## **EXECUTIVE SUMMARY**



US 68 Scoping Study Green and Metcalfe County KYTC Item No. 3-203.00

Prepared for:



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# US 68 Scoping Study KYTC Item No. 3-203.00 Executive Summary

The Kentucky Transportation Cabinet (KYTC) initiated two different studies affecting US 68 in Metcalfe County and Green County. The US 68 Corridor Project examines the need for and types of improvements necessary along the route between the Cumberland Parkway and Greensburg. The US 68 Greensburg Connector Project investigates alternatives to better connect US 68 through or around Greensburg. The current studies serve as the first step in establishing project goals, identifying environmental concerns, and evaluating preliminary alternatives.

#### **Purpose and Need**

The purpose of the US 68 Corridor Project is to provide a safer, more efficient connection between Greensburg and the Cumberland Parkway by improving substandard geometrics along the corridor. The existing alignment is characterized by horizontal and vertical curvature that does not satisfy current geometric design guidelines. Over the three-year period between January 2011 and December 2013, there were 67 crashes reported between the Parkway and the KY 61 intersection south of Greensburg. Of these crashes, 50 (75 percent) were single vehicle collisions. With a new interchange under construction at the Parkway, the demand for travel along the US 68 corridor is expected to increase. Addressing the substandard geometrics will extend previously implemented improvements along US 68 and provide a better connection between Greensburg, southern Green County, and northern Metcalfe County to the Cumberland Parkway.

The purpose of the US 68 Greensburg Connector Project is to improve safety, connectivity, and mobility in and through Greensburg. The US 68 Corridor provides the only connection for areas east and west of Greensburg and is one of only two crossings of the Green River in the area (the other being KY 417 (Legion Park Road). Over the three-year period between January 2011 and December 2013, there were 71 crashes between the KY 61 intersection south of Greensburg and KY 61/KY 3535 (Industrial Park Road) to the north. Providing a new or improved connection through or around Greensburg will better accommodate existing and future traffic volumes, provide a new or improved Green River crossing, and offer a better connection for regional traffic including commercial vehicles.

### **Project Development**

Community outreach helped guide the US 68 Scoping Study, particularly in identifying potential issues and developing alternatives. A two-step process was used that involved early meetings with project stakeholders and local officials, followed by meetings with the general public.

At the first round of public meetings in February 2014, an overwhelming majority of survey respondents indicated both the US 68 Corridor and US 68 Greensburg Connector Project were needed. The public identified five general segments for reconstruction and/or realignment.

Together these locations and the spot improvements identified by the local officials served as the starting point for the development of conceptual improvements for the US 68 Corridor Project.

Following the first round of public meetings, a second Project Team meeting was held in March 2014. The Project Team decided that the new route alternatives for the US 68 Greensburg Connector Project should focus on providing an at-grade intersection with KY 61, balancing the earthwork, and minimizing costs. Two alternatives meet this requirement. In addition to the new routes, an additional alternative was carried forward which included replacing the bridge over the Green River and providing shoulder improvements along existing portions of the route south of downtown.

Following the development of the revised concepts, the Project Team again met with stakeholders and interested members of the public in July 2014. At these coordination points, alternatives were presented; each group was asked to provide feedback regarding their concerns and/or preferences. The survey results for the US 68 Corridor Project indicate spot improvements 4, 11, 12 and 13 are considered the public's highest priorities and spot improvements 5 and 6 would be medium priority if considered on their own. The survey results for the US 68 Greensburg Connector Project were split on their preference for both the Green alternative and the Yellow alternative.

#### Recommendations

The recommendations for the US 68 Corridor Project and the US 68 Greensburg Connector Project are based on their ability to meet the purpose and need, the input received, and the alternative development process.

The final study recommendation for the US 68 Corridor Project is to improve the corridor using a number of spot improvements. It was determined that the complete reconstruction of the US 68 corridor was not viable because of the high cost. Instead, it is recommended that Spot Improvements #4, #5, and #6 in Metcalfe County and Spot Improvements #11, #12, and #13 in Green County move forward as a high priority. **Figure ES-1** and **Table ES-1** summarize the US 68 Corridor recommendations. The estimated construction costs are reflective of estimated earthwork, drainage, structures and pavement. Right-of-way relocations and construction costs are based on a two-lane roadway design with 11-foot lanes and 4-foot shoulders. The structure lengths were determined based upon the estimated limits of the floodplains, resulting in a conservative approach that should be revisited during subsequent project phases.

The final study recommendation for the US 68 Greensburg Connector Project is shown on **Figure ES-2** and **Table ES-2** and includes two conceptual alternatives for consideration in the next phase of the project. The green alternative would include minor improvements along existing US 68 and replacing the existing bridge over the Green River. The existing bridge has a sufficiency rating of 52.3. When the sufficiency rating drops below 50.0, the bridge will be eligible for Federal bridge replacement funds. The yellow alternative is a new connector around Greensburg starting on US 68 at the Vaughn Curve, crossing KY 61 about ¼ mile north of Patterson Road, crossing the Green River and ending at KY 3535 in northern Greensburg.

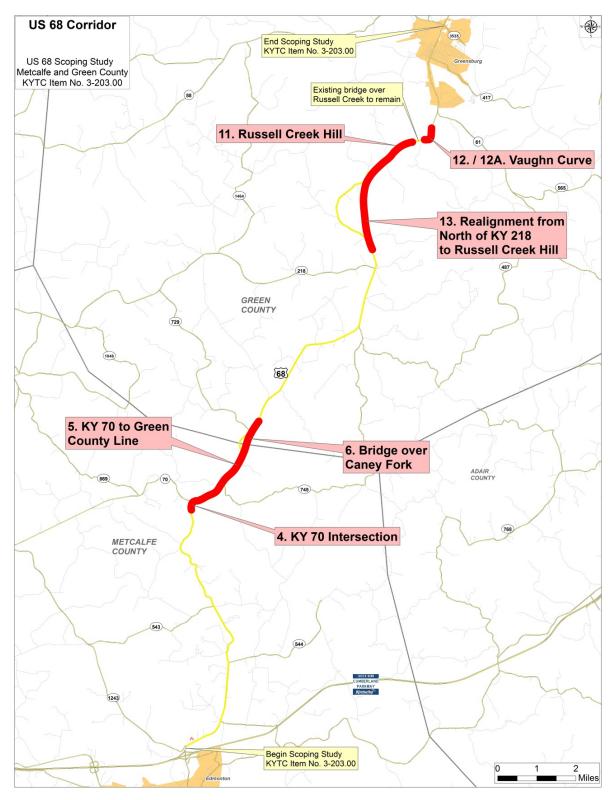


Figure ES-1: US 68 Corridor Project Recommendations

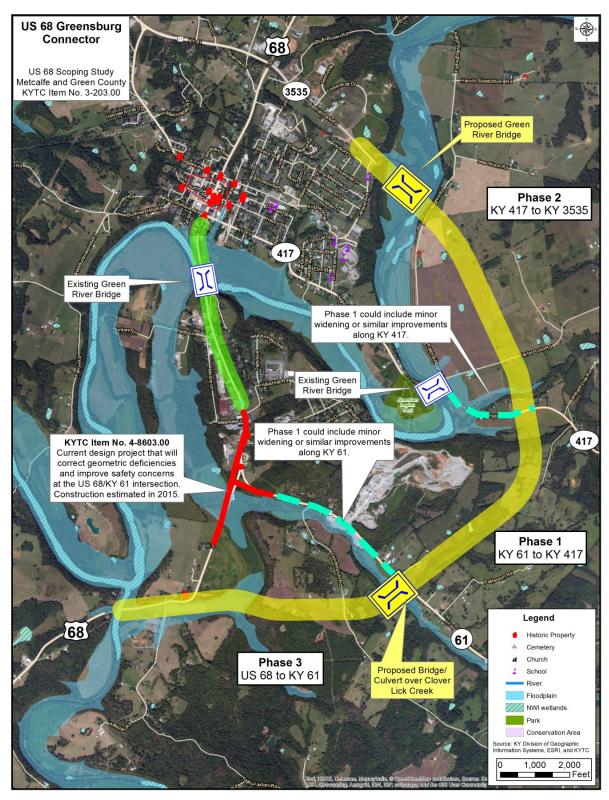


Figure ES-2: US 68 Greensburg Connector Project Recommendations

Spot #	#4	#5	#6	#11	#12	#13	
Location	KY 70 Intersection	KY 70 to South of the Green County line	Bridge over Caney Fork & Realignment	Russell Creek Hill	Vaughn Curve	Realignment between KY 218 and Russell Creek Hill	
Total Length (miles)	0.5	0.9	0.9	0.5	0.5	2.5	
Design	\$1,750,000			\$2,090,000			
Right-of-way	\$375,000	\$475,000	\$550,000	\$365,000	\$335,000	\$1,850,000	
Utilities	\$300,000	\$450,000	\$450,000	\$340,000	\$365,000	\$1,580,000	
Construction	\$2,600,000	\$6,200,000	\$8,700,000	\$1,700,000	\$2,800,000	\$16,400,000	
Total	\$21,850,000			\$27,825,000			

Table ES-1: US 68 Corridor Project Spot Improvement Recommendations

Alternative Corridor	Length (miles)	Project Phase	Total for all Phases	Phase 1	Phase 2	Phase 3	
			(\$ Millions, unless noted)	(KY 61 to KY 417)	(KY 417 to KY 3535)	(US 68 to KY 61)	
Green	1.6	Right-of-way	\$700,000	N/A			
		Utilities	\$1.72				
		Construction	\$9.7-12.0				
		Total	\$12.1 to \$14.4				
Yellow	4.6	Right-of-way	\$5	\$1.20	\$1.70	\$1.60	
		Utilities	\$3.10	\$845,000	\$1.20	\$1.10	
		Construction	\$25.90	\$6.70	\$10.10	\$9.10	
		Total	\$33.50	\$8.70	\$13.00	\$11.80	

Table ES-2: US 68 Greensburg Connector Cost Estimates