

KY 1194 CORRIDOR STUDY

Lincoln County, KY | Item No. 8-80203

PREPARED BY
TEAM KENTUCKY
 TRANSPORTATION CABINET

IN PARTNERSHIP WITH

EXECUTIVE SUMMARY | SEPTEMBER 2025



EXECUTIVE SUMMARY

The Kentucky Transportation Cabinet (KYTC) initiated a corridor study of the KY 1194 corridor near Stanford in northern Lincoln County. The study includes three distinct sections: improving existing KY 1194, extending KY 1194 east on new alignment to US 27, and considering complete street elements on KY 78 (Main Street) in downtown Stanford. Shown in **Figure ES-1**, the study area encompasses milepoints (MP) 0.0 to MP 6.602 of KY 1194, plus an area south of Stanford roughly bounded by KY 78, US 27, Boneyville Road, and Spoonamore Lane.

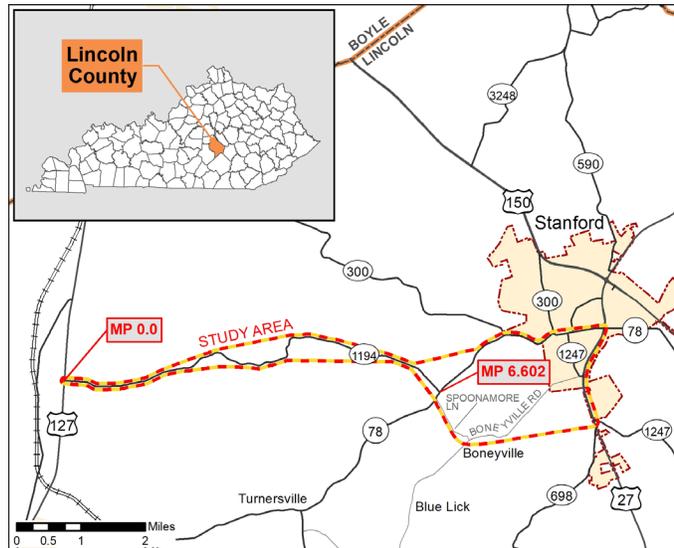


Figure ES-1: General Project Location

EXISTING CONDITIONS

KY 1194 is a rural minor collector with 10-foot lanes and minimal shoulders. It carried up to 2,700 vehicles per day (vpd) in 2024, with the busiest stretch approaching US 127. During 2019-2023, 32 crashes were reported along the 6.6-mile corridor, including one fatality and four injury collisions. There are 17 horizontal curves and 15 steep grades that do not meet Highway Design Manual (HDM) guidelines, with the curviest section near Moores Lane and Hanging Fork Creek. The speed limit is 55 mph.



Figure ES-2: Representative views on KY 1194 (left) and Main Street (center, right)

Within Stanford, KY 78 (West Main Street) is a major collector posted at 25 mph. There are 14 intersections over 0.75 miles including two signals, plus additional driveways and access points. KY 78 carries up to 5,800 vpd with 12-foot lanes, curb/gutter, on-street parking, and wide sidewalks for most

of its length in town. During 2019-2023, 14 crashes were reported along Main Street—primarily at intersections—but none were severe.

Safety Performance

Throughout the study area, 131 crashes were reported along state routes during the five-year analysis period, including 2 fatalities (both motorcyclists), 33 injury collisions, and 96 resulting in property damage only (PDO). There were also 13 crashes along local routes near the southeastern study area boundary that provide a similar function as an extension of KY 1194. Single vehicle crashes are the leading crash type overall, accounting for 40% of all reported crashes, followed by angle (24%) and rear end collisions (22%). Considering just KY 1194, 74% of reported crashes involved a single vehicle. **Figure ES-3** shows crash locations by severity and type as well as intersections exhibiting “LOSS 3-4” with more severe crashes than predicted by mathematical models.

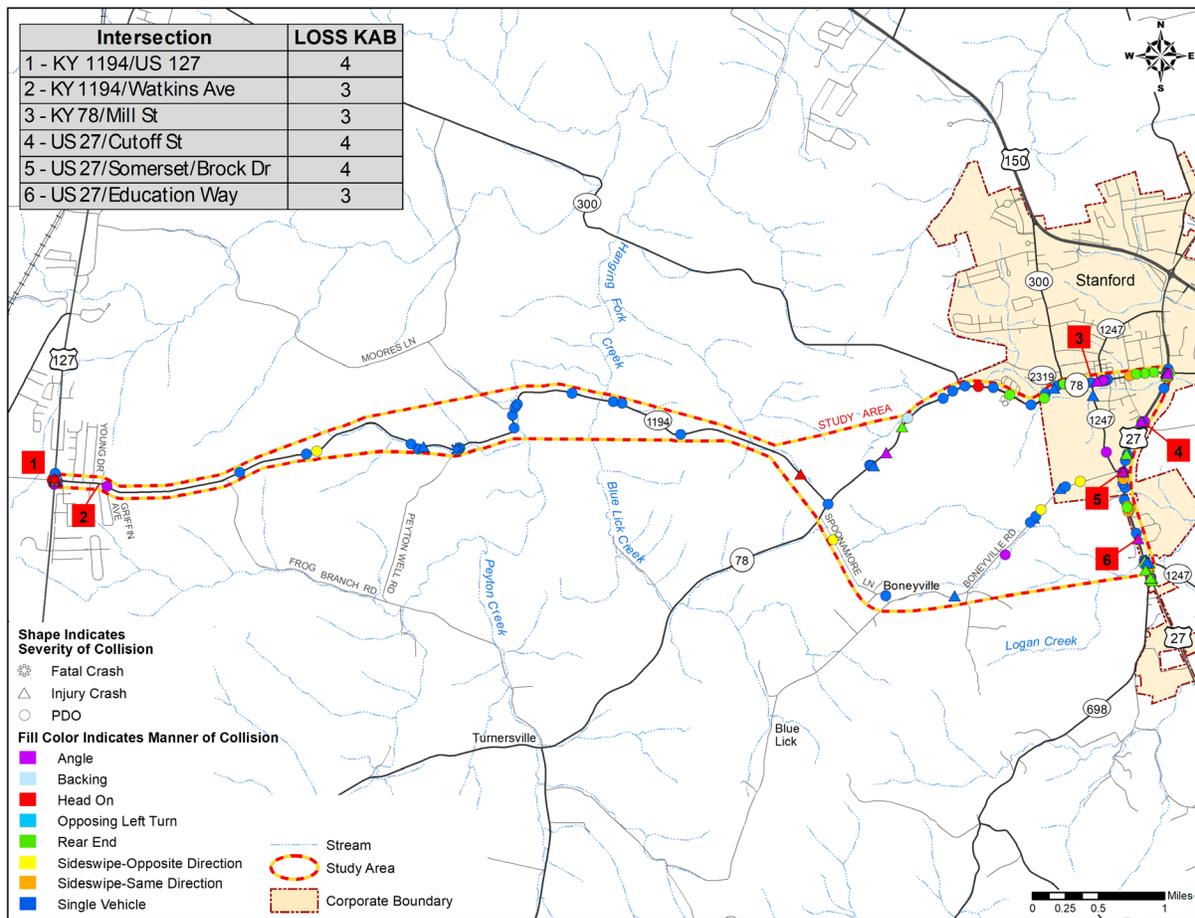


Figure ES-3: Crash Location, Severity, Type, and Poor LOSS

Both KY 1194 and KY 78 have undergone low-cost Highway Safety Improvement Program (HSIP) projects within the last decade.

- As part of Item No. 8-9000, HSIP improvements were implemented along KY 1194 during 2018. Comparing before and after crash rates, the project effectively halved crash rates and substantially lessened crash severities. That is, 46% of crashes prior to the HSIP project resulted in a fatality or injury compared to 17% afterwards.
- West of town, Item No. 8-9014 along KY 78 was completed in 2024 and included enhanced signing/stripping, cross slope improvements, guardrail replacement, roadside regrading, and drainage improvements. A before-after analysis has not yet been completed on this project.

Existing and Future Traffic

Considering current traffic, capacity analyses show highway segments operate at Level of Service (LOS) D or better today.

Two of seven study intersections show LOS E operations with lengthy delays during busy peaks:

- The stop-controlled KY 78 (Hustonville Street) approach to KY 300 (Danville Road) with 300 vehicles per hour coming into town in the morning.
- Low-volume turns from KY 1194/McCormack Church Road onto US 127.

A 0.5% annual growth rate was applied to forecast 2045 No-Build traffic with up to 3,300 vpd on KY 1194. By 2045, the segment of KY 78 (West Main Street) between KY 300 (Danville Avenue) and KY 1247 (Somerset Street) shows LOS E in the AM peak hour with 7,100 vpd on this section. Increased traffic in 2045 also affects operations at study intersections. The same intersections listed above continue to demonstrate LOS E-F performance. Plus southbound lefts from US 27 to the school campus also approach available capacity, even with an officer directing traffic.

Bicycle and Pedestrian Facilities

A network of sidewalks serves the heart of downtown with clusters existing in select surrounding neighborhoods. KY 78 was repaved in summer 2024. Perpendicular crosswalks exist for pedestrians crossing Main Street but not at cross-streets. As of 2025, no formal bike/ped plan exists but there is local interest in expanding these networks. No cyclists and a few pedestrians were observed during August 2024 traffic counts, all traveling within the downtown core.

Environmental Context

A planning-level environmental overview identified key resources throughout the study area. Streams and farmlands define a rural environment with numerous historic resources scattered throughout. Community resources are largely clustered in Stanford.

CONCEPT DEVELOPMENT

Build concepts were developed based on review of existing highway geometry, existing and future traffic operations, crash concentrations, field reconnaissance, environmental constraints, and input

from the community and the project team. Concepts were organized into three categories, depending on which study goal they most closely align with.



The first group of Build Concepts look at relatively small spot improvements to target relatively low-cost, low-impact solutions to address safety or congestion concerns.

- Safety improvements or reconstruction of the US 127/KY 1194 intersection as an “RCUT”
- Realign 1.6 miles of KY 1194 near creeks with wider pavement section
- Improve visibility at KY 78 intersections with KY 1194 and Spoonamore Lane
- Convert eastern KY 300/KY 78 intersection to all-way stop or signal

Another group of Build Concepts consider larger scale improvements to KY 1194, including extending the highway east to reach US 27. One option (shown in **gray** in **Figure ES-4**) would provide 11-foot-wide lanes with 4-foot-wide paved shoulders and a consistent 45-mph travel speed. Four bypass options were also considered: **Yellow**, **Green**, **Red**, or **Blue** ranging in length from 1.0-2.7 miles. Traffic modeling suggests the routes closer to town carry more traffic: up to 4,800 vpd on Yellow versus up to 3,100 vpd on Blue. Any bypass option is expected to divert 800-1,000 vpd from Main Street.

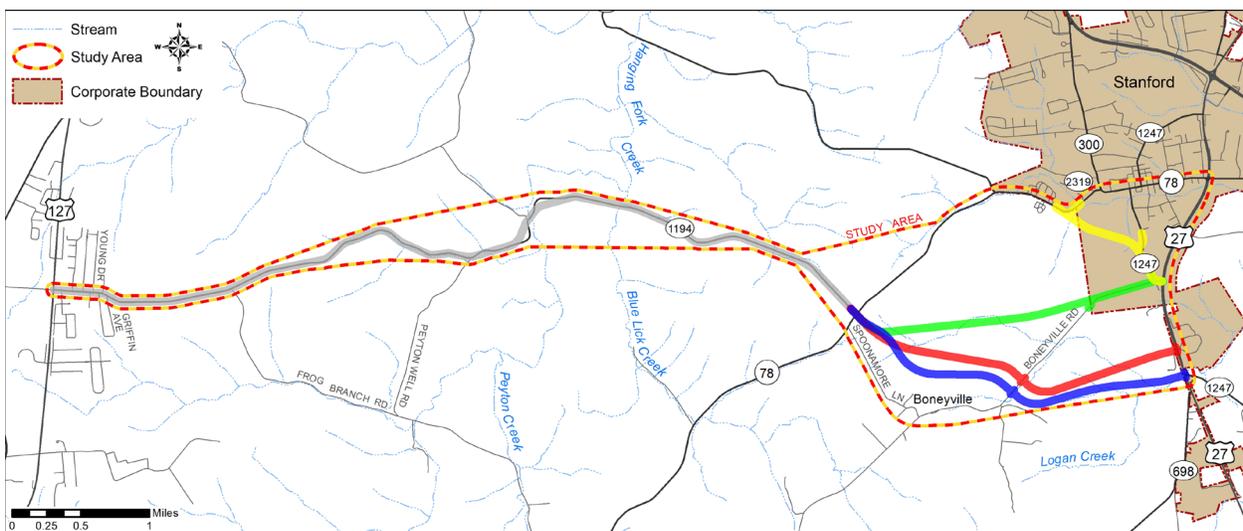


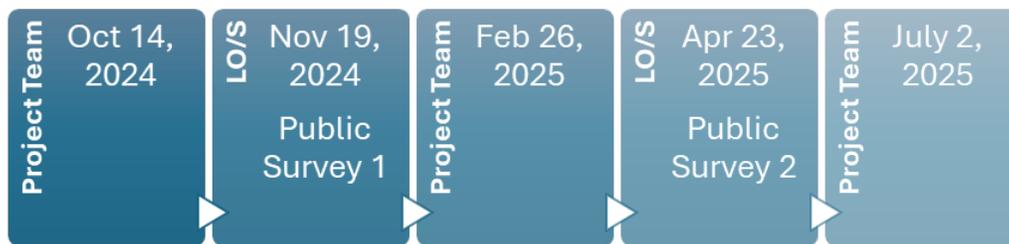
Figure ES-4: KY 1194 Build Concepts

A third set of Build Concepts look at low-cost changes downtown incorporating complete street principles to make KY 78 (Main Street) more accessible for bicyclists and pedestrians. This could include striping, a bike lane, streetscaping, upgrades for pedestrian mobility, or traffic calming measures to slow East Main Street traffic.

Planning-level designs for Build concepts were used to estimate high-cost construction items including earthwork and pavement. While planning-level estimates aim to be conservative, larger projects having extended implementation timelines are likely to face significant cost increases. Transportation benefits (i.e., travel time savings and predicted crash reductions) were monetized then weighed against project costs to calculate the benefit-cost ratio (BCR). If greater than 1.0, the BCR indicates the discounted present value of the benefits exceeds the discounted present value of the costs, suggesting the project is valuable.

COMMUNITY INVOLVEMENT

The project team met at key milestones over the course of the study, including two meetings with local officials/stakeholders (LO/S) and a public-facing website.



Public surveys showed the greatest concerns with the existing KY 1194 corridor are sharp curves and narrow pavement widths. Overall, 85% felt the existing KY 1194 corridor should be improved while 63% believed it should be extended to US 27. In town, the biggest concern was cars driving too fast.

Following development of Build concepts, a second round of surveys showed spot improvements at intersections were the highest rated priority, followed closely by improving safety along existing KY 1194. Northernmost Yellow and Green options received more support of bypasses but all were similar, including No-Build. Representatives from the Boneyville community, a historic African-American hamlet near Boneyville Road and Spoonamore Lane, demonstrated a strong interest in the study and strong opposition to impacts on their community.

RECOMMENDATIONS

Concepts were identified as High, Medium, or Low priorities, with a fourth "Local" priority category added for in-town options that KYTC could pursue in partnership with the City, but that should be initiated locally. **Table ES-1** summarizes prioritization information, also shown in **Figure ES-5**.

Table ES-1: Prioritized Build Concepts

Build	Length (mi)	Potential Relocations	DRUC Costs	Crashes	BCR	Priority	
Spots	US 127/KY 1194 Safety	-	\$10,000	15	>100	High	
	US 127/KY 1194 RCUT	0.7	\$5.4M	15	2.7	High	
	Curves near Creek	1.6	\$17M	10	2.0	Med	
	Profile at KY 78/KY 1194	0.3	\$10,000	1	<0.1	Low	
	All-way Stop at KY 78/KY 300	-	\$10,000	2	>100	High	
KY 1194	45 mph Reconstruction	6.5	\$70M	23	0.5	Low	
	Extend KY 1194						
	Yellow Bypass	1.0	0-2	\$14M	-	1.1	Med
	Green Bypass	2.3	3-6	\$16M	-	1.1	
	Red Bypass	2.6	1	\$19M+	-	1.2	Dismiss
Blue Bypass	2.7	1	\$26M	-	0.8	Dismiss	
Main St	Sidewalk Accessibility	-	\$40,000	0 ped	NA	Local	
	<i>Striping only</i>	-	\$15,000	12	NA	High	
	Alternating Parking	0.2	\$30,000	2	NA	Local	
	Remove Signal (each)	-	\$50,000	5 ¹	NA	Local	

¹ 1 crash at KY 1247 (Somerset St) intersection and 4 crashes at KY 1247 (Lancaster St) intersection

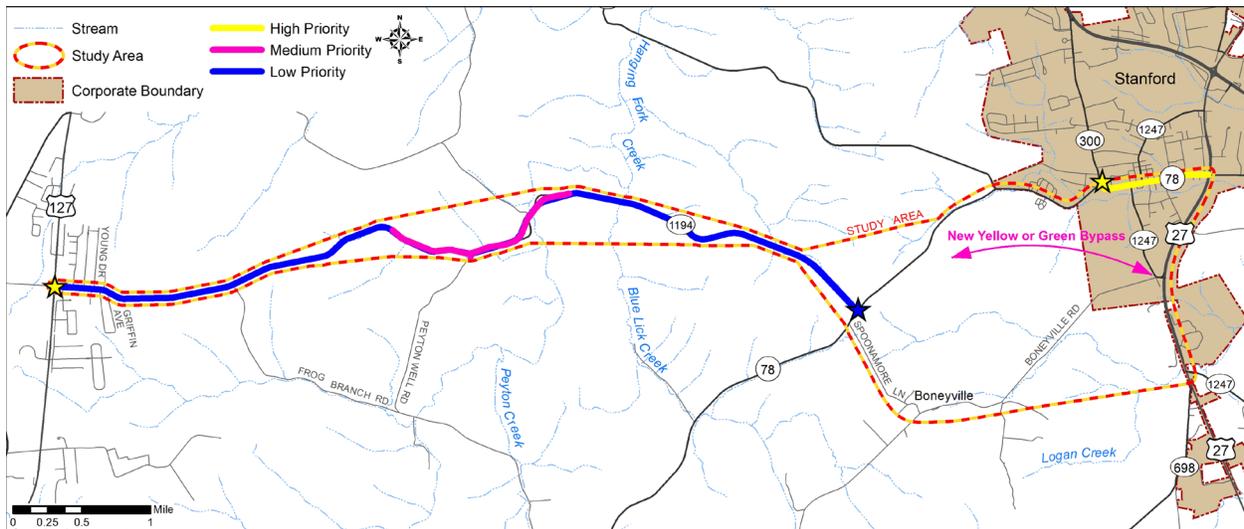


Figure ES-5: Prioritized Build Concepts

Larger scale corridors are likely to impact streams, floodplains, bat or mussel habitat, historic resources, and homes/farms. There is also a gas line that crosses KY 1194 near MP 4.7. One of the oldest counties in Kentucky, there are instances where no deed reference is on file at the courthouse or where changes in ownership have not been updated as heirs inherit across generations. Should a project advance

requiring additional right-of-way, it is likely these circumstances will impact costs and timelines. Project sheets in **Section 8.2** contain additional information about each recommended Build concept.

No funding to date has been assigned to advance improvement concepts beyond this initial planning phase. Some improvements are low-cost actions requiring little advance preparation and could be implemented relatively quickly by KYTC maintenance forces. Others are higher-cost projects that must compete for funding and progress through the project development process.

