## **Highway 5 Corridor Widening Study**

## Benton (I-30) to the Pulaski County Line

### Why are we conducting a Public Involvement Meeting?

The Arkansas State Highway and Transportation Department (AHTD) is conducting a study of Highway 5 from I-30 in Benton to the Pulaski County line due to continuing growth and increasing congestion. Traffic volumes up to 15,000 vehicles per day (VPD) now occur and are forecast to exceed 30,000 vpd by 2035. The study will inform decision-makers about:

- The timing and project limits of widening needs; and
- General design of future projects.

#### What are the design alternatives under consideration?

There are two typical design sections shown on display. See a separate display for comparison.

- Flush Median (Five-Lane) Four travel lanes and continuous center turn lane with bicycle lanes and sidewalks
- Raised Median Four travel lanes and curbed median with turn lanes at selected intersections, bicycle lanes and sidewalks

#### What is shown on the corridor aerial photograph on display?

A conceptual design layout for a Raised Median typical section only. The layout for a Raised Median is shown because:

- A Raised Median has the larger footprint of the two alternatives (by 6 feet) and the difference would be virtually undetectable at this scale;
- A Flush Median (Five-Lane) would have painted turn lanes in approximately the same location as the Raised Median; and,
- The placement of median breaks in a Raised Median design is critical to a successfully functioning corridor.

#### What is the conceptual design layout?

The conceptual design is a preliminary estimate of the:

- alignment the widened highway would likely follow given standard design practices;
- footprint of the constructed roadway as warranted by 2035 traffic forecasts;
- preliminary estimate of the construction limits; and,
- preliminary identification of properties that may be directly impacted by construction.

#### The conceptual design layout:

- Is NOT project design. Many factors will refine the footprint during actual project design.
- **Does NOT show right of way limits.** Final construction limits and right of way cannot be determined until a survey is conducted and a final design is produced.

Actual impacts of project construction and the acquisition of right of way will extend beyond the Construction Limits by varying distances depending on the slope of the land. Some impacts may ultimately be avoided in actual project design by the construction of retaining walls. A few possible locations for retaining walls are noted on the conceptual layout.

**Proposed Impact to Structures** – Structures shaded as Proposed Impacts may or may not be ultimately directly impacted when actual design is completed. Additional structures that are close to, but not touching, the Proposed Construction Limits may also be impacted especially in areas with changes in elevation.

**Project Construction** – The first widening project in the corridor has already been determined. Immediately after the completion of the study, design will begin on Job 061335, Springhill Rd.-Hwy. 183 (Bryant)(S). A Design Public Hearing will be held on that construction project when design reaches a point that proposed right of way limits are determined. Job 061335 is currently scheduled in the AHTD State Transportation Improvement Program (STIP) for Federal Fiscal Year 2015.

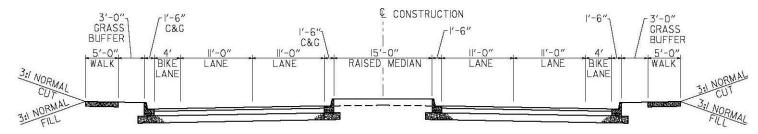
# **Highway 5 Corridor Widening Study**

**Interstate 30 to the Pulaski County Line** 

## PROPOSED TYPICAL HIGHWAY SECTIONS

## RAISED MEDIAN

Four Travel Lanes and Curbed Median with Turn Lanes, Sidewalks, and Bicycle Lanes



## **ADVANTAGES**

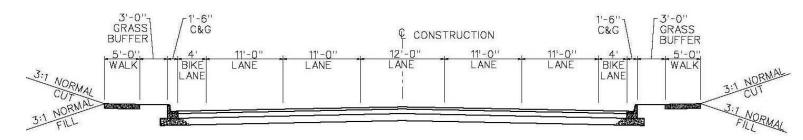
- Enhances the capacity of the corridor by improving traffic flow through elimination of unpredictable turning conflicts.
- Decreases vehicular crashes and motorist delay by decreasing turning conflicts.
- Provides a safe refuge in the middle of the road for pedestrians and may reduce pedestrian crashes.
- Encourages more orderly future development and decreases driveways by encouraging shared access at median breaks.
- Handles the high forecast traffic volumes (more than 30,000 vehicles per day) better than a flush median design.
- Provides an opportunity for enhancing the highway's appearance.

## **DISADVANTAGES**

- Requires an additional six feet of right of way more than the Flush Median.
- Limits direct left-turn access into and out of some driveways and streets.
- Lengthens some trips by requiring turns only at median breaks.

## **FLUSH MEDIAN (FIVE-LANE)**

Four Travel Lanes and Continuous Center Turn Lane with Sidewalks and Bicycle Lanes



## **ADVANTAGES**

- Provides direct left-turning access to land adjacent to the highway corridor.
- Removes left-turning vehicles from the travel lane which improves traffic flow and reduces vehicular crashes compared to a four-lane undivided highway.
- Requires six feet less right of way than the Raised Median alternative.

## **DISADVANTAGES**

- Increases opportunities for unpredictable turning movements.
- Roadway traffic capacity may suffer as traffic conflicts increase.
- Creates a long distance (more than 60 feet) for pedestrians to cross without a safe refuge.
- Encourages small lot commercial development with closely spaced driveways that may increase turning conflicts.

