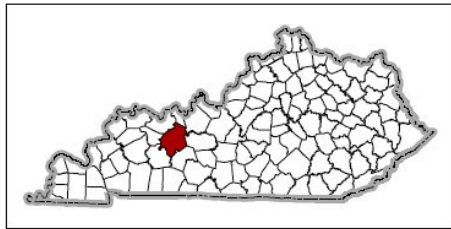
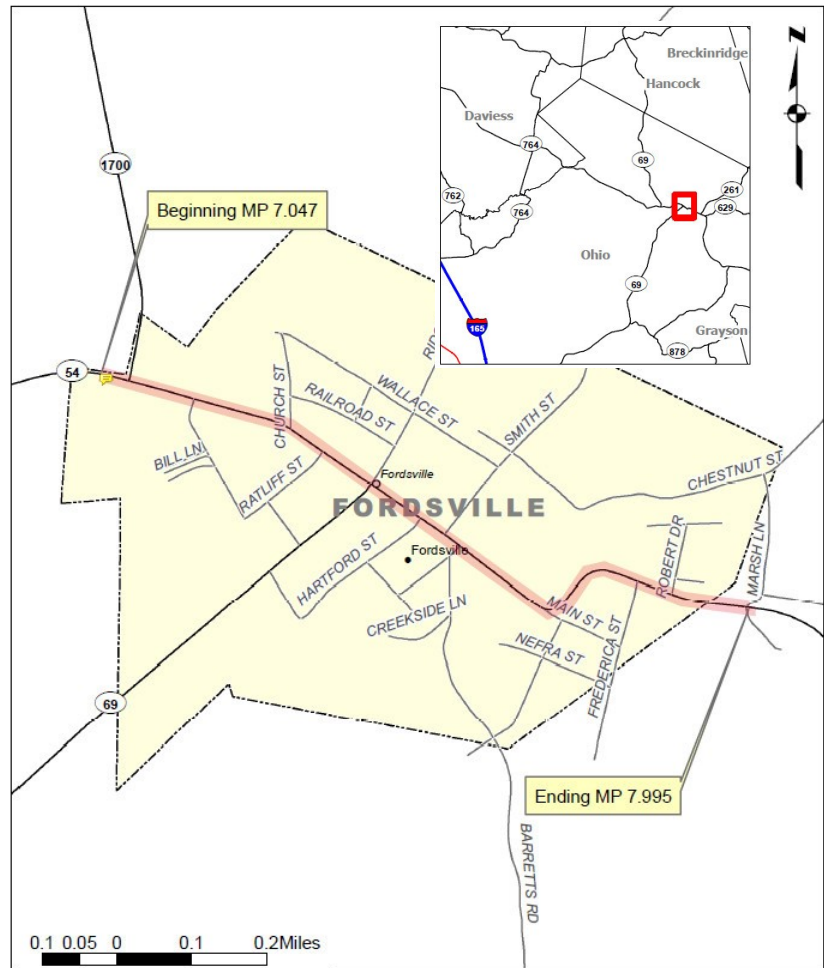


Data Needs Analysis



Scoping Study



Improve safety on KY54 by upgrading MP 7 to MP 8 to three lanes including curb and gutter and addressing two sharp turns.

Ohio County

Item No. **2-8951**

Prepared by

KYTC District 2 Planning

September 2021



I. PRELIMINARY PROJECT INFORMATION			
County:	Ohio	Item No.:	2-8951.00
Route Number(s)*:	KY 54	Road Name:	East/West Main Streets
Program No.:	135320	UPN:	FD04 092 0054 007-008
Federal Project No.:	STP 9031 034	Type of Work:	MINOR WIDENING
2020 Highway Plan Project Description:			
IMPROVE SAFETY ON KY 54 BY UPGRADING MP 7.0 TO MP 8.0 TO THREE LANES INCLUDING CURB AND GUTTER AND ADDRESSING TWO SHARP TURNS. (16CCN)(18CCN)(202CCR)			
Beginning MP:	7.047	Ending MP:	7.995
Project Length:	0.948		
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 type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural Collector		
MPO Area:	Not Applicable		
ADT (current):	3281 2020		
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 checked="" type="checkbox"/> Sidewalk		
Posted Speed:	<input checked="" type="checkbox"/> 35 mph <input type="checkbox"/> 45 mph <input type="checkbox"/> 55 mph <input type="checkbox"/> Other (Specify): 		
KYTC Guidelines Preliminarily Based on : 50 MPH Proposed Design Speed			
COMMON GEOMETRIC			
Roadway Data:	<u>EXISTING</u>	<u>PRACTICES**</u>	
No. of Lanes	2	2	Existing Rdwy. Plans available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Year of Plans: 1933
Lane Width	10'-17'	11' min	
Shoulder Width	2'-3'	6'	<input type="checkbox"/> Traffic Forecast Requested Date Requested: NA
Max. Superelevation***			
Minimum Radius***		758	<input type="checkbox"/> Mapping/Survey Requested Date Requested:
Maximum Grade	9%	7%	
Minimum Sight Dist.		425'	Type:
Sidewalk Width(urban)	4'-6'		
Clear-zone [†]		34'	
Project Notes/Design Exceptions?			
Bridge No.‡	092B00137N	(Bridge #2)	
Sufficiency Rating	94.50%		Existing Geotech Data Available? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Total Length	26.9		
Width, curb to curb	37.7		Detour Length(s): 10.248
Span Lengths	12.1		
Year Built	1934		
Posted Weight Limit	none		
Structurally Deficient?	No		
Functionally Obsolete?	No		
Existing Bridge Type	concrete 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

This project received funding in the 2020 Highway Plan.	<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
	SPP	D	2021	\$750,000
	SPP	R	2023	\$1,220,000
	SPP	U	2024	\$2,440,000
	SPP	C	2026	\$7,300,000

B. Project Status

This project is expected to be advertised in September.

C. System Linkage

KY 54 is a highly traveled route between Daviess, Ohio and Grayson County to the east. A lot of traffic in the summer use this route to access Rough River Lake and Dam. There is also a lot of truck traffic on KY 69 between Ohio County and Hancock County that junction with KY 54 in Fordsville and depart from KY 54 to the west of Fordsville. KY 54 shows a truck percentage of 13.1 between MP 6.0 and MP 7.4. Of the section of KY 54 from MP 7.047- 7.995, there is 0.365 miles show as AA (62,000 lbs) and 0.533 shown as AAA (80,000 lbs).

D. Modal Interrelationships

This route does not provide direct access to any airports or freight centers but it is a well used route to the Rough River Lake and Dam area about 18 miles away.

E. Social Demands & Economic Development

This route serves as Main Street through the city of Fordsville. It connects a restaurant, Bank and several shops. On one end there is a school and long term care facility and on the other end is a gas station and a Dollar general store. A section from the beginning of this project on KY 54 (MP 7.04) to KY 69 (MP 7.5) is on the Blues to Bluegrass- Bill Monroe BG Trail Scenic Byway System.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

There are two count stations along the project and both show a slight decline in traffic over the last 5 years. Additional information is provided in the tables and exhibits below.

G. Capacity

This project would not increase capacity. This project would be to improve the drainage issues, geometric deficiencies and pavement concerns.

H. Safety

There were 37 collisions reported during the period of 6/18/2017-6/18/2021. This included 8 that were described as being in a parking lot. Of the remaining 29 collisions, 9 more involved rear ending or backing into a parked vehicle but not in a parking lot. There was 1 single vehicle from a parking position. Of the remaining 19 collisions, the majority of the collisions were single vehicle collisions. There were 18 collisions (not including the parking lots) that happened during the daylight, 5 at dark and 5 reported at dusk/dawn. Of the 5 that were listed as dark, 3 were on a lighted section of roadway. There were several crashes in the downtown area that includes narrow lanes and on street parking. There were also several in the curve that does not have access control. Additional information is shown in the Tables and Exhibits section below.

I. Roadway Deficiencies

This route is a 2 lane road with sections of on street parking. There were several crashes shown in this section. There are some drainage issues and some sections with poor pavement conditions. There are some open ditches as well as some paved sections between the roadway and existing sidewalk. There are two curves on the east end of the project that create some sight distance issues. The curve between MP 7.690 - 7.753 is a 37.70 degree curve (F) has a skewed intersection coming into it. The other curve between MP 7.757- 7.822 is a 28 degree curve (F) and is adjacent to a convenient store parking lot that has no defined access points. This area had several crashes. There is also a curve that is 8.5-13.1 degree (D) curve between MP 7.247-7.292.

III. PRELIMINARY ENVIRONMENTAL OVERVIEW	
A. Air Quality	
Project is in: <input type="checkbox"/> Attainment area <input type="checkbox"/> Nonattainment or Maintenance Area <input type="checkbox"/> PM 2.5 County	
STIP Pg.#: <input style="width: 100px;" type="text"/>	TIP Pg.#: <input style="width: 100px;" type="text"/>
No STIP or TIP at this time	
B. Archeology/Historic Resources	
<input type="checkbox"/> Known Archeological or Historic Resources are present	
Historic will need to investigate older houses and business buildings through the downtown area. Archaeology will have to investigate any ROW acquired	
C. Threatened and Endangered Species	
No habitat seen except a small number of trees to be removed	
D. Hazardous Materials	
<input checked="" type="checkbox"/> Potentially Contaminated Sites are present <input type="checkbox"/> Potential Bridge or Structure Demolition	
A gas station is seen on the sharp curve on the eastern section of this road. The location of USTs will have to be located. Straightening of road will remove business from main road	
E. Permitting	
Check all that may apply: <input 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 type="checkbox"/> Yes <input type="checkbox"/> No Impacts to: <input type="checkbox"/> Wetlands <input 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	
None	
F. Noise	
Are existing or planned noise sensitive receptors adjacent to the proposed project? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Is this considered a "Type I Project" according to KYTC Noise Analysis and Abatement Policy? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Temporary	
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	
If the east end is straightened out there may be an effect on lower income/minority populations. This is unknown at this time	
H. Section 4(f) or 6(f) Resources	
The following are present on the project: <input type="checkbox"/> Section 4(f) Resources <input type="checkbox"/> Section 6(f) Resources	
None seen at this time	
Anticipated Environmental Document: <input style="border: none; border-bottom: 1px solid black;" type="text" value="CE Level 1"/> ▼	

IV. PROJECT NEED, PURPOSE & SCOPE

A. Need:

This section of KY 54 serves as Main Street in Fordsville providing connections to local businesses and services as well residential properties. KY 54 serves as a link to the Owensboro area in Daviess County to the west and the Rough River Lake and Dam in Grayson County to the east. KY 54 boasts an AADT of 3281 vehicles which includes 13% as truck traffic. This section of KY 54 suffers from a number of geometric deficiencies including sharp horizontal curves, deficient sight distance, and narrow lanes or shoulders in certain portions of the roadway. In addition, there is a lack of access management, poorly defined on street parking, and drainage issues in this corridor. This project is needed to address safety and function issues as well as traffic flow.

B. Purpose:

The purpose of this project is to improve the safety, traffic flow, and function of KY 54.

C. Scope:

To make necessary improvements to KY 54 from MP 7.047 to near Marsh Lane. (MP 7.995) This would include addressing geometric deficiencies, instituting access management, improving functionality issues, and addressing any other concerns such as drainage and pavement issues.

V. PROJECT ESTIMATE & METHODOLOGY		
Estimate Methodology:	Current Estimate	
This is the same estimate as the 2020 Highway plan with the exception of an increase in the R/W estimate. A review of the cost estimates used for the Highway planned revealed that the current estimate for R/W was low compared to what is currently being seen on other projects.	<u>Phase</u> <u>Estimate</u>	
	Planning	
	Design	750,000
	R/W	1,750,000
	Utilities	2,440,000
	Const	7,300,000
	Total 12,240,000	

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
 P.O. Box 1389
 Owensboro KY 42302-1389
 (o) 800.844.4832
 (d) 270.689.6110

AT&T
 Contact - Scott Roche
 1340 E John Rowan Blvd.,
 Bardstown, KY 40004
 (502) 348-4528

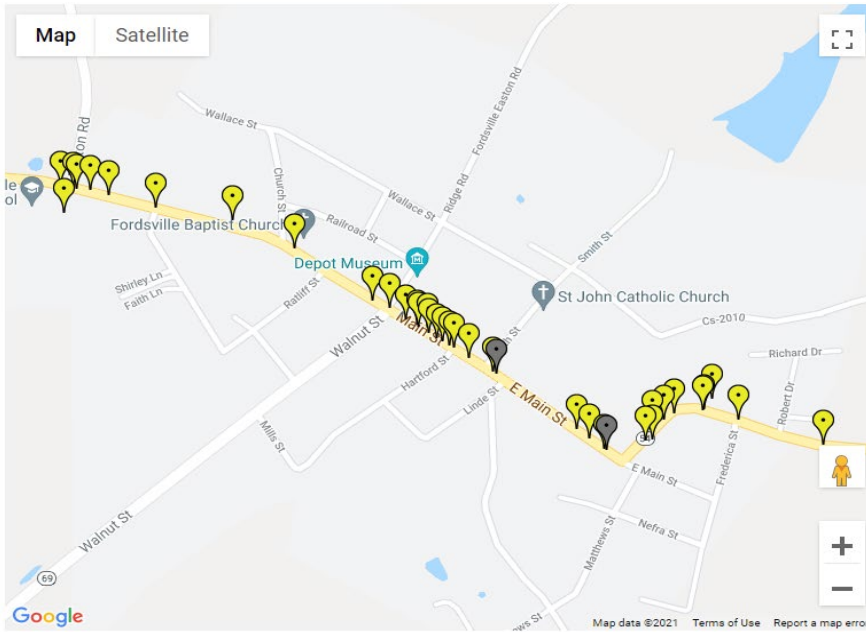
Spectrum
 Contact - Justin Sturgeon
 250 Madison Square Dr
 Madisonville, KY 42431
 (812) 253-2767

Ohio County Water District
 Contact - Eric Hickman, P.E.
 124 East Washington Street
 Phone: 270-298-7704.
 Mobile: 270-519-0885

VII. TABLES AND EXHIBITS

Collision Data 6/18/2017- 6/18/2021
43 Total Collisions

IncidentID	County	RdwyNumber	Street	RoadwayName	StreetStx	Intersecto	Intersect	Weather	Direction/Description	Manner/Collision	LightCondition
28154163	OHIO	KY0054	36	MAIN	ST			CLEAR	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	REAR END	DAYLIGHT
27924106	OHIO	KY0054	313	MAIN	ST			CLOUDY	SIDESWIPE COLLISION - SAME DIRECTION	SIDESWIPE-SAME DIRECTION	DAYLIGHT
27872724	OHIO	KY0054		MAIN	ST			CLEAR	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	REAR END	DARK-HWY LIGHTED/ON
27872727	OHIO	KY0054		MAIN	ST			CLEAR	COLLISION IN PARKING LOT	BACKING	DAYLIGHT
27777404	OHIO	KY0054		MAIN	ST	KY1700	EASTON	CLEAR	OTHER INTERSECTION COLLISIONS	SINGLE VEHICLE	DAWN
27359042	OHIO	KY0054	100	MAIN	ST			CLOUDY	RAN OFF ROADWAY (1 VEHICLE WITH/EARTH EMBANKMENT/DITCH)	SINGLE VEHICLE	DAYLIGHT
27331008	OHIO	KY0054		MAIN	ST			CLEAR	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	REAR TO REAR	DARK-HWY LIGHTED/ON
27209976	OHIO	KY0054		MAIN	ST			CLOUDY	RAN OFF ROADWAY (1 VEHICLE WITH/EARTH EMBANKMENT/DITCH)	SINGLE VEHICLE	DARK-HWY NOT LIGHTED
26616876	OHIO	KY0054	188	MAIN	ST			CLOUDY	COLLISION WITH FIXED OBJECT NON - INTERSECTION - FIRST EVENT COLLISION 09 - 32 EXCLUDING 16	SINGLE VEHICLE	DAYLIGHT
26519900	OHIO	KY0054	265	MAIN	ST			RAINING	OTHER ROADWAY OR MID-BLOCK COLLISION	SINGLE VEHICLE	DAYLIGHT
26423108	OHIO	KY0054		MAIN	ST			RAINING	OTHER ROADWAY OR MID-BLOCK COLLISION	OPPOSING LEFT TURN	DAYLIGHT
26253388	OHIO	KY0054	36	MAIN	ST			CLOUDY	COLLISION IN PARKING LOT	BACKING	DAYLIGHT
26062142	OHIO	KY0054		MAIN	ST			CLEAR	COLLISION WITH ANIMAL NON INTERSECTION	SINGLE VEHICLE	DUSK
25773452	OHIO	KY0054	313	MAIN	ST			CLEAR	COLLISION IN PARKING LOT	BACKING	DAYLIGHT
25656141	OHIO	KY0054	313	MAIN	ST			CLEAR	COLLISION IN PARKING LOT	BACKING	DAYLIGHT
25580607	OHIO	KY0054	15	MAIN	ST			CLEAR	COLLISION IN PARKING LOT	ANGLE	DAYLIGHT
25378653	OHIO	KY0054		MAIN	ST	KY0069	KY69	CLEAR	SIDESWIPE-SAME DIRECTION	SIDESWIPE-SAME DIRECTION	DAYLIGHT
25378656	OHIO	KY0054	36	MAIN	ST			CLEAR	OTHER ROADWAY OR MID-BLOCK COLLISION	SINGLE VEHICLE	DARK-HWY LIGHTED/ON
25260826	OHIO	KY0054	15	MAIN	ST			RAINING	SIDESWIPE COLLISION - OPPOSITE DIRECTION	SIDESWIPE-OPPOSITE DIRECTION	DAYLIGHT
25260768	OHIO	KY0054		MAIN	ST			CLOUDY	OTHER ROADWAY OR MID-BLOCK COLLISION	OPPOSING LEFT TURN	DAYLIGHT
25163881	OHIO	KY0054	200	MAIN	ST			RAINING	COLLISION IN PARKING LOT	BACKING	DAYLIGHT
25057086	OHIO	KY0054	200	MAIN	ST			RAINING	SIDESWIPE COLLISION - OPPOSITE DIRECTION	SIDESWIPE-OPPOSITE DIRECTION	DAYLIGHT
24730374	OHIO	KY0054		MAIN	ST			CLEAR	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	BACKING	DAYLIGHT
24668065	OHIO	KY0054	135	MAIN	ST			CLOUDY	COLLISION IN PARKING LOT	SINGLE VEHICLE	DAWN
24493046	OHIO	KY0054	271	MAIN	ST			CLOUDY	1 VEHICLE ENTERING OR LEAVING PARKED POSITION (NOT PARKING LOT)	SINGLE VEHICLE	DAYLIGHT
24371121	OHIO	KY0054		KY54				CLEAR	OTHER ROADWAY OR MID-BLOCK COLLISION	REAR END	DAYLIGHT
24106008	OHIO	KY0054		MAIN	ST			CLEAR	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	BACKING	DAYLIGHT
24085272	OHIO	KY0054		MAIN	ST			CLEAR	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	SINGLE VEHICLE	DARK-HWY NOT LIGHTED
23789324	OHIO	KY0054		MAIN	ST			CLEAR	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	BACKING	DAYLIGHT
23752084	OHIO	KY0054	215	MAIN	ST			CLEAR	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	REAR END	DAYLIGHT
23822121	OHIO	KY0054	102	MAIN	ST			CLOUDY	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	REAR END	DAYLIGHT
23703346	OHIO	KY0054		MAIN	ST			CLEAR	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	REAR END	DAYLIGHT
23306834	OHIO	KY0054	8	MAIN	ST			CLEAR	COLLISION WITH BICYCLIST NON INTERSECTION	SINGLE VEHICLE	DUSK
22630974	OHIO	KY0054	313	MAIN	ST			CLEAR	1 VEHICLE ENTERING/LEAVING ENTRANCE	ANGLE	DAYLIGHT
20896724	OHIO	KY0054		MAIN	ST		RATLUFF	CLOUDY	1 VEHICLE PARKED POSITION (NOT PARKING LOT/DRIVEWAY)	BACKING	DAYLIGHT
20740349	OHIO	KY0054	232	MAIN	ST			CLEAR	NON-COLLISION OBJECT COLLISION	SINGLE VEHICLE	DAYLIGHT
										OPPOSING LEFT TURN	DAWN



Collision Categories:

- Injured 
- Property Damage 

VII. TABLES AND EXHIBITS (cont.)

