

APPENDIX E

Meeting Minutes

PROGRESS MEETING MINUTES

I-71 at I-265 Interchange Study

Item No. 5-68.00

June 2, 2009 - 9:30 A.M.

A progress meeting was held at the KYTC-District 5 office in the Design Conference Room.

Those in attendance at the meeting are as follows:

Paul Davis	KYTC District 5 Project Manager
Jeff Schaefer	KYTC District 5 Environmental Coordinator
Mohamad Abdol	KYTC District 5 Engineering Support Br. Manager
Pat Matheny	KYTC District 5 Design
Tala Quinio	KYTC District 5 Design
Bob Farley	KYTC Central Office Design
Jason Hyatt	KYTC Central Office Traffic
Scott Thomson	KYTC Central Office Planning
Bill Hanson	FHWA Kentucky Division
Greg Groves	URS
Paul Slone	URS
Mitch Thomas	URS
Kevin Dant	URS
Bob Gustafson	Qk4
Darryl Renfrow	Qk4

1. URS began the meeting by giving an overview of the history of the I-71 Widening project (5-48.00) which was started by Qk4 in 1994. The project evaluated a six-lane widening of I-71 from I-64 to I-265. After public involvement and a peer-to-peer to review KYTC decided the most effective use of funds was to eliminate the bottlenecks caused at the interchanges during peak hour congestion. The following projects were identified:
 - 5-48.10:** Add an auxiliary lane from I-64 to Zorn Avenue
 - 5-48.20:** Add an auxiliary lane from I-264 to I-71 NB and evaluate other improvements to the interchange.
 - 5-68.00:** A study to evaluate short and long-term improvements to I-71 and I-265 interchange. The existing interchange at KY-22 and I-265 influences the function of this interchange.

In addition, the previous study influenced the construction of cable barriers along I-71 due to cross-over collisions, creation of a TARC express bus route from Oldham County, and the implementation of ITS (TRIMARC) solutions along the corridor.

2. A review of the current existing conditions was given to the Project Team.
The following is a summary of the issues reviewed:

- **Existing Land Use Zoning** – A 1998 aerial of the project area was reviewed. It was noted the majority of the commercial development was not present at that time. Since that time the Summit, Old Brownsboro Crossing (Lowe's, Costco, Norton Healthcare), Kroger, Hilton Garden Inn, and commercial office buildings have been constructed adjacent to or within close proximity to the existing interchanges of I 71/I 265 and I 265/KY 22, respectively.
- **Existing Geometrics** – existing interchange geometrics were reviewed. The design speed on the existing loop ramps is 30 mph and the design speed on the outside ramps is 50 mph. Both I 71 and I 265 mainline design speeds are 65 mph, respectively.
 1. The distance between existing interchanges is summarized below:
 - I 265/I 71 to I 265/KY 22 is approximately 2500 feet.
 - I 265/I 71 to Crestwood exit is approximately 5 miles
 - I 265/I 71 to I 264 is approximately 4 miles
 2. The existing weave lengths (nose to nose) are summarized below:
 - I 265 NB to I 71 SB is approximately 675 feet
 - I 265 NB to I 71 NB is approximately 850 feet
 - I 71 SB to I 265 SB is approximately 675 feet
 - I 71 NB to I 265 SB is approximately 650 feet
- **Safety** – A review of accident data from Jan. 2006-Dec 2008 was conducted. For the period there were 598 accidents of which nearly 50% were rear end collisions, or one crash every 1.8 days. The second largest number was collisions with a fixed object. KYTC D-5 provided data regarding cable barrier impacts. 158 impacts were noted resulting in the replacement of 944 posts. Since the cable barrier has been installed there has not been a cross-over fatality in the project study area. Other safety considerations discussed were the speed differential on I 265 NB in the AM peak due to vehicles stacking the outside lane on I 265 NB to the ramp to I 71 SB. Vehicles in the outside lane on I 265 NB heading to I 71 SB are progressing at an approximate rate of 10-15 mph while vehicles in the inside lane of I 265 NB heading north on I 265 to US 42 are at or near mainline posted speed of 65 mph. The large speed differential is a significant factor in causing rear-end crashes.
- **Sign Inventory**- A review of the existing signs were discussed. The exit ramp from I-71 SB to I-265 WB has a posted speed of 30 mph and has rollover warning signs on the ramp. It was noted a semi with trailer or other large vehicle has no other ramp speed warning signs prior to exit.

- **Environmental Review** – URS gave an overview of preliminary environmental data from GIS which included UST Hazmat sites, historic properties, streams, and FEMA Flood Zones. Other factors to be considered for future improvements include noise and right of way impacts.
- **Traffic** - URS presented a video of the existing merge weave conditions at AM/PM peak from the KY 22 WB ramp to I-265/I-71 and I-71 SB to I-265 NB/KY22 exit ramp. In addition, to the video URS collected traffic counts during AM/PM peaks noting the number of merges and weaves. URS presented a VISSIM model which depicted the existing conditions. LOS for the interchanges was discussed. It was noted the KY 22 WB ramp to I-265/I-71 existing LOS was a B/C, respectively. Paul Slone explained that the highway capacity methodologies evaluate spot locations. The critical points in the system are at the base of the I-265 WB to I-71 SB loop ramp in the morning and the I-71 NB to I-265 EB ramp diverge in the afternoon. The effects of the congestion at these points spills backward into other ramp, weave and mainline sections of the freeway. The HCS cannot quantify the spillback effects into other analyzed sections.

3. URS presented preliminary study alternatives primarily addressing short-term improvements. The alternatives presented are as follows:

- **Alternative 1** – Add an additional auxiliary lane to the outside from I-71 NB (Ramp 5) to I-265 SB exit to KY 22. (PM solution)
- **Alternative 2** – Shift I-71 NB thru lanes to the median allowing the outside lane to become an auxiliary lane and widen Ramp 5 to the inside or the outside to KY 22 exit. (PM solution)
- **Alternative 3** – Shift I-71 SB thru lanes to the median allowing the outside lane to become an auxiliary lane for the I-265 ramps. Align the I 265 NB on ramp at KY 22 with the existing I-265 NB exit ramp at KY 22 and eliminate the existing I-265 NB on ramp at KY 22. By aligning the new I 265 NB on ramp at KY 22 with the off ramp will increase the weaving length to approximately 1200 feet. (AM solution)
- **Alternative 4** – Add an additional auxiliary lane on I-71 NB and along Ramp 5 to I-265 SB exit to KY 22 exit. Shift I-71 NB and SB thru lanes to the median allowing the outside lane to become an auxiliary lane for the on and off ramps. Eliminate I-265 NB on ramp at KY 22 and align new I-265 NB on ramp with the existing I-265 NB exit ramp at KY 22. By aligning the new I 265 NB on ramp at KY 22 with the off ramp will increase the weaving length to approximately 1200 feet. (AM and PM solution)
- **Alternative 5** – Add an auxiliary lane on I-71 NB and along Ramp 5 to the I-265 SB exit to KY 22 exit. Construct a fly over ramp from I-265 NB to I-71 SB and tie down to I-71 NB. Eliminate Ramp 2 (loop ramp) from I-265 NB to I-71 SB. Eliminate I-265 NB ramp at KY 22 and align new I-265 NB ramp with the existing I-265 NB exit ramp at KY 22. By aligning the new I 265 NB on ramp at KY 22

with the off ramp will increase the weaving length to approximately 1200 feet. (AM and PM solution)

- **Alternative 6** – Add an additional auxiliary lane on I-71 NB and along Ramp 5 to I-265 SB exit to KY 22 exit. Construct a fly over ramp from I-265 NB to I-71 SB and tie down to I-71 NB while maintaining access to I 265 NB. Eliminate Ramp 2 (loop ramp) from I-265 NB to I-71 SB. (AM and PM solution)
- **Alternative 7** – Add an auxiliary lane on I-71 NB and along Ramp 5 to I-265 SB exit to KY 22. Construct a fly over ramp from I-265 NB to I-71 SB an I-71 NB. This fly over would be tighter and near the center of the existing bridge to allow for another future flyover from KY 841 SB to I-71 NB. Eliminate Ramp 2 (loop ramp) from I-265 NB to I-71 SB. Eliminate I-265 NB ramp at KY 22 and align new I-265 NB ramp with the existing I-265 NB exit ramp at KY 22. Aligning the new I 265 NB on ramp at KY 22 with the off ramp will increase the weaving length to approximately 1200 feet. (AM and PM solution).

Evaluation of alternatives 5-7 should be deferred for consideration until development of an ultimate solution has been completed.

Three additional alternative considerations beyond the project scope were discussed with the project team and summarized below:

- Ramp Metering at KY 22 on ramps in the AM peak
- Close KY 22 on ramps and make traffic proceed down Chamberlain Lane to Westport Road to access I 265 (approximately 1 mile to the south)
- Construct a new interchange north of I 265/I 71 moving traffic that access I 265 at KY 22 to access I 71 upstream
- Evaluate improvements and lane configurations within the existing bridge piers. This improvement would function as a CD system and leave the existing loop ramps.

During the review of alternatives discussion was had regarding improvements (short-term and long range). URS will evaluate short-term and long range alternatives with this study. Design year traffic volumes should consider the impact of the Ohio River Bridges project for the East End Bridge, while construction year may not consider this project. Currently the project is estimated at a cost of \$4 billion dollars and is on hold pending a financing strategy from the Kentucky legislature.

Other items of discussion were any improvements beyond the existing right of way would be prohibitively expensive. Noise walls will most likely be required for any capacity additions along residential corridors in the project study area.

4. Next Steps for the project study are as follows:

- Coordination Meetings with the following:
 - ✓ TARC
 - ✓ CTS (Ohio River Bridge Update and traffic data)
 - ✓ TRIMARC
- Alternatives development and traffic evaluation.

- Continue environmental overview and development of preliminary purpose and need of projects.

KIPDA MEETING SUMMARY

I-71 at I-265 Interchange Study

Item No. 5-68.00

June 26, 2009 - 9:30 A.M.

The meeting was held at the KYTC-District 5 office in the Main Conference Room.

Those in attendance at the meeting are as follows:

Paul Davis	KYTC District 5 Project Manager
Scott Thomson	KYTC Central Office Planning
Andy Rush	KIPDA
Larry Chaney	KIPDA
Lauren Hatfield	URS
Kevin Dant	URS

1. KIPDA presented projected 2030 Traffic Forecasts and 2030 Socioeconomic Data supplied to BTM during a previous study.
2. Socioeconomic data provided by LMPDS was reviewed. Revised LMPDS Socioeconomic Data was provided. In particular, changes made TAZ section 533 were reviewed. Group present agreed that revised figures should be used for modeling and other study purposes.
3. Socioeconomic data model is based on preset controls. LMPDS officials have to move "household" and "employment" numbers from one area to another to maintain set controls. Data figures are from 2004.
4. KIPDA presented map of Proposed I-71 Interchange and Alternate Routes containing projected 2030 revised version of the LMPDS socioeconomic data. Map depicted I-71 as is present day and included widening of KY 22 to 5 lanes west of Crestwood.
5. Proposed County Line Interchange was discussed. Interchange to run from approximately Haunz Lane area providing access to I-71 continuing across 1694 and ending with connection approximately at Locke Lane. Study for this interchange is not complete.
6. KIPDA will project volumes to provide to URS and KYTC based on the LMPDS TAZ revised Socioeconomic Data.
7. Andy Rush will run and provide scenarios based on the following options:
 - a. No-Build (includes only the projects currently in KIPDA's Long-Range Transportation Plan)
 - b. A run without the proposed interchange on I-71 at the Jefferson/Oldham county line
 - c. A run that includes auxiliary lanes on I-71 (both directions)
 - d. A run that includes a new flyover ramp(s)
8. Kevin Dant to send conceptual drawings to Andy for flyover and auxiliary lanes.

Tentative follow-up meeting set for 2nd week in July. Specific date and time TBD.

KIPDA MEETING SUMMARY

I-71 at I-265 Interchange Study

Item No. 5-68.00

July 21, 2009 - 9:30 A.M.

The meeting was held at the KYTC-District 5 office in the Main Conference Room.

Those in attendance at the meeting are as follows:

Paul Davis	KYTC District 5 Project Manager
Scott Thomson	KYTC Central Office Planning
Brian Meade	KYTC
Bob Farley	KYTC
Tala Quinio	KYTC
Larry Chaney	KIPDA
Andy Rush	KIPDA
Kevin Dant	URS

1. KIPDA presented projected 2030 Traffic Forecasts with updates discussed at 06/26/09 meeting.
2. All options were reviewed. The “No Build” option did not include the construction of an Oldham/Jefferson Interchange.
3. Collector Distributor System Alt. 6 (2 Lane Fly Over) was reviewed. Simulation of traffic 265 Westbound showed:
 - e. 61% of Total Traffic used the flyover
 - f. 38% of Total Traffic remained on the mainline
4. All numbers of the simulation are a reflection of I-71 having only 4 lanes .
5. Andy Rush provided scenarios based on the following options:
 - g. No-Build (includes only the projects currently in KIPDA’s Long-Range Transportation Plan)
 - h. A run without the proposed interchange on I-71 at the Jefferson/Oldham county line
 - i. A run that includes auxiliary lanes on I-71 (both directions)
 - j. A run that includes a new flyover ramp(s)
6. URS will develop traffic modeling simulations for the study alternatives using the traffic data forecasts provided by KIPDA.

PROGRESS MEETING SUMMARY

I-71 at I-265 Interchange Study

Item No. 5-68.00

September 18, 2009 - 1:30 P.M.

The meeting was held at the KYTC-District 5 office in the Design Conference Room. Those in attendance at the meeting are as follows:

Paul Davis	KYTC District 5 Project Manager
Tala Quinio	KTYC District 5 Design
Mohamad Abdol	KYTC District 5 Engineering Support
Jeff Schaefer	KYTC District 5 Environmental Coordinator
Kyle Cooper	KYTC District 5 Planning
Greg Groves	URS
Mitch Thomas	URS
Kevin Dant	URS
Glen Kelly	Qk4
Darryl Renfrow	Qk4

1. URS discussed the status of the current alternatives and provided detail drawings of each improvement.
2. Discussion was had regarding the KY 22 ramps in Alternative 3. It is anticipated the model will show KY 22 would be negatively impacted by this change by realigning all traffic to enter I-265 beside the existing I-265 off ramp at KY 22.
3. Discussion was held regarding cost estimates for alternatives. Conceptual level estimates will be prepared for each alternative prior to the next Project Team Meeting.
4. URS gave a review of progress on the environmental overview. KYTC indicated the overview should be prepared based on the final alternatives from the study.
5. It was decided to hold another progress meeting with KYTC personnel (District 5 and Central Office) prior to the next Project Team Meeting. The anticipated date for the meeting is mid-October.

TRIMARC MEETING SUMMARY

I-71 at I-265 Interchange Study

Item No. 5-68.00

October 1, 2009 - 2:00 pm

URS scheduled a meeting with TRIMARC to review the existing conditions of the interchange, discuss possible improvements, and receive input from TRIMARC regarding future plans and/or needs.

Those in attendance at the meeting are as follows:

Tim Emington	TRIMARC Operations Manager
Todd Hood	TRIMARC Systems Administrator
Daniel Woo	TRIMARC Asst. Systems Administrator
Greg Groves	URS
Kevin Dant	URS

1. URS reviewed the existing AM/PM VISSIM traffic simulation videos. TRIMARC indicated the models were a good representation of existing conditions. We discussed the PM cue on the northbound PM and TRIMARC indicated it is usually back to the Watterson or at least Barbour Lane.
2. TRIMARC will have new dynamic message boards in the I-71 South direction (north of I-265, and between I-265 and I-264) operational by the end of the month. A new camera is present near the Oldham and Jefferson County line. The camera will be fully integrated by the end of the year.
3. URS reviewed preliminary alternative concepts with TRIMARC. TRIMARC indicated they believe any improvement to the I-265 NB to I-71 SB weave should help traffic on KY 22. They had concerns with eliminating the free-flow ramp from KY 22 to I-265. This change would impact the signal at Old Brownsboro Crossing.
4. After reviewing the alternatives TRIMARC indicated the flyover would be a relief to congestion at this interchange. They requested consideration of outbound variable message signs and other ITS solutions for any improvements to I-71 between I-264 and Oldham County.

cc: File
Paul Davis, KYTC Project Manager

FHWA/KYTC Central Office
PROJECT BRIEFING MEETING
I-71 at I-265 Interchange Study
Item No. 5-68.00
January 5, 2010 - 9:30 A.M.

The meeting was held at the KYTC-Central Office in Conference Room #118. Those in attendance at the meeting are as follows:

Steve Waddle	KYTC State Highway Engineer-Project Development
Paul Davis	KYTC District 5 Project Manager
Brian Meade	KYTC District 5 Project Development
Bob Farley	KYTC Central Office Design
Gilberto De Leon	FHWA Kentucky Division
Greg Groves	URS
Mitch Thomas	URS
Paul Slone	URS
Kevin Dant	URS

The purpose of the meeting was to review the project alternatives and recommendations to date with FHWA Kentucky Division and KYTC Central Office State Highway Engineer-Office of Project Development.

1. URS presented a review of the existing conditions of the interchange using a video montage of the peak hour weaving between KY 22 and I-71 as well as videos driving the project in the AM and PM peak..
6. URS reviewed the project goals of the study:
 - *Evaluate the safety and capacity of the existing interchange*
 - *Determine the future adequacy of the interchange*
 - *Consideration of interim build/ultimate build scenarios*

The primary need of the study is peak hour congestion relief and improved safety during the AM peak period from I-265 NB to I-71 SB and in the PM peak from I-71 NB to I-265 SB.

7. URS presented the project alternatives and discussed the effectiveness of each alternative when compared to the project's goals. After reviewing each alternative, URS recommended the project team continue to evaluate Alternative 5A, 8A, and 10A.
8. KYTC discussed the opportunity for portions of the alternatives to be broken out into future design projects. Central Office was interested in breaking out Alternative 1 as a stand alone future Highway Plan project. FHWA will determine the potential for projects to progress without completing a full IJS/IMR at this time.
9. Drawings of alternatives, Level of Service Analysis and 2020/2030 traffic projections were provided to FHWA
10. URS will proceed with completion of the study based on the recommendations of further study on Alternative 5A, 8A and 10A.

CTS MEETING SUMMARY

I-71 at I-265 Interchange Study

Item No. 5-68.00

June 16, 2009 - 9:30 A.M.

After the project status review meeting on June 2, 2009, URS contacted CTS regarding traffic data used for LSIORB analysis for the I-71/I-265 interchange. The meeting was scheduled and was held at the KYTC-District 5 office in the Main Conference Room.

Those in attendance at the meeting are as follows:

Paul Davis	KYTC District 5 Project Manager
Tala Quinio	KYTC District 5 Design
Scott Thomson	KYTC Central Office Planning
Gary Valentine	KYTC – LSIORB Project Manager
Andy Barber	KYTC – LSIORB Deputy Project Manager
Greg Groves	URS
Paul Slone	URS
Kevin Dant	URS
John Sacksteder	CTS
Kevin Villier	CTS

1. URS gave an overview of the I-71 and I-265 interchange study and the impact traffic from the LSIORB project, specifically the East End Bridge, would have on any future improvements to the interchange.
2. CTS indicated traffic at this interchange was not evaluated as part of the LSIORB project and all traffic forecasts for the project were contained in the Engineering Section of the project documentation. CTS will provide this information to URS.
3. CTS indicated all traffic data was based on the KIPDA traffic model and was based on a design year of 2025. The 2030 model was used for an Air Quality (PM 2.5) update.
4. 2030 should be the lookout year for the I-71/I-265 interchange study. This data should be available from KIPDA. URS will contact KIPDA to schedule a meeting regarding the traffic model and the projects proposed as completed in the 2030 forecast.
5. KIPDA meeting is scheduled for June 26 at 9:30 at District 5 office.