Appendix E Project Meeting Minutes

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MEETING REPORT Pre-Study Kick Off Meeting Strategic Corridor Planning Study I-69 Spur, I-66/I-65 Spur and US 60 Connection Overview of Existing Conditions Audubon and William H. Natcher Parkways and US 60 Bypass Owensboro

MAY 25, 2011

A Project *"Pre-Study Kick-Off"* Meeting was conducted on May 25, 2011 for this project at the District 2 Office in Madisonville, Kentucky.

Attendees were:

Kevin McClearn Nick Hall Kenny Potts John Rudd David Martin Steve Ross Jill Asher Mikael Pelfrey Jeff Moore David Lindeman Gary Sharpe Will Conkin KYTC – District 2 KYTC – District 2 KYTC – District 2 KYTC – District 2 KYTC – Central Office KYTC – Central Office KYTC – Central Office KYTC – Central Office KYTC – District 3 Planning Palmer Engineering Palmer Engineering Palmer Engineering Kevin.mcclearn@ky.gov Nick.hall@ky.gov Kenny.potts@ky.gov John.rudd@ky.gov Charles.martin@ky.gov Steve.ross@ky.gov Jill.asher@ky.gov Mikael.pelfrey@ky.gov Jeff.moore@ky.gov Dlindeman@palmernet.com Gsharpe@palmernet.com

Following introductions, Nick Hall provided a brief overview of the project. Following the overview, Kevin McClearn, District 2 Chief District Engineer, provided additional comments concerning the project. Mr. McClearn noted that Ted Merryman, KYTC I-69 Coordinator had been working with the FHWA to develop an agreement that would provide guidance regarding the minimum characteristics of the Parkways that would be acceptable for ultimate designation of Parkway routes as I 69. It was noted that the specific agreement being developed was for Segment of Independent Utility (SIU) No. 5 from I 24 at Eddyville along the Western Kentucky Parkway and Pennyrile Parkway to Henderson. It was further noted that, in efforts to move I-69 forward, KYTC has the Dawson Springs interchange (Exit 24), a former toll plaza, on the Wendell H. Ford (Western Kentucky) Parkway under contract for design to meet interstate standards. The interchange project is an effort to sign the Western Kentucky Parkway from I-24 to the Edward T. Breathitt (Pennyrile) Parkway as Interstate 69.

Following opening remarks by Mr. Hall and Mr. McClearn, Gary Sharpe discussed the I-69 Strategic Corridor Planning Study Overview of Existing Conditions: Julian M. Carroll Purchase Parkway and Interstate 24 draft report. A draft copy of this report was given to the project team for review and comparison since these two planning studies are very similar. It was further discussed, since these two planning studies are similar, that the previous scope of services will be used to develop the initial scope for this project. The consultant was advised that it was the KYTC's intent that a scope of services be developed consistent with the \$275,000 advertised lump sum fee.

The project covers approximately 100 miles and five counties (Warren, Butler, Ohio, Daviess, and Henderson). The project corridor also connects three Metropolitan Planning Organizations (Henderson, Owensboro, and Bowling Green, KY). It consists of three major segments. The first segment is the entire length of the Audubon Parkway. It travels from the Pennyrile Parkway in Henderson, KY to the US 60 Bypass in Owensboro, KY. The second segment is the US 60 Bypass in Owensboro. For this project, the segment of the US 60 Bypass considered is between the Audubon Parkway west of Owensboro eastward to the William H. Natcher Parkway (Natcher Parkway). The third segment of this study is the Natcher Parkway from US 60 Bypass in Owensboro, KY to I-65 in Bowling Green, KY.

The meeting continued with discussing prior I-66 and I-69 studies relevant to this study. The following studies were referenced.

- Southern Kentucky Corridor I-66 Economic Justification and Financial Feasibility Study – May 1997
- Corridor 18 Feasibility Study November 1995
- Corridor 18 Special Issues Study July 1997
- I-66 Bowling Green Outer Beltline 2004

The following references were identified as applicable for geometric and engineering criteria:

- AASHTO Policy on Geometric Design of Highways and Streets, 2004 Edition
- AASHTO Policy on Design Standards Interstate Standards, 2005
- AASHTO Roadside Design Guide, 2006
- Division of Highway Design Manual, current edition

A handout was provided illustrating the AASHTO minimum guidelines for design elements of an interstate facility. The design elements listed will be verified by reviewing As-built plans and the Highway Information System (HIS) database. In addition, interchange ramp taper lengths will be measured from As-built plans and verified in the field.

The project team discussed the need for an Environmental Justice Review. The project team decided that there was not a need to conduct an Environmental Justice Review at this time, because any recommended improvements would be within the existing right-of-way. In addition, the need for an Environmental Overview and Geotechnical Overview was discussed. It was concluded that there was no need to conduct an Environmental Overview or a Geotechnical Overview at this time because any recommended improvements would be confined to existing right-of-way. If needed at a later date, the Geotechnical Overview will be conducted by KYTC.

The extent that safety hardware and more specifically guardrail end treatments meet current criteria will be evaluated for this project. The consultant was directed to identify any second generation or older guardrail end treatments that do not meet current standards. Length of need will not be evaluated.

After discussion, it was ultimately decided that the annual growth rates for traffic analyses will differ along the study corridor. For example, the Natcher Parkway annual growth rate will differ from US 60 Bypass annual growth rate. Therefore, it was decided that the consultant will recommend the annual growth rates for the project and coordinate with KYTC Central Office Planning, for approval. Prior I-69 and I-66 studies may be considered and will be referenced for future traffic projections with and without I-69 and I-66. Any traffic counts needed will be conducted by KYTC.

Treatment of roadside signs was discussed. The consultant was advised during the assessment of existing conditions that roadside signs that (1) were not shielded by guardrail, and (2) did not include *break-away posts* should be identified and addressed in the report. Signs that are obviously outside the clear zone should be noted as such.

The importance of identifying substandard vertical clearances was discussed as a critical aspect for the report. The consultant advised that initial screening for substandard vertical clearances will be done using as-built plans, plans from more recent pavement rehabilitation projects, and data from pavement management records. The consultant concurred that vertical clearances will be verified in the field. Vertical clearance maps will be obtained and reviewed, if available.

Areas with a significant crash history were discussed. It was mentioned that there may be a significant history of crashes at the US 60 Bypass and Audubon Parkway interchange. Crash history data will be collected for the 2006-2010 period. Crash analysis will be conducted utilizing the Kentucky Transportation Center's Analysis of Traffic Accident Data in Kentucky methodology. Fatal crashes will be distinguished in the crash analysis. The consultant will evaluate crash history data in combination with non-compliant design features to determine if there is a direct relationship between crash history and noncompliant design features.

The differences in criteria between urban and rural interstates were discussed. It was discussed that for the urban areas Owensboro, Bowling Green, and Henderson, sections of the Parkways and US 60 Bypass within these urban areas will be evaluated on the basis of urban interstate standards. The need for a study for an alternative alignment to connect the Audubon and Natcher Parkways was discussed. The project team concurred that there might be a need to include a cursory alignment study in the study report for comparison of impacts and costs. *However in a follow-up meeting concerning the Study Report for SIU 6 from Fulton to Eddyville, the consultant was advised alternative alignments should not be included in the report for SIU 6 (June 8, 2011).* Thus, this topic will need further discussion as the scope of work is developed.

The I-66 Bowling Green Outer Beltline Study presents three alternative corridors for I-66 in the vicinity of Bowling Green, KY. This study will be reviewed and referenced in the report.

Currently (2010) the Audubon Parkway and US 60 Bypass are on the Extended Weight Coal Haul Highway System. As part of this study, the coal haul routes will be indentified within the project corridor and the weight and axle restrictions of an interstate will be compared to the existing restrictions on these routes.

Currently, the Natcher Parkway is being extended east from I-65 to US 231 in Bowling Green, KY. The Natcher Parkway and I-65 interchange is the beginning (MP 0.00) of the Natcher Parkway. The extension will result in moving the beginning of the parkway to US 231. The report will include mileage reference to the current and future mile post of the Natcher Parkway. Since the extension project is under construction, the proposed I-65 and Natcher Parkway interchange will be reviewed as existing. In addition, it was noted that there is an interchange proposed on the Natcher Parkway at KY 626 in Warren County. This interchange will be included in the report.

The meeting concluded with a brief discussion of the proposed Public Meetings for this project. It was agreed that instead of public meetings, stakeholder meetings will be held in conjunction with the Owensboro and Bowling Green MPO meetings. These meetings with the MPO will include local officials. It is anticipated that theses meetings will be held in the Spring 2012. Palmer will provide Jeff Moore of District 3 and Kevin McClearn a copy of the I-69 Strategic Corridor Planning Study for the Purchase Parkway and I-24 for their reference in communicating the purpose of this planning study with the Bowling Green and Owensboro MPO. Stakeholder meetings will be held after the Preliminary Recommendations phase and prior to the Draft Report submittal. The following is a tentative project schedule.

- Notice to Proceed
- Assessment of Existing Conditions
- Preliminary Recommendations
- Public Meeting
- Draft Report
- IDT Meeting
- Final Report

July 13, 2011 November 1, 2011 November 15, 2011 Spring 2012 July 2, 2012 July 16, 2012 September 30, 2012

An IDT meeting is being scheduled for review of the Draft I-69 Strategic Corridor Planning Study - Overview of Existing Conditions: Julian M. Carroll Purchase Parkway and Interstate 24 report. *In follow-up discussions, the IDT Meeting for this project has been scheduled for July 26, 2011.* Members of the Project Team for this project will be invited to attend.

Prepared By: Will Conkin, PE, PTOE Gary W. Sharpe, PE, PLS

AASHTO MINIMUM GUIDELINES

Area Туре				Rural			Urban		Urban/Rural		
Design Element	2004 AASHTO Guide	2005 AASHTO Policy	Mainline	Ramps	Loops	Mainline	Ramps	Loops	Directional	Entrance	Exit
Design Speed (MPH)	507,825,826	2	70	35	25	50	25	25	40		\sim
Driving Lane Width	504,838	3	12'	15'	15'	12'	15'	15'			\sim
Inside Shoulder Width	505,838	3									
4-lane freeway & ramps	505,510,513,838	3				4'					
6-lane, Truck DDHGV<=250	505,510,513,838	3	4'	2'-4'	2'-4'	10'	2'-4'	2'-4'	1'-6'		\sim
6-lane, Truck DDHGV>250	505,510,513,838	3				12'					\sim
Outside Shoulder Width	505,838	3									
Truck DDHV <= 250	505,838	3	10'	8'-10'	8'-10'	10'	8'-10'	8'-10'	8'-10'		\sim
Truck DDHV > 250	505,838	3	12'	8-10	8-10	12'	8-10	8-10	8-10		
Median Width	509	4	36'			10'	\sim				
Over Freeway Vertical Bridge Clearance	506,763						16'-00"				
Over Freeway Vertical Sign Truss Clearance	507		17-'00"								
Bridge Width (Horizonatal) ADT>2000	386	5	Traveled Lanes + Shoulders (approach raodway width)								
Bridge Width (Horizonatal) ADT>2000 ¹		5				Traveled	Lanes + 4'	each side			
Design ADT (vehicles per day)			> 6,000	750-	1,500	> 6,000	750-	1,500			
Clear Zone (Fill Slope 1V:4H or flatter) ²	Roadside Design Guide		30'-46'	10'	-14'	20'-28'	10'	-14'			\sim
Clear Zone (Cut Slope 1V:3H or flatter) ²	Roadside Design Guide		22'-30'	10'	-12'	14'-22'	10'	-12'			
Superelevation	505					+/-8%					\sim
Horizontal Curvature Minimum Radius (8% max SE)	170		1810'	314'	134'	758'	134'	134'	444'		\sim
Minimum Runoff (8% mas SE)	181		240'	155'	137'	192'	137'	137'	166'		\sim
Minimum Runout (8% mas SE)	181		60'	39'	34'	48'	34'	34'	41'		\sim
Maximum Grade	506,829		4%	5%-7%	5%-7%	5%	5%-7%	5%-7%	4%-6%		
Stopping Sight Distance	112		730'	250'	155'	425'	155'	155'	305'		
Taper Ratio	845			\sim			\sim			50:1	
Divergence Angle	849			\sim			\sim				2°-5°

¹ This item is referenced in the AASHTO A Policy on Design Standards - Interstate System

² Information on clear zones is provided in AASHTO's Roadside Design Guide.

MEETING REPORT Progress Meeting Strategic Corridor Planning Study I-69 Spur, I-66/I-65 Spur and US 60 Connection Overview of Existing Conditions of Audubon and William H. Natcher Parkways and US 60

JANUARY 28, 2012

A Project Progress Meeting was conducted on January 10, 2012 for this project at the District 2 Office in Madisonville, Kentucky.

Attendees were:

Kevin McClearn Nick Hall Jason Ward John Rudd Gary Sharpe Will Conkin KYTC – District 2 KYTC – District 2 KYTC – District 2 KYTC – District 2 Palmer Engineering Palmer Engineering Kevin.mcclearn@ky.gov Nick.hall@ky.gov Jason Ward@ky.gov John.rudd@ky.gov Gsharpe@palmernet.com Wconkin@palmernet.com

Attendees via Video Teleconference from Central Office in Frankfort were:

Keith Damron	KYTC – Central Office	Keith.damron@ky.gov
Steve Ross	KYTC – Central Office	Steve.ross@ky.gov
Amy Thomas	KYTC – Central Office	Amy.Thomas@ky.gov

Attendees via Video Teleconference from the District 3 Office in Bowling Green were:

Greg Meredith	KYTC – District 3
Jeff Moore	KYTC – District 3
Deneatra Henderson	KYTC – District 3
Joe Plunk	KYTC – District 3
Broc Porter	KYTC – District 3
Cole Overstreet	KYTC – District
Eric Druen	BRADD
Amy Scott	BRADD/MPO

Greg.meredith@ky.gov Jeff.moore@ky.gov Deneatra.henderson@ky.gov Joseph.plunk@ky.gov Broc.porter@ky.gov Cole.overstreet@ky.gov edruen@bradd.org Ascott@bradd.org

Attendees via Video Teleconference from the GRADD in Owensboro were:

Gina Boaz	GRADD	<u>ginaboaz@gradd.com</u>
Jennifer Wedding	GRADD	jenniferwedding@gradd.com

Nick Hall opened the meeting with a brief discussion of the project. Following introductions and review of the agenda (**Attachment A**), Gary Sharpe summarized the status of the project. A power point presentation was presented summarizing data collected and the

progress status for the project. During the presentation, the following discussions occurred referring to project development. A copy of the "*Pre-Study*" *Kick Off Meeting* minutes was provided as a handout and reviewed (**Attachment B**). Also provided was a table illustrating the AASHTO minimum guidelines for an interstate facility (**Attachment C**). This table references the minimum AASHTO criteria for roadway geometry design elements on an interstate.

During the discussions for design exceptions and design variances, it was noted that KYTC has a formal agreement with FHWA on the segment of I-69 between I-24 and the Edward T. Breathitt (Pennyrile) Parkway interchange along the Western Kentucky Parkway. This segment is currently signed as I-69. Currently, this is the only segment of the proposed I-69 corridor for which a formal agreement has been made between KYTC and FHWA.

Since the "*Pre-Study*" *Kick Meeting,* held on May 25, 2011, the Natcher Parkway extension project was opened to traffic. Extension of the Natcher Parkway project increased the mileage on the Natcher Parkway by approximately 2.08 miles. The updated mileage log will be referenced in the report since the milepost and corresponding exits have been updated along the route.

During review of the crash analysis, it was noted that the project segment of US 60 was previously designated US 60 Bypass during the crash analysis period (2006-2010). Because of recent agreements with the City of Owensboro, US 60 has been rerouted onto what was previously designated the US 60 Bypass – thus the bypass designation has been eliminated. The change in designation also changed the mileage log and exit numbers along the project segment of US 60. This mileage updated was taken into consideration in the crash history collection and presentation of the crash analysis. The crash history was collected for the project segment of US 60 using key word searches: US 60, US 60 Bypass, and Wendell Ford Expressway in the Collision Report Analysis for Safer Highways (CRASH) database. The project crash database was then developed and verified based on route name, mileage, and GIS.

It was noted during the traffic operations discussion that the annual growth rate recommendations presented were based on existing I-69 and I-66 studies including the I-66 Bowling Green Outer Beltline study and historical traffic growth. These recommendations had previously been coordinated with Division of Planning. Traffic background documentation is included as **Attachment D**. Annual growth rate recommendations for the project are included as **Attachment E**. These recommendations will be further evaluated by Central Office, District 2 staff, and District 3 staff. Future traffic volumes will be calculated based on the final annual growth rate recommendations and 2011 existing traffic counts. The 2011 traffic counts should be available by the end of January or early February 2012.

As-built plans indicate the design speed for the Natcher Parkway is 70 mph, 80 mph for the Audubon Parkway and 60 mph for the project segment of US 60. Regardless of the route original design speed, the roadway geometry and operational considerations (LOS) will be evaluated based on the 50 mph design speed for an urban interstate and 70 mph design speed for a rural interstate

The urban and rural boundaries where discussed concerning evaluation of existing conditions and analysis. The most current urban boundaries (based on the 2000 census) will be referenced for determining the urban and rural limits of the project routes.

The BRADD, GRADD, Bowling Green MPO and Owensboro MPO transportation plans will be reviewed for identified projects along the Audubon Parkway, Natcher Parkway, and US 60. The projects identified along these routes will be provided as information only in the report.

The Coal Haul Highway System, Coal By-products Haul Road System, and Extended Weight Coal System on Kentucky Highways designations were discussed. The report will include a discussion on these systems and current vehicle weight requirements and limitations on the Audubon Parkway, Natcher Parkway and US 60. The discussion will also include the FHWA interstate criteria for vehicle weight and axle loading requirements.

The meeting concluded with a brief discussion of the project milestones and dates.

- Complete Overview of Existing Conditions
- Meeting with MPOs
- Draft Recommendations
- Draft Report
- IDT Meeting
- Final Report

March 2012 April 2012 June 2012 August 2012 September 2012 November 2012

Prepared By:	Will Conkin, PE, PTOE
	Gary W. Sharpe, PE, PLS

AGENDA

Progress Meeting

I-69 Spur, I-66/I-65 Spur and US 60 Connection Strategic Corridor Planning Study Overview of Existing Conditions of Audubon Parkway, William H. Natcher Parkway and US 60 Henderson / Daviess / Ohio / Butler / Warren Counties District 2 Office, Madisonville January 10, 2012

- A. Introductions
- **B.** Opening Comments
 - I. Purpose of Meeting
 - II. Pre-Design Meeting Review (Handout)
- C. AASHTO A Policy on Design Standards Interstate Highways -- January 2005
 - I. Summary of Design Standards (Table)
 - II. Design Exceptions versus Design Variances Draft Agreement with FHWA
- D. Overview of Existing Conditions Progress Review
 - I. Study Area
 - II. Operational and Safety Considerations
 - a. Crash History and Analysis
 - i. Number of Crashes
 - ii. Critical Rate Factor
 - iii. Spot Crash Analyses
 - iv. Analyses of Crash Causes
 - v. Crashes at Interchanges
 - b. Traffic Volumes and Operational Level of Service
 - i. Recommended Growth Rates
 - ii. 2011 Actual / DDHV (Classification Counts)
 - iii. Level of Service Analyses
 - III. Mainline Geometry / Typical Sections
 - IV. Bridges and Overpasses
 - V. Interchanges and Ramps
- E. Anticipated Schedule
 - I. Complete Overview of Existing Conditions
 - II. Meeting with MPOs
 - III. Draft Recommendations
 - IV. Draft Report
 - V. IDT Meeting
 - VI. Final Report
- F. Questions / Discussions
- G. Adjourn

March 2012 April 2012 June 2012 August 2012 September 2012 November 2012

Area Type		Rural			Urban		Ur	ban/Rural	
Design Element	Mainline	Ramps	Loops	Mainline	Ramps	Loops	Directional	Entrance	Exit
Design Speed (MPH) (507,825,826) [2]	70	35	25	50	25	25	40		
Level of Service (504, 838) [3]		С			D				
Driving Lane Width (504,838) [3]	12'	15'	15'	12'	15'	15'			
Inside Shoulder Width (505,510,513,838) [3]								-	
4-lane freeway & ramps				4'					
6-lane, Truck DDHGV<=250	4'	2'-4'	2'-4'	10'	2'-4'	2'-4'	1'-6'		
6-lane, Truck DDHGV>250				12'					
Outside Shoulder Width (505,838) [3]			•	•		•			
Truck DDHV <= 250	10'	01401	01.4.01	10'	01401	01401	01.4.01		
Truck DDHV > 250	12'	8-10	8-10	12'	8-10	8-10	8-10		
Median Width (509) [4] ¹	36'			10'					
Over Freeway Vertical Bridge Clearance (506,763)		-		•	16'-00"	-		-	
Over Freeway Vertical Sign Truss Clearance (507)					17-'00"				
Bridge Width (Horizonatal) ADT>2000			Traveled	Lanes + Sh	oulders (ap	proach rao	dway width)		
Bridge Width (Horizonatal), Length > 200' ²				Traveled	Lanes + 3.5	5' each side	;		
Design ADT (vehicles per day)	> 6,000	750-1	1,500	> 6,000	750-1	1,500			
Clear Zone (Fill Slope 1V:4H or flatter) ³	30'-46'	10'	-14'	20'-28'	10'	-14'			
Clear Zone (Cut Slope 1V:3H or flatter) ³	22'-30'	10'	-12'	14'-22'	10'	-12'		\sim	
Superelevation (505) ⁴				+/-8%					
Horizontal Curvature Minimum Radius (8% max SE) (170)	1810'	314'	134'	758'	134'	134'	444'		
Minimum Runoff (8% max SE) (181)	240'	155'	137'	192'	137'	137'	166'		
Minimum Runout (8% max SE) (181)	60'	39'	34'	48'	34'	34'	41'		
Maximum Grade (506,829)	4%	5%-7%	5%-7%	5%	5%-7%	5%-7%	4%-6%		
Stopping Sight Distance (112)	730'	250'	155'	425'	155'	155'	305'		
Taper Ratio (845)								50:1	-
Divergence Angle (849)									2°-5°

Note: Page number references from AASHTO's A Policy on Geometric Design of Highways and Streets, 2004 are provided in parenthesis. Page number reference from AASHTO's A Policy on Design Standards Interstate System, 2005 are provided in brackets.

¹ AASHTO's A Policy on Design Standards Interstate System, 2005 states 36' minimum depressed median in rual areas. AASHTO's A Policy on Geometric Design

²This item is referenced in the AASHTO A Policy on Design Standards Interstate System, 2005

³ Information on clear zones is provided in AASHTO's *Roadside Design Guide Current Edition*.

⁴ Common KYTC Practice is 8% maximum superelevation. KYTC has used 10% maximum superelevation on past projects including the Purchase Parkway.

AASHTO Minimum Guidelines

I-69 Spur, I-66 / I-65 Spur and US 60 Connection: Traffic Projection Background Data and Growth Rate Recommendation

The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), identified I-69 (Corridor 18) as a high priority corridor on the National Highway System. The Federal Highway Administration (FHWA) later concluded (1995) that construction of I-69 from Mexico to Canada was feasible. The Corridor 18 Special Issues Study (1997) further identified a representative corridor through Kentucky that followed much of the Parkway system in western Kentucky including the Julian M. Carroll (Purchase) Parkway, the Wendell H. Ford (Western Kentucky) Parkway, and the Edward T. Breathitt (Pennyrile) Parkway. I-69 in Kentucky will extend from Fulton at the Tennessee State Line along the Purchase Parkway, I-24, Western Kentucky Parkway, and Pennyrile Parkway to Henderson before crossing the Ohio River into Indiana.

I-69 Spur is intended to link Owensboro to Henderson and I-69 via the Audubon Parkway. The Natcher Parkway will serve as the I-66/I-65 Spur following the Natcher Parkway between Bowling Green and Owensboro. A segment of US 60 in Owensboro will connect the I-69 Spur and the I-66/I-65 Spur. With these improvements, Owensboro will have interstate access to the high priority corridor I-69, I-65, and I-66, improving regional connectivity and traffic flow between Owensboro, Henderson, Madisonville, and Bowling Green.

The purpose of I-69 Spur, I-66 / I-65 Spur and US 60 Connection Planning Study is to identify improvements needed to bring the Audubon and Natcher Parkways and US 60 to current standards to become part of the interstate system in Kentucky as either the I-69 Spur or I-66 / I-65 Spur.

As part of the project, the current and future operations of the Audubon and Natcher Parkways and US 60, functioning both a parkways/expressway and an interstate, will be evaluated for the proposed interstate spur designation. The evaluation of the operational considerations include a traffic analysis of the Audubon and Natcher Parkway and US 60. Current and future traffic projections will be needed based on the parkways/expressways with and without I-69, I-65/I-65 Spur designation. The current traffic volumes for this project will be based on KYTC HIS database and traffic classification counts.

Natcher Parkway Annual Growth Rate Recommendation

The available relative studies were reviewed to estimate growth rates of the parkways/expressways with the introduction of I-69 and I-66. The first studies reviewed with consideration to future traffic projection along the Natcher Parkway with and without I-66 was *Southern Kentucky Corridor (I-66) Planning Study* and *Bowling Green Outer Beltline Corridor Planning Study*. These reports were prepared for the Kentucky Transportation Cabinet by Bernardin, Lochmueller & Associates, Inc in October 2004. The purpose of I-66 Corridor Planning Study was to "identify and evaluate alternative interstate corridors, including a "no build" corridor, for the I-66 Corridor, between the William H. Natcher Parkway and the Louie B. Nunn (Cumberland) Parkway". The purpose of the Bowling Green Outer Beltline Corridor Planning Study was to "identify and evaluate alternative freeway corridors, including a "no build" corridor for the Bowling Green Outer Beltline". A traffic analysis was conducted to serve both of these planning studies. The traffic analysis presented findings based on three scenarios: (1) I-66 as an individual project, (2), Bowling Green Beltline as an individual project, and (2) a combined I-66 and Bowling Green Beltline project.

The projects included developing a Regional Travel Model to evaluate the traffic considerations for the three scenarios mentioned above and is a comprised of the Kentucky Statewide Traffic Model (KySTM) and the Bowling Green Transportation Plan Travel Model. The Bowling Green Transportation Plan Model was built using planning software MinuTP.

The I-66 Corridor Planning Study recommended four corridors for further consideration based on the project screening process; No-build Corridor, Corridor 10, Corridor 11, and Corridor 12. Refer to pages 56-61 of the Technical Memorandum: Traffic Analysis FINAL REPORT for I-66 corridor descriptions and traffic analyses. The Bowling Green Outer Beltline Planning Study recommended two corridors for further considerations based on the project screening process; Corridor A and Corridor B. Refer to pages 62-66 of the Technical Memorandum: Traffic Analysis FINAL Report for Bowling Green Outer Beltline corridor descriptions and traffic analyses. These corridors were combined and analyzed. The combined corridor descriptions and analyses are presented on pages 67-69 of the Technical Memorandum: Traffic Analysis FINAL Report.

The results of the traffic analyses for the combined corridors were reviewed for future traffic projections along the Natcher Parkway. The following table illustrates the study existing (Year 2000) and future (Year 2030) traffic volumes for the Natcher Parkway from I-65 in Bowling Green to US 60 in Owensboro. These volumes were developed with the Regional Travel Model in the planning study. All of the corridors, including the No-Build (Existing plus Committed-E+C) option, includes some of the programmed improvements from the KYTC 2002 and 2000 Six Year Highway Plan (See page 46 of the Technical Memorandum: Traffic Analysis FINAL REPORT). The corridors reviewed and findings in **Table 1** are based on the report recommendations. The 2010 Average Daily Traffic (ADT) are included in **Table 1** for comparison. The Annual Growth Rates (AGR) presented in **Table 1** were calculated from the Year 2000.

The options analyzed in the Technical Memorandum: Traffic Analysis FINAL REPORT were compared to the options in the I-69 Spur, I-66 / I-65 Spur and US 60 Connection Planning Study for the Natcher Parkway.

- **2030 Natcher Parkway without I-66 and without the Beltline** 2030 Existing Plus Committed (State Data Center Scenario): Highlighted BLUE
- **2030 Natcher Parkway with I-66 and without the Beltline** 2030 I-66 Corridor 12: Highlighted RED
- **2030 Natcher Parkway without I-66 and with the Beltline** 2030 Outer Beltline B: Highlighted YELLOW
- **2030 Natcher Parkway with I-66 and with the Beltline** 2030 Corridor 11 or 12 with Beltline A: Highlighted GREEN

Table 2 illustrates the future traffic projections for the Natcher Parkway based on the growthrates used in the Technical Memorandum: Traffic Analysis FINAL REPORT.**Figures 1**through **5** show the traffic segments along the Natcher Parkway.

	A	nnual Daily Tr	affic (ADT) & Annual G	rowth Rate	(AGR) - Nate	cher Pwky			
	SEGM	ENT 1	SEGN	/IENT 2	SEGM	IENT 3		SEG	MENT 4-5	
Year / Corridor Option	I-65 to l	JS 31W	US 31W	/ to US 68	US 68 to	0 US 231		US 231 to	US 231 (KY 7	'9)
	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000	AD	т	AC	GR 2000
2000 Existing - Planning Study	13,600	-	13,800	-	7,820	-	8,4	90		-
2010 (KTC Traffic Counts)	19,500	3.67%	19,100	3.30%	12,200	4.55%	11,1	.00		2.72%
2030 Existing Plus Committed	40 997	3 75%	37 810	3 4 2 %	21 838	3 48%	17 1	55		2 37%
(KY Statewide Traffic Model)	10,557	3.7370	57,010	3.12/0	21,000	3.1070	17,1	.55		2.3778
2030 Existing Plus Committed	47,779	4.28%	42,762	3.84%	24,267	3.85%	19,2	.04	:	2.76%
(State Data Center Scenario)	10 5 60		44.200	2.070(25 670		20.0	0.2		0.050/
2030 I-66 Corridor 12	49,569	4.41%	44,399	3.97%	25,678	4.04%	20,8	83		3.05%
	SEGM	ENT 1	SEGN	/ENT 2	SEGM	IENT 3	SEGME	ENT 4	SEGMENT 5	
Year / Corridor Option	I-65 to l	JS 31W	US 31W	to US 68	US 68 to	5 US 231	US 231 to	Beltline	Beltline to	US 231 (KY 79)
	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000
2030 I-66 Corridor 10	44,147	4.00%	39 <i>,</i> 459	3.56%	22,583	3.60%	13,608	1.58%	22,922	3.37%
2030 I-66 Corridor 11	43,268	3.93%	39,335	3.55%	24,134	3.83%	13,391	1.53%	24,258	3.56%
2030 Outer Beltline A	44,168	4.00%	40,421	3.65%	24,560	3.89%	13,425	1.54%	23,827	3.50%
2030 Outer Beltline B	45,124	4.08%	40,047	3.62%	23,033	3.67%	13,640	1.59%	22,440	3.29%
2030 Corridor 10 w/ Beltline B	45,124	4.08%	40,047	3.62%	23,033	3.67%	13,640	1.59%	22,440	3.29%
2030 Corridor 11 or 12 w/ Beltline A	44,168	4.00%	40,421	3.65%	24,560	3.89%	13,425	1.54%	23,827	3.50%
			1							
	SEGMENT 6		SEGN	/IENT 7	SEGM	ENT 8	SEGME	ENT 9	SEG	MENT 10
Year / Corridor Option	US 231 (KY 79) to KY 70		KY 70 to US 231		US 231 to WK Pwky		WK Pwky	to KY 69	KY 69 to	US 60 Bypass
	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000
2000 Existing - Planning Study	9,980	-	9,280	-	7,010	-	6,510	-	5,520	-
2010 (KTC Traffic Counts)	10,900	0.89%	8,840	-0.48%	7,450	0.61%	8,540	2.75%	9,580	5.67%
2030 Existing Plus Committed	14 437	1 24%	12 985	1 1 3%	12 040	1 87%	12 552	2 2 1 %	11 464	2 47%
(KY Statewide Traffic Model)	14,437	1.2470	12,505	1.1570	12,040	1.0270	12,552	2.2170	11,404	2.4770
2030 Existing Plus Committed	15.902	1.56%	14.159	1.42%	13.897	2.31%	14.498	2.70%	13.308	2.98%
(State Data Center Scenario)	- ,		,		- /		,		- ,	
2030 I-66 Corridor 12	17,595	1.91%	15 <i>,</i> 850	1.80%	15,699	2.72%	14,322	2.66%	13,058	2.91%
			1							
	SEGM	ENT 6	SEGN	/IENT 7	SEGM	ENT 8	SEGME	ENT 9	SEG	MENT 10
Year / Corridor Option	US 231 (KY 7	79) to KY 70	KY 70 t	o US 231	US 231 to	WK Pwky	WK Pwky	to KY 69	KY 69 to	US 60 Bypass
	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000	ADT	AGR 2000
2030 I-66 Corridor 10	18,834	2.14%	16,656	1.97%	16,263	2.84%	14,611	2.73%	13,309	2.98%
2030 I-66 Corridor 11	19,030	2.17%	16,789	2.00%	16,382	2.87%	14,666	2.74%	13,316	2.98%
2030 Outer Beltline A	18,598	2.10%	16,345	1.90%	15,926	2.77%	14,381	2.68%	13,058	2.91%
2030 Outer Beltline B	18,418	2.06%	16,233	1.88%	15,842	2.76%	14,358	2.67%	13,057	2.91%
2030 Corridor 10 w/ Beltline B	18,418	2.06%	16,233	1.88%	15,842	2.76%	14,358	2.67%	13,057	2.91%
2030 Corridor 11 or 12 w/ Beltline A	18,598	2.10%	16,345	1.90%	15,926	2.77%	14,381	2.68%	13,058	2.91%

Table 1 Natcher Parkway Annual Daily Traffic and Annual Growth Rates – Data from Technical Memorandum: Traffic Analysis FINAL REPORT 2004

Annual Daily Traffic (ADT) & Annual Growth Rate (AGR) - Natcher Pwky											
	SEGM	ENT 1	SEGN	1ENT 2	SEGM	ENT 3		SEG	MENT 4-5		
Year / Corridor Option	I-65 to l	JS 31W	US 31W	to US 68	US 68 to	US 231		US 231 to	US 231 (KY 7	'9)	
	ADT	AGR	ADT	AGR	ADT	AGR	AD.	Г		AGR	
2010 Existing (KTC Traffic Counts)	19,500	-	19,100	-	12,200	-	11,1	00		-	
2040 Natcher Parkway without I-66 and without Beltline	68,600	4.28%	59,200	3.84%	37,900	3.85%	25,2	00		2.76%	
2040 Natcher Parkway with I-66 and without Beltline	71,100	4.41%	61,500	3.97%	40,100	4.04%	27,4	00		3.05%	
			1						r		
	SEGM	ENT 1	SEGN	1ENT 2	SEGM	ENT 3	SEGME	NT 4	SEGMENT 5		
Year / Corridor Option	I-65 to l	JS 31W	US 31W	to US 68	US 68 to	US 231	US 231 to	Beltline	Beltline to US 231 (KY 79)		
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	
2040 Natcher Parkway without I-66 and with Beltline	64,700	4.08%	55,500	3.62%	36,000	3.67%	17,900	1.59%	29,400	3.29%	
2040 Natcher Parkway with I-66 and with Beltline	63,400	4.00%	56,000	3.65%	38,400	3.89%	17,600	1.54%	31,200	3.50%	
									•		
	SEGMENT 6		SEGMENT 7		SEGM	ENT 8	SEGME	NT 9	SEG	IMENT 10	
Year / Corridor Option	US 231 (KY 7	79) to KY 70	KY 70 to US 231		US 231 to WK Pwky		WK Pwky to KY 69		KY 69 to US 60 Bypass		
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	
2010 Existing (KTC Traffic Counts)	10,900	-	8,840	-	7,450	-	8,540	-	9,580	-	
2040 Natcher Parkway without I-66 and without Beltline	17,400	1.56%	13,500	1.42%	14,800	2.31%	19,100	2.70%	23,100	2.98%	
2040 Natcher Parkway with I-66 and without Beltline	19,300	1.91%	15,100	1.80%	16,700	2.72%	18,800	2.66%	22,700	2.91%	
					-						
	SEGM	ENT 6	SEGN	1ENT 7	SEGM	ENT 8	SEGME	NT 9	SEG	IMENT 10	
Year / Corridor Option	US 231 (KY 7	79) to KY 70	KY 70 to	o US 231	US 231 to	WK Pwky	WK Pwky t	to KY 69	KY 69 to	US 60 Bypass	
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	
2040 Natcher Parkway without I-66 and with Beltline	18,200	2.06%	14,100	1.88%	14,700	2.76%	16,600	2.67%	19,700	2.91%	
2040 Natcher Parkway with I-66 and with Beltline	18,400	2.10%	14,200	1.90%	14,800	2.77%	16,600	2.68%	19,700	2.91%	

Table 2 Natcher Parkway - Calculated Annual Daily Traffic and Annual Growth Rates (based on data from Technical Memorandum: Traffic Analysis FINAL REPORT 2004)



Figure 1 Natcher Parkway Segments 1 through 4/5 and Annual Growth Rates based on Technical Memorandum: Traffic Analysis FINAL REPORT 2004



Figure 2 Natcher Parkway Segments 4/5 & 6 and Annual Growth Rates based on Technical Memorandum: Traffic Analysis FINAL REPORT 2004



Figure 3 Natcher Parkway – Segments 7 & 8 and Annual Growth Rates based on Technical Memorandum: Traffic Analysis FINAL REPORT 2004



Figure 4 Natcher Parkway – Segments 9 & 10 and Annual Growth Rates based on Technical Memorandum: Traffic Analysis FINAL REPORT 2004



Figure 5 Natcher Parkway – Segment 10 and Annual Growth Rates based on Technical Memorandum: Traffic Analysis FINAL REPORT 2004)

It is shown that the annual growth rates calculated from the YR 2000 traffic volumes to YR 2010 along the Natcher Parkway are close to the annual growth rates projected for the 2030 Existing Plus Committed (KY Statewide Traffic Model) and 2030 Existing Plus Committed (State Data Center Scenario) in the Technical Memorandum: Traffic Analysis FINAL REPORT. With the exception of Segments 3 and 10, the calculated annual growth rates are slightly less than the projected annual growth rates.

Since the time of the Technical Memorandum: Traffic Analysis FINAL REPORT publication the Kentucky Transportation Cabinet have updated their statewide traffic models with newer software and data. The growth rates developed in the report were based on a 1997 traffic model. Also since the time of the publication, the economy and job growth has not grown at the rate which was modeled in the report. **Table 3** illustrates the historical ADT volumes for the Natcher Parkway by segment of study. Based on this information and YR 2000-2010 calculated annual growth rates the annual growth rates and future traffic volumes for the Natcher Parkway are recommended for the I-69 Spur, I-66 / I-65 Spur and US 60 Connection Planning Study in **Table 4** and shown in **Figures 6-10**.

			Н	ISTORICAL	ANNUAL DAIL	Y TRA	FFIC			
				HISTORICAL ANNUAL DAILY TRAFFIC NATCHER PARKWAY 4-5 6 7 8 9 58 US 231 US 231(KY 79) KY 70 US 231 to WK Pkwy to 31 US 231(KY 79) KY 70 US 231 WK Pkwy KY 69 I 30 11,300 11,300 8,720 7,830 7,790 I 30 11,100 10,900 8,840 7,450 8,540 I 30 10,100 10,500 8,410 7,650 7,660 I 30 10,200 10,100 7,790 6,500 I I 30 10,200 10,700 8,420 7,380 6,530 I 30 10,400 10,700 8,420 7,380 6,530 I 30 10,100 9,860 6,600 6,770 5,510 I 30 10,400 6,990 7,200 6,830 5,080 I 30						
SEGMENT	1	2	3	4-5	6	7	8	9	10	
	I-65	US 31W	US 68	US 231	US 231(KY 79)	KY 70	US 221 to		KY 69	
YEAR	to	to	to	to	to	to	WK Pkwy		to	
	US 31W	US 68	US 231	US 231(KY 79)	KY 70	US 231	VVIX I KVVy	111 03	US 60	
2011 ¹	20,200	19,100	11,900	11,300	11,300	8,720	7,830	7,790	8,900	
2010	19,500	19,100	12,200	11,100	10,900	8,840	7,450	8,540	9,580	
2009	18,200	16,900	10,900	10,100	10,500	8,410	7,650	7,660	8,970	
2008	22,200	17,300	11,100	10,200	10,100	7,790		6,500	8,400	
2007	19,300	18,500	11,200	10,400	10,700	8,420	7,380	6,530	6,400	
2006	17,100	17,400	11,200	10,100	9,860	6,600	6,770	5,510	6,270	
2005	15,700	16,900	9,220	9,060	9,590	6,240	6,670	5,260	5,890	
2004	17,300	16,800	9,600	10,300	9,500	7,200	6,830	5,080	6,230	
2003	15,200	15,200	8,010	9,100		6,800	5,600	5,130	5,940	
2002	14,300					8,420				
2001	15,100	13,400	7,850	9,340	7,410	6,650	7,010	6,020	6,370	
2000	13,600	13,800	7,820	8,490	9,980	9,280		6,510	5,520	
1999		13,700	8,450	10,400	6,090	6,090		7,970	9,460	
1998	12,600	12,300	5,520	7,470	7,660	7,660	6,180	4,760	5,660	
1997	10,700	11,300	7,120	8,850	5,360	5,360	6,330	6,230		
1996	12,600	12,100	6,890	6,140	4,670	4,670	7,020	5,770	6,260	
1995	7,850	12,100	6,670	4,800	4,820	4,820		5,080	6,680	
1994	9,090	10,500	6,280		4,540	4,540	4,530	4,860	3,370	
1993		10,500	5,880		4,280	4,280	4,280	4,610	5,250	
1992					4,020	4,020	4,060	4,640		
1991	7,330	7,900	5,260	4,780	3,790	3,790	3,830	4,170		
1990		7,870	5,160	4,860	3,460	3,460	3,760	4,000		
1	Computer	Estimate								

Table 3 Natcher Parkway – Historical Annual Daily Traffic Volumes

Natcher Parkway Annual Growth Rate & Average Daily Traffic											
	SEGMENT 1 I-65 to US 31W		SEGN US 31W	SEGMENT 2 US 31W to US 68		ENT 3 US 231		SEGMEN US 231 to US 2	T 4-5 231 (KY 79)		
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	-		AGR	
2010 Existing (KTC Traffic Counts)	19,500	-	19,100	-	12,200	-	11,10	00		-	
2040 Without I-69, I-66/I-65 Spur	48,800	3.1%	45,100	2.9%	30,500	3.1%	22,00	00	2.3%		
2040 With I-69, I-66/I65 Spur	56,400	3.6%	52,100	3.4%	33,300	3.4%	24,000		2.6%		
	SEGM	ENT 6	SEGMENT 7		SEGMENT 8		SEGMENT 9		SEGMENT 10		
	US 231 (KY 7	79) to KY 70	KY 70 to	o US 231	US 231 to	WK Pwky	WK Pwky to KY 69		KY 69 to US 60 Bypass		
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	
2010 Existing (KTC Traffic Counts)	10,900	-	8,840	-	7,450	-	8,540	-	9,580	-	
2040 Without I-69, I-66/I-65 Spur	14,700	1.0%	11,600	0.9%	11,000	1.3%	16,900	2.3%	20,700	2.6%	
2040 With I-69, I-66/I65 Spur	16,100	1.3%	12,300	1.1%	11,000	1.3%	16,900	2.3%	20,700	2.6%	

Table 4 Natcher Parkway – Recommended Annual Growth Rates and projected Annual Daily Traffic Volumes



Figure 6 Natcher Parkway Segments 1 through 4/5 and Recommended Annual Growth Rates for I-69, I-66/I-65 and US 60 Connection Planning Study



Figure 7 Natcher Parkway Segments 4/5 & 6 and Recommended Annual Growth Rates for I-69, I-66/I-65 and US 60 Connection Planning Study



Figure 8 Natcher Parkway – Segments 7 & 8 and Recommended Annual Growth Rates for I-69, I-66/I-65 and US 60 Connection Planning Study



Figure 9 Natcher Parkway – Segments 9 & 10 and Recommended Annual Growth Rates for I-69, I-66/I-65 and US 60 Connection Planning Study



Figure 10 Natcher Parkway - Segment 10 and Recommended Annual Growth Rates for I-69, I-66/I-65 and US 60 Connection Planning Study

US 60 Annual Growth Rate Recommendation

Currently there are not any studies for US 60 related to traffic projections with consideration to I-66 or I-69. The historical ADT for US 60 was collected and evaluated. **Table 5** illustrates the historical ADT volumes for the US 60 by segment of study. The estimated traffic projections for the I-69 Spur, I-66 / I-65 Spur and US 60 Connection Planning Study are provided below in **Table 6**.

	HISTOF		NUAL DA		C
			US 60)	
SEGMENT	11	12	13	14	15
	US 231	US 431	Carter Rd	KY 81	Audubon Pkwy
YEAR	to	to	to	to	to
	Natcher Pkwy	US 231	US 431	Carter Rd	KY 81
2011 ¹	27,900	32,400	25,400	19,100	19,200
2010	27,200	31,900	25,100	19,000	18,000
2009					
2008	24,600				
2007			25,100	22,100	20,400
2006		29,600		20,600	
2005	28,200	30,400		15,800	
2004		27,700	22,700	20,800	19,100
2003		27,100			
2002	25,200	27,000			
2001		24,000	17,500	17,200	17,200
2000		26,400			
1999	22,000	27,100			
1998		26,600	14,200	13,400	13,400
1997		25,300			
1996	21,900	24,600		12,700	12,700
1995		24,900	13,200		
1994		19,600			
1993		22,300			
1992	19,300	23,700	14,900	14,300	14,300
1991		18,000			
1990					
1	Computer Estin	nate			

Table 5 US 60– Historical Annual Daily Traffic Volumes

		US 60 Annual Growth Rate & Average Daily Traffic											
	SEGMENT 11 S US 231-KY 2155 to		SEGME	SEGMENT 12 SEGME US 431 to US KY 2698		SEGMENT 13 SEGMEN KY 2698 (Carter KY 81 to K		NT 14	SEGMENT 15				
			US 431					KY 2695	Audubon Pwky to				
	Natcher Pkwy		231-KY 2155		Road) to US 431		(Carter Road)		KY 81				
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR			
2010 Existing (KTC Traffic Counts)	27,200	-	31,900	-	25,100	-	19,000	-	18,000	-			
2040 Without I-69, I-66/I-65 Spur	46,500	1.8%	49,900	1.5%	49,700	2.3%	37,600	2.3%	34,600	2.2%			
2040 With I-69, I-66/I65 Spur	50,800	2.1%	54,500	1.8%	52,700	2.5%	39,900	2.5%	36,700	2.4%			

Table 6 US 60 Recommended Annual Growth Rates and projected Average Daily Traffic Volumes



Figure 11 US 60 – Segments 11 through 15 and Recommended Annual Growth Rates for I-69, I-66/I-65 and US 60 Connection Planning Study

Audubon Parkway Annual Growth Rate Recommendation

Currently there are not any studies for the Audubon Parkway related to traffic projections with consideration to I-66 or I-69. The historical ADT (**Table 7**) for the Audubon Parkway was collected and evaluated. The estimated traffic projections for the I-69 Spur, I-66 / I-65 Spur and US 60 Connection Planning Study are provided below in **Table 8**. The I-69 Strategic Corridor Planning Study Overview of Existing Conditions – Edward T. Breathitt (Pennyrile) and Wendell H. Ford (Western Kentucky) Parkway- was reviewed with consideration to traffic projections because of the geographical location of project. The study reports the existing conditions of the Wendell H. Ford and Edward T. Breathitt Parkways from Eddyville to Henderson. The northern terminus in Henderson on the Edward T. Breathitt Parkway is at KY 425 (Henderson Bypass), just south of the Audubon Parkway.

HIS	HISTORICAL ANNUAL DAILY TRAFFIC										
	A	UDUBON	PARKW	AY							
SEGMENT	16	17	18	19							
	KY 1554	KY 416	KY 1078	Pennyrile Pkwy							
YEAR	to	to	to	to							
	US 60	KY 1554	KY 416	KY 1078							
2011 ¹	9,360	8,800	8,060	8,280							
2010	9,410	9,070	7,860	7,900							
2009	9,400	8,290	8,110	8,190							
2008		7,470	6,980	7,450							
2007	7,970	7,440	7,170	7,190							
2006	7,910	7,640	6,720	7,780							
2005	6,920	6,640	8,070	7,830							
2004	7,160	8,300	7,360	7,670							
2003	7,540	7,280	6,680	6,830							
2002											
2001	6,590	6,710	6,060	6,550							
2000	7,050	7,050	6,010	6,270							
1999	8,540		6,960	7,180							
1998	7,110	7,200		7,730							
1997	6,660	7,400	6,990	7,610							
1996	6,670	7,790	6,380	7,140							
1995	6,590	6,130	5,430	6,810							
1994	5,370	6,880		5,550							
1993	5,390	6,610	5,160								
1992	5,820	5,810	5,340	4,600							
1991	5,020	4,620	4,620								
1990		4,430	4,430								
1	Computer Esti	mate									

Table 7 Audubon– Historical Annual Daily Traffic Volumes

		Audubon Parkway Annual Growth Rate & Average Daily Traffic							
	SEGMENT 16 KY 1554 to US 60		SEGM KY 416 to	SEGMENT 17 KY 416 to KY 1554		ENT 18 o KY 416	SEGMENT 19 Edward T. Breathitt (Pennyrile) Pkwy to KY 1078		
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	
2010 Existing (KTC Traffic Counts)	9,410	9,410 -		-	7,860	-	7,900	-	
2040 Without I-69, I-66/I-65 Spur	18,700 2.3%		18,000	2.3%	16,100	2.4%	14,800	2.1%	
2040 With I-69, I-66/I65 Spur	20,400	2.6%	19,100	2.5%	17,000	2.6%	15,700	2.3%	

Table 8 Audubon Parkway Recommended Annual Growth Rates and projected Average Daily Traffic Volumes

Figure 12 Audubon Parkway – Segments 16 through 19 and Recommended Annual Growth Rates for I-69, I-66/I-65 and US 60 Connection Planning Study

Natcher Parkway Annual Growth Rate & Average Daily Traffic									
	SEGMENT 1 I-65 to US 31W		SEGN US 31W	SEGMENT 2 US 31W to US 68		ENT 3 US 231	SEGMENT 4-5 US 231 to US 231 (KY 79)		
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	
2010 Existing (KTC Traffic Counts)	19,500	-	19,100	-	12,200	-	11,100	-	
2040 Without I-69, I-66/I-65 Spur	48,800	3.1%	45,100	2.9%	30,500	3.1%	22,000	2.3%	
2040 With I-69, I-66/I65 Spur	56,400	3.6%	52,100	52,100 3.4%		3.4%	24,000	2.6%	

	SEGMENT 6 US 231 (KY 79) to KY 70		SEGMENT 7 KY 70 to US 231		SEGMENT 8 US 231 to WK Pwky		SEGMENT 9 WK Pwky to KY 69		SEGMENT 10 KY 69 to US 60 Bypass	
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR
2010 Existing (KTC Traffic Counts)	10,900	-	8,840	-	7,450	-	8,540	-	9,580	-
2040 Without I-69, I-66/I-65 Spur	14,700	1.0%	11,600	0.9%	11,000	1.3%	16,900	2.3%	20,700	2.6%
2040 With I-69, I-66/I65 Spur	16,100	1.3%	12,300	1.1%	11,000	1.3%	16,900	2.3%	20,700	2.6%

		US 60 Annual Growth Rate & Average Daily Traffic								
	SEGMI	SEGMENT 11		ENT 12	SEGME	ENT 13	SEGMEN	NT 14		
	US 231-K	US 231-KY 2155 to l		US 431 to US 231-KY		(Carter	KY 81 to KY 2695 (Carter		SEGMENT 15	
	Natche	Natcher Pkwy		2155) US 431	Road)		Audubon Pwky to KY 81	
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR
2010 Existing (KTC Traffic Counts)	27,200	-	31,900	-	25,100	-	19,000	-	18,000	-
2040 Without I-69, I-66/I-65 Spur	46,500	1.8%	49,900	1.5%	49,700	2.3%	37,600	2.3%	34,600	2.2%
2040 With I-69, I-66/I65 Spur	50,800 2.1%		54,500	1.8%	52,700	2.5%	39,900	2.5%	36,700	2.4%

		Audubon Parkway Annual Growth Rate & Average Daily Traffic								
	SEGMENT 16 KY 1554 to US 60		SEGMENT 17 KY 416 to KY 1554		SEGMENT 18 KY 1078 to KY 416		SEGMENT 19 Edward T. Breathitt (Pennyrile) Pkwy to KY 1078			
	ADT	AGR	ADT	AGR	ADT	AGR	ADT	AGR		
2010 Existing (KTC Traffic Counts)	9,410 -		9,070	-	7,860	-	7,900	-		
2040 Without I-69, I-66/I-65 Spur	18,700 2.3%		18,000	2.3%	16,100	2.4%	14,800	2.1%		
2040 With I-69, I-66/I65 Spur	20,400	2.6%	19,100	2.5%	17,000	2.6%	15,700	2.3%		

Figure 1 Natcher Parkway Segments 1 through 4/5

Figure 2 Natcher Parkway Segments 4/5 & 6

Figure 3 Natcher Parkway – Segments 7 & 8

Figure 4 Natcher Parkway – Segments 9 & 10

Figure 5 Natcher Parkway – Segment 10

Figure 6 US 60 – Segments 11 through 15

Figure 7 Audubon Parkway – Segments 16 through 19

MEETING REPORT Progress Meeting Strategic Corridor Planning Study I-69, I-66/I-65 Spurs and US 60 Connection Overview of Existing Conditions Henderson/Daviess/Ohio/Butler/Warren Counties District 2 Office August 2, 2013

A Project Progress Meeting was conducted on August 2, 2013 for this project at the District 2 Office in Madisonville, Kentucky.

Attendees were:

Kevin McClearn	KYTC – District 2
Nick Hall	KYTC – District 2
John Rudd	KYTC – District 2
Gary Sharpe	Palmer Engineering
Will Conkin	Palmer Engineering

Kevin.mcclearn@ky.gov Nick.hall@ky.gov John.rudd@ky.gov Gsharpe@palmernet.com Wconkin@palmernet.com

Attendees via Video Teleconference from Central Office in Frankfort were:

Steve Ross	KYTC – Central Office	Steve.ross@ky.gov
Mikael Pelfrey	KYTC – Central Office	Mikael.pelfrey@ky.gov
Shane McKenzie	KYTC – Central Office	Shane.Mckenzie@ky.gov

Gary Sharpe opened the meeting with a brief discussion of the current status of the project and report. The report was reviewed by chapter with the project team. The following summarizes the discussion and recommendations per chapter of the report.

I. Project Introduction

During the review of the chapter, it was decided to include the current status of the I-66 corridor in Kentucky. The report will include a background and current status of the I-69 and I-66 corridors.

II. Early Coordination and Public Involvement

In an effort to provide the public with information about this study, two meetings were held with the Bowling Green and Owensboro Metropolitan Organizations. The chapter title will be changed to **Metropolitan Organization Coordination** and the text will summarize the information provided to the MPOs.

III. Operational Considerations

The crash analysis was reviewed and when compared to other Kentucky parkways, there is one segment on the Audubon Parkway between Exit 10 and Exit 18 in Henderson/Daviess Counties, where the critical crash rate is between 0.9 and 0.99 when analyzed as a parkway route. When compared to other

Kentucky interstates, rather than state parkways, this segment has a critical crash rate of 1.13. It was noted for this segment that 36% of the collisions involved an animal. This was considered a significant contributor toward a critical crash rate greater than 1.0.

The Level of Service (LOS) for future traffic with and without interstate designation was reviewed. Based on the traffic projections, the Audubon Parkway will operate at a LOS B or better with or without interstate designation. US 60 will operate at a LOS D or better with or without interstate designation. The Natcher Parkway will operate at a LOS B or better with or without interstate designation. The Natcher Parkway will operate at a LOS B or better with or without interstate designation in Daviess, Ohio, and Butler Counties. In Warren County (more specifically within the urban limits of Bowling Green) the Natcher Parkway will operate at a LOS D or better without interstate designation and LOS E with interstate designation. The decrease in LOS is due to a minor increase in projected traffic associated with interstate designation and also the decrease from 70 mph to 50 mph analysis traveling speed.

The Audubon Parkway, Natcher Parkway and the project section of US 60 are part of the Extended Weight Coal and Coal By-Products Haul Road System. Section C of Chapter III provides a detailed description of the commercial vehicle weight standards for an interstate and the Extended Weight Coal and Coal By-Products Haul Road System. Interstate weight standards of commercial vehicles will apply to any route designated as an interstate.

IV. Mainline Geometry/Typical Section

During discussions of the mainline geometry, it was noted that there is one sag vertical curve in which does not meet length of vertical or stopping sight distance criteria. The vertical curve is on the Natcher Parkway in Ohio County at MP 53.800.

V. Bridges and Overpasses

Mainline bridge widths and overpass vertical clearances were discussed. The need to review the sufficiency ratings for the deficient overpass structures was discussed. 24 of the 40 mainline bridges less than 200 feet do not meet the 39 foot minimum horizontal clearance, of which 20 are on the Natcher Parkway and 4 are on US 60. There are 12 mainline bridges greater than 200 feet in length that do not meet the 31 foot minimum horizontal clearance, of which all of them are located on the Natcher Parkway. There are 2 overpass structures on the Natcher Parkway that do not meet the 16 foot vertical clearance requirement. On US 60, there is one overpass structure that does not meet the vertical clearance requirement.

VI. Interchanges and Ramps

During the discussion on Interchanges and Ramps, it was noted that every interchange has some type of a ramp deficiency. The majority of ramp deficiencies identified were minimum taper length.

There are two locations on US 60 and one location on the Natcher Parkway that do not meet the interstate interchange spacing criteria. These locations were discussed. It was noted that auxiliary lanes could be constructed to comply with interchange spacing.

VII. Key Findings of Existing Conditions Overview

Chapter VII provides an overview of the identified deficiencies in the project corridor. A crash analysis is provided in an attempt to correlate the location of deficiencies with crash history.

Vertical alignment deficiency and mainline bridge deficiencies were analyzed in 0.3 mile segments with reference given to the deficiency location. Based on this analyses, there are two mainline bridge locations where segment evaluated had a critical crash rate greater than 1.0. It was agreed that Central Office Planning will provide the crash reports for these two locations. The reports will be further evaluated to better understand crash causation and documented in the report.

The Owensboro – Daviess County MPO has identified a need for an "Outer Loop" in the 2040 Long Range Transportation Plan which would begin at the Audubon Parkway west of Owensboro and loop to the southeast around Owensboro crossing the Natcher Parkway and terminating at US 60 to the east. This project will be added to Section G Long Range Planning – Identified Projects of **Chapter XII.**

VIII. Potential Interchange Improvement Alternatives and Development Costs

In Chapter VIII, the potential improvement alternatives and development cost are presented. Route designation of US 60 as an interstate alterative was a key discussion item. It is estimated to cost \$37.5 million (\$5.6 million per mile) to improve US 60 to meet interstate standards. This estimate includes improving one of the parkway interchanges with US 60 to meet intestate standards.

The following was discussed in the context of route designation options for presentation in the report:

- 1. The existing US 60 and Natcher Parkway interchange is surrounded by residential development that could be impacted with the necessary improvements to the interchange and US 60 to meet interstate criteria. The existing US 60 and Audubon Parkway interchange is adjacent to the Owensboro Softball Complex located in Jack C. Fisher Park. The park would likely be impacted by the necessary improvements to US 60 and the interchange to meet interstate criteria.
- 2. The Owensboro Daviess County MPO has identified a need for an "Outer Loop" in the 2040 Long Range Transportation Plan which would begin at the Audubon Parkway west of Owensboro and loop to the southeast around Owensboro crossing the Natcher Parkway and terminating at US 60 to the east. The project has been identified by the MPO but is not currently

identified in the KYTC 6-year plan. The route is in the early stages of planning and the anticipated characteristics for the route have not been determined.

3. The I-67 Development Corporation has studied the feasibility of an interstate corridor between I-65 in Bowling Green, Kentucky to Indianapolis, Indiana. This corridor would follow along the Natcher Parkway from Bowling Green to US 60 in Owensboro, then northward along US 60 and US 231 to Indiana. The I-67 corridor would require a major interchange improvement at the existing Natcher Parkway and US 60 interchange. The major interchange improvements necessary to meet interstate criteria for I-67 are somewhat different than those necessary to designate US 60 as I-66/I-65 Spur or I-69 Spur.

Based on the impacts and costs associated with improving US 60 to meet interstate criteria, the future need for an Outer Loop identified by the Owensboro – Daviess County MPO, and the improvements necessary for the potential I-67 corridor in Daviess County, it was decided to include two route configurations for the Necessary Upgrades and Spot Safety Improvements Alternative in the report.

- (1) Route Designation Option 1: This option designates the I-69 Spur to travel along the Audubon Parkway from Henderson to the US 60 interchange in Owensboro and designates the I-66/I-65 Spur to travel along the Natcher Parkway from I-65 in Bowling Green to the US 60 interchange in Owensboro. The I-69 Spur would terminate at the existing Audubon Parkway and US 60 interchange (US 60 Exit 10) and the I-66/I-65 Spur would terminate at the existing Natcher Parkway and US 60 interchange (US 60 Exit 17). The segment of US 60 between the Natcher Parkway and Audubon Parkway would not be designated as either I-69 Spur or I-66/I-65 Spur. The cost associated with this option includes the improvements along the Audubon Parkway and Natcher Parkway to upgrade necessary features and improve safety. This option does not include improving the US 60 connection between the Audubon Parkway and Natcher Parkway nor the interchanges at the parkways to meet interstate criteria.
- (2) Route Designation Option 2: The second option designates US 60 as either I-9 Spur or I-66/I-65 Spur. This option includes improvements along the Audubon Parkway, Natcher Parkway, and US 60 to upgrade necessary features and improve safety. The existing US 60 and Audubon Parkway interchange would need improvement if US 60 is designated as I-69 Spur. Likewise, the existing US 60 and Natcher Parkway interchange would need improvement if US 60 is designated as I-66/I-65 Spur. Currently, both of these interchanges are trumpet interchanges configured to serve the main US 60 movement.

In 2012, the interchange ramps at Exit 10 on the Audubon Parkway were rehabilitated with concrete pavement. Exit 10 is at the location for an old toll plaza and does not meet current geometric interstate criteria. A potential

interchange improvement strategy for Exit 10 will utilize two of the existing ramps to minimize the construction cost to meet interstate criteria.

IX. Recommendations

Based on the impacts and costs associated with improving US 60 to meet interstate criteria, the current status of the Outer Loop planned by the Owensboro – Daviess County MPO and the potential I-67 corridor in Daviess County, the project team decided to recommend Route Designation Option 1 of the Necessary Upgrades and Spot Safety Improvements Alternative in the report.

The project team also recommended that a design exception for the deficient sag vertical curve at MP 53.800 on the Natcher Parkway should be requested.

Discussions in the report will be predicated on design exceptions and variances for deficiencies used or considered with previous I-69 conversion agreements with KYTC and FHWA on the Purchase Parkway, Western Kentucky Parkway, and Pennyrile Parkway where applicable.

The project team also noted that the report will include recommendations to designate the Natcher Parkway as I-65 Spur because of the lack of I-66 designation within the state of Kentucky.

X. I-67 Corridor Study Overview

The crash analysis for the I-67 Corridor along US 60 Bypass, US 60, and US 231 in progress but will be completed prior to submittal of the draft report.

The concept and cost estimate for improving the I-67 corridor to meet interstate standards will be based on planning level information. The report will note that the cost estimates, US 60/US 231 interchange, and frontage road concepts are based on a high level overview of the corridor. It also was noted that there may be undetermined costs associated with the cost estimates provided in the report, because of the high level/overview associated with this aspect of the project. More specifically, the study does not include any property or deed research or utility investigation which could significantly affect costs. Construction costs are also expected to increase upon further investigation of property ownership, utility location, and preliminary design of a frontage road system and interchange.

With completion of the Draft Report, it will be provided to the KYTC for review and comments by the project team. Upon review and comments, an Interdisciplinary Team (IDT) meeting will be scheduled.

Progress Meeting Discussion Topics I-69, I-69/I-65 Spurs and US 60 Connection Strategic Corridor Planning Study Henderson/Daviess/Ohio/Butler/Warren Counties District 2 Office August 2, 2013

A. Report Review

- I. Project Introduction
- II. Early Coordination and Public Involvement
- III. Operational Considerations
- IV. Mainline Geometry/Typical Section
- V. Bridges and Overpasses
- VI. Interchanges and Ramps
- VII. Key Findings of Existing Conditions
- VIII. Potential Improvement Alternatives and Development Costs
- IX. Recommendations
 - a. Route Designation
 - b. Design Exceptions and Variances
- X. I-67 Corridor Study Overview
- **B. Draft Completion**
- C. IDT Meeting

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I-69 SI Overv	Name	1. Gary W. Sharpe	2. Will Conkin	3. That by	4. Lol Rudd	5. Keun Mcclear	6. Withank Ref Pagey	7. Steve Rass	8. Shaw McKenzu	 10.	11	12.	13	14

PROGRESS MEETING

MEETING REPORT FHWA / KYTC Review Meeting Strategic Corridor Planning Study I-69 Spur, I-66/I-65 Spur and US 60 Connection Overview of Existing Conditions of Audubon and William H. Natcher Parkways and US 60

MARCH 25, 2014

A meeting was conducted on March 25, 2014 for this project at Transportation Cabinet Office Building in Frankfort, Kentucky.

Attendees were:

Gary Valentine	KYTC – SHE Office
Mikael Pelfrey	KYTC – Central Office
Steve Mills	FHWA
Ryan Tenges	FHWA
John Ballantyne	FHWA
John Moore	KYTC – Central Office
Shane McKenzie	KYTC – Central Office
Steve Ross	KYTC – Central Office
Jeff Moore	KYTC – District 3
Deneatra Henderson	KYTC – District 3
John Rudd	KYTC – District 2
Gary Sharpe	Palmer Engineering
Will Conkin	Palmer Engineering

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Mikael Pelfrey opened the meeting with a brief discussion of the project. Following introductions Gary Valentine directed the project team to remove the I-67 chapter from the I-69 Spur, I-66/I-65 Spur and US 60 Connection report and to provide this information as a separate report. It was noted that FHWA and KYTC do not recognize the I-67 Corridor as a designated interstate corridor for study. The draft report will be edited for removal of Chapter X I-67 Corridor Overview. The I 67 Corridor Overview will be prepared as a separate *stand-alone* document. Gary Valentine also emphasized the importance of providing accurate cost estimates for future program planning, specifically the 6-year highway plan. All cost estimates shown in the report will be reviewed for accuracy and updated based on 2013 unit bid costs.

Steve Mills provided the FHWA perspective of the project with general comments on the report and report presentation to the project team. Mr. Mills noted that although the I-69 Spur, I-66/I-65 Spur and US 60 Connection Overview of Existing Conditions of Audubon and William H Natcher Parkways and US 60 Connection report is similar to previous parkway to interstate conversion planning reports, the interstate designation and project duration for the *spurs* projects are not as defined as with the previous interstate conversion implementations. Therefore, FHWA recommends the narrative of the report to be more

specific in regard to the need for FHWA concurrence in the design exception process and provide a range of costs based on the potential outcome of design exception approvals. FHWA also recommends the project team update costs to provide the most reasonable costs possible for future program planning decision makers. Considering the project is in the earliest planning stages, it was recommended that the report provide a range of costs for those identified deficiencies in the report stratified on the basis of receiving a design exception approval versus improving the noted deficiencies to meet interstate standards. For those locations with identified deficiencies, it was noted that additional engineering analysis would be need for FHWA review and concurrence for requested design exceptions. By providing a range of costs, future program planning decision makers will have a more accurate understanding of potential costs based on whether design exceptions are approved. The report narrative will be updated based on these recommendations and the report will include the range of potential costs as requested.

The meeting continued with reviewing the report by chapter. The following items were discussed during the review.

Executive Summary

- The route designation options presented in Chapter XIII will be included in the Executive Summary.
- Several edits to the report discussed below will be reflected in the Executive Summary.

Chapter I Introduction

• The discussion on I-67 Corridor and Chapter X will be removed.

Chapter II MPO Coordination

• There were not any comments to modifying Chapter II during the review.

Chapter III Operational Considerations

- Table 3-2 Spot Crash Analysis Existing Facility will be modified to present the critical crash rate factor for the segments identified as opposed to having a critical number of crashes.
- Table 3-7 Existing (2012) Directional Design Hourly Volumes (DDHV) will include the number of trucks at the peak hour in addition to the truck percentage at the peak hour.
- Figures 3-15 through 3-18 will include the mainline AM/PM design hourly volumes if available.
- Section C Commercial Vehicle Weight Standards The narrative of the section will be rearranged to describe the interstate weight requirements and implications of interstate designation at the beginning of the section rather than at the end of the section.

Chapter IV Mainline Geometry/Typical Section

• There were not any comments to modifying Chapter IV during the review.

Chapter V Bridges and Overpasses

- Table 5-2 Summary of Substandard Lateral Clearances will be modified to highlight mainline bridges which are deficient to interstate standards, and include the interstate standard lateral clearance in the chart for each bridge.
- There was a discussion on whether the guardrail transition at the mainline bridges meets current standards. The guardrail transition was not studied nor is presented in the report. The costs associated with improving the mainline bridges will include improving the guardrail transition at the mainline bridges.

Chapter VI Interchange and Ramps

- The section on Rolled Curb will be removed from the report. There are not any rolled curb on the project routes studied.
- **Table 6-1 Interchange Geometrics** will be modified to highlight the deficient interchanges and ramps
- **Table 6-4 Interchange Crash Data** will be modified to more accurately display the crash data and clarify ramp related crashes. The 'Total' column does not include those crashes coded as ramp related.
- Section G. Interchange Control of Access Narrative will be added to Chapter IX Recommendations for KYTC not to issue any new access permits. The cost associated with acquiring control of access will be included in the cost estimates. The I-69 and Purchase Parkway conversion agreement between KYTC and FHWA will be referenced for recommendations.
- Figure 6-9 Natcher Parkway / I-65 Exit 2 will be modified to include the most recent aerial to illustrate the current full clover leaf interchange with collector-distributor roads on I-65.

Chapter VII Key Findings of Existing Conditions Overview

• Section G. Long Range Planning – Identified Projects – The list of identified projects will be updated based on current status.

Chapter VII Potential Improvement Alternatives and Development Costs

- Section A Potential Improvements and Development Cost The narrative will include the FHWA recommendations on describing the FHWA design exception and variance processes and a range of costs based on a potential outcome from the design exception and variance application.
- The estimated construction costs will be updated to 2013 prices and evaluated on project costs versus unit costs.
- The 'Upgrade Guardrail End Treatment Deficiencies' item will be modified to 'Upgrade Guardrail Trailing End Treatment Deficiencies'.
- Narrative will be added to the items in **Tables 8-1** and **8-3** which are dependent on Route Designation Option to clarify the US 60 route designation.
- Route and milepost will be added to applicable items in Tables 8-1 and 8-3.
- A footnote will be added to the 'Interchange Ramp Improvements' item in Tables 8-1 and 8-3 to clarify this item includes improving the ramp tapers to meet the minimum interstate standard.
- **Tables 8-2** and **8-4** will be modified to clarify that US 60 is not designated as an interstate for Route Designation Option 1.

- **Table 8-2** will be modified to present the potential range of costs based on a potential outcome of the design exception and variance application.
- The 'Correct Vertical / Stopping Sight Distance Deficiency' item in **Table 8-3** will be reevaluated based on project costs
- The I-69 interchange with the Audubon Parkway was discussed. The report will clarify that the costs presented in the report do not include the costs associated with the interchange. These costs were assumed to be included in the Segment of Independent Utility 5 cost estimate.
- Construction cost estimates will be added to the potential interchange improvements/reconstruction **Figures 8-1** through **8-9**

Chapter IX Recommendations

- The discussion of the I-67 Corridor will be removed from the chapter.
- The narrative of the chapter will clarify that at this point in time, design exceptions and variances may be considered for some of the 13 controlling criteria, and the deficient design features will require further design, operational and safety analysis for design exception and variance consideration and ultimate approval by the FHWA.

The meeting concluded with the project team discussing the next steps of the project. The project team will meet after the report has been updated based on the discussions held during the meeting.

Prepared By: Will Conkin, PE, PTOE Gary W. Sharpe, PE, PLS

Project Meeting Discussion Topics I-69, I-66/I-65 Spurs and US 60 Connection Strategic Corridor Planning Study Henderson / Daviess / Ohio / Butler / Warren Counties Transportation Cabinet Central Office March 25, 2013

- A. Project Overview / Scope of Project
- **B.** Report Review
 - I. Project Introduction
 - II. MPO Coordination
 - III. Operational Considerations
 - IV. Mainline Geometry/Typical Section
 - V. Bridges and Overpasses
 - VI. Interchanges and Ramps
 - VII. Key Findings of Existing Conditions
 - VIII. Potential Improvement Alternatives and Development Costs
 - IX. Recommendations
 - a. Route Designation
 - b. Design Exceptions and Variances
 - X. I-67 Corridor Study Overview
- C. Draft Completion
- D. IDT Meeting
- E. Future Steps

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PROGRESS MEETING

MEETING REPORT FHWA / KYTC Review Meeting Strategic Corridor Planning Study I-69 Spur, I-66/I-65 Spur and US 60 Connection Overview of Existing Conditions of Audubon and William H. Natcher Parkways and US 60

MAY 2, 2014

A meeting was conducted on May 2, 2014 for this project at Transportation Cabinet Office Building in Frankfort, Kentucky.

Attendees were:

Mikael Pelfrey	KYTC – Central Office
John Moore	KYTC – Central Office
Steve Ross	KYTC – Central Office
Kevn McClearn	KYTC – District 2
Nick Hall	KYTC – District 2
Steve Mills	FHWA
Ryan Tenges	FHWA
John Ballantyne	FHWA
Duane Thomas	FHWA
David Lindeman	Palmer Engineering
Gary Sharpe	Palmer Engineering
Will Conkin	Palmer Engineering

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Mikael Pelfrey opened the meeting with a brief status of the project. Following introduction of the meeting attendees, the revisions to the Draft Report based on the meeting held on March 25, 2014 were reviewed. During the review, additional comments were made resulting in revisions to the report. Palmer Engineering will revise the Draft Report based on these comments.

The meeting concluded with the project team discussing the next steps of the project. Palmer Engineering will provide the revised chapters of the report to the project team for review. The project team will review and provide any additional comments. Final Draft of the report will be completed by the end of May.

In a follow up discussion to the meeting, the following timeline was established for the review and submittal for the I-69 Spur, I-66/I-65 Spur, and US 60 Connection report and Overview of I-67 Corridor report:

- 5/15/2014 Palmer Engineering submit draft reports with revised chapters
- 5/20/2014 KYTC/FHWA review and provide final comments
- 5/28/2014 Palmer Engineering submit final reports electronically

Copies of the reports will be printed and delivered to project team after electronic submittal.

Prepared By: Will Conkin, PE, PTOE Gary W. Sharpe, PE, PLS

PROGRESS MEETING I-69 SPUR, I-66/I-65 SPUR AND US 60 CONNECTION STRATEGIC CORRIDOR PLANNING STUDY Overview of Existing Conditions of Audubon Parkway, William H. Natcher Parkway and US 60 May 2, 2014	Drganization E-mail Address	In Contine Palmerer. com	wid Lindeman Palmer Palmer en	ing Shape Palmer Palmer	Jane Thomas EHWA duane thomas @ dot, gov	yan Tenges FHUA 'Yan. Tenges dot.go	have Mills FHWA Sheve, Mills @ dot.gov	likael Pelfrey RYTC C.D. Planning mikael. Pelfrey @ Ky.gov	EVIN MCCLEARY KYTE-DZ KeVIL. McCLEA- PLY-gol	ct Hall KYTC-02 Mick halle ky, gor	Ohn Ballantin FAWA-ty John Ballantine Clotifor	Here Ross Kitc Co. Planing stere rosile Ky, gou		
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