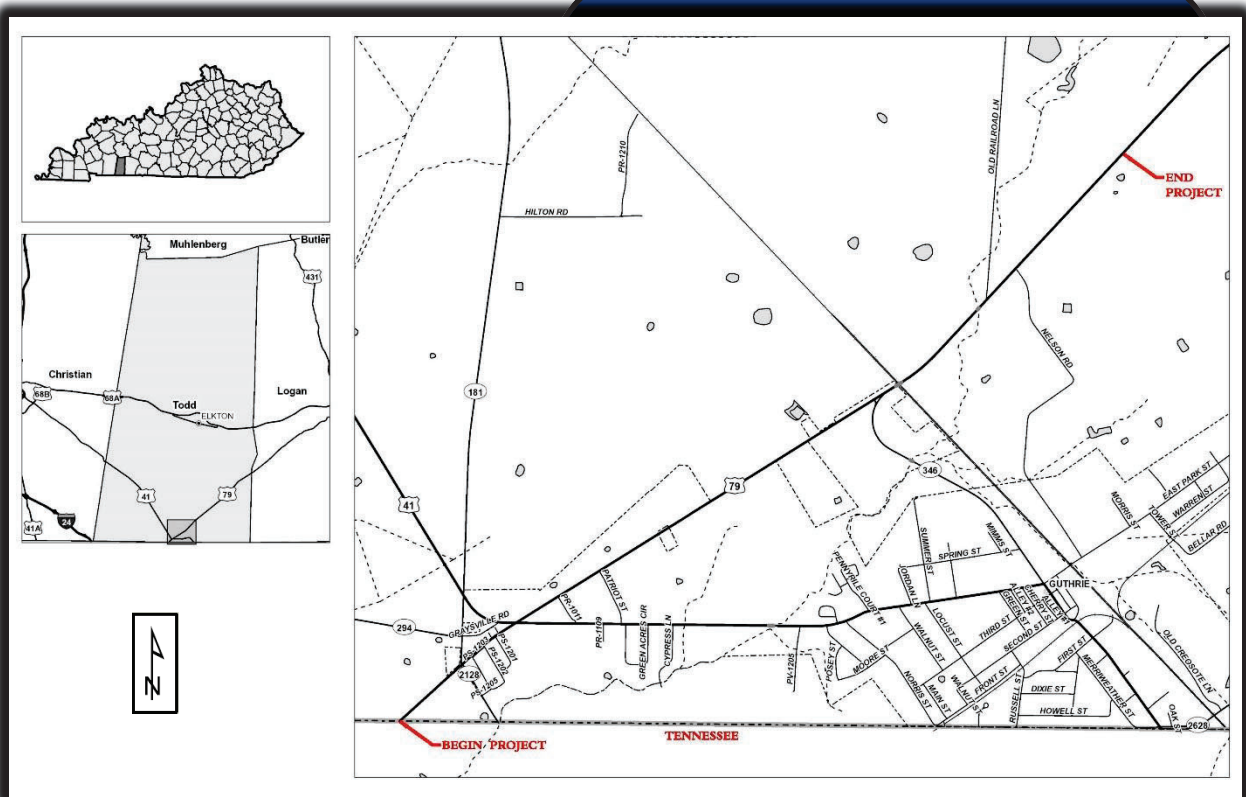
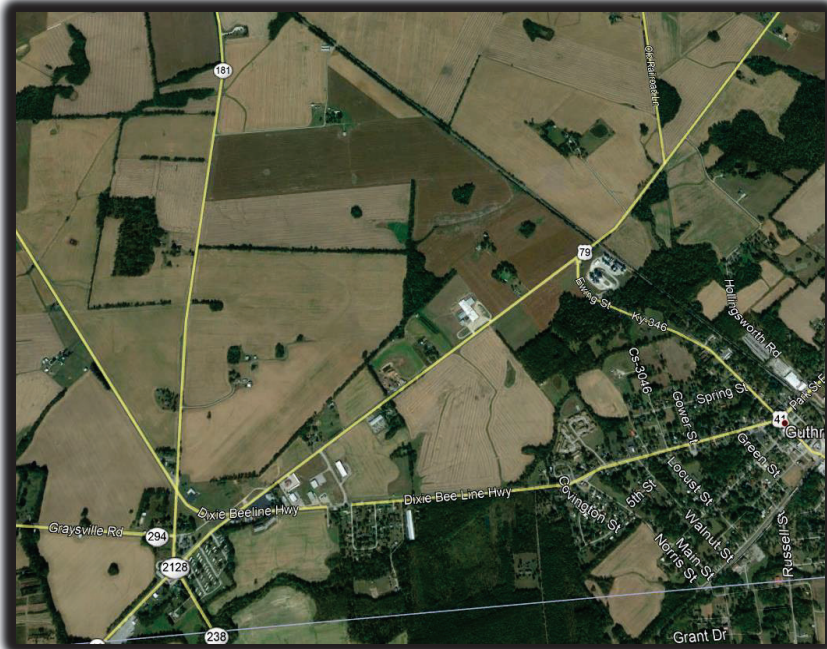


Data Needs Analysis



Scoping Study



US-79
Russellville Road
Todd County
Item No. 3-80001.00

Prepared by the
KYTC District 3

October 2018



I. PRELIMINARY PROJECT INFORMATION			
County:	Todd	Item No.:	80001.00
Route Number(s)*:	US-79	Road Name:	Russellville Road
Program No.:		UPN:	(Function) 110 0079 000-003
Federal Project No.:		Type of Work:	Widening
2018 Highway Plan Project Description:			
US-79 Widening from MP 0 to MP 3.0 (18CCN)			
Beginning MP:	0	Ending MP:	3
Project Length:		3	
In TIP:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Reconcile Project Information in Clearview			
State Class.:	<input checked="" type="checkbox"/> Primary <input type="checkbox"/> Secondary		
Functional Class.:	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural <input type="checkbox"/> Arterial		
MPO Area:	Not Applicable		
ADT (current):	7175 2015		
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled <input type="checkbox"/> Partial Spacing: 1		
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type):		
Existing Bike Accommodations:	Shared Lane <input type="checkbox"/> Sidewalk		
Posted Speed:	<input checked="" type="checkbox"/> 35 mph <input type="checkbox"/> 45 mph <input checked="" type="checkbox"/> 55 mph <input type="checkbox"/> Other (Specify):		
KYTC Guidelines Preliminarily Based on : 55 MPH Proposed Design Speed			
COMMON GEOMETRIC			
Roadway Data:	EXISTING	PRACTICES**	
No. of Lanes	2	2	Existing Rdwy. Plans available?
Lane Width	11'	12'	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Shoulder Width	4'	8'	Year of Plans: 1938/1999
Max. Superelevation***	N/A	8%	<input type="checkbox"/> Traffic Forecast Requested
Minimum Radius***	N/A	960'	Date Requested:
Maximum Grade	N/A	4%	<input type="checkbox"/> Mapping/Survey Requested
Minimum Sight Dist.	N/A	495'	Date Requested:
Sidewalk Width(urban)	N/A	N/A	Type:
Clear-zone [†]	N/A	26'-32'	
Project Notes/Design Exceptions?		N/A	
Bridge No.†:	110B00011N	110B00013N	
Sufficiency Rating	65.5	90.6	Existing Geotech Data Available?
Total Length	120.8'	34'	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Width, curb to curb	25'	23'	
Span Lengths	38'	10'	
Year Built	1932	1931	
Posted Weight Limit	N/A	N/A	Detour Length(s): N/A
Structurally Deficient?	No	No	
Functionally Obsolete?	Yes	No	
Existing Bridge Type	Concrete T-beam	Concrete Culvert	
*If more than one road is included in the project, include additional sheets. **Based on proposed Design Speed ***AASHTO's A Policy on Geometric Design of Highways and Streets +AASHTO's Roadside Design Guide †If more than two bridges are located on the project, include additional sheets.			

II. PROJECT PURPOSE AND NEED

A. Legislation

The following funding is listed in the 2018 General Assembly's Enacted Highway Plan.

<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
SPP	D	2019	\$1,200,000
SPP	R	2021	\$2,000,000
SPP	U	2021	\$3,000,000
SPP	C	2022	\$8,000,000

B. Project Status

The design funds will be available for this project in FY 2019, and the project will be included in the STIP.

C. System Linkage

This section of US-79 is federally functionally classified as a Rural Principal Arterial that connects the city of Russellville, KY in Logan County to the city of Clarksville, TN. It is the primary route that connects the adjacent city of Guthrie to the rural communities near the Tennessee state line and the commercial centers of Russellville.

D. Modal Interrelationships

This is a rural highway on the Kentucky Highway Freight Network - Tier 3 Intermodal Freight Arterial. There is not a fixed route transit service in Todd County, but US-79 is a bus route for area schools. Pedestrian facilities are also not present on this route.

E. Social Demands & Economic Development

This corridor provides the primary connection for residents of Guthrie to the services - business, school, government, and recreational activity - of Russellville. It is also an economic freight corridor between Kentucky and Tennessee.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

The last actual traffic count (2015) for US-79 between MP 0 and MP 0.497 was 7,175 AADT (13.11% Trucks) and between MP 0.497 and 3.973 was 4,515 ADT (21.6% Trucks). These counts have remained fairly consistent over the past two decades. This is a AAA route, and it is vital for the transportation of freight.

G. Capacity

This section of US-79, other than the intersection with US-41, does not experience noteworthy congestion issues.

H. Safety

In the last three years (2015-2018), there have been 47 crashes on US-79 between MP 0 and MP 3 with fifteen resulting in injury and one fatality. Most of these crashes were either single vehicle, angle, or rear end collisions, and 31 happened between MP 0 and MP 0.497. The Critical Rate Factor for this segment is 1.60 indicating that crashes may be occurring at a higher rate than on similar type corridors in Kentucky. It is worth noting that this portion of the corridor has multiple entrances on the highway.

I. Roadway Deficiencies

This section of US-79 has skewed intersections at US-41 and KY-181. There are areas along the corridor that include a 5.0% grade which is in excess of the KYTC geometric 4.0% maximum design standard.

III. PRELIMINARY ENVIRONMENTAL OVERVIEW	
A. Air Quality Project is in: <input checked="" type="checkbox"/> Attainment area <input type="checkbox"/> Nonattainment or Maintenance Area <input type="checkbox"/> PM 2.5 County STIP Pg.#: TIP Pg.#:	
As this is a state- funded project, it will not be listed in the STIP.	
B. Archeology/Historic Resources <input type="checkbox"/> Known Archeological or Historic Resources are present A permit from the USACE might be required; therefore, Section 106 will apply. If so, SHPO clearances for archeology and historic will be required. There were no sites observed within the environmental footprint that appear to be eligible for the NRHP.	
C. Threatened and Endangered Species There are no critical habitat at this location. The Gray bat and Indiana bat are endangered species, and the Northern long-eared bat is threatened. Anticipate that seasonal tree clearing restrictions will be required to minimize potential adverse effects to Indiana bats. The Slabside pearlymussel and Snuffbox mussel are endangered as well. Expect a subject matter expert to conduct a further survey.	
D. Hazardous Materials <input type="checkbox"/> Potentially Contaminated Sites are present <input type="checkbox"/> Potential Bridge or Structure Demolition There is an Exxon and a Phillips 66 gas station that has underground storage tanks.	
E. Permitting Check all that may apply: <input checked="" type="checkbox"/> Waters of the US <input type="checkbox"/> MS4 area <input type="checkbox"/> Floodplain Impacts <input type="checkbox"/> Navigable Waters of the US Impacts Are 401/404 Permits likely to be required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Impacts to: <input type="checkbox"/> Wetlands <input type="checkbox"/> Stream/Lake/Pond <input checked="" type="checkbox"/> ACE LON <input type="checkbox"/> ACE NW <input type="checkbox"/> ACE IP <input type="checkbox"/> DOW IWQC <input type="checkbox"/> Special Use Waters It is expected that the impacts to Spring Creek could meet the criteria for a USACE LON permit. The DEA Permit Coordinator will prepare the documentation for this permit. Once final design is complete, if the impacts to the stream are greater than expected, then a USACE Nationwide #14 Permit will be used. Spring Creek is not listed as a Special Use Water by KY Division of Water.	
F. Noise Are existing or planned noise sensitive receptors adjacent to the proposed project? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is this considered a "Type I Project" according to KYTC Noise Analysis and Abatement Policy? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No KYTC does not normally consider noise analysis on state-funded projects.	
G. Socioeconomic Check all that may apply: <input type="checkbox"/> Low Income/Minority Populations <input type="checkbox"/> Relocations <input type="checkbox"/> Local Land Use Plan available This project is located in a rural area, and there are no relocations that will be required for the construction of this project.	
H. Section 4(f) or 6(f) Resources The following are present on the project: <input type="checkbox"/> Section 4(f) Resources <input type="checkbox"/> Section 6(f) Resources There are no 4(f) or 6(f) resources within the direct impact areas.	
Anticipated Environmental Document: <div style="border: 1px solid black; padding: 2px; display: inline-block;">None (Completely State funded) ▼</div>	

IV. PROJECT NEED, PURPOSE & SCOPE
A. Need: The CFR for a portion of the corridor is 1.60. This section of US-79 is a rural principal arterial route that connects the rural communities around the city of Guthrie to the cities of Russellville, KY and Clarksville, TN. It is also an intermodal freight arterial (AAA route) that is vital for the transportation of freight. It currently experiences between 13.11% and 21.6% truck traffic.
B. Purpose: The purpose of this project is to improve safety and freight mobility along this corridor.
C. Scope: Improve the roadway to accommodate both passenger and truck traffic. Improve sight distance at areas with multiple access points.

V. PROJECT ESTIMATE & METHODOLOGY		
Estimate Methodology:	Current Estimate	
The following estimate is listed in the 2018 General Assembly's Enacted Highway Plan.	Phase	Estimate
	Planning	
	Design	\$1,200,000
	R/W	\$2,000,000
	Utilities	\$3,000,000
	Const	\$8,000,000
	Total	\$14,200,000

VII. TABLES AND EXHIBITS



Photo 1: Project area facing north toward Russellville, including the intersection with KY-181 and KY-2128

VII. TABLES AND EXHIBITS (cont.)



Photo 2: Project area facing south toward the Tennessee line, including the intersection with US-41