



Groundbreaking by Design.

MEETING MINUTES

Project: KY 32 Corridor Study
Nicholas County
Item No. 9-8812

Purpose: Project Team Meeting No. 1

Place: Hybrid Meeting: KYTC District 9 and MSTeams

Meeting Date: November 20, 2023 at 1:30 PM

Prepared By: Qk4

Participants:

Darrin Eldridge	KYTC D9
Blake Jones	KYTC D9
Michael Read	KYTC D9
Karen Mynhier	KYTC D9
Austin Mineer	KYTC D9
Catherine Davis	KYTC CO Planning
Steve DeWitte	KYTC CO Planning
Dave Heil	KYTC CO Planning
David Souleyrette	KYTC CO Planning
Randy Turner	KYTC CO Design
Rebecca Thompson	Qk4
Deanna Miller	Qk4

Rebecca opened the meeting, which is intended is to discuss the existing conditions for the five-mile KY 32 corridor, stretching between KY 36 at Main Street/Broadway in downtown Carlisle and Scrubgrass Creek.

The rural section of the corridor has two 10-foot lanes, narrow shoulders, and a 45-55 mph posted speed limit. On-street parking, sight distance obstructions, and steep grades on cross-streets restrict mobility in the city limits. KY 32 is a rural major collector characterized by several sharp curves and steep hills. Field observations also noted sight distance restrictions, steep drop-offs from shoulders, and roadside stabilization efforts. The corridor was resurfaced in 2021.

Other planned area projects are concentrated in town:

- Item No. 9-205 reconstructs KY 32/KY 36 near the schools, with right-of-way funding in FY 2024.
- CHAF IP20080555 reconstructs KY 36 from US 68 to town, sponsored in the 2024 SHIFT process.
- CHAF IP20120557 reconstructs KY 32 from US 68 to town, sponsored in the 2024 SHIFT process.
- CHAF IP20190177 reconstructs KY 32 through town.
- CHAF IP02110094 overlaps the current study limits.

- CHAF IP20110095 is between the Scrubgrass and Fleming creek bridges at the eastern edge of the study area. Item No. 9-10094 covers the KY 32 Fleming Creek Bridge, slated for construction letting in January 2024.

Deanna reviewed 2018-2022 crash data along the study corridor. The 36 crashes reported included no fatalities and five injury collisions. By type, most were single vehicle crashes (44%) and angle collisions (19%). One-third were roadway departures (RD); considering only RD crashes showed a skew towards crashes in curves compared to the overall trend. Overall, 31% of crashes occurred in wet conditions and 28% occurred after dark. KY 32 demonstrates many of the systemic risk factors identified in the recent district-wide HSIP RD assessment although it was not identified as a priority corridor.

The highway carries 1,100-2,300 vehicles per day (vpd) in 2023. Turning movement counts were collected at Broadway/Main and KY 32/Lake Drive in September 2023, with a forecast report prepared by KYTC. Operationally, both intersections operate at Level of Service (LOS) A-B during both peak hours. Minimal traffic growth is projected through 2045.

Beyond downtown, there was little to no bicycle or pedestrian traffic reported along KY 32. There are 4-5 feet wide sidewalks along portions of the route in town, though gaps exist and not all locations meet ADA requirements.

Group discussion followed:

- The corridor was resurfaced in 2021, with fresh asphalt and striping likely contributing to lower observed crash rates since.
- Add existing curve advisory signs/chevrons to existing conditions mapping.
- Were as-built plans reviewed to measure stopping sight distance at intersections? Not all locations were legible; Qk4 will investigate further while developing improvement concepts.
- A diner at the curves just north of KY 1455 sits close to the existing roadway.
- Are there any clusters of wet-weather crashes that may suggest a drainage issue?
- CRA's historic overview (coming soon) will help inform the level of sidewalk improvements in town that may be feasible.
- Another ongoing planning study along KY 716 considers a painted bike-lane style path on a wide stretch of pavement to accommodate pedestrians.

The remaining discussion identified potential short-term countermeasures: intersection conflict warning system, signage, striping, high friction pavement, shaving back hillsides that block curve visibility, adding guardrail with delineators, rumble strips, and clear zone improvements. Qk4 will also develop a consistent 45-mph template along the ridge to provide a cost estimate to reconstruct the route.

Blake will reach out to key local officials and stakeholders about scheduling a kickoff meeting for the study. This may target mid December or be held after the holidays, depending on their availability.

End of Minutes



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MEETING MINUTES

Project: KY 32 Corridor Study
Nicholas County
Item No. 9-8812

Purpose: Stakeholder Meeting No. 1

Place: Nicholas County Courthouse
125 East Main Street, Carlisle

Meeting Date: February 13, 2024 at 10:00 AM

Prepared By: Qk4

Participants:

Steve Hamilton	Nicholas Co. Judge/Executive
Kenny Holbrook	Magistrate
Matt Hughes	Magistrate
Patrick Dunn	Nicholas Co. Road Department
Michael McDowell	Nicholas Co. Fire/Emergency Mgmt
Kristy Nelson	Nicholas Co. Emergency Medical Service
Jeff Sidles	Nicholas Co. Sheriff
Michael Clay	KY News Group
Kirk Robinson	Nicholas Co. Water Dept.
Silas Cleaver	Nicholas Co. Water Dept.
Allen Clay Stone	Bluegrass ADD
Blake Jones	KYTC D9
Michael Read	KYTC D9
Austin Mineer	KYTC D9
Jesse Holbrook	KYTC D9
Rebecca Thompson	Qk4
Deanna Miller	Qk4

Austin opened the meeting to discuss the existing conditions for the five-mile KY 32 corridor, stretching between KY 36 at Main Street/Broadway in downtown Carlisle and Scrubgrass Creek near the Fleming County line. The project team will use data and input from local officials and stakeholders to develop a range of potential improvement options: from small-scale, low-cost spots to full corridor reconstruction. The study will help define the costs and impacts of identified project concepts to inform future decisions on which improvements should be pursued.

Several potential projects from the CHAF database and one programmed project were identified close to town. Item No. 9-205 reconstructs the KY 32/KY 36 intersection near the schools as a roundabout, with right-of-way funding available in FY 2024. The 2024 Governor's Recommended Highway Plan also includes funding for R, U, C project phases.

The rural section of the corridor has two 10-foot lanes, narrow shoulders, and a 45-55 mph posted speed limit. KY 32 is a rural major collector characterized by several sharp curves and steep hills. Field observations noted sight distance restrictions, steep drop-offs from shoulders, and roadside stabilization efforts. The corridor was resurfaced in 2021. The highway carries 1,100-2,300 vehicles per day (vpd) in 2023, including tractors, school buses, and farm equipment.

Beyond downtown, there is little to no bicycle or pedestrian traffic. Sidewalks are 4-5 feet-wide along portions of the route in town, though gaps exist and not all locations meet ADA requirements.

Five years of crash data (2018-2022) revealed 36 crashes spread along the corridor including no fatalities and five injury collisions. No crash clusters were identified. By type, most were single vehicle crashes (44%) and angle collisions (19%). KY 32 demonstrates many systemic risk factors identified in the recent district-wide HSIP Roadway assessment.

Group discussion topics included:

- Heavy rain events cause water lines near Stoney Creek Road (KY 1658, at KY 32 MP 12.3) to slip as topsoil slides off the underlying clay. Kirk provided a waterline plan sheet detailing problem areas.
- Crashes in tangents may reflect after-crash resting spots rather than locations in curves contributing to an incident. Attendees concurred that the curves are an issue with the curve at Stoney Creek Road identified as one of the worst.
- A 0.15-mile gap in the city's sidewalk network exists from E. North Street to N. Locust Street.
- The city may be interested in a flashing caution light at Pickeral Street near the church in Henryville (MP 10.3). Drivers have limited visibility pulling out from steep cross-streets. Elevated sidewalks can also block visibility.
- Three gas lines are located at MP 11.85 (near the old car lot).
- The corridor has few opportunities to safely pull off the roadway, e.g., to use cell phones or for slower moving farm equipment to allow cars to pass.
- Lower traffic volumes on KY 32 may be attributed to drivers using US 68 via cut-through routes to get to Carlisle, because of wider lanes and faster travel time. Most of the traffic on KY 32 is local drivers familiar with the alignment.
- Two planned developments were identified by the group that should be included in future year traffic forecasts. A nursing home (80-90 jobs) and slaughterhouse (40-50 jobs) are planned, with a potential Nicholas/Bourbon industrial park along Carpenter Pike. Future US 68 widening may create more economic opportunities for the area.

End of Minutes

MEETING MINUTES

Project: KY 32 Corridor Study
Nicholas County
Item No. 9-8812

Purpose: Project Team Meeting No. 2

Place: Hybrid Meeting: KYTC District 9 and MSTeams

Meeting Date: May 17, 2024 at 10:00 AM

Prepared By: Qk4

Participants:

Michael Read	KYTC D9
Karen Mynhier	KYTC D9
Austin Mineer	KYTC D9
Steve DeWitte	KYTC CO Planning
Dave Heil	KYTC CO Planning
Jay Balaji	KYTC CO Planning
Jared Jeffers	KYTC CO Planning
David Souleyrette	KYTC CO Planning
Dasha Korostina	KYTC CO Planning
Ben Coomes	KYTC CO Design
David Gambrel	Bluegrass ADD
Rebecca Thompson	Qk4
Deanna Miller	Qk4
Courtney Evans	Qk4

Austin opened the meeting, welcoming attendees. The KY 32 planning study considers systemic safety countermeasures along the five-mile corridor between KY 36 at Main Street/Broadway in downtown Carlisle and Scrubgrass Creek.

The section in the city has 13-foot lanes, sidewalks, and on-street parking; surrounding properties comprise a historic district. The rural section has two 10-foot lanes with narrow shoulders, characterized by several sharp curves and steep hills. The highway carries 1,100-2,300 vehicles per day (vpd) with no capacity concerns and minimal growth projected through 2045. Crash data (2018-2022) identified 36 crashes including five injury collisions. By type, most were single vehicle crashes (44%) and angle collisions (19%). Overall, 28% of crashes occurred at night and 31% were in wet/icy conditions.

Qk4 presented a range of Build options for consideration (**Table 1**), organized into four categories: improvements in town, followed by three "buckets" of improvements organized from low cost/low impact to larger scale measures. With relatively low traffic volumes and crash rates, low-cost measures with minimal impacts may be more practical.

Group discussion followed:

- Even with curb extensions, radii downtown should be able to accommodate truck traffic.

- The District has not historically supported midblock crossings. Consider pairing the locations shown with curb extensions to reduce crossing widths and improve visibility.
- Adding guardrail requires some shoulder widening as well.
- Addressing some curvy sections along the existing highway may increase travel speeds and change driver expectations. The corridor is consistent today. Larger new alignment sections introduce extra conflict points at oxbows to preserve property access.
- The stopping sight distance from KY 1658 (Stoney Creek Road) meets 55 mph turning right onto KY 32 and meets 45 mph turning left onto KY 32. Stoney Creek carried 218 vpd as of its most recent count.

Table 1: Build Options Considered

In Town	Low Cost
<ul style="list-style-type: none"> a. KY 32/KY 36 Pedestrians b. Midblock Crossings c. Define Striping 	<ul style="list-style-type: none"> a. 6-inch Thermo b. Chevrons for Curves c. KY 32/KY 1455 Striping d. Optical Bars near Diner e. Guardrail
Medium Impact	Reconstruction
<ul style="list-style-type: none"> a. Pull-offs b. Systemic Sight Distance c. KY 32/KY 1658 Stoney Creek d. Widen/Realign Curves in seven sections 	<ul style="list-style-type: none"> a. 45 mph Reconstruction

The team discussed escalation. Cost estimates can represent 2024 dollars, but total costs are likely to increase as projects compete for statewide funding and progress through the project development process. KYTC Planning will issue guidance, but it is likely right-of-way, utility, and construction costs see further inflation if future phases are not funded in the current biennium.

The team agreed to present each of the Build options to stakeholders at a future meeting, except the optical speed bars. Optical speed bars may be unfamiliar to motorists and lead to confusion; FHWA's *Speed Management Manual for Local Rural Road Owners*¹ notes they reduce speeds an average of 2 mph and warns the measure "should be used sparingly, else it will lose its novelty effect."

Next steps:

- Qk4 will prepare construction cost estimates and simplify the presentation to share with stakeholders.
- Qk4 will share KMZs for District 9 to prepare R/U estimates.
- Blake will coordinate with the Judge to schedule the next meeting locally, targeting mid June or later.

End of Minutes

¹ Online at <https://highways.dot.gov/safety/local-rural/speed-management-manual-local-rural-road-owners>



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MEETING MINUTES

Project: KY 32 Corridor Study
Nicholas County
Item No. 9-8812

Purpose: Stakeholder Meeting No. 2

Place: Nicholas County Courthouse
125 East Main Street, Carlisle

Meeting Date: July 9, 2024 at 10:00 AM

Prepared By: Qk4

Participants:

Steve Hamilton	Nicholas Co. Judge/Executive
Kenny Holbrook	Magistrate
Matt Hughes	Magistrate
Ronnie Clark	Mayor of Carlisle
Patrick Dunn	Nicholas Co. Road Department
Michael McDowell	Nicholas Co. Fire/Emergency Mgmt
Jeff Sidles	Nicholas Co. Sheriff
Gary Kinder	Chief of Police
Michael Clay	KY News Group
Silas Cleaver	Nicholas Co. Water Dept.
Justin McVey	Nicholas Co. Road Department
Allen Clay Stone	Bluegrass ADD
Blake Jones	KYTC D9
Michael Read	KYTC D9
Austin Mineer	KYTC D9
Ben Coomes	KYTC CO Design
Rebecca Thompson	Qk4
Deanna Miller	Qk4

Rebecca opened the meeting, welcoming attendees. The KY 32 planning study considers systemic safety countermeasures along the five-mile corridor between KY 36 at Main Street/Broadway in downtown Carlisle and Scrubgrass Creek. Today's meeting includes a brief recap of existing conditions, followed by a discussion of potential Build options. No funding for any additional project development phases is included in the 2024 Highway Plan.

The study section of KY 32 in the city has 13-foot lanes, sidewalks, and on-street parking; surrounding properties comprise a historic district. The rural section has two 10-foot lanes with narrow shoulders, characterized by several sharp curves and steep hills. The highway carries 1,100-2,300 vehicles per day (vpd) with no capacity concerns and minimal

growth projected through 2045. Crash data (2018-2022) identified 36 reported crashes including five injury collisions. By type, most were single vehicle crashes (44%) and angle collisions (19%). Overall, 28% of crashes occurred at night and 31% were in wet/icy conditions.

Qk4 presented a range of Build options for consideration (**Table 1**), organized into four categories.

Table 1: Build Options Considered

In Town	Low Cost
a. KY 32/KY 36 Pedestrian Accessibility b. Add two Midblock Crossings c. Define Striping	a. 6-inch Striping for Full Corridor b. Chevrons for Curves c. KY 32/KY 1455 Striping d. Add Guardrail
Medium Impact	Reconstruction
a. Add two pull-offs for slow-moving traffic b. Systemic Sight Distance (trim trees, hillsides) c. KY 32/KY 1658 Stoney Creek realignment d. Widen/Realign Curves in seven sections	a. Full 45 mph Reconstruction

Group discussion followed:

- Existing pavement near Henryville is several inches higher than the adjacent sidewalk creating drainage issues.
- KY 32 is important for the community but the grooved centerline along KY 36 is also critical to address.
- Replacing the existing signals south of the courthouse with all-way stops would help slow traffic for the midblock crossing on KY 36. Stopping sight distance southbound is a concern.
 - With a 4-way stop, all movements at the KY 32/KY 36 intersection operate at Level of Service A/B based on existing traffic volumes.
- The city is looking to replace some waterlines through downtown; any future sidewalk projects should be coordinated to minimize rework.
- Adding signage along the corridor complicates right-of-way mowing.
- Leaving excess pavement at the KY 32/KY 1455 intersection creates a leftover space that people may be tempted to use for various reasons, i.e. parking or roadside sales. Removing excess pavement could restrict box trucks from performing U-turns to return to town.
- Reconstructing select curves by adding pavement provides more recovery room, but may also lead to higher speeds, creating issues for motorists approaching downstream curves.
- Realigning the intersection/curves at KY 1658 is the top priority. The curve at Adams Lane, restriping KY 1455, curves 25-26, and curves 12-15 are also priorities of the options discussed.
- Extending the culvert near Adams Lane would allow for more sight distance for motorists entering KY 32.
- Reconstructing the corridor to a 45-mph design speed template was considered and dismissed by the group, due to the high costs and impacts. The planning report can document this.

Going forward, Qk4 will examine the other options discussed today: sidewalk drainage issues in Henryville, replacing the KY 32/KY 36 signal with a four-way stop, and lengthening the Adams Lane culvert. The project team will meet once more to finalize recommendations then a report summarizing the study process and recommended improvements will be published later this year.



MEETING MINUTES

Groundbreaking by Design.

Project: KY 32 Corridor Study
Nicholas County
Item No. 9-8812

Purpose: Project Team Meeting No. 3

Place: Hybrid Meeting: KYTC District 9 and MSTeams

Meeting Date: August 27, 2024 at 10:30 AM

Prepared By: Qk4

Participants:

Darrin Eldridge	KYTC D9
Blake Jones	KYTC D9
Michael Read	KYTC D9
Karen Mynhier	KYTC D9
Austin Mineer	KYTC D9
Dave Heil	KYTC CO Planning
Jay Balaji	KYTC CO Planning
Brent Sweger	KYTC CO Planning
Catherine Davis	KYTC CO Planning
Libbie Lowe	KYTC CO Planning
Ben Coomes	KYTC CO Design
Rebecca Thompson	Qk4
Deanna Miller	Qk4
Courtney Evans	Qk4
Chasity Bryant	Qk4

Austin opened the meeting, welcoming attendees. The KY 32 planning study considers systemic safety countermeasures along the five-mile corridor between KY 36 at Main Street/Broadway in downtown Carlisle and Scrubgrass Creek. Qk4 reviewed the existing conditions information, environmental red flags, and input from local officials/stakeholders (LO/S).

- Do any sections show an elevated Level of Service of Safety? The milepoints in the system are wonky so calculations in CDAT are not reliable. Based on the reported crashes—36 incidents over five miles in five years with no clusters—it is unlikely.

The remainder of the meeting covered a discussion of Build concepts, culminating in the study recommendations summarized in **Table 1**. Three concepts were added following LO/S discussions: removing two signals in town, improving sidewalks/drainage near the northern city limits, and improving visibility at Adams Lane.

- Could the pedestrian improvements at KY 32/KY 36 be accomplished with temporary striping/bollards instead of a more permanent solution? The team discussed whether this would require upgrades to ensure ADA compliance, which could be challenging given the existing grades and historic setting.

- At the KY 32/KY 1455 intersection, the team prefers to leave existing pavement in place, relying on striping/signage to adjust travel lanes.
- The Henryville sidewalk/drainage repairs could be a good candidate for a city/county project with TAP funding.
- There was local interest in pull-offs; if these advance, the northbound location could be shifted to minimize utility impacts.
- The team discussed whether tree trimming is more efficient conducted by in-house maintenance forces or a contractor. In the past, using an HSIP contractor provided good value, especially as maintenance crews are busy. A lot of the vegetation throughout the district has grown up lately; it would be beneficial to address—not just for the KY 32 corridor.
- Cost estimates assume right-of-way acquisition for cutting back embankments to be conservative; however, easements could be effective for lower cost. This can be explored as part of a future project development phase.
- The curve realignment options would be less effective if constructed piecemeal. Particularly south of KY 1455, individual curves are extremely close together and should be considered as a package set. One option would be to start improving the alignment from town and work northwards as far as possible within the available budget. District staff preferred a single project sheet describing curve improvements over individual pages.

Table 1: Build Options Considered

Concept	DRUC Cost	Recommendation
IN TOWN		
a. KY 32/KY 26 Pedestrians	\$240k	Low
b. Midblock Crossings	\$60k	Low
c. Define Striping	\$150k	Medium
d. Four-way Stops	\$50k	High/Traffic data needed
LOW COST		
a. 6" Striping	\$330k	Low/with Resurfacing
b. Curve Signage	\$70k	Medium
c. KY 1455 Striping	\$30k	Medium
d. Additional Guardrail	\$4.6M	Low
e. Henryville Sidewalks	\$1.2M	Medium
MEDIUM IMPACT		
a. Pull-offs	\$780k	Medium
b. Hillsides/Vegetation	\$1.6M	High
c. Stoney Creek Intersection	\$5.0M	Medium
d. Widen/Realign Curves	\$23M	Medium
RECONSTRUCTION		
a. 45 mph design speed	\$61M	Dismiss

Next steps: Qk4 will submit the draft report in the coming weeks and coordinate with Bluegrass ADD on the outstanding socioeconomic report edits.

End of Minutes