



Florida Department of Transportation

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GOVERNOR


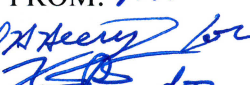

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JIM BOXOLD
SECRETARY

ROADWAY DESIGN BULLETIN 15-07
TRAFFIC OPERATIONS BULLETIN 02-15
(FHWA Approved: April 13, 2015)

DATE: April 15, 2015

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Consultant Project Management Engineers, District Construction Engineers, District Maintenance Engineers, District Geotechnical Engineers, District Structures Design Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, Program Management Engineers

FROM:  Michael Shepard, P.E., State Roadway Design Engineer
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SUBJECT: **Evaluation of Intersections for Roundabouts**

This bulletin introduces a new policy covering the evaluation of intersections for roundabouts as further supported by the new 2015 Florida Intersection Design Guide.

REQUIREMENTS

1. Delete **PPM**, Volume 1, Section 2.13.1 and replace it with the following:

The *National Cooperative Highway Research Program (NCHRP) Report 672, Roundabouts: An Informational Guide*, is adopted by FDOT and establishes criteria and procedures for the operational and safety analysis of modern roundabouts in the United States. In addition, the *Florida Intersection Design Guide* contains Florida specific guidelines and requirements for evaluation and design of roundabouts in Florida.

A roundabout alternative must be evaluated on new construction and reconstruction projects. Evaluation is also required for all other types of projects that propose new signalization or require a change in an un-signalized intersection control. An evaluation is not required for minor operational improvements such as changes to signal phasing, or for signal replacement projects where the primary purpose is to upgrade deficient equipment and installations.

To construct a roundabout on the state highway system one of the following criteria must be met:

- **MUTCD** traffic signal warrants 1 or 2
- Documented high frequency of severe crashes
- Context Sensitive Solution for the implementation of Complete Streets on a low speed facility.

While roundabouts may provide a community enhancement, they are not be constructed on state roads solely for this purpose.

Use 20-year design traffic for roundabout evaluation and design. Roundabouts are not to be considered at locations where the design year total traffic volume entering the intersection exceeds 25,000 AADT for a single-lane roundabout, or 45,000 AADT for a two lane roundabout.

All roundabout designs must be approved by the State Roadway Design Engineer.

Modification for Non-Conventional Projects:
See the RFP for requirements.

2. Add the following to **PPM**, Volume 1, Section 25.4.17:

When there are proposed changes in intersection control a roundabout alternative must be considered. See Section 2.13.1 in Chapter 2 of this Volume for additional information.

3. The 2015 **Florida Intersection Design Guide (FIDG)** has been released and is available on the Roadway Design Internet site. Detailed information on the Roundabout Evaluation Process is included in Chapter 7 of the current **FIDG**.

COMMENTARY

Current **PPM** language requires roundabouts to be evaluated on new construction, reconstruction, and safety improvement projects, as well as any time there are proposed changes in intersection control that will be more restrictive than the existing condition. This bulletin, along with the 2015

Florida Intersection Design Guide, establishes a process to be followed to satisfy the roundabout evaluation requirement.

BACKGROUND

Prior to this bulletin, there was no guidance available to define what constitutes a formal roundabout evaluation. The roundabout evaluation process presented in this bulletin is being implemented to eliminate confusion and promote consistency across all Districts in the consideration and evaluation of roundabouts.

IMPLEMENTATION

The requirements of this bulletin are effective immediately. These requirements may be waived for projects currently in the design phase and implementation will adversely impact the project's schedule.

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