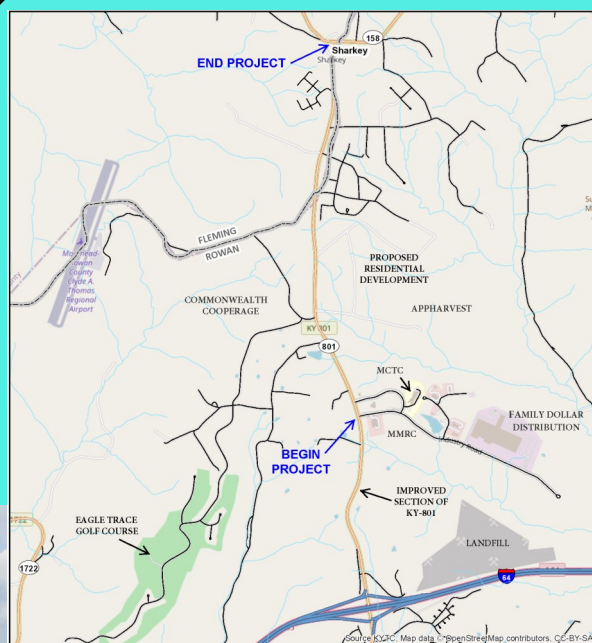
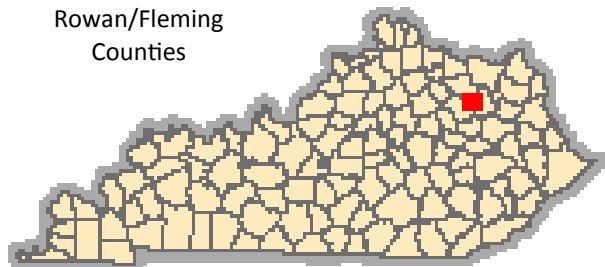


Rowan/Fleming
Counties



Data

Needs

Analysis



Scoping Study

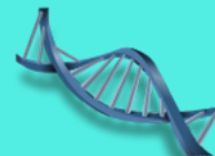
KY 801 (Farmers-Sharkey Rd.)
Rowan/Fleming Counties

Widen KY 801 from near MMRC Regional
Park to KY 158 in Fleming County (MP
15.61 to MP 17.011, Rowan Co. and MP
0.00 to MP 0.912, Fleming Co.)

Item No. 09-8915.00

Prepared by KYTC
District 9

August, 2020



I. PRELIMINARY PROJECT INFORMATION			
County:	Rowan/Fleming	Item No.:	9-8915.00
Route Number(s):*	KY 801	Road Name:	Farmers - Sharkey Road
Program No.:		UPN:	(Function) (County #) (Route) (MPs)
Federal Project No.:		Type of Work:	Widening
2020 Highway Plan Project Description:			
Widen KY 801 from near MMRC Regional Park to KY 158 in Fleming Co.			
Beginning MP:	Rowan 15.610 Fleming 0.00	Ending MP:	Rowan 17.011 Fleming 0.912
		Project Length:	2.313
		Total	
In TIP:	<input type="checkbox"/> Yes <input type="checkbox"/> No Reconcile Project Information in Clearview		
State Class.:	<input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary		
Functional Class.:	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural Collector ▼		
MPO Area:	Not Applicable ▼		
ADT (current):	3994 2018		
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled <input type="checkbox"/> Partial Spacing: ▼		
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type): ▼		
Existing Bike Accommodations:	Shared Lane ▼ Ped: <input type="checkbox"/> Sidewalk		
Posted Speed:	<input 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 :		50 MPH Proposed Design Speed	
COMMON GEOMETRIC			
Roadway Data:	EXISTING	PRACTICES**	
No. of Lanes	2	2	Existing Rdwy. Plans available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Year of Plans: 1956
Lane Width	9'-12'	12' *	
Shoulder Width	0-8'	6'	<input type="checkbox"/> Traffic Forecast Requested Date Requested: ▼
Max. Superelevation***	8.00%	8%	
Minimum Radius***	1146.6'	758'	<input type="checkbox"/> Mapping/Survey Requested Date Requested: ▼
Maximum Grade	8.5%	7%	
Minimum Sight Dist.	<425'	425'	Type: ▼
Sidewalk Width(urban)	N/A	N/A	
Clear-zone [†]	6' - 20'	12' - 26'	
Project Notes/Design Exceptions?		*Substantial trucks and farm equipment	
Bridge No.:[‡]	(Bridge #1) (Bridge #2)		
Sufficiency Rating			
Total Length			
Width, curb to curb			
Span Lengths			
Year Built			
Posted Weight Limit			
Structurally Deficient?			
Functionally Obsolete?			
Existing Bridge Type			
*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

As shown in the 2020 approved Highway Plan

<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
FED	D	2021	\$1.56 million
FED	R	2023	\$2.32 million
FED	U	2024	\$1.13 million
FED	C	2025 & 2026	\$7.0 M (25) & \$8.21M (26)

B. Project Status

The project was first put in the 2016 Highway Plan showing: Planning (\$75K FY17 STP), Design (\$1.5M FY17 STP), R/W (\$2.0M FY18 STP) Utilities (\$1.0M FY19 STP) and Construction (\$12.5M FY20 STP). Planning and Design funds were requested, but never authorized. The 2018 Highway Plan listed only Planning (\$100K FY19 STP); no other phases were shown and no funding was authorized. The project has recently been recognized as an administrative priority in the 2020 Highway Plan so design funding should be authorized and the project advertised for consultant services in the summer of 2020.

C. System Linkage

KY 801 provides a direct southern commercial and commuter link between I-64/US 60 and the MMRC Regional Industrial Park, Eagle Trace Golf Course, the US Army National Guard, the Morehead-Rowan County Airport and two new industries nearing completion, Commonwealth Cooperage (Independent Stave Company) and AppHarvest. It also provides a rural commuter link to KY 158 to the north and KY 32 (via KY 158) to the Northeast.

D. Modal Interrelationships

Existing industry within the MMRC Regional Industrial Park and the new Maysville Community and Technical College (MCTC - Rowan Campus) have a direct connection to I-64 and US 60 via an improved section of KY 801 to the south. However, Eagle Trace Golf Course and newer development to the north (US Army National Guard, Morehead-Rowan County Airport, Commonwealth Cooperage and AppHarvest) must traverse an unimproved section of KY 801 having narrow lanes, minimal shoulders and a deficient vertical curve (poor sight distance) before reaching the improved section of KY 801 near the MMRC. Substantial residential development to the north as well as commuter traffic from northern Rowan and Fleming Counties generate nearly 4000 vehicles per day along this unimproved section of KY 801.

E. Social Demands & Economic Development

Widening and improving KY 801 will provide a more efficient and much safer route for commercial traffic traveling between the new industrial development and I-64 and US 60. Furthermore, commuters and school busses traveling south will have a safer route to their work destinations at the new industrial development, within the MMRC, west along I-64 to Morehead and east along I-64 to Lexington. Along with improved safety, widening and improving KY 801 will facilitate better connectivity and decreased travel times potentially leading to additional residential and industrial/commercial development along the route. Current land use is a mix of residential development, farm land and woods to the north and industrial/commercial development to the south of the project limits.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

ADT's along KY 801 have seen a sharp rise over the past 30 years, ranging from below 1000 in 1991 to nearly 4000 in 2018 equating to approximately 4.8% growth per year. Truck percentages have seen a significant increase since the opening of the Family Dollar Distribution facility within the MMRC in 2000. Truck traffic will continue to increase with the opening of Commonwealth Cooperage and AppHarvest to the north of the MMRC. Future (planned) residential development along northern KY 801 will contribute to an even greater increase in commuter traffic. Narrow lanes and lack of shoulders are not conducive to the efficient movement of commercial vehicles. Slow moving and turning commercial vehicles (without turn lanes) integrated with faster moving commuter vehicles lends itself to a greater number of crashes with potentially higher severity.

G. Capacity

KY 801 operates below capacity and even though ADT's continue to rise, it is not expected to warrant additional through lanes. Improving KY 801 by correcting deficiencies, widening lanes and shoulders, and adding appropriate turn lanes will increase the efficiency and safety of the route.

H. Safety

Between June, 2015 and June, 2020, there have been 22 reported crashes along KY 801 within the project limits. One crash was a fatality and 6 had injuries. Fifteen were property damage only. Overall, the crashes are evenly dispersed throughout the project limits. These accidents are indicative of narrow lanes, narrow shoulders, edge of pavement drop-offs and inadequate clear zones. Although not recorded in KSP's database, there have been several instances where large trucks mistakenly traveled north on the unimproved section of KY 801 only to get stuck trying to turn onto KY 158. When this happens, KY 801, KY 158 or both become blocked until large commercial tow trucks can pull them out.

I. Roadway Deficiencies

KY 801, within the project limits, is afflicted with three vertically deficient curves. The first, a sag curve in Rowan County near milepoint 15.98 limits sight distance looking north along KY 801 from intersection of Bluebank Road. In turn, Bluebank Road is obscured for traffic going southbound on KY 801. The second, a crest curve located in Fleming County near milepoint 0.72 obscures the stop condition of the KY 158 T-intersection for northbound KY 801 and limits sight distance for Boardwalk Road for southbound KY 801. The third issue is the long vertical grade of KY 158 and crest curve just east of the KY 801 intersection. Sight distance is limited looking east on KY 158 while the KY 801 intersection is obscured by this crest going westbound on KY 158. Narrow lanes and shoulders combined with edge of pavement drop-offs and inadequate clear zones create little opportunity for recovery when vehicles run off the road. Wide commercial vehicles, speed differentials and substandard vertical curves are a recipe for severe accidents potentially with serious injuries.

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.#: FY 19-22; Sct A-5; Pg 103 of 114 TIP Pg.#: 	
B. Archeology/Historic Resources <input type="checkbox"/> Known Archeological or Historic Resources are present A few structures and/or properties throughout the existing KY 801/KY 158 corridor could be potentially eligible for the National Register of Historic Places (NRHP). There are no properties in the corridor that are currently listed on the NRHP. It is likely that unknown archaeology sites are present within the corridor.	
C. Threatened and Endangered Species Four bat species, 8 mussel species, and 2 plant species are listed as federally threatened/endangered on the IPaC database from USFWS for the project location.	
D. Hazardous Materials <input checked="" type="checkbox"/> Potentially Contaminated Sites are present <input type="checkbox"/> Potential Bridge or Structure Demolition A couple of locations appear to have former uses as a gas station or garage, which may have caused some minor contamination.	
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 checked="" type="checkbox"/> Wetlands <input checked="" type="checkbox"/> Stream/Lake/Pond <input 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 There are no major stream crossings within the existing KY 801 corridor. Several smaller streams do exist along KY 801 and could be impacted depending on alignment placement. Additionally, wetlands could be present along the corridor. The level of USACE permit needed for the job will be dependent upon how much stream and wetlands are impacted. It is anticipated that either a ACE LON or ACE Nationwide permit will apply.	
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 the KYTC Noise Analysis and Abatement Policy? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Many residential receptors are located along existing KY 801. This could be a Type 1 project depending on alignment placement.	
G. Socioeconomic Check all that may apply: <input checked="" type="checkbox"/> Low Income/Minority Populations <input checked="" type="checkbox"/> Relocations <input type="checkbox"/> Local Land Use Plan available There is potential to have low income and minority populations living within the expected limits of the project. It is expected that an Environmental Justice analysis will be performed later in the project development phase in order to fully assess impacts that the project might have on these populations.	
H. Section 4(f) or 6(f) Resources The following are present on the project: <input checked="" type="checkbox"/> Section 4(f) Resources <input type="checkbox"/> Section 6(f) Resources A few structures and/or properties throughout the existing KY 801 corridor appear to be potentially eligible for the National Register of Historic Places. There are no parks, known wildlife refuges, or public recreation areas within the limits of the KY 801 corridor.	
Anticipated Environmental Document: CE Level 2 ▼	

9-8915.00
Rowan/Fleming

Data Needs Analysis
Scoping Study

KY 801
Widening

IV. PROJECT SCOPING, NEEDS & PURPOSE	
A. Scoping & Need:	
<p>KY 801 north of the MMRC Industrial Park has remained virtually unimproved since its reconstruction circa 1952. Routine maintenance, resurfacing, shouldering and ditching operations have resulted in slightly wider lanes and shoulders (original lanes were 9' without shoulders), but the vertical deficiencies have not been addressed and some of the edge of pavement dropoffs have worsened. Clearzones were never sufficient and have actually been reduced in some areas because of tree growth and the addition of utilities. The existing horizontal alignment appears to meet current standards for this type of roadway. Several factors have contributed to a significant increase in traffic volumes (both commuter vehicles and trucks) over the past 30 years. The first significant change was the construction of the I-64/KY 801 interchange just south of the project limits in the early to mid 1990's. This was followed by the construction of the MMRC Industrial Park, construction of the Family Dollar Distribution facility and KY 801 roadway improvements (reconstruction) between I-64 and the industrial park circa 2000. Since 2000, the MMRC industrial park has expanded and several new industrial/commercial facilities have opened including the Maysville Community and Technical College (MCTC), Eagle Trace Golf Course, the US Army National Guard facility and the Morehead-Rowan County Airport. Additionally, several new residential subdivisions have been constructed and two new industries are under construction (AppHarvest and Commonwealth Cooperage) and will open soon. KY 801 north of the improved section (between the MMRC and KY 158) no longer provides safe and efficient means of travel for the number and types of vehicles using it. Improvements are needed to bring this section of KY 801 up to current standards that address current and future travel demands considering traffic volumes, vehicle types, turning movements, bicycle and pedestrian accessibility and especially safety. Impacts to existing utilities, industrial, commercial and residential development and land use should be evaluated as part of these improvements.</p>	
B. Draft Project Purpose:	
<p>Improving KY 801 to address the current deficiencies, growing development and increased traffic volumes will improve safety, mobility, access and connectivity for this region of Rowan and Fleming Counties.</p>	

V. PROJECT ESTIMATE & METHODOLOGY		
Estimate Methodology:	Current Estimate	
Current highway plan estimates were based upon using consultant services for design and possibly right of way. Construction estimates were based on widening KY 801 along or near the existing route using current geometric standards with a 50mph design speed.	<u>Phase</u>	<u>Estimate</u>
	Planning	N/A
	Design	\$1.56M
	R/W	\$2.32M
	Utilities	\$1.13M
	Const	\$15.21M
	Total	\$20.22M
VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION		
Company Name -	Fleming-Mason Energy	
Contact -	Brandon Hunt (bhunt@fme.coop)	
Address -	PO Box 328, 1449 Elizaville Road, Flemingsburg, KY 41041	
Phone No. -	(606) 845-2661	
Company Name -	Delta Natural Gas Company	
Contact -	Jonathan Morphew (morphew@deltagas.com)	
Address -	3617 Lexington Rd., Winchester, KY 40391	
Phone No. -	(859) 744-6171 ext. 1123	
Company Name -	Windstream Kentucky Inc.	
Contact -	Chris Barker (chris.barker@windstream.com)	
Address -	1715 East Broadway Street, Campbellsville, KY 42718	
Phone No. -	(606) 784-4140	
Company Name -	Time Warner Cable	
Contact -	Steven Smith (rsteven.smith@charter.com)	
Address -	1617 Foxhaven Drive, Richmond, KY 40475	
Phone No. -	(859) 626-4809	
Company Name -	Morehead Utility Plant Board	
Contact -	Holly McGrath-Rosas (hrosas@mupb.com)	
Address -	135 S. Wilson Avenue, Morehead, KY 40351	
Phone No. -	(606) 784-5538	
Company Name -	Rowan Water Inc.	
Contact -	Jerry Patrick (rowanwater@windstream.net)	
Address -	1765 Christy Creek Rd., Morehead, KY 40351	
Phone No. -	(606) 784-9818	
Company Name -	Kentucky Wired	
Contact -	Mike Hayden (mike.hayden@ky.gov)	
Address -	Ledcor: 2008 Mercer Road, Lexington, KY 40511	
Phone No. -	(502) 782-2535	

VII. TABLES AND EXHIBITS

MMRC Regional Industrial Park looking South toward I-64



MMRC Regional Industrial Park looking looking East from KY 801

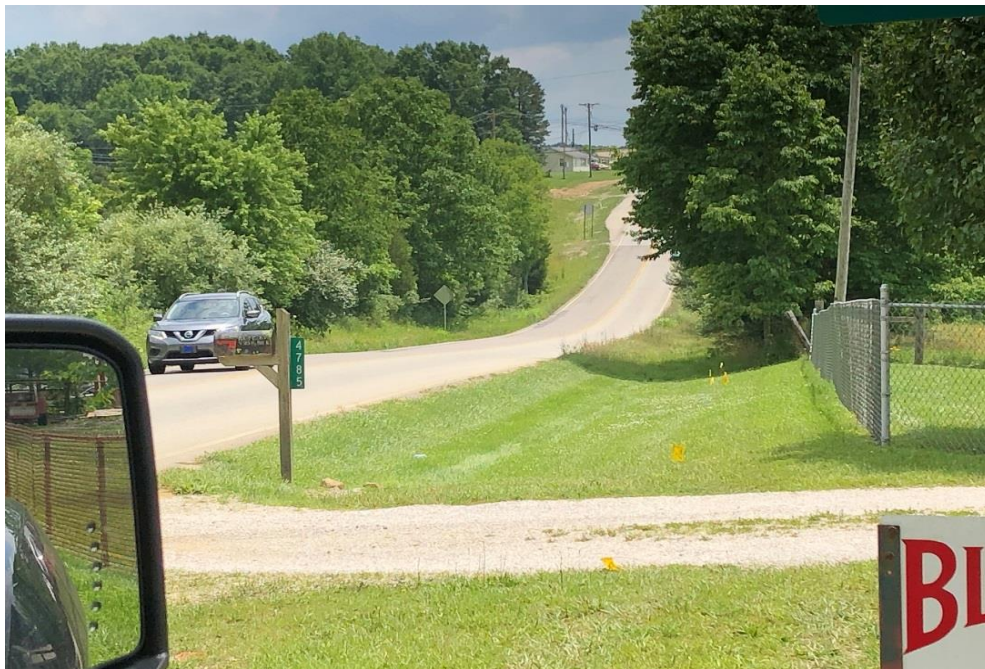


VII. TABLES AND EXHIBITS (CONT.)

KY 801 looking North from MMRC - Cooperage (lt.) and AppHarvest (rt.)



Deficient sag curve looking South from Bluebank Road



VII. TABLES AND EXHIBITS (CONT.)

Deficient crest curve looking North from Bluebank Road



Deficient crest curve looking North toward KY 158 intersection



VII. TABLES AND EXHIBITS (CONT.)

Deficient sight distance looking East from KY801 @ KY 158 intersection



Looking West from KY 801 @ KY 158 intersection

