# I-40 Corridor Study AHTD Job No. 012119 Conway – I-430 (Widening) (I-430) Pulaski and Faulkner Counties

## **Need for Improvements**

Traffic congestion is being experienced on portions of Interstate 40 (I-40) from I-430 in North Little Rock through the City of Conway. Continued growth in traffic volumes is expected to lead to worsening congestion. Pavement and bridge reconstruction is anticipated to be needed on portions of I-40 in the coming years to maintain the existing infrastructure in a state of good repair.

# **Purpose of the Study**

The purpose of this study is to determine highway widening needs, assess pavement and bridge conditions, evaluate interchange operations, develop improvement alternatives, and recommend scope and phasing of projects. Design concepts to be evaluated are expected to include alternatives to reconstruct pavement on I-40, reconstruct some bridges, widen the main lanes, improve interchange operations, and/or add auxiliary lanes between ramps. Additionally, alternatives will be examined that assess the ability of new location alignments, alternative transportation modes, High Occupancy Vehicle lanes, Transportation Systems Management/Travel Demand Management, Intelligent Transportation Systems, and No-Build alternatives to meet transportation needs. Also, traffic management needs for highway construction, maintenance and incident management will be addressed.

## Study Area

The study area is the I-40 corridor from I-430 in North Little Rock (Pulaski County) through Conway in Faulkner County, and will include freeway main lanes, ramps, and interchanges. Traffic operations on the portion of I-430 from I-40 to the Arkansas River Bridge will be analyzed and parallel corridors such as Highway 365 will be included in the study. The study area traverses portions of the Cities of North Little Rock, Maumelle, Mayflower, and Conway, and portions of Pulaski and Faulkner Counties.

I-40 is an Interstate facility and primary route for moving people and goods across the southern United States. Average Daily Traffic Volumes range between 31,000 vehicle/day west of Conway to 75,000 vehicles/day east of I-430. Up to eighteen percent of traffic is trucks. There are ten existing interchanges and two proposed interchanges within the study area. West of the Study Area, one additional interchange is being considered.

#### **Study Description**

The study will evaluate the I-40 corridor to determine the current, opening year (2015) and future (2035) traffic and infrastructure maintenance needs, and improvements that would best meet those needs. Recommendations are anticipated to be primarily related to the number of freeway lanes, cross-street and ramp design at interchanges, and the phasing of construction projects to efficiently provide the most benefit.

