

Data

Needs

Analysis



Scoping Study



Anderson County
From Hilltop Drive to West
End of Bridge over KY River
Item No. 7-80001.00

Prepared by the KYTC
Division of Planning and
KYTC District 7

March 2021



I. PRELIMINARY PROJECT INFORMATION

County:	Anderson	Item No.:	7-80001.00
Route Number(s):*	US 62	Road Name:	Versailles Road
Program No.:	1288601D	UPN:	FD52 003 0062 020-000
Federal Project No.:	STP 5038027	Type of Work:	Reconstruction

Highway Plan Project Description:

IMPROVE US-62 (VERSAILLES RD.) FROM HILLTOP DR. TO WEST END OF BRIDGE OVER KENTUCKY RIVER AT TYRONE(18CCN) (2020CCR)

Beginning MP:	20.493	Ending MP:	22.863	Project Length:	2.37
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	Route is on:	<input type="checkbox"/> NHS <input type="checkbox"/> NN <input type="checkbox"/> Ext Wt		
Functional Class.:	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural <input type="checkbox"/> Collector	Truck Class.:	AAA	% Trucks:	9
MPO Area:	Not Applicable	Terrain:	Rolling		
ADT (current):	5231(MP 20.493-22.187)[2017] 3755(MP 22.187-22.863)[2017]				
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled <input type="checkbox"/> Partial Spacing: <input type="text"/>				
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type): <input type="text"/>				
Existing Bike Accommodations:	None	Ped:	<input type="checkbox"/> Sidewalk		
Posted Speed:	<input type="checkbox"/> 35 mph <input checked="" type="checkbox"/> 45 mph <input checked="" type="checkbox"/> 55 mph <input type="checkbox"/> Other (Specify): <input type="text"/>				
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
Lane Width	11'	11'	
Shoulder Width	4'	6'	Year of Plans: 1930 1951
Max. Superelevation***	8.00%	8.00%	<input type="checkbox"/> Traffic Forecast Requested
Minimum Radius***	232.67'	758'	Date Requested: <input type="text"/>
Maximum Grade	7.00%	7.00%	<input type="checkbox"/> Mapping/Survey Requested
Minimum Sight Dist.	250' (est)	425'	Date Requested: <input type="text"/>
Sidewalk Width(urban)	N/A	N/A	Type: <input type="text"/>
Clear-zone [†]		24'	
Project Notes/Design Exceptions?	Above practices from KYTC Highway Design Guide - Rural Collector		

Bridge No.: [‡]	(Bridge #1)	(Bridge #2)	
Sufficiency Rating			Existing Geotech Data Available? <input type="checkbox"/> Yes <input type="checkbox"/> No
Total Length			
Width, curb to curb			
Span Lengths			
Year Built			
Posted Weight Limit			Detour Length(s): 19.9
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

This project has had the support of State and Local Officials. As of the 2017 Anderson County Comprehensive Plan, this project was identified on Table 3.7-1: Anticipated Future Roadway Projects. Under that same plan, this project was also identified in the "Unscheduled Needs" list.

<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
FED	D	2021	\$1,250,000
FED	R	2023	\$3,830,000
FED	U	2023	\$4,500,000
FED	C	2024	\$13,750,000

The project first showed in the 2018 Enacted Highway Plan under item number 7-80001.00 with all phases being programed SPP. The 2020 Enacted Highway Plan now shows FED funding for all phases.

B. Project Status

Currently, design funding was authorized by FHWA on February 9, 2021. TC-10 Authorization No. 12886. Funding is provided through the Federal Surface Transportation Program. This project was initially identified in 2012. In SHIFT 2020, the project was sponsored, scored, and was double boosted (+30 points), provided by the District Office and the Bluegrass Area Development District, achieving a final score of 60.50. It is listed in the current 2020 Enacted Highway Plan with design (FY 2021), right of way (FY 2023), utilities (FY 2023), and construction (FY 2024) all programmed with FED funding.

C. System Linkage

US 62 is part of the Kentucky State Secondary System and its Federal Functional Classification is a Major Rural Collector. This section of US 62 provides secondary access to Lawrenceburg from Versailles in Woodford County. It runs parallel to the Bluegrass Parkway, which is located approximately 4 miles to the south, and is also a well travelled corridor. Additionally, this corridor serves as part of the Kentucky Bourbon Trail which is said to bring hundreds of thousands of tourists each year.

D. Modal Interrelationships

Along this section of US 62, there is little intermodal interaction. There is no active railways, city bus service, or water ports. The historic Young's High Bridge, which crosses the Kentucky River, was owned and operated by Norfolk Southern however has been abandoned since November 1985. The Kentucky River is currently only suitable for recreational boating and water supply purposes.

E. Social Demands & Economic Development

Per the 2017 Comprehensive Plan, Anderson County's proximity to Louisville, Lexington, and Frankfort, has been one of the reasons for growth in the County. Over the past 15 years, Anderson County has experienced annual growth rate of 1.7 percent by population. This growth in population is also seen in the recent land use designations, where low density residential has nearly doubled in the past 15 years while the agricultural land designations had dropped by nearly 5,000 acres. The county is mostly rural residential and agricultural with small pockets of commercial use scattered at major intersections. Despite this growth, Anderson County is experiencing low to moderate levels of economic growth and development. The areas that are experiencing the most development are located along the US 127 bypass and "Interchange Commerce Area" around the Bluegrass Parkway and US 127 interchange. Outside of those areas, little economic growth has been noted in the County. Per the Future Land Use Map (FLUM) the area in the vicinity of the project limits include low to medium density residential on the Hilltop Drive side and Light Industrial in the area of Tyrone and the Wild Turkey Distillery.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

Recent traffic counts show an AADT of 5,231 from MP 20.493 to MP 22.187 [2017] and 3,755 from MP 22.187 to 22.86 [2017]. There is a relatively considerable amount of truck traffic on this corridor. The last traffic count done in 2017 shows about 8.996% trucks. Much of the truck traffic is generated from the Hanson Aggregates Rock Quarry, located about a mile down on KY 1510, as well as commercial traffic from the Wild Turkey Distillery.

G. Capacity

Currently, there are no capacity issues along this corridor with the most current traffic counts showing 5,231 vehicles per day, which comprises of about 8.996% of truck traffic. The truck weight classification for the entire length of US 62 in Anderson County is AAA (80,000 lbs limit).

H. Safety

The 2009 Lawrenceburg SUA Study Identified the intersection with Hilltop Drive as having a considerable crash history with a CRF of 1.759. Recommendations to a possible solution included "increasing corner clearance" as this intersection is the main truck access route to the Industrial Park located south of US 62. In 2017, a resurfacing project was completed that included this intersection. Although the "corner clearance" may not have been improved as part of the resurfacing project, the new striping that was placed appears to have reduced the number of crashes around the intersection. A recent 5 year collision analysis for the entire corridor between Hilltop Drive and the bridge, shows that there were 90 total collisions from March 7, 2016 to March 6, 2021. This include 3 fatalities, 22 injuries, and 72 property damage only collisions. The report indicates that the collisions are relatively spread out between Hilltop Drive and Lock Road where 2 of the 3 fatalities occurred. There are a concentration of crashes occurring at the sharp curve before the KY River bridge

I. Roadway Deficiencies

This section of roadway has not been upgraded with exceptions of resurfacings and maintenance work. The roadway surface is in relatively good to fair condition with much of the length of roadway having an IRI roughness within 120. There does exist some horizontal curve and grade issues especially near the Kentucky River Bridge. Some of these deficiencies are contributing to sight distance issues. While a portion of US 62 has approx. 4' of shoulder, the portion descending down to the Kentucky River has little to no shoulder on the side approaching the river. A paved shoulder with guardrail is present on the ascending side of the roadway leaving the KY River. KYTC's Common Geometric Practices for Rural Major Collectors recommends 11' lanes with 6' shoulders. Due to the extensive impacts that such a wide shoulder would have on the portion of US 62 between KY 1510 and the river, a design exception/variance may be recommended in the design process.

III. PRELIMINARY ENVIRONMENTAL OVERVIEW

A. Air Quality

Project is in: Attainment area Nonattainment or Maintenance Area PM 2.5 County

STIP Pg.#:

TIP Pg.#:

No air quality impacts are anticipated

B. Archeology/Historic Resources

Known Archeological or Historic Resources are present

No known sites are present, however, archeological & historic impacts could still be encountered during Phase 1 surveying. Also, de minimus impacts to the Wild Turkey facility could be possible.

C. Threatened and Endangered Species

Potential impacts to T & E species (bats).

D. Hazardous Materials

Potentially Contaminated Sites are present Potential Bridge or Structure Demolition

No evidence of hazardous materials in the project area.

E. Permitting

Check all that may apply: Waters of the US MS4 area Floodplain Impacts Navigable Waters of the US Impacts
Are 401/404 Permits likely to be required? Yes No Impacts to: Wetlands Stream/Lake/Pond
 ACE LON ACE NW ACE IP DOW IWQC Special Use Waters

Possible Waters of the US impacts (wetlands)

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 noise impacts are anticipated.

G. Socioeconomic

Check all that may apply: Low Income/Minority Populations Relocations Local Land Use Plan available

No relocations are anticipated. Potential for Environmental Justice may exist in areas east of downtown, namely along the south side of US 62. Impacts to any EJ Populations will be assessed as needed. (Reference: 2009 Lawrenceburg SUA)

H. Section 4(f) or 6(f) Resources

The following are present on the project: Section 4(f) Resources Section 6(f) Resources

No section 4(f) or 6(f) resource impacts are anticipated.

Anticipated Environmental Document:

CE Level 1

IV. PROJECT NEED, PURPOSE & SCOPE

A. Need:

This section of US 62 is functionally classified as a Rural Major Collector connecting Lawrenceburg to Versailles and beyond. It is one of only 2 routes that crosses the Kentucky River into Anderson County, the other route being the Bluegrass Parkway. Currently, there exists portions of this facility with little to no shoulders and inadequate sight distance in spots. Based on a collision analysis from the Kentucky State Police Collision Analysis, from March 7, 2016 to March 6, 2021, there were 90 collisions resulting in a total of 3 fatalities, 22 injuries, and 72 counts of property damage. Two of the collisions involved commercial vehicles.

B. Purpose:

The purpose of this project is to explore and provide feasible solutions to improve the safety and mobility on US 62 from Hilltop Drive to the west end of the bridge over the Kentucky River while maintaining driver expectancy and minimizing the impacts to the surrounding environment.

C. Scope:

US 62 provides a secondary connection between Lawrenceburg and Versailles and is one of a few corridors that cross the Kentucky River. The section between Hilltop Drive to the bridge has seen several collisions over the past 5 years including 3 fatalities. In addition to routine commuters, this section of highway also sees motorists who may not be familiar with the area as it is part of a tourism corridor. The scope of the project is to examine and implement solutions that will have a positive impact to the level of safety and driver expectancy to the corridor.

V. PROJECT ESTIMATE & METHODOLOGY

Estimate Methodology:	Current Estimate	
Estimates listed are from the 2020 Enacted Highway Plan which were derived from planning level estimates and escalated based on the fiscal year listed. Design funding is available in the current biennium.	<u>Phase</u>	<u>Estimate</u>
	Planning	
	Design	(2021) \$1,250,000
	R/W	(2023) \$3,830,000
	Utilities	(2023) \$4,500,000
	Const	(2024) \$13,750,000
	Total	\$23,330,000

VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION

Company Name -	City of Lawrenceburg Water
Contact -	Brad Wellman
Email Address -	bwellman@lawrenceburgky.org
Phone No. -	502-598-3297
Company Name -	Atmos Energy Gas
Contact -	Silas Bohlen
Email Address -	silas.bohlen@atmosenergy.com
Phone No. -	270-685-8020
Company Name -	Kentucky Utilities
Contact -	Caroline Justice
Email Address -	caroline.justice@lge-ku.com
Phone No. -	502-627-3708
Company Name -	Bluegrass Energy
Contact -	Tony Smith
Email Address -	tonys@bgenergy.com
Phone No. -	859-885-2134
Company Name -	AT&T Kentucky
Contact -	Frank Ambrose
Email Address -	fa2207@att.com
Phone No. -	859-753-8377
Company Name -	
Contact -	
Email Address -	
Phone No. -	
Company Name -	
Contact -	
Email Address -	
Phone No. -	

EXHIBIT 1

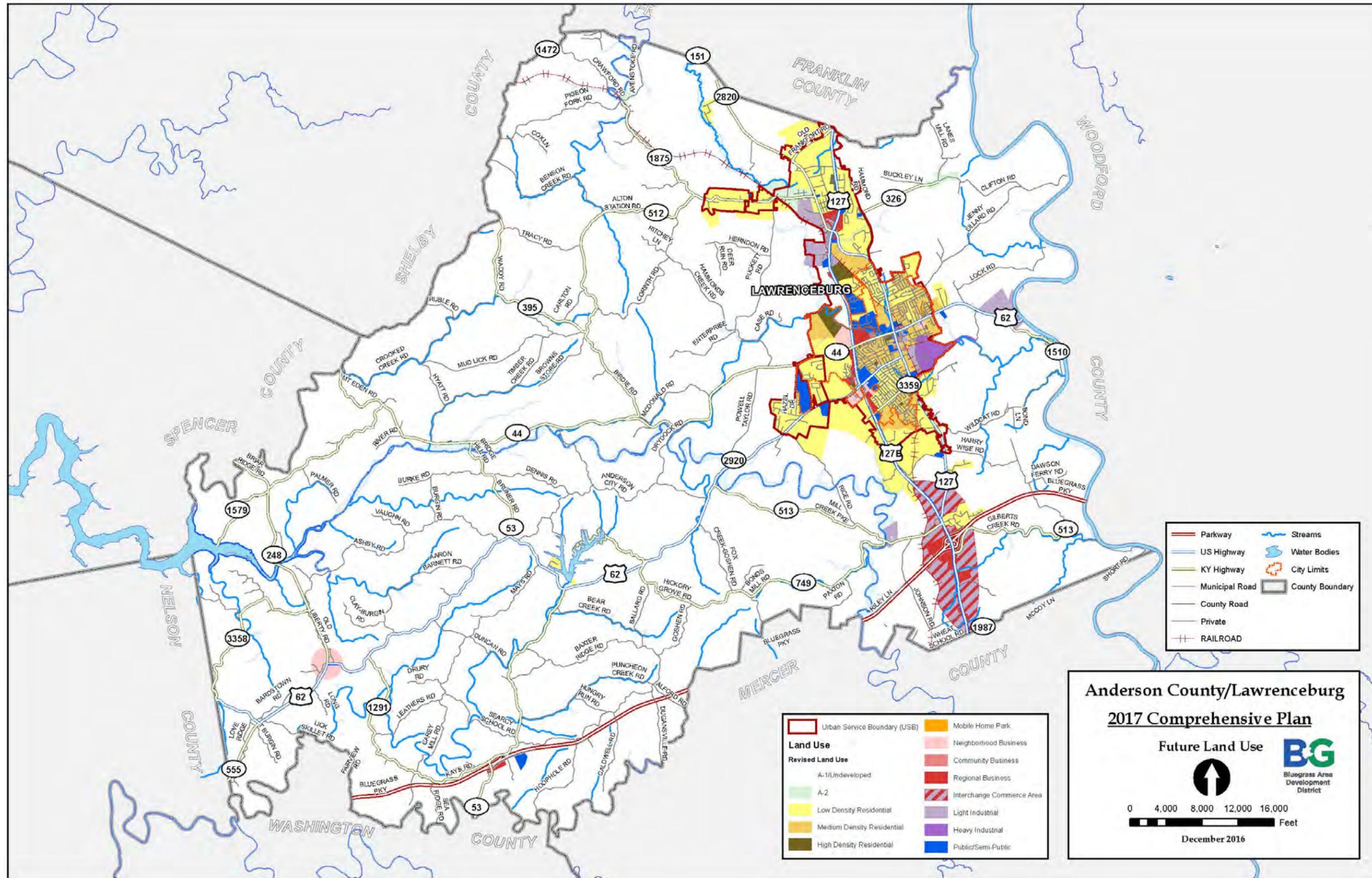
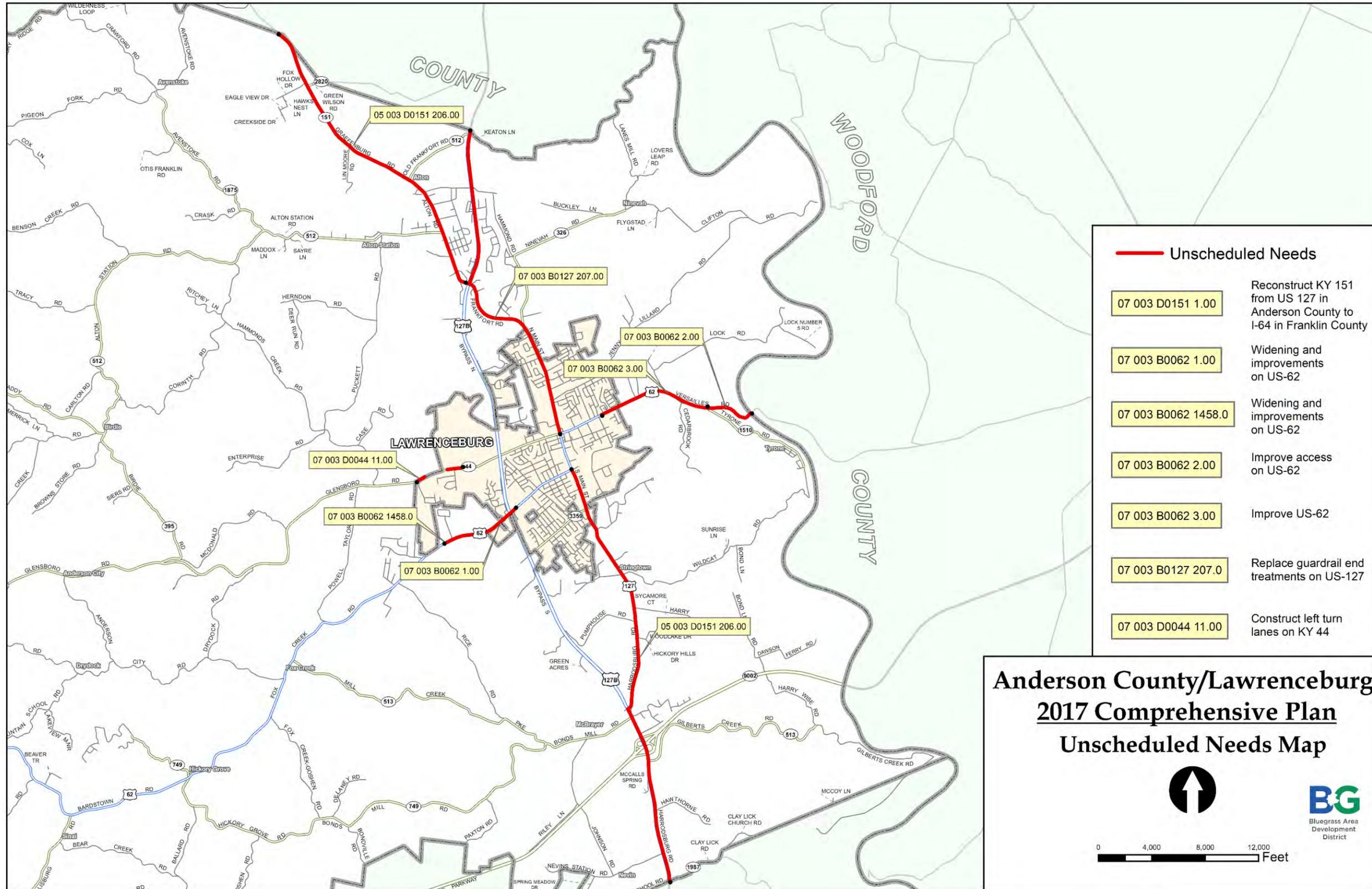


EXHIBIT 2



- Unscheduled Needs**
- 07 003 D0151 1.00** Reconstruct KY 151 from US 127 in Anderson County to I-64 in Franklin County
 - 07 003 B0062 1.00** Widening and improvements on US-62
 - 07 003 B0062 1458.0** Widening and improvements on US-62
 - 07 003 B0062 2.00** Improve access on US-62
 - 07 003 B0062 3.00** Improve US-62
 - 07 003 B0127 207.0** Replace guardrail end treatments on US-127
 - 07 003 D0044 11.00** Construct left turn lanes on KY 44

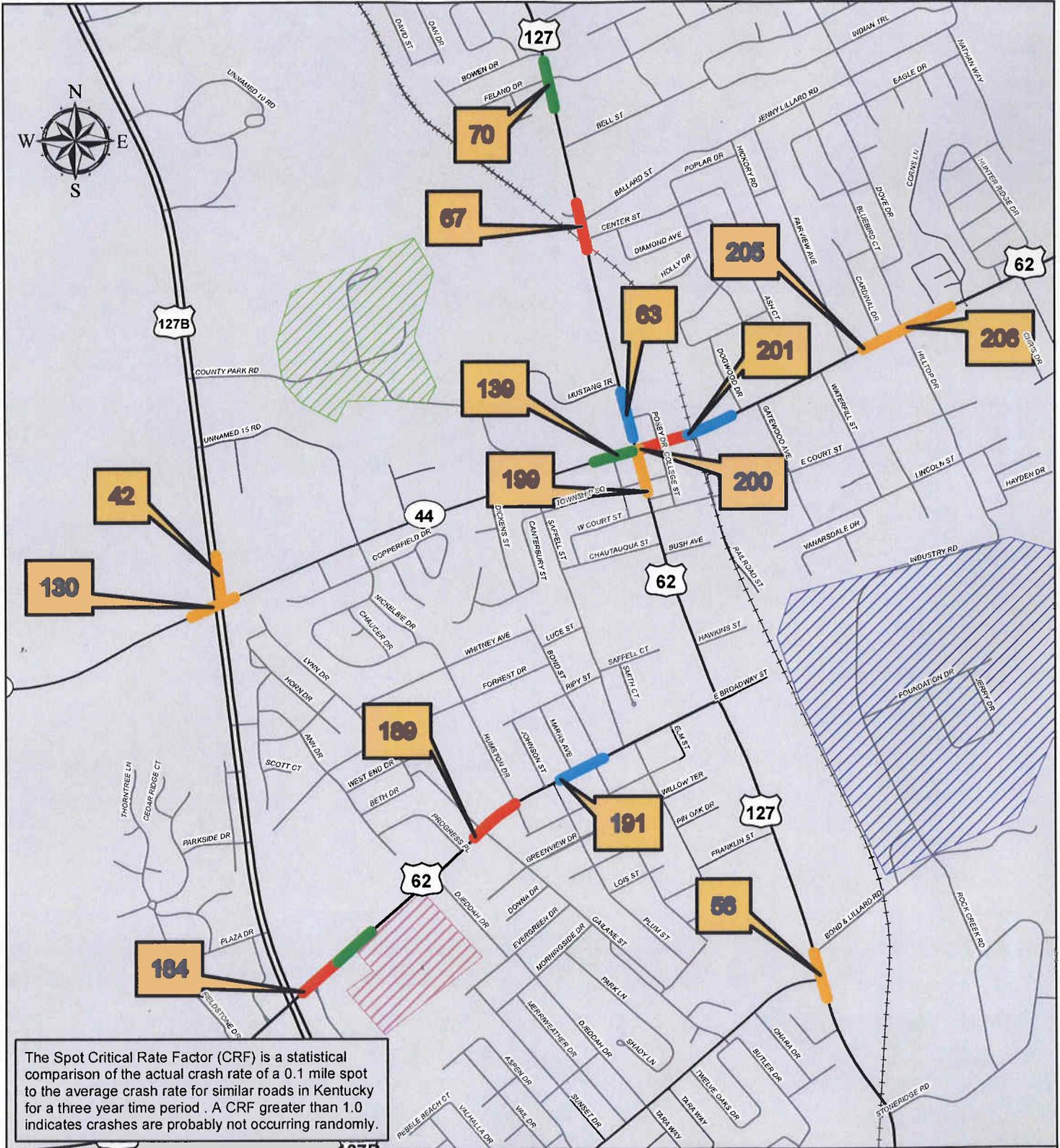
**Anderson County/Lawrenceburg
2017 Comprehensive Plan
Unscheduled Needs Map**

↑

0 4,000 8,000 12,000 Feet

BG
Bluegrass Area
Development
District

EXHIBIT 3



The Spot Critical Rate Factor (CRF) is a statistical comparison of the actual crash rate of a 0.1 mile spot to the average crash rate for similar roads in Kentucky for a three year time period. A CRF greater than 1.0 indicates crashes are probably not occurring randomly.

High Spot CRF

- █ 1.000 - 1.199
- █ 1.200 - 1.499
- █ 1.500 - 1.999
- █ > 2.000

50 Spot Identifier (See Table 1)



Division of Planning

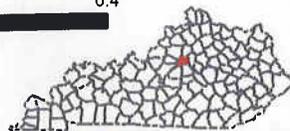
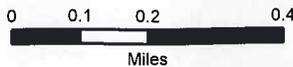


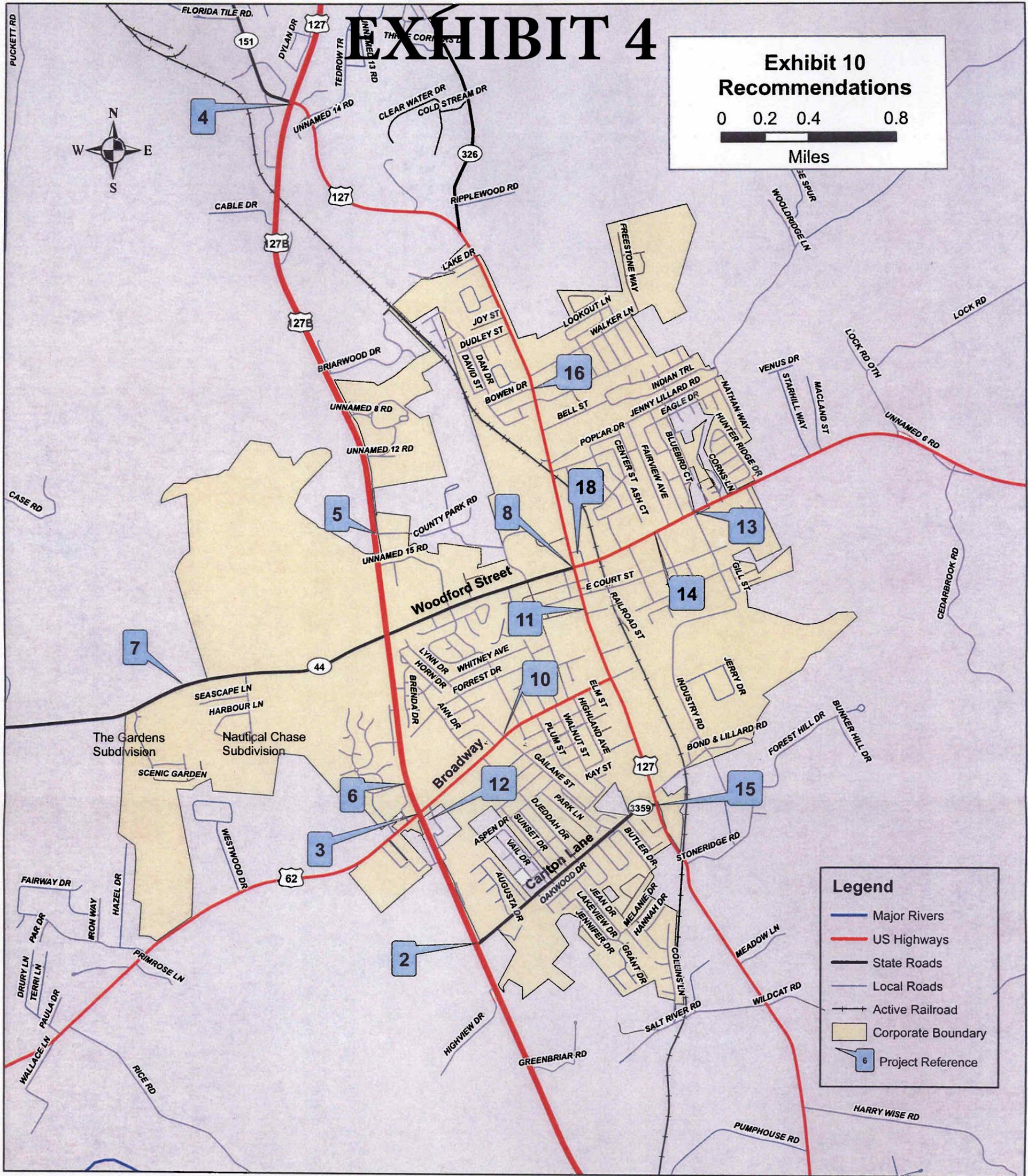
Exhibit 5
High Crash Spots
 Lawrenceburg
 Small Urban Area
 Transportation Study

EXHIBIT 4

Exhibit 10 Recommendations

0 0.2 0.4 0.8

Miles



Legend

- Major Rivers
- US Highways
- State Roads
- Local Roads
- Active Railroad
- Corporate Boundary
- 6 Project Reference

Rank/ Reference	Intersection/Area	Recommended Solution
1 (Not Shown)	US 127 Bypass	Rename US 127 Bypass as US 127.
	US 127	Rename US 127 as US 127 Business.
	Woodford Street	Rename KY 44 from US 127 Bypass to US 127 as US 62.
	Broadway/Main Street	Rename US 62 from US 127 Bypass to US 127 as four digit route.
2	Carlton Lane/ US 127	Add right turn lane to Carlton Lane westbound at US 127B
3	US 127B/ US 62	All-red phase needs to be checked and possibly extended.
4	US 127/ US 127B/ KY 151	Left turn lane from SB US 127 to SB old US 127 (Main Street) backs up in the peak hour and should be extended. Signal phasing needs to be more responsive to traffic demand.
5	US 127 Bypass/Community Park	Add right turn lane from northbound US 127 Bypass into the community park.
6	US 127 Bypass/Food Court	Add a right turn lane from southbound US 127 Bypass into the food court across from Anderson County High School.
7	KY 44	Restripe KY 44 at the Nautical Chase and Gardens subdivisions to eliminate the current dangerous passing zone. Turning Lanes should be considered in at these locations, with future developments required to install their own turning lanes.
8	US 62/US 127/KY 44	Post "Stop Here on Red" signs next to stop bars.
9 (Not Shown)	127 Bypass	Ensure that traffic signals on US 127 Bypass from the new Wal-Mart to Kroger are coordinated.
10	US 62/Lynn Drive	Trim Bushes in front of Dairy Queen.
11	Main Street	Add high visibility signs in front of the First Christian Church on Main Street warning motorists of pedestrians.
12	McDonalds Exit	Post a sign near the McDonalds exit that directs traffic attempting to access US 127 Bypass to use the frontage road in front of the car lot instead of first going back out onto US 62.
13	US 62 / Hilltop Drive	Restripe Intersection to increase corner clearance.
14	US 62 / Waterfill Avenue	Improve signage for trucks accessing industries via Waterfill Street from Woodford Street. Improve corner clearance at this intersection, possibly involving utility relocation (fire hydrant on corner).
15	US 127 / Carlton Drive	Change speed limit to 35 mph until past Carlton Drive.
16	US 127 (Secretariat Dr to Walker Ln)	Eliminate on street parking and restripe to add two-way-left-turning lane from Bell Street to Walker Lane (Milepoints 6.962-7.075).
17 (Not Shown)	KY 44/Nautical Chase Subdivision	Add to the Anderson County Comprehensive Plan to extend a route connecting KY 44 to US 62 at Nautical Chase Subdivision.
18	Posey Street	Turn Posey Street into a one-way street starting at US 127 and ending at US 62, with the direction of travel being in a clockwise direction.

EXHIBIT 5

5 Year Collision Analysis Map

