1. PURPOSE:
This directive sets forth the Department of Transportation and Development’s (DOTD) policy for the justification and approval for installing roundabouts.

2. SCOPE:
This policy applies to the State highway system and to local roads where state or federal funds will be used as well as to any improvements to the State highway system funded by a private entity, Parish or local governments that are constructed by permit. Refer to EDSM VI.1.1.6 on Roundabout Design for the design details of a roundabout.

3. POLICY:
A) A comprehensive investigation and report of traffic conditions and physical characteristics shall be made of the location. This report shall be recommended by the District and approved by the Chief Engineer. This report shall include:
1. Crash history of the site for the past 3 years with a chart listing the number of correctable crashes
2. Traffic Volumes
   a. 7 day 24 hour approach counts with hourly subtotals including classification counts identifying truck volumes
   b. Manual counts for peak hour AM and PM (also noon and weekend if applicable)
   c. Projected peak hour counts for a 20 year design life (Traffic Engineering Division Administrator to approve waivers to design year)
   d. Pedestrian Volumes
3. Speed study for each approach
4. Analysis of roundabout operation
   a. Sidra Intersection [computer software] (Akcelik & Associates) software must be run to compare the level of service and the v/c ratio between roundabouts, signals and stop controlled intersections
   b. VisSim™ [computer software] (Visual Solutions, Inc.) model
5. Identify any safety concerns
6. Perform a systems analysis on adjacent intersections and commercial driveways that the roundabout may affect
7. Nearby land use
   a. Right of Way Issues
   b. Access Issues
   c. Operational issues
8. Conceptual drawing of proposed roundabout
   a. Assure appropriate geometry can be obtained for entry and exit using a WB-67 (or larger) design vehicle. (Waivers to be approved by the Traffic Engineering Division Administrator.)
   b. Horizontal and vertical geometry must be clearly identified
   c. Approximate Right of way
   d. Nearby driveways
   e. Utilities
   f. Sidewalk location

B) Locations where a roundabout may be justified;
   1. Intersections with poor visibility as long as stopping sight distance to the roundabout will be provided.
   2. Intersections with 5 or more reported crashes, of types susceptible to correction by a roundabout, have occurred within a 12 month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash.
   3. Increases capacity of an intersection.
   4. Intersections with limited space for queuing.
   5. Intersections with difficult skew angles, significant offsets, odd number of approaches or close spacing to other intersections.
   6. Intersections where U turns need to be accommodated.

C) Reasons why a roundabout may not be justified;
   1. Should not be installed strictly for access to private development using state or federal funds. May be installed under permit.
   2. Should not be planned to include metering or signalization

4. WAIVERS:

   Deviations from this policy must be requested in writing along with engineering justification for the variation from policy. The request shall be submitted to the Traffic Engineering Division Administrator who may approve a waiver in policy.

5. APPLICATION OF STANDARDS:

   These standards shall apply immediately to all new installations.

6. OTHER ISSUANCES AFFECTED:

   All directives, memoranda or instructions issued heretofore in conflict with this directive are hereby rescinded.
7. IMPLEMENTATION:

This directive will become effective immediately upon issuance.

WILLIAM H. TEMPLE
CHIEF ENGINEER