



ES.3 Purpose and Need

A Purpose and Need Statement for the US 31 Improvement from Plymouth to South Bend in Marshall and St. Joseph counties, Indiana, was drafted in March, 2003. It was presented at a Community Advisory Committee (CAC) and Public Information Meeting on April 10, 2003, and at an Interagency Review Meeting on May 15, 2003. The Purpose and Need Statement was subsequently revised based on projections for the year 2030 and comments received from the public and resource agencies.

Project Need Statement

Transportation improvements to US 31 between US 30 and its southern junction with US 20 are needed for the following reasons:

Reduce Traffic Congestion

- For the year 2002, three out of the four signalized intersections operate at an unacceptable level-of-service (LOS) of traffic operations during the AM and/or PM peak hours
- In the year 2030, all currently signalized intersections will operate at an unacceptable LOS
- For the year 2000, five out of eight segments of US 31 operate at an unacceptable LOS
- In the year 2030, all segments of US 31 will operate at an unacceptable LOS, with the one exception being the segment between US 30 and Michigan Road

Level-of-Service (LOS) describes a measure of congestion on roadways. LOS ranges from A to F, with LOS A indicating the least traffic congestion and LOS F indicating the most traffic congestion. INDOT standards state that an LOS C is the minimum acceptable for rural and suburban areas, and LOS B is more desirable. For urban intermediate and built-up areas, an LOS D is the minimum acceptable, while an LOS C is more desirable. Except for the segment from Miller Road (about three miles south of the US 20 Bypass) to the US 20 Bypass, the US 31 corridor is considered rural where an LOS falling below C is unacceptable.

Improve Safety

- Base year and projected future year total crash rates on US 31 exceed the statewide average for about half the length of the 20-mile corridor, including segments from US 6 through LaPaz, through Lakeville, and from Lakeville to US 20
- Base year and projected future year injury crash rates or fatal crash rates on US 31 exceed the statewide average for 40% of the corridor length

Consistency with Transportation Plans

- Existing US 31 lacks even partial access control for 15 miles from Michigan Road to the US 20 Bypass, where about 480 private driveways exist
- Existing US 31 also lacks adequate median width for left-turns through LaPaz, and through Lakeville to the US 20 Bypass



Project Purpose Statement

Based on the identified transportation needs, three overall project purposes (goals) have been established for the US 31 Improvement Project:

- 1) **Purpose 1 (Congestion):** Reduce congestion on US 31 by providing the capacity to meet the forecasted travel demand for 2030 at an acceptable LOS.
- 2) **Purpose 2 (Safety):** Improve safety on US 31 between US 30 and US 20.
- 3) **Purpose 3 (Consistency with Transportation Plans):** Determine consistency with statewide (INDOT) and regional (MACOG) transportation plans. MACOG is the South Bend Area Metropolitan Planning Organization (MPO). Project Alternatives will not be required to meet the third item in order to satisfy purpose and need.

Evaluation Criteria for Meeting Purpose and Need

Specific objectives and performance measures have been developed for each of the three identified purposes. The three purposes of the project and the performance measures for each are listed below.

Purpose 1 (Congestion): Reduce congestion on US 31 by providing the capacity to meet the forecasted travel demand for 2030 at an acceptable level-of-service (LOS).

Performance Measures:

- Achievement of an LOS in rural and suburban areas of C (B is more desirable) and in urban intermediate/built-up areas of no less than D (C is more desirable) on US 31 between US 30 and US 20.
- Reduction in the amount of congested vehicle-miles of travel and congested vehicle-hours of travel in the South Bend metropolitan area.

Purpose 2 (Safety): Improve safety on US 31 between US 30 and US 20.

Performance Measures:

- Reduction in the risk of fatal, injury, and property damage only (PDO) crashes to crash rate levels at or below statewide averages for this type of facility associated with travel on US 31 between US 30 and US 20.
- Reduction in fatal, injury and PDO crashes to crash rate levels at or below statewide averages in the South Bend metropolitan area.

Purpose 3 (Consistency with Transportation Plans): Determine consistency with the statewide (INDOT) and regional (MACOG) transportation plans.

Performance Measures:

- Determine consistency with the INDOT 2000-2025 Long Range Transportation Plan for Statewide Mobility Corridors and consistency with the MACOG Transportation Plan. Project Alternatives will not be required to meet this criterion in order to satisfy purpose and need.