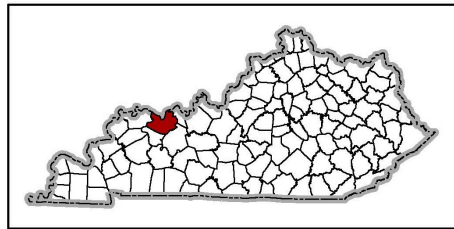
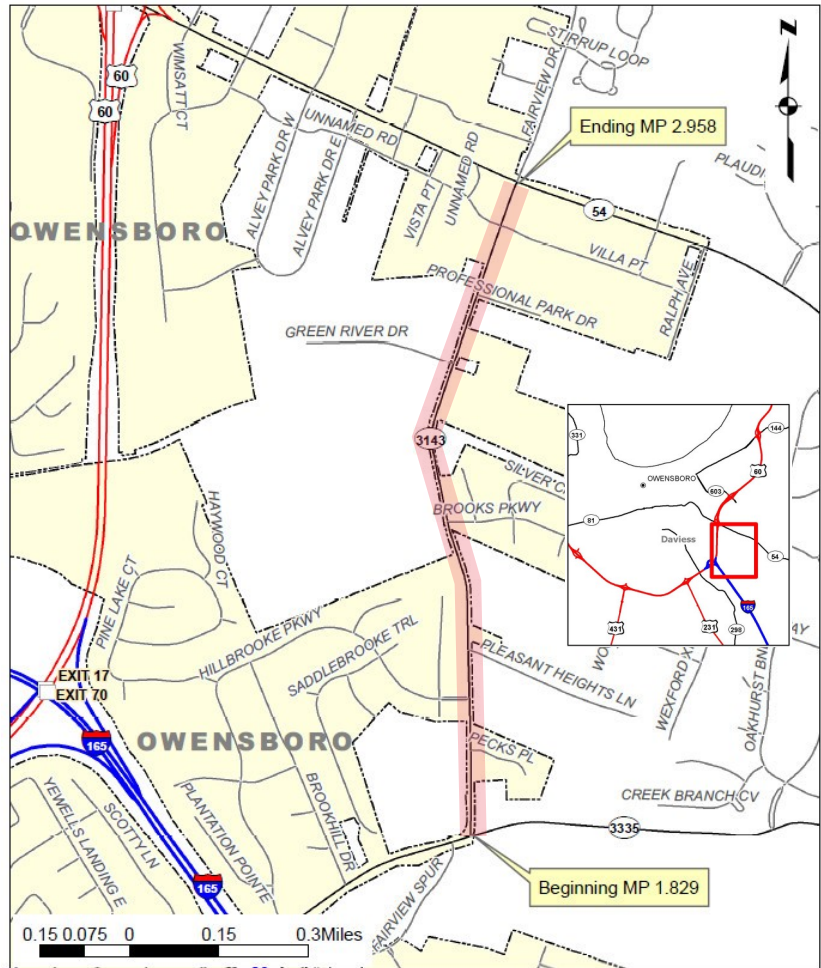


# Data Needs Analysis



## Scoping Study



Improve KY 3143 from KY 3335 to KY 54.

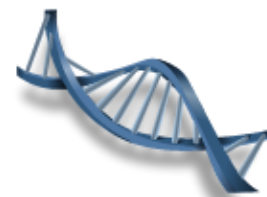
Daviess County

Item No. **2-8854**

Prepared by

KYTC District 2 Planning

August 2020



**I. PRELIMINARY PROJECT INFORMATION**

<b>County:</b>	Daviness	<b>Item No.:</b>	2-8854
<b>Route Number(s)*:</b>	KY 3143	<b>Road Name:</b>	Fairview Drive
<b>Program No.:</b>	120810	<b>UPN:</b>	FD52 030 3143 002-003
<b>Federal Project No.:</b>	STP 8670002	<b>Type of Work:</b>	Minor Widening

2020 **Highway Plan Project Description:**

Improve KY 3143 from KY 3335 to KY 54. (14CCN)(2020CCR)

<b>Beginning MP:</b>	1.829	<b>Ending MP:</b>	2.958	<b>Project Length:</b>	1.13
<b>In TIP:</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<a href="#">Reconcile Project Information in Clearview</a>			
<b>State Class.:</b>	<input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary	<b>Route is on:</b>	<input type="checkbox"/> NHS <input type="checkbox"/> NN <input type="checkbox"/> Ext Wt		
<b>Functional Class.:</b>	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural <input type="text" value="Collector"/>	<b>Truck Class.:</b>	AAA	<b>% Trucks:</b>	7.3
<b>MPO Area:</b>	Owensboro	<b>Terrain:</b>	Rolling		
<b>ADT (current):</b>	6721	2019			
<b>Access Control:</b>	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled <input type="checkbox"/> Partial	<b>Spacing:</b>			
<b>Median Type:</b>	<input checked="" type="checkbox"/> Undivided <input checked="" type="checkbox"/> Divided (Type):				
<b>Existing Bike Accommodations:</b>	Shared Lane	<b>Ped:</b>	<input type="checkbox"/> Sidewalk		
<b>Posted Speed:</b>	<input type="checkbox"/> 35 mph <input checked="" type="checkbox"/> 45 mph <input type="checkbox"/> 55 mph <input type="checkbox"/> Other (Specify):				
<b>KYTC Guidelines Preliminarily Based on :</b>	45 MPH Proposed Design Speed				

**COMMON GEOMETRIC**

Roadway Data:	EXISTING	PRACTICES**	
No. of Lanes	2	Min 2	<a href="#">Existing Rdwy. Plans available?</a> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Lane Width	11	Min 10'	
Shoulder Width	2-3	C&G	Year of Plans: _____
Max. Superelevation***		6%	<input checked="" type="checkbox"/> <a href="#">Traffic Forecast Requested</a>
Minimum Radius***		643	Date Requested: 7/17/2020
Maximum Grade		9%	<input type="checkbox"/> Mapping/Survey Requested
Minimum Sight Dist.		360	Date Requested: _____
Sidewalk Width(urban)		5'	Type: _____
Clear-zone <sup>†</sup>		curb to curb	
Project Notes/Design Exceptions?			

<b>Bridge No.†</b>	(Bridge #1)	(Bridge #2)	
Sufficiency Rating			<a href="#">Existing Geotech Data Available?</a> <input type="checkbox"/> Yes <input type="checkbox"/> No
Total Length			
Width, curb to curb			
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**

This project received funding in the 2020 Hwy Plan.

<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
	D	2021	\$820,000
	R	2022	\$3,160,000
	U	2024	\$3,650,000
	C	2026	\$7,600,000

**B. Project Status**

Design funds have been requested. It is expected to be advertised in September 2020.

**C. System Linkage**

This section of KY 3143 serves an area that has large residential developments. The whole KY 3143 corridor (via Fairview Drive) provides a connection from the rapidly growing KY 54 area to KY 298. From there KY 3143 (via Fours Lane) provides a connection to the US 231 area which has several schools ranging from elementary to college campuses.

**D. Modal Interrelationships**

This route does not provide direct access to any airports, riverports or railroad facilities. It does provide access to a section of the Adkisson Greenbelt bike/pedestrian facility. A trailhead with a parking lot and bike racks are located near the striped crosswalk at approximate MP 2.53.

**E. Social Demands & Economic Development**

This project begins at KY 54 which is a major corridor for shopping and employment. There are several medical facilities in this area including the Regional Hospital. This project is a section of the KY 3143 corridor that (via Fairview Drive and Fours Lane) connects to the schools and college campuses on US 231. There is also a large soccer complex located on KY 3143 within the project area as well as an access point for the Adkisson Greenbelt walking/biking trail at approximate MP 2.53.

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

**F. Transportation Demand**

The last actual traffic count for this section of KY 3143 was 6,721 ADT in 2019. This was a slight increase from a 2016 count at this location of 6324 ADT. This is indicative of the growth in the area. The historical count information is shown in the Tables and Exhibits section below.

**G. Capacity**

This is a two lane congested route. There have been improvements made at the KY 54 approach to better control access. There are several large residential developments along this route as well as a soccer complex, utility company and the KYTC Maintenance facility.

**H. Safety**

There were 46 collisions reported during the period of 1/1/2017-1/1/2020. Of these 46 collisions, 40 involved more than one vehicle. The majority of the collisions (37%) involved rear endings. Angle collisions made up another 26% . There were 35 collisions that happened during the daylight, 8 at dark and 3 reported at dusk. Of the 8 that were listed as dark, 2 were on a lighted section of roadway with the other 6 being on the non lighted section. Additional information is shown in the Tables and Exhibits section below.

**I. Roadway Deficiencies**

Other than a short section approaching KY 54, KY 3143 is a two lane with a lot of access points. There are sight distance issues at some of the intersections including the intersection with KY 3335. There are some substandard geometrics including at least one deficient horizontal curve, one deficient vertical curve and a lack of shoulder on the rural section.

**III. PRELIMINARY ENVIRONMENTAL OVERVIEW**

**A. Air Quality**

Project is in:  Attainment area  Nonattainment or Maintenance Area  PM 2.5 County  
STIP Pg.#: 24 TIP Pg.#: ??

**B. Archeology/Historic Resources**

Known Archeological or Historic Resources are present

No historic concerns seen. Undisturbed areas will be looked at in more detail by archaeologist.

**C. Threatened and Endangered Species**

Possible trees to be removed requiring mitigation fees if so. No Effect anticipated

**D. Hazardous Materials**

Potentially Contaminated Sites are present  Potential Bridge or Structure Demolition

None seen

**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

KY 3143 crosses Horse Fork Creek two times along the corridor, however disturbance is not anticipated by desired road improvements so Permits likely not needed.

**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

Temporary increase of noise during construction

**G. Socioeconomic**

Check all that may apply:  Low Income/Minority Populations  Relocations  Local Land Use Plan available  
none

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

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

Greenbelt Trail parking on east side of Fairview & Horse Fork Creek Park. Land and Water Conservation Funds used to build needs to be researched.

Anticipated Environmental Document:

CE Level 1

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

**A. Need:**

This corridor provides access to an area experiencing exponential growth and development in Owensboro. The development on KY 54 has led to increased congestion in this corridor from residential areas and other motorists who use KY 3143 as an alternative route to bypass congestion on KY 54. In addition, KY 3143 serves as part of a connection to the US 231 corridor which houses several schools and college campuses that also generate traffic on this corridor. The increased congestion in this corridor along with substandard geometrics, possible intersection performance and safety issues, and lack of pedestrian facilities present challenges that need to be addressed in order to allow for KY 3143 to function more effectively.

**B. Purpose:**

The purpose of the project is to reduce congestion, improve safety and traffic flow. Some goals of the project would be to provide turn lanes and better pedestrian facilities.

**C. Scope:**

The scope of this project is to make necessary improvements along KY 3143 from KY 3335 to KY 54 which include addressing congestion by providing turn lanes and widening where needed, improving safety by addressing substandard geometrics, and adding pedestrian facilities to accommodate pedestrians and provide connectivity to existing facilities along the corridor.

**V. PROJECT ESTIMATE & METHODOLOGY**

<b>Estimate Methodology:</b>	<b>Current Estimate</b>	
Same as 2020 Highway Plan Estimate	<u>Phase</u>	<u>Estimate</u>
	Planning	
	Design	\$820,000
	R/W	\$3,160,000
	Utilities	\$3,650,000
	Const	\$7,600,000
	<b>Total</b>	<b>\$15,230,000</b>

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

Atmos Energy  
Contact - Chase Downing  
3275 Highland Pointe Dr.  
Owensboro KY, 42303  
(270) 685-8128

Kenergy  
Contact- Scott Atherton  
3111 Fairview Drive  
PO Box 1389  
Owensboro, KY 42301  
(270) 926-4141

AT&T  
Contact - Glen Share  
120 Clark Street  
Henderson KY 42420  
(270) 831-3025

Regional Water Resource Agency(Sewer)  
Contact- Mike Rhinerson  
Joseph A Murphy Building  
2101 Grimes Avenue  
Owensboro, KY 42303

Owensboro Municipal Utilities (Water/Internet)  
Contact - Austin McLimore  
2070 Tamarack Rd  
Owensboro, KY 42301  
(270) 926-3200

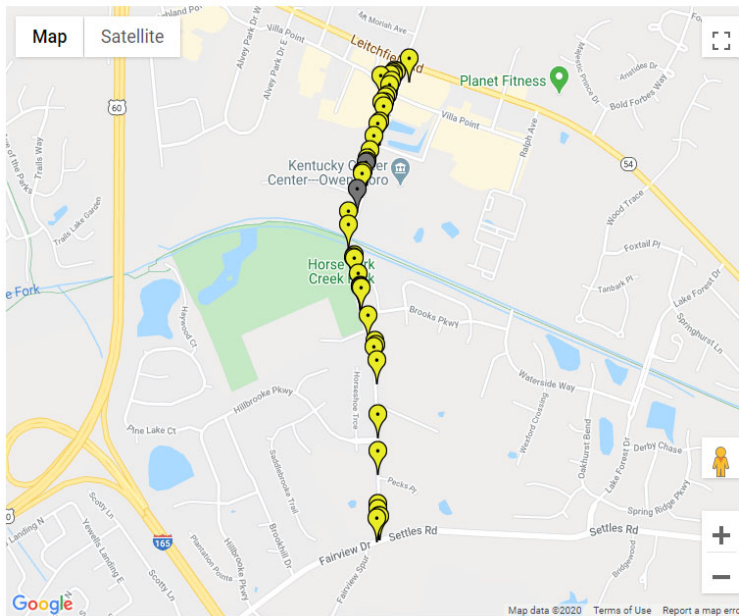
Spectrum  
Contact - Justin Sturgin  
250 Madison Square Dr  
Madisonville, KY 42431  
(812) 253-2767

Windstream  
Contact - James Galvin  
111 South Main Street  
Elizabethtown KY 42701  
(270) 765-1818

**VII. TABLES AND EXHIBITS**

Collision Data 1/1/2017-1/1/2020  
46 Total Collisions

Incident Id	County	Rdwy Number	Intersection Rdwy	Intersection Rdwy Name	Between St Rdwy Name1	Between St Rdwy2	Between St Rdwy	Rdwy Condition Code	Manner of Collision	Light Condition
26116921	DAVISS	KY3143	KY3335	SETTLES				DRY	REAR END	DAYLIGHT
26001736	DAVISS	KY3143						WET	SINGLE VEHICLE	DARK-HWY NOT LIGHTED
25837390	DAVISS	KY3143						DRY	ANGLE	DAYLIGHT
25791378	DAVISS	KY3143						DRY	HEAD ON	DUSK
25655003	DAVISS	KY3143						DRY	ANGLE	DAYLIGHT
25627945	DAVISS	KY3143						OTHER	ANGLE	DAYLIGHT
25609701	DAVISS	KY3143						DRY	SIDESWIPE-OPPOSITE DIRECTIC	DAYLIGHT
25540728	DAVISS	KY3143						WET	BACKING	DAYLIGHT
25468919	DAVISS	KY3143		GREEN RIVER				DRY	REAR END	DAYLIGHT
25431884	DAVISS	KY3143						DRY	REAR END	DAYLIGHT
25094353	DAVISS	KY3143		HILLBROOKE				DRY	ANGLE	DAYLIGHT
25074615	DAVISS	KY3143						DRY	REAR END	DAYLIGHT
24604748	DAVISS	KY3143			GREEN RIVE		BROOKS	WET	REAR END	DAYLIGHT
24605971	DAVISS	KY3143						WET	SINGLE VEHICLE	DAYLIGHT
24517752	DAVISS	KY3143		BROOKS				WET	ANGLE	DAYLIGHT
24396349	DAVISS	KY3143						DRY	REAR END	DARK-HWY NOT LIGHTED
24378127	DAVISS	KY3143						DRY	ANGLE	DARK-HWY NOT LIGHTED
24320472	DAVISS	KY3143						WET	BACKING	DAYLIGHT
24177826	DAVISS	KY3143		GREEN RIVER				DRY	ANGLE	DAYLIGHT
24036904	DAVISS	KY3143						WET	SINGLE VEHICLE	DAYLIGHT
23992602	DAVISS	KY3143						DRY	REAR END	DARK-HWY LIGHTED/ON
23887577	DAVISS	KY3143						DRY	BACKING	DAYLIGHT
23864320	DAVISS	KY3143						DRY	SIDESWIPE-SAME DIRECTION	DAYLIGHT
23835090	DAVISS	KY3143						DRY	SIDESWIPE-SAME DIRECTION	DAYLIGHT
23768679	DAVISS	KY3143		FAIRVIEW				DRY	REAR END	DAYLIGHT
23669131	DAVISS	KY3143	KY3335	SETTLES				DRY	REAR END	DAYLIGHT
23361580	DAVISS	KY3143						DRY	REAR TO REAR	DAYLIGHT
23275331	DAVISS	KY3143			GREEN RIVE		VILLA	DRY	OPPOSING LEFT TURN	DAYLIGHT
23196868	DAVISS	KY3143		BROOKS				DRY	REAR END	DAYLIGHT
23073489	DAVISS	KY3143			HILLBROOK	KY3335	SETTLES	SNOW/SSL	SINGLE VEHICLE	DAYLIGHT
22907541	DAVISS	KY3143		VILLA				DRY	ANGLE	DAYLIGHT
22614709	DAVISS	KY3143						WET	ANGLE	DARK-HWY NOT LIGHTED
21432833	DAVISS	KY3143						DRY	ANGLE	DUSK
20773075	DAVISS	KY3143						DRY	SINGLE VEHICLE	DARK-HWY NOT LIGHTED
20678722	DAVISS	KY3143						DRY	REAR END	DARK-HWY LIGHTED/ON
20610407	DAVISS	KY3143						DRY	BACKING	DUSK
20487381	DAVISS	KY3143						DRY	SIDESWIPE-SAME DIRECTION	DAYLIGHT
20319745	DAVISS	KY3143						DRY	OPPOSING LEFT TURN	DAYLIGHT
19786078	DAVISS	KY3143			VILLA		GREEN F	DRY	REAR END	DAYLIGHT
19727987	DAVISS	KY3143		VILLA				DRY	ANGLE	DAYLIGHT
19712042	DAVISS	KY3143						DRY	ANGLE	DAYLIGHT
19500839	DAVISS	KY3143						WET	SINGLE VEHICLE	DARK-HWY NOT LIGHTED
19395518	DAVISS	KY3143						DRY	REAR END	DAYLIGHT
19339673	DAVISS	KY3143						DRY	REAR END	DAYLIGHT
19320404	DAVISS	KY3143		VILLA				DRY	REAR END	DAYLIGHT
19110973	DAVISS	KY3143						DRY	REAR END	DAYLIGHT



Collision Categories:

- Injured 
- Property Damage 

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

Traffic Data

[Print](#) [Download Station Details](#)

Historical Traffic Volume Summary  
Station Details:

Sta ID:	030D95
Sta Type:	Full Coverage
Map:	<a href="#">MapIt</a>
District:	2
County:	Davies
Route:	030-KY-3143 -000
Route Desc:	FAIRVIEW DR

Begin MP:	1.4070
Begin Desc:	I-165 OVERPASS
End Mp:	2.9580
End Desc:	KY 54
Impact Year:	
Year Added:	

Newest Count:

AADT:	6721
Year:	2019
% Single:	3.5910
% Combo:	3.7160
K Factor:	11.30
D Factor:	56

Definitions:

Sta. ID - Three digit county number + station number

MP - milepoint

Impact Year - year of significant change to traffic pattern within station segment

AADT - Annual Average Daily Traffic - the annualized average 24-hour volume of vehicles on a segment of roadway

% Single - single unit truck volume as a percentage of the AADT

% Combo - combination truck volume as a percentage of the AADT

K Factor - peak hour volume as a percentage of the AADT

D Factor - percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2020		2010	7360	2000	
2019	6721	2009		1999	
2018		2008		1998	
2017		2007	6390	1997	
2016	6324	2006		1996	
2015		2005		1995	
2014		2004	4980	1994	
2013		2003		1993	
2012		2002		1992	2930
2011		2001	5350	1991	

