

## **EXECUTIVE SUMMARY**

### **PRE-DESIGN SCOPING STUDY**

#### **US 421 FROM HAL ROGERS PARKWAY TO KY 149 MANCHESTER, CLAY COUNTY ITEM NO. 11-8003.00**

The project termini were defined in the FY 2003-2008 Kentucky Transportation Cabinet (KYTC) Six-Year Highway Plan as the Hal Rogers (formerly Daniel Boone) Parkway and KY 149 in Manchester, Clay County. See Exhibit ES-1. The project study team agreed that the northern termini should extend to the US 421/KY 80 intersection with KY 11 and KY 2076 to coincide logistically with the proposed Manchester bypass and for ease of traffic flow throughout the existing corridor. The major part of the reconstruction of this roadway segment is expected to consist of a three-lane roadway with curb and gutter sections. Sidewalks should be considered for the portions of the roadway that pass through the developed areas and Paces Creek Elementary School. The curb and gutter sections with sidewalks along this segment in addition to the paved shoulders along the other segment would better serve bicycle and pedestrian traffic. Additionally, turning lanes would be constructed at the major crossroads along the corridor. The length of the project along the existing roadway alignment is 3.2 miles and there are two existing bridge structures within the project limits.

Current year traffic ranges from about 13,900 vehicles per day from the US 421/KY 149 intersection (southern terminus) to KY 11 (south) to 15,400 vehicles per day near the Horse Creek Bridge to nearly 14,000 vehicles per day at the US 421/KY 80/KY 11/KY 2076 intersection (northern terminus). Projected future year (2030) average daily traffic volumes range from about 20,000 vehicles at the southern terminus to about 22,500 vehicles near the northern terminus.

The primary goal is to address safety and traffic flow problems created by the heavy mixed traffic composition; i.e. cars, trucks, both tractor trailer and delivery, along the existing corridor. The short sight distances and the narrow cross section of the roadway increase these problems. Potential benefits of the project include improved safety resulting from increased sight distance; constructing turning lanes to ease congestion and reduce crashes; a wider roadway cross section; improved intersections; and potentially improved access to areas of economic growth along the US 421 corridor.

The recommended configuration for priority segment 1 would be to widen the current roadway to 3 lanes with a continuous turning lane to the proximity of the Save-A-Lot store, milepoint 14.79. This typical section would include curb and gutter with sidewalks. Segment 2 would be tapered from the previous segment to a 2-lane section with full paved shoulders to the intersection of KY 149. Turn lanes would be constructed at this intersection. Both sections would follow the existing alignment and include retrofitting of the existing bridges over Horse Creek and Goose Creek.

Estimated costs are shown in Table ES-1.



**TABLE ES - 1  
COST ESTIMATES BY SEGMENT**

Segment Number	SEGMENT DESCRIPTION		TYPE OF IMPROVEMENT	APPROXIMATE LENGTH (MILES)	PHASE COST ESTIMATES (Millions)				Total Cost Estimate (Millions)	Estimated Cost per Mile (Millions)
	NORTHERN TERMINUS	SOUTHERN TERMINUS			Phase II Design	R/W	Utilities	Construction		
1	KY 11 / KY 2076	US 421 - MP 14.79	Widen to 3-Lane section with continuous turning lane	2.1	\$1.00	\$4.50	\$1.00	\$8.00	\$14.50	\$6.81
2	US 421 MP - 14.79	KY 149	2-Lane with full paved shoulders with turning lane at KY 149	1.1	\$0.50	\$1.50	\$0.50	\$2.50	\$5.00	\$4.55

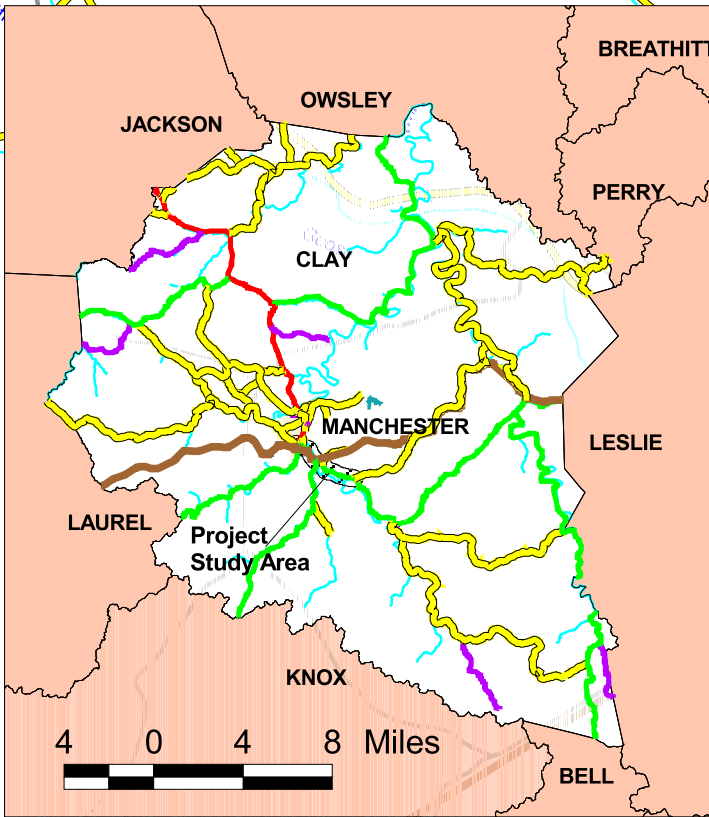
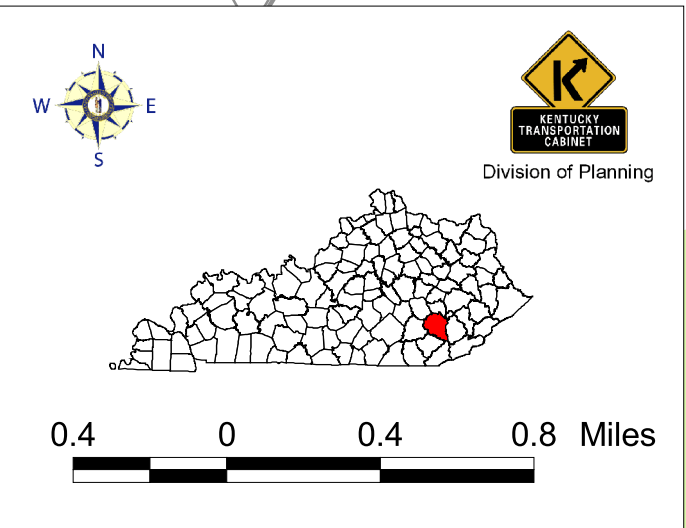
# Project Location/Recommendation

Clay County

Item No. 11-8003.00

Exhibit ES - 1

US 421/KY 80 from  
Hal Rogers Parkway  
South to KY 149



**Priority Segment 1**  
KY 11/KY 2076 to MP 14.790 (2.1 Miles)

D	\$1,000,000
R	\$4,500,000
U	\$1,000,000
C	\$8,000,000
T	\$14,500,000

**Priority Segment 2**  
MP 14.790 to KY 149 (1.1 Miles)

D	\$500,000
R	\$1,500,000
U	\$500,000
C	\$2,500,000
T	\$5,000,000

- State Primary Road System
  - Interstate
  - Parkway
  - Other State Primary
  - State Secondary
  - Rural Secondary
  - Supplemental Road
- Project Study Area
- Railroad
- Incorporated Area
- Local Roads
  - Unimproved
  - Soil, Gravel or Stone
  - Bituminous or Concrete