

Introduction

The goal of Intersection Control Evaluation (ICE) is to inform the FDOT’s decision-making process to identify and select an intersection control strategy (also referred to as alternative) meeting the project’s purpose and need, fitting the intersection location’s context classification, providing safe travel facilities for all road users, and reflecting the overall best value. The control strategy’s value is measured in terms of performance-based criteria within available resources.

Purpose and Applicability

The purpose of ICE is to consider multiple context-sensitive control strategies when planning a new intersection or modifications to an existing intersection. A context-sensitive control strategy is a flexible approach to identifying a control type meeting the goals and needs of the community and all road users.

An ICE is required when any of the following applies:

- New intersection signalization is proposed except for signalization at a midblock crosswalk.
- Major reconstruction of an existing signalized intersection is proposed.
- Changing a directional or bi-directional median opening to a full median opening
- Driveway Connection permit applications for Category E, F, and G standard connection categories (defined by average daily trips thresholds in Rule 14-96.004, F.A.C.) to add, remove, or modify a traffic signal.
- District Design Engineer (DDE) and/or District Traffic Operations Engineer (DTOE) consider an ICE a good fit for the project.

ICE Procedure

The FDOT ICE procedure outlines quantitative methods to evaluate the performance of potential intersection control strategies and select a preferred control strategy. This “performance-based” objective evaluation procedure creates a transparent and consistent approach to select a preferred control strategy based on metrics such as safety; operations; multimodal accommodations; benefit-cost ratios; and environmental, utility, and right of way impacts. The ICE procedure is the same for new intersections or modifications to existing intersections.

The ICE activities consist of three stages:

1. Stage 1–Screening
2. Stage 2–Preliminary Control Strategy Assessment
3. Stage 3–Detailed Control Strategy Assessment

However, determining a preferred intersection control strategy may not always require all three stages. ICE analysis is to be completed for the existing year (year of data collection), the opening year, and the design year.

For an intersection project requiring ICE, the evaluation must be prepared under the supervision of a licensed Professional Engineer in the State of Florida. Following the evaluation, ICE Form(s) must be submitted with supporting documentation signed and sealed by said Professional Engineer to the DDE and the DTOE for their approval. FDOT retains final approval authority for the ICE, except for local-agency-led projects on locally maintained roadways not using FDOT funds.

The FDOT ICE Manual documents the steps and processes required to conduct an ICE. The State Traffic Engineering and Operations Office’s [webpage](#) provides resources on the FDOT ICE procedure.