





# Scoping Study



KY 245, Nelson/Bullitt County From Flaget Hospital to Happy Hollow Road Item No. 4-8307.20

Prepared by the KYTC Division of Planning and KYTC District 4

August 2022





I. PRELIMINARY PROJECT INFORMATION									
County:	Nelson/Bullitt	Item No.:	4-8307.20						
Route Number(s): <sup>*</sup>	KY 245	Road Name:	New Shepherdsville Road						
Program No.:	7966403D	UPN: FD04	Nelson KY245 7.7-12.2/0-4.4						
Federal Project No.:		Type of Work:	Minor Widening						
-	an Project Description:								
	· ·	hrough county line (MP 12	2.261 Nelson/MP 0.000 Bullitt) to						
Happy Hollow Rd (MP 4.425)									
Beginning MP:	7.722/0.00	Ending MP: 12.261/4.425	Project Length: 8.964						
In TIP: 🗌 Yes 🗹 No		Use PD	P/CHAF to Verify Project Data						
State Class.: 🗹 Primary	y Secondary	Route is on:	🗌 NHS 🔄 NN 📄 Ext Wt						
Functional Class.: 🔽 ເ	Urban 🗸 Rural Arterial	▼ Truck Class.:	AAA <b>V % Trucks:</b> 17.907						
MPO Area: Not Applicab	ble	▼ Terrain:	Rolling						
ADT (current):	<u>15265</u> 2021								
Access Control:	None 🗸 Permit 🗌 F	ully Controlled Partial	Spacing:						
Median Type:		ded (Type):							
Existing Bike Accommo		▼ Ped:	Sidewalk						
Posted Speed:	] 35 mph 45 mph	√ 55 mph	Other (Specify):						
<b>KYTC</b> Guidelines Prelim	inarily Based on :	55 MPH Proposed	Design Speed						
		COMMON GEOMETRIC							
Roadway Data:	EXISTING	PRACTICES**							
No. of Lanes	<u>2</u>	<u>3/5</u>	Existing Rdwy. Plans available?						
Lane Width	<u>12'</u>	<u>12'</u>	✓ Yes No						
Shoulder Width	<u>12'</u>	<u>8' Usable</u>	Year of Plans: 1973						
Max. Superelevation***	<u>9.30%</u>	<u>8%</u>	Traffic Forecast Requested						
Minimum Radius***	<u>1432'</u>	<u>960'</u>	Date Requested:						
Maximum Grade	2.86%	<u>5%</u>	Mapping/Survey Requested						
Minimum Sight Dist.	<u>603'</u>	<u>495'</u>	Date Requested:						
Sidewalk Width(urban)	<u>N/A</u>	<u>N/A</u>	Туре:						
Clear-zone <sup>†</sup>	<u>30'</u>	<u>30'</u>							
Project Notes/Design Exce	ptions?								
Bridge No.: <sup>‡</sup>	None in Project Area	<u>(Bridge #2)</u>							
Sufficiency Rating									
Total Length			Existing Geotech Data Available?						
Width, curb to curb			Yes 🗸 No						
Span Lengths									
Year Built									
Posted Weight Limit			Detour Length(s):						
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 Project has local and legislative support Year Funding Phase Amount SPP D \$3,000,000 2023 SPP 2025 \$5,000,000 R \$6,000,000 SPP U 2026 С SPP 2027 \$30,000,000 **B. Project Status** Project was ranked #4 in the 2022 SHIFT process. Project was added to the 2022-2028 Enacted Highway Plan C. System Linkage KY 245 provides direct access to I-65 and is a corridor that links the Bluegrass Parkway and I-65 **D. Modal Interrelationships** E. Social Demands & Economic Development Project will improve access to Nelson County High School, Flaget Memorial Hospital, and Bernheim Forest

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

#### F. Transportation Demand

The City of Bardstown continues to grow and develop. This corridor is the connection to I-65 and is expected to increase in traffic over the next several years.

#### G. Capacity

KY 245 is a 2 lane road which carries 10,658-14,624 vehicles per day. The volume of traffic is expected to increase over the next several years

#### H. Safety

2017 THROUGH 2021 DATA- 138 Total Accidents - 35 Injury Accidents - 2 Fatal Accidents17 Angle Collisions - 4 Head On Collisions - 3 Opposing Left Turns - 50 Rear End Collisions - 10 Sideswipe OppositeDirections - 5 Sideswipe Same Direction - 49 Single Vehicle Accidents23 of the accidentsinvolved an animal23 of the accidents

#### I. Roadway Deficiencies

Due to amount of traffic, passing opportunities are limited Class - A and B; Grade - B and C; Curve

Nelson/Bullitt

III. PRELIMINARY ENVIRONMENTAL OVERVIEW					
A. Air Quality					
Project is in: <ul> <li>Attainment area</li> <li>Nonattainment or Maintenance Area</li> <li>PM 2.5 County</li> </ul> STIP Pg.#:          TIP Pg.#:					
STIP Pg.#:     TIP Pg.#:       Project will be added to the STIP update when the new 6YP is added					
rioject will be added to the STIF update when the new OFF is added					
B. Archeology/Historic Resources					
Known Archeological or Historic Resources are present					
There are no known archaeological sites within the project area. There have been some strip surveys, presume utility line installation, but the majority of the are is unsurveyed.	eably for				
C. Threatened and Endangered Species					
IPAC indicates the potential for 10 listed species to occur within the project area 3 bat species (NLEB, GB, IB), s species (Clubshell, fanshell, orangefoot pimpleback, pink mucket, rabbitsfoot and ring pink) and monarch butto (candidate species)					
D. Hazardous Materials          Image: Potentially Contaminated Sites are present       Image: Potential Bridge or Structure Demolition         There is at least one operation gas station (recent construction) and multiple former gas station sites along the which could be RECs	e corridor				
E. Permitting         Check all that may apply: <ul> <li>Waters of the US</li> <li>MS4 area</li> <li>Floodplain Impacts</li> <li>Navigable Waters of the US</li> </ul> Are 401/404 Permits likely to be required?	ke/Pond				
F. Noise         Are existing or planned noise sensitive receptors adjacent to the proposed project?       ✓ Yes       No         Is this considered a "Type I Project" according to       KYTC Noise Analysis and Abatement Policy?       ✓ Yes	No No				
G. Socioeconomic Check all that may apply: 🗸 Low Income/Minority Populations 🗌 Relocations 🗸 Local Land Use Pla	n available				
There is potential for impacts to Low Income (21%-36%) or Minority (8%-21% in Nelson Co) population impacts	. Nelson				
Co has a comprehensive plan (https://ncpz.com/ordinances)					
H. Section 4(f) or 6(f) Resources					
The following are present on the project:  Section 4(f) Resources  Section 6(f) Resources					
Bernheim Forest, a large, private forest is adjacent to the project corridor and in some areas lies on both sides of the existi	ng road.				
Anticipated Environmental Document: CE Level 3	•				

#### IV. PROJECT NEED, PURPOSE & SCOPE

A. Need:

KY 245 is a critical corridor that provides a link between the City of Bardstown and Interstate 65 which is utilized by both commuters who work in and around Louisville and industries in Nelson County moving freight to the I-65 corridor.

#### B. Purpose:

Address safety, capacity, and passing opportunities along KY 245 between Flaget Hospital in Nelson County and Happy Hollow Road in Bullitt County

#### C. Scope:

Project is expected to follow the same alignment for the majority of the corridor with an attempt for minimal impacts to the Bernheim Forest area. Project could potentially widen part (approximately 3 miles) of the Nelson county section to match the existing 5 lane typical which ends just north of Flaget Hospital. The remainder (approximately 6 miles) of the corridor would likely be widened to accomodate a 2 plus 1 design which would allow passing opportunities.

V. PROJECT ESTIMATE & METHODOLOGY						
Estimate Methodology: Current Estin		urrent Estimate				
Estimate based on 3 miles of widening to 5 lane and 6 miles of widening to a 2+1	<u>Phase</u>	<u>Estimate</u>				
	Planning					
	Design	3,000,000				
	R/W	5,000,000				
	Utilities	6,000,000				
	Const	30,000,000				
	Total	44,000,000				

#### VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION

(	Company Name - Contact - Address - Phone No	AT&T Scott Roche, sr8832@att.com 1340 E. John Rowan Blvd., Bardstown, Ky 40004 502-348-4528
(	Company Name - Contact - Address - Phone No	City of Bardstown, Water & Sewer Jessica Filiatreau, jhfiliatreau@bardstowncalbe.net 220 N Fifth St, Bardstown, Ky 40004 502-348-5947
(	Company Name - Contact - Address - Phone No	City of Bardstown, Electric Eric Richter 220 N Fifth St, Bardstown, Ky 40004 502-348-5947
(	Company Name - Contact - Address - Phone No	North Nelson Water District Cole Cissell, northnelsonwaterdistrict @yahoo.com 555 Louisville Rd, P.O. Box 25, Cox's Creek, 40013 502-348-8342
(	Company Name - Contact - Address - Phone No	Salt Tiver Electric Cooperative Corp. Daniel Carrico, dcarrico@srelectric.com 2230 Parkway Dr, Bardstown, Ky 40004 502-373-7730
(	Company Name - Contact - Address - Phone No	LG&E Carolin Justice, Caroline.Justice@lge-ku.com P.O. Box 32020, 820 West Broadway, Louisville, Ky 4020 502-627-3708



### VII. TABLES AND EXHIBITS (cont.)

None (Completely State funded)	District	Trimmed District	Full Item #	Trimmed It	
CE for Minor Projects	4	4	8307	8307	
CE Level 1				.20	
CE Level 2					
CE Level 3	Hyperlink	text			
EA/FONSI	https://business.kytc.ky.gov/apps/hub/Pages/Viewer.aspx?di				
EIS					

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Not Applicable Bowling Green Cincinnati/Northern Kentucky (OKI) Clarksville/Oak Grove Evansville/Henderson Huntington/Ashland Lexington Louisville/Southern Indiana (KIPDA) Owensboro Radcliff/Elizabethtown

1

AAA

A AA

Level Rolling Mountainous

3

4

Local Collector Arterial Interstate

4

None Shared Lane Bike Lane Shoulder Designated US Bike Route Bike Path

2

Aerial Lidar Conventional

600 ft 1200 ft

1