1.0 INTRODUCTION

The Kentucky Transportation Cabinet initiated the KY 9 Widening Study to determine improvement strategies that address both the current and future needs of the facility. Located in the northeastern part of the state, the portion of KY 9 under study extends from the KY 10 intersection west of Maysville in Mason County (3.4 miles east of the Bracken County line) to 0.5 miles north of the Campbell/Bracken County line. Also known as the AA Highway because of its termini near Ashland, Kentucky and Alexandria, Kentucky (hence “A-A”), KY 9 is the primary rural principal arterial for Northern/Northeastern Kentucky, linking those cities to the surrounding region as well as numerous communities in between. The study area is shown in Figure 1.

FIGURE 1 - PROJECT STUDY AREA
Recognizing the community’s desire to improve the route, the Approved 2000-2002 Biennial Highway Construction Program and Identified Preconstruction Program Plan for FY 2003 Through 2006, also known as the Six-Year Highway Plan (SYP), identified funds for a Scoping Study of this highway segment. In April of 2001, the study was initiated with an assessment of existing conditions. This included the following:

- a review of existing reports and plans
- an analysis of the existing and design year 2025 traffic conditions
- an analysis of the crash history of the road
- an environmental review/footprint highlighting known environmentally sensitive areas and resources

1.1 Study Purpose

The purpose of this study is to identify and gather critical information about the project corridor in order to define possible roadway improvements that might better serve the residents of Mason, Bracken, Pendleton and Campbell Counties. This may include, but may not be limited to, the widening of this segment to four lanes. In order to provide direction for the Study, draft study objectives were presented at the first Team Meeting, as well as the first round of Local Official and Stakeholder meetings. The final, recommended objectives of this study include the following:

- Discussing project goals and issues with public officials, government agencies, concerned citizens and other groups with interest in the project
- Defining project goals and issues based on this input
- Identifying known environmental concerns
- Exchanging information with the public
- Producing and evaluating alternates
- Developing final recommendation(s)

Recommendations that result from this study will be geared towards possible future inclusion in the Six-Year Highway Plans.

1.2 Corridor Issues

Critical issues currently identified along the existing KY 9 corridor include both perceived safety problems and increasing traffic volumes (particularly truck traffic). The overall crash rate for this portion of KY 9 is lower than average for two-lane rural roads in Kentucky, but the public perceives the crash rates as being much higher. The severity of the head-on collisions and the frequency of the intersection crashes occurring in this corridor contribute to this perception. Some of the most evident issues include the following:

- The existing road is on rolling terrain and many of the intersections are located at the top or bottom of hills. Traffic turning onto KY 9 often merges with high-speed traffic at the bottom of hills, causing problems due to speed differentials and limited sight distances.
There is a low level of light resulting in reduced visibility for nighttime driving conditions, particularly during periods of rain/precipitation. Lighting has been recently provided for most of the major intersections.

Truck traffic, at approximately 17% of the overall traffic in 2000, is relatively high on KY 9 and seems to be increasing.

Turning lanes are not provided at many intersections, which results in a lack of safe storage for drivers wanting to make left turns, and a higher likelihood of rear end collisions as drivers turn onto the side roads. Also, vehicles turning right often use the shoulder as a turn lane to avoid rear-end collisions.

Truck-climbing lanes are available throughout the corridor, but often begin or end near intersections causing potential conflicts with merging traffic. Also, the lanes frequently begin within a vertical curve, lessening their effectiveness due to vehicular deceleration before the vehicle can diverge from the traffic lane. Many end abruptly just beyond the crest of the hill.

Dense fog causes visibility problems about 60 days per year. This may be the cause of many crashes at intersections.

Driver behavior, such as inattention, speeding, and driving while drowsy, is a major cause of crashes along the corridor.

High volumes of deer-related crashes occur in many areas along the corridor.

Widening of KY 9 could result in steeper approach grades on side roads because of rolling terrain. This may increase the cost of a reconstruction alternative because these side roads at the intersection of KY 9 would also need partial reconstruction.

Sight-distance problems exist at many intersections in the corridor due to guardrail placement or embankments.

1.3 Statement of Project Goals

The following Project Goals have been identified for the KY 9 Widening Study:

- Provide adequate capacity to support Design Year 2025 traffic volumes.
- Improve existing roadway geometrics to address sight-distance concerns.
- Reduce the number of crashes along the route and improve intersection safety.
- Reduce speed differentials by improving truck-climbing lane merge and diverge points.