

**I. PRELIMINARY PROJECT INFORMATION**

<b>County:</b>	Campbell/Pendleton	<b>Item No.:</b>	6-189.00 & 6-8706.00		
<b>Route Number(s):</b>	US 27	<b>Road Name:</b>	Alexandria Pike		
<b>Program No.:</b>	7961701D	<b>UPN:</b>	B	96	27
<b>Federal Project No.:</b>		<b>Type of Work:</b>	Reconstruction		

(Year) **Highway Plan Project Description:**  
 Reconstruction of US 27 from Butler in Pendleton County to South of KY 154 in Campbell County

<b>Beginning MP:</b>	17.92	<b>Ending MP:</b>	1.9	<b>Project Length:</b>	4
<b>Functional Class.:</b>	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural	<b>State Class.:</b>	<input checked="" type="checkbox"/> Primary <input type="checkbox"/> Secondary		
	Arterial	<b>Route is on:</b>	<input checked="" type="checkbox"/> NHS <input checked="" type="checkbox"/> Nat'l Truck Network		
<b>MPO Area:</b>	OKI	<b>Truck Class.:</b>	AAA		
In TIP:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>% Trucks:</b>	10.6		
<b>ADT (current):</b>	7400	<b>Terrain:</b>	Rolling		
<b>Access Control:</b>	<input type="checkbox"/> Fully Controlled <input checked="" type="checkbox"/> Permit	<input type="checkbox"/> Partial Spacing:			
<b>Median Type:</b>	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type):				
<b>Existing Bike Accomodations:</b>	Shared Lane	<b>Ped:</b>	<input type="checkbox"/> Sidewalk		
<b>Posted Speed:</b>	<input type="checkbox"/> 35 mph <input type="checkbox"/> 45 mph <input checked="" type="checkbox"/> 55 mph	<input type="checkbox"/> Other (Specify):			
<b>KYTC Guidelines Preliminarily Based on :</b>	60 MPH Proposed Design Speed				

**COMMON GEOMETRIC**

Roadway Data:	EXISTING	PRACTICES*	
No. of Lanes	2	2	<a href="#">Existing Rdwy. Plans available?</a>
Travelled Way Width	11	12	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Shoulder Width	4	10	Year of Plans: 1947,87,98
Max. Superelevation**	6.00%	6%	<input checked="" type="checkbox"/> <a href="#">Traffic Forecast Requested</a>
Minimum Radius**	3819	1330	Date Requested: 1/15/2008
Maximum Grade	6%	4%	<input checked="" type="checkbox"/> Mapping Requested
Minimum Sight Dist.	1200	570	Date Requested: 8/6/2006
Sidewalk Width(urban)	na	na	Type: Aerial
Clear-zone***	6	44	

Project Notes/Design Exceptions?:

\*Based on proposed Design Speed, \*\*AASHTO's A Policy on Geometric Design of Highways and Streets, \*\*\*AASHTO's Roadside Design Guide

<b>Bridge No.*:</b>	(Bridge #1)	(Bridge #2)	<a href="#">Existing Geotech data available?</a>
Sufficiency Rating			<input type="checkbox"/> Yes <input type="checkbox"/> No
Total Length			
Width, curb to curb			
Span Lengths			
Max. Span Length			
Year Built			
Posted Weight Limit			
Structurally Deficient?			
Functionally Obsolete?			

\* If more than 2 bridges are present on project, see attached sheets.

**II. PROJECT PURPOSE AND NEED**

**A. Legislation**

Initial design funds authorized under Item #6-189, additional funds and phases were approved under Item 6-8706	<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
	SPP	Design	2013	\$3,000,000
	SPP	Right of Way	2014	\$6,000,000
	SPP	Utilities	2014	\$4,500,000
	SPP	Construction	2016	\$38,000,000

**B. Project Status**

Surveying and traffic projections are complete and some initial designs have been investigated. Not enough Phase I design has been completed to be fully salvaged.

**C. System Linkage**

US 27 is a major route in Northern Kentucky connecting Lexington and Cincinnati through 5 counties.

**D. Modal Interrelationships**

US 27 is a truck route that transports goods and services to and from the counties north and east of Lexington.

**E. Social Demands & Economic Development**

US 27 is the main route into and out of the counties that this route travels through. All development in these counties travel on this route.

**F. Transportation Demand**

US 27 is the main route into and out of the counties that this route travels through. All development in these counties travel on this route.

## II. PROJECT PURPOSE AND NEED (cont.)

### G. Capacity

This two lane roadway has the capacity to handle much more than the projected traffic along this route with only modest geometric improvements. Improvements are needed to improve this route to handle increased truck traffic into/out of Pendleton County.

### H. Safety

There have been 31 accidents along this corridor from 6-1-2009 to 6-1-2012. Of these 31 accidents 13 of them were vehicle collisions with an animal.

### I. Roadway Deficiencies

Shoulder width, intersection sight distance, access control and grades do not meet current design standards for an arterial roadway. The addition of truck climbing lanes in the 1980's improved the roadway and decreased delays, but these situations can be improved with a modern roadway.

### Purpose and Need Statement:

US 27 is the major route for freight into and out of Pendleton County, and is the most direct route to the population centers of Cincinnati and Lexington. Despite the addition of truck climbing lanes there are deficiencies in shoulder width, access management, intersection sight distance, or vertical alignment.

Purpose: Upgrade US 27 to current design standards.

**III. PRELIMINARY ENVIRONMENTAL OVERVIEW**

**A. Air Quality**

Project is in:  Attainment area  Nonattainment or Maintenance Area  PM 2.5 County  
STIP Pg.#: \_\_\_\_\_ TIP Pg.#: \_\_\_\_\_

**B. Archeology/Historic Resources**

Known Archeological or Historic Resources are present

While no know archeological sites are present, the project will require additional right of way, so an archaeological evaluation will need to be performed during the Design Phase of the project. Historical architecture resources exist within the corridor; impact will be dependant on chose alignment.

**C. Threatened and Endangered Species**

Potential habitate for Indiana Bat and Running Buffalo Clover

**D. Hazardous Materials**

Potentially Contaminated Sites are present  Potential Bridge or Structure Demolition

There is the potential to impact the former location of gas pumps

**G. Permitting**

Check all that may apply:  Waters of the US  MS4 area  Floodplain Impacts  Navigable Waters of the US Impacts  
Are 401/404 Permits likely to be required?  Yes  No Impacts to:  Wetlands  Stream/Lake/Pond  
 ACE LON  ACE NW  ACE IP  DOW IWQC  Special Use Waters

**H. Noise**

Are noise sensitive receivers adjacent to the proposed project?  Yes  No

**I. Socioeconomic**

Check all that may apply:  Low Income/Minority Populations affected  Relocations  Local Land Use Plan available

There may be a few relocations

**J. Section 4(f) or 6(f) Resources**

The following are present on the project:  Section 4(f) Resources  Section 6(f) Resources

Potential to impact 4(f) resources with historic structure and recreational area.

**Anticipated Environmental Document:**

None (Completely State funded)



**IV. POSSIBLE ALTERNATIVES**

**A. Alternative 1: No Build**

No reconstruction and only routine maintainance would not allow for additional shoulder width or an improved vertical alignment. There would be no improvement to the movement of goods and services through the area.

**B. Alternative 2**

Reconstruct US 27 to the current standards for a 2-lane arterial highway, includes improved shoulders, sight distance, and vertical geometry. Truck climbing lanes would be improved, access management would be implemented (1200 foot spacing instead of access buy permit), and turn lanes would be constructed at the intersections.



Planning Level Cost Estimate:

<u>Phase</u>	<u>Estimate</u>
Design	\$2,250,000
R/W	\$6,000,000
Utilities	\$4,500,000
Const	\$38,000,000
<b>Total</b>	<b>\$50,750,000</b>

**IV. POSSIBLE ALTERNATIVES (cont.)**

**B. Alternative #3**

Reconstruct US 27 to the current standards for a 4-lane divided arterial highway.



Planning Level Cost Estimate:

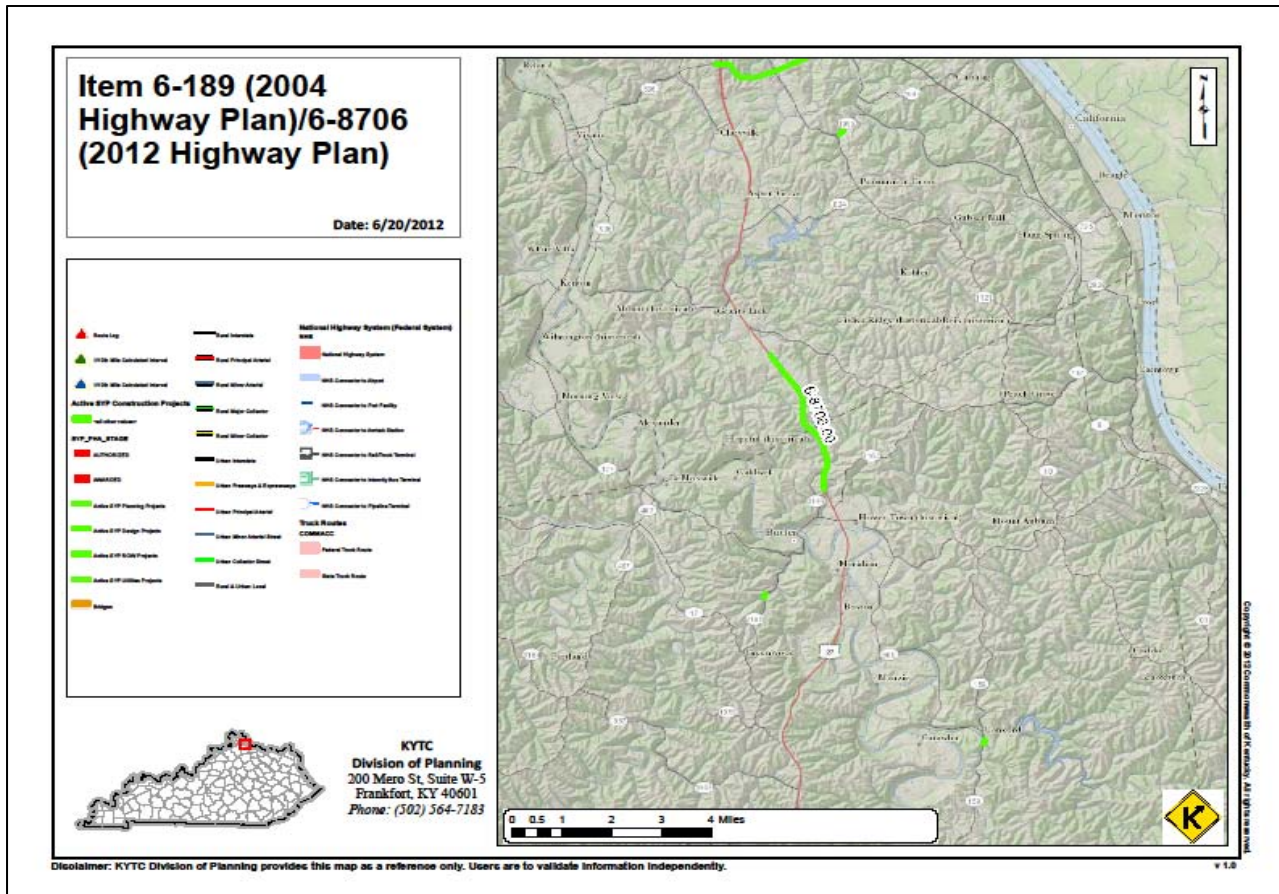
<u>Phase</u>	<u>Estimate</u>
Design	\$4,400,000
R/W	\$12,400,000
Utilities	\$4,300,000
Const	\$77,000,000
<b>Total</b>	<b>\$98,100,000</b>

**V. Summary**

Traffic demand does not meet the threshold to warrant a 4-lane divided highway. The projected 2028 traffic would have to double, or the existing traffic in Pendleton County would have to increase 300% for a 4-lane divided highway to meet warrents. The funds allocated to this project by the State Legislature would be sufficient to complete the improved 2-lane alternate.

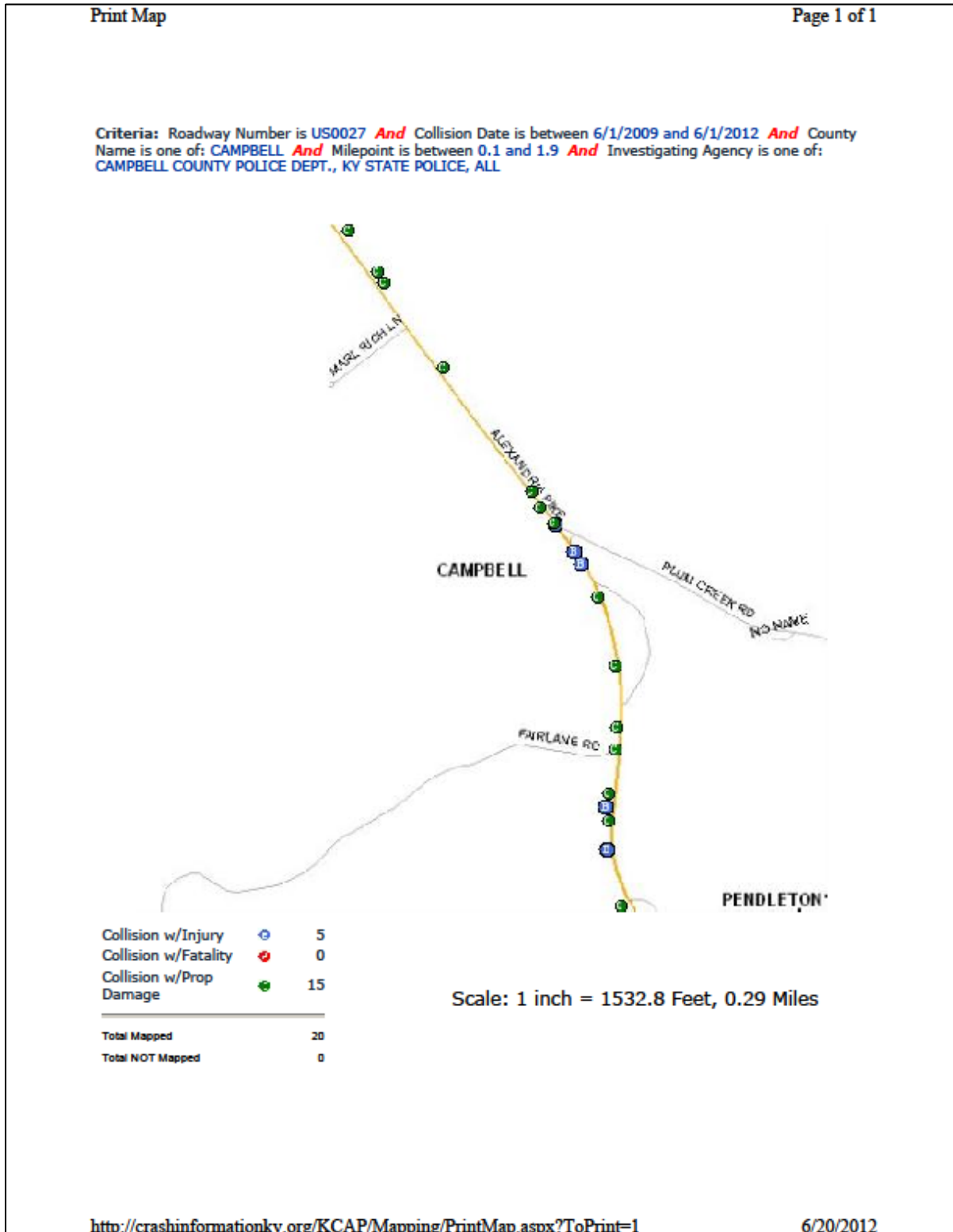
Alt #	Description	D (\$)(Fund)	R (\$)(Fund)	U (\$)(Fund)	C (\$)(Fund)	Total (\$mil)
1	No Build	0	0	0	0	\$0.00
2	2-lane alternate	2,250,000	6,000,000	4,500,000	38,000,000	\$50,750,000.00
3	4-lane alternate	4,400,000	12,400,000	4,300,000	77,000,000	\$98,100,000.00
-	Current Hwy Plan Estimated Cost					\$51,500,000.00
-	Current Pre-Con Estimated Cost					\$50,750,000.00

VI. Tables and Exhibits



### VI. Tables and Exhibits (cont.)

#### Campbell County Accident Location Map





### Pendleton County Accident Location Map

