## Newsletter for I471/KY8 Interchange

Project Item Number: 6-8104.00

County and Route: Campbell, New Route

Project Description: The I-471/KY 8 Interchange Modification Project is examining modifications to the interchange to reduce traffic delays on southbound I-471 at the KY 8 exit ramp, resulting in improved safety for southbound and exiting traffic.

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Approximate dates: February 2008

Comments (number of people reached, effectiveness of the technique, what you would do differently, etc.): The project newsletter is sent to approximately 45 people that have expressed interest in the project by providing email contact information. Additionally, hard copy versions are mailed to other interested parties that provided their information either via sign-in sheets at public meetings or contact with the project team. Email distribution is the cost-effective choice. However, flexibility and adjustments must be made to accommodate all interested parties. The newsletter has been a beneficial way to disseminate information to the public and interested parties between public meetings; it has allowed the project team to relay relevant information in a timely manner.

# **Project Report**

Kentucky Transportation Cabinet, District 6, Covington, KY

Newsletter No. 4 – February, 2008

**PROJECT RECAP** 

## **MEETING NEWS**

The Kentucky Transportation Cabinet I-471/KY 8 Interchange Modification Project team and its design consultants held two meetings in January, 2008. The first meeting was for the Interchange Advisory Committee and Section 106 Review Consulting Parties and was held Thursday, January 10<sup>th</sup> at the Newport High School. The second meeting was a General Public meeting held Wednesday, January 16<sup>th</sup>, also at Newport High School.

The purpose of both meetings was to present traffic analyses and evaluate the effects on the four design Alternatives identified to move forward into the Environmental Assessment process. Specific Alternatives must be identified so that analysts can determine the designs' effects on the human and natural elements in the Project area. A questionnaire and comments sheet was included in Meeting handouts to solicit opinions on the revised design details and queries regarding traffic flow of local roads. Following are summaries of the traffic analysis and questionnaire results and comments.

## **Traffic Analysis Summary**

The traffic analysis looked at the effects of traffic volumes forecast for the year 2035 on Alternative designs including Interstate 471 travel lanes, entrance and exit ramps, and the KY 8 roadway intersections in the Project area. The effects are then classified according to Level of Service criteria based on average speeds and times of delay. LOS A, for example, represents free-flow traffic conditions and Level of Service F would represent rush hour gridlock-like conditions. For urban areas, a Level of Service C or D is considered applicable, where some congestion and delay is expected during peak traffic hours – AM and PM commuting times generally.

At right are tables showing the LOS determinations generated by the traffic modeling software VISSIM (visual simulation). Using existing and forecast traffic volumes input onto computer mapping of the existing and proposed roadways, the modeling shows how the system operates under the forecast traffic volumes.

Alternates	Select Interstate Segments on I-471*				
	SB DCB Bridge (KY Side)	SB I-471 b/w KY 8 and Memorial Pkwy	SB I-471 b/w Memorial Pkwy and Grand Ave		
2006 Existing	D/F	D/F	E/F		
2035 No-Build	E/F	F/D	C/D		
2035 Alt 1	E/D	C/B	D/F		
2035 Alt 2b	E/D	С	D/F		
2035 Alt 5d	E/D	C/B	D/F		

<sup>\*</sup>Preliminary Reak Hour Average Interstate LOS from VISSIM Simulation Models - 01/9/09

Alternates	Select Intersection Locations on KY 8"				
	Park Avenue	NB Ramp	SB Ent/Exit Ramp (Alt 5d)	Riveria Drive	
2006 Existing	С	С	N/A	С	
2035 No-Build	С	D	N/A	С	
2035 Alt 1	С	С	N/A	С	
2035 Alt 2b	В	С	N/A	С	
2035 Alt 5d	В	С	A	С	

\*\*Preliminary Peak Hour Average Intersection LOS from VISSIM Simulation Models - 01/9/08

**PROJECT RECAP** 

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One of the primary reasons for traffic analyses is so that the Alternative designs may be revised to maximize operating performance. For example, where modeling might show KY 8 westbound traffic lanes being blocked by traffic queues turning left onto the KY 8 southbound entrance ramp, designers then alter the design to provide a longer left-turn bay to remove turning traffic from the KY 8 through lanes.

Such design revisions are the reasons the Alternative designs may not look exactly the way they were presented during earlier meetings. The basic design concepts, such as a split exit ramp to Riviera Lane, are retained however.

#### **Summary of Questionnaire Results and Comments**

Following are summaries of the Questionnaire Results and Comment Logs received from the January 10<sup>th</sup> and January 16<sup>th</sup> meetings. To receive the complete Results, please contact Michael Galbraith using the address information found under Contact Information.

#### Question 1

The Kentucky Transportation Cabinet recently improved the signal timing along the KY 8 corridor and added a turn lane on the Park Avenue Ramp. What are your observations regarding the southbound exit traffic queues as a result of these improvements?

#### **Question 1 Response Selections**

- 1. Improvements appear to solve backup problems on the Daniel Carter Beard Bridge.
- 2. Traffic does not back up on the Bridge but congestions and delays on Park Avenue and KY 8 are still a problem.
- 3. May be better for now, but problems will reappear with future traffic volumes.
- 4. Backup problems on the Bridge, Park Ave., and KY 8 remain during peak hours, weekend evenings, and other times.
- 5. Improvements have not helped backup problems on the Bridge or on Park Avenue and KY 8.
- 6. Do not live in area; deliberately not answering.

#### **Question 1 Summary of Responses**

The majority of responses selected (response Nos. 2 and 3) indicate that improvements already implemented – a second left turn lane at Park Ave/KY 8 and signal improvements – have helped alleviate backups on the Daniel Carter Beard Bridge but problems remain during peak times and special occasions.

#### Question 2

**Alternate 1 only**: As proposed, Alternate 1 is the only build concept that maintains the existing southbound ramp via Park Avenue. In this design, the Park Avenue/3<sup>rd</sup> Street Intersection is modified and 3<sup>rd</sup> Street is changed to one-way in the eastbound direction between Park Avenue and Providence Way.

Changing traffic on 3<sup>rd</sup> Street to a one-way eastbound direction maintains reasonable accessibility to the Providence Way neighborhood.

#### **Question 2 Response Selections**

1 = Strongly Disagree to 5 = Strongly Agree (6 = Do not live in area; deliberately not answering)

#### **Question 2 Summary of Responses**

Responses covered the range of answers roughly equally. The Project Team response will be to continue to model the scenarios according to Alternate design changes and develop strategies to avoid or minimize potential negative effects.

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# **MEETING NEWS** continued from Page 2

#### Question 3

**Alternates 2b and 5d only:** In Alternates 2b and 5d, Providence Way is reconstructed with 24-foot width from curb to curb. What is your preference for potential Providence Way reconfiguration? Check or underline your selection please.

#### **Question 3 Response Selections**

- a. PW w/ 24', two-way travel, no parking (potential impacts to three houses)
- b. PW w/ 24', one-way travel, w/ parking (potential impact to three houses)
- c. PW w/ 14', one-way travel, no parking (impacts to houses minimized)
- d. Decline selection do not live in area.

#### **Question 3 Summary of Responses**

The majority of responses (73%) favor option C where the potential impacts to houses is minimized. When the Alternates' preliminary alignments and grades are set, the neighborhood around Providence Way will be canvassed with similar questions for a localized perspective on the potential effects.

#### Question 4

Please comment on what you see as potential impacts of the Alternative 5d southbound ramp at 3<sup>rd</sup> Street, Linden Avenue, and Beech Street near the Newport Island Community. (Note that most of the ramp will be depressed well below ground level.)

#### **Question 4 Summary of Comments**

Comments reflected a broad range of considerations from concerns about encroachment into the Island neighborhood to support for the design as an improvement. The Project Team response will be to continue to evaluate the potential effects resulting from Alternate 5d alignments and grades along with traffic modeling at the new SB off ramp Single Point Urban Interchange at KY 8.

#### Question 5

Would moving the sidewalks and providing crosswalks to the north side of KY 8 continue to provide acceptable pedestrian facilities and level of service in your opinion?

#### **Question 5 Summary of Comments**

The comments support providing sidewalks to at least maintain the pedestrian service present currently along KY 8 (i.e. sidewalks on the south side of KY 8). Comments cite need for safe pedestrian crossings at Riviera and Ramp intersections with KY 8.

Several comments noted that addition of sidewalks on the north side would offer an important option avoiding the need for pedestrians to cross KY 8 from the north side to the south side and vice versa depending on the pedestrians' destinations.

#### Question 6

Do you have comments on the relocation of Riviera Ave east or west of its present alignment?

#### **Question 6 Summary of Comments**

Concerns were voiced over either of the plans. Comments showed that Community respondents were weighing the impacts to the human and natural environments such as impacts to the Bellevue Vets and Shopping Center versus Taylor Creek.

**PROJECT RECAP** 

# MEETING NEWS continued from Page 3

The Project Team will continue to evaluate both options to identify the best solution based on traffic volume and movement modeling, economic and other factors, and Community acceptance.

#### Other Comments

Two letters submitted to the Project Team were attached to the Summaries in their entireity.

The issue of closing Park Avenue to improve neighborhood accessibility is raised in several comments. However, the solutions proposed by Alternates 2b and 5d also raise concerns. Bicycle access in the Project area drew several comments voicing support for maintaining or improving the facility or providing an alternate route on the north side of the floodwall.

### PROJECT MEETING DOCUMENTATION

For further reading about Project actions culminating in the Meetings' presentations, please visit the Project website at <a href="https://www.471project.org">www.471project.org</a>. The following documents are available for viewing:

- January 10, 2008 Interchange Advisory Committee (IAC)/Section 106 Review Consulting Parties (S106CPs) Conceptual Alternatives/Traffic Analysis Evaluation Meeting Notes
- January 10<sup>th</sup>, 2008 IAC/S106CPs Meeting Handouts
- January 10<sup>th</sup>, 2008 IAC/S106CPs Meeting Questionnaire Results and Comments Log
- January 16th, 2008 Conceptual Alternatives/Traffic Analysis Evaluation Public Meeting Handout
- January 16<sup>th</sup>, 2008 Public Meeting Questionnaire Results and Comments Log.
- HDR Traffic Operations Results Summary (presented at both 1-10 and 1-16 meetings)
- Alternative 1 Display
- Alternative 2b Display
- Alternative 5d Display.

The HDR Traffic Operations Results Summary contains the table shown on page 1 along with graphics showing level of service determinations for the streets and intersections in the Project area.

In addition to all of the documents for the January meetings listed above, the web-site also contains reports from earlier IAC/S106CPs and Public meetings. These documents contain information on development of all 14 original design concepts and the engineering evaluations and questionnaire results and comments that were considered in selecting the current Alternatives to move forward. Other materials to describe Project processes and actions appear as well.

All these documents can also be viewed at the Kentucky Transportation Cabinet District 6 offices, 421 Buttermilk Pike, Covington, KY **by appointment** during regular business hours.

**CURRENT ACTIONS** 

## **DEVELOPMENT OF BASELINE STUDIES**

Currently, the Alternative designs' effects on the Project area are being investigated and compiled into an Environmental Assessment (EA). The investigations include in-depth inventories of existing human developments and the natural environments. Analysis of Riviera Drive and Taylor Creek are two such examples respectively.

The inventories identify and map resources of both types and the Alternate designs are applied in an overlay map to begin assessing the effects. These are referred to as baseline studies and include separate studies for:

- 1. Aquatic and Terrestrial Habitats (the natural environment)
- 2. Socio-economic Conditions (the human environment)
- 3. Hazardous Materials and Underground Storage Tanks
- 4. Historic and Cultural Resources
- 5. Archaeology
- 6. Air Quality
- 7. Noise Levels.

The Air Quality and Noise Level studies are dependent on the traffic volumes forecast for year 2035. The other studies are dependent on having the Alternative alignments defined so that the biologists and archaeologists, for example, can identify where effects may potentially occur and to determine the extent of the effects.

Completed baseline studies become referenced components of the Environmental Assessment which is required by the Federal Highway Administration (FHWA) to gauge the effects of federally-funded projects on the areas where the Projects are located. FHWA and their local representatives, the Kentucky Transportation Cabinet, are charged with developing the EA. Typically, the Cabinet uses civil and environmental engineering consultants to develop Alternative designs and Environmental Assessments as demonstrated with our Project. The EA must be approved by FHWA for the release of federal funds to the Project.

## **CONTINUING TRAFFIC ANALYSIS**

Traffic analysis will continue across the entire Project area. This analysis includes consideration of the effects of adding a fourth lane as expected to be recommended by the on-going I-471 Corridor Study. The Project team has included a fourth lane to our traffic modeling and design scenarios for SB 471 from the Beard Bridge to KY 1120/Memorial Parkway/10<sup>th</sup> St. to accommodate the Corridor Study recommendation.

Other more localized effects must be evaluated as well. For example, an entrance/exit configuration for the South Shore development at KY 8 was examined to determine the effects on KY 8 traffic volumes and movements at this location. An opening in the flood wall for access to South Shore is tentatively proposed in the section across from the Island neighborhood. All such planned and proposed developments are considered in forecasting future traffic volumes and for modeling traffic movements.

NEXT STEPS

## INTER-AGENCY COORDINATION

The Project Team will continue its inter-agency coordination to make sure the Project remains on track and on schedule. Contact with FHWA, the Heritage Council/State Historic Preservation Office, the US Army Corps of Engineers, local Governments, Cincinnati and the Ohio Department of Transportation will be continued to keep these stakeholders apprised of Project actions.

For example, a meeting scheduled by the Design Team is to meet with FHWA Project officials to present and discuss the Alternatives as they stand today. This is to seek FHWA's concurrence on Alternative geometric features applied to the interstate facility. Geometric features are things like the sharpness of exit ramp curves, adequate safe stopping distances, or the slopes of ramps going uphill or downhill. An example would be an overly-steep entrance ramp that large trucks are slow to climb, backing up other traffic and slowing down the entire system. Geometric criteria are guidelines that must be evaluated and weighed as designs are developed and this Concurrence meeting will ensure that the Alternates are in line with recommended criteria.

## ENVIRONMENTAL ASSESSMENT DEVELOPMENT AND REVIEW

As the draft Environmental Assessment (EA) is being completed, Project officials and designers will use further Public Involvement meetings – like those that have been conducted to this point in the Project – to continue to gauge operational effectiveness and public opinion. These gauges will be used to identify one recommended, preferred Alternative to be described in the draft EA.

The draft EA containing baseline information and Alternate recommendations will be once more presented to stakeholders and the public at a Public Hearing. Comments received at the Hearing will be recorded and considered in the final design selection made by FHWA and included in the final EA. If the recommended Alternative receives reasonable negative comment, the design will be altered to avoid, minimize, or mitigate effects to address the negative comments and the draft EA will be revised. Once FHWA is satisfied that the Project meets its Purpose and Need in addressing problems – in this case, traffic safety on the Daniel Carter Beard Bridge – and does not impact the surrounding human or natural environment to a significant degree, the document is approved. Approval of the final EA by FHWA will then lead to release of the funds for Project implementation.

If you have any questions or concerns about how the Project will effect the surroundings, please use the information included with this newsletter to contact us. We thank you for your input and continuing interest and hope that you will continue to participate through the <a href="https://www.471project.org">www.471project.org</a> web-site and Project meetings. Your perspectives will help us to better assess potential effects and make sure the Project meets its purpose and need and provides positive benefits in the Communities it serves.



# **Contact Information**

Questions or comments? Please contact: Carol Callan-Ramler, P.E. Project Manager Kentucky Transportation Cabinet 421 Buttermilk Pike Covington, KY 41017 859-341-2700 Please address newsletter comments to:
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I-471/KY 8 Interchange Modification

**Project Report**