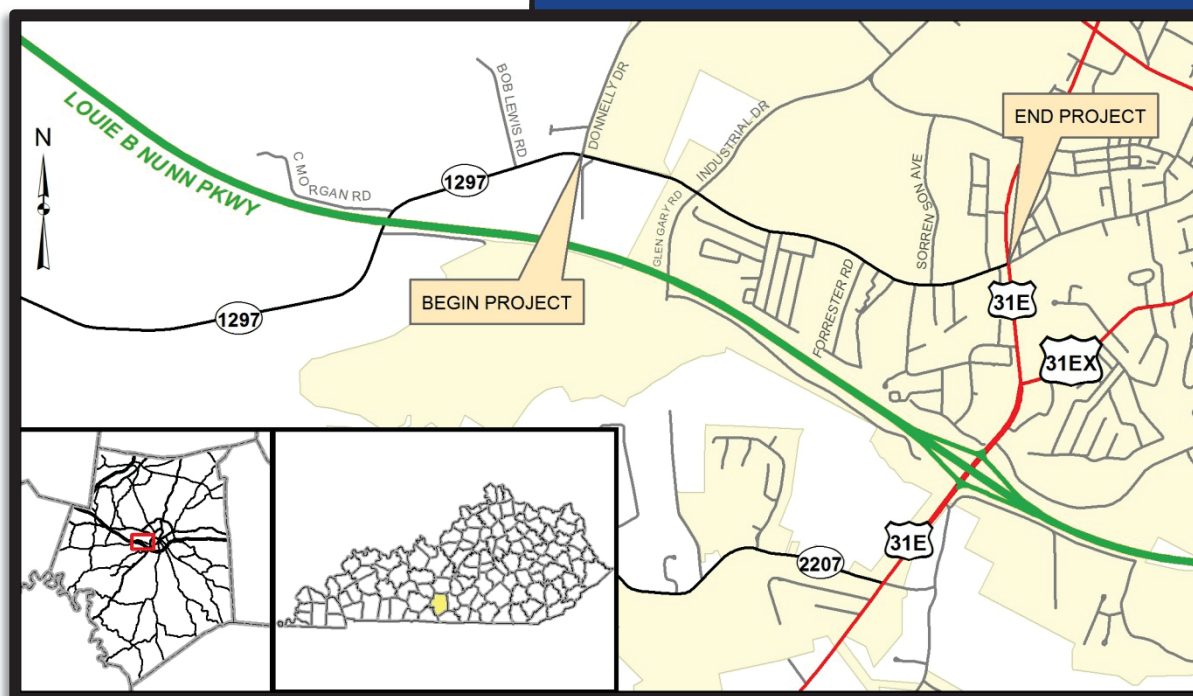
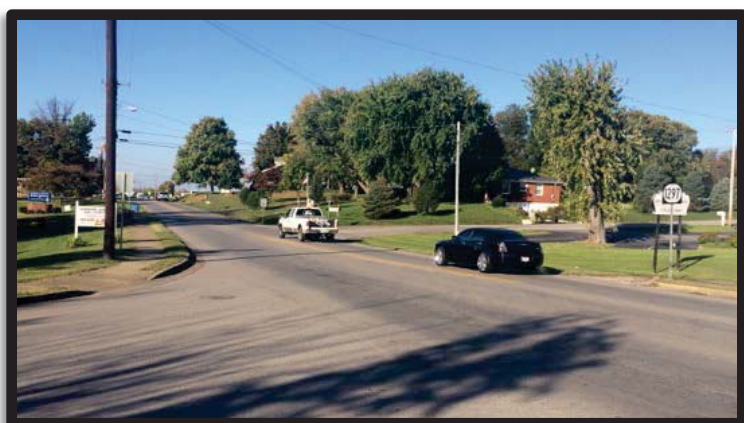


Data Needs Analysis



Scoping Study



KY 1297, Barren County
From Donnelly Dr to US 31E
Item No. 3-8821.00

Prepared by the KYTC
Division of Planning and
KYTC District 3

October 2014



I. PRELIMINARY PROJECT INFORMATION			
County:	Barren	Item No.:	3-8821
Route Number(s):*	KY 1297	Road Name:	Old Bowling Green Rd/Cleveland Ave.
Program No.:	89630 01D	UPN:	FD04 005 1297 011 - 013
Federal Project No.:	N/A	Type of Work:	Major Widening
2014 Highway Plan Project Description:			
Major Widening from Donnelly Drive to US-31E (Roger Wells) in Glasgow and widen Donnelly Drive (14CCN).			
Beginning MP:	11.078	Ending MP:	12.799
Project Length:	1.721		
In TIP:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reconcile Project Information in Clearview		
State Class.:	<input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary		
Functional Class.:	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural <input type="checkbox"/> Collector		
MPO Area:	Not Applicable		
ADT (current):	8183 (2013)		
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled <input type="checkbox"/> Partial		
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type):		
Existing Bike Accommodations:	<input type="checkbox"/> Shared Lane <input type="checkbox"/> Ped: <input checked="" 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 : 35 MPH Proposed Design Speed			
COMMON GEOMETRIC			
Roadway Data:	EXISTING	PRACTICES**	
No. of Lanes	2	2 (+TWLTL)	Existing Rdwy. Plans available?
Lane Width	9'	11-12'	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Shoulder Width	2-4'	urban	Year of Plans: 1955
Max. Superelevation***	varies	4.0%	<input checked="" type="checkbox"/> Traffic Forecast Requested
Minimum Radius***	716'	371'	Date Requested: 9/5/2014
Maximum Grade	7.0%	10%	<input checked="" type="checkbox"/> Mapping/Survey Requested
Minimum Sight Dist.	unknown	250	Date Requested: 9/25/2014
Sidewalk Width(urban)	3'	4-6'	Type: Aerial
Clear-zone [†]	varies	urban	
Bridge No.:# 00500056N			
Sufficiency Rating	73.2		
Total Length	27'		
Width, curb to curb	24'		
Span Lengths	12.1'		
Year Built	1956		
Posted Weight Limit	n/a		
Structurally Deficient?	no		
Functionally Obsolete?	yes		
Existing Bridge Type	box 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 was listed in the 2014 General Assembly's Enacted Highway Plan. The project was ranked #3 in the District Transportation Plan (DTP) and ranked #1 by the locals.

<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
SPP	D	2016	\$1,200,000
	R		
	U		
	C		

B. Project Status

The design funds authorized on August 22, 2014 will be available for this project in FY 2015 and the project will be included in the STIP.

C. System Linkage

KY 1297 is federally Functionally Classified as an Urban Collector that connects the city of Glasgow to residential and industrial areas, educational and sports facilities. Red Cross Elementary School is located on this corridor and within the project limits. KY 1297 provides access to the industrial park.

D. Modal Interrelationships

Currently this is a rural roadway that has very low intermodal interaction. A fixed route transit service does exist in Barren County, but KY 1297 is not included in the current service. KY 1297 is included in the Glasgow-Barren County's Joint Planning Commission "Glasgow Alternative Transportation Endeavor" as planned to be a "proposed entrance corridor" in the future.

E. Social Demands & Economic Development

KY 1297 (Old Bowling Green Road) provides access to several large parcels of existing and planned industrial development in western Glasgow. Several large residential developments are also accessed from this segment of KY 1297. Direct access to the Louie B. Nunn (Cumberland) Parkway provided by the western portion of the Glasgow Outer Loop will increase the likelihood of additional industrial and residential development in this area. Two additional activity centers, the Glasgow Soccer Complex and Red Cross Elementary School, are located on this segment of KY 1297.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

The last actual traffic count (2013) for KY 1297 for station A39 between MP 12.575 and MP 12.799 was 8,183 vpd AADT. The last actual traffic count (2011) for MP 11.078 to MP 12.575 was 4,570 vpd AADT. These counts have fluctuated over the past decade, but with the anticipated growth as noted in section E, these volumes will experience a corresponding increase.

G. Capacity


During the peak travel periods in the morning and afternoon, congestion is experienced along this section as school traffic for the Red Cross Elementary School competes with commuter traffic (both from the residential units and to the industrial facilities). The potential for further industrial development along the north side of the corridor, along with the new interchange with the Glasgow Outer Loop on the Louie B. Nunn (Cumberland) Parkway near the KY 1297/Outer Loop intersection, has the potential to impact the capacity of this section of KY 1297.

H. Safety

Areas along this section of KY 1297 have historically been flagged as high crash locations with Critical Rate Factors (CRF) greater than 1. A buildup calculation was ran, and the mile-long section between MP 11.306 and 12.306 has a CRF factor of 1.50.

I. Roadway Deficiencies

Currently, KY 1297 in this area has two 9-foot lanes with earth shoulders ranging from 2' to 4'. Significant drainage problems are not known to exist along this section of roadway. KYTC common geometric practices for Urban Collector streets recommends 11'-12' lanes with curb and gutter. The culvert structure located within this propped corridor is functionally obsolete with a curb to curb width of 24 feet.

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	
Project area has several houses 50+ years old making them potentially eligible for the National Register	
C. Threatened and Endangered Species	
Listed T & E Species for Barren County: Kentucky Cave Shrimp, Gray Bat, Indiana Bat, Northern Long-eared Bat, Catspaw, Fanshell, Northern Riffleshell, Orangefoot Pimpleback, Pink Mucket, Rabbitsfoot, Rign Pink, Rough Pigtoe, Sheepnose, Snuffbox, and Speataclease. I feel the listed mussel species and the KY Cave Shrimp will be "No effect" as there is no habitat present for these species. The listed bats species could be present.	
D. Hazardous Materials	
<input checked="" type="checkbox"/> Potentially Contaminated Sites are present <input type="checkbox"/> Potential Bridge or Structure Demolition	
Asbestos can be found in water lines and in homes. There are monitoring wells in the parking lot of the restaurant located at 1113 Cleveland Road. This could be monitoring ground water contamination from underground storage tanks or from adjacent factories.	
E. Permitting	
Check all that may apply: <input checked="" type="checkbox"/> Waters of the US <input checked="" 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 checked="" type="checkbox"/> Stream/Lake/Pond	
<input type="checkbox"/> ACE LON <input checked="" type="checkbox"/> ACE NW <input type="checkbox"/> ACE IP <input type="checkbox"/> DOW IWQC <input type="checkbox"/> Special Use Waters	
Stream crossing at Huggins Branch. Glasgow is an MS4 community.	
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	
Project would widen the road closer to sensitive noise receptors. A noise study may be needed.	
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	
The south side of KY 1297 is heavily populated with numerous types of homes.	
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	
Red Cross Elementary has ball field located close to the existing ROW. There are soccer fields across from Donnelly Drive adjacent to existing ROW. These two sites could be considered 4(f) resources.	
Anticipated Environmental Document:	None (Completely State funded) 

IV. PROJECT SCOPING, NEEDS & PURPOSE

A. Scoping & Need:

KY 1297 (Old Bowling Green Road/Cleveland Ave.) is an urban collector street within the corporate limits of Glasgow connecting the commercial activities along US 31E and the future western segment of the Glasgow Outer Loop (KY 3600) and the Louie B. Nunn (Cumberland) Parkway. This narrow two-lane roadway with narrow shoulders currently provides access to activities in the adjacent industrial park, a large residential neighborhood, Red Cross Elementary, and the recreational activities at the nearby soccer complex. This roadway along with the functionally obsolete culvert structure along this corridor do not meet KYTC Geometric Design Standards.

B. Draft Project Purpose:

The purpose of this project is to address safety and mobility issues as well as roadway deficiencies along KY 1297 for the movement of people and freight.

V. PROJECT ESTIMATE & METHODOLOGY

Estimate Methodology:	Current Estimate	
Assume three lane urban typical section from Industrial Drive (MP 11.5) to US 31E (MP 12.8) due to urban nature of area, numerous residential small lots, structures located close to roadway. Assume rural typical section between Donnelly Drive and Industrial Drive. 15 road approaches will be included – Industrial and Donnelly being the most significant. Includes existing Dbl 12x7 culvert over Huggins Branch (00500056N). Environmental involvement for stream impacts (Corps Permit). Alignment to generally follow existing but shifting may be feasible in areas to minimize right of way and utility impacts and maintain traffic for profile modifications.	<u>Phase</u>	<u>Estimate</u>
	Planning	\$0
	Design	\$1,200,000
	R/W	\$3,500,000
	Utilities	\$4,100,000
	Const	\$7,150,000
	Total	\$15,950,000

According to 1955 plans, ROW is 30' each side of centerline. According to PVA information, there are 85+ parcels; at least 25 of which are small lots in the city limits which appear to have considerable impacts to front yards. A few industrial properties. Assume several Perm Utility Esmts will be utilized in areas with limited room for utility relocations. Utilities include typical facilities – gas, water, telephone, and possibly sewer in the urban area. Overhead electric and pole route will be impacted along majority of corridor.

VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION

Company Name -	Glasgow Electric Plant Board
Contact -	Todd Barbour, Engineering Manager
Address -	100 Mallory Drive, PO Box 1809, Glasgow, KY
Phone No. -	270-651-8341
Company Name -	Farmers Rural Electric Cooperative Corp.
Contact -	Chuck Bishop, Vice-President of Engineering
Address -	504 South Broadway St, PO Box 1298, Glasgow, KY
Phone No. -	270-651-2191
Company Name -	Atmos Energy
Contact -	Ryne White, Engineer II
Address -	3275 Highland Point Drive, Owensboro, KY
Phone No. -	270-685-8140
Company Name -	South Central Rural Telephone Coop., Corp.
Contact -	Tim Gibson, OSP Engineer
Address -	1399 Happy Valley Road, PO Box 159, Glasgow, KY
Phone No. -	270-678-8208
Company Name -	Glasgow Water Company
Contact -	Scott Young, Manager
Address -	126 East Public Square, PO Box 819, Glasgow, KY
Phone No. -	270-651-3727
Company Name -	Windstream dba Kentucky Data Link, Inc. (KDL)
Contact -	Rick Cunico, Engineer
Address -	3701 Communications Way, Evansville, IN
Phone No. -	812-760-6602
Company Name -	Windstream Kentucky East, Inc.
Contact -	Brenda Wilfong, Contracts
Address -	50 Executive Parkway, Hudson, OH
Phone No. -	330-650-7498

VII. TABLES AND EXHIBITS



Photo 1: KY 1297 facing East. The US 31W signal is shown.



Photo 2: KY 1297 near the intersection with US 31E facing West.

VII. TABLES AND EXHIBITS (cont.)



Photo 3: On KY 1297 facing West between Dawn St and Embark Ct. The sidewalk on the south side of the roadway begins at US 31E and ends at Embark Ct. Shown in this photo is multi-family housing on the left side of the road combined with industrial facilities on the right.



Photo 4: Semi-trucks travel the route to access the multiple industrial facilities along KY 1297