

## **MEETING MINUTES**

Project:	KY 222 Glendale Corridor Study Hardin County
Purpose:	Project Team Meeting No. 1
Place:	KYTC District 4 and Virtual Meeting
Meeting Date:	June 16, 2022 at 1:00 PM
Prepared By:	Qk4

Participants:

KYTC D4
KYTC D4
KYTC Planning
KYTC Planning
Qk4
Qk4
Qk4

\* virtual attendee

Kevin Blain opened the meeting, welcoming attendees. The purpose of the meeting is to present the existing conditions inventory and discuss growth assumptions in the recently updated regional travel demand model by KYTC. Study area needs are driven by future traffic accessing the MegaSite so traffic forecasts will be a critical component.

The team reviewed the previous projects map; Qk4 will edit the limits show for Item No. 4-171 and include Item numbers for the two Ring Road projects. Kevin will review the map to confirm other CHAFs remain active.

Rebecca Thompson reviewed the existing conditions data. KY 222 is a minor collector with two 10-foot lanes and narrow shoulders (≤1-foot paved). There is a sharp S-curve east of the parkway bridge, which is currently being reconstructed. The vertical alignment has some steep sections although no data is available in HIS. The

speed limit varies from 35 mph in town to 55 mph in the rural sections. Strava heat maps show a robust cycling community traveling throughout the area; Justin confirmed there are group rides in good weather.

Turning movement counts were conducted at the KY 222 intersections with US 62 and KY 1136. Year 2019 traffic data from the Item No. 4-20 interchange project are also available. There were 51 crashes along KY 222 during 2016-2021; year 2020 trends were consistent with other years. The 51 crashes included three fatalities (two motorcyclists) and six injury collisions. Most were single vehicle crashes (51%) or angle collisions (27%). None involved cyclists or pedestrians.

The remainder of the meeting focused on the travel demand model assumptions. Qk4 met with Adam King (Hardin County Planning Commission Director) and Charlie Allen (Hardin County Engineer) on June 15 to obtain feedback on anticipated future land use change and socioeconomic growth assumptions; a meeting with Aaron Hawkins (city planner) is scheduled following this meeting.

- Current zoning for the area is primarily residential with industrial and commercial surrounding the MegaSite. Some property owners in the vicinity have recently begun requesting zoning changes to increase land values, not all of which are reflected on the current mapping website.
- The county's future land use plan shows the area south of KY 1136 as industrial and a stretch of interstate commercial surrounding US 31W. An update of the county's comp plan will begin next month. The county anticipates urban land uses will extend south to Sonora; requests to construct mutli-family housing units are common, already surpassing the total number of new houses constructed county-wide last year.
- Large-scale single-family subdivisions are likely to develop in greenspaces between the proposed Ring Road extension and Glendale. There is limited sewer but the city may annex more area, growing to the south.
- A recent study for the city's ongoing comp plan update estimates 30,000+ new homes in the region over the next five to ten years.
- The latest Ford projections show 4,900 workers between two plants; this number could be higher by 2045. Initially, there was talk of a third plant although it is not shown on the latest concept plans.
- ECTC plans to build a training center southwest of the Ford battery plants, with 200 students and 25 staff. Access will be along KY 1136.
- The old children's home has been purchased with plans to develop the area as commercial and office space.
- Permitting for development between KY 1136 and the river, from US 31W to the rail line could be challenging. The site was a civil war camp so intensive archaeological investigations may be required.
- There is little space in the city to expand large-scale industrial uses. The US 62 corridor could see this type of growth, depending how the solar farm advances.
- There are approved permits for 500+ multi-family units in two developments along KY 1136, adjacent to the new KSP station and East Hardin Middle School. The undeveloped lot behind applied for a zone change for residential too.
- Item No. 4-171 currently assumes two travel lanes plus full-depth shoulders and turn lanes along KY 1136. Ultimately, this could turn into a five-lane urban facility. All four Six Year Plan projects mapped should be considered part of the "E+C" No-Build network.

Forecasts prepared for the Ford plants and for the KY 1136 project show very different distribution assumptions. Ford assumes  $\sim 4\%$  accessing the plants via KY 1136 with  $\sim 68\%$  to/from the north along I-65. The KYTC forecast from the updated statewide model shows  $\sim 36\%$  accessing the plants via KY 1136 and  $\sim 20\%$  to/from

the north along I-65. While the distribution of employee trips is largely speculative at this point and could change over time, general consensus was that closer to  $\sim 30\%$  of employee traffic will be drawn from areas further south.

Before wrapping up the meeting, Rebecca presented the environmental red flags and next steps. Taylor Bend park near the KY 1136/KY 1868 intersection should be removed as it is not a public resource. Listed historic sites designate small footprints surrounding each structure; however, modern survey methodologies are likely to recommend much larger footprints as National Register-eligible.

Next steps include refining the travel demand model assumptions and setting up a meeting with local officials and stakeholders. Kevin will take the lead on setting up the meeting, targeting the week of July 11. Preliminary invitees include the Area Development District, metropolitan planning organization, city, county, school system, legislators, and the industrial foundation. The middle school or church basement may provide a suitable venue.

### **MEETING MINUTES**

Project:	Glendale Area Highway Projects Hardin County
Purpose:	Local Officials Meeting
Place:	Glendale Christian Church
Meeting Date:	July 14, 2022 at 10:00 AM
Prepared By:	Qk4

### Participants:

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Adam King	Hardin Co. Planning & Development
Brad Patterson	Hardin Co. Schools
Charlie Allen	Hardin Co. Government
Chris Corder	Hardin Co. Schools
David Lee	Hardin Co. Sherriff's Office
David Morgan	Hardin Co. Road Dept.
E. G. Thompson	Hardin Co. Government
Fred Clem	Hardin Co. Magistrate
Harry Berry	Hardin Co. Government
Jeremy Smith	KY State Police
Jim Duplessis	State Government
John Stith	Hardin Co. Board of Education
Marvin Rhinehart	Hardin Co. Sherriff's Office
Matthew Deneen	Elizabethtown City Council
Michael Steck	Hardin Co. Road Dept.
Mike Skaggs	Lincoln Trail ADD
Paul Moran	Hardin Co. Schools
Rick Gaines	Elizabethtown/Hardin Co. Industrial Foundation
Samara Heavrin	KY State House
Brad Bottoms	KYTC D4
Kevin Blain	KYTC D4
Joe Ferguson	KYTC D4
Anna Coffey	KYTC D4
Steve De Witte	KYTC Planning
Dave Heil	KYTC Planning
Jared Jeffers	KYTC Planning
Tom Springer	Qk4
Kate Sautel	Qk4
Rebecca Thompson	Qk4
Mitch Thomas	AECOM

John Edwards	AECOM
Jordan Taliaferro	AECOM
John Keeton	AECOM
Chadwick Collins	AECOM

Kevin Blain opened the meeting, welcoming attendees. The purpose of the meeting is to update local officials and stakeholders on various transportation projects currently under development in the Glendale area. There was a 2008 study of mobility needs, followed by a 2021 update. With the Ford plant moving rapidly towards construction, KYTC is working to stay ahead of emerging needs.

#### Item No. 4-20 I-65/KY 222 Interchange Reconstruction

Construction at the interchange is underway, starting with the new access to the Ford property to accommodate construction traffic. Up to 4,000 construction workers are expected at BOSK by next summer; Ford is also considering options to shuttle workers from other possible parking sites. During construction, there will only be one entrance into the BOSK site from KY 222 but ultimately there will be two entrances. The new interchange will be open to traffic in 2024; KYTC will publicize new traffic patterns closer to time.

#### Item No. 4-198 Ring Road Extension (to US 31W)

Starting in 2013, the project advanced with state funding including identifying a preferred alignment and beginning to purchase right-of-way. The project was paused in 2016 due to funding shortfalls statewide. Now, the project is moving again with federal funding. KYTC is updating past studies to meet federal requirements, revisiting previous alignments, and will hold a public meeting this fall. Construction is anticipated to occur by 2025 and last 2+ years but depends on funding in the next highway plan.

The project requires the southbound I-65 weigh station to be relocated. It is proposed to shift south, between Glendale and Sonora (milepoint 81), at the former location of the rest area. There will be additional truck parking spaces.

- How will Ring Road intersect with existing roads: KY 1136, Overall Phillips, US 31W, etc? KYTC is looking at several intersection design options (e.g., offset intersections, roundabouts). It is anticipated Ring Road would not connect with Overall Phillips. These connections will be discussed at the public meeting.
- Right-of-way costs will be more expensive now but are not a consideration in choosing a preferred alternative.

As a separate project, another Ring Road extension Lincoln Parkway (Item No. 4-80250) is identified in the 2022 Highway Plan but design work will not begin until a preferred alignment is selected for Item 4-198.

#### Item No. 4-171 Widen KY 1136 (Gilead Church Road)

The existing highway is narrow, curvy/hilly, and about to carry significantly more traffic. Section 1 is between the proposed KCTC training facility and US 31W. This section is fully funded in the Highway Plan and would reconstruct the two sharp curves. Section 2 is the western section to KY 1868 and includes bridging over the railroad. The proposed road has two 12-foot lanes with 8-foot paved shoulders. Turn lanes are proposed on US 31W and on KY 1136/KY 1868.

AECOM presented a virtual room and video with simulations of the proposed improvements.

- Will the US 31W/KY 1136 intersection be signalized? At first, it will remain a two-way stop control until increasing traffic volumes meet signal warrants. KYTC will monitor the situation.
- Are there short-term plans to handle traffic during construction of the BOSK site? KYTC can grant a permit for Ford or the local government to add some gravel where needed, but KYTC does not have a mechanism to implement short-term widening for large construction traffic.

#### New Planning Study

Qk4 is beginning a planning study covering the Glendale area, looking at future traffic demands and where needs/priorities remain between other ongoing projects. The study area runs from the I-65/KY 222 interchange, south to KY 1136/KY 1868, and west to US 62—potentially including a new interchange at the Western KY parkway. There is no identified funding for any future phases or projects.

Study area needs are driven by future traffic accessing the BOSK plant so traffic forecasts will be a critical component. The goal is to coordinate all projects and the future (2045) traffic scenario, including the Ford plant and future land use changes in southern Hardin County. Future regional traffic has been forecasted using the updated Meade-Hardin Travel Demand Model (TDM). Coordination has occurred with both city and county planning representatives to help forecast the future (2045) land use scenario, built around household and job projections. The ongoing city comp plan update forecasts 33,000-50,000 new households in the larger region. The current TDM model includes 14,000 new households in Hardin County (40,000 in 2018 versus 54,000 in 2045) and 38,000 new jobs (46,000 in 2018 versus 84,000 in 2045), including 5,000 at BOSK. Maps showing current TDM growth assumptions were distributed, asking attendees to review/comment.

- Most recent growth has occurred along US 62 near Cecilia. Other infrastructure improvements are being advanced that would support future development.
- Glendale's sewer plant will be near capacity once BOSK is operational. It will take more investment and capacity to support significant residential growth.
- Ford's current plans use about half the megasite. If the remainder develops with similar intensity in the future, it will change traffic patterns.

The current TDM growth assumptions show notable growth—600 new vehicles per day on KY 222 with 10,500 trips to/from the BOSK plant (75% to/from the north driveways to KY 222), and 5,600 new daily trips on KY 1136 (New Glendale Road) north of Glendale. KYTC noted a lot of these rural roads will need to be revisited in the future to safely accommodate increased traffic.

The 2021 *Glendale Mobility Study* identified several priority projects for the area, including bypasses for the historic community. A large "PACE" agricultural easement and numerous historic resources constrain a new highway connection north of Glendale. Qk4 will begin drawing up concepts—an improved KY 222, a new alignment connector, and/or new WKY parkway interchange—then schedule meetings with this group and the public in September. Attendees were encouraged to mark up the map following the presentation to note additional constraints, known developments, or potential corridors to evaluate.

• The northeast Glendale bypass should show on the project map. We do not need more through traffic cutting through the historic town. A bypass is necessary and should be a short-term priority.

- There are many highway needs noted here to accommodate increased traffic, but these projects compete with others statewide for limited funding—including the new battery plant at Bowling Green too.
- An I-65 interchange at KY 1136 was suggested previously, south of the BOSK property, to increase access. It should still be considered.
   The intent is that the KY 1136 widening discussed above could be widened to four/five lanes with little

The intent is that the KY 1136 widening discussed above could be widened to four/five lanes with little additional right-of-way needed.



## **MEETING MINUTES**

Project:	KY 222 Glendale Corridor Study Hardin County
Purpose:	Project Team Meeting No. 2
Place:	KYTC District 4 and Virtual Meeting
Meeting Date:	August 29, 2022 at 1:00 PM
Prepared By:	Qk4

Participants:

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Brad Bottoms	KYTC D4
Kevin Blain	KYTC D4
Joe Ferguson	KYTC D4
Jared Clemons	KYTC D4
Justin Wallace	KYTC D4
Bow Warren	KYTC D4
Kevin Young	KYTC D4
Jacob Riggs*	KYTC D4
Steve DeWitte	KYTC Planning
Dave Heil	KYTC Planning
Jared Jeffers	KYTC Planning
Jay Balaji*	KYTC Planning
Connor Schurman*	KYTC Planning
Tom Springer	Qk4
Rebecca Thompson	Qk4
Steve Trevino*	Qk4
Courtney Evans*	Qk4
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\* virtual attendee

Kevin Blain opened the meeting, welcoming attendees. The purpose of the meeting is to discuss future traffic and potential improvement concepts. Rebecca Thompson briefly reviewed the existing conditions but study area needs are driven by future traffic accessing the MegaSite.

The Hardin-Meade Travel Demand Model formed the basis of forecast efforts, incorporating recent updates from KYTC plus growth assumptions developed through conversations with local officials and key stakeholders. Qk4 presented slides summarizing Average Daily Traffic (ADT) forecasts for the No-Build and various Build scenarios.

• Year 2021 counts along I-65 were conducted during the week including Memorial Day, contributing to the high observed volumes. Previous counts fluctuate but have been below 45,000. When the recent 2022 counts are available, Qk4 will update model runs. Beyond I-65, minimal changes to the volumes shown are anticipated.

- The No-Build scenario shows 4,800 vehicles per day (vpd) on KY 222 between the BOSK development and downtown Glendale. Roughly 76% of the site traffic is distributed to the north to/from KY 222 versus 24% to/from the south along KY 1136.
- Three build alternatives were modeled: a new WKY Parkway interchange alone, a new Ky 1136 interchange alone, and both new interchanges:
  - The Build scenario with only a new WKY parkway interchange shows relatively low volumes— 2,500 vpd divided between all four ramps—with minimal impact on I-65/KY 222 interchange volumes. Forecasts shown an additional 900-1,200 vpd through Glendale versus the No-Build scenario.
  - The Build scenario with only a new KY 1136 interchange shows higher volumes—5,200 vpd divided between all four ramps—and some traffic diverted from the I-65/KY 222 interchange volumes. Forecasts shown decreased traffic through Glendale versus the No-Build scenario.
  - The Build scenario with both new interchanges shows identical ramp volume forecasts for each potential new interchange individually and roughly 800 additional vpd through Glendale versus the No-Build.

Other project team discussions:

- Capacity at the I-65/KY 222 ramps to/from the north is likely to be a concern, as identified in the Wade Trim assessment. Qk4 will look at capacity in more detail before the next meeting.
- Based on projections, extending the four-lane section along US 62 is not necessary for traffic operations. Another project is already adding turn lanes at the US 62/KY 222 intersection.
- As part of forecast efforts, earlier projections from Wade Trim and the Stantec KY 1136 analyses were compared; each effort represents different assumptions and network configurations.

Qk4 also presented a selection of build concepts to consider.

Two northeast bypass concepts were shown.

- The Blue concept (4 to 5a) should advance to share with stakeholders but including improvements to existing KY 222 east to Mud Splash Road (5a to 5b).
- Qk4 will also develop another bypass alignment parallel to Oxmoor Drive, north of the streams, connecting to KY 222 at Mud Splash Road, similar to the 4 to 5b connection shown in **Figure 1**.



Figure 1: 2008 Northeast Bypass Concept

A northwest bypass concept is not feasible as there is no gap

between the PACE easement and expanded historic boundary. The PACE easement requires a willing seller to progress; impacts within the historic district could occur but hinge on the viability of an avoidance alternative (e.g., a south bypass) and the purpose and need of the project. Conversations with stakeholders should explain that this concept was considered but dismissed as not feasible.

AECOM developed representative footprints for a new KY 1136 interchange with I-65. While the northeast bypass still adds value, no improved east/west connection is needed without a parkway interchange as the Ring Road Extension, part of the No-Build baseline for this study, provides a similar function.

Several potential configurations with a new WKY parkway interchange were presented. The purpose and need discussion is critical to determining what the concepts should achieve: getting traffic to/from the plant or keeping extra trips away from historic Glendale.

- Two new interchange locations were considered: at the existing parkway overpass or a new structure about 600 feet northeast. Either routes traffic around the dog-leg curves on existing KY 222.
- One east-west connector follows existing KY 222 most of its length between the parkway and KY 1136, dipping south of Glendale to form a southern bypass and grade-separated railroad crossing near the old high school.
  - Initial plans called for a substation along Shipp Lane near this alignment; D4 will confirm the latest plans.
  - There may also be local interest in reopening the former school if residential growth meets expectations.
- Another east-west connector option follows existing KY 222 to near Bacon Creek Road before swinging south on new alignment to meet KY 1136 at Smith Mill Road.
- Another east-west connector option heads southeast from the parkway interchange on new alignment, following the eastern end of Smith Mill Road to its intersection with KY 1136.
- Local officials suggested a straight connection from a new interchange to KY 1136/KY 1868. Qk4 should develop this alignment or explain why it was not viable.

The project team will reconvene mid-September to review updated build concepts and traffic projections. The next local officials/stakeholders meeting will likely be mid-October, followed in a couple weeks with a public open house. Graphics should not present a KY 1136 interchange footprint but should conceptually discuss the options shown today. Some similar concepts were vetted during the 2008 Glendale mobility study but the 2021 update did not include any additional community outreach. Public involvement should include both a website and in-person meeting, similar to the setup for the recent Lebanon study.

Next steps:

- Qk4 will eliminate outlying 2021 I-65 count from model adjustments and update future traffic as appropriate.
- Qk4 will refine northeast bypass options as discussed above.
- Qk4 will develop concept naming conventions and work towards a project team update, likely mid-September.
- D4 will confirm the latest known plans for the possible substation at Shipp Lane.
- D4 will provide Qk4 with the recently obtained 2022 I-65 counts as soon as they are available.
- Qk4 will begin developing materials for community outreach efforts.



## **MEETING MINUTES**

Project:	Glendale Mobility Study Hardin County
Purpose:	Local Officials/Stakeholders Meeting No. 2
Place:	Glendale Christian Church
Meeting Date:	October 13, 2022 at 2:00 PM
Prepared By:	Qk4

#### Participants:

Aaron Hawkins	Elizabethtown Planning & Development
Adam King	Hardin Co. Planning & Development
Brad Patterson	Hardin Co. Schools
Chris Corder	Hardin Co. Schools
Dwight Morgan	Hardin Co. Road Dept.
E. G. Thompson	Hardin Co. Government
Harry Berry	Hardin Co. Government
Jim Duplessis	State Government
Jim Shaw	Elizabethtown Planning & Development
Keith Taul	Hardin Co. Judge/Executive (nominee)
Matthew Deneen	Elizabethtown City Council
Mike Bell	Glendale Mayor (de facto)
Mike Skaggs	Lincoln Trail ADD
Rick Gaines	Elizabethtown/Hardin Co. Industrial Foundation
Steve Rice	Hardin Co. Schools
Brad Bottoms	KYTC D4
Kevin Blain	KYTC D4
Chris Jesse	KYTC D4
Bow Warren	KYTC D4
Dave Heil	KYTC Planning
Tom Springer	Qk4
Rebecca Thompson	Qk4

Kevin Blain opened the meeting, welcoming attendees. The purpose of the meeting is to update stakeholders on the study, specifically the build concepts considered. The goal is to wrap up the study ahead of the 2024 SHIFT process, beginning early next year; with the plants moving rapidly towards construction, KYTC is working to stay ahead of emerging needs. A public website (<u>GlendaleStudy.com</u>) about the study will be launched following the meeting, with an open house public meeting in early November.

Tom Springer presented content from the website, which is broken into five sections: Existing Conditions, Future Scenario, Study Goals, Build Concepts, and Input. Attendees were asked to review content, share insights—both as residents and as local officials, and to help promote the upcoming meeting/survey.

Tom briefly reviewed the existing conditions, noting study area needs are driven by future traffic accessing the Blue Oval SK (BOSK) plants. As planners look at future traffic flows and impacts to the local highway network, any improvement concepts will be developed to satisfy as many of the following goals as possible:

- Facilitate safe and efficient traffic movements to/from the BOSK plants
- Reduce future traffic flows within historic Glendale, preserving the community as a tourist destination rather than a cut-through route
- Minimize impacts to the human and natural environment
- Consider the safety and mobility needs of all users

Most of the group discussion focused on the build concepts, organized into four different geographic areas:

<u>A Concepts</u>, a Northeast Bypass of Glendale

- The Purple concept (A.2) has fewer property impacts, with acquisitions largely limited to a single owner. Yellow (A.1) widens existing, bringing the road into people's front yards.
- The proposed connection to Overall Phillips was discussed.
- The current typical section assumes two 12-foot lanes with paved shoulders, connecting to the realigned section of KY 222 east of Mud Splash Road as part of the ongoing interchange project. The maps shown on the website show a wider footprint (150-300 ft) to provide flexibility for any future design work. Future year traffic volumes are well below the threshold for consideration of a four-lane road.
- BOSK plans currently use about half the site; additional growth will occur. Per earlier coordination with this group, the future year traffic analyses reflect additional development in the area.

<u>B Concepts</u>, a Northwest Bypass of Glendale, is not viable due to the abutting PACE easement and historic district boundaries.

<u>C Concepts</u>, a new I-65 Interchange at KY 1136, pull traffic away from the KY 222 interchange, providing redundancy to the BOSK plants for employees, deliveries, and emergency responders without increasing traffic through Glendale.

- Brad Bottoms provided an update on the Item No. 4-171 project, which includes design work to create a "proper" two-lane road but with enough right-of-way to widen to four or five lanes in the future as needed. The goal is to begin construction in 2024, at least on the eastern portion.
- A new I-65 interchange would require additional analyses and coordination with FHWA. It's about 1.25 miles from the KY 222 interchange so spacing could be a concern.
- Attendees generally recognized benefits of this concept, asking if funding could be made available to begin design work ahead of the next budget cycle.

D Concepts, a new Western KY Parkway Interchange at KY 222 with an improved east/west connection

- Attendees preferred concepts that connected at Gilead Church Road over those closer to Glendale.
- Traffic calming efforts to discourage high speeds and increased trucks along KY 222 should be considered in future design phases.

Following the discussion, an interactive poll helped get an informal feel for the group's preferences.

Shown in **Figure 1**, attendees were asked to rank which Build Concept(s) provide the best solution. Concept C (new I-65 Interchange at KY 1136) was ranked highest priority, followed closely by Concept A (Northeast Glendale Bypass).

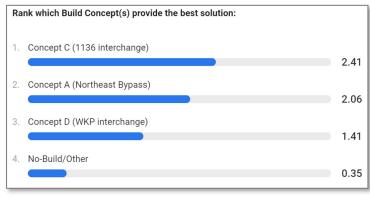


Figure 1: Poll Results for Concept Ranking

A second question asked which North Bypass was preferred. Of 15 responses, 80% picked Purple (A.2) and 20% picked Yellow (A.1).

A third question asked which Concept D was preferred. Results are presented in **Figure 2**, with Green (D.2) favored. As many of the concepts overlap the same alignments and the shades of blue were confusing, results may be divided.

Which Concept D do you prefer?	
D.1 (Blue) 6%	
D.2 (Green)	470/
D.3 (Red)	47%
D.4 (Orange) 0%	
D.5 (Teal) 24%	
None 0%	

Figure 2: Poll Results for Concept D Preferences

Tom then presented the information for the upcoming November 3 public meeting, encouraging attendees to help promote the event. KYTC will reach out to local media outlets and launch a social media push in the coming days. The group stepped through the survey form included on the website. With no further questions, the meeting adjourned.

### **MEETING MINUTES**



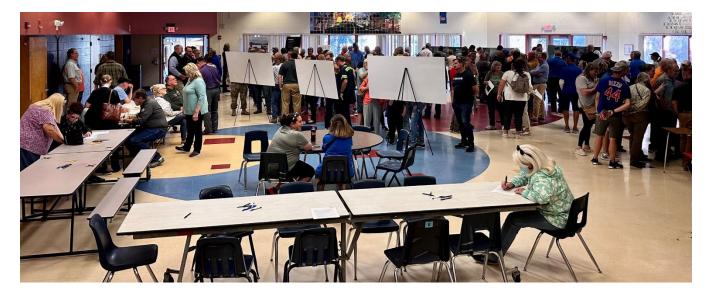
Project:	Glendale Mobility Study Hardin County
Purpose:	Public Meeting
Place:	Old East Hardin Middle School 129 College Street, Glendale
Meeting Date:	November 3rd, 2022 5:00-7:00 PM

A public meeting for the Glendale Mobility Study was held on Wednesday, November 3, 2022, at Old East Hardin Middle School. The meeting had no formal presentation and was laid out in station format. The project website (GlendaleStudy.com) contained mirror information and survey questions to the in-person meeting for those who preferred not to or couldn't attend in person. The public meeting and accompanying survey were promoted via District 4 social media accounts, media releases, the study website, and roadside signs. A member of the project team was at each station to discuss the project with members of the public and answer any questions. In total, 277 individuals attended the meeting.

- Following the sign in tables, an initial station included the background information for the study: boards explaining why KYTC was completing the study, its goals and objectives, and the organization of the build concepts.
- Two sets of boards on each side of the room presented large-scale mapping of Concepts A, C, and D alongside basic traffic and typical section information. A laptop and big screen were available with KMZs of each Build Concept to explore in more detail.
- A final table provided paper copies of the survey, giving the public the opportunity to provide feedback on the concepts presented and some other suggestions or concerns.









#### SURVEY SUMMARY

Project:

Glendale Mobility Study Hardin County

Purpose:

Summary of Public Survey Responses November 2022

An online public survey effort was launched on October 14, 2022, collecting comments through November 18. KYTC, the local newspaper, and other local stakeholders posted links to the website/survey on their websites and through social media outlets. Information on how to access the survey online and paper copies of the survey were shared at the in-person, open house public meeting on November 3 at the Old East Hardin Middle School, where about 177 people attended. Throughout the comment period, 146 individuals took the survey (76 electronically plus 70 on paper). This memo summarizes the input received.

Question 1: Rank the four study goals from MOST to LEAST important. (Rank four options below 1 to 4 where 1 is the highest importance.)

Facilitate safe and efficient traffic movements to/from the BOSK plants

Reduce future traffic flows within historic Glendale

Minimize impacts to the human and natural environment

Consider the safety and mobility needs of all users

**Figure 1** summarizes the input received. Blue bars represent ranked numeric results, with darker bars representing the higher priority. Minimizing impacts received the most #1 rankings, as noted by the largest dark blue bar below. Reducing traffic through historic Glendale followed in a close second place.

The average score represents the mean of numeric results, where the lower number notes the highest priority. Reducing Glendale traffic, with a 2.2 average ranking, rated the highest priority while facilitating BOSK traffic was the lowest priority.

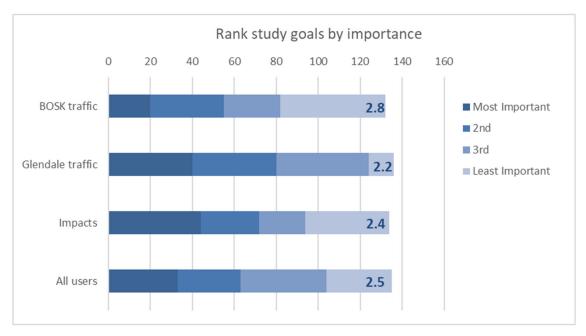


Figure 1: Question 1 Results

#### Question 2: Which concepts(s) provide MOST benefit for BOSK traffic?

Shown in **Figure 2**, most surveys identified Concept C, which includes a new interchange with I-65 at KY 1136 (Gilead Church Road), as the most beneficial for BOSK traffic. Concept A (Northeast Glendale Bypass) followed, with Concept D (new WKP/KY 222 interchange) with the least support. Two individuals felt none of the concepts would provide benefit.

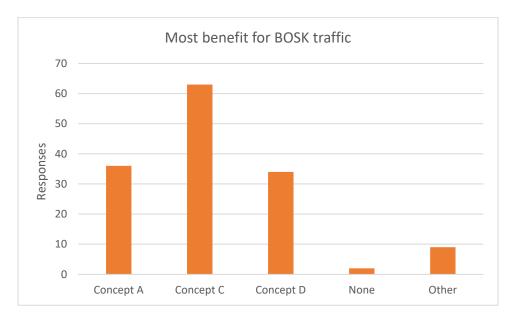
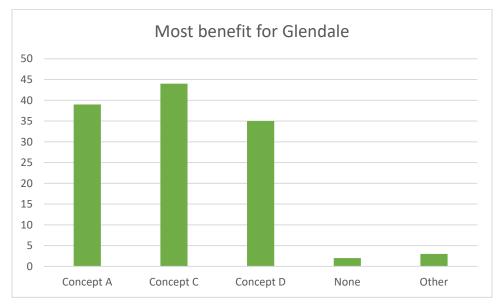


Figure 2: Question 2 Results

Extending KY 222 to Lincoln Parkway was also suggested as a viable improvement, though a few written in responses favored waiting to see how BOSK traffic is distributed throughout the region.

#### **Question 3: Which concept(s) provide the MOST benefit for historic Glendale?**

**Figure 3** summarizes the results, following the same format as the previous chart. As shown, Concept C was favored as having the most benefit for historic Glendale, followed by Concept A then Concept D. Written in "other" comments elaborated on preferences, plus one suggestion to incorporate multi-modal options (e.g., bike lanes) and stricter zoning to cluster development.





# Question 4: Do you think a Northeast Glendale Bypass (Concept A) should advance? If yes, which do you prefer?

Of the three build concepts, Concept A received the least public support overall.

As shown in **Figure 4**, 56% of survey respondents support Concept A (Northeast Glendale Bypass). Of supporters, Concept A.2 (Purple, further from Glendale) was favored over Concept A.1 (Yellow) nearly 3:1. A few written-in comments were provided under "other" mostly noting fewer property impacts associated with A.2.

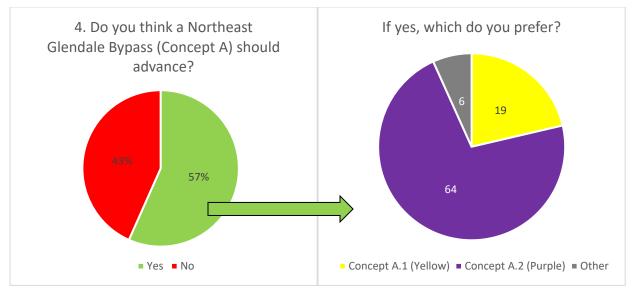


Figure 4: Question 4 Results

#### Question 5: Do you think an I-65/KY 1136 interchange (Concept C) should advance?

As shown in **Figure 5**, most respondents (81%) support Concept C (I-65/KY 1136 interchange) advancing. Of the three Build concepts considered, Concept C received the highest level of public support. Many written-in comments cited keeping development traffic along I-65 rather than dispersed onto other rural roadways.

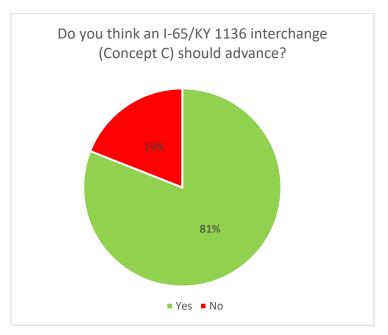


Figure 5: Question 5 Results

Question 6: Do you think a WKY Parkway/KY 222 interchange (Concept D) should advance? If yes, which do you prefer?

As shown in **Figure 6**, 67% of respondents think that WKY Parkway/KY 222 interchange should advance. Of these supporters, Concepts D.3 (Red) and D.1 (Dark Blue) received the most support. Concepts D.5 (Light Blue) and D.2 (Green) were rated medium, and no one selected D.4 (Orange).

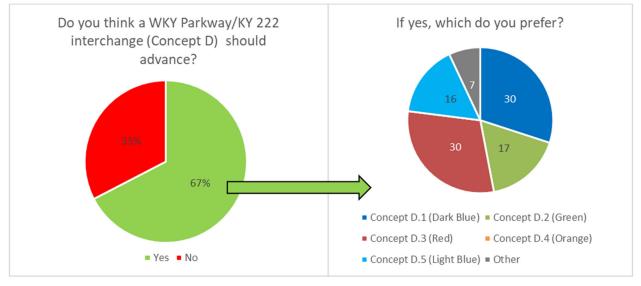


Figure 6: Question 6 Results

For reference, build concepts are shown in Figure 8 on the following page.

In addition, 143 of the respondents provided the zip code of where they live—mapped in **Figure 7**. Most (56%) reside within 42740 followed by 31% in 42701.

Based on the zip code where respondents work, the majority of respondents (42%) work in 42701, followed by 42740 (33%).

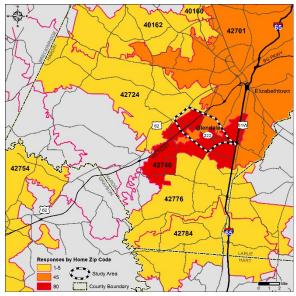


Figure 7: Surveys by Home Zip Code

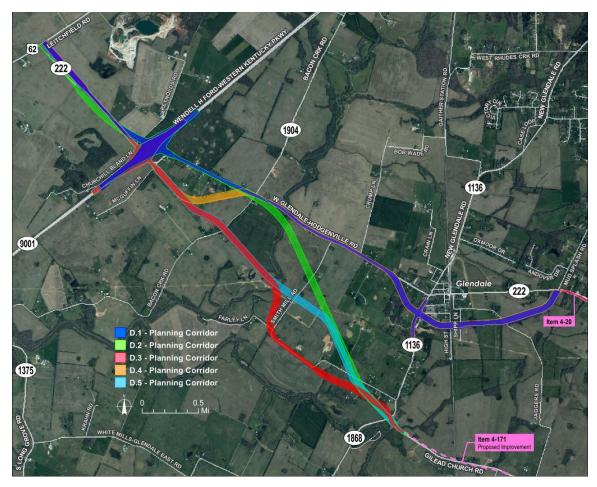


Figure 8: Concept D Options

Finally, open-ended comments were also provided. Many people oppose changes/development near Glendale. The following bullet points are the most common comment themes:

- Preserve as much of Glendale (i.e., community, farmlands, ecosystem/environment, historic district/tourism) as possible. The community predates BOSK and its needs should be prioritized.
- Most Glendale people will be affected by this project; none of the concepts benefit or help keep historic Glendale.
- Concerns about noise impacts along proposed bypass
- Roads such as KY 1136 need to be improved. New Glendale Road is not wide enough for the existing traffic, especially tractor-trailers or any vehicle pulling a trailer.
- KY 222/KY 1136 intersection in Glendale should be a four-way stop today.
- Repair Farley Lane.
- Build new roads to I-65 to help with the traffic flow.
- Concerns about interchanges at I-65 and future growth.



## **MEETING MINUTES**

Project:	KY 222 Glendale Corridor Study Hardin County
Purpose:	Project Team Meeting No. 3
Place:	KYTC District 4 and MSTeams
Meeting Date:	January 5, 2023 at 9:30 AM
Prepared By:	Qk4

Participants:

Janus.	
Brad Bottoms	KYTC D4
Kevin Blain	KYTC D4
Joe Ferguson	KYTC D4
Jared Clemons	KYTC D4
Justin Wallace	KYTC D4
Bow Warren	KYTC D4
Kevin Young	KYTC D4
Jacob Riggs	KYTC D4
Chris Hampton	KYTC D4
Chris Jessie	KYTC D4
Steve DeWitte*	KYTC Planning
Dave Heil	KYTC Planning
Jay Balaji*	KYTC Planning
Connor Schurman*	KYTC Planning
Dasha Korostina*	KYTC Planning
Adam Ulrich*	KYTC Design
Tom Springer	Qk4
Rebecca Thompson	Qk4
Jeremy Lukat*	Qk4
Courtney Evans*	Qk4
	* virtual attendee

\* virtual attendee

Kevin Blain opened the meeting, welcoming attendees. The purpose of the meeting is to review the study findings and reach a team consensus on recommendations. Rebecca Thompson briefly reviewed the existing conditions, noting study area needs are driven by future traffic accessing the Blue Oval SK (BOSK) plants. The study area looks at various projects in the vicinity—the I-65/KY 222 interchange reconstruction, the Ring Road extension,

KY 1136 Gilead Church Road widening, etc.—to assess other needs and priorities among all the moving pieces. Improvement concepts have been developed to satisfy as many of the following goals as possible:

- Facilitate safe and efficient traffic movements to/from the BOSK plants
- Reduce future traffic flows within historic Glendale, preserving the community as a tourist destination rather than a cut-through route
- Minimize impacts to the human and natural environment
- Consider the safety and mobility needs of all users

Extensive efforts were undertaken to update and reach consensus on socioeconomic growth assumptions in the regional travel demand model as much of the study focuses on anticipated traffic flows.

Group discussion focused on the build concepts, organized into four different geographic areas:

- Concept A, a Northeast Bypass of Glendale, provides a secondary connection for KY 1136-to-BOSK traffic around Glendale, anticipated to carry 3,000 vehicles per day (vpd). A two-lane typical section is assumed, with 12-foot lanes and 8-foot paved shoulders between KY 1136 and KY 222 at Mud Splash Road.
- Concept B, a Northwest Bypass of Glendale, was considered but determined to be infeasible due to the proximity of the conservation easement and historic district boundary.
- Concept C, a new interchange at I-65/KY 1136, carries an estimated 5,200 vpd between all four ramps, diverting some traffic from the busy I-65/KY 222 interchange. No specific design configurations were developed, solely Build versus No-Build with a standard diamond configuration assumed.
- Concept D, a new Western KY Parkway interchange (at/near the existing KY 222 overpass) and improved east/west connection, also assumes a two-lane typical section with 12-foot lanes and 8-foot paved shoulders. All four ramps combined carry an estimated 2,500 vpd and do not impact anticipated traffic flows at the I-65/KY 222 interchange.

The study included two meetings with local officials and a public meeting in November with 146 surveys collected. Concept C received the most support from public surveys and local official discussions, with Concepts A and D generally supported but as lower priorities. There was a strong favor for Concept A.2 (Purple) over Concept A.1 (Yellow). Preferences among the five Concept D variations were more divided; however, local officials noted the Concept D options nearest Glendale were not preferred. Qk4 reviewed summary matrices comparing cost estimates, anticipated impacts, and how well each concept satisfied study goals.

The team discussed study recommendations.

- Concept A is the highest priority. Both variations will likely be considered future during preliminary design efforts, especially if much time elapses between the conclusion of the planning effort and obligation of design funds as the area is rapidly changing. Concept A satisfies the study goals, is consistent with recommendations from previous MPO/ADD studies, costs less than other concepts with fewer impacts, and received stakeholder/public support. The 8-foot-wide paved shoulders would help meet the KYTC complete streets policy.
- Concept C should be considered a high priority when/if warranted to handle future traffic. With BOSK shift staggering assumptions and completion of the Item No. 4-20 reconstruction, the highway network should provide adequate capacity for current traffic projections. However, if additional development substantially increases traffic, a second interchange in the vicinity may become necessary. The team

discussed timing to begin considering design alternatives, environmental impacts, and operational analyses supporting an Interchange Justification Study.

• Concept D represents a long-term priority; it has the least benefit for traffic, highest costs, and greatest environmental impacts. While any future project development efforts should consider a range of alignments, connections to KY 1136 (Gilead Church Road) are preferred over connections to KY 222. The northern options (Concepts D.1 and D.4) lead to greater potential impacts on the historic community (property impacts, noise, etc.), preclude future use of the former middle school, and result in higher costs than more southern connections.



## **MEETING MINUTES**

Project:	Glendale Mobility Study Hardin County
Purpose:	Project Team Meeting No. 4
Place:	KYTC District 4 and MSTeams
Meeting Date:	July 10, 2023 at 1:30 PM
Prepared By:	Qk4

Participants:

allo.	
Brad Bottoms	KYTC D4
Kevin Blain	KYTC D4
Joe Ferguson	KYTC D4
Justin Wallace	KYTC D4
Bow Warren	KYTC D4
Kevin Young	KYTC D4
Jacob Riggs	KYTC D4
Chris Hampton	KYTC D4
Chris Jessie*	KYTC D4
Jonna Wallace*	KYTC DEA
Dave Heil*	KYTC Planning
Connor Schurman*	KYTC Planning
Tom Springer*	Qk4
Rebecca Thompson	Qk4
Jeremy Lukat*	Qk4

\* virtual attendee

Kevin Blain opened the meeting, welcoming attendees. The purpose of the meeting is to discuss additional north bypass concepts, driven by recent railroad events and public comments.

**Background** 

Rebecca Thompson briefly reviewed the initial study findings. The study process has examined various projects around Glendale to assess other needs and transportation priorities. Four groups of improvement concepts were developed in the initial study—A, a new northeastern bypass; B, a new northwestern bypass (initially deemed infeasible); C, a new I-65 interchange at KY 1136; and D, a new Western KY Parkway interchange with an improved east-west linkage.

Extensive efforts were undertaken to update socioeconomic growth assumptions in the regional travel demand model as much of the study focuses on anticipated traffic volumes. Three community meetings occurred throughout 2022, including a public survey effort with 146 surveys completed.

With the derailment in March 2023 and "near miss" in July 2022, the project team decided to take a closer look at options to reduce conflict points with the railroad tracks. The earlier *Glendale Area Transportation Studies*, by

LTADD, and several public comments also supported a "full" northern bypass that connected to KY 222 on both ends instead of stopping at KY 1136.

#### Historic District

The Glendale Historic District (shown in red in Figure 1) is listed in the National Register of Historic Places. In 2005, consultant Helen Powell & Company made a preliminary recommendation to extend the boundary north to the PACE property (shown in yellow) but the work was not finalized. In May and June 2023, the team undertook a more intensive survey of the potential northern expansion area and recommended extending the boundary to only what is shown in pink. State Historic Preservation Office (SHPO) concurrence is pending but the 2023 recommendation reduces the extent of the 2005 proposed expansion, thus creating a gap south of the PACE easement.



Figure 1: Recommended Historic District Expansion (Pink)

#### **Build** Alternatives

Within this gap, a selection of potential "Concept AB" bypass options were developed, projected to carry 3,300 vehicles per day (vpd) east of KY 1136 and 1,800 vpd to the west. Forecasts assume two 12-foot lanes with 8-foot paved shoulders, that the existing KY 1136 crossing is closed, and that the KY 222 crossing downtown remains open to vehicular traffic.

- **Concept AB At Grade** includes an at-grade rail crossing and runs just south of the PACE limits. Construction costs are estimated at \$8.0 million with four likely relocations.
- **Concept AB Grade Separated** includes a grade separated rail crossing (4.5% max grade) and runs just south of the PACE limits. Construction costs are estimated at \$13.4 million with 8+ likely relocations.
- **Concept AB PACE** includes an at-grade rail crossing along the southern edge of the PACE easement, intended to minimize relocations. Construction costs are estimated at \$7.9 million with about five acres required within the easement.

Team discussion followed:

- East Railroad Avenue is currently being widened; a connection to the new bypass should be shown.

- Increasing spacing between KY 1136 intersections adds storage length for left-turning vehicles between.
- Qk4 should also develop a Grade Separated/PACE combination for comparison.
- The county may be supportive of closing the KY 222 railroad crossing to vehicles, which would make the downtown area a more pedestrian-friendly environment and discourage cut-through trips.

#### Next Steps

- Each concept should be presented to local officials to generate discussion. A meeting will be scheduled for late August; Jonna will encourage SHPO to provide at least an informal response prior. Qk4 will prepare meeting materials; Kevin will coordinate logistics and invitations.

Recommendations from the initial study still apply for Concept C; the language for Concept D may need to be tweaked pending discussion with local officials next month. Along with the Concept AB discussion, local officials will be asked their opinions if there would still be a need for an improved connection to KY 1136 (Gilead Church Road) for traffic to access the southern portion of the BOSK site, or would the north bypass address the need?