



# LOUISVILLE - SOUTHERN INDIANA OHIO RIVER BRIDGES PROJECT Initial Financial Plan



Submitted to:  
**Federal Highway  
Administration**

Submitted by:  
**Kentucky Transportation Cabinet  
Indiana Department of Transportation**

**January 2008**





**Kentucky Transportation Cabinet  
Indiana Department of Transportation**

**Louisville - Southern Indiana Ohio River Bridges Project  
Initial Financial Plan  
Letter of Certification**

The Kentucky Transportation Cabinet (KYTC) and the Indiana Department of Transportation (INDOT) have developed a comprehensive Initial Financial Plan for the Louisville - Southern Indiana Ohio River Bridges (LSIORB) Project in accordance with the requirements of Section 106(h) of Title 23, as amended by Section 1904(a)(2) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and the Federal Highway Administration (FHWA) January 2007 *Financial Plans Guidance*.


This Initial Financial Plan provides detailed cost estimates to complete the Ohio River Bridges Project as well as a detailed accounting of the financial resources to be utilized to fully fund the Project. The cost data in this Initial Financial Plan provides an accurate accounting of costs incurred as of the third quarter of State Fiscal Year 2007 (March 31, 2007) and includes an estimate of future costs based on the best available engineers' estimates and reasonable estimates of construction-related inflation factors. The estimates of financial resources to fund the Project also represent the best available current information and reasonable assumptions for future resources. These estimates will be updated as new information becomes available and provided to FHWA in Annual Updates to this Initial Financial Plan.

To the best of our knowledge and belief, the Initial Financial Plan, as submitted herewith, is based on sound underlying assumptions that fairly and accurately present the financial position of the LSIORB Project, cash flows, and expected conditions for the Project's life cycle. This Initial Financial Plan is our reasonable best effort at providing an accurate basis upon which to schedule and fund the Ohio River Bridges Project. We have made available all significant information that is relevant to the Initial Financial Plan and, to the best of our knowledge and belief, the inputs and assumptions derived from these documents and records are appropriate.

Respectfully Submitted:

  
Bill Nighbert  
Secretary  
Kentucky Transportation Cabinet

9-27-07  
Date

  
Karl B. Browning  
Commissioner  
Indiana Department of Transportation

9/28/07  
Date

Indiana Division Office  
575 N. Pennsylvania St., Rm 254  
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Kentucky Division Office  
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January 2, 2008

Mr. Joseph W. Prather, Secretary  
Kentucky Transportation Cabinet  
200 Mero Street, Room 613  
Frankfort, Kentucky 40622

Mr. Karl Browning, Commissioner  
Indiana Department of Transportation  
100 North Senate, Room N758  
Indianapolis, Indiana 46204

Dear Mr. Prather and Mr. Browning:

This is in response to your letter of September 28, 2007, requesting our approval of the Louisville Southern Indiana Ohio River Project Initial Financial Plan (IFP).

After reviewing the IFP, we have determined that it meets 23 USC 106(h) and applicable Federal Highway Administration (FHWA) requirements; thus, we are hereby approving the plan.

Please remember an annual update of the IFP must be provided to the FHWA by September 30 each year until the project is complete.

Sincerely yours,

A handwritten signature in dark ink, appearing to read 'Jose Sepulveda'.

Jose Sepulveda  
Kentucky Division Administrator

A handwritten signature in dark ink, appearing to read 'Robert Tally'.

Robert Tally  
Indiana Division Administrator

c: Matt Bullock, KYTC Project Manager  
Paul Boone, INDOT Project Manager  
Daniel C. Wood, FHWA Major Projects Team



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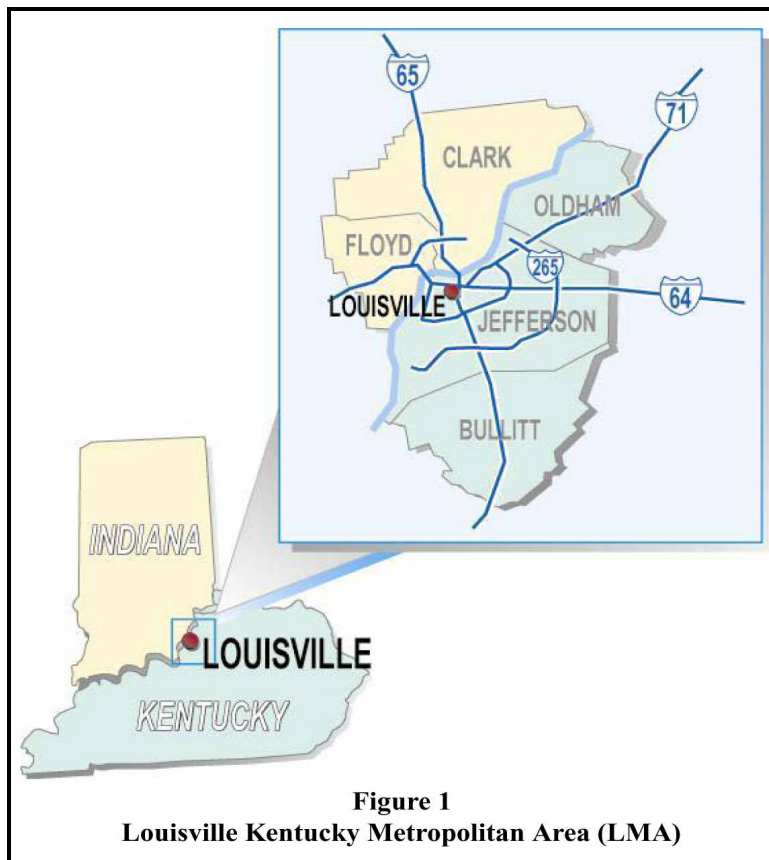
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## EXECUTIVE SUMMARY

### PROJECT OVERVIEW

The Louisville-Southern Indiana Ohio River Bridges (LSIORB) Project is a construction and reconstruction project being undertaken to address long-term cross-river transportation needs in the Louisville metropolitan area (LMA). The LSIORB Project was developed over an almost 40-year period in recognition of the need to improve cross-river mobility between Jefferson County, Kentucky and Clark County, Indiana (see *Figure ES-1*). In September 2003, the Federal Highway Administration (FHWA) issued a Record of Decision (ROD) that identified the preferred alternative in the Final Environmental Impact Statement (FEIS) as the selected alternative and that approved two new Ohio River bridge crossings and connected approaches.



*Figure ES-1 Louisville Kentucky Metropolitan Area*

### PROJECT SPONSORS, COST SHARING, AND MANAGEMENT

In 1993, the Commonwealth of Kentucky, acting through the Kentucky Transportation Cabinet (KYTC) and the State of Indiana, acting through the Indiana Department of Transportation (INDOT) agreed to jointly pursue needed improvements to cross-river mobility within the Louisville metropolitan area. This joint pursuit has been “codified” in a series of formal



agreements, including a 2004 Memorandum of Agreement for design and construction of the two bridges and approaches (commonly referred to as the bi-state management agreement). Among its various provisions, the bi-state management agreement allocates the Project's costs between the states, as described below:

- Costs of the General Engineering Services contract are to be shared as follows: 67% KYTC, 33% INDOT, except where costs are identifiable as specific to one state or the other, with those costs to be borne 100% by the state requesting the services;
- Costs associated with the main river structures and approach spans for the Downtown Bridge and the East End Bridge are to be shared on a 50/50 basis between the States; and
- Costs associated with the approach roadways, structures, and interchanges on each side of the river are the responsibility of each state, respectively.

These terms result in an updated approximate overall project cost allocation of 72% to KYTC and 28% to INDOT, based on the current cost estimates and schedule included in this Initial Financial Plan.

In accordance with the bi-state agreement, the sponsoring agencies have formed a Bi-State Management Team (BSMT) to manage the Project. Representatives from KYTC and INDOT comprise the BSMT, along with a non-voting, ex-officio member from FHWA. The BSMT also has retained a General Engineering Consultant (GEC) to execute selected program management services on behalf of the BSMT.

## INITIAL FINANCIAL PLAN SUMMARY

This document is submitted as the Louisville - Southern Indiana Ohio River Bridges (LSIORB) Project Initial Financial Plan (IFP). It is being submitted jointly by the Kentucky Transportation Cabinet and the Indiana Department of Transportation as required by Section 106 of Title 23 of the United States Code and consistent with guidance issued by FHWA<sup>1</sup>. The Plan provides detailed cost estimates to complete the Project as well as estimates of financial resources to fully fund the Project by both states.

This document demonstrates the States' commitment to complete the LSIORB Project and to sound financial planning for mega-projects, as defined by Section 106 of Title 23 and modified by Section 1305 (b) of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) and Section 1904 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Within the Plan, the following topics are addressed (by chapter):

- **Chapter 1. Introduction** – This chapter provides an overview of the Project and of the individual sections that together make up the Project, describes the management plan, and provides a history of the Project to date, including a review of the status of all ongoing activities.
- **Chapter 2. Project Cost Estimate** – This chapter provides a detailed description of the cost elements of the Project and provides current estimates of those costs. It also

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<sup>1</sup> Federal Highway Administration. *Financial Plans Guidance*, January 2007.

summarizes the costs incurred to date and provides detail on key cost-related assumptions.

The current cost estimate is based on the state fiscal year 2003 (SFY 2003) detailed cost estimate that was generated as part of the *Financing Options Plan* for the Project.<sup>2</sup> These costs were reviewed by both states and FHWA for validity of the base estimates and assumptions. The costs have subsequently been updated to reflect the results of additional design activity and inflated to reflect year-of-expenditure costs and the current project schedule.

The total baseline estimated cost for the LSIORB Project is \$2.154 billion in 2003 dollars (compared to \$1.937 billion in the *Financing Options Plan*) and \$4.068 billion based on the projected year-of-expenditure (i.e., on a cash flow basis in nominal dollars). The year-of-expenditure estimate reflects the current project schedule and reasonable assumptions for future inflation. The States will continue to monitor and adjust the cost estimate based on new project-specific information as well as information on economic conditions that will affect project costs.

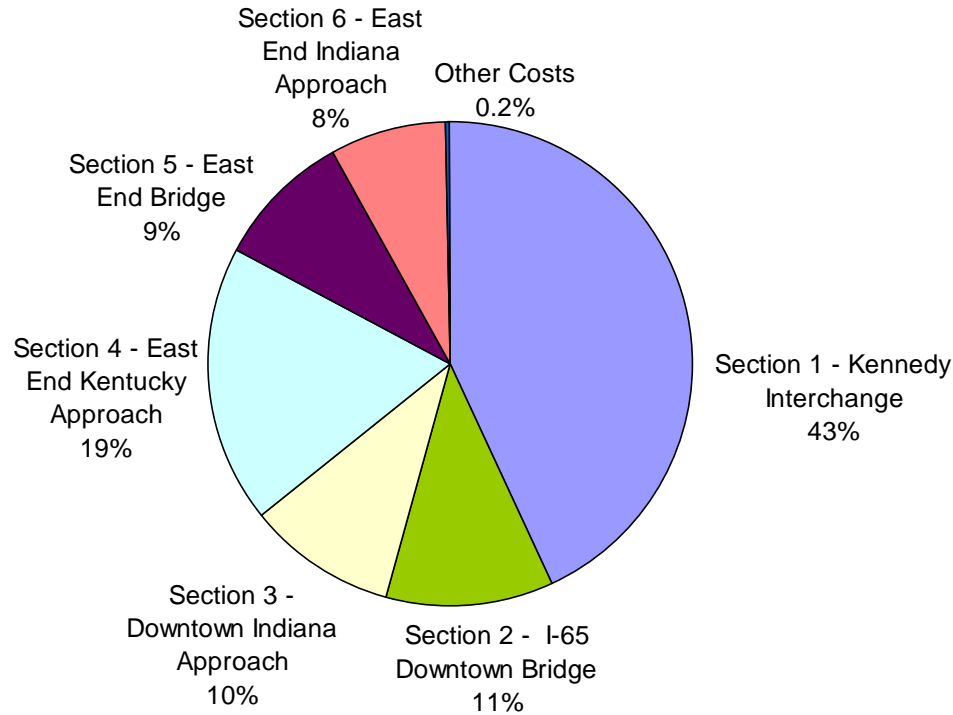
Table ES-1 and Figure ES-2 provide an overview of the LSIORB Project costs. These costs are presented in year-of-expenditure dollars based on the current project schedule, current cost estimates, and reasonable estimates of inflation.

**Table ES-1. LSIORB Project Cost Estimate – by Section and by State  
(Year-of-Expenditure \$, millions)\***

Project Segment	Total Project Cost	Kentucky	Indiana
Section 1 - Kennedy Interchange	\$1,749.8	\$1,749.8	\$0.0
Section 2 - I-65 Downtown Bridge	453.6	226.8	226.8
Section 3 - Downtown Indiana Approach	411.8	0.0	411.8
Section 4 - East End Kentucky Approach	753.3	753.3	0.0
Section 5 - East End Bridge	374.1	187.0	187.0
Section 6 - East End Indiana Approach	318.4	0.0	318.4
Other Costs	6.7	4.9	1.8
<b>TOTALS (Y.O.E.)</b>	<b>\$4,067.7</b>	<b>\$2,921.9</b>	<b>\$1,145.9</b>

\*Note: Totals do not sum due to rounding.

<sup>2</sup> Louisville-Southern Indiana Ohio River Bridges Project *Financing Options Plan*, April 2003.



**Figure ES-2. LSIORB Cost Breakdown by Section**  
(based on year-of-expenditure costs)

Table ES-2 provides additional background detail on these cost estimates, including the baseline 2003 estimate, this estimate escalated to 2007, and the current year-of-expenditure estimate, taking into account the anticipated impact of inflation.

**Table ES-2. LSIORB Project Cost Summary (in \$ millions)**

Project Segment	Base Year Cost in 2003 Dollars	Base Year Cost in 2007 Dollars*	Year-of-Expenditure Cost Based on Current Estimates of Inflation
Section 1 - Kennedy Interchange	\$865.0	\$1,187.4	\$1,749.8
Section 2 - Downtown River Bridge	215.2	301.1	453.6
Section 3 - Downtown IN Approach	212.3	288.7	411.8
Section 4 - KY East End Approach	442.6	613.8	753.3
Section 5 - East End River Bridge	224.0	313.2	374.1
Section 6 - IN East End Approach	189.1	260.2	318.4
Other	5.9	6.5	6.7
<b>Total</b>	<b>\$2,154.1</b>	<b>\$2,970.9</b>	<b>\$4,067.7</b>

\* Costs expended prior to 2007 escalated only to the year of expenditure.

- **Chapter 3. Implementation Plan** – This chapter provides information on the planned schedule for implementation of all Project elements. It also provides information regarding the assignment of implementation responsibilities and provides a summary of the status of necessary permits and approvals.

Based on the currently planned traditional project delivery approach, the LSIORB Project is scheduled to be completed by the conclusion of SFY 2024, with the East End Bridge open to traffic by the end of SFY 2013, the Downtown Bridge open by the conclusion of SFY 2019, and the Kennedy Interchange completed in 2024 (see *Figure ES-3*). After the new Downtown Bridge has been opened, the existing I-65 Kennedy Bridge will undergo modifications to accommodate southbound traffic only.

State Fiscal Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Design</b>																				
Section 1 - Kennedy Interchange																				
Section 2 - I-65 Downtown Bridge																				
Section 3 - Downtown Indiana Approach																				
Section 4 - East End Kentucky Approach																				
Section 5 - East End Bridge																				
Section 6 - East End Indiana Approach																				
<b>Construction</b>																				
Section 1 - Kennedy Interchange																				
Section 2 - I-65 Downtown Bridge																				
Section 3 - Downtown Indiana Approach																				
Section 4 - East End Kentucky Approach																				
Section 5 - East End Bridge																				
Section 6 - East End Indiana Approach																				

**Figure ES-3. LSIORB Project Schedule Overview**

To achieve the planned schedule, design of Sections 1 and 4 were initiated first in order to address the complexities of Section 1's Kennedy Interchange and of the Section 4 Kentucky approach. Design for the Downtown Bridge (Section 2) and the East End Bridge (Section 3) have subsequently been initiated so that design elements can be adequately coordinated with Sections 1 and 4. Similarly, Sections 3 and 6 will commence shortly so that all design elements can be coordinated and construction schedules maintained.

- **Chapter 4. Project Funding** – This chapter reviews the States' overall plan of finance for the Project, describes in detail the planned sources of funds, and reviews the funding plan in the context of the States' overall transportation programs and available resources.

As currently conceived and for the purposes of this Initial Financial Plan, the Ohio River Bridges Project will be funded entirely through federal and state transportation program funding. Federal funding will include High Priority Project (HPP) and other federal funding designated specifically for the Project as well as federal-aid apportionments of the States of Kentucky and Indiana. Initial state funding will be comprised of state matching funds for the federal-aid program, core state construction program funds in each of the two sponsoring states, and, in the case of Indiana, lease proceeds from the Indiana Toll Road concession made available through the State's *Major Moves* program (see *Table ES-3 for a summary of funding planned for the Project*).

**Table ES-3. Summary LSIORB Project Funding by Source (\$ in millions)\***

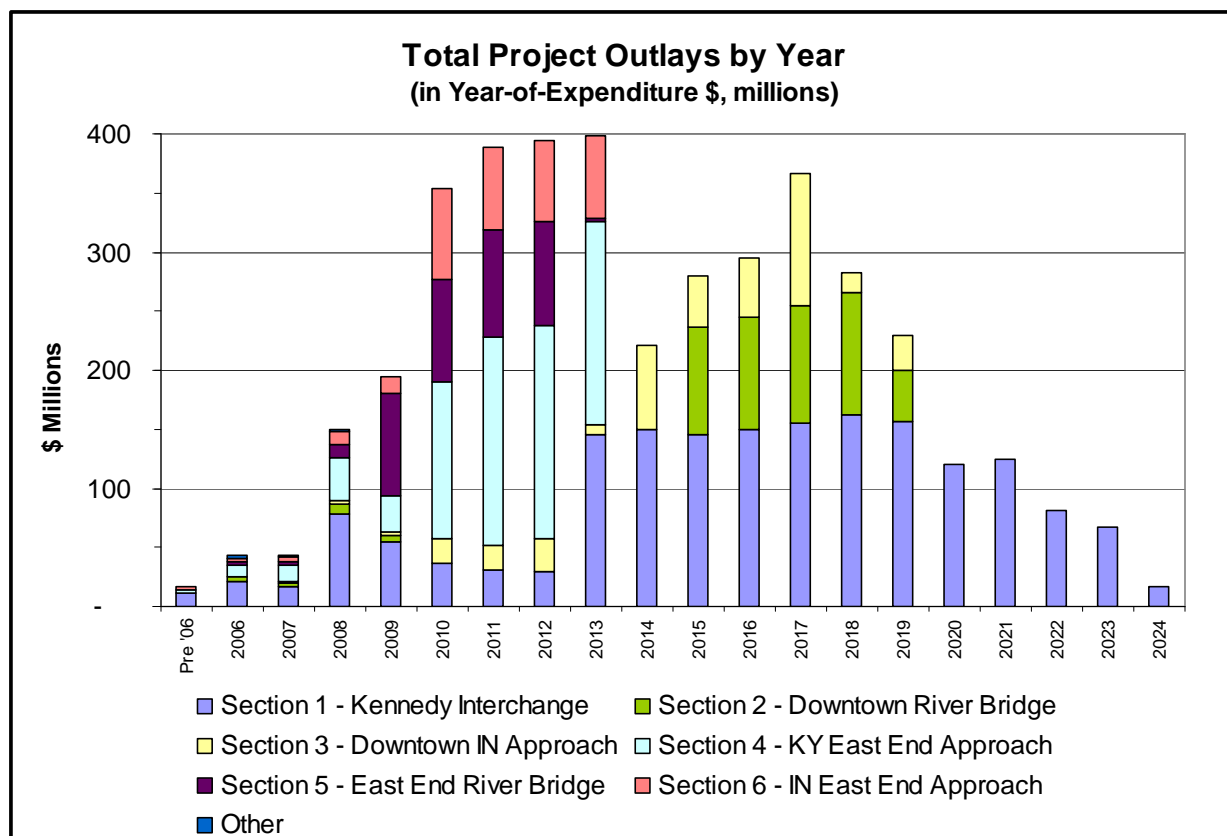
	Funding Source	Expended or Obligated	Committed (in Budget)	Scheduled (in Plan)	Anticipated	Total
Kentucky	6-Year Plan Funding (federal program funds, incl. state match)	\$45.1	\$233.1	\$530.4	\$2,034.6	\$2,843.2
	TEA-21 HPP (incl. state match)	33.5	0.0	0.0	0.0	33.5
	SAFETEA-LU HPP & Discretionary (incl. state match)	27.6	0.0	0.0	0.0	27.6
	Annual Federal Appropriation Earmarks	17.6	0.0	0.0	0.0	17.6
	<b>SUBTOTAL</b>	<b>\$123.8</b>	<b>\$233.1</b>	<b>\$530.4</b>	<b>\$2,034.6</b>	<b>\$2,921.9</b>
Indiana	Major Moves Program	\$0.0	\$44.0	\$434.0	\$0.0	\$478.0
	Federal program with state match	0.0	24.0	217.0	381.9	622.9
	SAFETEA-LU HPP (incl match)	0.0	12.0	9.0	0.0	21.0
	TEA-21 HPP (incl match)	11.0	0.0	0.0	0.0	11.0
	Annual Federal Appropriation Earmarks	7.0	6.0	0.0	0.0	13.0
	<b>SUBTOTAL</b>	<b>\$18.0</b>	<b>\$86.0</b>	<b>\$660.0</b>	<b>\$381.9</b>	<b>\$1,145.9</b>
<b>TOTAL</b>		<b>\$141.8</b>	<b>\$319.1</b>	<b>\$1,190.4</b>	<b>\$2,416.5</b>	<b>\$4,067.7</b>

\* Note: see Chapter 4 for definitions of funding categories and designations.

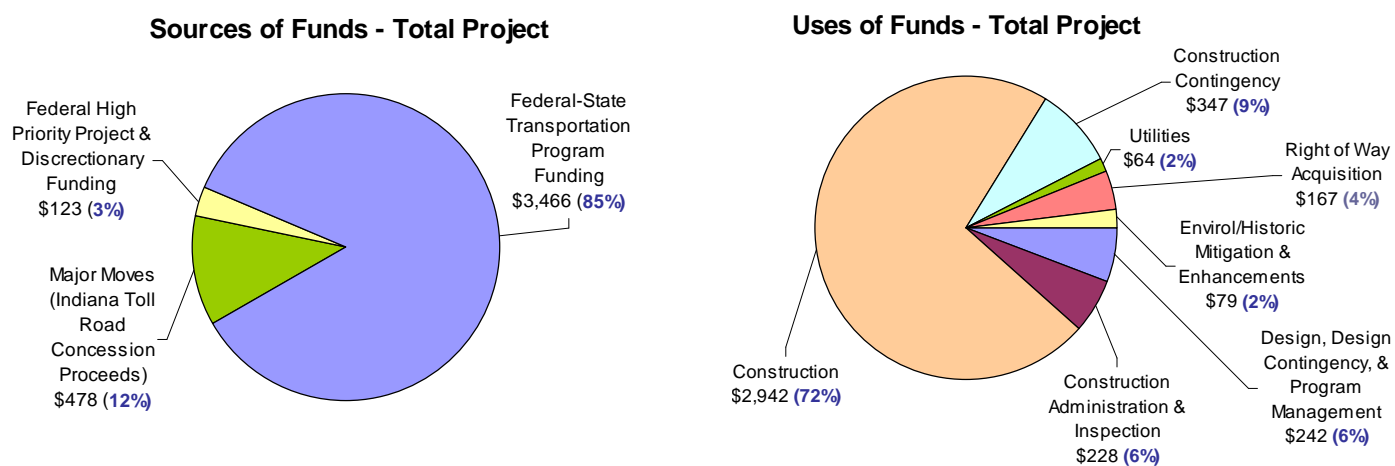
Kentucky has expended, obligated, committed, and/or scheduled approximately 84% of the projected IFP funding needs that will be required during the period of the State's 2006 – 2012 Six-Year Plan and will continue to make future commitments consistent with the State's planning and budgetary processes (see Chapter 4 for definitions of expended/obligated, committed, and scheduled funding). Indiana has 100% of its projected LSIORB funding accounted for in expended/obligated, committed, and/or scheduled funding over the SFY 2006 – 2015 period (the term of the State's 10-Year *Major Moves* program). In both states, the difference between planned funding and the total projected funding need can be attributed to the timing of adoption of the States' plans relative to development of updated cost estimates in support of this IFP. KYTC plans to revisit the designated funding with the next update to the State's Six-Year Plan and Indiana will continue to review and revise its plans as necessary.

Given the long time horizon for this project and the extent to which circumstances and opportunities change over time, it is anticipated that there may be additional and/or alternative financial resources applied to the Project by each state. Any changes to the funding plan will be relayed in Annual Updates to this IFP, as required by FHWA.

- **Chapter 5. Project Cash Flow** – This chapter provides a summary of annual cash flow needs for the LSIORB Project, as shown in Figure ES-4 and an overview of the planned sources and uses of funds for the Project, as shown in Figure ES-5. Given the early status of the Project in terms of developing section-specific implementation plans, contract packages, and projections of cash outlays, it is anticipated that this chapter will be updated substantially in the first and subsequent Annual Updates to the Financial Plan.
- **Chapter 6. Other Factors** – This chapter addresses a number of important factors that could affect the LSIORB Project and, in particular, the financial plan for the Project. These include cost and funding-related risks and associated mitigation strategies as well as interdependencies with each state's transportation programs, budgets, and other projects.



**Figure ES-4. Total Project Annual Outlays (in Year-of-Expenditure \$, millions)**



\*Note: Percentages may not sum to 100% due to rounding.

**Figure ES-5. Total Project Sources and Uses of Funds (in \$ millions)**



## CONCLUSION

This Initial Financial Plan documents expenditures and revenues secured for the Project through the third quarter of State Fiscal Year 2007.<sup>3</sup> Through the presentation of this Initial Financial Plan and based upon currently available information, the sponsoring agencies believe that the States are fully prepared to complete the Project on schedule and according with the projected funding requirement presented in this IFP. As conditions change, the project sponsors will provide FHWA with Annual Updates to this Initial Financial Plan. The first update is anticipated to be provided by September 30, 2008, reflecting information through SFY 2008, and subsequent updates each following year.

While each state is fully committed to meet its obligations under this plan and based on its current legal authorities, both states recognize that circumstances can change and alternative structures may present themselves as superior to the baseline plan, as articulated in this document. Future Annual Updates will account for any such revisions to the funding plan and incorporate new capabilities in each state and for the Project as a whole.

Alternative funding approaches could include, but are not limited to:

- Public-private/concession arrangements that rely at least in part on tolls as the underlying funding stream;
- Public sponsored tolling (via each state or through a joint public authority);
- Development-related private financial participation; and/or
- Other dedicated state and local funding sources, such as transportation-related fees or other revenue measures.

In addition to these funding alternatives, alternative financing approaches to be considered include the use of borrowing – via the States' highway revenue bonding programs, the sale of Grant Anticipation Revenue Vehicles (GARVEEs) to be repaid with future federal and matching state funds, or federally-supported borrowing such as via the Transportation Infrastructure Finance and Innovation Act (TIFIA) program and private activity bonds (PABs). These approaches will be considered in the context of each state's overall transportation programs and the ability to generate cost savings and/or expedited project delivery.

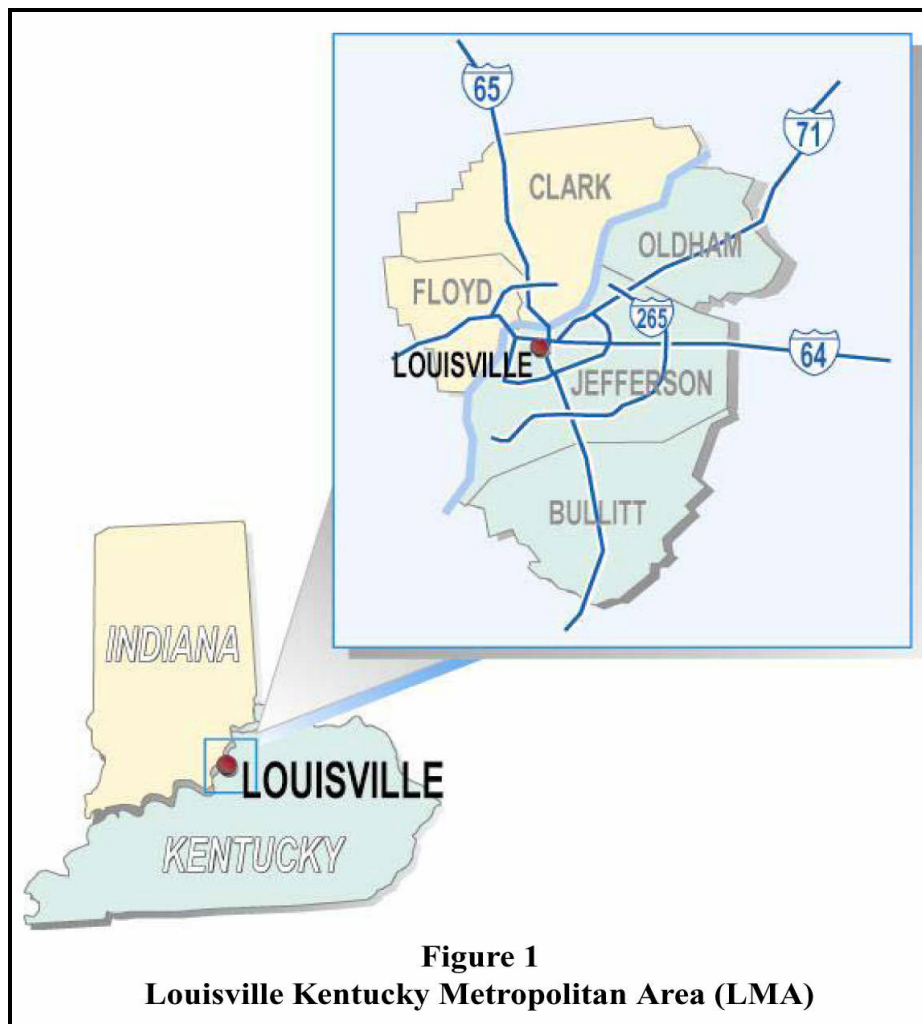
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<sup>3</sup> Design costs through June 30, 2007 are included.

## CHAPTER 1. INTRODUCTION

### PROJECT DESCRIPTION

The Louisville-Southern Indiana Ohio River Bridges (LSIORB) Project is a construction and reconstruction project being undertaken to address long-term cross-river transportation needs in the Louisville metropolitan area (LMA). The LSIORB Project was developed over an almost 40-year period (*see Project History below*) in recognition of the need to improve cross-river mobility between Jefferson County, Kentucky and Clark County, Indiana (*see Figure 1-1*). In September 2003, the Federal Highway Administration (FHWA) issued a Record of Decision (ROD) that identified the preferred alternative in the Final Environmental Impact Statement (FEIS) as the selected alternative and that approved two new Ohio River bridge crossings and connected approaches.



**Figure 1-1. Louisville Kentucky Metropolitan Area**

The LSIORB Project consists of six major construction sections. Each of the six sections is briefly described below and graphically represented in Figure 1-2.

### **Section 1 – Kennedy Interchange (Spaghetti Junction)**

The Kennedy Interchange, where I-64, I-65, and I-71 converge in Louisville, will be reconstructed just south of the current location. This reconstruction is designed to improve traffic flow and safety, provide better downtown access, and open up prime waterfront property for redevelopment. Features include:

- A new interchange design at Mellwood Avenue and I-64;
- A new partial interchange at I-71 and Frankfort Avenue/Ohio Street; and
- The extension of Witherspoon Street by one mile to Frankfort Avenue/Ohio Street.

### **Section 2 – I-65 Downtown Bridge**

A new six-lane bridge for northbound I-65 traffic will be built immediately upstream (east) of the existing Kennedy Bridge. The existing bridge will be reconfigured to serve southbound I-65 traffic.

### **Section 3 – Downtown Indiana Approach**

Roadway work will be completed as required to carry southbound I-65 traffic to all lanes of the existing Kennedy Bridge and to pick up northbound traffic from the new Downtown Bridge.

Features include:

- A new ramp system linking the Clark Memorial Bridge and I-65;
- Additional access between Jeffersonville and Clarksville with the opening of Sixth Street under I-65; and
- New connections at I-65 and Court Avenue as well as improved access at I-65 north of Stansifer Avenue.

### **Section 4 – East End Kentucky Approach**

The existing Gene Snyder Freeway in Kentucky (KY 841) will be extended northerly to the new East End Bridge to be constructed across the Ohio River. Features include:

- 2,000-foot twin tunnels under U.S. 42 and the historic Drumanard Estate; and
- A redesigned partial interchange at U.S. 42 that retains current access, allowing traffic to enter and exit KY 841 only in the direction of I-71.

### **Section 5 – East End Bridge**

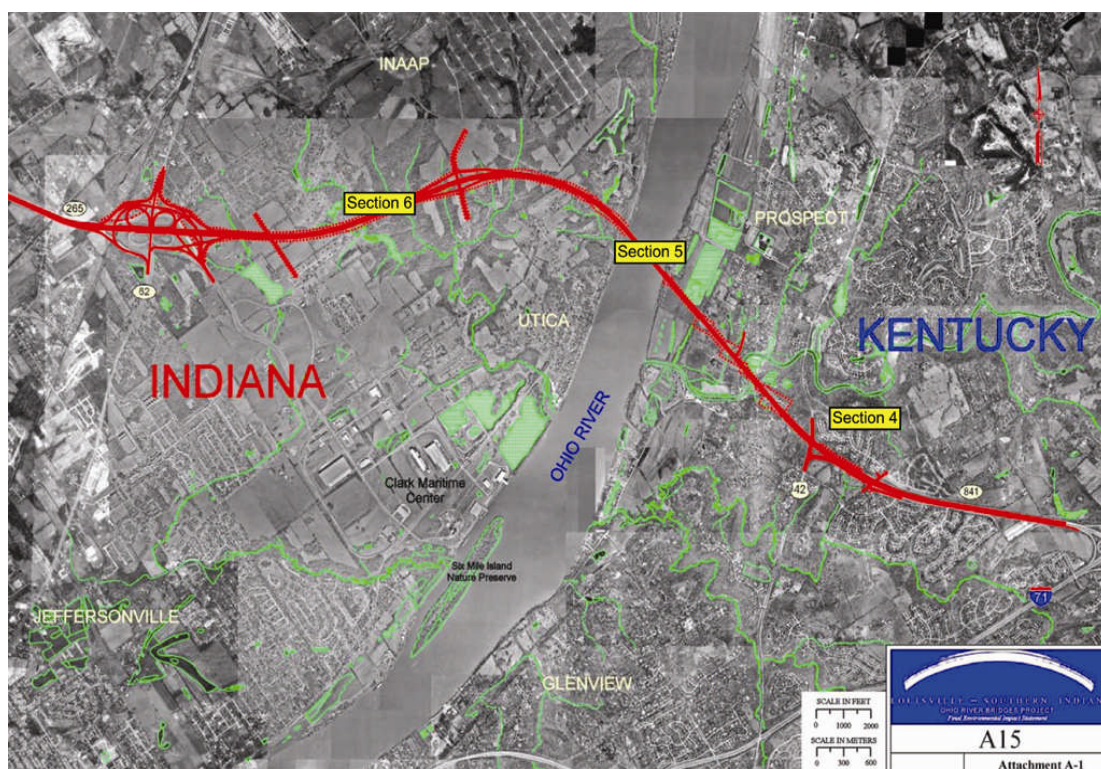
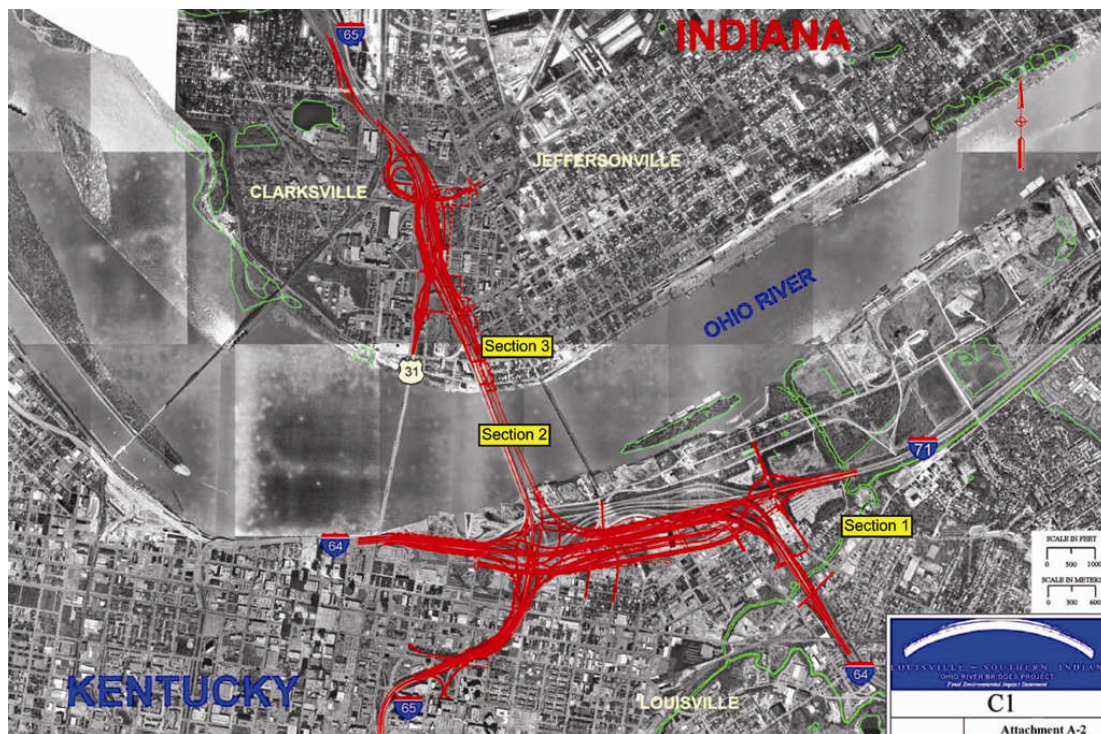
A new six-lane bridge will link the extended Gene Snyder Freeway in Kentucky (KY 841) with the Lee Hamilton Highway in Indiana (IN 265).

### **Section 6 – East End Indiana Approach**

The existing Lee Hamilton Highway in Indiana (IN 265) will be connected to the new East End Bridge. Features include:

- A new full interchange at Old Salem Road in Indiana; and
- Reconstruction of the IN 265/IN 62 interchange in Southern Indiana.





**Figure 1-2. Six Major Construction Sections**

## PROJECT SPONSORS AND COST SHARING

In 1993, the Commonwealth of Kentucky, acting through the Kentucky Transportation Cabinet (KYTC) and the State of Indiana, acting through the Indiana Department of Transportation (INDOT) agreed to jointly pursue needed improvements to cross-river mobility within the Louisville metropolitan area. This joint pursuit has been “codified” in a series of formal agreements, including but not limited to a 1997 Memorandum of Agreement for preparation of the Environmental Impact Documents and Preliminary Bridge Study Report (see *Attachment A*) and a 2004 Memorandum of Agreement for design and construction of the two bridges and approaches (commonly referred to as the bi-state management agreement) (see *Attachment B*).

Among its various provisions, the bi-state management agreement allocates the Project's costs between the states, as described below:

- Costs of the General Engineering Services contract are to be shared as follows: 67% by KYTC, 33% by INDOT, except where costs are identifiable as specific to one state or the other, with those costs to be borne 100% by the state requesting the services;
- Costs associated with the main river structures and approach spans for the Downtown Bridge and the East End Bridge are to be shared on a 50-50 basis between the States; and
- Costs associated with the approach roadways, structures, and interchanges on each side of the river are the responsibility of each state, respectively.

These terms result in an updated approximate overall project cost allocation of 72% to KYTC and 28% to INDOT, based on the current cost estimates and project schedule.

## PROJECT MANAGEMENT AND OVERSIGHT

In accordance with the bi-state management agreement, the sponsoring agencies have formed a Bi-State Management Team (BSMT) to manage the Project. Representatives from KYTC and INDOT comprise the BSMT, along with a non-voting, ex-officio member from FHWA. The BSMT also has retained a General Engineering Consultant (GEC) to execute selected program management services on behalf of the BSMT.

The BSMT will cooperatively oversee all LSIORB project activities, from the preliminary engineering and environment phase through final construction. The coordinating body also is responsible for developing the Project Management Plan (PMP) to prescribe the project management and oversight method, including scope, schedule, and cost oversight and cost containment procedures. The Commissioner of INDOT and the Secretary of KYTC will approve this plan. The BSMT is additionally tasked with dispute resolution and with determining the allocation of costs that may arise from unforeseen events.

## PROJECT HISTORY

The inception of the Ohio River Bridges Project occurred over 40 years ago with the creation of a regional transportation planning process. Following is a chronology of major milestones for the Project.

- **1963**

The transportation planning process began in 1963, when the States of Indiana and Kentucky, together with the local communities, established a cooperative transportation planning program and a metropolitan planning organization (MPO) known as the Kentuckiana Regional Planning and Development Agency (KIPDA). That early program produced the first transportation plan for the LMA in 1969.

- **1969**

The recommendations of the first long-range plan in 1969 included “extension of I-265 through Clark County [Indiana] with a crossing of the Ohio River at Utica [as] an extremely important addition to the freeway system . . .” This extension would have connected with the then proposed I-265/KY 841 near U.S. 42 in eastern Jefferson County, Kentucky.

- **1978**

The next long-range transportation plan, completed in 1978, again called for the extension of I-265 from I-65 in Indiana to the terminus of I-265/KY 841 at U.S. 42 in Kentucky, with a bridge over the Ohio River.

- **1991 - 1994**

Between 1991 and 1994, KYTC and INDOT sponsored the Metropolitan Louisville Ohio River Bridge Study. This study investigated the need for a new Ohio River bridge in the LMA and evaluated four potential corridors for construction of such a bridge. The third long-range transportation plan for the LMA was prepared by KIPDA in 1993. This plan again recommended an extension of I-265 between I-65 in Indiana and I-265/KY 841 in Kentucky, with a new Ohio River bridge. (An extension of I-265 has been constructed from I-65 to S.R. 62 in southeastern Clark County, Indiana. That extension, which has been designated S.R. 265, ends short of an Ohio River crossing.) In 1993, KIPDA also recommended improvements to the geometrically complex Kennedy Interchange in downtown Louisville to alleviate congestion and safety problems. Known locally as “Spaghetti Junction,” the Kennedy Interchange is the junction of three interstate highways — I-64, I-65, and I-71 — and is located on the southern bank of the Ohio River at the foot of the Kennedy Bridge, which carries I-65 across the Ohio River.

- **1995**

Based on results of the Metropolitan Louisville Ohio River Bridge Study and over 25 years of local transportation planning, KIPDA initiated a Major Investment Study in 1995 to “address the problem of current and future travel mobility across the Ohio River between Kentucky and Indiana in the Louisville region.” The Ohio River Major Investment Study (ORMIS) evaluated a wide range of transportation improvements that might address cross-river mobility needs, including light rail transit, multiple new



highway bridge corridors, reconstruction of the Kennedy Interchange, travel demand management strategies, transportation system management measures, and enhanced bus service.

▪ **1996**

The KIPDA's Transportation Policy Committee unanimously endorsed the recommendation of the ORMIS Committee for a preferred investment strategy incorporating the following four elements:

- A "two-bridge solution;"
- Bus-oriented transit improvements;
- Short-term traffic operational improvements; and
- A regional financial summit to deal with funding needs.

The "two-bridge solution" included: building a new Ohio River bridge parallel to the Kennedy Bridge (I-65) between downtown Louisville and Jeffersonville, Indiana; reconstructing the Kennedy Interchange adjacent to the Kennedy Bridge; and building another new bridge approximately eight miles east of the Kennedy Bridge, connecting KY 841/I-265 (Gene Snyder Freeway) in eastern Jefferson County, Kentucky, with S.R. 265 at S.R. 62 in southeastern Clark County, Indiana.

▪ **1997 – 1998**

Based on the ORMIS recommendations and the KIPDA long-range transportation plan, INDOT and KYTC agreed in December 1997 to jointly pursue needed improvements to cross-river mobility between Jefferson County, Kentucky and Clark County, Indiana. The Federal Highway Administration issued a Notice of Intent in the Federal Register on March 27, 1998 indicating that FHWA, in cooperation with INDOT and KYTC, would prepare an EIS to evaluate alternatives for improving cross-river mobility between Jefferson and Clark Counties, including the ORMIS recommendation.

▪ **2003**

The Federal Highway Administration issued a Record of Decision selecting the preferred alternative as a Two Bridges/Highway Alternative, with the specific elements selected in the Far East and Downtown corridors, as well as the Kennedy Interchange Reconstruction option.

## OVERVIEW OF CURRENT ACTIVITIES AND PROJECT SCHEDULE

Table 1-1 lists each of the six LSIORB Project sections, the section-specific major activities that are currently underway, and the planned completion date for these sections. All dates are based on state fiscal year (SFY), which for both Kentucky and Indiana runs July 1 – June 30.

**Table 1-1. Current Activities and Status**

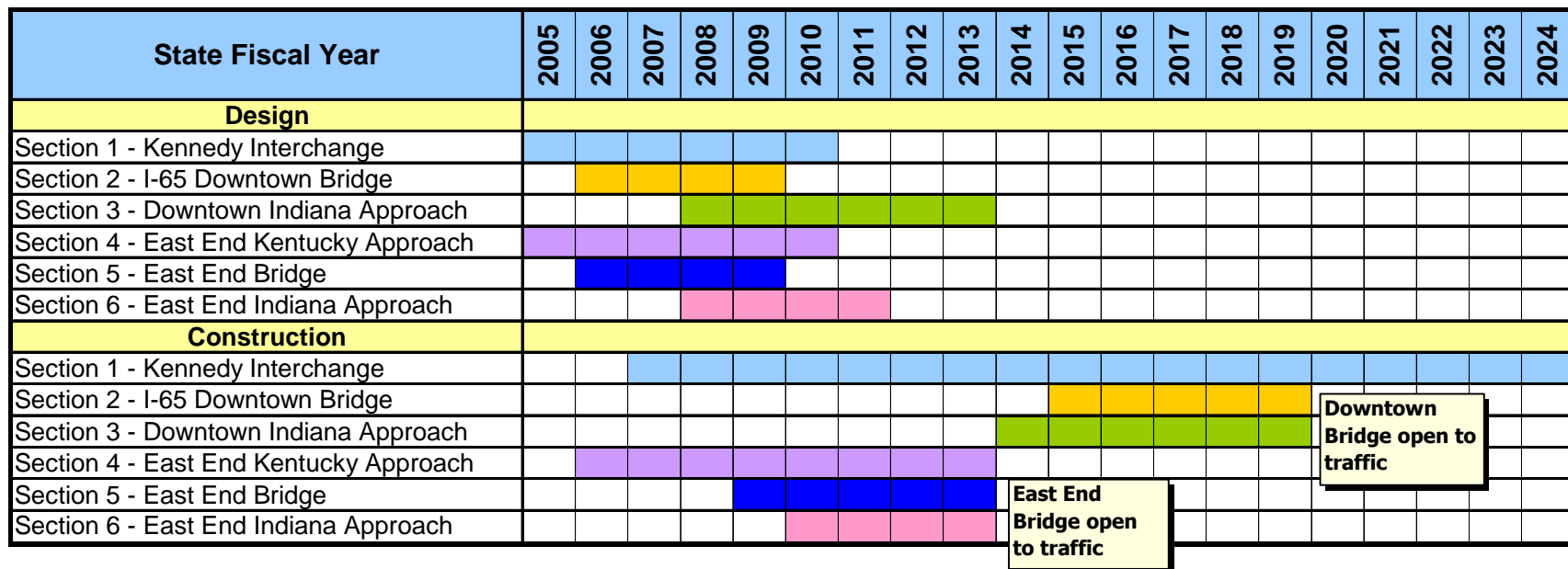
Project Section	Current Activities	Forecasted Completion Year (State Fiscal Year)
Section 1 - Kennedy Interchange	Design phase approx. 50% complete	2024
Section 2 - I-65 Downtown Bridge	Design phase approx. 20% complete	2019
Section 3 - Downtown Indiana Approach	Design contract being established	2019
Section 4 - East End Kentucky Approach	Design phase approx. 40% complete	2013
Section 5 - East End Bridge	Design phase approx. 20% complete	2013
Section 6 - East End Indiana Approach	Design contract being established	2013
Other*	Ongoing	2012

*\*Other includes project-wide enhancements and historic mitigation and a limited portion of program management costs.*

The current schedule calls for completion of the East End Bridge and related roadways by SFY 2013. Construction on Section 1 (Kennedy Interchange) also will be proceeding at this time. The Downtown Bridge is scheduled to commence construction in SFY 2015 and be completed by SFY 2019. At that time, the bridge can be open for traffic while related roadway work on Section 1 is being completed, scheduled for SFY 2024. After the Downtown Bridge has been opened, the existing I-65 Kennedy Bridge will undergo modifications to accommodate southbound traffic only.

In order to meet this schedule, design of Sections 1 and 4 were initiated first. This is because of the complexity of Section 1's Kennedy Interchange and of the Section 4 tunnel. Design for Sections 2 and 5 (Downtown Bridge and East End Bridge, respectively) have subsequently started so that design elements, particularly the bridge approaches, can be tied into Sections 1 and 4. Similarly, Sections 3 and 6 will commence shortly so that all design elements can be coordinated and construction schedules maintained. While Section 2 (Downtown Bridge) will have a lag between design and construction, it is important for the design to proceed with the Section 1 and 3 designs so that the bridge approaches, roadway profiles, horizontal alignments, and other design elements can be properly coordinated.

Figure 1-3 presents an overview of the LSIORB Project schedule. A more detailed schedule can be found in Attachment C to this IFP.



**Figure 1-3. LSIORB Project Schedule Overview**

## CHAPTER 2. PROJECT COST ESTIMATE

### INTRODUCTION

*This chapter provides a detailed description of the cost elements of the Ohio River Bridges Project and provides current estimates of those costs. It also summarizes the costs incurred to date and provides detail on key cost-related assumptions.*

### COST ELEMENTS

The cost estimate to complete the Ohio River Bridges Project is broken down into six project sections plus an “Other” category to capture costs that are not section-specific, such as project-wide mitigation and enhancements. The sections and responsible sponsors are shown in Table 2-1.

**Table 2-1. LSIORB Project Sections and Cost Responsibility**

Section	Responsible Project Sponsor	Section Description
1	KYTC	Kennedy Interchange (Spaghetti Junction)
2	KYTC, INDOT	I – 65 Downtown Bridge
3	INDOT	Downtown Bridge Indiana Approach
4	KYTC	East End Bridge Kentucky Approach
5	KYTC, INDOT	East End Bridge
6	INDOT	East End Bridge Indiana Approach
Other	KYTC, INDOT	Environmental and Historic Mitigation, Enhancements*, GEC Advance Contract

*\*INDOT's share of environmental and historic mitigation costs is captured within each project section.*

The costs for each project section have been further broken down into 13 major project elements as follow:

- 1) **Preliminary Engineering/Design** – preliminary engineering design services through final right of way plans.<sup>4</sup>
- 2) **Final Engineering/Design** – final design services through construction documents.<sup>5</sup>
- 3) **Design Program Management** – services of the GEC during the design phase; similar activities during the construction phase are included in the Construction Administration and Inspection category.
- 4) **Design/Development Contingency** – contingency to cover additional design services as required if unknowns are identified during the environmental/preliminary engineering phase that result in additional scope requirement. This contingency can cover unanticipated cost impacts of context sensitive design, bridge type selection, enhancements desired by the public, and so forth.
- 5) **Construction Administration and Inspection** – all construction and program management, administration, and inspection activities during the construction phase of the project.
- 6) **Construction** – actual project construction.
- 7) **Construction Contingency** – contingency to cover additional construction services, as required to address unforeseen circumstances.
- 8) **Utilities** – all public and private utility relocation and new utility construction, such as telephone, electric, gas, fiber optics, water, sewer, and storm drainage.
- 9) **Right of Way Acquisition** – appraisals, administration, management, and acquisition of required right of way.
- 10) **Environmental Mitigation** – various project-related activities such as handling of hazardous materials, wetlands, and cultural resources mitigation.
- 11) **Enhancements** – various project-related activities such as context sensitive treatments and designs.
- 12) **Historic Mitigation** – mitigation of sensitive historic properties.
- 13) **Other** – project-wide (i.e., not specific to an individual project section) historic mitigation and enhancements and other costs not captured by primary cost categories.<sup>6</sup>

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<sup>4</sup> Corresponds to Engineering/Design – Phase C in *Financing Options Plan*.

<sup>5</sup> Corresponds to Engineering/Design – Phase D in *Financing Options Plan*.

<sup>6</sup> INDOT's share of environmental and historic mitigation costs is captured within each project section.

## COST ESTIMATE OVERVIEW

The current cost estimate is based on the SFY 2003 detailed cost estimate that was generated as part of the *Financing Options Plan* for the Project.<sup>7</sup> These costs were reviewed by both states and FHWA for validity of the base estimates and assumptions. The costs have subsequently been updated, adjusted, and inflated to reflect year-of-expenditure costs and the current project schedule. Significant design activities have progressed on Sections 1, 2, 4, and 5, and the cost estimates for these sections have been updated based on current information. Adjustments also have been made to account for new cost information available on Sections 3 and 6. Future updates will be performed for all sections as section-specific activities proceed.

The current total estimated cost for the LSIORB Project is \$2.154 billion in 2003 dollars (compared to \$1.937 in the Financing Options Plan) and \$4.068 billion based on the projected year-of-expenditure (i.e., on a cash flow basis) and current expectations of construction-related inflation. The 2003 estimate is presented as the baseline cost estimate against which future adjustments can be reviewed. The year-of-expenditure estimate reflects the current project schedule and reasonable assumptions for future inflation. The States will continue to monitor and adjust the cost estimate based on new information on underlying economic conditions.

Table 2-2 and Figure 2-1 provide an overview of the LSIORB Project costs, by segment and by state. These costs are presented in year-of-expenditure dollars based on the current project schedule, current cost estimates, and reasonable estimates of inflation.

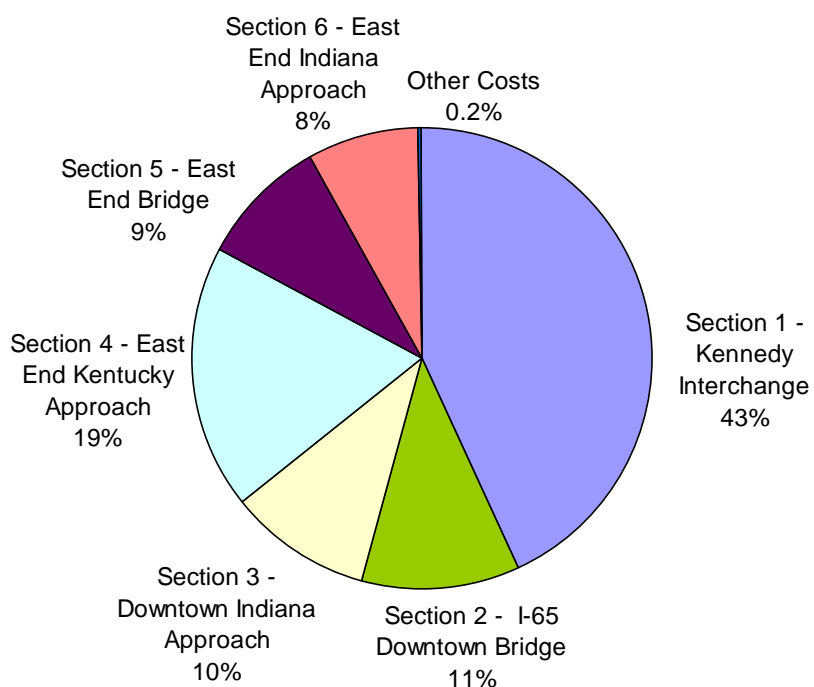
**Table 2-2. LSIORB Project Cost Estimate – by Section and by State  
(Year-of-Expenditure \$, millions)\***

Project Segment	Total Project Cost	Kentucky	Indiana
Section 1 - Kennedy Interchange	\$1,749.8	\$1,749.8	\$0.0
Section 2 - I-65 Downtown Bridge	453.6	226.8	226.8
Section 3 - Downtown Indiana Approach	411.8	0.0	411.8
Section 4 - East End Kentucky Approach	753.3	753.3	0.0
Section 5 - East End Bridge	374.1	187.0	187.0
Section 6 - East End Indiana Approach	318.4	0.0	318.4
Other Costs	6.7	4.9	1.8
<b>TOTALS (Y.O.E.)</b>	<b>\$4,067.7</b>	<b>\$2,921.9</b>	<b>\$1,145.9</b>

\*Note: Totals do not add due to rounding.

<sup>7</sup> *Louisville-Southern Indiana Ohio River Bridges Project Financing Options Plan*, April 2003.





**Figure 2-1. LSIORB Cost Breakdown by Section  
(based on year-of-expenditure costs)**

Table 2-3 provides additional background detail on these cost estimates, including the baseline 2003 estimate, this estimate escalated to 2007, and the current year-of-expenditure estimate, taking into account the anticipated impact of inflation.

**Table 2-3. LSIORB Project Cost Summary (in \$ millions)**

Project Segment	Base Year Cost in 2003 Dollars	Base Year Cost in 2007 Dollars	Year-of-Expenditure Cost Based on Current Estimates of Inflation
Section 1 - Kennedy Interchange	\$865.0	\$1,187.4	\$1,749.8
Section 2 - Downtown River Bridge	215.2	301.1	453.6
Section 3 - Downtown IN Approach	212.3	288.7	411.8
Section 4 - KY East End Approach	442.6	613.8	753.3
Section 5 - East End River Bridge	224.0	313.2	374.1
Section 6 - IN East End Approach	189.1	260.2	318.4
Other	5.9	6.5	6.7
<b>Total</b>	<b>\$2,154.1</b>	<b>\$2,970.9</b>	<b>\$4,067.7</b>

\* Costs expended prior to 2007 escalated only to the year of expenditure.

## COST ESTIMATING METHODOLOGIES AND KEY ASSUMPTIONS HISTORY

Current cost estimates, as reflected in this Initial Financial Plan, build upon prior detailed construction cost estimates developed by the Bi-State Management Team in conjunction with the GEC and FHWA (and documented in the *Financing Options Plan (FOP)*). The baseline FOP

estimates were based on the preliminary concepts of the preferred alternative. These costs are broken down by Project Section and Cost Element, as described further below. Following the review of baseline cost estimating methodologies, this chapter discusses more recent refinements to the cost estimates for the Project.

### **Baseline *Financing Options Plan* Cost Estimating Methodology by Cost Element**

The cost estimate that was used to generate the *Financing Options Plan* started with the detailed line item estimates developed for the FEIS. Those costs were updated to then current knowledge to include historic mitigation, project contingencies, shared pedestrian/bikeway on the bridges, updated right of way appraisals, and updated Intelligent Transportation System (ITS) costs; and employed the following methods and assumptions:

- **Engineering/Design Costs** – Engineering costs were estimated as a percentage of construction based on historical knowledge adjusted to account for the unique project elements that would affect the engineering design. The estimates varied section to section and ranged from 5.5% to just over 9% of the section construction cost estimate. Key project elements considered in making this determination include design complexity, traffic control requirements, right of way acquisition requirements, level of public involvement, and utility impacts.
- **Design Program Management** – Design Program Management costs were estimated as 4% of base construction costs. The 4% of construction rate was based on the magnitude of project oversight, along with requirements for environmental and historic resources mitigation coordination.
- **Design/Development Contingency** – The Design/Development contingency varied section to section and ranged from 15% to over 20% of base construction.
- **Construction** – The Bi-State Management Team, in conjunction with the GEC and FHWA, developed a detailed construction cost estimate based on the preliminary concepts of the preferred alternative. A significant level of detail, based on the preferred alternative, was used to generate each section's cost estimate. Line items estimated and included in the Construction cost category include, but are not limited to, the following: clearing and grubbing, mobilization and demobilization, maintenance of traffic including temporary roadways to meet phasing requirements, right of way fencing, major drainage structures, retaining walls, embankments, signing and lighting, and intelligent transportation systems.
- **Construction Administration and Inspection** – The Construction Administration and Inspection costs were estimated as 8% of the total construction costs, including costs for contractors and for state personnel.
- **Construction Contingency** – Construction contingencies were determined based on a risk factor evaluation, and varied from 12% to 25%, with 12% being applied to the roadway sections (Sections 1, 3, 4, and 6), 15% applied to the Ohio River bridge sections (Sections 2 and 5), and 25% applied to the tunnel construction in Section 4.
- **Utilities** – Utility costs have been based on estimates prepared by the utility companies after a preliminary engineering review. No contingency was added to this amount.

- **Right of Way Acquisition** – Right of way costs were based on a detailed right-of-way study of the parcels to be acquired or relocations required, and included a 20% contingency.

### **Baseline *Financing Options Plan* Inflation Assumption**

To account for potential cost inflation, original SFY 2000 base year cost estimates were inflated by 12% to generate the SFY 2003 estimate for the *Financing Options Plan*. Beginning in SFY 2003, an additional 4% annual inflation rate was applied to forecast year-of-expenditure costs. The 4% inflation rate, per the *Financing Options Plan*, was based on the Consumer Price Index (CPI).

### **Current Cost Estimate Methodology by Program Element**

The current cost estimate, as part of this Initial Financial Plan, is based on the SFY 2003 estimate from the *Financing Options Plan*, with the following updates:

- **Engineering Design Cost Estimates** – Engineering costs were established based on costs of design contracts currently executed or in negotiation, plus estimates of costs for future contracts. For the entire project, engineering costs are estimated to be approximately 10.5% of construction.
- **Design Program Management Estimates** – Program Management costs during the design phase of the Project are estimated to be less than 2% of construction, based on currently negotiated contracts. The reduction in this cost element offsets some of the increase in the engineering design costs.
- **Construction Administration and Inspection Estimates** – Construction Administration and Inspection Costs have been increased to 9% of total construction costs. The 1% increase is to cover Program Management costs during the construction phase.
- **Section 1 (Kennedy Interchange) Cost Update** – This section has progressed to 50% design, and the cost estimate has been updated accordingly.
- **Section 1 Construction Contingency Adjustment** – The construction contingency for Section 1 has been reduced to 10% because design has progressed to 50% and there are now fewer unknowns.
- **Section 4 (East End Bridge Kentucky Approach) Cost Update** – The cost estimate for the tunnel has been updated based on the current level of design.
- **Section 4 Tunnel Construction Contingency Adjustment** – The Section 4 construction contingency has been reduced from 25% to 12%, reflecting the advanced design status and the anticipated knowledge and increased cost certainty to be gained from construction of the exploratory tunnel.
- **Re-distribution of Project Costs** – Design and construction costs for the bridge approaches were originally included in roadway Sections 1, 3, 4, and 6. These costs have subsequently been moved to the bridge sections, Sections 2 and 5.

- **Updated Construction Phasing** – The construction schedule has been updated based on current implementation plans.

These updates and shifting of costs have resulted in adjustments to all cost elements, with the net effect being a \$4.5 million increase in the Indiana base year (2003) cost estimate and a \$212.3 million increase in the Kentucky base year cost, for a total increase of \$216.8 million (an 11% increase over the base cost estimate provided in the *Financing Options Plan*). The major adjustments that are responsible for the difference in baseline costs are as follow:

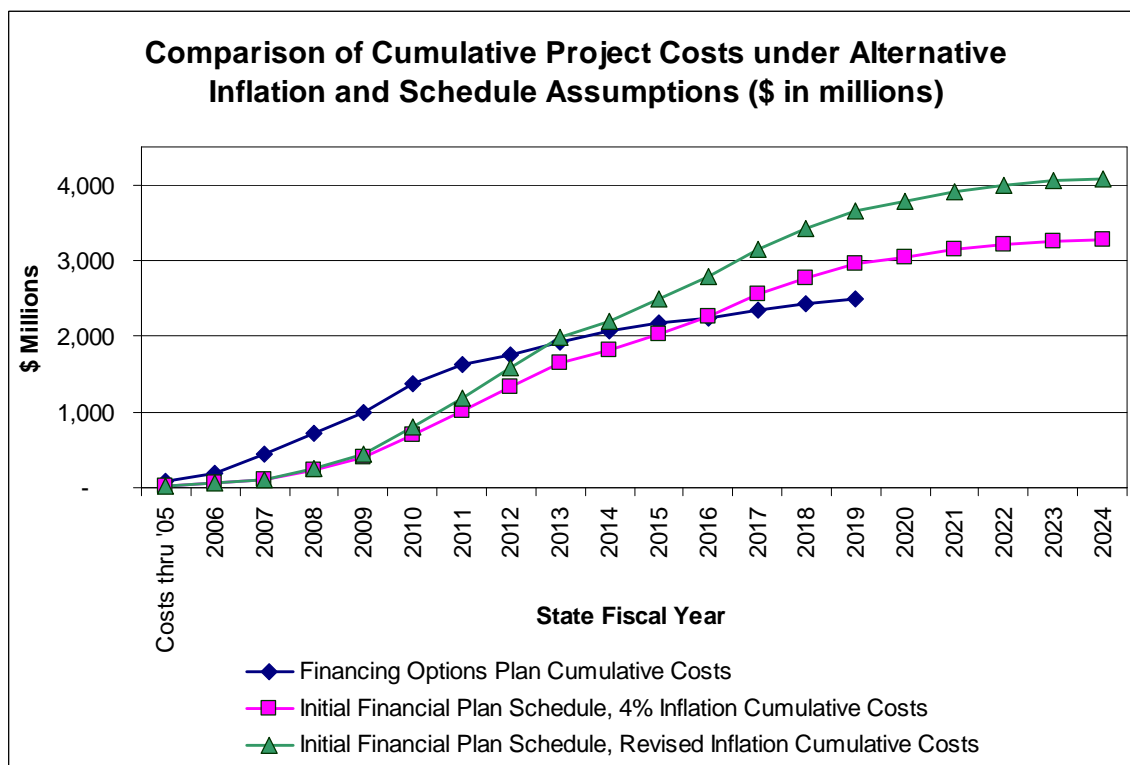
- Net increase of \$17 million in combined design and program management costs, with reductions in program management offsetting some of the design cost increases.
- Overall decrease of \$3 million for design contingency, as design contingency has been removed in proportion to design that has been completed.
- Overall increase of \$25 million in Construction Administration and Inspection due to construction cost increases and the additional 1% of construction applied to this category for Construction Administration.
- Overall increase of \$145 million in construction and construction contingency costs comprised of roughly a \$15 million increase in Section 1 costs, \$120 million in Section 4 roadway and tunnel costs, and an overall increase of \$10 million in construction contingencies due to shifting of costs between sections, which incidentally moved costs into sections that are subject to higher contingency estimation formulas.
- Overall increase of \$9.5 million for right of way acquisition.
- An \$18 million increase for hazardous materials mitigation in Section 1.
- Overall increase of \$5.5 million budgeted for archaeology mitigation.

## Current Inflation Assumption

At the time of its preparation in 2003, the *Financing Options Plan* applied a 4% annual inflation rate based on historical data. Recently, however, construction costs have experienced much higher escalations, due in part to the impacts of fuel prices on construction material and equipment operation costs. From 2003 to 2006, for example, street and highway construction costs increased an average of 10% per year (based on measures of the Producer Price Index), with inflation starting to trend down in 2007. Therefore, for purposes of this IFP, the 10% average annual inflation rate observed from 2003 to 2006 was continued until 2007 for the construction costs. It is then reduced to 8% in 2008 and to a 4% annual rate in 2009 (based on a review of long-run Producer Price Index trends). While not identical, this is consistent with forecasting methodologies utilized by both states in their construction programs.

Design and program management costs, which are predominantly labor costs, are conservatively assumed to grow at 4% per year, for all years, based on a review of the Consumer Price Index as reported by the U.S. Department of Labor. The inflation rate applied to Right of Way costs is 5%.

The impacts of higher inflation over the course of the Project can be seen in Figure 2-2. As shown, the total cumulative cost is now estimated to be \$4.068 billion, compared to \$2.488 billion based on the *Financing Options Plan* year-of-expenditure estimate and approximately \$3.277 billion if 4% inflation is assumed throughout the forecasting time period, as was done in the *Financing Options Plan*. The States will continue to monitor market conditions and adjust the cost estimate as necessary.



**Figure 2-2. Comparison of Inflation Impacts on Total Project Construction Costs**

## COST BREAKDOWN BY PHYSICAL LOCATION (CONSTRUCTION SEGMENT) AND PROJECT ELEMENT

To control the overall project scopes, budgets, and schedules, the LSIORB Project has been organized to be managed, designed, and constructed by sections that relate to geographic locations. Table 2-4 and Figure 2-3 provide a summary breakdown of project costs by construction segment and project element, in year-of-expenditure dollars (see Attachment D for additional detail).

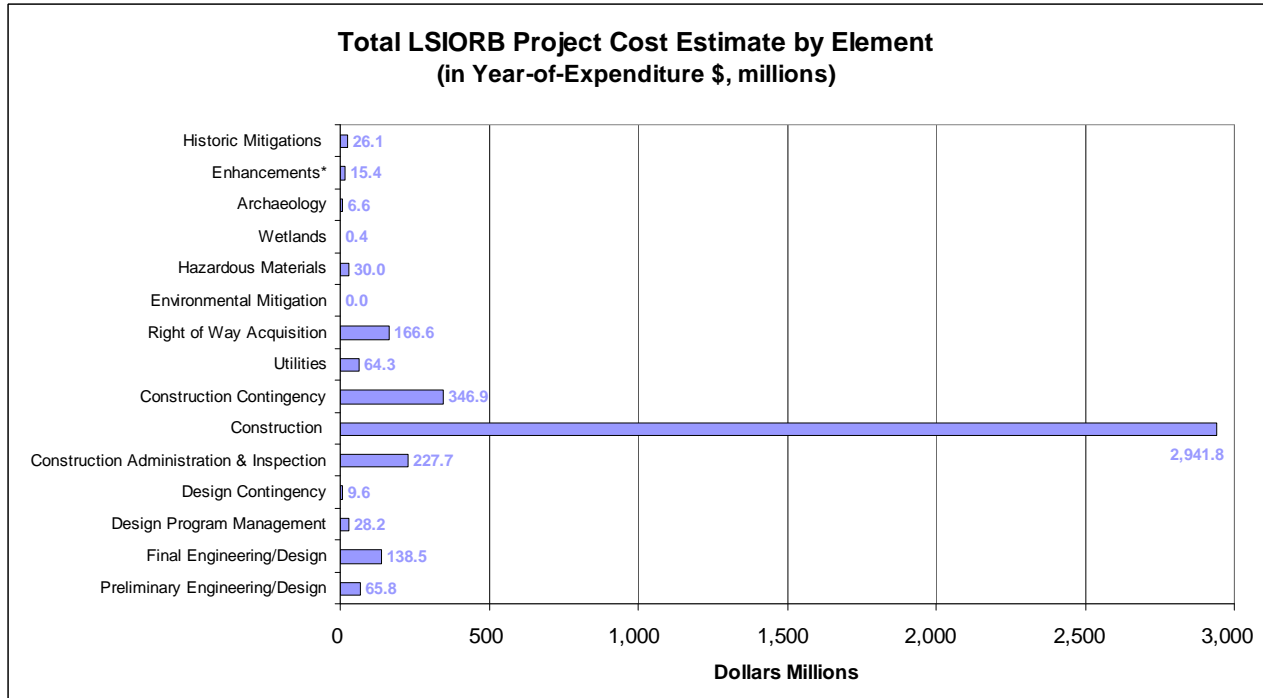
**Table 2-4. LSIORB Project Cost Estimate by Construction Segment, Project Element, and State (Year-of-Expenditure \$, millions)\*\***

Project Element	Cost by Section and State										Total Cost by State		Total Cost
	1	2		3	4	5		6	Other				
	KY	KY	IN	IN	KY	KY	IN	IN	KY	IN	KY	IN	
Preliminary Engineering/Design	\$44.0	\$3.3	\$3.3	\$0.0	\$7.6	\$3.7	\$3.7	\$0.0			\$58.7	\$7.1	\$65.8
Final Engineering/Design	60.0	4.4	4.4	24.6	17.2	4.8	4.8	18.2			86.4	52.0	138.5
Design Program Management	13.9	0.8	0.8	3.3	3.1	0.9	0.9	2.6		1.8	18.8	9.4	28.2
Design Contingency	2.6	1.0	1.0	0.0	2.6	1.2	1.2	0.0			7.4	2.2	9.6
Construction Administration & Inspection	95.1	14.0	14.0	21.0	43.7	11.4	11.4	17.2			164.1	63.6	227.7
Construction	1,248.0	176.0	176.0	271.0	563.1	142.7	142.7	222.3			2,129.7	812.0	2,941.8
Construction Contingency	124.8	26.4	26.4	32.5	67.3	21.4	21.4	26.7			239.9	107.0	346.9
Utilities	48.7	0.0	0.0	3.6	4.0	0.0	0.0	8.1			52.7	11.6	64.3
Right of Way Acquisition	61.1	0.0	0.0	52.9	31.6	0.0	0.0	21.0			92.7	73.9	166.6
Environmental Mitigation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
Hazardous Materials	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			30.0	0.0	30.0
Wetlands	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2			0.1	0.2	0.4
Archaeology	2.4	0.9	0.9	0.0	0.6	0.9	0.9	0.0			4.8	1.8	6.6
Enhancements*	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5		15.1	0.3	15.4
Historic Mitigations	5.7	0.0	0.0	2.8	12.3	0.0	0.0	1.8	3.4		21.5	4.6	26.1
TOTALS (Y.O.E.)	\$1,749.8	\$226.8	\$226.8	\$411.8	\$753.3	\$187.0	\$187.0	\$318.4	\$4.9	\$1.8	\$2,921.9	\$1,145.9	\$4,067.7

\* Enhancement costs are not escalated over time but instead are fixed dollar commitments.

\*\* Totals do not sum due to rounding.





\*Enhancement costs are not escalated over time but instead are fixed dollar commitments.

**Figure 2-3. Total LSIORB Project Cost Estimate by Element (Year-of-Expenditure \$, millions)**

## COST EXPERIENCE (COST INCURRED TO DATE AND COST TO COMPLETE)

Table 2-5 provides a summary of the actual expenditures on the Ohio River Bridges Project as of the third quarter of SFY 2007 (March 31, 2007).<sup>8</sup>

**Table 2-5. Total Expenditures to Date by State Fiscal Year**  
(Year-of-Expenditure \$, in millions)

State Fiscal Year	Actual Expenditures to Date		
	Kentucky	Indiana	Total
2005	\$13.9	\$2.9	\$16.8
2006	34.0	8.8	42.8
2007	35.2	5.2	40.4
<b>TOTAL</b>	<b>\$83.1</b>	<b>\$17.0</b>	<b>\$100.1</b>

\* Actual expenditures through March 2007; Design expenditures through June 2007.

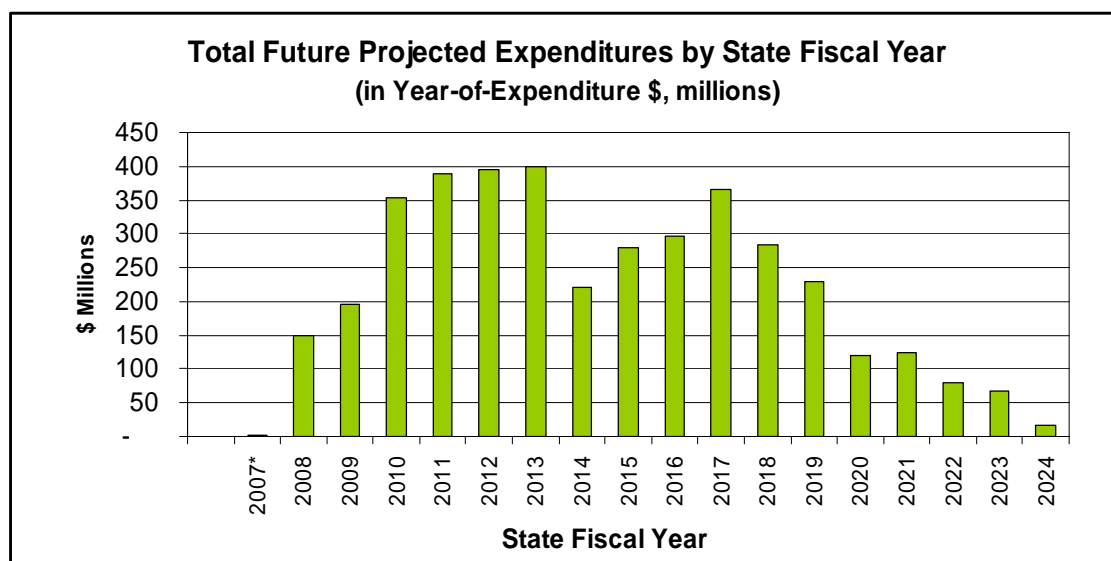
<sup>8</sup> Note: includes design costs through June 30, 2007.

Table 2-6 and Figure 2-4 provide a summary of the projected future expenditures for the Project, by state fiscal year and based on the currently anticipated year of expenditure.

**Table 2-6. Projected Future Expenditures by State Fiscal Year  
(Year-of-Expenditure \$, in millions)**

State Fiscal Year	Projected Future Expenditures		
	Kentucky	Indiana	Total
2007*	\$0.9	\$1.5	\$2.4
2008	126.4	23.3	149.7
2009	132.4	62.6	195.0
2010	212.6	141.4	354.0
2011	251.9	137.0	388.8
2012	253.9	140.4	394.3
2013	317.8	80.8	398.6
2014	149.9	70.8	220.8
2015	190.7	89.6	280.3
2016	196.9	98.8	295.7
2017	204.6	161.5	366.1
2018	213.7	69.2	282.9
2019	178.1	51.9	230.0
2020	120.1	0.0	120.1
2021	124.1	0.0	124.1
2022	80.8	0.0	80.8
2023	67.2	0.0	67.2
2024	16.7	0.0	16.7
<b>TOTAL</b>	<b>\$2,838.8</b>	<b>\$1,128.9</b>	<b>\$3,967.7</b>

\*Note: 2007 includes only 4<sup>th</sup> quarter 2007 costs other than design costs accounted for above.



\*Note: 2007 includes April–June period; excludes design costs accounted for as previously expended.

**Figure 2-4. Projected Future Expenditures by State Fiscal Year (Year-of-Expenditure \$, in millions)**

## **COST MANAGEMENT RESPONSIBILITY**

The Bi-State Management Team has ongoing responsibility for the oversight of the Ohio River Bridges Project and, in particular, the management of project costs and schedule. The BSMT recognizes the importance of cost control for a project of the scale and duration of the LSIORB Project. The BSMT is routinely called upon to work with the States to pursue opportunities to effectively manage project costs. Management approaches are discussed further in Chapter 6 of this IFP.

## CHAPTER 3. IMPLEMENTATION PLAN

### INTRODUCTION

*Based on the currently planned traditional project delivery approach, the Ohio River Bridges Project is scheduled to be completed by the conclusion of SFY 2024, with the East End Bridge open to traffic by the end of SFY 2013 and the Downtown Bridge open by the conclusion of SFY 2019. This chapter provides information on the planned schedule for implementation of all elements of the Project. It also provides additional information regarding the assignment of implementation responsibilities and provides a summary of the status of necessary permits and approvals.*

### PROJECT DESCRIPTION/PHASING

As detailed in Chapter 1 of this IFP, six interconnected sections comprise the Ohio River Bridges Project, which is being implemented to provide two new Ohio River Bridge crossings and to reconstruct the I-64/I-65/I-71 Kennedy Interchange. The six sections are:

- Section 1 – Kennedy Interchange (“Spaghetti Junction”)
- Section 2 – I-65 Downtown Bridge
- Section 3 – Indiana Approaches to Downtown Bridge
- Section 4 – Kentucky Approaches to East End Bridge
- Section 5 – New East End Bridge
- Section 6 – Indiana Approaches to East End Bridge

Given the structure of the LSIORB Project as outlined above, it is clear that the coordination of design and construction sequencing among the various sections will be critical. Such sequencing also could have a significant impact on overall costs and financing requirements. The States recognize the importance of close coordination to ensure that the most effective project sequencing is carried out and have developed mechanisms to ensure such coordination, including support provided via the BSMT.

### IMPLEMENTATION RESPONSIBILITY

The BSMT, acting through the GEC, coordinates the scope development process for all section design contracts in order to provide for design compatibility along with a consistent work breakdown structure and process. The GEC and the BSMT monitor the project design development and performance and obtain updated section construction cost estimates from the section design engineers as the Project moves through its various phases.

To effectively coordinate project activities, the GEC will create a master project schedule based on the individual project schedules provided by the section design consultants. This schedule will take into consideration the required coordination among sections and phasing aspects of each project component and will be developed in greater detail as each section progresses through design and into construction.

## SUMMARY PROJECT SCHEDULE

Because of the Project's complexity and the relative early stages of design, it is premature to develop a detailed construction schedule. Preliminary information on the construction phasing required within and among the sections was included in the 2003 "Engineering Report" prepared by the Project's EIS/Preliminary Engineering consultant for FHWA, KYTC, and INDOT in September 2003. Information contained in that report served as the basis for the Summary Project Schedule provided as Attachment C to this IFP. This preliminary schedule provides detail necessary to balance forecasted construction costs with the funding plans and resources of each state.

As shown in the Summary Project Schedule and based on current implementation plans, construction segments will be pursued simultaneously and the Project is scheduled to be fully completed by the conclusion of SFY 2024. The East End Bridge, along with the approach roadways on either side of the River, is scheduled for a SFY 2013 completion. The Downtown Bridge and the approach roadway on the Indiana side of the River are scheduled for completion by the end of SFY 2019. Construction of the Kennedy Interchange will continue until the end of SFY 2024. After the new Downtown Bridge has been opened, the existing I-65 Kennedy Bridge will undergo modifications to accommodate southbound traffic only.

## STATUS OF PERMITS AND APPROVALS

Consistent with project development processes in each of the States sponsoring the Project, permit acquisition has been made the responsibility of the individual section designers and contractors. Application for appropriate permits or preparation of required notifications to permitting agencies will be monitored by the BSMT and GEC project managers to assure that the applications are filed in a timely manner to avoid schedule delays. Those permits and notifications identified as required in the FEIS are outlined in Table 3-1.

**Table 3-1. Permits or Notifications Required for the LSIORB Project**

Agency	Permit/Notification*
U.S. Army Corps of Engineers	Section 404 Permit for Discharge of Dredged or Fill Material into Waters of the United States
U.S. Army Corps of Engineers	Section 10 Construction, Dumping and Dredging Permit
U.S. Coast Guard	Section 9 Bridge Permit
Federal Aviation Administration	FAA Form 7460-1 Notice of Proposed Construction or Alteration
Kentucky Airport Zoning Commission	Lighting required for top of structures of Ohio River

Agency	Permit/Notification*
Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water	Floodplain Construction Permit
Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water	Section 401 Water Quality Certification
Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water	Rule 5 National Pollution Discharge Elimination System
Indiana Department of Environmental Management	Section 401 Water Quality Certification
Indiana Department of Environmental Management	Rule 5 National Pollution Discharge Elimination System
Indiana Department of Natural Resources	Construction in a Floodway Permit

*\*Note: not all permits/notifications apply to all sections of the LSIORB Project.*

As discussed further in the Risk Management section of this IFP (see *Chapter 6*), early and frequent communication and coordination with the permitting agencies, as well as process oversight by the BSMT, acting through the GEC, will facilitate the permitting processes. Based on the current status of all the sections – in the design stage – the permitting processes are in the early agency coordination phase.

## CHAPTER 4. PROJECT FUNDING

### INTRODUCTION

*As described in detail in Chapter 2, based on current estimates and the most up-to-date information on construction-related inflation, the Ohio River Bridges Project will require an estimated \$4.068 billion (in year-of-expenditure dollars) to fully fund all project elements over the planned project horizon. This chapter reviews the States' overall plan of finance for the Project, describes in detail the planned sources of funds, and reviews the funding plan in the context of the States' overall transportation programs and available resources.*

### OVERALL PLAN OF FINANCE

As currently conceived and for the purposes of this Initial Financial Plan, the Ohio River Bridges Project will be funded entirely through federal and state transportation program funding. Federal funding will include High Priority Project (HPP) and other federal funding designated specifically for the Project and additional federal-aid apportionments of the States of Kentucky and Indiana. Initial state funding will be comprised of state matching funds for the federal-aid program, core state construction program funds in each of the two sponsoring states, and, in the case of Indiana, lease proceeds from the Indiana Toll Road concession made available through the State's *Major Moves* program.

Currently, neither state plans to utilize debt financing for the Project but rather to meet annual cash flow needs on a pay-as-you-go basis. Both states intend to review this decision as the Project proceeds and will make adjustments to the plan of finance, as called for by the States' own changing financial circumstances as well as financial market conditions. Kentucky, in particular, recognizes the potential to utilize Grant Anticipation Revenue Vehicles (GARVEE) borrowing to manage cash flow demands of this project in the context of other important program funding demands.

Given the long time horizon for this project and the extent to which circumstances and opportunities change over time, it is anticipated that there may be additional and/or alternative funding sources applied to the LSIORB Project by each state. Any changes to the funding plan will be relayed in Annual Updates to this IFP, as required by FHWA.

### SOURCE OF FUNDS

For the purposes of this IFP, the status of funding sources is referred to as falling into one of several categories, as follow:

- **Expended and/or Obligated Funds** – including funds that have actually been spent as well as those that have been obligated but for which the cash outlay is still forthcoming;
- **Other Committed Funds** – referring to those funds for which there is a commitment but no actual expenditures or obligations, which for both states refers to funding included in the State's biennial budget;

- **Scheduled Funding** – which refers to funding included in the States’ multi-year plans but not yet committed through the relevant budgetary process – In the case of Kentucky, this is the State’s Six-Year Highway Plan, and for Indiana, the State’s 10-Year *Major Moves* Program as well as its core federal-state highway program; and
- **Anticipated Funding** – referring to funds that can reasonably be anticipated to be available to the Project in later years but which are not yet formally assigned to the Project in a binding budget or planning document, such as future funding from federal and state resources that support the States’ ongoing core federal-state highway programs.

Planned funding for the Project is consistent with each state’s fiscally constrained State Transportation Improvement Programs (STIPs) and relevant Transportation Improvement Programs (TIPs).

Currently, the LSIORB Project has expended/obligated, committed, and/or scheduled funding sources of \$1.651 billion, comprised of \$887 million for Kentucky’s portion of the Project and \$764 million for Indiana’s project costs. Anticipated funding for the Project reflects LSIORB Project funding needs beyond each state’s current plan horizon and that will be committed as each state updates its transportation funding plans over the life of the Project. The States have demonstrated their overall commitment to the Project through the already expended, obligated, and scheduled funds and have expressed their commitment to providing future funding through this IFP as well as through the bi-state management agreement for the Project.

Table 4-1 shows the current breakdown of overall funding for the Project, based on the three categories described above. Each funding source is discussed in more detail in the sections that follow.

**Table 4-1. Summary LSIORB Project Funding by Source (\$ in millions)**

	Funding Source	Expended or Obligated	Committed (in Budget)	Scheduled (in Plan)	Anticipated	Total
Kentucky	6-Year Plan Funding (federal program funds, incl. state match)	\$45.1	\$233.1	\$530.4	\$2,034.6	\$2,843.2
	TEA-21 HPP (incl. state match)	33.5	0.0	0.0	0.0	33.5
	SAFETEA-LU HPP & Discretionary (incl. state match)	27.6	0.0	0.0	0.0	27.6
	Annual Federal Appropriation Earmarks	17.6	0.0	0.0	0.0	17.6
	<b>SUBTOTAL</b>	<b>\$123.8</b>	<b>\$233.1</b>	<b>\$530.4</b>	<b>\$2,034.6</b>	<b>\$2,921.9</b>
Indiana	Major Moves Program	\$0.0	\$44.0	\$434.0	\$0.0	\$478.0
	Federal program with state match	0.0	24.0	217.0	381.9	622.9
	TEA-21 HPP (incl match)	11.0	0.0	0.0	0.0	11.0
	SAFETEA-LU HPP (incl match)	0.0	12.0	9.0	0.0	21.0
	Annual Federal Appropriation Earmarks	7.0	6.0	0.0	0.0	13.0
	<b>SUBTOTAL</b>	<b>\$18.0</b>	<b>\$86.0</b>	<b>\$660.0</b>	<b>\$381.9</b>	<b>\$1,145.9</b>
<b>TOTAL</b>		<b>\$141.8</b>	<b>\$319.1</b>	<b>\$1,190.4</b>	<b>\$2,416.5</b>	<b>\$4,067.7</b>



## FEDERAL HIGH PRIORITY PROJECT FUNDING

Both states have secured special designations for the LSIORB Project via congressional action in the form of High Priority Project funding and/or federal appropriation earmarks. These funding amounts are shown in Table 4-2.

**Table 4.2. High Priority Project Funding by State (\$ in millions)**

State	High Priority Project Funding Designation*			
	TEA-21	SAFETEA-LU	APPROPRIATION EARMARKS	Total
Kentucky	\$33.5	\$27.6	\$17.6	\$78.6
Indiana	\$11.0	\$21.0	\$13.0	\$45.0
<b>Total</b>	<b>\$44.5</b>	<b>\$48.6</b>	<b>\$30.6</b>	<b>\$123.6</b>

\* Including state match, after obligation limitation and rescissions.

High Priority Project funds are funded by contract authority and available until expended. Subject to section 117 of Title 23, United States Code, the amount listed for each HPP Project in SAFETEA-LU is available (from amounts made available by section 1101(a)(16) of SAFETEA-LU) for fiscal years 2005 through 2009 to carry out each project. As with the use of other federal-aid highway program funds, High Priority Project funds require a state match. In accordance with 23 U.S.C. §117(c), the Federal share for HPP funds is 80% unless otherwise specified within the project description or in law. Both states are committed to providing this match to ensure that the HPP funds are in fact deployed on the Project.

## OTHER FEDERAL AND STATE FUNDING

Both Kentucky and Indiana have designated specific funding for the LSIORB Project from each state's federal-aid program, as described below. In both states, this designation is subject to the State's budget process.

### Kentucky

In addition to already expended and/or obligated state and federal funding of \$45.1 million (exclusive of the federal HPP and special appropriation funding described above), the Kentucky Transportation Cabinet has an additional \$233.1 million in funds included in the State's 2007-2008 biennium budget and \$530.4 million in the State's Six-Year Highway Plan enacted by the State Legislature (covering the SFY 2006 – 2012 period). Together with the HPP funding described above, this represents 84% of estimated costs through the period covered by the Six-Year Plan (see further discussion below). The difference between the Six-Year Plan and the IFP projected funding needs over the same time period can be attributed to the timing of adoption of the Six-Year Plan relative to development of updated cost estimates in support of this IFP. At the next opportunity, the State will revisit its Six-Year Plan and pursue appropriate adjustments.

The 2007-2012 Six-Year Highway Plan contains an estimated \$3.8 billion of total federal highway funding and approximately \$1.5 billion in state construction program and road bond funding. For reference, Table 4-3 shows Kentucky's current Six-Year Highway Plan funding designated for the Ohio River Bridges Project by federal funding category and intended use. As shown, the primary anticipated federal funding categories include Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). The State will

continue to make adjustments as well as additional financial commitments to the Project based on the State's standard two-year budget procedures and in accordance with the Six-Year Highway Plan. Further commitments will be consistent with this IFP and subsequent Annual Updates as well as state statutory provisions.

**Table 4-3. Kentucky Six-Year Plan Funding by Category (SFY 2006 - SFY 2012)**

Funding Category	Use	2006	2007	2008	2009	2010	2011	2012	Total
IM	Section 1 Design	16,356,000	9,920,000		4,580,000				30,856,000
IM	Section 1 Construction		12,544,000	680,000	2,960,000				16,184,000
	<b>IM Subtotal</b>	<b>16,356,000</b>	<b>22,464,000</b>	<b>680,000</b>	<b>7,540,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>47,040,000</b>
NHS	Section 1 Design	24,534,000	14,880,000	21,642,000	6,870,000				67,926,000
NHS	Section 1 Right of Way		10,000		12,650,000	5,260,000	13,690,000	14,230,000	45,840,000
NHS	Section 1 Utilities						6,840,000	7,120,000	13,960,000
NHS	Section 1 Construction		18,816,000	1,020,000	4,440,000				24,276,000
NHS	Section 2 Design	3,580,000	3,200,000	3,650,000	1,060,000				11,490,000
NHS	Section 4 Design	9,540,000	10,100,000	13,020,000	3,420,000				36,080,000
NHS	Section 4 Right of Way	4,500,000	11,700,000	7,700,000					23,900,000
NHS	Section 4 Utilities	170,000	460,000	1,220,000	1,270,000				3,120,000
NHS	Section 4 Construction	4,890,000	5,090,000	5,290,000	23,280,000	60,460,000	78,280,000	40,000,000	217,290,000
NHS	Section 5 Design	3,940,000	3,810,000	4,260,000	950,000				12,960,000
NHS	Section 5 Construction				31,510,000	32,770,000	34,080,000	32,700,000	131,060,000
	<b>NHS Subtotal</b>	<b>51,154,000</b>	<b>68,066,000</b>	<b>57,802,000</b>	<b>85,450,000</b>	<b>98,490,000</b>	<b>132,890,000</b>	<b>94,050,000</b>	<b>587,902,000</b>
STP	Environmental Mitigation	240,000	1,640,000	1,360,000	1,230,000	610,000	160,000	170,000	5,410,000
STP	Section 1 Env. and Historic Mitigation	3,150,000	2,110,000	8,580,000	8,780,000	7,630,000	7,610,000	1,140,000	39,000,000
STP	Section 1 Design			14,428,000					14,428,000
STP	Section 4 Environmental Mitigation	2,360,000	5,620,000	2,550,000	740,000	430,000			11,700,000
STP	Section 4 Construction						43,500,000	40,000,000	83,500,000
	<b>STP Subtotal</b>	<b>5,750,000</b>	<b>9,370,000</b>	<b>26,918,000</b>	<b>10,750,000</b>	<b>8,670,000</b>	<b>51,270,000</b>	<b>41,310,000</b>	<b>154,038,000</b>
<b>GRAND TOTAL KENTUCKY 6-YEAR PLAN</b>		<b>73,260,000</b>	<b>99,900,000</b>	<b>85,400,000</b>	<b>103,740,000</b>	<b>107,160,000</b>	<b>184,160,000</b>	<b>135,360,000</b>	<b>788,980,000</b>

## Indiana

The Indiana Department of Transportation has provided for funding for Indiana's share of the LSIORB Project in the recently authorized *Major Moves* Transportation Program as well as through the State's traditional highway program funded primarily through a combination of federal and state gas tax receipts. In addition to the special federal funding described above, funding that has either been expended, obligated, or committed to the Project includes \$44 million in construction funding provided via the *Major Moves* Program and \$24 million in additional federal and state funding for non-construction costs.

Further funding that is scheduled (i.e., assigned to the Project in the State's plans) includes an additional \$434 million in *Major Moves* funding for construction and \$217 million from federal and state gas tax receipts for future years' non-construction costs as well as additional construction funding beyond that provided by *Major Moves*. *Major Moves* only provides funding for construction and construction-related costs (e.g., construction, construction administration and inspection, contingencies, and utilities). The remainder of project costs (e.g., design, program administration, and ROW acquisition) as well as additional construction funding is provided for in the State's annual budget. As demonstrated here, Indiana has committed and/or scheduled resources for 100% of project costs through 2015 and approximately two-thirds of the total IFP funding needs. Indiana will continue to commit funds to the Project consistent with this IFP and as needed to meet the project schedule.

For reference, Table 4-4 shows Indiana's planned annual funding for the LSIORB Project by funding category and use. Indiana will continue to make specific financial commitments to the Project based on the State's standard budget procedures and in accordance with the State's transportation plan. Given the size of the financial commitment for the LSIORB Project in relation to the rest of Indiana's transportation program, the State does not foresee difficulty in meeting the financial requirements on the desired schedule (see further discussion below).

**Table 4-4. Indiana Funding by Category (SFY 2006 – 2019)**

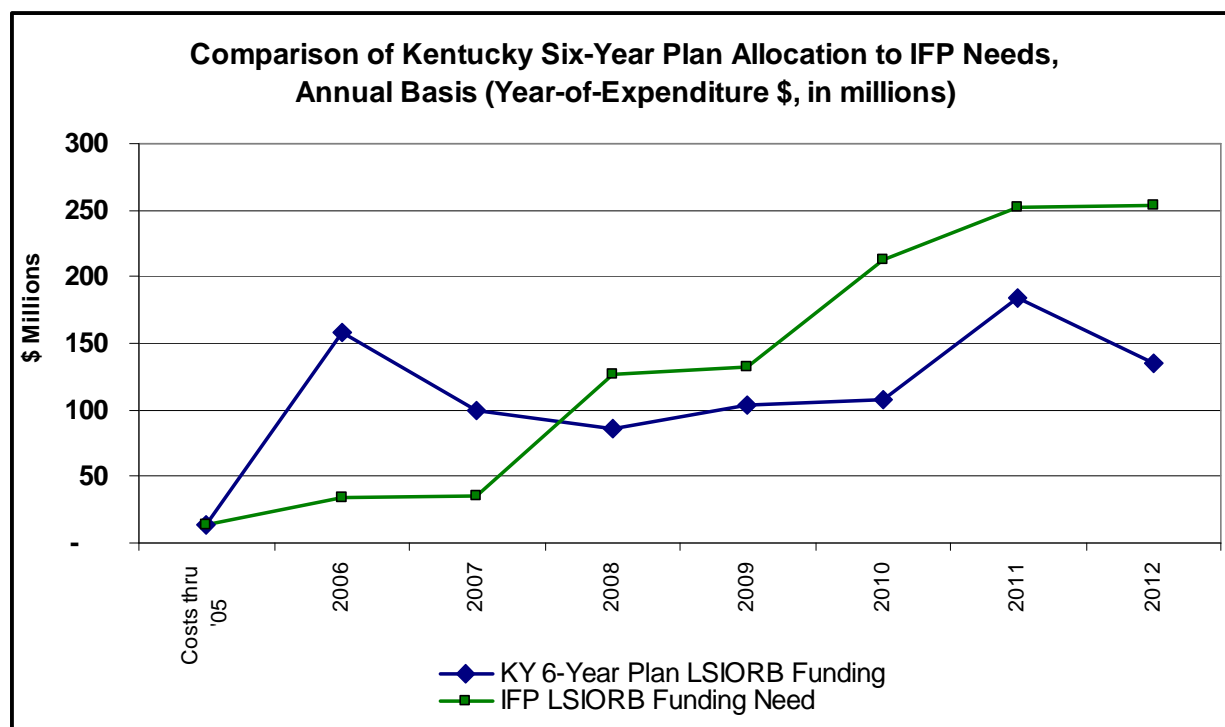
Funding Category	Use	Pre '06	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
<b>Section 2 - Downtown River Bridge</b>																	
H02	Section 2 Preliminary Engr/Design		1,902,555	946,522	498,658												-
H02	Section 2 Final Engr/Design				2,433,306	1,918,419											3,347,735
H02	Section 2 Design Prog/Management		161,717	80,454	351,836	230,210											4,351,725
NHS	Section 2 Design Contingency				586,393	383,684											824,217
426	Section 2 Archaeology		210,912														970,077
IM	Section 2 Archaeology			219,348													210,912
H05	Section 2 Archaeology				228,122												219,348
NHS	Section 2 Archaeology					237,247											228,122
NHS	Section 2 Construction Admin & Test											2,972,318	3,091,210	3,214,859	3,343,453	1,394,800	237,247
IM	Section 2 Construction											24,882,351	25,877,645	26,912,751	27,989,261	11,676,375	14,016,640
NHS	Section 2 Construction											12,441,176	12,938,823	13,456,375	13,994,630	5,838,187	117,338,383
IM	Section 2 Construction Contingency											3,732,353	3,881,647	4,036,913	4,198,389	1,751,456	58,669,191
NHS	Section 2 Construction Contingency											1,866,176	1,940,823	2,018,456	2,099,195	875,728	17,600,758
																	8,800,378
																	<b>226,814,733</b>
<b>Section 3 - Downtown IN Approach</b>																	
H05	Section 3 Historic Mitigations		337,459														337,459
IM	Section 3 Historic Mitigations			116,986					1,067,484	444,073	461,836	400,258					2,490,637
HY1	Section 3 Design			797,281	1,673,120												2,470,401
L02	Section 3 Design Program Manage.			60,833	547,494												608,327
IM	Section 3 Design					2,050,231											2,050,231
NHS	Section 3 Design					1,025,115	3,198,359	2,785,471	7,867,798	7,993,319							22,870,062
NHS	Section 3 Construction Admin & Test										4,557,185	2,807,515	3,308,881	7,246,083	1,138,248	1,964,093	21,022,005
IM	Section 3 Construction											24,132,267	28,441,804	62,284,404	9,783,923	16,882,546	141,524,944
MM	Section 3 Construction										28,266,760						28,266,760
NHS	Section 3 Construction										30,490,818	12,066,133	14,220,902	31,142,202	4,891,961	8,441,273	101,253,289
IM	Section 3 Construction Contingency										4,700,606	2,895,872	3,413,017	7,474,129	1,174,071	2,025,905	21,683,600
NHS	Section 3 Construction Contingency										2,350,303	1,447,936	1,706,508	3,737,064	587,035	1,012,953	10,841,799
NHS	Section 3 Utilities						1,368,205	1,067,200	554,944	564,829							3,555,178
NHS	Section 3 Right of Way Acquisition						16,769,143	17,607,600	18,487,980								52,864,723
																	<b>411,839,415</b>
<b>Section 5 - East End River Bridge</b>																	
Q02	Section 5 Preliminary Engr/Design		1,614,418	936,565	1,167,880												3,718,863
426	Section 5 Final Engr/Design/Conting				3,883,534	2,131,649											6,015,183
405	Section 5 Design Program Manage.		137,225	79,608	505,141	213,165											935,139
426	Section 5 Archaeology		210,912														210,912
NHS	Section 5 Archaeology			219,348													219,348
H05	Section 5 Archaeology				228,122												228,122
MM	Section 5 Construction Admin & Test					2,619,210	2,822,976	2,935,895	2,880,805	104,837							11,363,723
MM	Section 5 Construction					32,889,542	35,448,232	36,866,161	36,174,395	1,316,445							142,694,775
MM	Section 5 Construction Contingency					4,933,431	5,317,235	5,529,924	5,426,159	197,467							21,404,216
NHS	Section 5 Archaeology					237,247											237,247
																	<b>187,027,528</b>
<b>Section 6 - IN East End Approach</b>																	
H05	Section 6 Right of Way Acq			2,535,392	4,467,000												7,002,392
H05	Section 6 Enhancements	3,225	20,976		275,799												300,000
H05	Section 6 Historic Mitigations			40,630													40,630
LY1	Section 6 Final Engr/Design/Manage			688,833	5,547,494	4,899,660	4,824,966	4,850,285									20,811,238
LY1	Section 6 Historic Mitigations				938,019												938,019
MM	Section 6 Utilities					3,959,197											3,959,197
NHS	Section 6 Right of Way Acq	2,900,533	2,183,151		4,467,000	4,466,999											14,017,683
NHS	Section 6 Wetlands				112,164	116,651											228,815
NHS	Section 6 Historic Mitigations		312,876		306,207	187,928											807,011
MM	Section 6 Construction Admin & Test					4,067,501	4,230,201	4,399,409	4,542,747								17,239,858
MM	Section 6 Construction					52,443,889	54,541,644	56,723,310	58,571,430								222,280,273
MM	Section 6 Construction Contingency					6,293,267	6,544,997	6,806,797	7,028,572								26,673,633
MM	Section 6 Utilities					4,117,565											4,117,565
																	<b>318,416,314</b>
Other	Design Program Management		1,755,384														1,755,384
																	<b>1,755,384</b>
<b>TOTALS</b>		<b>2,903,758</b>	<b>8,847,585</b>	<b>6,721,800</b>	<b>23,331,918</b>	<b>62,613,378</b>	<b>141,442,916</b>	<b>136,959,378</b>	<b>140,389,081</b>	<b>80,763,719</b>	<b>70,827,508</b>	<b>89,644,355</b>	<b>98,821,260</b>	<b>161,523,236</b>	<b>69,200,166</b>	<b>51,863,316</b>	<b>1,145,853,374</b>
<b>Key:</b>																	
559	Federal FY Appropriation Earmark	HO5	National Highway System	LY20	HPP-SAFETEA-LU												
H02	Interstate Maintenance Disc Earmark	HY 10	HPP-SAFETEA-LU	L02	Interstate Maintenance Disc Earmark												
426	Federal FY Appropriation Earmark	LY10	HPP-SAFETEA-LU	Q02	Interstate Maintenance Disc Earmark												
MM	Major Moves Program	HY20	HPP-SAFETEA-LU														

## SUMMARY OF COMMITTED, SCHEDULED, AND ANTICIPATED FUNDING

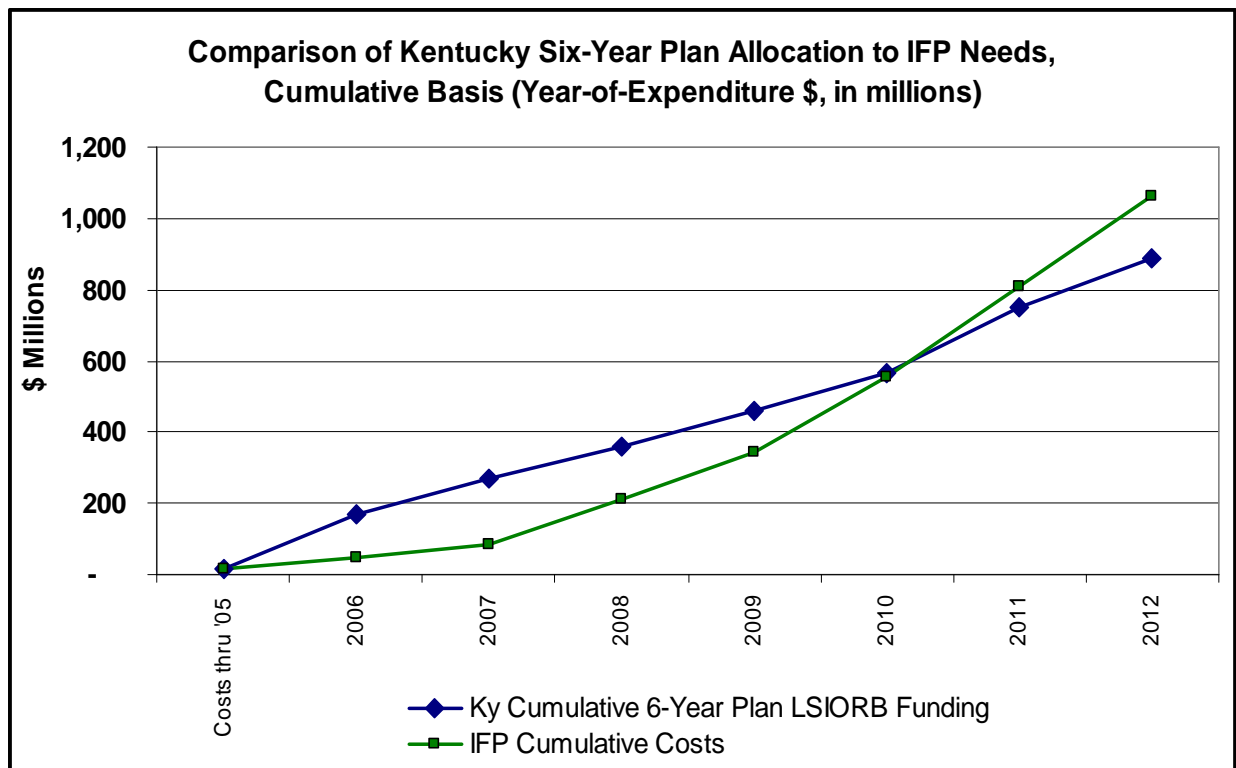
Kentucky and Indiana's commitment to fully funding the Ohio River Bridges Project is demonstrated through the financial commitments describe above. This section summarizes those commitments and future plans, focusing primarily on the current planning horizons for each state.

### Kentucky

Figures 4-1 and 4-2 show Kentucky's expended, obligated, committed, and scheduled funding for the LSIORB Project (i.e., funding specified in the State's most recent Six-Year Highway Plan) against currently projected expenditures in the same period on an annual and cumulative basis, respectively. As shown, the Six-Year Highway Plan along with prior financial commitments account for 84% of the projected costs in the period through SFY 2012, with approximately \$174 million not yet accounted for in the Six-Year Plan period. As noted earlier, this difference can be explained by the timing of passage of the Six-Year Plan relative to development of updated cost estimates in support of this IFP. It is the intention of the Kentucky Transportation Cabinet to update its Recommended Six-Year Plan at the next opportunity to match resource needs for that same six-year period, as specified in this IFP.



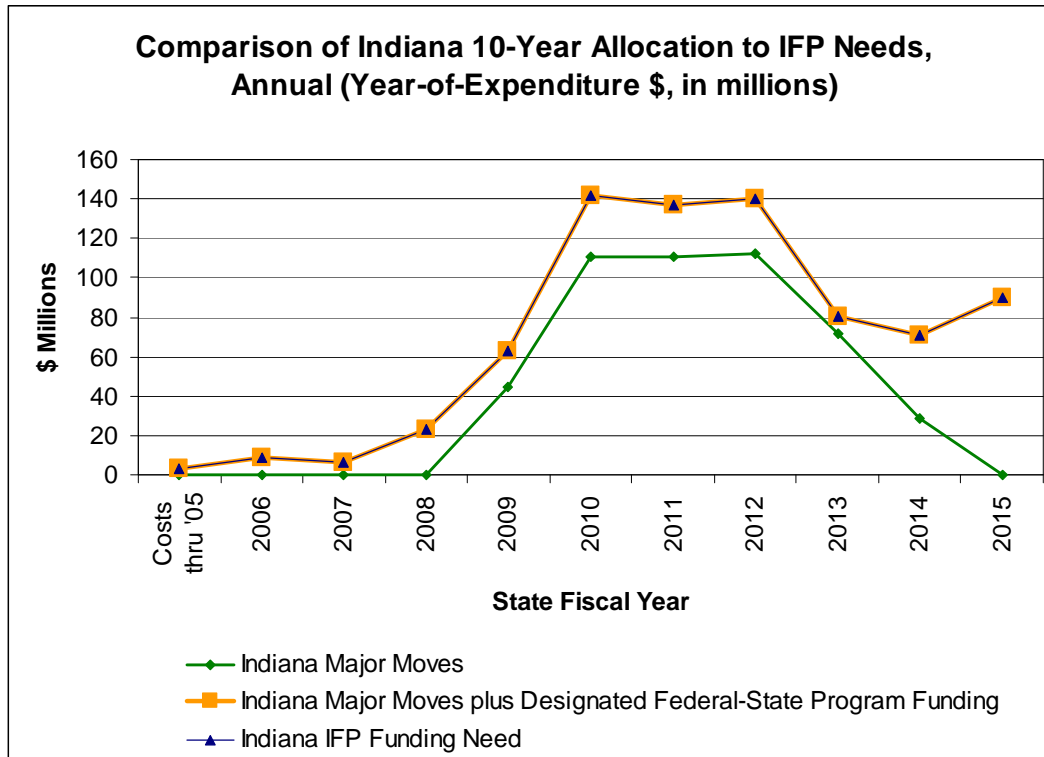
**Figure 4-1. Kentucky Six-Year Plan vs. IFP Expenditure Estimates, Annual Basis**



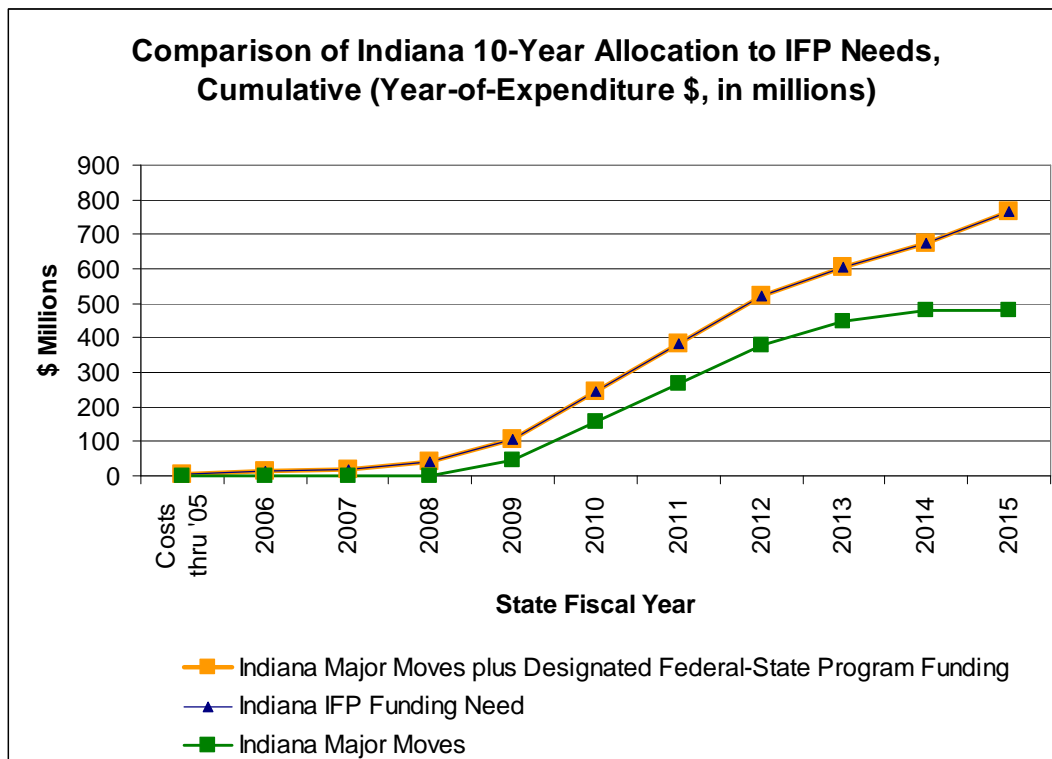
**Figure 4-2. Kentucky Six-Year Plan vs. IFP Expenditure Estimates, Cumulative Basis**

## Indiana

Figures 4-3 and 4-4 show Indiana's construction and construction-related funding for the LSIORB Project (i.e., funding specified in the *Major Moves* program and other committed or scheduled federal and state resources) against projected expenditures in the same period on an annual and cumulative basis, respectively. Indiana has committed and/or scheduled funding for the Project of approximately two-thirds of the currently projected total need and has designated funding as committed or scheduled for 100% of project costs through 2015, the end of the State's 10-year horizon for *Major Moves*. The difference between the \$478 million in *Major Moves* funding planned for the Project and the total projected construction cost can be attributed to the timing of adoption of the *Major Moves* program relative to development of updated cost estimates in support of this IFP. In Indiana's case, the primary source of the cost differences is a change in the inflation assumption based on current and anticipated market conditions, as discussed in more detail in Chapter 2 of this IFP. It is INDOT's intention to identify future cost savings opportunities and utilize core federal-state program funding, as demonstrated in this IFP, to meet the additional project funding needs of the Project.



**Figure 4-3. Indiana Major Moves and Other Designated Funding vs. IFP Expenditure Estimates, Annual Basis (in \$ millions)**



**Figure 4-4. Indiana Major Moves and Other Designated Funding vs. IFP Expenditure Estimates, Cumulative Basis (in \$ millions)**

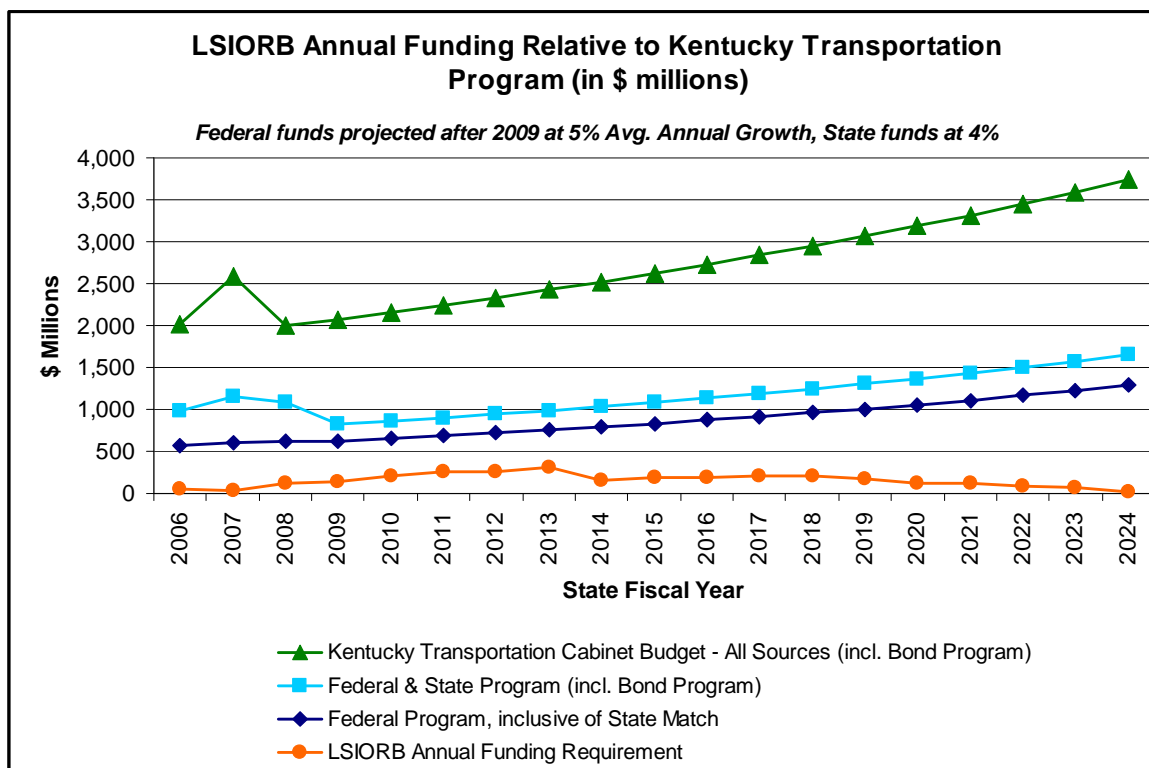
## **LSIORB FUNDING IN RELATION TO THE STATES' OVERALL TRANSPORTATION PROGRAMS**

As discussed above, under their current plans, both states intend to dedicate additional resources out of their core programs to meet the future funding needs of the LSIORB Project. This section demonstrates each state's ability to meet such future project demands from their current and projected funding programs.

### **Kentucky**

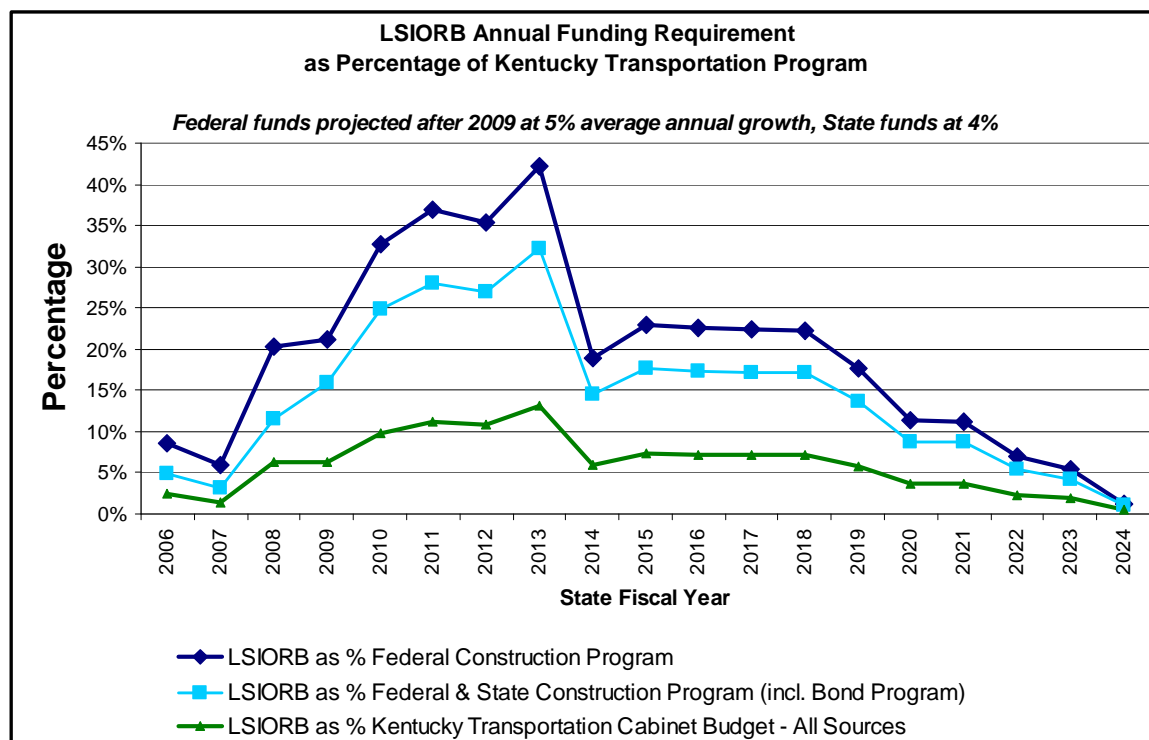
Figure 4-5 shows Kentucky's projected annual cash outlays for the LSIORB Project against the State's projected available federal-aid program resources, including state match and against the state's overall transportation program. Figure 4-6 then translates this information into percentage terms. This analysis is based in part on the assumption that federal funds will increase by approximately 5% per year after 2009, based on the historical trend over the 1985 – 2005 period, and that state funds available for state construction needs will grow by an estimated annual 4%, also based on historical experience. The State estimates that federal funds are "reduced" via an approximate 92% obligation limitation, such that the State has 92% of apportioned funds available for spending in a given year. Further, in recent years, Kentucky has made use of toll credits for the State's match of federal funds, which creates a situation where on a cash flow basis projects are 100% federally funded. This practice is assessed on an ongoing basis and adjustments to the plan of finance will be made, as appropriate.

As shown in these charts, the average annual impact of the Ohio River Bridges Project is approximately 14% of the State's federal and state construction programs during this period. The maximum annual impact is projected to occur in 2013 and equal approximately 32% of the State's federal and state construction programs. This would be the case without the application of cash management techniques, including potential borrowing to dampen the impact in a small number of years. Kentucky anticipates considering the utilization of such techniques to manage the Project's year-by-year impact on the State's overall transportation program.



*\*Note: Temporary increase in 2007 relates to state revenue bonds and GARVEE bond issuances.*

**Figure 4-5. Comparison of Annual LSIORB Funding Requirement with Kentucky Transportation Program Resources (in \$ millions)**

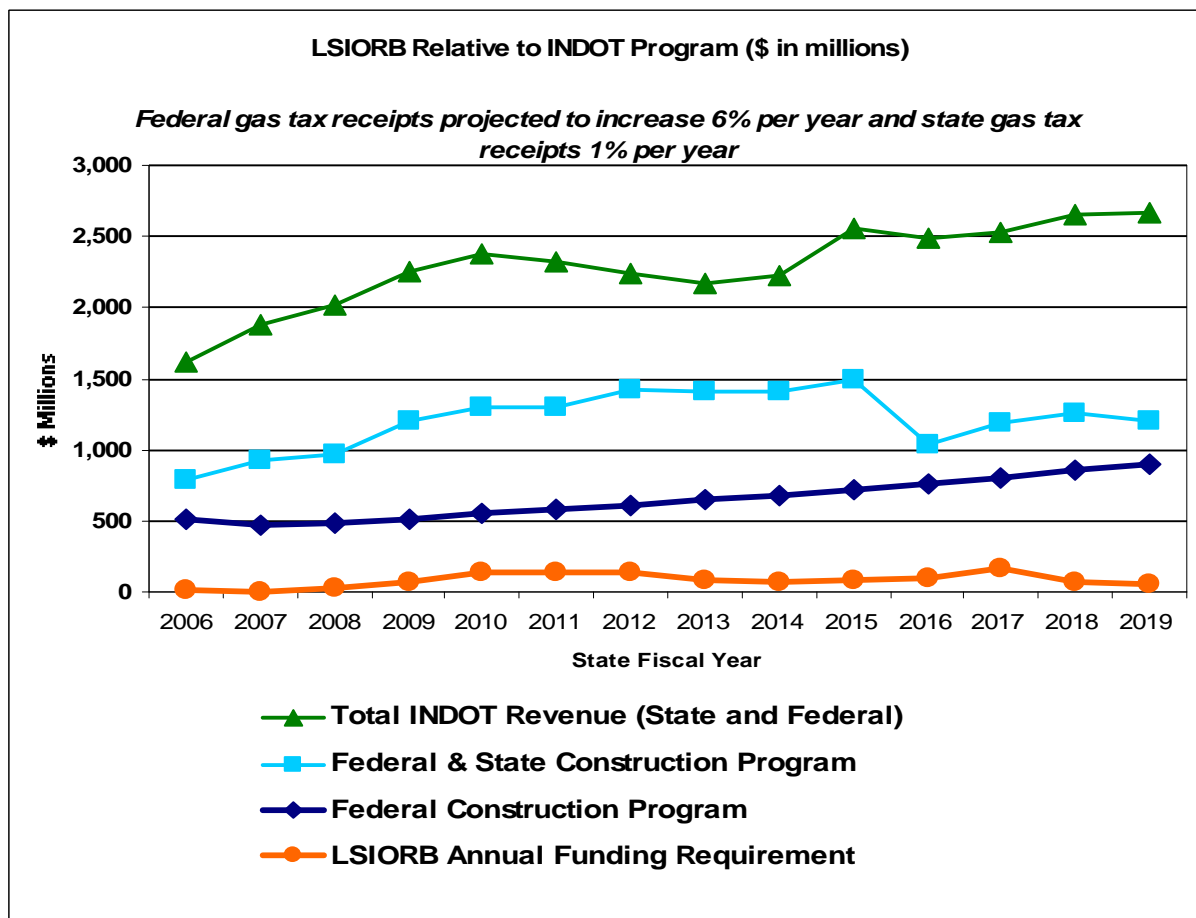


**Figure 4-6. Comparison of Annual LSIORB Funding Requirement with Kentucky Transportation Program Resources (as percentage)**

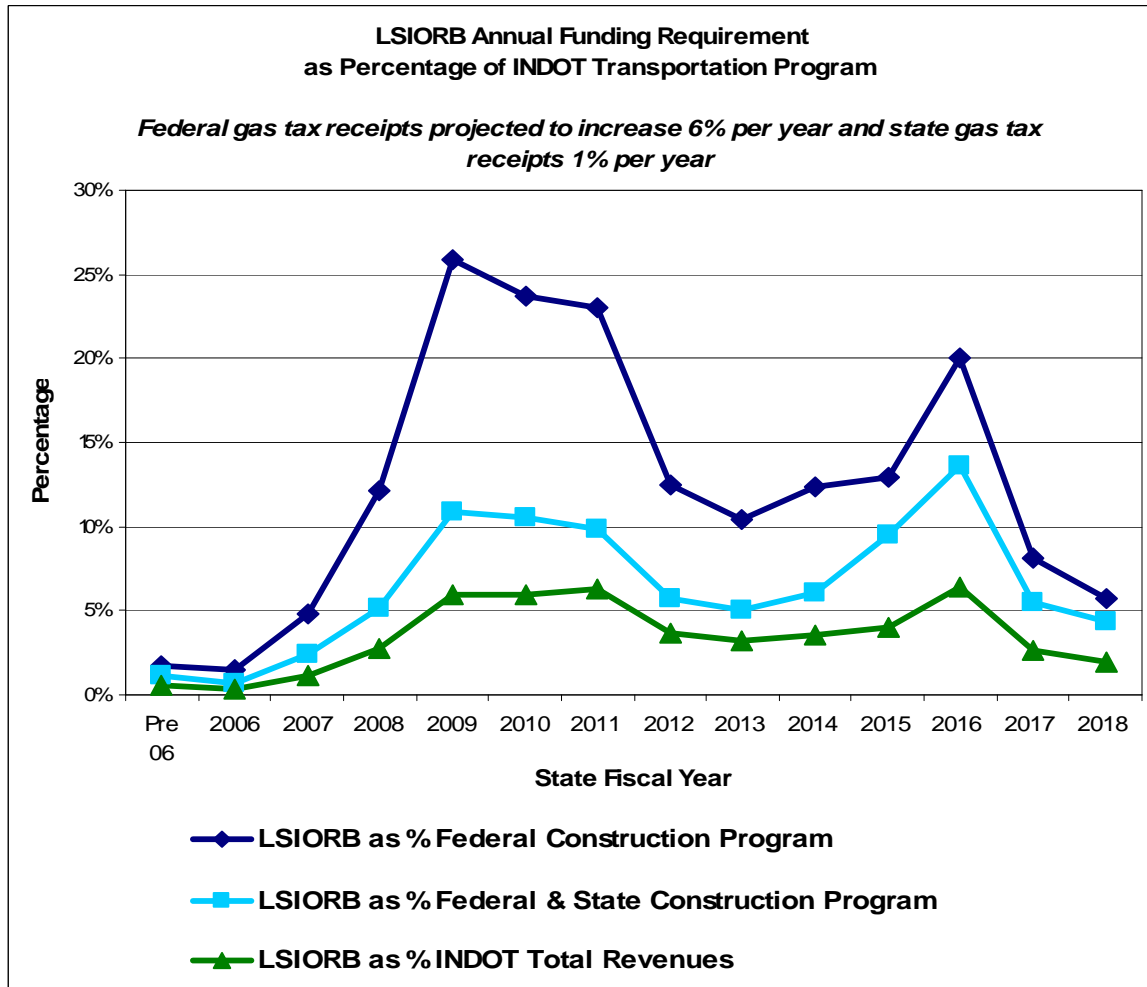


## Indiana

Figures 4-7 and 4-8 show Indiana's projected annual cash outlays for the Ohio River Bridges Project against the State's projected federal construction program, federal-state program, and overall agency resources. These forecasts are based in part on the assumption that federal receipts will grow by 6% per year, based on the historical average of the last 10 years and consistent with the State's Long-Range Plan assumptions, and that state gas tax receipts will grow by 1%. As shown in these charts, the Project is estimated to consume a maximum annual percentage of the State's program in 2016 of just under 14% and an average annual 6.5%.



**Figure 4-7. Comparison of Annual LSIORB Funding Requirement with Indiana Transportation Program Resources (in \$ millions)**



**Figure 4-8. Comparison of Annual LSIORB Funding Requirement with Indiana Transportation Program Resources (as percentage)**

## POTENTIAL ALTERNATIVE FUNDING APPROACHES

Chapter 6 of this IFP addresses the planned Annual Updates to this IFP. Included as an important element of future updates is the potential to employ alternative funding approaches to the baseline plan presented in this IFP. While each state is fully committed to meet its obligations under this plan and based on its current legal authorities, both states recognize that circumstances can change and alternative structures may present themselves as superior to the baseline plan, as articulated in this document. Future Annual Updates will account for any such revisions to the Plan of Finance and incorporate new capabilities in each state and for the Project as a whole.

Alternative funding approaches could include, but are not limited to:

- Public-private/concession arrangements that rely at least in part on tolls as the underlying funding stream;
- Public sponsored tolling (via each state or through a joint public authority);

- Development-related private financial participation; and/or
- Other dedicated state and local funding sources, such as transportation-related fees or other revenue measures.

In addition to these funding alternatives, alternative financing approaches to be considered include the use of borrowing – via the States’ highway revenue bonding programs, the sale of Grant Anticipation Revenue Vehicles (GARVEEs) to be repaid with future federal and matching state funds, or federally-supported borrowing such as via the Transportation Infrastructure Finance and Innovation Act (TIFIA) program and private activity bonds (PABs). These approaches will be considered in the context of each state’s overall transportation programs and the ability to generate cost savings and/or expedited project delivery.

Both states are open to considering how such approaches could contribute to the LSIORB Project and to the States’ overall programs. In particular, the States recognize that there is some potential to accelerate certain project elements via the use of a combination of these alternative approaches. In particular and given the importance of managing overall costs, the States will work to incorporate alternative funding and finance approaches that help to manage the impact of inflation on overall project costs.

## **KEY REVENUE-RELATED ASSUMPTIONS, RISKS, AND MITIGATIONS**

As with any project of the size and duration of the Ohio River Bridges Project, there are a great number of uncertainties regarding the magnitude and timing of project costs in relation to the availability of funding. These risks and the strategies being utilized to address them are discussed in Chapter 6 of this IFP.

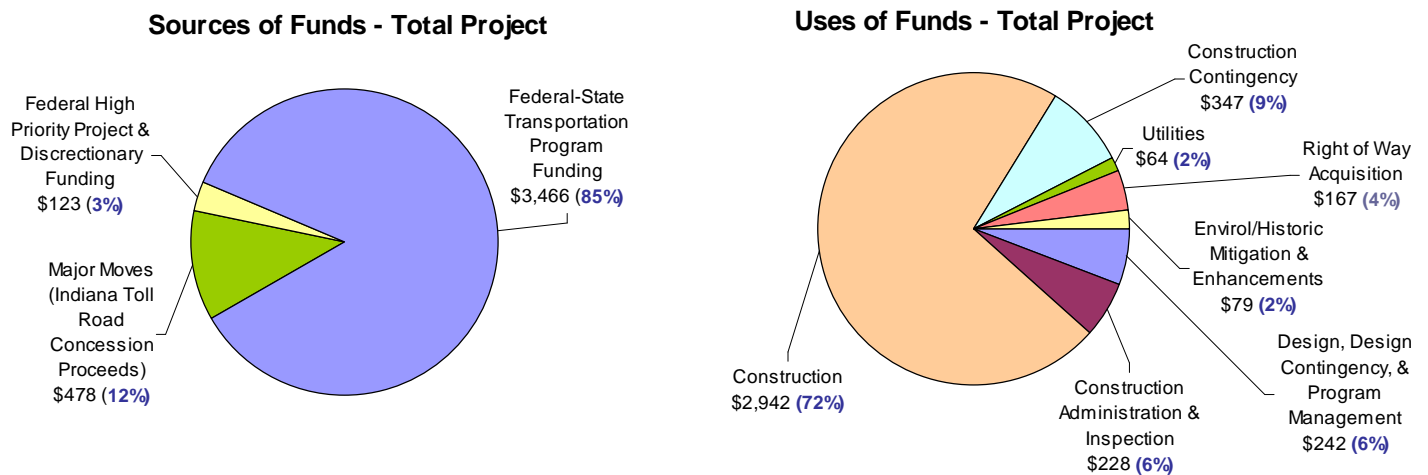
## CHAPTER 5. PROJECT CASH FLOW

### INTRODUCTION

*This chapter provides a summary of the annual cash flow needs of the Ohio River Bridges Project. Given the early status of the Project in terms of developing section-specific implementation plans, contract packages, and projections of actual cash outlays, it is anticipated that this chapter will be updated substantially in the first and subsequent Annual Updates to the Initial Financial Plan. At a minimum, it is anticipated that such updates may include a comparison of quarterly cash needs against available funding and will address strategies to manage matching the timing of resource availability and cash flow requirements.*

### SOURCES AND USES OF FUNDS

As described in Chapter 4 of this IFP and based on current plans, the LSIORB Project will be funded with a combination of federal and state transportation funding. Figure 5-1 provides a summary of the planned sources and uses of funds for the Project. At this time, the States have not planned for borrowing any funds to manage cash need, although Kentucky acknowledges that GARVEE bonds are a good possibility if authorized by the General Assembly. This decision will be revisited on an ongoing basis and adjustments made in Annual Updates to the Plan, as appropriate and only as consistent with legal capabilities and financial conditions in each state.

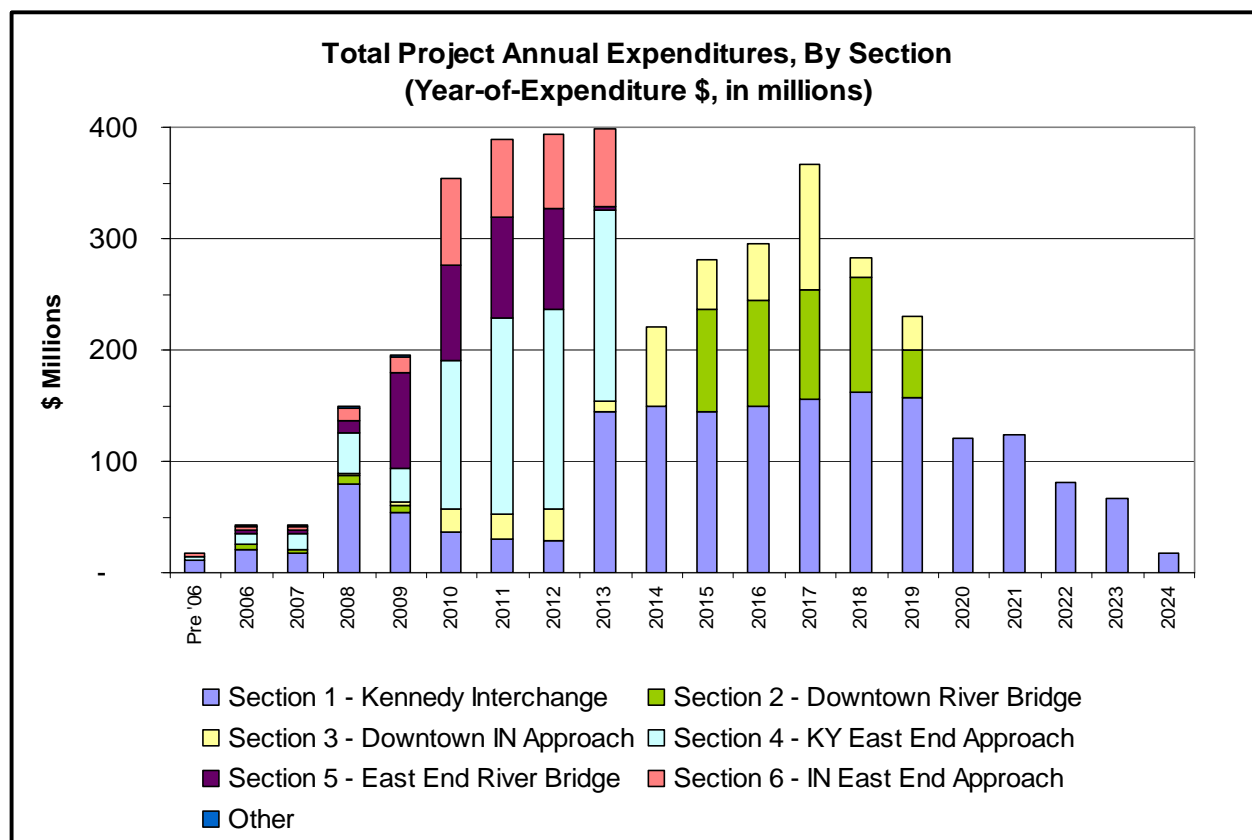


*\*Note: Percentages may not sum to 100% due to rounding.*

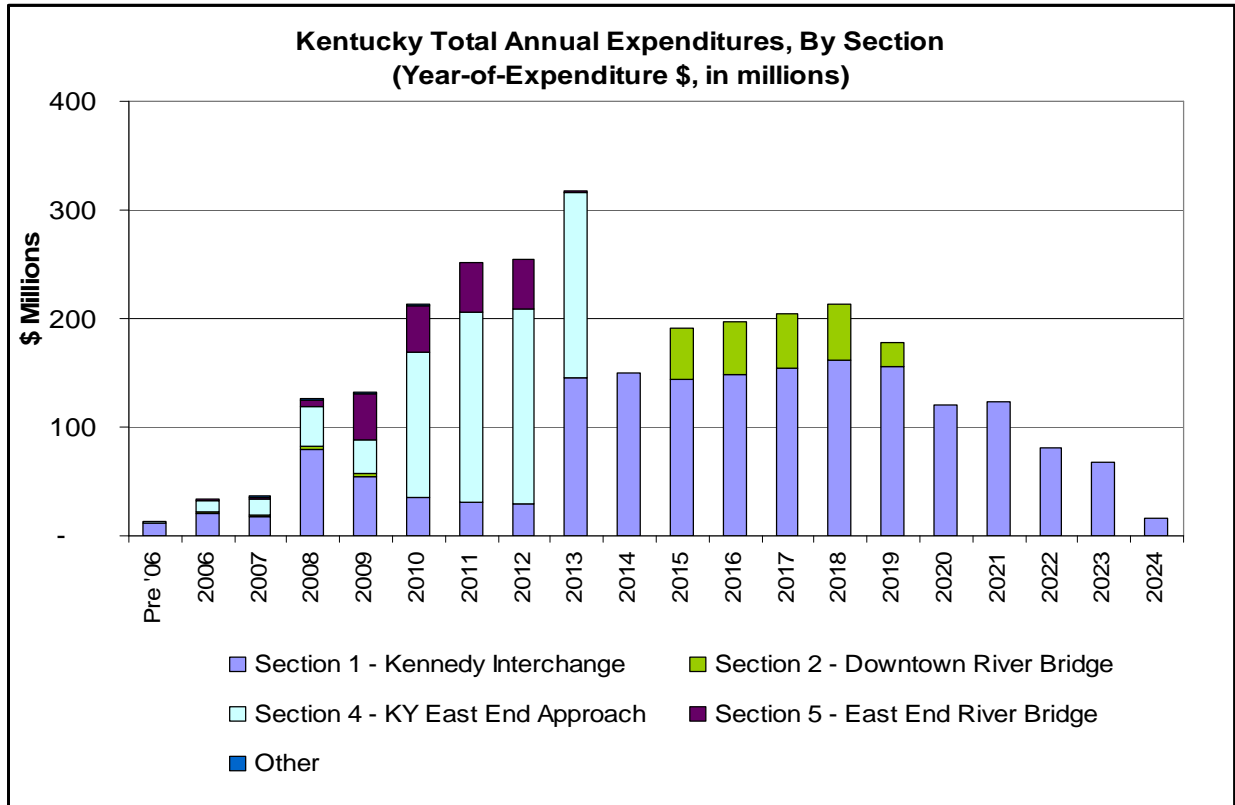
**Figure 5-1. Sources and Uses of Funds – Total Project (in Year-of-Expenditure \$, millions)**

## PROJECT CASH FLOW

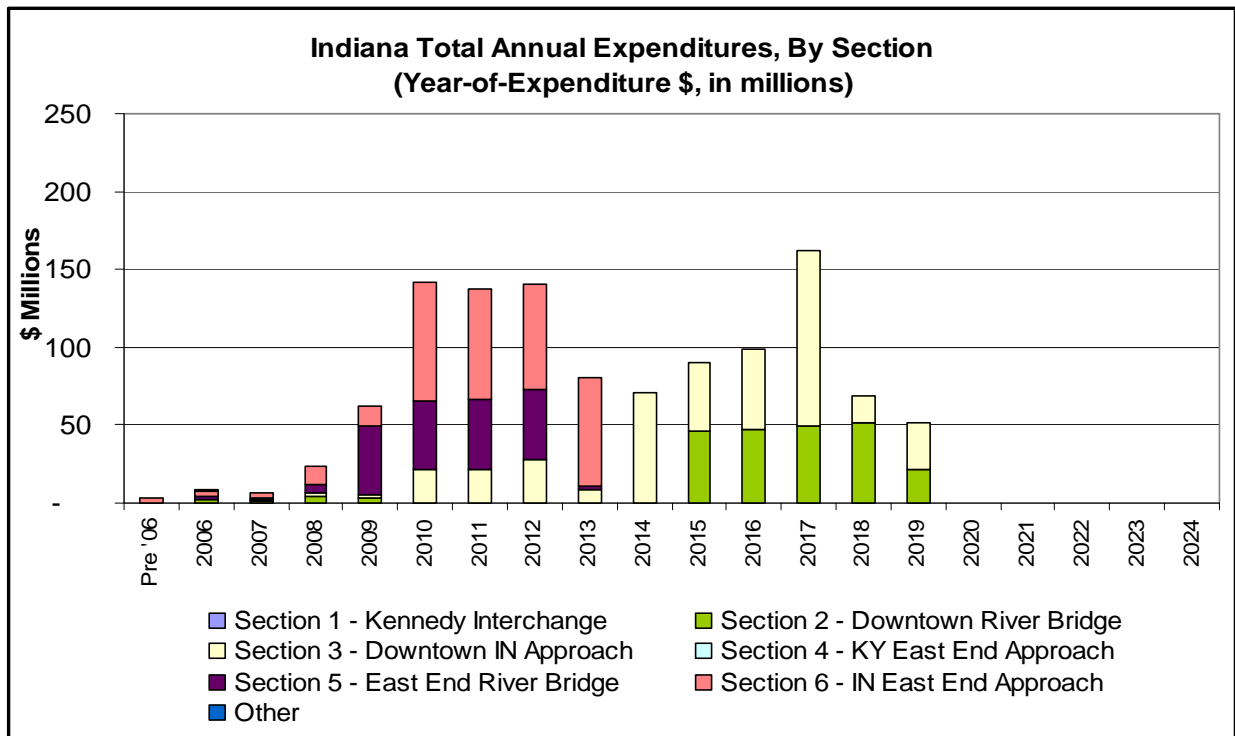
Figures 5-2, 5-3, and 5-4 together summarize the anticipated annual cash outlays for the Project as a whole and for each state. As noted above, refined cash flow projections will be developed as the Project progresses.



**Figure 5-2. Total Project Annual Outlays (Year-of-Expenditure \$, in millions)**



**Figure 5-3. Kentucky Share of Annual Outlays (Year-of-Expenditure \$, millions)**



**Figure 5-4. Indiana Share of Annual Outlays (Year-of-Expenditure \$, millions)**

## **Available Revenue Versus Annual Cash Outlays**

The States' funding plans (i.e., Kentucky's Six-Year Plan and Indiana's *Major Moves* program) generally reflect planned encumbrances, or dollars available to be obligated to project elements on an annual basis. The schedule of costs developed for the Project to date, and reflected in this IFP, is on a cash flow basis (i.e., annual cash outlays rather than encumbrances). Once the States have developed more detailed implementation plans, letting schedules, and contract packages, a more detailed analysis of the anticipated timing of cash outlays against available revenue can be conducted and cash management mechanisms established to manage the overall cash flow for the Project. Given the Project's overall size, this will be quite important not only to ensure the availability of revenues as needed but also to help manage the impact of the Project on the States' overall programs.

## **Cash Management Techniques**

Both states intend to utilize available cash management techniques, including but not limited to Advance Construction, to manage the timing of cash needs against the availability of federal and state funds. Kentucky's Secretary, for example, has the authority (granted by state statute) to "concurrently advance projects in the Biennial Highway Construction Plan by employing management techniques that maximize the Cabinet's ability to contract for and effectively administer the project work." All state revenues flowing through Kentucky's Road Fund are subject to cash management principles outlined in KYTC's "Cash Management Spending Plan" (dated September 29, 2003). The Spending Plan also established a legislatively-mandated safeguard directing that KYTC not draw Road Fund cash balances below \$100 million without the approval of the state Finance Cabinet. Indiana has similar capabilities and provisions. Specific plans will be developed once the States have developed more detailed implementation schedules.



## CHAPTER 6. OTHER FACTORS

### INTRODUCTION

*This chapter addresses a number of important factors that could affect the LSIORB Project and, in particular, the financial plan for the Project. These include cost- and funding-related risks and associated mitigation strategies as well as interdependencies with each state's transportation programs, budgets, and other projects. This chapter also provides a schedule for future updates to the financial plan.*

### COST ESCALATION RISKS AND MITIGATION STRATEGIES

Cost escalation is a risk that can affect the overall ability to achieve expectations of completing a project on time and within budget. Recent national events draw heightened attention to the need for cost management and, in particular, a focus on identifying and mitigating cost-related risks. All design and construction projects have risk elements that can affect costs, and that should be identified and mitigated to the greatest extent possible. These risk elements include, but are not limited to, project scope and design, right of way acquisition, NEPA litigation, permitting, schedules, contract packaging, and general and construction-related inflationary pressures. The chapter briefly outlines areas of potential cost risks and possible mitigation measures that the BSMT is currently considering and/or pursuing.

#### Project Scope, Design, and Construction Estimating

With six major design segments that will likely lead to numerous construction phases/contracts within each segment, careful attention needs to be given to design development and construction sequencing to keep the project on schedule. To mitigate risks to the cost and schedule associated with the project design, the BSMT has tasked the GEC with coordinating development of the following design elements: hazardous waste investigations; context sensitive solutions; Intelligent Transportation Systems; signage; maintenance of traffic; construction phasing; pavement markings; lighting; project controls (includes scope, cost, schedule, change management, reporting, risk analysis, document control, and construction cost trends); public involvement and communications; and design reviews. This process also will involve managing the coordination and communication among the section designers to ensure design compatibility among the sections and to exploit potential efficiencies by coordinating design efforts.

Additionally, project construction costs will be re-evaluated as the designs progress. At major milestones during the design (i.e., 30%, 60%, 90% and 100% submissions), a construction estimate will be prepared so that the potential cost impacts of specific design elements can be evaluated and addressed as necessary. The GEC will review each design consultant's construction estimate and perform an independent check of the "top ten" bid items identified as having the greatest potential to affect the construction bids. Value engineering also will be utilized to help control construction costs. Value Engineering will be performed at the 60% design stage and will be independently conducted by the States.

For projects currently in the design phase, section designers have jointly developed scopes of work to ensure design compatibility. Regular weekly or monthly meetings, monthly status reports, earned value analysis, and schedule reviews are being conducted. This oversight process helps ensure that individual project elements stay on schedule, within scope and budget, and that design issues that could have an effect on other sections are immediately and efficiently addressed. The selective use of carefully structured lump sum design contracts is helping to reduce budget management time and, at the same time, ensure that the budgeted design cost is not exceeded. This review process will continue through construction.

## **Right of Way Acquisition**

Numerous pieces of property will need to be acquired for construction of the LSIORB Project. Delays in property acquisition can lead to cost increases as the purchase price is affected by escalation in real estate values. Both states have identified the potential properties to be acquired and, to the extent possible, are proceeding with advanced acquisitions.

## **NEPA Litigation**

Prior to the start of construction, the highest litigation risks relate to the National Environmental Policy Act (NEPA). To mitigate the potential impacts of future litigation that could cause schedule delays and cost escalation, risk and mitigation measures were addressed with the development of the Environmental Impact Statement (EIS). The BSMT intends to adhere to the recommendations outlined in the EIS.

## **Permitting**

As reviewed in Chapter 3 of this IFP, numerous permits are required for the LSIORB Project. Failure to secure permits as needed can lead to construction delays and cost escalation. Beyond normal construction-related permits, and prior to the start of construction, permits are required from the U.S. Army Corps of Engineers, U.S. Coast Guard, Federal Aviation Administration, and various state agencies regulating environmental issues. Each section designer will be required to obtain the non-construction related permits for the section for which they have design responsibility. Contractors will then be responsible for obtaining their own construction-related permits. In order to mitigate potential permitting delays, all permitting agencies are being contacted early in design, made aware of future permitting needs, solicited for process feedback, and kept apprised of potential permitting issues. Also, in accordance with the EIS, the FHWA, in addition to the BSMT and the GEC, will oversee these activities. Both states also have recent experience with the permitting requirements of major river crossings and will draw on this experience for the LSIORB Project.

## **Schedule**

Schedule delays, especially during construction, are primary causes of cost escalation. While expediting project schedules can often help to reduce inflation-related cost escalation, aggressive acceleration can sometimes drive up costs for particular project elements. To mitigate these potential schedule-related impacts, construction needs will be analyzed so that the sequencing/scheduling minimizes the potential for delays and the advantages and disadvantages of potential accelerations are carefully considered prior to implementation. Other specific items to be considered include utility relocations, right of way acquisition activities, and the potential impacts of other construction projects.

## **Construction Packaging**

Packaging of bid documents can have a positive or negative impact on construction cost. Various bidding strategies will be considered when deciding how to structure the construction packages. These include, but may not be limited to, exploiting opportunities to utilize competitive bidding, use of local contractors, optimization of alternate construction methods, potential incentive/disincentive clauses, and pursuit of the most advantageous scheduling options.

## **Inflationary Pressures**

As with any major multi-year project, inflation is a key risk as it relates to the project budget and ultimate project completion. As discussed in Chapter 2, LSIORB Project cost estimates have been inflated annually based on currently available information. The provision for inflation will be reviewed on an ongoing basis throughout the life of the Project. Cost management strategies (such as the use of fixed price contracts) and cost reduction opportunities to offset unforeseen inflationary increases also will be explored, as necessary.

## **Other**

All projects are subject to project unknowns. The BSMT will carefully monitor the progress of the Project elements to identify, evaluate, and mitigate the impacts of project unknowns as necessary throughout the life of the Project. Mitigation strategies will be employed in an effort to contain the project costs within the estimates and contingencies currently established.

Despite the application of appropriate cost management and mitigation strategies, budget constraints, increasing pressure to control costs, and recent highly visible projects with serious cost and/or schedule overruns is generating a need to re-evaluate current processes of risk management. FHWA is currently changing the agency's approach to cost estimating for major projects. Instead of the traditional approach of estimating costs and applying a contingency to cover unknowns, FHWA is implementing a Risk Based Cost Assessment strategy at project onset. This strategy attempts to quantify the impacts of risk by performing a risk assessment, identifying risk/opportunity elements, evaluating the probability of occurrence and cost impacts of each element, and generating a mathematical confidence level for the estimates. Using this approach, the need for cost mitigation strategies can be identified earlier in the project cycle, helping to reduce the impact of certain risk factors. This process was undertaken for the Section 2 (Downtown Bridge) design and will be evaluated for application to other Project sections going forward.

## **FUNDING RISKS AND MITIGATION STRATEGIES**

As with any major construction project, especially one of the duration of this project, there are uncertainties associated with project funding. Following is a review of the key funding-related project risks and associated mitigation strategies that the BSMT is considering and/or actively pursuing to address these risks.

### **Risk of Non-Appropriation of Funds**

Perhaps the greatest financial risk for a project that is expected to take nearly 20 years to fully complete and involves two states is the risk that funds are withheld or otherwise compromised. As described in the section below regarding interactions with state budgets and programs, both

states are fully committed to the Project and intend to continue to make funds available to meet project needs and schedules.

While the current funding plan articulated in this IFP relies entirely on federal and state highway program funds and demonstrates the States' ability to meet the Project's needs with these traditional sources, the States will continue to consider alternative funding structures, as appropriate (see further discussion under the Financial Plan Updates section of this chapter).

### **Risk of Delays in Funding Availability**

A recognized funding risk is that of delays in funding due to federal and/or state funding lapses, competition for available funding, and related potential delays. Recognizing the importance of secure funding for the Project, the States intend to develop and utilize detailed cash flow models that project and monitor cash flow requirements and help to ensure resources are available as needed. It is intended that each state will maintain its own cash forecasting model as part of its routine cash forecasting activities. In addition, the GEC for the Project will develop and provide to each state a detailed accounting of cash needs. This is anticipated to be done on a monthly basis, with greater frequency as needed during the heaviest expenditure periods.

In addition to the accurate forecasting and management of cash resources, both states intend to utilize cash management techniques such as Advance Construction to manage the requirements of the LSIORB Project in the context of their overall transportation programs.

## **INTERACTIONS WITH STATE TRANSPORTATION PROGRAMS, BUDGETS, AND OTHER PROJECTS**

As described in this IFP, both Kentucky and Indiana have made specific commitments to the completion of the LSIORB Project and intend to make additional commitments as needed based on actual project implementation. Kentucky, for instance, will continue to make additional financial commitments to the Project based on the State's standard two-year budget procedures and in accordance with the Six-Year Highway Transportation Plan. The Six-Year Plan ensures that funding for the LSIORB Project and any potential impact on other projects in the State's transportation program is fully considered.

The Indiana Department of Transportation has provided for substantial construction funding for the State's share of the LSIORB Project in the recently authorized *Major Moves* Transportation Program as well as made additional commitments of federal and state funding resources to meet the Project's non-construction and additional construction dollar needs. The State will continue to make specific financial commitments to the Project based on the State's standard budget procedures and in accordance with the State's Transportation Plan. Given the size of the financial commitment for the LSIORB Project in relation to the rest of Indiana's transportation program, the State does not foresee difficulty in meeting the financial requirements on the desired schedule.

## **FINANCIAL PLAN UPDATES**

The States of Kentucky and Indiana plan to provide annual updates to this financial plan based on both states' fiscal year, which ends June 30. Annual updates will then be provided within 90 days of the end of the state fiscal year (i.e., by September 30 of each year). The first annual

update will be provided by September 30, 2008 and reflect information through June 30, 2008. This approach will allow the States to incorporate information from each state's multi-year transportation plan updates as well as their regular budget processes and legislative schedules.

Examples of items that will be expanded upon in the Annual Updates, based on the anticipated progress on the Project, are:

- Updates to cost estimates based on the completion of more detailed design work and re-estimation of unit costs, as done for Chapter 1 in this IFP, as well as continued re-estimation of inflationary forces;
- More detailed cash flow forecasting (i.e., of anticipated encumbrances/obligations as distinct from anticipated cash needs), including on a quarterly (vs. annual) basis and based on both state and federal fiscal years (if necessary);
- Tracking of actual expenditures against projected cash flow needs and development of a cost history tracking system;
- Tracking of actual revenues against projected funding and updated project costs as well as strategies to address any funding shortfalls, as necessary; and
- Incorporation of any additional funding sources and/or financing approaches as alternatives to traditional pay-as-you-go program funding.

As described in Chapter 4 of this IFP, alternative funding approaches could include, but are not limited to: public-private/concession arrangements that rely at least in part on tolls as the underlying funding stream; public sponsored tolling (via each state or through a joint public authority); development-related private financial participation; and/or other dedicated state and local funding sources such as transportation-related fees or other revenue measures. In addition to these funding alternatives, alternative financing approaches to be considered include the use of borrowing – via the States' highway revenue bonding programs, the sale of Grant Anticipation Revenue Vehicles (GARVEEs) to be repaid with future federal and matching state funds, or other bonding mechanisms.

Neither state has performed a detailed assessment of these alternatives but both states are open to considering how such approaches could contribute to the LSIORB Project and to the States' overall programs. In particular, the States recognize that there is some potential to accelerate certain project elements via the use of a combination of these alternative approaches. Given the importance of managing overall costs, the States will work to incorporate alternative funding and finance approaches that help to manage the impact of inflation on overall project costs.

**ATTACHMENT A. 1997 MEMORANDUM OF AGREEMENT FOR PREPARATION OF  
ENVIRONMENTAL IMPACT DOCUMENTS AND PRELIMINARY BRIDGE STUDY  
REPORT**

**AGREEMENT  
BETWEEN  
COMMONWEALTH OF KENTUCKY  
TRANSPORTATION CABINET  
AND  
INDIANA DEPARTMENT OF TRANSPORTATION**

**THIS AGREEMENT** is entered into by and between the Commonwealth of Kentucky, acting by and through the Secretary, Kentucky Transportation Cabinet, hereinafter referred to as "KYTC," and the State of Indiana, acting by and through the Commissioner, Indiana Department of Transportation, hereinafter referred to as "INDOT."

**WITNESSETH:**

**WHEREAS**, KYTC and INDOT have previously executed an agreement, dated October 14, 1991, for preparation of a Scoping Study, Technical Memorandum, Environmental Impact Document, and Preliminary Bridge Study Report for a bridge, including approaches, over the Ohio River in the Metropolitan Louisville area, and

**WHEREAS**, a joint bi-state endeavor resulted in the preparation of the Ohio River Major Investment Study (ORMIS) which recommended a two bridge solution, an east end bridge for increased interstate mobility and a downtown bridge, including the reconstruction of the Kennedy Interchange, for relief of cross river vehicular traffic congestion on the existing three highway bridges over the Ohio River in the Metropolitan Louisville area, and

**WHEREAS**, the east end bridge would extend from south of the existing KY 841 (Gene Snyder Freeway) intersection with US 42 in Kentucky to I-265 (Lee Hamilton Highway) at State Road 62 in Indiana, including interchanges and approaches; and, the downtown bridge would extend from south of the I64-I65-I71 Kennedy Interchange in Kentucky to the L & I Railroad Bridge over I-65 located approximately at Indiana RP 1 + 017, and

**WHEREAS**, KYTC and INDOT desire to proceed with the preparation of a Preliminary Engineering Study and Environmental Study/Overview for the design and construction of the east end bridge and downtown bridge crossing the Ohio River as recommended in the Final Report of the Ohio River Major Investment Study (ORMIS), and

**WHEREAS**, it is the desire of KYTC and INDOT to more specifically identify the areas of cooperation for the purpose of defining the obligations of the two parties, one to another, for this project.

**NOW, THEREFORE**, this Agreement witnesseth, that for and in consideration of the premises and the further consideration of the covenants and agreements hereinafter contained, KYTC and INDOT agree as follows:

**SECTION I. SCOPE OF WORK**

Preparation of a Preliminary Engineering Study and Environmental Study/Overview is hereby authorized as a joint venture to examine the feasibility of and obtain necessary environmental approvals and permits for design and construction of two (2) new bridges in: (1) the vicinity of Jeffersonville, Indiana and Louisville, Kentucky; and (2) the vicinity of Eastern Jefferson County, Kentucky and Eastern Clark County, Indiana, and further identified in the Ohio River Major Investment Study as the downtown bridge and the east end bridge, respectively.



The study will include all the approaches to the new structures including the reconstruction of the Kennedy Interchange in Kentucky and Court Avenue Interchange in Indiana, connections to existing roadway systems, necessary appurtenant structures in both Indiana and Kentucky and will be based on the recommendations contained in the Final Report of the Ohio River Major Investment Study (ORMIS).

## **SECTION II. OBLIGATIONS OF INDOT**

- A. In cooperation with KYTC, INDOT shall select a consultant to provide services outlined in the SCOPE OF WORK, through INDOT's established consulting services procedures. The consultant selection process will include local participation to provide a short list of consultant teams who will make oral presentations to INDOT and KYTC officials prior to final consultant team selection as outlined in the INDOT Professional Service Bulletin 1997, No. 23, dated November 25, 1997.
- B. INDOT shall be responsible for contracting with and establishing payment procedures to the selected consulting engineering team.

## **SECTION III. OBLIGATIONS OF KYTC**

- A. KYTC, in cooperation with INDOT, shall participate in the consultant selection process to select a firm to provide services outlined in the SCOPE OF WORK.
- B. It shall be the responsibility of KYTC to obtain all environmental and permit approvals for the main span and approaches of both the downtown and east end bridges crossing the Ohio River. This will include, but not be limited to, approvals from the Federal Highway Administration through the Kentucky Division Office and Region 4 Office, U.S. Army Corps of Engineers, U.S. Coast Guard, INDOT, and other agencies as required by both Indiana State law, Kentucky State law and federal law.
- C. As part of KYTC's financial contribution identified in Section V, KYTC shall provide all aerial surveys and mapping for the project.

## **SECTION IV. BI-STATE PROJECT MANAGEMENT TEAM**

- A. It is the intent of KYTC and INDOT to establish a Bi-State Project Management Team to cooperatively oversee all activities associated with the preliminary engineering and environmental assessment phase, final design phase, right-of-way phase, utility relocation phase, and construction phase for these two (2) Ohio River bridges.
- B. Should any disputes occur which cannot be resolved by the Bi-State Project Management Team relative to the main river structures, the Kentucky Secretary of Transportation and the Commissioner of the Indiana Department of Transportation will jointly resolve the dispute by choosing the most economically efficient alternative that satisfies project criteria. Resolution of any disputes regarding the approaches will be determined by the respective state having jurisdictional authority.

## **SECTION V. FINANCING**

- A. INDOT shall establish one million dollars (\$1,000,000) for the Preliminary Engineering Study and Environmental Study/Overview (resulting from the Scope of Work in this agreement) and bear 100% of the initial \$1,000,000 of costs associated with the payment of consultant costs.

- B. KYTC has placed in the Cabinet's Draft 1998-2004 Six Year Highway Plan the amount of one million dollars (\$1,000,000) for the Preliminary Engineering Study and Environmental Study/Overview resulting from the Scope of Work in this agreement, subject to approval by Kentucky's Legislature. Upon expenditure of the initial one million dollars (\$1,000,000) by INDOT, as established in Section V (A), KYTC shall bear 100% of the second \$1,000,000 in costs associated with the payment to the selected consultant. INDOT shall submit to KYTC invoices in the amount of each billing received by the selected consultant. KYTC shall approve and pay INDOT within thirty (30) days after receipt of such invoices from INDOT.
- C. Work by either Indiana or Kentucky staff, or items provided by either Indiana or Kentucky toward completion of this project, shall not be chargeable toward either state's \$1,000,000 contribution. Each state's \$1,000,000 shall be used strictly for payment of consultant's invoices and the aerial surveys and mapping described in Section III C of this agreement.
- D. It is expressly agreed that the cost remaining for the Scope of Work for Preliminary Engineering and the Environmental Study/Overview after the initial expenditures of \$1,000,000 by each state shall be shared on a 50%/50% basis with Kentucky bearing 50% of the costs and Indiana bearing 50% of the costs, using funding to be designated by KYTC and INDOT.

#### **SECTION VI. ADDITIONAL AGREEMENTS**

This agreement is limited to the preparation of the Preliminary Engineering Study and Environmental Study/Overview. Additional agreement(s) or supplement(s) to this agreement shall be prepared and executed for changes in the SCOPE OF WORK of this agreement, subsequent design activities, construction, right of way acquisition, utility costs borne by either Indiana or Kentucky, environmental mitigation costs, railroad costs or maintenance of the facility that may result from the recommendations of the aforementioned reports and documents and mutually agreed to by the parties. All agreement(s) or supplements must be in writing and submitted for approval by the Attorney General of Indiana. Furthermore, KYTC and INDOT agree that the responsibility of design, construction, right of way acquisition utility costs, environmental mitigation costs, railroad costs, or maintenance costs of the Ohio River Bridges main spans shall be shared on a 50%/50% basis. The Kentucky approach roadways and approach spans shall be the responsibility of KYTC. The Indiana approach roadways and approach spans shall be the responsibility of INDOT. If, in the event, special federal appropriations become available for the Louisville bridges, the funds will be applied to the project in the following order:

- (1) the main structures;
- (2) the approaches based on a prorated share for each state.

#### **SECTION VII. DISCRIMINATION**

INDOT, KYTC and their consultants and subcontractors shall not discriminate against any employee or applicant for employment, to be employed in the performance of work under this agreement, with respect to hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of race, color, religion, sex, disability, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the Agreement.

#### **SECTION VIII. FORCE MAJEURE, SUSPENSION AND TERMINATION**

In the event that either party is unable to perform any of its obligations under this Agreement or to enjoy any of its benefits because of natural disaster, actions or decrees of governmental bodies or communication line failure not the fault of the affected party (hereinafter referred to as a "Force Majeure Event"), the party who has been so affected shall immediately give notice to the other party and shall do everything possible to resume performance. Upon receipt of such notice, all obligations under this Agreement shall be immediately suspended. If the period of nonperformance exceeds thirty (30) days from the receipt of notice of the Force Majeure Event, the party whose ability to perform has not been so affected may be given written notice to terminate this Agreement.

#### **SECTION IX. SEVERABILITY**

Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

#### **SECTION X. MAINTAINING A DRUG-FREE WORKPLACE, EXEC. ORDER #90-5**

- A. KYTC hereby covenants and agrees to make a good faith effort to provide and maintain during the term of this Agreement a drug-free workplace, and that it will give written notice to the Indiana Department of Transportation within ten (10) days after receiving actual notice that an employee of the KYTC has been convicted of a criminal drug violation occurring in its workplace.
- B. In addition to the provisions of subparagraph (A) above, if the total contract amount set forth in this Agreement is in excess of \$25,000.00, the KYTC hereby further agrees that this Agreement is expressly subject to the terms, conditions and representations contained in the Drug-Free Workplace certification executed by it in conjunction with this Agreement and which is appended as an Attachment hereto.
- C. It is further expressly agreed that the failure of the party to in good faith comply with the terms of subparagraph (A) above, or falsifying or otherwise violating the terms of the certification referenced in subparagraph (B) above shall constitute a material breach of this Agreement.

#### **SECTION XI. DEFINITION OF EMPLOYEE**

For the purpose of Section X above, the term "Employee" shall include only those employees of KYTC directly engaged in the performance of this Agreement.

#### **SECTION XII. ATTORNEY GENERAL APPROVAL**

This Agreement shall not be effective unless and until approved by the Attorney General of Indiana, or his authorized representatives, as to legality and form.

IN TESTIMONY WHEREOF, the parties hereto have executed this Agreement

COMMONWEALTH OF KENTUCKY

Paul E. Patton  
Governor of Kentucky

11 Dec 1997  
Date

STATE OF INDIANA

Frank R. Bannon  
Governor of Indiana

12/11/97  
Date

Attest: Indiana Secretary of State

Lee Anne Hilary

KENTUCKY TRANSPORTATION CABINET

Joe B. Caudill  
Secretary of Transportation

11 December 97  
Date

INDIANA DEPARTMENT OF TRANSPORTATION

Paul M. H. [Signature]  
Commissioner

12/11/97  
Date

APPROVED AS TO LEGALITY AND FORM

[Signature]  
General Counsel  
Kentucky Transportation Cabinet

10 Dec 97  
Date

APPROVED AS TO LEGALITY AND FORM

Jeffrey W. H. [Signature] (For)  
Attorney General of Indiana

12/18/97  
Date

INDIANA STATE BUDGET AGENCY

[Signature]  
Highway contract, I.C. 8-23-9-21  
Director

N/A  
Date

INDIANA DEPARTMENT OF ADMINISTRATION

[Signature]  
Highway contract, I.C. 8-23-9-21  
Commissioner

N/A  
Date

**ATTACHMENT B. 2004 MEMORANDUM OF AGREEMENT FOR DESIGN AND  
CONSTRUCTION OF THE TWO BRIDGES AND APPROACHES (BI-STATE  
MANAGEMENT AGREEMENT)**

**MEMORANDUM OF AGREEMENT BETWEEN  
THE KENTUCKY TRANSPORTATION CABINET AND  
INDIANA DEPARTMENT OF TRANSPORTATION  
GENERAL ENGINEERING SERVICES, DESIGN AND CONSTRUCTION  
LOUISVILLE-SOUTHERN INDIANA OHIO RIVER BRIDGES PROJECT**

**THIS AGREEMENT** is entered into by and between the Commonwealth of Kentucky, acting by and through the Secretary, Kentucky Transportation Cabinet, hereinafter referred to as "KYTC," and the State of Indiana, acting by and through the Commissioner, Indiana Department of Transportation, hereinafter referred to as "INDOT."

**WITNESSETH:**

**WHEREAS**, KYTC and INDOT have previously executed an agreement, dated December 11, 1997, for preparation of Environmental Impact Documents and Preliminary Bridge Study Report for improving cross river travel in the Metropolitan Louisville area, and

**WHEREAS**, a joint bi-state endeavor resulted in the preparation of the Final Environmental Impact Statement which recommended a two bridge solution, a new east end bridge for increased interstate mobility and an additional downtown I-65 bridge, including the reconstruction of the Kennedy Interchange, for relief of cross river vehicular traffic congestion on the existing three highway bridges over the Ohio River in the Metropolitan Louisville area, and

**WHEREAS**, the new east end bridge would extend from south of the existing KY 841 (Gene Snyder Freeway) intersection with US 42 in Kentucky to I-265 (Lee Hamilton Highway) at State Road 62 in Indiana, including interchanges and approaches as identified as A-15 in the Final Environmental Impact Statement; and, the new downtown I-65 bridge, just upstream of the existing Kennedy Bridge, would extend from south of the I64-I65-I71 Kennedy Interchange in Kentucky to approximately 2000 feet north of the L & I Railroad Bridge over I-65 located approximately at Indiana RP 1 + 017, identified as C-1 in the Final Environmental Impact Statement, and

**WHEREAS**, KYTC and INDOT desire to proceed with the general engineering services, design, right of way, utilities relocation and construction of the east end bridge and downtown bridge crossing the Ohio River as documented and recommended in the Final Environmental Statement and Section 106 Memorandum of Agreement, and

**WHEREAS**, it is the desire of the KYTC and INDOT to more specifically identify the areas of cooperation for the purpose of defining the obligations of the two parties, one to another, for this project, and

**WHEREAS**, the Federal Highway Administration has published a Record of Decision on September 06, 2003 which documented the recommendation of the two bridges solution as advancing to the next phases, and

**WHEREAS**, in cooperation with KYTC, INDOT has procured a consultant to provide General Engineering Services for the oversight assistance for the project.

**NOW THEREFORE**, this Agreement witnesseth, that for and in consideration of the premises and the further consideration of the covenants and agreements hereinafter contained, KYTC and INDOT agree as follows:

**SECTION I. SCOPE OF WORK**

All necessary services are hereby authorized as a joint venture for design and construction of two (2) new bridges and approaches in: (1) the vicinity of Jeffersonville, Indiana and Louisville, Kentucky; and (2) the vicinity of Eastern Jefferson County, Kentucky and Eastern Clark County, Indiana, and further identified in the Final Environmental Impact Statement and Section 106 Memorandum of Agreement as the downtown bridge, Alignment C1, and the east end bridge, Alignment A15, respectively.

This project will include all of the approaches to the new structures including the reconstruction of the Kennedy Interchange in Kentucky and Court Avenue Interchange in Indiana, connections to existing roadway systems, necessary appurtenant structures in both Indiana and Kentucky as documented in the Final Environmental Impact Statement and Section 106 Memorandum of Agreement.

#### **SECTION II. OBLIGATIONS OF INDOT**

- A. INDOT has contracted with and established payment procedures for the General Engineering Services consultant.
- B. INDOT shall cause to be constructed all of the necessary approaches in Indiana to the downtown bridge, C-1, and the east end bridge, A-15, in the general manner described in the Final Environmental Impact Statement and the Section 106 Memorandum of Agreement.
- C. INDOT shall work in cooperation with the KYTC for the design and construction of the main river structure for a downtown Ohio River Bridge, C-1, and an east end Ohio River Bridge, A-15.
- D. INDOT shall obtain all environmental and permit approvals for the Indiana approaches.
- E. INDOT shall work in cooperation with KYTC for securing the permit approvals for the river structures bridging the Ohio River.

#### **SECTION III. OBLIGATIONS OF KYTC**

- A. KYTC, in cooperation with INDOT, shall obtain all environmental and permit approvals for both the downtown bridge C-1 and east end bridge A-15 crossing the Ohio River. This will include, but not be limited to, approvals from the U.S. Army Corps of Engineers, U.S. Coast Guard, INDOT, and other agencies as required by both Indiana State law, Kentucky State law and federal law.
- B. In cooperation with INDOT, KYTC shall select consultants to design the main river structure and necessary approach spans for the downtown bridge, C-1 and the east end bridge A-15.
- C. KYTC shall cause to be constructed the main river structures for alignments C-1 and A-15 and all of the necessary approaches in Kentucky to the downtown bridge, C-1 including the Kennedy Interchange, and the east end bridge A-15 in the general manner described in the Final Environmental Impact Statement and the Section 106 Memorandum of Agreement.
- D. KYTC shall obtain all environmental and permit approvals for the Kentucky approaches.

#### **SECTION IV. BI-STATE PROJECT MANAGEMENT TEAM**

- A. It is the intent of KYTC and INDOT to develop, implement and maintain a Project Management Plan to prescribe the method of management and oversight of all activities associated with the general engineering services, design phase, right-of-way phase, utility relocation phase, and construction phase for these two (2) Ohio River bridges and approaches. The Project Management Plan is to be developed by the Bi-State Project Management Team and approved by the Commissioner of INDOT and the Secretary of KYTC.

- B. Should any disputes occur which cannot be resolved by the Bi-State Project Management Team, the Kentucky Secretary of Transportation and the Commissioner of the Indiana Department of Transportation will jointly resolve the dispute.

#### **SECTION V. FINANCING**

- A. KYTC and INDOT agree that the costs of the general engineering services shall be shared sixty-seven percent (67%) / thirty-three percent (33%) respectively except where costs are identifiable as specific to either Kentucky or Indiana. These state specific services would include, but not be limited to, the historic preservation plans, state specific mitigation, special state-specific studies, etc. Any state specific services shall be paid at 100 percent by the state requesting the services.
- B. KYTC and INDOT agree that the responsibility for the costs of the design, permits and additional environmental approvals and construction, right of way acquisition, utility relocation, environmental mitigation and enhancements, railroad cost, and Section 106 Memorandum of Agreement Historic Preservation commitments associated with the main river structures and main river approach spans for the downtown bridge, C-1, and the east end bridge, A-15, shall be shared on a fifty percent (50%) / fifty percent (50%) basis. The Bi-State Project Management Team shall determine the costs associated with the main river structures and main river approach spans for the downtown bridge, C-1, and the east end bridge, A-15 that will be shared fifty percent (50%)/fifty percent (50%) between Kentucky and Indiana.
- C. The cost of the approach roadways, structures and interchanges on the Kentucky side shall be the responsibility of KYTC including railroad costs, Section 106 commitments and environmental mitigation and enhancements.
- D. The cost of the approach roadways, structures and interchanges on the Indiana side shall be the responsibility of INDOT including railroad costs, Section 106 mitigation commitments and environmental mitigation and enhancements.
- E. The costs of any unforeseen activities associated with the Scope of Work in Section I will be shared by INDOT and KYTC upon a percentage basis to be determined by the Bi-State Project Management Team subject to the approval of the Secretary of KYTC and Commissioner of INDOT.

#### **SECTION VI. ADDITIONAL AGREEMENTS**

This agreement is limited to the Scope of Services Section I. Additional agreement(s) or supplement(s) to this agreement shall be prepared and executed for changes in the SCOPE OF WORK of this agreement mutually agreed to by the parties and the maintenance of the two (2) new Ohio River Bridges. All agreement(s) or supplementals must be in writing and submitted for approval by the Attorney General of Indiana, KYTC, INDOT and the Governors of Kentucky and Indiana. Furthermore, KYTC and INDOT agree that the responsibility of maintenance costs of the two (2) Ohio River Bridges main spans shall be shared on a fifty percent (50%)/fifty percent (50%) basis. The approach roadways and approach spans on the Kentucky side shall be the responsibility of KYTC. The approach roadways and approach spans on the Indiana side shall be the responsibility of INDOT. If, in the event, special federal appropriations become available for the Louisville Bridges not specifically designated by Congress for either Kentucky or Indiana, the funds will be applied to the project as mutually agreed by the Commissioner of INDOT and the Secretary of KYTC.



#### **SECTION VII. DISCRIMINATION**

Pursuant to the Civil Rights act of 1964, INDOT, KYTC and their consultants and subcontractors shall not discriminate against any employee or applicant for employment, to be employed in the performance of work under this Agreement, with respect to hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of race, color, age, sex, disability, status as a veteran or national origin. Breach of this Section may be regarded as a material breach of the Agreement.

#### **SECTION VIII. FORCE MAJEURE, SUSPENSION AND TERMINATION**

In the event that either party is unable to perform any of its obligations under this Agreement or to enjoy any of its benefits because of natural disaster, actions or decrees of other governmental bodies or communication line failure not the fault of the affected party (hereinafter referred to as a "Force Majeure Event"), the party who has been affected shall immediately give notice to the other party and shall do everything possible to resume performance. Upon receipt of such notice, all obligations under this Agreement shall be immediately suspended. If the period of nonperformance exceeds thirty (30) days from the receipt of notice of the Force Majeure Event, the party whose ability to perform has not been so affected may give written notice to terminate this Agreement.

#### **SECTION IX. TERMINATION**

Upon 30-day prior written notification, KYTC or INDOT upon mutual written agreement may terminate the project and cancel this agreement. Work completed to that point shall be put in a condition mutually satisfying to KYTC and INDOT as agreed to by the Bi-State Project Management Team. KYTC and/or INDOT will be reimbursed for audited expenditures incurred prior to the time of termination and any costs incurred in demobilization in accordance with Section V of this Agreement.

#### **SECTION X. SEVERABILITY**

Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.


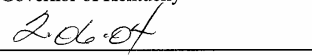
#### **SECTION XI AUDIT AND INSPECTION**

INDOT shall permit KYTC or its authorized representatives to inspect all relevant project data and records and to inspect and approve all relevant phases of the project prior to beginning the next phase of the project.

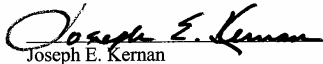
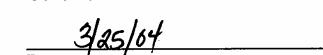
KYTC shall permit INDOT or its authorized representatives to inspect all relevant project data and records and to inspect and approve all relevant phases of the project prior to beginning the next phase of the project.

IN TESTIMONY WHEREOF, the parties hereto have executed this Agreement.

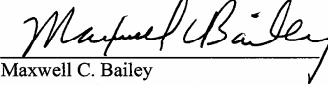
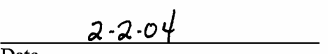
**COMMONWEALTH OF KENTUCKY**

  
Ernie Fletcher  
Governor of Kentucky  
  
Date

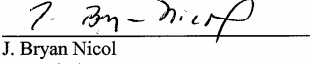
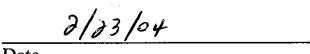
**STATE OF INDIANA**

  
Joseph E. Kernan  
Governor of Indiana  
  
Date


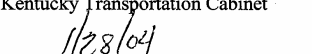
**KENTUCKY TRANSPORTATION CABINET**

  
Maxwell C. Bailey  
Secretary of Transportation  
  
Date

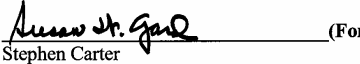
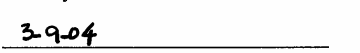
**INDIANA DEPARTMENT OF  
TRANSPORTATION**

  
J. Bryan Nicol  
Commissioner  
  
Date

**APPROVED AS TO LEGALITY AND FORM**

  
Office of General Counsel  
Kentucky Transportation Cabinet  
  
Date

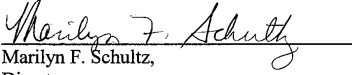
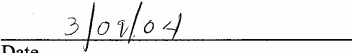
**APPROVED AS TO LEGALITY AND FORM**

  
Stephen Carter  
Attorney General of Indiana  
  
Date

**INDIANA DEPARTMENT OF ADMINISTRATION**

  
Charles R. Martindale  
Acting Commissioner  
  
Date

**INDIANA STATE BUDGET AGENCY**

  
Marilyn F. Schultz,  
Director  
  
Date

## **ATTACHMENT C. SUMMARY PROJECT SCHEDULE**

Activity ID	Activity Name	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	25						
Section 1 KY Kennedy Interchange																						Section 1 KY Kennedy Interchange					
A1000	Preliminary Engineering/Design	Preliminary Engineering/Design																									
A1010	Final Engineering/Design			Final Engineering/Design																							
A1020	Design Program Management	Design Program Management																									
A1030	Design Contingency	Design Contingency																									
A1040	Construction Administration & Inspection			Construction Administration & Inspection																							
A1042	Construction Administration & Inspection									Construction Administration & Inspection																	
A1050	Construction - 2008-2009			Construction - 2008-2009																							
A1052	Construction - 2013-2024									Construction - 2013-2024																	
A1055	Construction Contingency - 2008-2009			Construction Contingency - 2008-2009																							
A1057	Construction Contingency- 2013-2024													Construction Contingency- 2013-2024													
A1070	Utilities						Utilities																				
A1075	Right of Way Acquisition	Right of Way Acquisition																									
A1082	Right of Way Acquisition				Right of Way Acquisition																						
A1090	Hazardous Materials			Hazardous Materials																							
A1095	Wetlands									Wetlands																	
A1097	Archeology	Archeology																									
A1120	Enhancements	Enhancements																									
A1130	Historic Mitigation - Design	Historic Mitigation - Design																									
A1420	Historic Mitigation - Construction												Historic Mitigation - Construction														
Section 2 I-65 Downtown Bridge																						Section 2 I-65 Downtown Bridge					
A2140	Preliminary Engineering/Design	Preliminary Engineering/Design																									
A2150	Final Engineering/Design			Final Engineering/Design																							
A2160	Design Program Management	Design Program Management																									
A2170	Design Contingency	Design Contingency																									
A2180	Construction Administration & Inspection											Construction Administration & Inspection															
A2190	Construction											Construction															
A2200	Construction Contingency											Construction Contingency															
A2520	Archeology	Archeology																									
Section 3 IN Downtown Approach																						Section 3 IN Downtown Approach					
A3530	Final Engineering/Design		Final Engineering/Design																								
A3540	Design Program Management		Design Program Management																								
A3560	Construction Administration & Inspection										Construction Administration & Inspection																
A3570	Construction										Construction																
A3580	Construction Contingency										Construction Contingency																
A3505	Utilities						Utilities																				
A3500	Right of Way Acquisition					Right of Way Acquisition																					
A3515	Historic Mitigations	Historic Mitigations																									
A7520	Historic Mitigations							Historic Mitigations																			

Activity ID	Activity Name	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	25
Section 4 KY East End Bridge Approach										▼ Section 4 KY East End Bridge Approach											
A5460	Design Contingency			Design Contingency																	
A4280	Preliminary Engineering/Design	Preliminary Engineering/Design																			
A4290	Final Engineering/Design		Final Engineering/Design																		
A4300	Design Program Management		Design Program Management																		
A4310	Design Contingency			Design Contingency																	
A4320	Construction Administration & Inspection			Construction Administration & Inspection																	
A4330	Construction			Construction																	
A4340	Construction Contingency			Construction Contingency																	
A4350	Utilities		Utilities																		
A4360	Right of Way Acquisition			Right of Way Acquisition																	
A4380	Wetlands			Wetlands																	
A4390	Archeology		Archeology																		
A4410	Historic Mitigation		Historic Mitigation																		
Section 5 East End Bridge										▼ Section 5 East End Bridge											
A5430	Preliminary Engineering/Design	Preliminary Engineering/Design																			
A5440	Final Engineering/Design		Final Engineering/Design																		
A5450	Design Program Management		Design Program Management																		
A5470	Construction Administration & Inspection			Construction Administration & Inspection																	
A5480	Construction			Construction																	
A5490	Construction Contingency			Construction Contingency																	
A5520	Archeology		Archeology																		
Section 6 IN East End Bridge Approach										▼ Section 6 IN East End Bridge Approach											
A6600	Final Engineering/Design		Final Engineering/Design																		
A6610	Design Program Management		Design Program Management																		
A6630	Construction Administration & Inspection			Construction Administration & Inspection																	
A6640	Construction			Construction																	
A6650	Construction Contingency			Construction Contingency																	
A6520	Utilities			Utilities																	
A6510	Right of Way Acquisition		Right of Way Acquisition																		
A6505	Wetlands			Wetlands																	
A6517	Enhancements	Enhancements																			
A6519	Enhancements		Enhancements																		
A6515	Historic Mitigations		Historic Mitigations																		
Other										▼ Other											
A7505	Design Program Management	Design Program Management																			
A7510	Enhancements		Enhancements																		
A7500	Historic Mitigation		Historic Mitigation																		

## **ATTACHMENT D. ANNUAL CASH EXPENDITURE DETAIL**

LSIORB Project - Initial Financial Plan  
Attachment D. Total Project Annual Cash Expenditure Detail

LSIORBP Total Costs (Y.O.E. Dollars)																					
State Fiscal Year;	Pre '06	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	TOTAL
Inflation Year (2003 as base)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Constr. Avg Inflation rate from 2003	10.0%	10.0%	10.0%	9.6%	8.6%	8.0%	7.5%	7.1%	6.8%	6.5%	6.3%	6.1%	6.0%	5.8%	5.7%	5.6%	5.5%	5.4%	5.4%	5.3%	
Constr.+ Contingency Annual Inflation Rate	10.0%	10.0%	10.0%	8.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
R/W Inflation Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Inflation Year (all other elements)	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	
Section	Element																				
Section 1 - Kennedy Interchange																					
1	Preliminary Engineering/Design	6,900,000	16,700,575	14,500,000	5,899,425	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44,000,000
1	Final Engineering/Design	-	-	-	20,000,000	20,000,000	20,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	60,000,000
1	Design Program Management	3,312,000	1,419,549	1,232,500	3,107,931	2,400,000	2,400,000	-	-	-	-	-	-	-	-	-	-	-	-	-	13,871,980
1	Design Contingency	-	-	-	1,035,977	800,000	800,000	-	-	-	-	-	-	-	-	-	-	-	-	-	2,635,977
1	Construction Administration & Inspection	-	-	-	2,619,758	626,333	-	-	7,327,209	8,991,951	9,213,033	9,581,554	9,964,816	10,363,409	10,004,656	7,713,686	8,022,233	5,214,452	4,338,424	1,081,219	95,062,733
1	Construction	-	-	-	34,391,709	8,222,386	-	-	96,190,282	118,044,714	120,947,035	125,784,917	130,816,313	136,048,966	131,339,320	101,263,879	105,314,434	68,454,382	56,954,046	14,194,045	1,247,966,428
1	Construction Contingency	-	-	-	3,439,171	822,239	-	-	9,619,028	11,804,471	12,094,704	12,578,492	13,081,631	13,604,897	13,133,932	10,126,388	10,531,443	6,845,438	5,695,405	1,419,404	124,796,643
1	Utilities	-	-	-	-	-	-	8,893,332	9,249,066	19,238,056	10,003,789	1,302,074	-	-	-	-	-	-	-	-	48,686,317
1	Right of Way Acquisition	-	-	12,155	-	13,400,956	5,628,402	14,774,554	15,513,282	11,769,101	-	-	-	-	-	-	-	-	-	-	61,098,451
1	Environmental Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
1	Hazardous Materials	-	-	-	6,783,468	7,054,807	6,114,166	6,349,839	3,699,626	-	-	-	-	-	-	-	-	-	-	-	30,001,906
1	Wetlands	-	-	-	-	-	-	-	-	28,657	-	-	-	-	-	-	-	-	-	-	28,657
1	Archaeology	-	562,432	584,929	608,326	632,660	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,388,347
1	Enhancements*	800,000	1,400,000	1,050,000	800,000	800,000	800,000	800,000	1,050,000	1,050,000	1,250,000	1,250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	-	13,600,000
1	Historic Mitigations	162,240	224,973	-	-	-	-	-	-	-	-	-	865,838	1,800,944	1,872,981	766,639	-	-	-	-	5,693,615
Section 2 - Downtown River Bridge																					
2	Preliminary Engineering/Design	-	3,805,110	1,893,043	997,315	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,695,468
2	Final Engineering/Design	-	-	-	4,866,612	3,836,838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,703,450
2	Design Program Management	-	323,434	160,909	703,671	460,421	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,648,435
2	Design Contingency	-	-	-	1,172,785	767,368	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,940,153
2	Construction Administration & Inspection	-	-	-	-	-	-	-	-	-	5,944,635	6,182,421	6,429,718	6,686,906	2,789,600	-	-	-	-	-	28,033,279
2	Construction	-	-	-	-	-	-	-	-	-	74,647,053	77,632,935	80,738,253	83,967,783	35,029,127	-	-	-	-	-	352,015,151
2	Construction Contingency	-	-	-	-	-	-	-	-	-	11,197,058	11,644,940	12,110,738	12,595,167	5,254,369	-	-	-	-	-	52,802,273
2	Utilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
2	Right of Way Acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
2	Environmental Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
2	Hazardous Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
2	Wetlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
2	Archaeology	-	421,824	438,697	456,245	474,495	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,791,260
2	Enhancements*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
2	Historic Mitigations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Section 3 - Downtown IN Approach																					
3	Preliminary Engineering/Design	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3	Final Engineering/Design	-	-	797,281	1,673,120	2,569,218	2,671,986	2,238,043	7,298,473	7,401,221	-	-	-	-	-	-	-	-	-	-	24,649,342
3	Design Program Management	-	-	60,833	547,494	506,128	526,373	547,428	569,325	592,098	-	-	-	-	-	-	-	-	-	-	3,349,677
3	Design Contingency	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3	Construction Administration & Inspection	-	-	-	-	-	-	-	-	-	4,557,185	2,807,515	3,308,881	7,246,083	1,138,248	1,964,093	-	-	-	-	21,022,004
3	Construction	-	-	-	-	-	-	-	-	-	58,757,578	36,198,400	42,662,706	93,426,606	14,675,884	25,323,819	-	-	-	-	271,044,993
3	Construction Contingency	-	-	-	-	-	-	-	-	-	7,050,909	4,343,808	5,119,525	11,211,193	1,761,106	3,038,858	-	-	-	-	32,525,399
3	Utilities	-	-	-	-	-	1,368,205	1,067,200	554,944	564,829	-	-	-	-	-	-	-	-	-	-	3,555,178
3	Right of Way Acquisition	-	-	-	-	-	16,769,143	17,607,600	18,487,980	-	-	-	-	-	-	-	-	-	-	-	52,864,724
3	Environmental Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3	Hazardous Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3	Wetlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3	Archaeology	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3	Enhancements*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3	Historic Mitigations	-	337,459	116,986	-	-	-	-	1,067,484	444,073	461,836	400,258	-	-	-	-	-	-	-	-	2,828,096
Section 4 - KY East End Approach																					
4	Preliminary Engineering/Design	1,783,968	5,846,262	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,630,230
4	Final Engineering/Design	-	348,428	8,167,444	4,036,271	4,197,722	500,000	-	-	-	-	-	-	-	-	-	-	-	-	-	17,249,865
4	Design Program Management	856,305	526,549	694,233	484,353	503,727	60,000	-	-	-	-	-	-	-	-	-	-	-	-	-	3,125,165
4	Design Contingency	-	-	-	1,210,881	1,259,317	150,000	-	-	-	-	-	-	-	-	-	-	-	-	-	2,620,198
4	Construction Administration & Inspection	-	-	-	548,041	569,963	8,424,677	11,371,867	11,660,585	11,076,381	-	-	-	-	-	-	-	-	-	-	43,651,515
4	Construction	-	-	-	7,194,587	7,482,371	108,622,681	146,621,964	150,344,523	142,812,155	-	-	-	-	-	-	-	-	-	-	563,078,281
4	Construction Contingency	-	-	-	719,459	748,237	13,034,722	17,594,636	18,041,343	17,137,459	-	-	-	-	-	-	-	-	-	-	67,275,855
4	Utilities	-	199,650	292,820	1,881,914	1,644,477	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,018,861
4	Right of Way Acquisition	-	-	-	17,867,942	13,702,478	-	-	-	-	-	-	-	-	-	-	-</				

LSIORB Project - Initial Financial Plan  
Attachment D. Total Project Annual Cash Expenditure Detail

LSIORBP Total Costs (Y.O.E. Dollars)																						
State Fiscal Year;		Pre '06	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	TOTAL
Section 5 - East End River Bridge																						
5	Preliminary Engineering/Design	-	3,228,835	1,873,130	2,335,759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,437,724
5	Final Engineering/Design	-	-	-	6,083,265	3,552,748	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,636,013
5	Design Program Management	-	274,451	159,216	1,010,283	426,330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,870,280
5	Design Contingency	-	-	-	1,683,805	710,550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,394,354
5	Construction Administration & Inspection	-	-	-	-	5,238,421	5,645,951	5,871,789	5,761,610	209,674	-	-	-	-	-	-	-	-	-	-	-	22,727,445
5	Construction	-	-	-	-	65,779,085	70,896,464	73,732,323	72,348,791	2,632,889	-	-	-	-	-	-	-	-	-	-	-	285,389,552
5	Construction Contingency	-	-	-	-	9,866,863	10,634,470	11,059,848	10,852,319	394,933	-	-	-	-	-	-	-	-	-	-	-	42,808,433
5	Utilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
5	Right of Way Acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
5	Environmental Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
5	Hazardous Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
5	Wetlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
5	Archaeology	-	421,824	438,697	456,245	474,495	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,791,260
5	Enhancements*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
5	Historic Mitigations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Section 6 - IN East End Approach																						
6	Preliminary Engineering/Design	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
6	Final Engineering/Design	-	-	628,000	5,000,000	4,267,000	4,167,000	4,166,000	-	-	-	-	-	-	-	-	-	-	-	-	-	18,228,000
6	Design Program Management	-	-	60,833	547,494	632,660	657,966	684,285	-	-	-	-	-	-	-	-	-	-	-	-	-	2,583,236
6	Design Contingency	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
6	Construction Administration & Inspection	-	-	-	-	-	4,067,501	4,230,201	4,399,409	4,542,747	-	-	-	-	-	-	-	-	-	-	-	17,239,857
6	Construction	-	-	-	-	-	52,443,889	54,541,644	56,723,310	58,571,430	-	-	-	-	-	-	-	-	-	-	-	222,280,273
6	Construction Contingency	-	-	-	-	-	6,293,267	6,544,997	6,806,797	7,028,572	-	-	-	-	-	-	-	-	-	-	-	26,673,633
6	Utilities	-	-	-	-	3,959,197	4,117,565	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,076,762
6	Right of Way Acquisition	2,900,533	2,183,151	2,535,392	4,467,000	4,467,000	4,466,999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21,020,075
6	Environmental Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
6	Hazardous Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
6	Wetlands	-	-	-	-	112,164	116,651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	228,815
6	Archaeology	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
6	Enhancements*	3,225	20,976	-	275,799	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300,000
6	Historic Mitigations	-	312,876	40,630	938,019	306,207	187,928	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,785,660
Other																						
Other	Preliminary Engineering/Design	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Final Engineering/Design	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Design Program Management	-	1,755,384	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,755,384
Other	Design Contingency	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Construction Administration & Inspection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Construction Contingency	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Utilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Right of Way Acquisition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Environmental Mitigation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Hazardous Materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Wetlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Archaeology	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Other	Enhancements*	-	-	900,000	120,000	120,000	120,000	120,000	120,000	-	-	-	-	-	-	-	-	-	-	-	-	1,500,000
Other	Historic Mitigations	64,896	168,730	584,929	1,216,653	948,989	450,591	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,434,788
Section Sub-totals																						
1	Section 1 - Kennedy Interchange	11,174,240	20,307,529	17,379,584	78,685,765	54,759,380	35,742,568	30,817,726	29,261,974	145,193,676	149,923,583	144,806,846	149,194,963	154,978,599	162,068,215	156,600,890	120,120,592	124,118,111	80,764,272	67,237,874	16,694,668	1,749,831,055
2	Section 2 - Downtown River Bridge	-	4,550,368	2,492,649	8,196,628	5,539,121	-	-	-	-	-	-	91,788,746	95,460,296	99,278,708	103,249,857	43,073,095	-	-	-	-	453,629,468
3	Section 3 - Downtown IN Approach	-	337,459	975,099	2,220,614	3,075,345	21,335,707	21,460,271	27,978,205	9,002,222	70,827,508	43,749,981	51,091,111	111,883,881	17,575,238	30,326,770	-	-	-	-	-	411,839,413
4	Section 4 - KY East End Approach	2,640,273	9,283,103	14,769,818	36,498,420	30,732,191	132,683,710	175,588,467	180,046,450	171,025,995	-	-	-	-	-	-	-	-	-	-	-	753,268,425
5	Section 5 - East End River Bridge	-	3,925,110	2,471,043	11,569,356	86,048,490	87,176,885	90,663,960	88,962,719	3,237,497	-	-	-	-	-	-	-	-	-	-	-	374,055,061
6	Section 6 - IN East End Approach	2,903,758	2,517,003	3,264,854	11,228,311	13,744,228	76,518,765	70,167,127	67,929,516	70,142,749	-	-	-	-	-	-	-	-	-	-	-	318,416,310
Other	Other	64,896	1,924,114	1,484,929	1,336,653	1,068,989	570,591	120,000	120,000	-	-	-	-	-	-	-	-	-	-	-	-	6,690,172
Total		16,783,167	42,844,686	42,837,977	149,735,747	194,967,744	354,028,225	388,817,551	394,298,865	398,602,139	220,751,091	280,345,573	295,746,370	366,141,189	282,893,310	230,000,755	120,120,592	124,118,111	80,764,272	67,237,874	16,694,668	4,067,729,905

\* Indicates items that are not inflated

Sub-total by Element

Preliminary Engineering/Design	8,683,968	29,580,782	18,266,173	9,232,499	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65,763,422
Final Engineering/Design	0	348,428	9,592,725	41,659,268	38,423,525	27,338,986	6,404,043	7,298,473	7,401,221	0	0	0	0	0	0	0	0	0	0	0	0	138,466,669
Design Program Management	4,168,305	4,299,367	2,368,523	6,401,225	4,929,264	3,644,339	1,231,712	569,325	592,098	0	0	0	0	0	0	0	0	0	0	0	0	28,204,157
Design Contingency	0	0	0	5,103,448	3,537,234	950,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,590,682
Construction Administration & Inspection	0	0	0	3,167,799	6,434,717	18,138,129	21,473,857	21,821,603	23,156,012	13,549,136	17,965,183	19,072,856	23,640,617	18,188,564	14,758,348	7,713,686	8,022,233	5,214,452	4,338,424	1,081,219	227,736,834	
Construction	0	0	0	41,586,296	81,483,841	231,963,034	274,895,931	279,416,623	300,206,756	176,802,292	231,792,488	246,080,558	304,981,172	234,692,633	191,692,266	101,263,879	105,314,434	68,454,382	56,954,046	14,194,045	2,941,774,678	
Construction Contingency	0	0	0	4,158,630	11,437,338	29,962,458	35,199,481	35,700,459	34,179,992	18,855,381	27,635,569	29,342,957	36,403,562	27,961,170	21,427,159	10,126,388	10,531,443	6,845,438	5,695,405	1,419,404	346,882,235	
Utilities	0	199,650	292,820	1,881,914	5,603,674	5,485,770	9,960,532	9,804,009	19,802,886	10,003,789	1,302,074	0	0	0	0	0	0	0	0	0	64,337,119	
Right of Way Acquisition	2,900,533	2,183,151	2,547,547	22,334,941	31,570,434	26,864,544	32,382,155	34,001,263	11,769,101	0	0	0	0	0	0	0	0	0	0	0	166,553,669	
Environmental Mitigation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hazardous Materials	0	0	0	6,783,468	7,054,807	6,114,166	6,349,839	3,699,626	0	0	0	0	0	0	0	0	0	0	0	0	30,001,906	
Wetlands	0	0	0	0	229,936	116,651	0	0	0	28,657	0	0	0	0	0	0	0	0	0	0	375,244	
Archaeology	0	1,518,566	1,813,281	1,642,481	1,581,649	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,555,977	
Enhancements*	803,225	1,420,976	1,950,000	1,195,799	920,000	920,000	920,000	920,000	1,050,000	1,050,000	1,250,000	1,250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	15,400,000	
Historic Mitigations	227,136	3,293,766	6,006,908	4,587,977	1,761,324	2,530,149	0	1,067,484	444,073	461,836	400,258	0	865,838	1,800,944	1,872,981	766,639	0	0	0	0	26,087,313	
TOTAL =	16,783,167	42,844,686	42,837,977	149,735,747	194,967,744	354,028,225	388,817,551	394,298,865	398,602,139	220,751,091	280,345,573	295,746,370	366,141,189	282,893,310	230,000,755	120,120,592	124,118,111	80,764,272	67,237,874	16,694,668	4,067,729,905	





LSIORB Project - Initial Financial Plan  
Attachment D. Total Project Annual Cash Expenditure Detail

Kentucky Costs (Y.O.E. Dollars)																								
State Fiscal Year:				Pre '06	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Section	Element	KY	IN																					
Other																							-	
Other	Preliminary Engineering/Design			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Final Engineering/Design			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Design Program Management	0%	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Design Contingency			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Construction Administration & Inspection			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Construction			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Construction Contingency			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Utilities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Right of Way Acquisition			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Environmental Mitigation			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Hazardous Materials			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Wetlands			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Archaeology			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Enhancements*	100%	0%	0	0	900,000	120,000	120,000	120,000	120,000	120,000	0	0	0	0	0	0	0	0	0	0	0	0	1,500,000
Other	Historic Mitigations	100%	0%	64,896	168,730	584,929	1,216,653	948,989	450,591	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,434,788
Section	Sub-totals																							
1	Section 1 - Kennedy Interchange			11,174,240	20,307,529	17,379,584	78,685,765	54,759,380	35,742,568	30,817,726	29,261,974	145,193,676	149,923,583	144,806,846	149,194,963	154,978,599	162,068,215	156,600,890	120,120,592	124,118,111	80,764,272	67,237,874	16,694,668	1,749,831,055
2	Section 2 - Downtown River Bridge			-	2,275,184	1,246,324	4,098,314	2,769,560	-	-	-	-	-	45,894,373	47,730,148	49,639,354	51,624,928	21,536,548	-	-	-	-	-	226,814,734
3	Section 3 - Downtown IN Approach			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Section 4 - KY East End Approach			2,640,273	9,283,103	14,769,818	36,498,420	30,732,191	132,683,710	175,588,467	180,046,450	171,025,995	-	-	-	-	-	-	-	-	-	-	-	753,268,425
5	Section 5 - East End River Bridge			-	1,962,555	1,235,522	5,784,678	43,024,245	43,588,443	45,331,980	44,481,360	1,618,749	-	-	-	-	-	-	-	-	-	-	-	187,027,530
6	Section 6 - IN East End Approach			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	Other			64,896	168,730	1,484,929	1,336,653	1,068,989	570,591	120,000	120,000	-	-	-	-	-	-	-	-	-	-	-	-	4,934,788
Total				13,879,409	33,997,100	36,116,177	126,403,830	132,354,365	212,585,311	251,858,173	253,909,784	317,838,420	149,923,583	190,701,219	196,925,111	204,617,953	213,693,143	178,137,437	120,120,592	124,118,111	80,764,272	67,237,874	16,694,668	2,921,876,532

\* Indicates items that are not inflated

KY Sub-total by Element

Preliminary Engineering/Design	8,683,968	26,063,810	16,383,087	7,565,962	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58,696,826
Final Engineering/Design	0	348,428	8,167,444	29,511,209	27,892,515	20,500,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86,419,596
Design Program Management	4,168,305	2,245,040	2,086,795	4,449,261	3,347,102	2,460,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18,756,502
Design Contingency	0	0	0	3,675,153	2,798,275	950,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,423,428
Construction Administration & Inspection	0	0	0	3,167,799	3,815,506	11,247,652	14,307,762	14,541,390	18,508,428	8,991,951	12,185,351	12,672,765	13,179,675	13,706,862	11,399,456	7,713,686	8,022,233	5,214,452	4,338,424	1,081,219	164,094,610		
Construction	0	0	0	41,586,296	48,594,299	144,070,913	183,488,126	186,518,918	240,318,881	118,044,714	158,270,562	164,601,384	171,185,440	178,032,857	148,853,884	101,263,879	105,314,434	68,454,382	56,954,046	14,194,045	2,129,747,061		
Construction Contingency	0	0	0	4,158,630	6,503,907	18,351,957	23,124,560	23,467,502	26,953,953	11,804,471	17,693,233	18,400,962	19,137,000	19,902,480	15,761,117	10,126,388	10,531,443	6,845,438	5,695,405	1,419,404	239,877,850		
Utilities	0	199,650	292,820	1,881,914	1,644,477	0	8,893,332	9,249,066	19,238,056	10,003,789	1,302,074	0	0	0	0	0	0	0	0	0	0	52,705,179	
Right of Way Acquisition	0	0	12,155	17,867,942	27,103,434	5,628,402	14,774,554	15,513,282	11,769,101	0	0	0	0	0	0	0	0	0	0	0	0	92,668,870	
Environmental Mitigation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Hazardous Materials	0	0	0	6,783,468	7,054,807	6,114,166	6,349,839	3,699,626	0	0	0	0	0	0	0	0	0	0	0	0	0	30,001,906	
Wetlands	0	0	0	0	117,772	0	0	0	0	28,657	0	0	0	0	0	0	0	0	0	0	0	146,429	
Archaeology	0	1,096,742	1,374,584	1,186,237	1,107,154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,764,717	
Enhancements*	800,000	1,400,000	1,950,000	920,000	920,000	920,000	920,000	920,000	1,050,000	1,050,000	1,250,000	1,250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	15,100,000	
Historic Mitigations	227,136	2,643,430	5,849,293	3,649,959	1,455,117	2,342,220	0	0	0	0	0	0	865,838	1,800,944	1,872,981	766,639	0	0	0	0	0	21,473,557	
	13,879,409	33,997,100	36,116,177	126,403,830	132,354,365	212,585,311	251,858,173	253,909,784	317,838,420	149,923,583	190,701,219	196,925,111	204,617,953	213,693,143	178,137,437	120,120,592	124,118,111	80,764,272	67,237,874	16,694,668	2,921,876,532		



LSIORB Project - Initial Financial Plan  
Attachment D. Total Project Annual Cash Expenditure Detail

Indiana Costs (Y.O.E. Dollars)																								
State Fiscal Year:				Pre '06	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Section	Element	KY	IN																					
Other																							-	
Other	Preliminary Engineering/Design			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Final Engineering/Design			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Design Program Management	0%	100%	0	1,755,384	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,755,384
Other	Design Contingency			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Construction Administration & Inspection			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Construction			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Construction Contingency			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Utilities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Right of Way Acquisition			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Environmental Mitigation			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Hazardous Materials			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Wetlands			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Archaeology			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Enhancements*	100%	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Other	Historic Mitigations	100%	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Section	Sub-totals																							
1	Section 1 - Kennedy Interchange			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Section 2 - Downtown River Bridge			-	2,275,184	1,246,324	4,098,314	2,769,560	-	-	-	-	-	45,894,373	47,730,148	49,639,354	51,624,928	21,536,548	-	-	-	-	-	226,814,734
3	Section 3 - Downtown IN Approach			-	337,459	975,099	2,220,614	3,075,345	21,335,707	21,460,271	27,978,205	9,002,222	70,827,508	43,749,981	51,091,111	111,883,881	17,575,238	30,326,770	-	-	-	-	-	411,839,413
4	Section 4 - KY East End Approach			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Section 5 - East End River Bridge			-	1,962,555	1,235,522	5,784,678	43,024,245	43,588,443	45,331,980	44,481,360	1,618,749	-	-	-	-	-	-	-	-	-	-	-	187,027,530
6	Section 6 - IN East End Approach			2,903,758	2,517,003	3,264,854	11,228,311	13,744,228	76,518,765	70,167,127	67,929,516	70,142,749	-	-	-	-	-	-	-	-	-	-	-	318,416,310
Other	Other			-	1,755,384	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,755,384
Total				2,903,758	8,847,585	6,721,799	23,331,917	62,613,378	141,442,915	136,959,378	140,389,081	80,763,719	70,827,508	89,644,354	98,821,259	161,523,235	69,200,167	51,863,318	0	0	0	0	0	1,145,853,372

\* Indicates items that are not inflated

IN Sub-total by Element

Preliminary Engineering/Design	0	3,516,973	1,883,087	1,666,537	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,066,596
Final Engineering/Design	0	0	1,425,281	12,148,058	10,531,011	6,838,986	6,404,043	7,298,473	7,401,221	0	0	0	0	0	0	0	0	0	0	0	0	52,047,073
Design Program Management	0	2,054,327	281,728	1,951,965	1,582,162	1,184,339	1,231,712	569,325	592,098	0	0	0	0	0	0	0	0	0	0	0	0	9,447,654
Design Contingency	0	0	0	1,428,295	738,959	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,167,254
Construction Administration & Inspection	0	0	0	0	2,619,210	6,890,476	7,166,095	7,280,213	4,647,584	4,557,185	5,779,833	6,400,091	10,460,942	4,481,701	3,358,892	0	0	0	0	0	0	63,642,223
Construction	0	0	0	0	32,889,542	87,892,121	91,407,806	92,897,705	59,887,875	58,757,578	73,521,927	81,479,173	133,795,732	56,659,776	42,838,383	0	0	0	0	0	0	812,027,617
Construction Contingency	0	0	0	0	4,933,431	11,610,501	12,074,922	12,232,957	7,226,038	7,050,909	9,942,337	10,941,995	17,266,562	8,058,690	5,666,043	0	0	0	0	0	0	107,004,385
Utilities	0	0	0	0	3,959,197	5,485,770	1,067,200	554,944	564,829	0	0	0	0	0	0	0	0	0	0	0	0	11,631,940
Right of Way Acquisition	2,900,533	2,183,151	2,535,392	4,467,000	4,467,000	21,236,143	17,607,600	18,487,980	0	0	0	0	0	0	0	0	0	0	0	0	0	73,884,799
Environmental Mitigation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Hazardous Materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Wetlands	0	0	0	0	112,164	116,651	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	228,815
Archaeology	0	421,824	438,697	456,245	474,495	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,791,260
Enhancements*	3,225	20,976	0	275,799	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	300,000
Historic Mitigations	0	650,335	157,615	938,019	306,207	187,928	0	1,067,484	444,073	461,836	400,258	0	0	0	0	0	0	0	0	0	0	4,613,756
	2,903,758	8,847,585	6,721,799	23,331,917	62,613,378	141,442,915	136,959,378	140,389,081	80,763,719	70,827,508	89,644,354	98,821,259	161,523,235	69,200,167	51,863,318	0	0	0	0	0	0	1,145,853,372