

How the KYTC Builds Roads

Step 1: Long-Range Planning

- Identify/prioritize purpose & need
- Identify & address public concern
- Identify priorities for Six Year-Highway Plan

Step 2: Six-Year Highway Plan

- Project revenue for federal & state funds
- Break revenue into funding categories
- Match required state funds to federal funds
- Balance all fund categories
- Determine projects & programs that can be funded with projected revenues

Step 3: Project Planning

DURATION: 1 - 2 YEARS

- Determine project limits
- Verify funding needs
- Identify public concerns
- Verify project needs
- Identify project goals
- Identify environmental concerns
- Coordinate with resource agencies
- Make project recommendations

Step 4: Preliminary Design & Environmental Analysis

DURATION: 1 - 2 YEARS

- Conduct field surveys
- Inventory existing resources to identify protected, endangered & important resources
- Identify & address public concerns by conducting meetings & distributing reports
- Develop alternatives
- Prepare environmental documentation

Step 5: Final Design

DURATION: 1 - 2 YEARS

- Develop final alignments
- Develop right-of-way needs
- Drill for soil & rock samples
- Identify & address public comments
- Review environmental commitments
- Develop construction plans

Step 6: Right-of-Way Purchase (Land Acquisition)

DURATION: 1 YEAR

- Determine property values
- Meet with property owners
- Address property owner concerns
- Make offers & buy property
- Sign deeds
- Assist with relocations

Step 7: Utility Relocation

DURATION: 1 YEAR

- Move utilities out of construction zone
- Pay utility companies for relocations

Step 8: Construction

DURATION: 1 - 2 YEARS

- Address public concerns
- Construct roadway
- Fulfill environmental commitments
- Maintain traffic

Step 9: Maintenance

DURATION: THE LIFE OF THE ROAD

- Remove snow & ice
- Patch potholes & resurface
- Mowing & many other items

Current Phase

Public Meeting KY 90 Scoping Study

Barren County
KYTC Item No. 3-8819.00

June 28, 2016



The Kentucky Transportation Cabinet (KYTC) is seeking your input on a study affecting KY 90 in Barren County. This study serves as the first step in establishing project goals, identifying environmental concerns, and evaluating preliminary alternatives. Tonight is **Your Turn** to provide input on these improvement alternatives.

The purpose of the KY 90 improvement project is to enhance regional mobility and to provide a safer, more efficient connection between Glasgow and I-65. KY 90 is the most direct connection between Glasgow and vehicles heading northbound on I-65. Signs on I-65 direct southbound vehicles to use KY 90 to access Glasgow. KY 90 also provides a link between the Barren River Lake State Park and the Mammoth Cave National Park. KY 90 is part of the National Truck Network.

Contact Information

To find out more about this project after tonight's meeting, feel free to contact:

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Project Overview

The current traffic volumes on KY 90 range between 8,200 and 9,100 vehicles per day (vpd) with 16 to 17 percent trucks. By 2040, traffic volumes are expected to grow to 12,000 vpd with 19 percent trucks. Analysis of the current and future traffic indicates a two lane road can adequately accommodate the existing and future traffic demand.

A review of the as-built plans found all the horizontal curves and all the vertical curves along KY 90 satisfy the 45 design speed north of US 31W in Cave City and the 55 mph design speed south of US 31W. The steepest grade along the study area is five percent.

Over the five-year period between January 2011 and December 2015, 204 crashes were reported along KY 90 in the study area. This includes three fatal crashes (1.5 percent), 47 injury collisions (23 percent) , and 154 property damage only collisions (75.5 percent) . Along the study corridor, 10 spots were found to have a critical crash rate factor (CRF) greater than 1.00. The CRF is one measure of the safety of a road. A CRF greater than 1.0 suggests crashes are likely not occurring at random but instead are likely attributable to some causative factor or factors.

What types of improvements are under consideration?

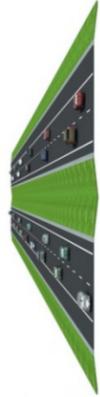
This project examines the need for and types of improvements necessary along KY 90 between the Sanders Street intersection in Cave City and the US 68 (Veterans Outer Loop) intersection in Glasgow. Spot Improvements and Corridor Wide Improvements are being evaluated.

The Spot Improvement Alternatives generally include relatively low cost improvements that can be implemented individually as solutions to address existing safety issues. Five locations were identified as conceptual spot improvement projects.

The Corridor Wide Alternatives would result in the improvement of KY 90 along the entire study area. In Cave City, a five-lane curb-and-gutter typical section is proposed with sidewalks and bike lanes. It matches the existing typical section north of Sanders Street. This alternative will replace the bridge over the CSX Rail. No home or business relocations are anticipated as a result of the potential improvements in this section.

South of Cave City, two alternatives are under consideration; Alternative 1 includes a 2 + 1 Typical Section and Alternative 2 is a Four-Lane Depressed Median Typical Section. Both alternatives reuse the existing road. The widening occurs on one side of the road so traffic operations can be maintained during construction and the existing pavement can be reused. The widening shifts from east to west to minimize right-of-way impacts and reduce earthwork.

The cost estimates for all the alternatives are shown in the table to the right.

Alternative	Typical Section	2016 Cost Estimates (millions)			
		Design	Right-of-Way	Utility	Construction
No Build	N/A	\$0.0	TBD	TBD	\$0.0
Spot Improvements	N/A	\$0.8	TBD	TBD	\$7.8
Alternative 1 (2+1 Minor Widening)		\$2.0	TBD	TBD	\$20.5
Alternative 2 (Four-Lane Depressed Median)		\$4.1	TBD	TBD	\$40.9

The construction cost for Alternative 2 (the Four-Lane Depressed Median concept) is nearly \$41 million, double the cost of the 2+1 Alternative.