EXECUTIVE SUMMARY

High-Level Overview of I-67 Corridor US 60 and US 231

May 2014























HIGH LEVEL OVERVIEW OF I-67 CORRIDOR EXECUTIVE SUMMARY

Kentucky Transportation Cabinet – Division of Planning MAY 2014

The Kentucky Transportation Cabinet (KYTC) has undertaken a *high-level overview* study of the potential I-67 corridor from the Natcher Parkway and US 60 interchange in Owensboro, Kentucky to the Kentucky/Indiana state line. The I-67 Development Corporation is studying the feasibility of a potential I-67 interstate corridor between I-65 in Nashville, Tennessee and I-196 in Western Michigan. However, an I-67 corridor is currently neither congressionally mandated nor administratively designated by the FHWA. In 2012, the I-67 Development Corporation published the *I-67 Corridor Feasibility Study*, which analyzed the feasibility of an interstate corridor between I-65 in Bowling Green, Kentucky and Indianapolis, Indiana. The study analyzed a potential I-67 corridor along the Natcher Parkway from I-65 in Bowling Green to US 60 in Owensboro, then along US 60 and US 231 to I-64 in Indiana. The corridor would then continue along a new interstate east of Huntingburg and Jasper, terminating at I-69 near Washington, Indiana.

Figure ES-1 illustrates this segment of the potential I-67 corridor and is defined as follows:

- Natcher Parkway and US 60 interchange (Exit 17) eastward along existing US 60 (Wendell Ford Expressway) to KY 54 interchange (Exit 18) (Blue);
- US 60 (Bypass) Extension, currently under construction, from KY 54 interchange to Hawes Boulevard (Yellow);
- US 60 from Hawes Boulevard to US 231 intersection (Red);
- US 231 from US 60 across the William H. Natcher Parkway Bridge to Indiana (Green);

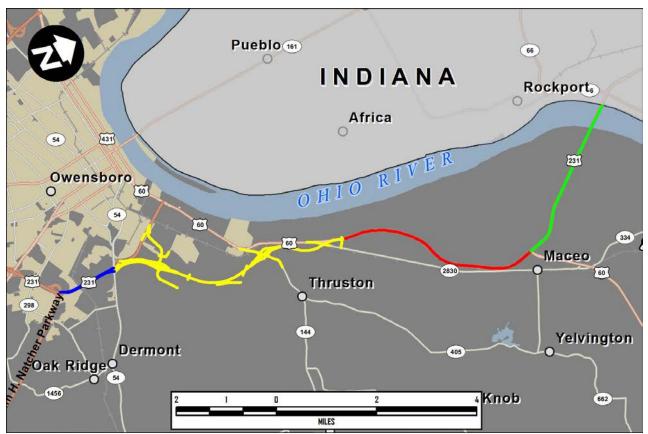


Figure ES-1 I-67 Study Area

STUDY PURPOSE

The primary purpose of this *high-level overview study* is to review the existing conditions along US 60 (Wendell Ford Expressway), US 60 (Bypass) Extension, US 60, and US 231 to identify locations that do not meet current Association of State Highway Transportation Officials (AASHTO) and Federal Highway Administration (FHWA) highway design guidelines and related criteria for designation as an interstate route. Evaluations include the degree to which these criteria are not met and identify improvements to address identified deficiencies.

STUDY ACTIVITIES

The study activities for the High Level Overview of the I-67 Corridor Study included the following:

- Identify criteria and standards per AASHTO and the FHWA for designation as an interstate route;
- Collect data from the KYTC's Highway Information System, As-built plans, crash data, field observation and measurement, and other information provided by the local KYTC District 2 office;
- Compare and analyze collected data with the interstate criteria, and identify conditions and locations on US 60 (Wendell Ford Expressway), US 60 (Bypass) Extension, US 60, and US 231 that do not meet interstate criteria and standards;
- Develop potential improvements and costs associated with improving these areas with identified deficiencies to meet criteria and standards.

KEY FINDINGS

The studied corridor provides some of the basic geometric characteristics of an interstate highway, such as two travel lanes in each direction, 12-foot lanes, 4-foot inside paved shoulders, 10-foot outside paved shoulders, 36-foot rural medians, 10-foot urban medians, 70 mph rural design speed, and 50 mph urban design speed. The urban sections exceed the minimum median widths, while the rural sections meet the minimum 36-foot median widths. However, some physical features of the project routes do not meet the criteria for an interstate facility. The following discussion describes the geometric features that do not meet interstate standards. The findings are based on available data and limited field reviews:

- <u>Interstate Control of Access:</u> US 60 and US 231 are partially controlled access routes along the study corridor. Access to an interstate highway shall be fully controlled. The intersections and access entrances would need to be terminated, rerouted, or grade separated in order to satisfy minimum interstate criteria for control of access.
- <u>Interchange Configuration:</u> According to the *I-67 Corridor Feasibility Study* published by the I-67 Development Corporation, the I-67 corridor in Kentucky would follow along the Natcher Parkway from I-65 in Bowling Green to Owensboro, then along US 60 (Wendell Ford Expressway), US 60 (Bypass) Extension, and US 60/US 231 across the Ohio River at the William H. Natcher Bridge.

The Natcher Parkway and US 60 (Wendell Ford Expressway) interchange has a trumpet configuration. The Natcher Parkway entrance and exit ramps are one lane. Therefore, the northbound I-67 through movement is currently a one-lane ramp, and the southbound I-67 through movement is currently a one-lane loop ramp. US 60 (Wendell Ford Expressway) is the main movement through the interchange with more than 30,000 vpd traveling on four lanes. Based on the interstate criteria requiring two through lanes, the Natcher Parkway and US 60 interchange would need to be improved for the proposed I-67 route.

- <u>Bridge Lateral Clearance:</u> One mainline bridge at MP 17.906 on US 60 (Wendell Ford Expressway) does not meet the minimum lateral clearance required. The mainline bridges on US 60 (Bypass) Extension, US 60, and US 231 meet the minimum lateral clearance required.
- Vertical Alignment and Stopping Sight Distance: Two vertical curves on the westbound on-ramp at the KY 54 and US 60 (Wendell Ford Expressway) interchange do not meet the minimum interstate criteria.
- Interchange Access Control: The KY 54 interchange on US 60 (Wendell Ford Expressway) does not meet the minimum control of access.

PRELIMINARY COST ESTIMATES

Table ES 1 provides a preliminary cost estimate to upgrade the I-67 corridor along US 60 (Wendell Ford Expressway), US 60 (Bypass) Extension, US 60, and US 231 to meet interstate standards and criteria. This study did not include any property research or utility location.

Improvement	Location	Design & Environmental (million) ¹	ROW and Utilities (million) ²	Construction Costs (million)	Total Costs (million)
Natcher Parkway / US 60 Interchange	US 60 (Wendell Ford Expressway)	\$6	\$12	\$41	\$60
Control of Access / Frontage Road	US 60 / US 231	\$5	\$14 ³	\$36	\$55
US 60 / US 231 Interchange	US 60 / US 231	\$5	\$9	\$30	\$44
Vertical Alignment / Stopping Sight Distance	KY 54	\$0.5	\$1	\$4	\$5
Interchange Access Control	KY 54	\$1	\$3	\$9	\$13
William H. Natcher Bridge	US 231 (Ohio River)	-	-	-	-
Total		\$18	\$39	\$120	\$177

¹Design & Environmental cost estimated at 15% construction costs

Table ES 1 I-67 Corridor Improvement Preliminary Cost Estimate

² ROW and Utilities cost estimated at 30% construction costs

³ ROW and Utilities cost estimated at 40% construction costs for Control of Access / Frontage Road Improvement











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