial or infrastructure commitments from other agencies, organizations, or private entities.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Request will document any pre-condition contingencies required in regards to the timing of other improvements and their inclusion in a TIP/STIP/LRTP prior to the Interstate access acceptance (final approval of NEPA document).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Request will document the funding and phasing.

**Explain if No or Not Applicable (N/A) is checked:*

11.0 Anticipated Design Exceptions and Variations

- Design exceptions/variations are not anticipated, but if an exception/variation should arise it will be processed per FHWA and FDOT standards.
- The following exceptions/variations to FDOT, AASHTO or FHWA rules, policies, standards, criteria or procedures have been identified:

12.0 Conceptual Signing Plan

A conceptual signing and marking plan shall be prepared and included in the access request.

13.0 Access Management Plan

- Access management plan within the area of influence will not be changed by the proposed improvements to the interchange.
- The improvement will affect access management within the area of influence will be changed. An access management plan will be developed within the area of influence to complement the improvements to the interchange:

14.0 FHWA Policy Points

The FHWA eight policy points will be addressed within the access request.

Appendix B

Template for Statement of Technical Review (QC Certification)

Quality Control Checklist Template

SYSTEMS PLANNING OFFICE

QUALITY CONTROL CERTIFICATION FOR INTERCHANGE ACCESS REQUEST SUBMITTAL

Submittal Date: _____

FM Number: _____

Project Title: _____

District: _____

Requester: _____

Phone: _____

District IRC: _____

Phone: _____

Document Type: MLOU IJR IMR IOAR OTHER _____ (Specify)

Status of Document (Only complete documents will be submitted for review; however, depending on the complexity of the project, interim reviews may be submitted as agreed upon in the MLOU)

Quality Control (QC) Statement

This document has been prepared following FDOT Procedure Topic No. 525-030-260 (New or Modified Interchanges) and complies with the FHWA Eight Policy requirements. Appropriate District level quality control reviews have been conducted and all comments and issues have been resolved to their satisfaction. A record of all comments and responses provided during QC review is available in the project file or Electronic Review Comments (ERC) system.

Requester _____

[PRINT NAME]

Date: _____

IRC _____

[PRINT NAME]

Date: _____

**Quality Control Checklist and Review Log (Sample)
Interchange Access Request Proposals**

Project Name: _____ **FDOT Project Manager:** _____
FPID No. _____ **IRC:** _____

No.	ITEM	READY FOR REVIEW	
		CHECKED BY	DATE
1	Travel Demand Forecasting		
	<i>Has the latest version of approved model been used? Have all adjustments made as per FDOT guidelines and MLOU and reviewed?</i>		
	<i>Have the traffic factors been reviewed and checked to make sure K, D and T factors are reasonable?</i>		
	<i>Did the project traffic development follow FDOT Traffic Forecasting Handbook and MLOU?</i>		
	<i>Have existing and future traffic volumes been checked for reasonableness?</i>		
2	Operational Analysis		
	<i>Are the inputs into traffic software correct?</i>		
	<i>Does the validation/calibration of microsimulation properly documented?</i>		
	<i>Are operational analysis results reasonable?</i>		
3	Concept Design		
	<i>Does the proposed design meet minimum design standards?</i>		
	<i>Have the exceptions and variations, if any, justified?</i>		
4	Conceptual Signing Plan		
	<i>Has a conceptual signing plan been reviewed, checked to make sure it can be signed, and meets MUTCD?</i>		
5	FHWA's Eight Policy Points		
	<i>Does the proposal satisfy FHWA's eight policy points?</i>		
6	Report Review		
	<i>Has the report been reviewed for grammatical and editorial errors?</i>		

Appendix C

Acronyms and Definitions

Term	Acronym	Definition
American Association of State Highway and Transportation Officials	AASHTO	A nonprofit, nonpartisan association representing state highway and transportation departments that advocates for transportation-related policies and provides technical services to support states in their efforts to efficiently and safely move people and goods.
Annual Average Daily Traffic	AADT	A measurement of the number of vehicles that use a highway over a period of a year divided by 365 to obtain the average for a 24-hour period.
Area of Influence	AOI	Area of influence is the area that is anticipated to experience significant changes in traffic volumes resulting from the interchange proposal and from changes in land use and/or roadway network (i.e., freeway main line, ramps, crossroads, immediate off-system intersections and local roadway system).
Average Daily Traffic	ADT	The number of vehicles that traverse a segment of roadway over a 24-hour period.
Design Hour Volume	DHV	DHV is the traffic volume expected to use a highway segment during the 30 th highest hour of the design year.
Development of Regional Impact	DRI	DRI is a development which, because of its character, magnitude or location would have a substantial effect upon the health, safety or welfare of citizens of more than one county.
Directional Design Hour Volume	DDHV	DDHV is the traffic volume expected to use a highway segment during the 30 th highest hour of the design year in peak direction.
Florida Administrative Code	FAC	The Florida Administrative Code is the official compilation of the administrative rules and regulations of state agencies
Federal Highway Administration	FHWA	The approval authority for IJR's on Interstate Highway System projects and serves in an advisory role on non-interstate proposals.
Florida Department of Transportation	FDOT	The Florida Department of Transportation (FDOT or Department) is an executive agency, which means it reports directly to the governor. FDOT's primary statutory responsibility is to coordinate the planning and development of a safe, viable and balanced state transportation system serving all regions of the state, and to assure the compatibility of all components, including multimodal facilities.
Florida Standard Urban Transportation Modeling Structure	FSUTMS	A standard modeling structure used in Florida for travel-demand forecasting approved by FDOT Model Task Force.
High Occupancy Vehicle	HOV	A vehicle carrying two or more passengers.
Highway Capacity Manual	HCM	Compiles methodologies and procedures used to analyze highway capacity and quality of service.
Highway Capacity Software	HCS	HCS is software that implements most of the HCM methodologies.
Intelligent Transportation System	ITS	A system that encompasses a broad range of advanced communications-based information and electronic technologies that improves transportation safety and mobility.
Interchange		A system that provides for the movement of traffic between intersecting roadways via one or more grade separations.
Interchange Access Request or Report	IAR	Interchange Access Request is prepared to demonstrate a proposed interchange access proposal is both engineering and operationally viable based on traffic, geometry, financial and other criteria.
Interchange Justification Report	IJR	The primary document developed to evaluate FHWA's Eight Policy Points and the document submitted to FDOT and FHWA to gain approval to add access to the Interstate Highway System.

Term	Acronym	Definition
Interchange Modification Report	IMR	A report documenting a request for approval to modify access points to an existing interstate interchange or approved interchange but not yet constructed.
Interchange Operational Analysis Report	IOAR	An IOAR is prepared for analysis of specific, low-cost aspects of an interchange modification mostly within an existing right of way where a full IMR is not required.
Interchange Review Coordinator	IRC	An FDOT's district personnel responsible for ensuring all interchange access requests are prepared according to the state and federal guidance.
Interstate or Interstate Highway System		A highway that is part of the Dwight D. Eisenhower National System of Interstate and Defense Highways.
Level of Service	LOS	A qualitative measure describing operational conditions within a traffic stream, based upon service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience; LOS A represents completely free flow of traffic allowing traffic to maneuver unimpeded; LOS F represents a complete breakdown in traffic flow, resulting in stop-and-go travel; LOS is typically calculated based upon peak-hour conditions.
Local Government Comprehensive Plan	LGCP	The plan (and amendments thereto) developed and approved by the local governmental entity pursuant to Chapter 163, F.S., and Rule Chapter 9J-5, Florida Administrative Code, and found in compliance by the Florida Department of Community Affairs.
Long Range Transportation Plan	L RTP	Long Range Transportation Plan adopted by the DOT, a metropolitan planning organization or a regional planning affiliation. For the purposes of an IJR and this policy and procedure, only the currently approved LRTP will be considered.
Master Plan	MP	Master Plan is a document identifying both short-term and long-term capacity improvements to limited-access highways mainline and interchanges consistent with SIS policies and standards to allow for high-speed and high-volume travel.
Measures of Effectiveness	MOEs	MOEs are parameters indicating the performance of a transportation facility or service.
Methodology Letter of Understanding	MLOU	The MLOU documents the agreements reached between the applicant, DIRC, SPO and FHWA during the study design development of the project.
Metropolitan Planning Organization	MPO	An organization made up of local elected and appointed officials responsible for the development and coordination of transportation plans and programs, in cooperation with the state, for metropolitan areas containing 50,000 or more residents.
National Environmental Policy Act	NEPA	A United States environmental law that established national policy promoting enhancement of the environment.
National Highway System	NHS	The National Highway System (NHS) includes the Interstate Highway System as well as other roads important to the nation's economy, defense and mobility. The NHS was developed by the United States Department of Transportation (USDOT) in cooperation with the states, local officials and metropolitan planning organizations (MPOs).
Project Development & Environmental Study	PD&E study	A PD&E study is prepared to ensure that FDOT's procedure for complying with environmental regulations is followed. In Florida, PD&E is the equivalent of NEPA.
State Environmental Impact Report	SEIR	A SEIR is required on all major state-funded projects in which FDOT becomes the owner of the document and no federal funding is involved in the project.

Term	Acronym	Definition
State Highway System	SHS	A network of approximately 12,000 miles of roads owned and maintained by the state of Florida or state-created authorities.
Statewide Transportation Improvement Program	STIP	The State Transportation Improvement Program (STIP) is a federally mandated document that must include a listing of projects planned with federal participation in the next four fiscal years.
Strategic Intermodal System	SIS	SIS includes facilities and services of statewide or interregional significance that meet high levels of people and goods movement, generally supporting the major flows of interregional, interstate and international trips.
Systems Interchange Management Report	SIMR	A Systems Interchange Modification Report is prepared when an interchange proposal is prepared for a series of closely spaced interchanges that are operationally interrelated.
Travel Demand Model		A computer model that forecasts traffic volumes on the major transportation grid. For purposes of an IJR, the travel-demand model must be the official model maintained by the MPO/RPA and is adopted as part of the LRTP.
Transportation Improvement Program	TIP	TIP is the MPO's agreed-upon list of priority projects that intend to use federal funds, along with non-federally funded capital projects. TIP is mandated by federal law for the MPO to receive and spend federal transportation funds.