

Appendix A – Meeting Summaries



TO: Jeff Moore

Project Manager, District 3 Planning Kentucky Transportation Cabinet

FROM: Brian Aldridge, P.E.

Project Manager ENTRAN, PLC

DATE: March 9, 2011

SUBJECT: KYTC Item #3-8630.00

Todd County Scoping Study

Kentucky Statewide Planning Contract

The kickoff meeting for the subject scoping study was held on February 22, 2011 at 9:00 a.m. CST in the KYTC District 3 conference room. The following individuals were in attendance:

Attendees:

Allen Cox KYTC – District 3 Traffic/Permits
Kelly Divine KYTC – District 3 Right-of-Way

Tonya Higdon KYTC – Planning
Keirsten Jaggers KYTC – District 3 PIO
Deneatra Henderson KYTC – District 3
Jeff Moore KYTC – District 3
Craig Morris Pennyrile ADD

Mark Mudd KYTC – District 3 Engineering Support

J.C. Puryear KYTC – District 3 Utilities

Steve Ross KYTC – Planning

Renee Slaughter KYTC – District 3 Environmental

Scott Thomson KYTC – Planning

Brian Aldridge ENTRAN
Tom Creasey ENTRAN
Glenn Hardin ENTRAN

After introductions, Jeff Moore welcomed everyone to the kickoff meeting for the Guthrie "Knot" Scoping Study. Jeff described the "knot" as the area where US 41, US 79, KY 181, and KY 294 come together, forming a large triangle west of Guthrie in southern Todd County. This area is also known as Tiny Town. A draft Purpose and Need Statement was provided for discussion. The study will focus on investigating existing deficiencies in and around the junction and short term projects to address existing safety and capacity issues.



Longer term projects to meet the future transportation needs of the area will also be examined and evaluated. The study will follow a 12-month schedule.

Brian Aldridge discussed the focus area for the study, located just north of the Tennessee state line and approximately six miles north of Clarksville, TN. The study will be heavily influenced by the construction of the Hemlock Semiconductor facility, located just off US 79 south of the study area in Tennessee. Hemlock is to be in operation in 2012 and once fully implemented, it could employ as many as 4,000 to 5,000 employees. Hemlock produces polycrystalline silicon used in the electronics industry, particularly the production of solar power equipment, and other "satellite" industries are likely to locate nearby to take advantage of both the raw materials used by Hemlock as well as the products created by Hemlock. This has been the experience of their other facility located in Michigan.

With its proximity to the Hemlock facility and access to two US routes, Guthrie is likely to attract some of the satellite industries. Todd County has placed purchase options on some parcels located west of the study area (located on KY 294) for likely industrial development related to Hemlock. Brian mentioned that KY 294 would require upgrades should future traffic volumes (especially trucks) increase significantly. Tennessee has already improved SR 294, which turns into KY 294. Jeff added that Patriot Park is another industrial site located on US 79 east of the study area that is currently being marketed for development.

The scope of work was discussed and an outline of the scope was shown. Brian indicated ENTRAN was currently engaged on the first four tasks: Existing Conditions Inventory, Traffic Forecasting, Environmental Footprint, and Purpose and Need Development. He said the environmental fieldwork has been delayed due to the weather but that literature review and records searches are underway. Brian indicated there are no previous studies available for the study area. Jeff briefly discussed the history of the Tiny Town area and how land use and historical travel patterns changed with the construction of I-24 to the south.

Brian presented some of the existing conditions for the study area. US 79 is functionally classified as a rural principal arterial, US 41 and KY 181 are rural minor arterials, and KY 294 is a rural minor collector. US 79 has 11-foot wide lanes and both US 41 and KY 181 have 10-foot wide lanes; KY 294 has 9-foot wide lanes. Shoulder widths on all facilities range from one to four feet in width.

The crash history between January 1, 2006 and December 31, 2010 was presented. Brian noted that, on the surface, none of the study corridors appear to have a high crash rate. However, the four main intersections each have experienced a significant number of crashes over that five year period. A graphic was shown depicting the primary crash types that occurred at each intersection, and there was some discussion on each location. Rear-end and angle crashes appear to be an issue at the US 79/KY 181 intersection. Brian suggested turn lanes on US 79 may be a countermeasure worthy of consideration. Access management seems to be an issue at the US 41/US 79 intersection with the gas station located on the south side having uncontrolled access to both roads. However, the number of crashes at this intersection has likely been tempered as it is currently a four-way stop-controlled. The severe



skew angle at the US 41/KY 181 intersection may be a contributing factor to the large number of angle crashes that have occurred.

There was some discussion on the environmental footprint for the study. US 41 is part of the "Trail of Tears" auto route, something that the study must take into consideration should significant improvements be recommended for the route. The Stagecoach Inn (or Gray's Inn) is located in the triangle on the north side of Graysville Road, northeast of the KY 181/KY 2894 intersection. This property is located on National Register of Historic Places (NRHP). The Pennyrile ADD will be performing the Environmental Justice evaluation for the study. The trailer park located south of US 79 may be an issue.

Traffic forecasting for the study was discussed. There is no local travel demand model in place, and the Kentucky Statewide model will be used for input to the process. Brian indicated that low, medium, and high growth scenarios will be evaluated in terms of future traffic demand. Tom Creasey indicated that estimates of future employment within the area will be critical to developing these growth scenarios. It was mentioned that the Clarksville Metropolitan Planning Organization (MPO) may have some socioeconomic data estimates related to growth in the Clarksville area as a result of Hemlock. Craig Morris said he would contact the MPO.

Historical traffic trends for each route were discussed. Growth in daily traffic on each route has been relatively steady, but 2010 average daily traffic estimates (ADT) do not suggest a significant capacity concern. US 79 currently carries approximately 6,500 vehicles per day (VPD) near KY 181 and about 3,500 VPD east of the study area. East of the study area, US 41 carries approximately 4,000 VPD. All remaining study segments have less than 2,000 VPD. Jeff indicated that while the project's primary focus would be on safety and access, District 3 will provide peak hour turning movements to make sure the necessary data is available for the study to move forward.

It was previously discussed during the scoping meeting for the study that the southern portion of Todd County has a rather large Mennonite community, particularly along KY 181 north of the study area. Mennonites travel by both automobile and tractor, and by horse and buggy primarily on Sunday.

There was some discussion concerning the city limits for Guthrie and the location of the optioned parcels being marketed west of the study area on KY 294. Brian showed a map of the city limits with two large parcels (one north of KY 294 and the other south) included in the city limits about ½ mile west of KY 181. However, he showed a picture of a real estate sign for what was believed to be the proposed industrial site further west. It was confirmed that the real estate sign marked the correct location, and it was later confirmed that the latest version of the Guthrie city boundary has changed and no longer includes the two parcels closer to KY 181.

One of the next steps will be to hold a combined Local Officials and stakeholders meeting. Jeff asked how we might solicit input from the attendees. Brian mentioned the use of a workshop/brainstorming session where the attendees are divided into groups and asked to



point out trouble spots and needed improvements. It was agreed this approach would be preferable to a questionnaire. There will be a single public meeting during the study, which will be held after conceptual alternatives have been developed.

The meeting ended at approximately 10:00 a.m.



TO: Jeff Moore

Project Manager, District 3 Planning Kentucky Transportation Cabinet

FROM: Brian Aldridge, P.E.

Project Manager ENTRAN, PLC

DATE: April 11, 2011

SUBJECT: KYTC Item #3-8630.00

Todd County Scoping Study

Kentucky Statewide Planning Contract Local Officials and Stakeholders Meeting

A combined Local Officials and Stakeholders meeting for the subject scoping study was held on April 6, 2011 at 9:30 a.m. CDT in the Elkton Bank and Trust conference room in Guthrie. The following individuals were in attendance:

Attendees:

Mike Baker Todd County Industrial Foundation

Gary Braden Pennyrile RECC Nancy Camp City of Elkton

Bert Covington, Jr. Covington Farms, Inc. Harry Greenmoo Guthrie Water Keith Dwyer Guthrie Police Chief

Michael Forrest AT&T

Darryl Greenfield Todd County Judge Executive

Barry Groves City of Trenton John Haley Todd County Water

Jen Harris Todd County Health Department Kyle Kenner Logan-Todd County Water

Mary C. King The Hairitage & Guthrie City Council

Scott Marshall Guthrie Mayor Steve Meriwether Stage Coach Inn

Dean and Jean Moore Robert Penn Warren House

Helen and Ray Morris Landowners

Jimmy Scott Elkton City Council Kim Skippers Dilling Group

Glenn Slack
Melba Smith
Michael Smith
Albert Thomas

Reburn-Julia Associates
Guthrie City Council
Creekside Meadows
Guthrie City Council



J. Walton Logan-Todd County Water

George Winters City of Guthrie

J.R. Ham

Tonya Higdon

Keirsten Jaggers

Deneatra Henderson

Jeff Moore

Greg Meredith

KYTC – Planning

KYTC – District 3 PIO

KYTC – District 3

KYTC – District 3

KYTC – District 3

KYTC – District 3

Brian Aldridge ENTRAN

After introductions, Jeff Moore welcomed everyone to the first of two Local Officials and Stakeholders meetings for the Guthrie "Knot" Scoping Study. Jeff described the "knot" as the area where US 41, US 79, KY 181, and KY 294 come together, forming a large triangle west of Guthrie in southern Todd County. This area is also known as Tiny Town. He noted this is the first transportation planning study performed in the area, and the study will follow a 12-month schedule. There are no project phases funded beyond the current study.

Brian Aldridge delivered a brief presentation describing the purpose and scope of the study. Handouts were provided discussing planning studies. He indicated that studies such as these are necessary to not only examine existing issues and concerns, but also long-term needs. Transportation projects take a great deal of time to implement (often 10 years or more), and studies such as these are critical to identify and prioritize needed improvements so that funding can be sought. The ultimate goal is to provide to KYTC a list of short-term projects that can be implemented in the near term and a list of prioritized projects that can be considered for inclusion in the Six Year Highway Plan. The scope of work was discussed and an outline of the scope was shown.

A draft Purpose and Need Statement was provided for discussion. This Purpose and Need Statement was written to evaluate not only the study, but also the projects that may be considered over the course of the study. The purpose of the study is to explore the scope of and justification for needed transportation improvements in the Tiny Town area. Short-term and long-term projects will be evaluated to improve safety and efficiency of travel and to provide better connections for travelers along the existing transportation network.

The focus area for the study is located just north of the Tennessee state line and approximately six miles north of Clarksville, TN. The study will be heavily influenced by the construction of the Hemlock Semiconductor facility, located just off US 79 south of the study area in Tennessee. Hemlock is to be in operation in 2012 and once fully implemented, it could employ as many as 4,000 to 5,000 employees. Based on the experience at their other facility in Hemlock, Michigan, other "satellite" industries are likely to locate nearby to take advantage of both the raw materials used by Hemlock as well as the products it produces (Hemlock produces polycrystalline silicon used in the electronics and solar power industries.)

With its proximity to the Hemlock facility and access to two US routes, Guthrie is likely to attract some of the satellite industries. Todd County has placed purchase options on some



parcels located west of the study area (located on KY 294) for likely industrial development related to Hemlock. Brian mentioned that KY 294 would likely require upgrades should future traffic volumes (especially trucks) increase significantly. Tennessee has already improved Tylertown Road and Jim Johnson Road, which becomes KY 294 in Kentucky. Patriot Park is another industrial site located between US 41 and US 79 east of the study area that is currently being marketed for development.

Brian presented some of the existing conditions for the study area. US 79 is functionally classified as a rural principal arterial, US 41 and KY 181 are rural minor arterials, and KY 294 is a rural minor collector. US 79 has 11-foot wide lanes and both US 41 and KY 181 have 10-foot wide lanes; KY 294 has 9-foot wide lanes. Shoulder widths on all facilities range from one to four feet in width.

The crash history between January 1, 2006 and December 31, 2010 was presented. The four main intersections each have experienced a significant number of crashes over that five year period. A map depicting the primary crash types that occurred at each intersection was provided as a handout, and there was some discussion on each location. Rear-end and angle crashes appear to be an issue at the US 79/KY 181 intersection. Brian suggested turn lanes on US 79 may be considered in the study, but could result in the loss of parking for businesses on the south side of US 79. Access management seems to be an issue at the US 41/US 79 intersection with the gas station located on the south side having uncontrolled access to both roads. However, the number of crashes at this intersection has likely been tempered as it is currently four-way stop-controlled. The severe skew angle at the US 41/KY 181 intersection may be a contributing factor to the large number of angle crashes that have occurred. There was some discussion concerning the sight distance at the intersection, particularly for southbound drivers on KY 181 approaching the intersection. US 41 is curved through this intersection.

Brian discussed the environmental footprint under development for the study area and provided a brief summary of the National Environmental Policy Act of 1969 (NEPA) Process. US 41 is part of the "Trail of Tears" auto route and the study must take that into consideration. The Stagecoach Inn (or Gray's Inn) is located in the triangle on the north side of Graysville Road, northeast of the KY 181/KY 294 intersection. This property is located on National Register of Historic Places (NRHP). The property located northwest of the intersection may also be historic, but no formal determination has been performed. Brian said if it is found to eligible for the NRHP, the likely boundary may include the outline of trees around the home and surrounding outbuildings. Widening KY 181 would be difficult if that determination is made. The Pennyrile ADD will be performing the Environmental Justice evaluation for the study.

Traffic forecasting for the study was discussed. Brian indicated that low, medium, and high growth scenarios will be evaluated in terms of future traffic demand as there are many unknowns related to future development in and around the study area. KYTC District 3 has recently performed turning movement counts at the key intersections in the study area and those will be used in the process.



Brian mentioned that this meeting was the first step in the public involvement process. There will be a single public meeting during the study, which will be held after conceptual alternatives have been developed. A second Local Officials and Stakeholders meeting will be held prior to the public meeting to discuss the information that will be presented to the public.

At the conclusion of the presentation, a brainstorming session was conducted to allow the attendees to assist the project team in answering two critical questions. First, they were asked to point out specific trouble spots or issues that should be considered in the study. Second, they were asked to identify possible transportation improvements that should be considered. The attendees were divided into five groups, and their recommendations are summarized below.

Group 1

- Proposed improvements
 - o Access control at Minit Mart near US 79 and US 41
 - O Consider increasing turning radius from eastbound US 41 to southbound US 79 (investigate availability of using state property near the intersection)
 - o Better "guide" signs at all intersections
 - o Widen KY 294 to TN state line (minor widening discussed included two 11-foot wide lanes with 8-foot wide shoulder that is partially paved)
 - o Build loop away from knot to west to connect to KY 181 or US 79

Group 2

- Transportation issues
 - o Drainage issues
- Proposed improvements
 - o New connection from KY 294 to US 79; improve KY 294 to Hemlock
 - o Consider a four-way stop at US 41 and KY 181 with a flashing beacon
 - o Eliminate "through" traffic on Graysville Road
 - o Increase turning radius at US 79 and US 41
 - o Provide better access control at Minit Mart

Group 3

- Proposed improvements
 - o Bypass to west (KY 294)
 - o Additional signage at US 41 and KY 181
 - o Consider making US 41 between KY 181 and US 79 a "local only" route
 - o Left turn lane on northbound US 79 at KY 181
 - Sidewalk connection along US 41 to east

Group 4

- Transportation issues
 - o Signs are too small at US 79 and KY 181; some advance warning signage is needed to direct traffic to turn onto KY 181
 - o Congestion is an issue on Graysville Road



- o Crashes at Patriot Park entrance on US 41
- Consider impact on downtown Guthrie, particularly associated with truck traffic toward Springfield
- o KY 346 (Ewing St.) serves as a cut-through
- Proposed improvements
 - o Consider a traffic signal at US 41 & US 79
 - o Western bypass with connection to Patriot Park to the east on US 79
 - O Speed limit reduction on US 79 from Tennessee state line to north of Patriot Park
 - o Speed limit reduction on US 41 north of the knot

Group 5

- Transportation issues
 - o New school(s) proposed in north Montgomery county
 - o Huge subdivision planned off Port Royal Road (KY 2128)
 - o 1,000 acre industrial park on KY 294
 - o 800 acres of industrial property on US 79 north of KY 2128
 - TDOT has recently discussed widening US 79 to four lanes south of the Kentucky state line
 - Caution about constriction to any creeks as they currently control flooding in and around Guthrie
- Proposed Improvements
 - O Bypass from KY 2128 to the west then north around to Patriot Park on US 41
 - o Consider closing Graysville Road (Stagecoach Inn)
 - o Add directional signage to Hemlock & other industrial parks
 - o Add more pavement to the west at KY 181 & US 41 to help "square up" trucks

The meeting ended at approximately 12:00 p.m.



TO: Jeff Moore

Project Manager, District 3 Planning Kentucky Transportation Cabinet

FROM: Brian Aldridge, P.E.

Project Manager ENTRAN, PLC

DATE: August 1, 2011

SUBJECT: KYTC Item #3-8630.00

Todd County Scoping Study

Kentucky Statewide Planning Contract

The second project team meeting for the subject scoping study was held on July 18, 2011 at 9:00 a.m. CST in the KYTC District 3 conference room. The following individuals were in attendance:

Attendees:

Rachel Fortson
J.R. Ham
KYTC - District 3
KYTC - Planning
Tonya Higdon
Seneatra Henderson
Daniel Hulker
Jeff Moore
Craig Morris
KYTC - District 3
KYTC - Planning
KYTC - Planning
KYTC - District 3
Fennyrile ADD

Mark Mudd KYTC – District 3 Engineering Support Renee Slaughter KYTC – District 3 Environmental

Brian Aldridge ENTRAN
Tom Creasey ENTRAN

After introductions, Jeff Moore welcomed everyone to the second project team meeting for the Guthrie "Knot" Scoping Study and provided a brief summary of why the study is underway. The triangular knot of intersections is known as Tiny Town. Brian Aldridge recapped the draft Purpose and Need Statement that has been developed over the course of the study. He noted there is between 3,000 and 4,000 acres of potential industrial use land in the vicinity of the study area and development is anticipated in these areas as a direct result of the Hemlock Semiconductor facility, located north of US 79 south of the study area in Tennessee.

Brian discussed the combined Local Officials and Stakeholders meeting that was held in Guthrie on April 6. The meeting was very well attended and a group brainstorming exercise



was used to gather input from the attendees. It was noted that each of the five groups provided similar input in terms of projects that should be considered as part of the study.

A handout showing the traffic counts collected by KYTC District 3 was provided and discussed. Brian said that the traffic counts at the four intersections within the study area would not warrant the installation of a traffic signal, a potential improvement that was suggested at the Local Officials meeting. Jeff added some background information on how traffic passes through the "triangle" noting that KY 294 provides indirect access to Fort Campbell (as well as the Hemlock site). KY 294 becomes Graysville Road (a city street) east of KY 181, and its connection to US 41 contributes to significant traffic during the peak hours and relatively high speeds. The KY 294-to-Graysville Road crossing volume is high enough that through traffic on KY 181 will often slow down (or yield the right-of-way) approaching the intersection even though only the KY 294 and Graysville approaches are stop-controlled.

Brian briefly discussed the Environmental Overview and said it was nearly ready to submit. A graphic depicting the natural environment footprint was shown and Brian said only a limited number of resources were located within the study area. Another graphic was shown depicting the human environment and Brian specifically mentioned the known National Register of Historic Places (NRHP) site, the Stagecoach Inn or Gray's Inn, located in the triangle north of Graysville Road and east of KY 181 Another site that is potentially eligible for the NRHP is the Louis Downer Farm located northwest of the KY 181 intersection with KY 294. The "Crossings", a planned multi-use development north of the US 41 intersection with US 79 was also discussed.

The preliminary traffic forecasts for the project were discussed. Brian began by relating some Census data for Todd County. Todd County's population grew by about 0.3 percent per year between 2000 and 2009. Because it is difficult to predict the impact Hemlock will have on growth in the area, the study will consider a range of forecasts including low, medium, and high growth scenarios. The low growth scenario is based on output from the Kentucky Statewide Travel Demand Model which is relatively consistent with the population growth from the Census with traffic on most study area roadways growing by 0.4 to 0.5 percent per year. The medium growth scenario is based on the lower of the historical growth rate or the functional class average growth rate for Todd County based on KYTC's latest available data. High Growth is based on the higher of the historical growth rate or the functional class average growth rate for Todd County. The medium growth scenario includes annual growth rates ranging from 0.6 to 2.1 percent and the high growth scenario ranges from 3.45 to 4.07 percent per year. It was agreed that the high growth scenario should be used for purposes of this study. It was noted that even at the assumed high growth rates, no roadway segment within the study area would be anticipated to require widening to four lanes before 2030.

Rachel Fortson presented a draft of the proposed signage improvements proposed for the study area and said installation would begin very soon. Jeff added that most (if not all) of these improvements could be implemented before the public meeting, and would demonstrate progress to the attendees at the April Local Officials and Stakeholders meeting. Brian added some comments he had heard at that meeting regarding some potential safety



concerns at Patriot Drive, just east of the study area. Some photos were shown depicting the Patriot Drive approaches to US 41 (south) and US 79 (north). Someone at the meeting suggested that drivers traveling Patriot Drive do not always obey the stop signs (only Patriot Drive is stop-controlled at both intersections). Brian suggested that the existing stop signs, thought to be 30" or 36" signs, could be replaced with oversized 48" signs and double signs could be included (one each on the left and right side of the roadway).

Speed limits through the study area were discussed. ENTRAN prepared a graphic showing the locations of existing speed limit signs and zones based on comments from the Local Officials and Stakeholders meeting. There was some discussion concerning the lack of a transition from most of the 55 mile per hour (MPH) zones to the 35 MPH zones. Extending the 35 MPH zone on US 41 to downtown Guthrie was one option discussed, as was evaluating 45 MPH "buffer" zones outside the existing 35 MPH areas. This could help alleviate trucks using air brakes to rapidly decelerate as they exit the 55 MPH areas entering the Tiny Town area.

The following short-term / "Spot" improvements were discussed:

- 1. Construction of left-turn lanes on US 79 at the KY 181 intersection. A number of rear end crashes have occurred at this intersection, and the addition of left-turn lanes on US 79 would be one way to minimize such crashes. This improvement would be difficult without significant right-of-way impacts and removal of parking for businesses south of US 79.
- 2. Access management at US 79 and US 41 intersection. This is a very large, skewed intersection with four-way stop control and the Minit Mart has uncontrolled access along the southern and eastern approaches. The potential short-term improvement includes maintaining the intersection in its current location but constructing a curbed island along most of the Minit Mart's frontage to define two access points one on US 41 east of the intersection and one on US 79 south.
- 3. Minor reconfiguration of the US 41 and KY 181 intersection. This is a very large, skewed intersection with two-way stop control on the KY 181 approaches. Vehicles, particularly trucks, on southbound KY 181 will often veer to the right (almost as if they were attempting to turn right onto westbound US 41) to maximize sight distance before crossing US 41 or turning left towards Guthrie. The proposed improvement is to construct a curbed island to define a right "turning roadway" onto westbound US 41 and to prevent through and left-turning vehicles from veering to the right. Additional maintenance activities that could be considered include some shoulder stabilization on the northbound KY 181 approach for right-turning vehicles. There was also some discussion concerning converting this intersection to four-way stop control.
- 4. Traffic calming on Graysville Road. Graysville Road experiences a significant volume of "cut-through" traffic as it provides a more direct east-west connection than either US 41 or US 79 to KY 181 and then KY 294. It was decided three options should be discussed with the Local Officials: 1) do nothing, 2) traffic



calming and speed reduction through speed humps or tables, and 3) permanent closure of Graysville.

The following long-term conceptual options were discussed:

- 1. Realignment of KY 181. This concept provides a western connector around Tiny Town by redirecting existing KY 181 from north of the US 41 intersection to the west along a semicircular route to US 79 west of the existing KY 181 intersection. Existing KY 181 would be removed from the existing KY 294 intersection north to the proposed realignment north of US 41. A minor widening of KY 294 west of the realigned KY 181 could be included with this option.
- 2. Realignment of US 79. This concept realigns US 79 to the west of the existing US 41 intersection to provide a more perpendicular intersection with US 41 and to eliminate the existing access issues with the Minit Mart. This concept would likely require the closure of Graysville Road near US 41 as it would be too close to the proposed US 79 intersection.
- 3. Realignment of US 41. This concept realigns US 41 from west of existing KY 181 to east of US 79 through the proposed "Crossings" development. This realignment would eliminate the adverse skew angles at the US 41 intersections with both KY 181 and US 79. The study team agreed to show a modified version of this concept to the public.
- 4. Northern Connector. This concepts includes a new connector route around the northern half of Tiny Town, from US 79 east of US 41 to US 79 west of KY 181. As shown, it would connect to US 79 east of Tiny Town at the existing entrance to Patriot Park, providing a connection to US 41. Existing KY 181 would be removed from the existing KY 294 intersection north to the proposed connector. One residence (the Morris residence) would be taken with this concept.

Brian noted some concerns relative to the benefits a northern connector would provide and suggested perhaps it should be shown to the Local Officials but not to the public. Jeff added the concept would not address many of the intersection issues in the triangle. Deneatra Henderson suggested showing a combination of the KY 181 and US 79 realignments. It was decided this option plus the four above would be shown at the next Local Officials meeting. Any recommended turn lanes should also be included in the cost estimates for these options.

Preliminary cost estimates for these long-term concepts were discussed. Brian mentioned the costs included some rough estimates for right-of-way and utilities and that input from the District would be sought before they were shown to the public.

There was some discussion concerning the priority of widening KY 294 west of the study area. Jeff said the widening should be the top priority of the study's recommendations to be consistent with the Unscheduled Projects List (UPL) prioritization. Todd County strongly supports this project to serve the anticipated industrial development to the west.



Next steps in the study will include a Local Officials meeting and a public meeting to be held the same day. The week of September 26-30 was discussed, and September 29 was chosen after the meeting. The Local Officials meeting will be held at 2 PM CST at the Guthrie Mayor's office. The public meeting will be from 5 to 7 PM CST at the Guthrie Senior Citizens Center. The meeting will follow an open house format with a brief presentation at around 5:15 (another presentation may be added at 6:15, if necessary). ENTRAN will develop a draft survey instrument to solicit public input at the meeting.

The meeting ended at approximately 10:30 a.m.



TO: Jeff Moore

Project Manager, District 3 Planning Kentucky Transportation Cabinet

FROM: Brian Aldridge, P.E.

Project Manager ENTRAN, PLC

DATE: November 11, 2011

SUBJECT: KYTC Item #3-8630.00

Todd County Scoping Study

Kentucky Statewide Planning Contract

Local Officials Meeting

A Local Officials meeting for the subject scoping study was held on September 29, 2011 at 2:00 p.m. CDT in the Guthrie City Hall. The following individuals were in attendance:

Attendees:

Bryan Blount Todd County Industrial Foundation

Nancy Camp City of Elkton

Darryl Greenfield Todd County Judge Executive

Barry Groves City of Trenton Scott Marshall Guthrie Mayor

Deneatra Henderson KYTC - District 3

Tonya Higdon KYTC – Central Office Planning

Keirsten Jaggers KYTC - District 3
Greg Meredith KYTC - District 3
Jeff Moore KYTC - District 3

Mikael Pelfrey KYTC – Central Office Planning

Joe Plunk KYTC - District 3
Samantha K. Shirley KYTC - District 3
Tom Creasey ENTRAN, PLC
Brian Aldridge ENTRAN, PLC

After introductions, Jeff Moore welcomed everyone to the second Local Officials meeting for the Guthrie "Knot" Scoping Study. Jeff described the "knot" as the area where US 41, US 79, KY 181, and KY 294 come together, forming a large triangle west of Guthrie in southern Todd County. He noted this is the first transportation planning study performed in the area, and the purpose of the meeting was to discuss the information that would be presented at the public meeting later that evening. He said the public meeting would be an open house format where the attendees could view the exhibits and ask questions of the



study team members. A formal presentation would be given at about 5:15 p.m. to familiarize everyone with the scope of the study and the alternatives that are under consideration. A questionnaire will be provided to collect input from the attendees. Copies of the exhibits were on display for the local officials to see.

Brian Aldridge provided a copy of the public meeting handout to everyone and provided some discussion on its contents. He said there are four short-term "spot" improvements under consideration and four long-term alternatives. The short-term improvements are as follows:

- 1. Construction of left-turn lanes on US 79 at KY 181
- 2. Reconfiguration of the US 41 and KY 181 intersection
- 3. Traffic Calming on Graysville Road
- 4. Curb construction along US 41 and US 79 near the convenience store

There was some discussion regarding the reconfiguration of the US 41 intersection with KY 181. This is a very large, skewed intersection with two-way stop control on the KY 181 approaches. Brian noted the proposed improvement, which includes separating the right turn from southbound KY 181 onto westbound US 41 from the southbound through and left turn, was an effort to prevent vehicles, particularly trucks, from veering to the right to maximize sight distance before crossing US 41 or turning left towards Guthrie. Brian said the project team believed the issue was limited sight distance to the east (towards Guthrie). It was noted the issue really deals with the sight distance to the west along US 41 as the skew angle on the southbound approach makes it difficult for trucks to see oncoming vehicles to their right. Therefore, the proposed concept should be revisited.

The four long-term improvements were developed based on input from the first local officials meeting in April. These concepts include the following:

- 1. Alternative 1 Realignment of KY 181
- 2. Alternative 2 Realignment of US 79
- 3. Alternative 2 Realignment of US 41
- 4. Alternative 4 Combination of Alternative 1 and Alternative 2

Each of the conceptual alternatives was developed in an effort to address the issues with the intersections within the triangle. Alternative 1 would alleviate concerns at both the KY 181 intersections with US 79 and US 41. Alternative 2 and Alternative 3 would address the skew angles at the US 79 intersection with US 41 and would also minimize the access issues with the convenience store on the south side of the intersection. Brian mentioned another alternative that had been discussed at the first local officials meeting in April that would have provided a semi-circular connection along US 41 around Tiny Town, effectively bypassing the area. He said the study team considered this option, but ultimately decided the utility of such a corridor would be minimal as through traffic on US 79 would continue to use the existing route.

The meeting ended at approximately 3:00 p.m.

PUBLIC MEETING SUMMARY

Guthrie "Knot" Planning Study Todd County Item No. 3-8630.00

Guthrie Senior Citizens Center
233 South Ewing Street
Guthrie, KY 42234
Thursday, September 29, 2011, 5:00 – 7:00 pm

A Public Meeting for the Guthrie "Knot" planning study was held on Thursday, September 29, 2011 at 5:00 pm at the Guthrie Senior Citizens Center in Guthrie. The purpose of the meeting was to provide information about the study, discuss potential alternative improvements to be considered, and solicit input from the public. The following individuals from the Kentucky Transportation Cabinet and the consultant staff were in attendance:

Tonya Higdon KYTC – Central Office Planning Mikael Pelfrey KYTC – Central Office Planning

Jeff Moore KYTC - District 3
Deneatra Henderson KYTC - District 3
Keirsten Jaggers KYTC - District 3
Greg Meredith KYTC - District 3
Joe Plunk KYTC - District 3
Samantha K. Shirley KYTC - District 3

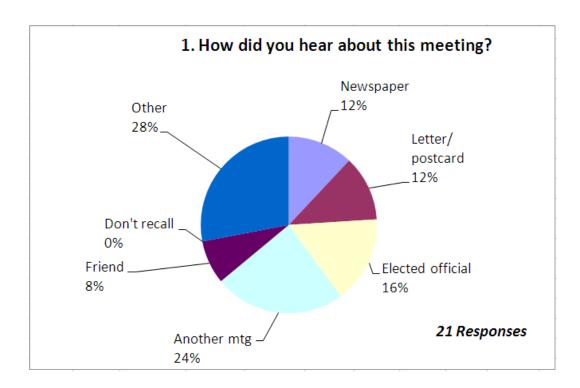
Tom Creasey ENTRAN, PLC Brian Aldridge ENTRAN, PLC

The meeting was held in an open house format, with a formal presentation at 5:15 pm to explain the project and the considerations to provide comments on. Attendees were asked to sign in and were provided a project handout and questionnaire. KYTC and consultant staff were available to answer questions and discuss issues. Based on the sign-in sheets, 75 members of the public attended the meeting.

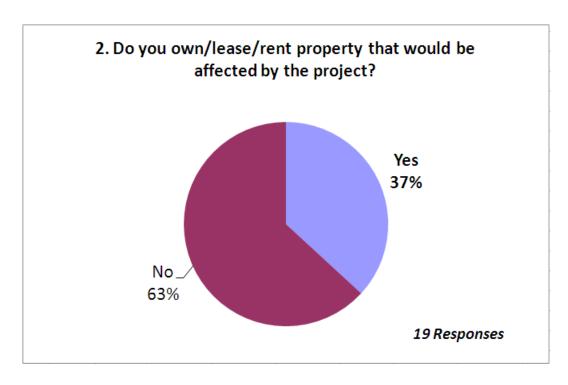
The following project exhibits were on display:

- Study Area with Existing and Future Traffic Volumes
- Crash History
- Long-Term Improvements Options
- Short-Term Improvement Options

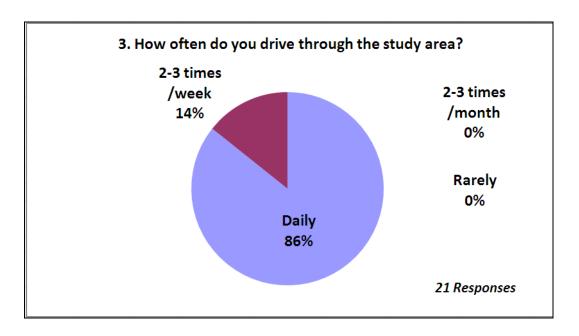
Public meeting attendees were given the option to either fill out their questionnaire at the meeting or return it by mail after the meeting. A total of 21 questionnaires were returned. The results of the questionnaire are summarized as follows:



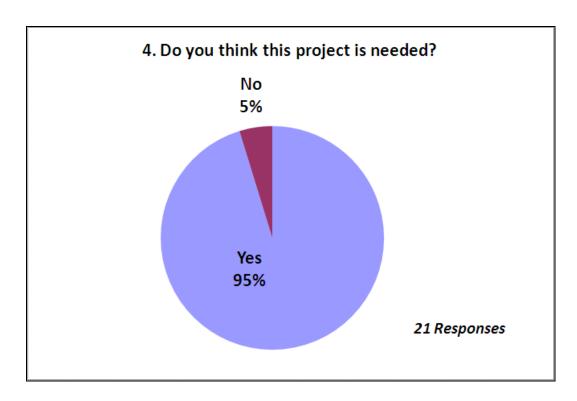
Some respondents indicated they heard about the meeting from more than one source. Most (7 responses, 28%) said they heard about the meeting from seeing the variable message sign KYTC District 3 posted the week of the meeting.



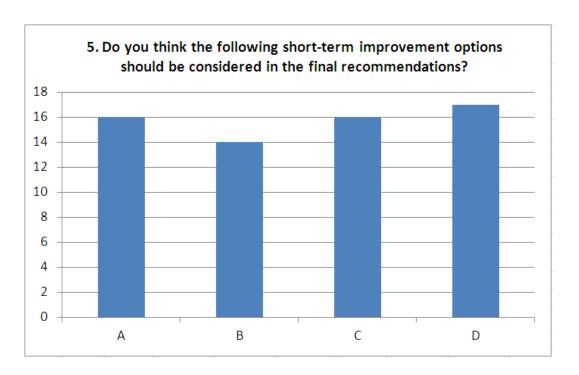
The majority of the survey respondents (12 responses, 63%) indicated they did not own property that may be affected by any of the potential improvements.



Most respondents (18 responses, 86%) said they drive through the study area daily. No respondents said they rarely drive through the study area.



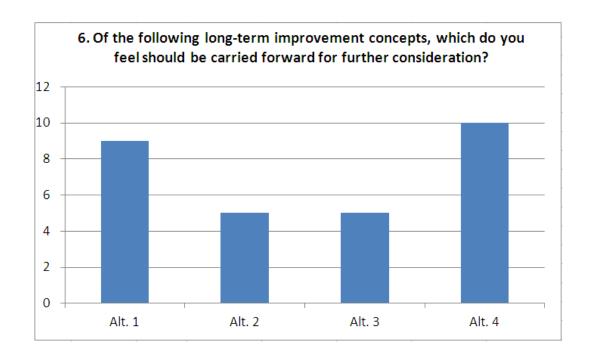
The overwhelming majority (20 responses, 95%) said transportation improvements are needed.



The study includes several potential short-term improvements that were presented for comments from the public. These include the following concepts:

- 1. Construction of left-turn lanes on US 79 at KY 181 (76% in favor)
- 2. Reconfiguration of the US 41 and KY 181 intersection (67% in favor)
- 3. Traffic Calming on Graysville Road (76% in favor)
- 4. Curb construction along US 41 and US 79 near the convenience store (81% in favor)

All short-term improvement options were well received by those that returned questionnaires. Of the 21 responses received, the lowest approval was 67% with the greatest being 81% in favor of making the improvements.



Several long-term improvements were also presented to further address the anticipated increase in traffic in the Tiny Town area. These alternatives are as follows:

- 1. Alternative 1 Realignment of KY 181
- 2. Alternative 2 Realignment of US 79
- 3. Alternative 3 Realignment of US 41
- 4. Alternative 4 Combination of Alternative 1 and Alternative 2

Nine respondents indicated Alternative 1 should be considered further. This was second only to Alternative 4, a combination of Alternative 1 and Alternative 2, which received 10 responses. It should also be mentioned that all long-term options included provisions to widen KY 294 westward from the Tiny Town "Knot" area.

One additional long-term option was mentioned by several meeting attendees. This alternative would have realigned US 41 south of its current location to provide a more perpendicular intersection with US 79. This alternative was not considered by the project team because a residential development is planned for the area east of US 79 and south of US 41 which would be affected by the alternative.



TO: Jeff Moore

Project Manager, District 3 Planning Kentucky Transportation Cabinet

FROM: Brian Aldridge, P.E.

Project Manager ENTRAN, PLC

DATE: November 30, 2011

SUBJECT: KYTC Item #3-8630.00

Todd County Scoping Study

Kentucky Statewide Planning Contract

The third project team meeting for the subject scoping study was held on November 22, 2011 at 9:00 a.m. CST in the KYTC District 3 conference room. The following individuals were in attendance:

Attendees:

Rachel Fortson KYTC - District 3
J.R. Ham KYTC - Planning
Tonya Higdon KYTC - Planning

Deneatra Henderson KYTC – District 3 Planning Jeff Moore KYTC – District 3 Planning

Craig Morris Pennyrile ADD
Greg Meredith KYTC – District 3

Mark Mudd KYTC – District 3 Engineering Support Joe Plunk KYTC – District 3 Project Development

Broc Porter KYTC – District 3 Tim Sharp KYTC – District 3

Renee Slaughter KYTC – District 3 Environmental

Brian Aldridge ENTRAN
Tom Creasey ENTRAN

After introductions, Jeff Moore welcomed everyone to the third project team meeting for the Guthrie "Knot" Scoping Study. He then turned it over to Brian Aldridge who delivered a brief presentation, beginning with a recap of the study Purpose and Need and some discussion regarding current and projected 2030 traffic volumes and the crash history within the study area.



Brian provided a summary of the comments received at the public meeting in September. He said there were 75 attendees and 21 comment sheets submitted. The comment sheet responses were summarized.

Next there was some discussion regarding the potential short-term, "spot" improvements that were presented at the public meeting. Rachel Fortson indicated the signing improvements project was implemented over the summer and the improved signage was in place prior to the public meeting. Brian mentioned that he had received some positive feedback on the improved signage. He also said feedback was generally positive regarding all four of the short-term improvement concepts, which are described as follows:

- 1. Construction of left-turn lanes on US 79 at the KY 181 intersection. A number of rear end crashes have occurred at this intersection, and the addition of left-turn lanes on US 79 would be one way to minimize such crashes. This improvement would be difficult without significant right-of-way impacts and removal of parking for businesses south of US 79. There was at least one request from the public to consider a four-way stop at the intersection; however, the warrants for a four-way stop would not be satisfied with either the current or future traffic projections.
- 2. Minor reconfiguration of the US 41 and KY 181 intersection. This is a very large, skewed intersection with two-way stop control on the KY 181 approaches. Vehicles, particularly trucks, on southbound KY 181 will often veer to the right (almost as if they were attempting to turn right onto westbound US 41) to maximize sight distance before crossing US 41 or turning left towards Guthrie. The conceptual improvement was to construct a curbed island to define a right "turning roadway" onto westbound US 41 and to prevent through and leftturning vehicles from veering to the right.). It was noted the issue really deals with the sight distance to the west along US 41 as the skew angle on the southbound approach makes it difficult for trucks to see oncoming vehicles to their right. Therefore, the proposed concept would not address the issue and therefore was not considered feasible. There was also some discussion from the public meeting concerning possibly converting this intersection to four-way stop control. Similar to the US 79 intersection with KY 181, the warrants for a fourway stop would not be satisfied with either the current or future traffic projections.
- 3. Traffic calming on Graysville Road. Graysville Road experiences a significant volume of "cut-through" traffic as it provides a more direct east-west connection than either US 41 or US 79 to KY 181 and then KY 294. As Graysville is a city street, the study can only recommend that the city considers some of the possible traffic calming measures.
- 4. Access management at US 79 and US 41 intersection. This is a very large, skewed intersection with four-way stop control and the convenience store located on the south side of the intersection has uncontrolled access along the southern and eastern approaches. The potential short-term improvement includes maintaining the intersection in its current location but constructing a curbed island along most of the convenience store frontage to define two access points one on US



41 east of the intersection and one on US 79 south. The intersection would not satisfy traffic signal warrants.

Brian then discussed each of the long-term conceptual options, summarized below. A minor widening of KY 294 study area could be included with each option.

- 1. Realignment of KY 181. This concept provides a western connector around Tiny Town by redirecting existing KY 181 from north of the US 41 intersection to the west along a semicircular route to US 79 west of the existing KY 181 intersection. Existing KY 181 would be removed from the existing KY 294 intersection north to the proposed realignment north of US 41.
- 2. Realignment of US 79. This concept realigns US 79 to the west of the existing US 41 intersection to provide a more perpendicular intersection with US 41 and to eliminate the existing access issues with the convenience store. This concept would likely require the closure of Graysville Road near US 41 as it would be too close to the proposed US 79 intersection. It would also split the property owned by the Morris family north of the US 41 where "The Crossings" commercial development is proposed.
- 3. Realignment of US 41. This concept realigns US 41 from west of existing KY 181 to east of US 79 through the proposed "Crossings" development. This realignment would eliminate the adverse skew angles at the US 41 intersections with both KY 181 and US 79. The study team agreed to show a modified version of this concept to the public.
- 4. Combination of Alternative 1 and Alternative 2. This concept includes the realignment of KY 181 proposed in Alternative 1 and the realignment of US 79 proposed in Alternative 2.

Public meeting feedback suggested Alternative 1 and Alternative 4 are most favored. Based on this information and the findings over the course of the study, Brian outlined Stantec's preliminary recommendations for the study. These recommendations include the short-term project to improve access management at the US 41 intersection with US 79 and to construct long-term Alternative 1, the realignment of KY 181. The combination of these two improvements will address all three of the badly skewed intersections forming the Tiny Town triangle. (Improvements to KY 294 are already considered a relatively high priority for District 3.) Jeff added that the recommendations meet all three objectives outlined in the Purpose and Need Statement, including improving safety, improving the efficiency of travel, and providing better connections between the study area roadways.

The meeting ended at approximately 10:00 a.m.