

MEETING MINUTES

Project: US 25 Corridor Study
Rockcastle County

Purpose: Project Team Meeting No. 1

Place: Hybrid Meeting: Virtual and Qk4 Somerset

Meeting Date: November 17, 2021 at 10:00 AM

Prepared By: Qk4

Participants:

James Jones	KYTC D8 CDE
Joe Gossage	KYTC D8
Jeff Dick	KYTC D8
Amanda Parmley	KYTC D8
William Lucas	KYTC D8
Jessica Richardson	KYTC D8
Conley Moren	KYTC D8
Randy Turner	KYTC CO Design
Steve De Witte	KYTC CO Planning
Jay Balaji	KYTC CO Planning
Jessica Blankenship	CVADD
Tom Clouse	Qk4
Rebecca Thompson	Qk4
Steve Trevino	Qk4
Rebecca Hammond	Qk4

Rebecca Thompson opened the meeting, welcoming attendees. The purpose of the meeting is to review the existing conditions information for the study, which focuses on the US 25 corridor on either side of the recently reconstructed I-75 interchange. The southern section is on an accelerated timeline due to the adjacent KY 461 widening effort (Item No. 8-8952).

The roadway's character varies on either side of the interchange. US 25 is a rural major collector with two lanes plus a two-way left turn lane (TWLTL) to the north versus a principal arterial with three lanes plus a TWLTL to the south. The south section is on the National Highway System and a state-designated truck route. Both sections have steep grades (5+ percent).

The team discussed ongoing plans, projects, concepts, and future development in the area.

- There are three Six Year Plan projects in the vicinity: 8-80107 (US 25 planning study), 8-80106 (US 25 congestion mitigation) and 8-8952 (KY 461 widening). All three were sponsored in 2022 SHIFT.
- Four CHAFs in the vicinity were sponsored in the 2022 SHIFT process—listed in **Table 1**. None were boosted or appeared in the District’s top ten.
- Initial conversations with local officials in September identified numerous major developments in the area. Up to 1,000 new jobs have been announced between various expansions at the two industrial parks. Renfro Valley has reopened, and the KY Music Hall of Fame is hosting events. The KOA campground has plans to triple in size. A destination retail attraction is envisioned for the hilltop south of the interchange, similar to the outlet mall at Simpsonville. One gentleman expressed recurring interest in a new I-75 interchange near Conway to promote accessibility.
- US 25 between Mount Vernon and Hummel Road is part of US Bike Route 21. The city is working with CVADD to plan for sidewalks and bike lanes on the east side of the highway south of the interchange.

Table 1: 2022 SHIFT-sponsored CHAFs

CHAF ID	Description
IP20190151	KY 461 safety, capacity, access: KY 1250 to US 150
IP20190032	New route between Exits 59 and 62 (Planning study)
IP20190069	Current US 25 scoping study
IP20190150	KY 461 safety, capacity, access: Pulaski County line to KY 1250

Existing and Future Traffic

Two rounds of traffic data were collected in August, one over a late summer weekend to account for “typical” summer weekend traffic and the other over a conventional weekday period. The weekend count south of the interchange shows considerably higher volumes than weekday peak hours taken with school in session. Highway Capacity Software segment modules do not accommodate the current configuration to the south, so intersection Level of Service (LOS) provides a more accurate operational measure. Existing average daily traffic is 4,700-7,800 vehicles per day (vpd) to the north, 14,600 vpd to the south, and 17,000+ vpd during a representative summer weekend. Intersections operate at LOS C or better during peak hours, except for US 25/KY 461. This intersection operates at an overall LOS D in the PM peak hour, while the northbound US 25 approach operates at LOS E. The Sunday summer peak volumes (12-1 PM) further reduces operation to a LOS E.

- Question: What do the truck volumes show?
Answer: During the highest weekend peak hour (Sunday 12-1 PM), 12% of the traffic represents trucks: 4.4% single unit trucks plus 7.6% tractor/trailer combos. Of the 88% representing passenger cars and pickups, 8.6% were larger than a typical auto: drivers hauling boats, RVs, other trailers, etc.

KYTC’s statewide model forms the basis for future (2045) projections. While the team is still refining the recent adjustments, preliminary results show robust growth: 1.5-2 percent per year along US 25. This degrades intersections to LOS F south of I-75. Widening to five lanes improves southern segments to LOS B with intersections at LOS D or better during peak hours.

- Question: What movement governs the LOS F results for the southbound ramps?
Answer: Only the lefts turn to/from the southbound ramps are impeded. The right turn from the southbound off-ramp is free-flow, picking up a dedicated lane that continues up the hill beyond the study limits. The left from the off-ramp operates at LOS F in the PM peak hour with 62.8 seconds delay and a

0.35 volume-to-capacity ratio. Despite the low volume making the move, heavy thru traffic on US 25 limits the ability of cars to pull out. Northbound 95th percentile queue lengths at the adjacent signal with the northbound ramps stretch to 195 feet, well within the available storage length.

2016-2020 Crash History

There were 127 crashes along US 25 in the five-year study period, including 16 injury collisions and no fatalities. However, between the I-75 reconstruction (2018-2019) and covid (2020), crash data may not be representative of typical patterns. There were no bicycle or pedestrian collisions. There were a surprising number of roadway departure crashes along the study limits, 21 to the south and six to the north over five years. Two crash clusters were explored in more detail: the US 25/KY 461 intersection and the stretch nearest the interchange.

Most of the study length experiences elevated crash rates. The US 25 intersection with Holt Road (by the Shell Station) has the worst Level of Service of Safety. There are numerous driveways in this section plus right turns from the southbound off-ramp are a high speed free-flow move though some motorists slow down to merge or turn.

- Question: How many of the angle crashes at US 25/KY 461 were left turns?
Answer: Of the 13 angle crashes at the intersection, eight included a left turn.
- Perhaps the roadway departure crashes were related to construction distractions. There is a lot of pavement width through this stretch.

Improvement Concepts

Qk4 presented three representative access management scenarios for the south section, paired with the five-lane US 25 section provided by the District. This stretch abuts a series of parcels that have recently been leveled, likely for future commercial developments (i.e., restaurants, gas station, small grocery). Three improvement concepts were discussed.

- Option 1 preserves existing access patterns, assuming six new parcels develop with at least one new driveway for each.
- Option 2 creates a backage road for the new development; the initial sketch showed a signalized three-leg intersection between Wendy's and the hotel driveway with a right-in/right-out adjacent to the Marathon station. The backage road could serve just the undeveloped parcels or extent to serve the car wash, sheds, KFC, and Wendy's too.
- Option 3 converts the TWLTL to a raised median so all driveways on the east side would function as right-in/right-out. This would require downstream U-turns—either at a signal or unsignalized loon.

A lengthy discussion of potential variations followed.

- The developer would be responsible for costs of the backage road and signal. The footprint shown should stop at the south edge of their property. A backage road with two access points is consistent with early conversations with the developer.
- The backage road could line up opposite the hotel driveway; however, reducing the distance from the southbound ramps is not ideal.
- The backage road could shift south—between Wendy's and the southernmost undeveloped parcel. If signalized, queue lengths could block access to Wendy's.
- The backage road could shift south between Wendy's and KFC but this area is used by fuel trucks and would complicate access to the pumps and adjacent drive thru lanes.

- A “Green T” intersection—at the backage road and/or US 25/KY 461—would let southbound traffic continue without stopping. The left-side merge is not ideal. This configuration was considered as part of Item No. 8-8952 but dismissed.
- Could U-turns fit at the US 25/KY 461 intersection? A loon would be required. From a traffic flow perspective, adjusting the timing to allow U-turns is preferable to adding a new signal.
- Changes to access will not be favored by existing businesses.
- Options requiring new right-of-way can extend the timeline for delivery, a concern if this section combines with 8-8952.
- Elevation differences to the old roadbed complicate using it as a backage connection.
- Frontage roads provide less queue storage space than backage roads and less efficient operations where the side street meets US 25.

The general consensus was to show Option 1 and a variation of Option 2 to local officials/stakeholders at the upcoming meeting. A graphic illustrating conflict points at each driveway may help facilitate discussion. The discussion about transportation needs for the north section will be open ended.

The team discussed logistics for the upcoming local officials/stakeholder meeting. Qk4 will set up a Doodle poll for the week of December 13-17. The Kentucky Music Hall of Fame board room or Mount Vernon city hall were suggested as possible venues.

With no further comments or discussion items, the meeting concluded at 12:30.



Groundbreaking by Design.

MEETING MINUTES

Project: US 25 Corridor Study
Rockcastle County

Purpose: Local Officials/Stakeholders Meeting No. 1

Place: Hybrid: MSTeams and Kentucky Music Hall of Fame, Mount Vernon

Meeting Date: December 15, 2021 at 2:00 PM

Prepared By: Qk4

Participants:

Hal Holbrook	Rockcastle County Judge/Executive
Ken Hopkins	Rockcastle County Schools
Bill Leger	Rockcastle County Attorney's Office
Jeff VanHook	Rockcastle County Industrial Development Authority
Corey Craig	Rockcastle County Industrial Development Authority
Emily Bullock	Rockcastle County Tourism
Crystal Rush	Mount Vernon Mayor's Office
Jessica Blankenship	CVADD
James Jones	KYTC D8 CDE
Joe Gossage	KYTC D8
Jeff Dick	KYTC D8
Amanda Parmley	KYTC D8
William Lucas	KYTC D8
Amber Hale	KYTC D8*
Conley Moren	KYTC D8*
Jami West	KYTC D8*
Steve De Witte	KYTC CO Planning*
Jacob Huber	KYTC CO Planning*
Dave Heil	KYTC CO Planning*
Tom Clouse	Qk4
Rebecca Thompson	Qk4

* virtual attendee

Jeff Dick opened the meeting, welcoming attendees. The purpose of the meeting is to review the existing conditions information for the study, which focuses on the US 25 corridor on either side of the recently reconstructed I-75 interchange. The southern section is on an accelerated timeline due to the adjacent KY 461 widening effort (Item No. 8-8952).

The roadway's character varies on either side of the interchange. US 25 is a rural major collector with two lanes plus a two-way left turn lane (TWLTL) to the north versus a principal arterial with three lanes plus a TWLTL to the south. The south section is on the National Highway System and a state-designated truck route. Both sections have steep grades (5+ percent).

Existing and Future Traffic

Two rounds of traffic data were collected in August, one over a late summer weekend to account for "typical" summer weekend traffic and the other over a conventional weekday period. The weekend count south of the interchange shows considerably higher volumes than weekday peak hours taken with school in session. However, available tools to forecast future growth are built around traditional weekday commuter trends. Existing average daily traffic is 4,700-7,800 vehicles per day (vpd) to the north, 14,600 vpd to the south, and 17,000+ vpd during a representative summer weekend. Intersections operate at LOS C or better during peak hours, except for US 25/KY 461. This intersection operates at an overall LOS D in the PM peak hour, while the northbound US 25 approach operates at LOS E. The Sunday summer peak volumes (12-1 PM) further reduces operation to a LOS E.

The project team met with local representatives in September to understand potential growth over the next 20 years: including expansions at the industrial parks, the "ditch" development along US 25, the KOA campground, and a hilltop retail destination. By 2045, an assumed 2% growth rate per year degrades intersections to LOS F south of I-75. Widening to five lanes improves southern segments to LOS B with intersections at LOS D or better during peak hours.

2016-2020 Crash History

There were 127 crashes along US 25 in the five-year study period, including 16 injury collisions and no fatalities. However, between the I-75 reconstruction (2018-2019) and covid (2020), crash data may not be representative of typical patterns. Two crash clusters were explored in more detail: the US 25/KY 461 intersection and the stretch nearest the interchange.

Most of the study length experiences elevated crash rates. The US 25 intersection with Holt Road (by the Shell Station) has the worst Level of Service of Safety. There are numerous driveways in this section plus right turns from the southbound off-ramp are a high speed free-flow move though some motorists slow down to merge or turn.

Improvement Concepts: South Section

Qk4 presented two representative access management scenarios¹ for the south section, paired with the five-lane US 25 section developed by District 8 to mimic 8-8952 to the south. Option 1 preserves existing access patterns, assuming seven new parcels develop with at least one new driveway for each. This increases the number of conflict points, degrading safety and traffic flow through the corridor. Option 2 creates a backage road for the new development; the initial sketch showed a signalized three-leg intersection between Wendy's and the motel driveway with a right-in/right-out adjacent to the Marathon station. This consolidates the number of access points, reducing impacts on traffic flow and vehicle conflict points.

¹ Representative access connections were presented; the internal roadway connections would be the responsibility of the developer and contingent upon the needs of future tenants. KYTC issues permits access but does not review/approve private development plans.

Group discussion followed:

- Attendees agreed the backage road concept is preferable. Extending the backage road to connect existing businesses would help improve existing congestion/safety concerns along US 25 in the vicinity.
- The Crase property could develop as a single tenant.
- A new commercial development adjacent to the car wash could be approved before this study concludes; the gravel lot connects to both Taco Bell and Old US 25 today.
- Adding a new traffic signal on the grade could be challenging for stopped/slowed trucks to climb.
- Sidewalks or a multi-use path along US 25 would be beneficial, but will be difficult to construct under the new I-75 bridge
- The concept plan for the hilltop development (50-store shopping destination with hotel and possible park) assumes three connections: a new roadway parallel to I-75 between the Mount Vernon exits, Heritage Way (microfoodery driveway), and a 4-5 lane connection to US 25 opposite the motel entrance. There have been interested parties, but traffic connections are critical to reaching an agreement. Jeff VanHook will share the preliminary site concept. The TIF district covers this area.
- Interstate closings create issues for local traffic when crashes lead to detours. A new link between interchanges would provide an alternate route.

Corridor Needs: North Section

The group discussed needs for the corridor north of the interchange. Event venues are returning to business. The county's 2021 food truck event saw 5,000+ participants and backed up US 25 traffic to the interchange. One long-term vision calls for a "Fourth Street Live" style attraction. A sidewalk connection to KOA would be beneficial.

The project team will continue to define improvement concepts and meet with this group again in early 2022. With no further comments or discussion items, the meeting concluded about 3:15.



Groundbreaking by Design.

MEETING MINUTES

Project: US 25 Corridor Study
Rockcastle County

Purpose: Project Team Meeting No. 2

Place: Hybrid Meeting: Virtual and Qk4 Somerset

Meeting Date: February 8, 2022 at 1:30 PM

Prepared By: Qk4

Participants:

James Jones	KYTC D8 CDE
Joe Gossage	KYTC D8
Jeff Dick	KYTC D8
Amanda Parmley	KYTC D8
Brian Dunbar	KYTC D8
Jessica Richardson	KYTC D8
Randy Turner	KYTC CO Design
Scott Thomson	KYTC CO Planning
Jay Balaji	KYTC CO Planning
Jessica Blankenship	CVADD
Tom Clouse	Qk4
Rebecca Thompson	Qk4
Steve Trevino	Qk4
Deanna Miller	Qk4

Jeff Dick opened the meeting, welcoming attendees. The purpose of the meeting is to discuss initial improvement concepts for the study, which focuses on the US 25 corridor on either side of the recently reconstructed I-75 interchange at Mount Vernon. Rebecca Thompson reviewed the existing conditions: the roadway's character varies on either side of the interchange. US 25 is a rural major collector with two lanes plus a two-way left turn lane (TWLTL) to the north versus a principal arterial with three lanes plus a TWLTL to the south.

Existing average daily traffic is 4,700-7,800 vehicles per day (vpd) north of the interchange, 14,600 vpd to the south, and 17,000+ vpd during a representative summer weekend. Intersections operate at LOS C or better during peak hours, except for US 25/KY 461. This intersection operates at an overall LOS D in the PM peak hour, while the northbound US 25 approach operates at LOS E. The Sunday summer peak volumes (12-1 PM) further reduces operation to LOS E.

There were 127 crashes along US 25 in the five-year study period, including 16 injury collisions and no fatalities. However, between the I-75 reconstruction (2018-2019) and Covid (2020), crash data may not be representative of typical patterns.

Stakeholder Coordination

The project team met with key stakeholders during December 2021 to present the existing conditions, discuss development plans, and consider access management south of the interchange. Following the meeting, RCIDA provided a conceptual drawing for the hilltop park and shopping center, which assumes three primary access points. The “ditch” development and a new business adjacent to Taco Bell are moving forward on a shorter timeframe.

Conversations during the meeting focused on facilitating connections to the hilltop development more so than improving mobility along US 25 itself. However, attendees were generally supportive of a backage road concept at the ditch development to reduce conflict points and expressed interest in bicycle/pedestrian connections along US 25 south of the interchange.

The project team also met with the Crase “ditch” development team during January 2022. Three of the lots were advancing with construction beginning as early as spring. Developers expressed interest in a signalized access point, a backage or mid-property roadway connection, and/or a continuous green T style intersection.

Future Traffic Volumes

Qk4 adjusted the statewide travel demand model to reflect development discussions with local officials and stakeholders. The latest iteration is less aggressive than estimates presented at the first project team meeting and does not include the hilltop park/mall. Trip generation rates at the ditch development were based on a small grocery store, fast food restaurant, and coffee shop as a conservative estimate since actual tenants are undetermined. Revised US 25 forecasts show up to 16,800 vpd south of the interchange versus 8,400 vpd to north.

With the increased volumes, most intersections in the No-Build scenario are predicted to operate at LOS D or better in both peak hours. The exception is the southbound I-75 off-ramp; the right turn is free-flow but the left is stop-controlled and faces more opposing traffic. For the southbound left, operations degrade to LOS E in the AM peak and LOS F in the PM but 95th percentile queue lengths are less than two vehicles.

Widening the southern section to five lanes improves intersections to LOS C or better during both peak hours.

Improvement Concepts

Qk4 presented a selection of improvement concepts for team discussion.

A **Continuous Green T** intersection creates one free-flow direction, making the opposing left merge into traffic. This configuration reduces intersection delay but research has found minimal safety benefits.

- A Green T intersection at US 25/KY 461 could eliminate stops for motorists climbing the hill. There is a lot of space to the south of KY 461 to extend the merge lane beyond the illustration shown on the slide. In the PM peak, this reduces intersection LOS from D in the No-Build scenario (45 seconds delay) to LOS C (22 seconds delay). The advance warning flashers could be removed southbound.
- A second Green T intersection at the ditch development entrance provides a signalized intersection for the development without requiring stops heading up the hill or potentially backing up traffic towards the

interchange. However, the merge lane for westbound left traffic could introduce increased conflicts as southbound motorists simultaneously access the TWLTL for Wendy's KFC, about 600 feet south.

- To eliminate this potential conflict, the backage road could be extended to serve the existing businesses south of the ditch property. Existing access points to US 25 between the Green T's could convert to right-in/right-out only.
- Does this solution require KYTC to build/maintain the backage connection? Is there a way to incorporate U-turns on US 25 instead to preserve access? Qk4 will investigate.
- Could the intersection work with only a single southbound thru lane if needed to reduce right-of-way impacts? Qk4 will investigate.

North of the interchange, existing capacity appears adequate to handle typical traffic volumes and there are minimal crashes beyond 700 feet of the interchange.

- Renfro Valley has a sold-out concert February 18-19; Qk4 will collect additional traffic information to quantify event traffic and delays.

North of the interchange, one concept extends the **sidewalk connection** between the KY Music Hall of Fame and KOA campground, a distance of about 0.4 miles.

To be responsive to stakeholder concerns, another concept considers a **sidewalk/multi-use path through the interchange**. US bike route 21 runs along this section of US 25. Photos of other free-flow ramp crossings in Louisville, Lexington, and Northern Kentucky were presented as examples. Unobstructed visibility is critical for safety; costs should include additional pedestrian-level lighting near/under the overpasses.

The team also discussed event traffic control, specifically a section with **reversible lanes** to efficiently move traffic between Renfro Valley and the interchange. There are some drawbacks with this configuration, but event traffic/delays were a recurring concern for stakeholders.

- Overhead dynamic lighted signs would alert motorists which lane(s) serve which direction of travel. A series of cones or barrels would be needed to channelize traffic approaching the interchange ramps after events.
- Unlike predictable traffic patterns on Nicholasville Road in Lexington, events at Renfro Valley are shorter duration and less consistently timed. Venue size was discussed, and it was noted that the Renfro Valley venue is maybe a third of the size of the Corbin arena and nowhere near the traffic associated with Rupp. KYTC does not typically design for the worst-case traffic.
- Shifting traffic patterns approaching the interchange would circumvent the green extension loops.
- The loss of the TWLTL is not ideal; traffic will still want to access adjacent businesses.
- This scenario would be difficult to schedule, program, and time.
- Local law enforcement directing traffic at the property driveways may be adequate.
- Qk4 will collect event traffic data during the Feb 18-19 show before the team decides if this option is viable to advance for additional consideration.

Another recurring stakeholder concern was the **Holt Road**/Shell station access points, adjacent to the free-flow southbound off-ramp. The bank was shaved back in 2018 as part of construction at the interchange. Crashes during 2019-2020 show a decline (5 total) versus the two years prior (10 crashes) but do not represent a statistically valid comparison. Additional monitoring is recommended to determine if the crash concentration has been addressed.

Next Steps

Qk4 will collect event traffic data then report back to this group. Then, the group will talk scheduling for the next stakeholder meeting.

With no further comments or discussion items, the meeting concluded at 2:30.



Groundbreaking by Design.

MEETING MINUTES

Project: US 25 Corridor Study
Rockcastle County

Purpose: Local Officials/Stakeholders Meeting No. 2

Place: Hybrid: MSTeams and Kentucky Music Hall of Fame, Mount Vernon

Meeting Date: June 6, 2022 at 1:30 PM

Prepared By: Qk4

Participants:

Hal Holbrook	Rockcastle County Judge/Executive
Josh Bray	State Representative
J. Rush	Mount Vernon Police
Carrie Ballinger	Rockcastle County Schools
Jeff VanHook	Rockcastle County Industrial Development Authority
Jessica Blankenship	Rockcastle County Tourism
Emily Bullock	Rockcastle County Tourism
James Jones	KYTC D8 CDE
Joe Gossage	KYTC D8
Jeff Dick	KYTC D8
Amanda Parmley	KYTC D8*
Conley Moren	KYTC D8*
Jessica Richardson	KYTC D8*
Mallory Frye	KYTC D8
Steve De Witte	KYTC CO Planning
Dave Heil	KYTC CO Planning
Jared Jeffers	KYTC CO Planning
Tom Clouse	Qk4
Rebecca Thompson	Qk4
Deanna Miller	Qk4*

* virtual attendee

Jeff Dick opened the meeting, welcoming attendees. The purpose of the meeting is to discuss improvement concepts for the study, which focuses on the portion of US 25 corridor located north and south of the recently reconstructed I-75 interchange.

Existing Conditions Review

Rebecca Thompson reviewed the planning process, existing roadway systems, geometry, traffic, and crash data. Two new traffic analyses were completed since the first LO/S meeting held in December 2021

- Year 2045 traffic projections were developed using existing weekday counts and the statewide travel demand model. While household and employment forecasts trend downward for the county, increases were incorporated to reflect expected growth at the industrial parks, the “Ditch” development, and KOA campground. The model projects 0.2% traffic growth per year along US 25 north of the interchange and 0.6% per year to the south. The hilltop retail destination discussed in December was not included in the model as the timeline is uncertain.
- Qk4 collected travel time data during a February 2022 sold-out concert at Renfro Valley. Arriving traffic volumes started increasing approximately 75 minutes before the event. Drivers experienced 3.5-minute average travel times from the I-75 interchange to the property entrance with a maximum of 5 minutes. Departing traffic cleared in 45 minutes with an average 1-minute travel time along US 25. No on-site parking personnel or officers directed traffic to help streamline operations.

Improvement Concepts

One group of improvement concepts constructs a 10-foot-wide shared use path (SUP) along US 25 from KY 461 to the KOA campground. Planning-level cost estimates (2022 dollars) were prepared for both asphalt and concrete paths and included pedestrian lighting in either. Combined costs for the four sections range from \$7.7 million for an asphalt SUP to \$10.6 million for a concrete SUP.

The project team examined many potential access management scenarios south of the interchange for possible combination with the adjacent Item No. 8-8952 widening. The “Ditch” property’s connection to US 25 is complicated by numerous factors: proximity to the interchange, nearby clusters of closely spaced driveways, steep grades climbing to the south, steep terrain features parallel to US 25 and the development site, and the US 25/KY 461 signal. Build concepts intended to reduce the number of conflict points, preserve business access, and remain within existing right-of-way were presented for consideration.

- Concept 1 widens US 25 south of the interchange, providing two thru lanes per direction, a flush center median, and 10-foot-wide SUP to the east. It creates a signalized Green-T intersection at US 25/KY 461 with a loon for southbound u-turn traffic. A backage road connection provides access between the car wash and Marathon with a right-in/right-out connection to US 25 both ends. A second signalized Green-T intersection provides primary access to the “Ditch” property, creating a third connection between US 25 and the backage road. A short section of raised median prevents left turns to existing businesses (car wash, KFC, Wendy’s) to reduce conflict points for the southbound merge from the northern Green-T. Access to gas stations adjacent to the interchange remains unchanged and no improvements to the interchange itself are included. Costs estimates range from \$11.4 million (asphalt SUP) to \$12.9 million (concrete SUP).¹
- Concept 2 widens US 25 south of the interchange, providing two thru lanes per direction, a raised median, and 10-foot-wide SUP to the east. It creates a signalized Green-T intersection at US 25/KY 461 with a loon for southbound u-turn traffic. Three additional opportunities to turn left south of the interchange are included: southbound to access to Wendy’s/KFC, northbound to the motel, and southbound into

¹ Costs for the SUP south of the southbound ramps are double counted as presented herein, included in the first SUP estimate and as part of Concepts 1, 2, and 2+.

the “Ditch” property. The US 25 intersection with the I-75 southbound ramps is reconstructed as a roundabout providing another northbound u-turn opportunity. The roundabout carries two northbound thru lanes; slip lanes to/from the ramps will not be altered. Cost estimates range from \$14.0 million (asphalt SUP) to \$17.5 million (concrete (SUP)).

- Concept 2+ matches Concept 2 but adds a second roundabout at the US 25 intersection with the I-75 northbound ramps. Total cost estimates range from \$16.2 million (asphalt SUP) to \$19.9 million (concrete SUP).

Traffic analyses show each build concept improves traffic flow over the No-Build scenario and reduces the number of conflict points.

Group discussion followed:

- Business owners will not like losing left-turn access to/from US 25 into their properties.
- Removing left turns makes pulling out of cross-streets/driveways safer and reduces delay. With a second northbound thru lane headed downhill, it will be more complicated to pull out onto US 25 in the future than it is today.
- Green-T intersections require a left-side merge since the uphill traffic does not stop.
- What kind of median will be in Concept 2? Can emergency responders cross or must they make u-turns too? This can be worked out during future design phases; a semi-mountable median could provide an acceptable solution.
- Roundabouts provide significant safety savings and reduce the number of stops. It takes a while to get used to them, but most places come to like them.
- Consider how roundabouts work when I-75 traffic must detour on US 25 for a crash.
- Roundabouts operate the same even during a power outage while signals revert to flashing.
- A similar two-roundabout interchange is proposed at I-75 exit 15, US 25W at Williamsburg.
- Loons and roundabouts are sized to accommodate large truck traffic.

The team also evaluated pavement repairs for the dual northbound lefts onto I-75 northbound ramp, reversible lanes for event traffic (not recommended), and safety improvements at Holt Road (not recommended at this time).

The team encouraged attendees to contact Jeff Dick (JeffD.Dick@ky.gov) to share additional comments or concerns about the build concepts shown today. A copy of the slides and simulation video were shared with attendees. With no further discussion, the meeting ended at 2:55.

MEETING MINUTES

Project: US 25 Corridor Study
Rockcastle County

Purpose: Project Team Meeting No. 3

Place: Hybrid Meeting: Virtual and KYTC D8 Somerset

Meeting Date: June 29, 2022 at 1:00 PM

Prepared By: Qk4

Participants:

James Jones	KYTC D8 CDE
Joe Gossage	KYTC D8
Jeff Dick	KYTC D8
Amanda Parmley	KYTC D8
Conley Moren	KYTC D8
Jessica Richardson	KYTC D8
Mallory Frye	KYTC D8
Randy Turner	KYTC CO Design
Steve De Witte	KYTC CO Planning
Dave Heil	KYTC CO Planning
Tom Clouse	Qk4
Rebecca Thompson	Qk4

Rebecca opened the meeting, welcoming attendees. The purpose of the meeting is to review the technical analyses and reach a consensus on the conclusions/recommendations.

Existing Conditions

US 25 is a rural major collector with two lanes plus a two-way left turn lane (TWLTL) to the north versus a principal arterial with three lanes plus a TWLTL to the south. Existing average daily traffic is 4,700-7,800 vehicles per day (vpd) north of the interchange, 15,400 vpd to the south, and 17,000+ vpd during a representative summer weekend. Year 2045 forecasts show up to 17,600 vpd south of the interchange versus 8,400 vpd to north. There were 127 crashes along US 25 in the five-year study period, including 16 injury collisions and no fatalities. However, between the I-75 reconstruction (2018-2019) and Covid (2020), crash data may not be representative of typical patterns.

North of the interchange, the project purpose is driven by bicycle/pedestrian mobility. To the south, finding an appropriate balance of mobility and access is one of the core challenges. Between KY 461 and the I-75 interchange, the purpose is three-fold: to improve mobility by increasing vehicle throughput for the congested

corridor, to improve safety by reducing crash rates—particularly at intersections, and to promote bicycle and pedestrian mobility. Secondary goals include preserving reasonable, safe business access and minimizing right-of-way impacts.

Improvement Concepts

Qk4 presented a selection of improvement concepts for team discussion.

- Four sections of shared use path combine to form a continuous, lighted, 10-foot-wide link from KY 461 to the KOA campground.
- Concept 1 includes a five-lane typical section south of the interchange with two Green-T intersections to eliminate southbound stops. A backage road consolidates access points for existing and proposed businesses east of US 25.
- Concept 2 includes a divided four-lane typical section south of the interchange with a Green-T intersection at US 25/KY 461. Opportunities for lefts/u-turns are provided at four median openings. The intersection with the I-75 southbound ramps is reconstructed as a roundabout with two northbound thru lanes along US 25.
- Concept 2+ includes all the same elements as Concept 2 and reconstructs the I-75 northbound ramps intersection as a roundabout.

Rebecca reviewed associated traffic impacts and the comparison matrix from the local officials/stakeholders meeting.

Group discussion followed:

- The shared use path is recommended to advance.
- Do the 2045 queues back up enough to impact the Wendy's driveway? The 2045 No-Build PM peak volumes applied to the existing geometry result in a 95th percentile queue length of 540 feet for southbound lefts—versus 550 feet of storage to the southernmost driveway (carwash).
- At the interchange, shared use path cost estimates for two scenarios were developed. One, pairing with the existing layout, adds a short retaining wall to hold back the slope and places the path outside the piers—similar to the US 68/KY 4 interchange in Lexington. In Concept 2/2+ there are fewer thru lanes so the path could run along the existing shoulder with a barrier, reducing costs.
- Narrower crossing widths and pedestrian refuges in islands improve pedestrian safety at the roundabouts, though there are no sidewalks today. The slip ramp to the southbound on-ramp is a high-speed movement; routing this movement through the roundabout instead would help slow down motorists.
- The report should present how traffic flow and crash rates compare for a five-lane section without any access management versus a five-lane section with. How many of the crashes are related to left-turning traffic?
- While no single build concept is recommended from the planning study, Concept 2+ is generally preferred as it best meets the study's purpose/goals. Concept 1 would require right-of-way for the backage road, impacting the project development timeline. Dual roundabouts in Concept 2+ provide a smoother flow through the interchange with fewer conflict points and improved safety for pedestrians. However, other concepts may be explored in future design phases.

Qk4 will provide a draft report by July 11. KYTC will review/comment within two weeks with the final report returned by no later than August 8. With no further comments or discussion items, the meeting concluded at 2:15.