

CHAPTER 7: PUBLIC INVOLVEMENT AND AGENCY COORDINATION

This chapter addresses public involvement and agency coordination that was undertaken as part of the development of both the Draft Environmental Impact Statement (DEIS) and the Final Environmental Impact Statement (FEIS).

7.1 Public Involvement

Thousands of residents from throughout the LMA participated in small, neighborhood meetings and large public meetings, providing information, suggestions and opinions. More than 100 residents were members of public involvement groups that met periodically with the project staff to identify issues and to review alternatives. Information about the EIS also was provided through the project's website that allowed visitors to e-mail comments and questions. More than 30 library branches displayed project materials including information on how to submit comments for consideration. Widespread media coverage drew attention to meetings and opportunities for public participation. The project's newsletter, e-mail and traditional mail also were used to draw attention to the project and resulted in valuable public input. The project's e-mail list grew to more than 800 addresses, and the mailing list grew to approximately 5,000 names of individuals and organizations.

The public involvement process was planned to merge with work milestones so that information was widely distributed and ample opportunities were available for public input before key decisions such as the determination of alternatives to examine in detail. Public input is reflected in the alternatives that were developed and in interchange design and location options. The Purpose and Need Statement was made available to the public in three draft forms and was refined to reflect public input.

Public involvement began even before the initiation of DEIS technical work. From April through September 1998, interviews with key stakeholders and community representatives in Indiana and Kentucky provided insight into concerns and issues. A number of representatives said they wanted the process to be open, to involve everyone equally and to be based on facts and not popular or political opinion. Others said they wanted the work completed as quickly as possible because the issue of whether and where to build a new bridge or bridges had been studied and talked about for years. In addition to interviews, research also was conducted on public involvement programs tied to other transportation projects around the country.

Based on the research and interviews, the public involvement program was designed with a goal of helping decision makers identify the best solution to improve cross-river transportation. Inclusive, ongoing and two-way communications were identified as priorities. A copy of the public involvement plan is included in this chapter.

Public involvement groups that met periodically with the project staff were a key element of the program and provided valuable knowledge, guidance and feedback. In all, five groups were established: a Regional Advisory Council (RAC) that focused on regional issues, and four Area Work Groups (AWG) that focused on specific areas and neighborhood issues. These groups,

with representation from nearly 150 organizations, provided an effective way to draw on a broad base of community expertise and opinion.

Organizations, local government agencies, neighborhood, environmental, business and civic groups each selected a representative and alternate member to serve on the appropriate group. Membership and participation grew as new issues and stakeholders emerged. The regional group meetings alternated between Kentucky and Indiana sites. AWG met in their neighborhoods. Group meetings were open to the public, with notification to a broad base of regional media and postings on the project website. Group meeting summaries and comments were sent to members for approval after the meetings, and were posted on the website.

Members of these groups provided information on a variety of desires and concerns, from broad-picture economic and environmental issues to neighborhood concerns about traffic and safety, noise and lighting. They reviewed the work progress as it developed, including the environmental database mapping system, computerized traffic modeling, non-highway alternatives and alignment development. Suggestions resulted in new interchange design options and new alignment locations.

Public involvement opportunities also were available to the general public. Media coverage and tools such as the website and newsletter provided information and opportunities to become involved. As a result, thousands of comments were received and suggestions, such as building a tunnel under the river, were heard and considered. In addition, public workshops were held on topics suggested by residents, including traffic analysis and land use.

Meetings also were held with civic, business, environmental and neighborhood groups to hear concerns and address questions. These meetings were often initiated by the project staff or were requested by residents including members of public involvement groups. The project staff toured specific areas with residents concerned about potential impacts and went to neighborhoods to hear from residents. Meetings were held in this fashion with residents in Louisville near the Ninth Street alternative and with residents from Bridgepointe, a subdivision in Prospect, Kentucky, the Harbors condominiums in Eastern Jefferson County, Butchertown in Louisville and Jeffersonville Main Street Association in Indiana and others. Materials available to the public such as brochures, newsletters, information booklets and website postings were updated frequently, with a goal on clear, concise, fact-based information and graphics.

Statistics pertaining to public involvement from project inception to just before publication of the DEIS are shown in the chart below.

TABLE 7.1-1
PUBLIC INVOLVEMENT STATISTICS: APRIL 1998 – AUGUST 2001

265	Public Involvement Meetings, Stakeholder Meetings and Presentations
6	Public Workshops Traffic Workshops, two sessions, June, 1999 Non-Highway Alternatives, October, 1999 Design Concepts, three sessions in March, 2001
8	Public Meetings Four in Indiana; four in Kentucky: 1 st Round: December 1998. Attendance: 300 total 2 nd Round: April 1999. Attendance: 400 total 3 rd Round: September 1999. Attendance: 1300 total 4 th Round: May 2000. Attendance: 1100 total
6	Regional Advisory Council Meetings
32	Area Work Group Meetings
1,257	Comment Forms Received
1,188,767	Total website hits
849	People on E-Mail Notification List
4,575	People on Mailing List

Key, ongoing elements of the public involvement program, which are explained in greater detail in the remainder of this chapter, are:

- Public Meetings
- Regional Advisory Council
- Area Work Groups
- Public Workshops
- Stakeholder Communications
- Environmental Justice Initiatives
- Indirect and Cumulative Effects Analysis
- Communication Tools
- Media Relations
- Section 106 Historic Resources Review Public Involvement
- DEIS Circulation and Public Hearing

7.1.1 Public Meetings

Public meetings were held at key points during the process to provide information and receive feedback. Extensive publicity advertised these meetings. Project staff appeared on television and gave radio interviews and newspapers featured articles on the upcoming meetings. In addition, the project's mailing list and newsletter informed stakeholders of the meetings. All public meetings were held in pairs, with one meeting in Indiana and one in Kentucky.

December 1998

The first public meetings were December 1, 1998 at Jeffersonville High School in Jeffersonville, Indiana and December 2, 1998 at Manual High School in Louisville, Kentucky. The purpose of these meetings was to explain the DEIS process and introduce the project staff. After a presentation, an open house was held that allowed the public to talk one-on-one to project staff. Maps and charts were available for review. Comment forms also were provided.

About 120 people attended the meeting in Jeffersonville. Attendance at the Louisville meeting was about 100. A total of 35 comment forms were received: 20 in Jeffersonville and 15 in Louisville.

April 1999

The second round of public meetings updated the project work and featured information on preliminary environmental and engineering work. The meetings were held April 14, 1999 at Jeffersonville High School in Jeffersonville, Indiana and April 15, 1999 at Ballard High School in eastern Jefferson County, Kentucky. Total attendance for the meetings was about 400, with about 250 attending in Indiana and 150 in Kentucky.

An opening presentation covered the following areas:

- Draft Purpose and Need Statement
- Traffic analysis
- Preliminary alignments
- Preliminary environmental resources map
- Public involvement opportunities
- Project timetable

A public question and comment period, moderated by a facilitator, followed the presentation. About 25 people spoke at Jeffersonville. There were nearly 50 speakers at the Ballard High School meeting.

Comments covered a wide range of topics, with many at Ballard High School questioning the need for a bridge in eastern Jefferson County. In contrast, Jeffersonville comments expressed support for an eastern bridge. Speakers at both meetings also addressed traffic studies, environmental surveys, light rail and the transportation of hazardous materials.

September 1999

The purpose of the third round of public meetings was to elicit public response to the refined alignments under consideration for detailed study in the DEIS. These meetings were held September 1, 1999 at Jeffersonville High School in Indiana and September 2, 1999 at Ballard High School in Kentucky.

Both meetings were conducted in an open house format. Displays included large maps of the alignments under consideration, an updated environmental resources map and a display dealing with other transportation options. Handout information on the DEIS process, public involvement opportunities and factors that influence decisions were distributed.

About 1,000 people attended the meetings, 300 in Indiana and 700 in Kentucky. Attendees were given the opportunity to submit written comments or to make comments to a stenographer for later transcription.

Comments were received from 313 individuals. The majority of those comments (216 or 69 percent) came from residents of the city of Prospect. Many of the comments were in opposition to the building of an eastern bridge in or near Prospect. Other views expressed included support for an eastern bridge, opposition to a new bridge in downtown Louisville/Jeffersonville, support for mass transit in lieu of highway options and impatience with the length of time required for decision-making about the alternatives.

May 2000

The fourth round of public meetings focused on the consultant's recommended options to carry forward for detailed analysis in the DEIS. The meetings were held May 10, 2000 at Jeffersonville High School in Indiana and May 11, 2000 at the Radisson Convention Center in Jeffersontown, Kentucky. About 300 people attended the Indiana meeting. The Kentucky meeting drew about 800 people. To provide detailed information and ample opportunities for public comment, the meetings combined open house and open microphone formats. Detailed, large-scale maps of the recommended alignments were prepared and booklets that included maps and written explanations of the recommendations were provided to attendees. Written and spoken comments were elicited.

The first hour of each meeting was conducted as an open house where attendees could review map displays and ask questions. Also during this time, they could view an introductory video about the project and a narrated slide show that reviewed the DEIS process. Following the open house, attendees were invited to make comments or ask questions. Names were randomly drawn to determine the order of public speakers. Each speaker was given three minutes. There were no limits placed on the number of turns a speaker could have, and several individuals spoke multiple times.

A majority of the comments received were in opposition to a bridge connecting eastern Jefferson County, Kentucky with Utica, Indiana. There was broad support for a downtown bridge and for rebuilding of the Kennedy Interchange. A number of comments also were made in support of alternatives not recommended for further study, including some highway alternatives and mass transit options.

7.1.2 Regional Advisory Council

The RAC was established to provide input on region-wide aspects of the project. These included transportation concerns such as safety and congestion, economic development and quality-of-life issues. The RAC met four times in 1999 and twice in 2000.

RAC members represented government agencies, business groups, civic, cultural and environmental organizations, and major employers throughout the LMA. The RAC consisted of approximately 50 member organizations. Table 7.1-2 lists the organizations that participated in the RAC.

Meetings of the RAC typically opened with a presentation by the project staff. RAC members were asked to consider an aspect of the project, such as possible alignments or traffic analysis and to comment on it. These comments were recorded, responded to and placed in the project record. The meetings were open to the public, although active participation was usually limited to RAC members. Non-members were typically given the opportunity to comment and ask questions at the end of the meetings.

TABLE 7.1-2
REGIONAL ADVISORY COUNCIL REPRESENTATION

African American Heritage Foundation
American Commercial Lines (Jeffboat)
Clark-Floyd Counties Convention & Tourism Bureau
Clark County Emergency Management
Clark County Redevelopment Commission
Clark County REMC
Coalition for Advancement of Regional Transportation (CART)
Coalition of Original People (COP)
Community Leadership Alliance
CSX Transportation
Delta Nu Alpha Derby Town 112 Chapter
Ford Motor Company Louisville Assembly Plant
Greater Louisville Association of Realtors
Greater Louisville Central Labor Council
Greater Louisville Inc.
Hoosier Environmental Council
Humana, Inc
Indiana Motor Truck Association
Indiana University Southeast
Jefferson County Air Pollution Control District
Jefferson County Housing Authority
Jefferson County Public Schools
Jeffersonville NAACP
Jeffersonville Parks Department
Kentuckians for Better Transportation
Kentucky Homebuilders Association
Kentucky Minority Supplier Development Council

Kentucky Motor Transport Association, Inc.
Kentucky Resources Council
Kentucky Waterways Alliance
Kentuckiana Regional Planning and Development Agency
Knob & Valley Audubon Society
League of Women Voters
Louisville Audubon Society
Louisville Bicycle Club
Louisville/Jefferson Co. Emergency Management
Louisville/Jefferson Co. MSD
Louisville/Jefferson Co. Tourism/Convention
Louisville/Jefferson Co. Planning Commission
Louisville Medical Center Development Corp.
Louisville NAACP
Louisville Sailing Club
Louisville Urban League
NIA Center
Regional Airport Authority
River Fields, Inc.
Sierra Club
Southern Indiana Chamber of Commerce
Southern Indiana Economic Development Council
South Central Indiana Central Labor Council
Transit Authority of River City (TARC)

7.1.3 Area Work Groups

Four AWG were created to focus on local concerns and specific issues in the vicinities of the four possible bridge termini. The AWG represented the following geographic areas: Downtown Louisville, Eastern Jefferson County (Kentucky), Jeffersonville/Clarksville (Indiana) and Eastern Clark County/Charlestown/Utica (Indiana).

Neighborhood associations, municipal governments, business groups, fire protection districts, school districts and other entities were invited to join the AWG. Every entity was asked to name a primary representative and an alternate. AWG were enlarged, as needed, to insure adequate representation of all affected interests in each area. The groups had about 25 to 30 members each. Table 7.1-3 lists the organizations that participated in the AWG meetings.

All AWG met at least five times in 1999; the Eastern Jefferson County group had an additional meeting. The groups each met twice in 2000.

AWG meetings followed a format similar to that of the RAC – a presentation followed by a work session, concluding with an open discussion period. Comments and questions were recorded and became a part of the project record. Meetings were open to the public. Participation was usually limited to AWG members, but at the end of each session the meeting was open to questions and comments from observers. Comment forms were also available to the public at these sessions.

Comments from work groups led to modifications of alignments and interchange design and locations.

TABLE 7.1-3
AREA WORK GROUPS REPRESENTATION

Eastern Jefferson County
Beechland Beach
Bridgepointe Neighborhood Association
Brownsboro Road Area Defense
City of Prospect
Committee to Save Harrods Creek
County Commissioner Russ Maple's office (A-District)
Estates of Hunting Creek
Fox Harbor Neighborhood Association
Glenview Hills
Glenview Manor
Green Spring
Harrods Creek Volunteer Fire Department
Indian Hills—Cherokee Section
Jefferson County Historic Preservation
Jefferson County Public Works Department
Juniper Beach
Ken Carla Vista Neighborhood Association
Oldham County Fiscal Court
Prospect/Harrods Creek Recreation
Prospect/Harrods Creek Neighborhood Association
River's Edge
Riviera Neighborhood Association
Saint Francis in the Fields
Shadow Wood Neighborhood Association
The Harbor at Harrods Creek
Transylvania Beach
Waldoah Beach
Wolf Pen Preservation Association
Woodlands Neighborhood Association

Louisville
Alderman George Unsel'd's office
Alderman Steve Magre's office
Alderwoman Cheri Hamilton's office
Beecher Terrace
Butchertown Neighborhood Association
Chestnut St. Family YMCA
City of Louisville
City of Louisville - Department of Public Works
City View Park
County Commissioner Delores Delahanty's office (B-District)
County Commissioner Russ Maple's office (A-District)

Downtown Development Corporation
East Downtown Business Association
Housing Authority of Louisville
Jefferson Community College
Jefferson Technical College
Louisville Central Area Inc.
Louisville Central Development Corporation
Louisville Development Authority
Louisville/Jefferson Co. Redevelopment Authority
Louisville Waterfront Development Corp.
Main Street Association
Norton Healthcare/University of Louisville Hospital
Phoenix Hill Neighborhood Association
Quinn Chapel A.M.E. Church
South Broadway Business Association

Jeffersonville/Clarksville
Bales Motor Co. Inc.
Beach Mold & Tool Inc.
City of Jeffersonville, Director of Planning
City of Jeffersonville, Engineer's Office
City of New Albany
Clark County Fire Chief Association
Clark Memorial Hospital
Clarksville Community School Corp.
Clarksville Parks Department
Clarksville Town Council
Cornerstone Group
Derby Dinner Playhouse
Falls of the Ohio Interpretive Center
Farm Bureau of Clark County Co-Op Association, Inc.
Floyd Memorial Hospital
Greater Clark County Schools
Heritage Bank
Indiana University Southeast
Jeffersonville Main Street, Inc.
Jeffersonville Redevelopment Commission
Jeffersonville-Clarksville Preservation, Inc.
Lakeshore Condo Association
Liter's Quarry of Indiana, Inc.
Ohio River Greenway Commission
Riverside Neighborhood Association
Southern Indiana Realtors Association
Southern Indiana Transit Advisory Group (SITAG)

Utica/Eastern Clark County AWG
Charlestown Chamber of Commerce
Charlestown Fire Department

City of Charlestown
City of Jeffersonville, Director of Planning
City of Jeffersonville, Engineer's Office
Clark County Engineer
Clark Maritime Centre
Facility One---Indiana Army Ammunition Plant
Fox Run Homeowners Association
Greater Clark County Schools
Northport Business Centre
Ole Stoner Place Neighborhood Association
Utica Historical Society
Utica Resident
Utica Town Council
Utica Township Fire Department

7.1.4 Public Workshops

Six public workshops were held to explore specific issues associated with the project, in some cases at the request of the public for more information on a topic. These workshops were publicized through the news media and by e-mail notification to those on the project's electronic mailing list.

On June 8, 1999, two workshops explored the methodology used to analyze regional traffic patterns. In order to accommodate as many people as possible, two sessions were held, an afternoon and evening session. A total of about 30 people attended.

An October 14, 1999 workshop dealt with the issue of non-highway transportation alternatives and their applicability to the LMA. About 40 people attended the workshop.

A set of workshops was held on March 13, 14 and 15, 2001 to examine visual impacts of possible project designs. The public was given an opportunity to provide feedback for the design team. The three meetings were in different parts of the project area. A total of about 180 people attended.

7.1.5 Stakeholder Communications

Stakeholder Meetings

In addition to meetings with the advisory groups and the general public, many meetings were held with elected officials, neighborhood associations, civic and environmental groups, and business and economic development organizations.

The project publicized a speaker's bureau program through the general media, the project newsletter and website. As the project progressed, project staff received numerous invitations to speak to various stakeholder and community groups and to be interviewed by various media. Every effort was made to accommodate those requests. As of May 31, 2002, 319 meetings had

been held with stakeholders, either as individuals or in groups. The following chart shows the list of stakeholder meetings:

**TABLE 7.1-4
PUBLIC INVOLVEMENT MEETINGS, STAKEHOLDER MEETINGS AND
PRESENTATIONS, APRIL 1998 – MAY 2002**

	Date	Stakeholders
1.	04/22/98	Prospect Mayor, Lonnie Falk and City Administrator, Ann Simms
2.	05/08/98	Jefferson County Judge-Executive, Dave Armstrong
3.	05/13/98	Southern Indiana Chamber of Commerce: Greg Fitzloff, President; Tonya Fischer, Vice President and Director of Community Development; Patricia Denny, Denny Trucking
4.	05/13/98	James Buddy Thompson, owner, historic farm and house; Merrill Schell, Mr. Thompson's attorney
5.	05/13/98	New Albany Mayor, Doug England
6.	05/18/98	Jeffersonville Mayor, Thomas Galligan
7.	05/19/98	Doug Cobb, President and CEO, Greater Louisville Inc.
8.	05/19/98	Charlestown Mayor, Bobby Braswell
9.	05/19/98	New Albany Mayor, Doug England
10.	05/20/98	Kentucky Heritage Council: David Morgan, State Historic Preservation Officer; Richard Jett, Administrator, Historic Preservation and Archives
11.	05/21/98	Louisville Mayor, Jerry Abramson
12.	05/21/98	River Fields: Meme Runyon, Robert Griffith, Stephen Reily, Franklin Jelsma, Hunter Louis, Kenneth Moore
13.	05/21/98	Jim Gaunt, President, Fifth Third Bank
14.	05/28/98	KIPDA Transportation Policy Committee
15.	06/04/98	David Jones, former CEO of Humana
16.	06/09/98	Ben Richmond, Executive Director, Louisville Urban League
17.	06/10/98	River Fields: Meme Runyon and Bob Griffith
18.	06/18/98	Greater Louisville Inc. Environmental Affairs Committee
19.	07/07/98	Barry Barker, Executive Director, TARC; Harold Tull, KIPDA Director of Transportation
20.	07/14/98	David Karem, President and Director, Louisville Waterfront Development. Corp.
21.	07/16/98	River Fields: Meme Runyon and Bob Griffith
22.	07/21/98	Jay Ellis, Executive Director, Jeffersonville Main Street Association
23.	07/21/98	Jeffersonville Mayor, Thomas Galligan
24.	07/22/98	Jim Urban, Oldham County Planner
25.	07/22/98	Barry Alberts, Executive Director, Downtown Development Corp.
26.	07/28/98	Doug Kuelpman, Public Affairs Director, UPS
27.	07/29/98	Jefferson County Commissioner Darryl Owens, C District
28.	08/05/98	Jeffersonville Rotary Club
29.	08/05/98	Carl Krammer, Southern Indiana Transit Advisory Group (SITAG), former Clark County (IN) Planner
30.	08/11/98	River Fields Historic Tour: Downtown Louisville, Butchertown
31.	08/11/98	Utica Town Board
32.	08/13/98	Clarksville Town Council
33.	08/17/98	Southern Indiana Chamber of Commerce Transportation Committee
34.	08/18/98	Ron Repp, Director, Charlestown Chamber of Commerce
35.	08/18/98	Clark County Board of Commissioners
36.	08/19/98	Dale Orem, CEO Heritage Bank, Jeffersonville
37.	08/19/98	Don Miller, Clark Maritime Center
38.	08/20/98	River Fields Historic Tour: Eastern Jefferson County

39.	08/21/98	Jefferson County Commissioner Joe Corradino, B-District
40.	09/02/98	Laura Lindley, Jeffersonville Historic Preservation
41.	09/16/98	Prospect Mayor, Lonnie Falk and City Administrator, Ann Simms
42.	09/23/98	Editorial Board Meeting: The Evening-News
43.	09/23/98	Editorial Board Meeting: The Courier-Journal
44.	09/24/98	News briefing on project process
45.	09/28/98	Southern Indiana Transit Advisory Group
46.	09/29/98	Billie Sue Smith, Public Affairs Director, Indiana Energy Inc.
47.	10/08/98	David Karem, President & Director, Louisville Waterfront Development Corp.
48.	10/13/98	Bob and Janet Hill, Utica residents
49.	10/20/98	Jefferson County Mayors and Councilmen
50.	10/21/98	Russ Maple, Jefferson County Commissioner, A-District
51.	10/21/98	Brian Bobo, Louisville Department of Public Works
52.	10/21/98	Doug Cobb, Executive Director, Greater Louisville Inc.; Vincent Senior, Public Affairs Director
53.	10/27/98	State Senator, Gerald Neal, (D-Louisville)
54.	10/27/98	Louisville Board of Alderman, President, Steve Magre
55.	10/28/98	River Fields: Meme Runyon and Bob Griffith
56.	10/28/98	Lavinia Swain
57.	11/04/98	State Representative, Eleanor Jordan, (D-Louisville)
58.	11/04/98	Jeffersonville Mayor, Tom Galligan; Dennis Julius and David Julius, owners of Walnut Ridge Nursery
59.	11/18/98	J. Michael Brown, President, Louisville International Airport Board of Directors
60.	11/18/98	Jeffersonville Main Street Association Board
61.	11/24/98	Louisville Board of Aldermen
62.	12/01/98	Public Meeting: Indiana
63.	12/02/98	Public Meeting: Kentucky
64.	12/16/98	Jeffersonville Mayor, Thomas Galligan
65.	12/17/98	KIPDA Policy Board
66.	12/17/98	Charlestown Chamber of Commerce
67.	12/17/98	Jana Ecker, Jeffersonville City Planner
68.	01/26/99	Delta Nu Alpha
69.	01/09/99	River Fields: Meme Runyon and Bob Griffith
70.	02/02/99	Prospect Mayor, Lonnie Falk and City Administrator, Ann Simms
71.	02/11/99	River Fields: Meme Runyon and Bob Griffith
72.	02/16/99	Indiana State Historic Preservation Officer
73.	02/16/99	Regional Advisory Council Meeting
74.	02/25/99	Kevin Campisano, Butchertown Neighborhood Association
75.	03/19/99	KIPDA Transportation Policy Committee
76.	03/24/99	Area Work Group Meeting: Downtown Louisville
77.	03/25/99	Area Work Group Meeting: Eastern Jefferson County
78.	03/25/99	Jefferson Co. Judge-Executive, Rebecca Jackson
79.	03/30/99	Area Work Group Meeting: Utica/ Eastern Clark County
80.	03/31/99	Bridge Concept Presentation: Louisville Mayor, Dave Armstrong; Jefferson County Judge-Executive, Rebecca Jackson; Louisville Chamber of Commerce President, Doug Cobb; Jeffersonville Mayor, Thomas Galligan; Clarksville Town Board President, John Minta; U.S Representative, Baron Hill, (D-Indiana).
81.	04/01/99	Area Work Group Meeting: Jeffersonville/ Clarksville
82.	04/07/99	Veritas Society
83.	04/14/99	Public Meeting: Indiana
84.	04/15/99	Public Meeting: Kentucky

85.	04/20/99	Area Work Group Meeting: Utica/ Eastern Clark County
86.	04/22/99	Area Work Group Meeting: Jeffersonville/ Clarksville
87.	04/28/99	Area Work Group Meeting: Eastern Jefferson County
88.	04/29/99	Area Work Group Meeting: Downtown Louisville
89.	05/11/99	Barry Alberts and Kelly Downer, Downtown Development Corp.; Brian Bobo, Assistant Director of Public Works, City of Louisville
90.	05/19/99	Regional Advisory Council Meeting
91.	06/08/99	Traffic Workshop
92.	06/20/99	Area Work Group Meeting: Utica/ Eastern Clark County
93.	06/22/99	Area Work Group Meeting: Jeffersonville/ Clarksville
94.	06/28/99	Area Work Group Meeting: Eastern Jefferson County
95.	06/29/99	Area Work Group Meeting: Downtown Louisville
96.	06/30/99	Jeffersonville Mayor, Thomas Galligan
97.	07/08/99	Louisville Mayor, Dave Armstrong
98.	07/08/99	Louisville Downtown Development Corporation
99.	07/20/99	Greater Louisville Inc. Executive Committee
100.	07/20/99	Area Work Group Meeting: Eastern Jefferson County
101.	07/21/99	Jeffersonville Main Street Development Corporation Board
102.	07/22/99	Ninth Street Stakeholders (with the Louisville Urban League)
103.	07/26/99	Southern Indiana Transit Advisory Group
104.	07/27/99	Clarksville Town Council
105.	07/28/99	Louisville Waterfront Development Corporation
106.	08/12/99	Clarksville Town Board President, John Minta and Jeffersonville Mayor, Thomas Galligan
107.	08/17/99	Area Work Group Meeting: Utica/Eastern Clark County
108.	08/18/99	Regional Advisory Council Meeting
109.	08/19/99	Area Work Group Meeting: Jeffersonville/Clarksville
110.	08/24/99	Greater Louisville Inc. Legislative Advisory Committee, U.S. Representative, Anne Northup, (R-Jefferson County)
111.	08/24/99	Jefferson County Judge-Executive Rebecca Jackson
112.	08/24/99	Indiana Greenway Commission
113.	08/25/99	Ninth Street Stakeholders (Louisville Urban League)
114.	08/25/99	Area Work Group Meeting: Eastern Jefferson County
115.	08/26/99	Area Work Group Meeting: Downtown Louisville
116.	09/01/99	Downtown Development Corporation, Board of Directors
117.	09/01/99	Public Meeting: Indiana
118.	09/02/99	Public Meeting: Kentucky
119.	09/02/99	New Albany Mayor, Doug England
120.	09/09/99	Bob and Janet Hill, Utica residents
121.	09/16/99	Southern Indiana Home Builders Association
122.	09/21/99	Oldham County Fiscal Court
123.	09/21/99	Louisville Sierra Club
124.	09/23/99	Metropolitan Planning Organization Representatives of Indiana
125.	09/23/99	Prospect Mayor, Lonnie Falk and City Administrator, Ann Simms
126.	09/27/99	Jefferson County League of Cities
127.	09/28/99	MaryAnn Naber, Historic Preservation Specialist, Advisory Council on Historic Preservation
128.	09/29/99	River Fields: Meme Runyon and Bob Griffith
129.	09/29/99	Clark County Redevelopment Commission
130.	10/12/99	Southern Indiana Chamber of Commerce
131.	10/12/99	Louisville Board of Aldermen
132.	10/13/99	KIPDA Technical Committee

133.	10/14/99	Public Workshop: Transportation Alternatives
134.	10/14/99	Regional Advisory Council Meeting
135.	10/18/99	Clark County Commissioner, Ralph Guthrie and Hyun Lee, County Engineer
136.	10/19/99	River Fields: Meme Runyon and Bob Griffith
137.	11/03/99	River Fields: Meme Runyon and Bob Griffith
138.	11/03/99	Area Work Group Meeting: Utica/Eastern Clark County
139.	11/04/99	Area Work Group Meeting: Jeffersonville/Clarksville
140.	11/09/99	Area Work Group Meeting: Eastern Jefferson County
141.	11/10/99	Area Work Group Meeting: Downtown Louisville
142.	12/01/99	National Trust for Historic Preservation: Richard Moe, President; Elizabeth S. Merritt, Associate General Counsel; Daniel Carey, Assistant Director, Southern Office (by phone from Charleston, S.C.); Gary Kozel, Director, Office of Communications.
143.	12/07/99	Louisville Yale Club
144.	12/08/99	City of Louisville, Public Works Director, Bill Herron; Brian Bobo, Assistant Director of Public Works; Bruce Traughber, Executive Director, Louisville Development Authority
145.	01/18/00	Prospect Mayor, Lonnie Falk and City Administrator, Ann Simms
146.	01/21/00	Kentucky Natural Resources Institute Leadership Class
147.	01/25/00	River Fields: Meme Runyon and Bob Griffith
148.	01/26/00	Louisville Water Company, Kay Ball
149.	01/28/00	Kentucky Transportation Conference
150.	02/01/00	Jeffersonville Mayor, Thomas Galligan
151.	02/11/00	Chapter, 25, International Right of Way Association
152.	02/22/00	INAAP ReUse Authority, Marc Elliott
153.	02/23/00	Middletown Chamber of Commerce
154.	04/04/00	Kiwanis Club of Sellersburg
155.	04/10/00	NACM (National Association of Credited Managers)
156.	04/12/00	Leadership Southern Indiana
157.	04/12/00	Area Work Group Meeting: Utica/Eastern Clark County
158.	04/13/00	Area Work Group Meeting: Jeffersonville/Clarksville
159.	04/17/00	Area Work Group Meeting: Downtown Louisville
160.	04/18/00	Regional Advisory Council Meeting
161.	04/18/00	Area Work Group Meeting: Eastern Jefferson County
162.	05/01/00	Greenspring Mayor, William Huff
163.	05/02/00	Jefferson County Judge-Executive, Rebecca Jackson
164.	05/10/00	Louisville Central Area Meeting
165.	05/10/00	Public Meeting: Indiana
166.	05/11/00	Environmental Team Meeting
167.	05/11/00	Public Meeting: Kentucky
168.	05/25/00	KIPDA Transportation Policy Committee meeting
169.	06/06/00	WLKY radio interview
170.	06/07/00	Citizens for the Advancement of Regional Transportation
171.	06/08/00	Clarksville Town Board
172.	06/13/00	The Harbors Condominium residents
173.	06/15/00	Greater Louisville Environmental Committee
174.	06/15/00	Lou Jacobson, The National Journal/Planning Magazine, (tour/interview)
175.	06/19/00	Southern Indiana Elected Officials conference
176.	06/20/00	St. Francis Church Vestry
177.	06/21/00	KMSDC Trade Show
178.	06/28/00	Clark Maritime Center tenants
179.	07/12/00	The Harbors Condominium, Board of Directors
180.	07/13/00	Downtown Development Corp., Board of Directors

181.	07/13/00	Bridgepointe Homeowners Association, Board of Directors
182.	07/19/00	WFPL Interview, (call-in show)
183.	07/24/00	Southern Indiana Transit Advisory Group
184.	08/01/00	Jeffersonville Main Street Association, Board of Directors
185.	08/15/00	Valley Station Business Association
186.	09/05/00	West Louisville, Kiwanis Club
187.	09/06/00	River Fields, Inc.
188.	09/12/00	Bridgepointe Homeowners Association
189.	09/13/00	City of Louisville Representatives
190.	09/19/00	National Black MBA Association
191.	09/21/00	Green Spring City Council
192.	10/10/00	WLLV - Peris Anderson interview, (call-in show)
193.	10/12/00	Southern Resource Center's Environmental Workshop
194.	11/14/00	KIPDA Community Transportation Advisory Committee
195.	11/16/00	Bridges Public Forum on Historic Preservation
196.	11/28/00	Steve Higdon, Greater Louisville Inc.
197.	11/28/00	Media Briefing at CTS
198.	11/28/00	Coalition for the Advancement of Regional Transportation
199.	11/28/00	Regional Advisory Committee Meeting
200.	11/29/00	Louisville Mayor, Dave Armstrong
201.	11/29/00	Courier-Journal Editorial Board
202.	11/30/00	Area Work Group Meeting: Jeffersonville/Clarksville and Utica/Eastern Clark County
203.	12/05/00	Area Work Group Meeting: Downtown Louisville
204.	12/06/00	Area Work Group Meeting: Eastern Jefferson County
205.	12/12/00	Southern Indiana Representatives
206.	12/20/00	Representatives of U.S. Rep. Baron Hill's office, (D- Indiana)
207.	12/29/00	Joel Elliott, aide to U.S. Sen. Evan Bayh, (D-Indiana)
208.	01/18/01	Middletown Library patrons
209.	01/31/01	Coalition for Original People
210.	01/31/01	John Clements on WDRB-TV
211.	02/06/01	John Clements with Bob Sokoler and the Morning Show
212.	02/07/01	Butchertown Neighborhood Association
213.	02/13/01	Design Concepts with City of Jeffersonville officials
214.	02/14/01	Design Concepts with City of Clarksville officials
215.	02/14/01	Design Concepts with City of Prospect officials
216.	02/14/01	Design Concepts with Jefferson County officials
217.	02/14/01	Minority Business Development Conference
218.	02/15/01	Design Concepts with City of Louisville officials
219.	02/15/01	Design Concepts with Louisville Waterfront Development Corp.
220.	02/15/01	Design Concepts with Downtown Development Corp.
221.	03/02/01	American Society of Engineers
222.	03/13/01	Design Concept Public Workshop: Eastern Jefferson County
223.	03/14/01	Design Concept Public Workshop: Downtown Louisville
224.	03/15/01	KY Representatives: Joe Schoenbaechler, Oldham Co. Chamber of Commerce; Amanda Sinnette, Oldham Co. Economic Development Authority; John H. Blackburn, Hardin Co. Road Supervisor; Tommy Turner, LaRue Co. Judge-Executive; Claude L. Brock, Spencer Co. and Taylorsville Economic and Tourism Office.
225.	03/15/01	Jana Ecker, Jeffersonville City Planner
226.	03/15/01	TARC Transportation/DBE Trade Show
227.	03/15/01	Design Concept Public Workshop: Indiana
228.	03/22/01	Louisville Board of Aldermen, Environmental Committee

229.	03/28/01	FHWA sponsored gathering of regulatory agencies
230.	04/02/01	Bridgepointe Homeowners Association Meeting
231.	04/03/01	Colgate Executive Meeting
232.	04/05/01	Joan Riehm, Regional Leadership Coalition
233.	04/05/01	Louisville Board of Aldermen, Environmental Committee
234.	04/19/01	Secondary and Cumulative Impacts Meeting
235.	05/03/01	Colgate/Palmolive Representatives
236.	05/09/01	Greater Louisville Inc., Economic Development Committee
237.	05/09/01	Butchertown Neighborhood Association meeting
238.	05/10/01	Courier-Journal, reporter Chris Poynter
239.	05/16/01	KY Conservation Committee (Section 106)
240.	05/16/01	Joe B. Jones (Section 106)
241.	05/17/01	Frederick Eckhart (Section 106)
242.	05/17/01	River Fields (Section 106)
243.	05/17/01	Marilyn Wekensjold (Section 106)
244.	05/17/01	Jim Gardner (Section 106)
245.	05/17/01	Morning Lark Baskett (Section 106)
246.	05/22/01	Colgate/Palmolive Representatives
247.	05/22/01	Historic Landmark Foundation of Indiana, [Indirect & Cumulative Effects Analysis (ICEA)]
248.	05/22/01	River Fields, Inc. (ICEA)
249.	05/22/01	Jefferson Co. Air Pollution Control District (ICEA)
250.	05/23/01	Association of Realtors (ICEA)
251.	05/23/01	Kentucky Waterways Alliance, Frank Elson (ICEA)
252.	05/23/01	Bridgepointe resident, Dennis Petroskey, (ICEA)
253.	05/23/01	City of Louisville Dept. of Public Works (ICEA)
254.	05/23/01	Bridgepointe resident, Brent Nemeck (ICEA)
255.	05/24/01	Section 106 Consulting Parties
256.	05/25/01	Section 106 Consulting Parties
257.	05/30/01	Prospect Mayor, Lonnie Falk and City Administrator, Ann Simms
258.	06/07/01	Louisville Board of Aldermen, Committee on Historic Preservation, Environment and Public Art
259.	07/05/01	Bridgepointe Homeowners Association
260.	07/11/01	Southern Indiana Chamber of Commerce
261.	07/16/01	Section 106 Consulting Party Historic Tour – Southern Indiana and Louisville
262.	07/17/01	Section 106 Consulting Party Historic Tour – Eastern Jefferson County
263.	07/23/01	Southern Indiana Transit Advisory Group
264.	07/26/01	Regional Leadership Coalition
265.	08/02/01	Bridgepointe residents
266.	08/15/01	Marc Elliott, INAAP
267.	08/15/01	Butchertown residents, County Commissioner, Russ Maple and County Engineer, Mark Adams
268.	08/21/01	Courier-Journal, Chris Poynter
269.	09/05/01	City of Jeffersonville officials
270.	09/06/01	Downtown Development Corporation, Board of Directors
271.	09/12/01	Louisville Downtown
272.	09/12/01	Louisville Forum
273.	09/19/01	Regional Leadership Coalition
274.	10/03/01	106 Consulting Party Meeting
275.	10/08/01	Leadership Louisville
276.	11/06/01	Business First Briefing

277.	11/08/01	Evening News editorial board
278.	11/12/01	The Courier-Journal editorial board
279.	11/27/01	Fox News in the Morning TV show
280.	11/27/01	Prospect City Officials
281.	11/28/01	State of Affairs/WFPL public affairs/call-in radio show
282.	11/29/01	Public Open House: Indiana
283.	12/04/01	Public Open House: Kentucky
284.	12/12/01	Leadership Southern Indiana
285.	12/19/01	St. Francis in the Fields Episcopal Church: Rev. Robin Jennings, John Bush
286.	12/19/01	The Harbors
287.	01/09/02	East Downtown Business Association
288.	01/09/02	St. Francis in the Fields Episcopal Church
289.	01/15/02	Western Louisville Open House
290.	01/16/02	Rotary Club – Clarksville, Indiana
291.	01/17/02	Clarksdale residents
292.	01/18/02	Avenue Plaza residents
293.	01/19/02	Public Open House: Indiana
294.	01/22/02	Public Open House: Kentucky
295.	01/23/02	Section 106 Consulting Parties
296.	01/24/02	Public Open House: Kentucky
297.	01/29/02	Dosker Manor residents
298.	01/31/02	Beecher Terrace residents
299.	02/06/02	Public Hearing: Indiana
300.	02/07/02	Public Hearing: Kentucky
301.	02/12/02	The Harbors
302.	02/13/02	Greater Louisville Economic Development Committee
303.	02/19/02	St. Matthews Kiwanis Club
304.	02/19/02	Butchertown Neighborhood Association Board
305.	02/28/02	Kentuckiana Regional Planning and Development Agency (KIPDA)
306.	03/05/02	Section 106 Consulting Parties
307.	05/15/02	Section 106 Consulting Parties
308.	05/16/02	Section 106 Consulting Parties
309.	05/28/02	Phyllis Croce (Section 106)
310.	05/28/02	Michael Peavy (Section 106)
311.	05/28/02	Lynn Renau (Section 106)
312.	05/28/02	Mitchell Osbourne (Section 106)
313.	05/28/02	Susan Toller (Section 106)
314.	05/29/02	Gail Schwartz and Ann Hargis (Section 106)
315.	05/30/02	Hoyte Blakely and Jim Segrest (Section 106)
316.	05/30/02	David Baughman (Section 106)
317.	05/30/02	Delene Murray (Section 106)
318.	05/30/02	Laura Lee Brown (Section 106)
319.	05/31/02	Buddy Thompson (Section 106)

Other Stakeholder Communications

Written and electronic communications were also used to reach stakeholders. Local elected officials received periodic letters informing them of the project's progress. Letters also were sent to target groups of stakeholders, as needed. E-mail was used to respond to stakeholder inquiries and also to communicate with stakeholders on an electronic mailing list.

7.1.6 Environmental Justice Initiatives

Throughout the public involvement process, efforts were made to include traditionally underrepresented populations. For example, the RAC included the African American Heritage Foundation and the National Association for the Advancement of Colored People (NAACP) chapters from Louisville and Southern Indiana.

An extensive database used for meeting notifications included churches serving a predominantly African-American audience in Indiana and Kentucky. Media lists used for meeting notifications and news releases included media with predominant African-American audiences, as well as minority cultural, business and neighborhood groups.

When project staff began considering Alternative C-2, which may impact African-American neighborhoods just west of downtown Louisville, special meetings were organized to inform the community, hear concerns and invite participation in the formal public involvement process.

Two meetings were held at the Louisville Urban League, one on July 22, 1999 and the other on August 25, 1999, with area representatives including neighborhood residents, elected officials and members of churches, civic and cultural organizations. Eleven representatives attended each meeting. Summaries of comments were written. Many of the comments questioned the location of a bridge near Ninth Street because of increased traffic and concerns that such a facility would create a barrier between a predominantly minority neighborhood and the rest of the city.

Attendees were added to the project database to ensure they would be notified of upcoming developments and events, and were notified of opportunities to serve on the project's public involvement groups. As a result, four new members representing the Louisville Housing Authority; South Broadway Business Association; Beecher Terrace, a public housing development; and the Chestnut Street Family YMCA, were added to the membership of the Louisville AWG. This group also had minority representation through economic development agencies and elected officials.

Ongoing meetings were held with minority business and civic groups and media with a predominantly minority audience. Elected officials, who represented predominantly African-American communities, were interviewed early in the process and were represented on public involvement groups.

7.1.7 Indirect and Cumulative Effects Analysis

The e-mail database, public involvement groups and the website were used to notify the public of opportunities on May 22 and 23, 2001 to review and comment on methodology used to conduct the Indirect and Cumulative Effects Analysis. The purpose of this contact was to receive input on the potential resources that may be affected, geographic boundaries and time frames for the analysis, other major actions in the region and possible mitigation strategies.

7.1.8 Communication Tools

Project Newsletter

The project newsletter, “Riverlink,” was distributed to a mailing list that consisted of stakeholders identified by the project team as well as interested parties. The newsletter also was available on-line, either through the project website or by e-mail, upon request.

The first issue of “Riverlink” was published in November 1998, with four subsequent issues through February 2001. It was used to publicize upcoming public meetings, describe portions of the EIS, present potential alignments, and report issues identified by the public. Readers were notified how to make comments or ask questions for the project record.

Project Website

The project website, www.kyinbridges.com, was a comprehensive source of information, which was heavily used. Information included a project overview, a “Recent Developments” section, a public involvement section that included an on-line comment form, a library of project documents and detailed maps of possible alignments.

The website was well publicized. The address appeared on all printed project-related materials. Press releases to local media were used to publicize site improvements or the presence of significant new information on the website. Several local media outlets provided direct links to the project website from their own website.

Brochures

Two project brochures were prepared in the summer of 1999 and a third was prepared in April 2001. These provided an overview of the project, an explanation of the public involvement program, a project update including possible alternatives and a project timeline. Information on how to obtain information and make comments was also included.

Brochures were widely distributed to locations such as all public libraries and County Clerks’ offices in a six-county area around Louisville. They were also made available at public meetings and stakeholder meetings.

Information Kits

Information kits were prepared, as needed, for stakeholder meetings, media events and other purposes. These kits contained general project information, newsletters, brochures and copies of news releases or other pertinent materials. Kits were also used during RAC and AWG meetings as a discussion guide and framework for comments.

Videos

An 11-minute overview video of the project was produced in the fall of 1999. The video included a history of the project, an overview of the EIS process, an approximate timeline and comments from community leaders with differing views. The video was shown at stakeholder meetings. A one-hour loop was made and shown at the May 2000 public meetings. The video was distributed to local television stations and cable networks.

A second video was prepared specifically for continuous showing during the May 2000 public meetings. Based on a slide show presentation, it provided a brief overview of the EIS process and a summary of the DEIS alternative selection process.

Both videos were distributed to all public libraries in the LMA. In addition, videos simulating a “drive through” of the area with a “build” scenario was also run on a continuous loop during public meetings.

Library Materials

In the fall of 1999, a package of materials was assembled for distribution to public libraries in the LMA, as well as municipal buildings in Utica and Prospect.

The package included:

- A binder containing background materials, project documents, press releases and comment forms.
- Brochures
- Overview videos
- Display cards with the website address, to be placed at each library’s computer center.

In May 2000, these materials were updated with the booklets given out at the recent public meetings and the video slide show presented at the meetings. The materials were updated in January 2001 with the revised draft of the Purpose and Need Statement and the Alternatives Analysis Report.

E-mail

An electronic mailing list was developed as a way to improve the efficiency of stakeholder communications. Members of the RAC, AWG, stakeholder organizations and the general public were offered the option of receiving project correspondence by e-mail. As of June 1, 2001, more than 800 people were receiving project information in this manner. Information included the newsletter, notices of upcoming events and notifications of improvements to the website or the availability of new information.

7.1.9 Media Relations

Local news media, including media with a predominantly minority audience, were used to disseminate information about the project and to notify the public about upcoming meetings and events.

News Releases

News releases were used to generate media interest prior to public meetings, to draw attention to or to clarify issues relating to the DEIS and to publicize the website. For example, the news media were notified of an opportunity to view the freshwater mussel survey work being conducted in the Ohio River. A videotape of the survey work also was provided to local television stations. The resulting print and electronic media coverage helped produce a large turnout for public meetings. Another release detailed the sharp increase in website traffic following news coverage of the availability of detailed project maps on the website.

TV and Radio Appearances

A representative of the project team appeared frequently on local television and radio news programs. These appearances were made to coincide with and support news releases publicizing upcoming public meetings or website improvements or to respond to requests by news organizations.

Public Service Announcements

Print and broadcast public service announcements (PSA) were used to publicize the public meetings. These were submitted to local newspapers and to radio stations.

A 30-second PSA based on the overview video was distributed to local television stations and cable systems. The announcement encouraged viewers to become informed about the project and express their questions and concerns.

7.1.10 Section 106 Historic Resources Review Public Involvement

Due to the abundance of historic resources in the project area and the special protection those resources are afforded, a public involvement plan was developed specifically to address Section 106 of the National Historic Preservation Act. The public was provided with opportunities to review documents and to comment on the Section 106 historic review process.

A historic preservation forum, open to the public, was held November 16, 2000. About 70 people attended the forum. At this forum, national experts on historic preservation explained the steps that must be followed in addressing potential impacts on historic resources under Section 106 and Section 4(f) of the Department of Transportation Act. This was followed by a discussion on how the project team is complying with historic preservation regulations. A summary of the presentation and the accompanying slideshows were posted on the website. The

project newsletter featured a story on the forum. Media notices and the newsletter highlighted information on how interested persons could apply to become a Section 106 Consulting Party.

During the week of May 7-11, 2001, notices were distributed to names on the e-mail database, the media (including minority-focused media) and to 315 public involvement group members about public comment opportunities relating to the Section 106 historic review process. The "Courier-Journal" publicized this opportunity. Individuals responded and reviewed materials on May 16-17, 2001 and May 29 to June 1, 2001. Project representatives were available to explain the information and to answer questions.

Fourteen individuals or groups responded to another public opportunity to review historic resource information. The documents made available for review included photographs, descriptions and maps of historic properties, as well as a preliminary assessment of how each of the bridge options (including new or rebuilt interchanges, approach roadways, etc.) would affect those resources. Notification of the opportunity was made through mail, e-mail, print media and radio. The "Courier-Journal" and the "Jeffersonville Evening News" each publicized the opportunity.

In September 2000, local governments, state historic preservation agencies and Native American tribes were invited by FHWA to participate in Section 106 activities as consulting parties.

Documentation related to Section 106 public involvement, including notifications and news coverage, is available in Appendix F.

7.1.11 DEIS Circulation and Public Hearing

Prior to and during a public comment period from November 9, 2001 to February 25, 2002, extensive efforts were made to provide information to the public about the DEIS, and to notify the public about a variety of comment opportunities and forums including two formal public hearings.

The DEIS circulation period began on November 9, 2001 and the USEPA's Notice of Availability was published in the "Federal Register" on November 16, 2001. Due to the complexity and size of the document, the close of the comment period was February 25, 2002. This provided 101 days for the notice of availability to the public for review and comment on the DEIS. The regulations require 45 days, but 101 days were granted for review. A total of 233 hard copies of the DEIS were distributed to federal, state and local governments and stakeholders. In addition, 233 copies of the DEIS were distributed on compact disc.

A variety of means were used to draw attention to the release of the DEIS for public comment and to inform the public about methods available to comment on the document. The effort included extensive media coverage, placement of the DEIS in 33 regional public libraries, mailings to a database of 5,000 names, e-mail notices to 800 addresses, postings on the project's website and widespread distribution of brochures about the DEIS and comment opportunities. In

addition, a letter and copy of the DEIS summary was sent to the representatives of public involvement groups.

During the comment period, five public open houses, including one on a Saturday, and two formal public hearings were held. All locations were accessible to the handicapped and on public transportation routes. Provisions, including transportation, were made available to accommodate those requiring special arrangements.

At all public forums, maps and other displays, including the DEIS, were available in an open house setting that allowed people to ask questions and get accurate information from project staff. The public also had opportunities to submit oral comments to a stenographer or to provide written comments. The public hearings provided the additional opportunity to make oral comments before an audience at a microphone in a separate speaking area. The public was also invited to comment by letters submitted through traditional mail, or through e-mail from a link on the project's web site. Copies of the DEIS were also available at 30 local libraries.

The following is a summary of public involvement initiatives during the comment period. Documents relating to these initiatives, including handouts, presentations, website postings, media coverage and mailing notices are contained in Appendix F.

Open Houses

A total of 200 people attended the five open houses held on: Thursday, November 29, 2001 from 6 p.m. to 9 p.m. at Kye's Meeting Center, 500 Missouri Avenue, Jeffersonville, Indiana; Tuesday, December 4, 2001, from 6 p.m. to 9 p.m. at the Kentucky International Convention Center, 221 S. Fourth Street, Louisville, Kentucky; Saturday, January 19, 2002, from 10 a.m. to 2 p.m., Kentucky Fair and Exposition Center, 937 Phillips Lane, Louisville, Kentucky; Tuesday, January 22, 2002, from 6 p.m. to 9 p.m., Kye's; and Thursday, January 24, 2002, from 6 p.m. to 9 p.m., Kentucky Fair and Exposition Center, Louisville, Kentucky.

These forums gave people an opportunity to obtain information and to submit written comments or oral comments to a stenographer. Project staff and consultants, state and federal representatives were available to answer questions and explain displays. Handouts explaining the meeting format, DEIS highlights and options and available comment methods were distributed.

Display areas were marked and included:

- **General Information:** Copies of the DEIS were available along with aerial maps showing all alignments and information on public involvement and comment opportunities.
- **Traffic and Noise:** Display boards and documents relating to the traffic analysis were available. Also available was the documentation regarding the noise analysis that included maps showing receptor locations. This display included an audio-video demonstration on noise level increases relating to the DEIS options. The project's noise expert was available for questions.

- Maps: Individual large aerial maps of each alignment option were mounted on easels. Additional maps showed interchange options and design renderings. Also on display was a computerized video of alternatives showing a drive-through over the landscape developed by project staff.

Public Hearings

The public hearings were held February 6, 2002 at Kye's Meeting Center in Jeffersonville and February 7, 2002 at the Kentucky Fair and Exposition Center in Louisville. About 500 people attended the hearing in Louisville and about 300 people attended the hearing in Jeffersonville.

Each hearing was scheduled for 4 p.m. to 10 p.m. Notification was made through extensive media coverage, direct mail to a database of 5,000 names, e-mail to about 700 addresses and legal advertisements. Variable message signs on interstate highways also provided notification and directions.

Attendees were given a handout explaining the three ways they could comment at the hearing. They included written comments on forms provided, recorded comments to a stenographer and recorded comments at a microphone before an audience. The stenographer was available for those who wished to provide oral comments, but did not desire to make them before the public at a microphone. In addition, brochures were distributed explaining the DEIS, the comment period and the various ways to submit comments.

Each public hearing was identical in format with two simultaneous venues. One venue was an open house with the same displays and information that were available at the five previous open houses. This allowed attendees to get questions answered and to study the DEIS, maps and other information.

At the same time, a public speaking session was held. This began with an opening presentation that included a slide show covering the development of the DEIS and explaining the options. Following opening remarks and a presentation, a speakers' forum provided anyone who wished to speak an opportunity to talk for two minutes. Speakers were also encouraged to submit comments in writing if they could not mention all of their concerns in the timeframe allotted at the microphone. A random drawing selected the order of speakers. Drawings were held every two hours.

Media

A comprehensive media list was comprised of 54 outlets: print (15), television (8) and radio (31). Before each public forum and public hearing, outlets on the media list were sent a news release, a media advisory, public service announcements and a calendar-of-events notice. These materials included information on public transportation and availability of provisions of services for people with disabilities.

A news conference was held on November 9, 2001 to publicize the release of the DEIS and to draw attention to public forums including the public hearings, how citizens could obtain information and how to make comments. The news event received widespread media coverage by television, print and radio. In addition, public service announcements were sent to all radio stations in the region to draw attention to the public hearings, to communicate ways through which individuals could comment and get more information. Television, radio and print also prominently covered the forums and public hearings. For a complete list of media coverage see Appendix F.

In addition, legal notices about the public hearings were published in the “Louisville Courier-Journal,” the “Jeffersonville Evening News” and the “Louisville Defender,” a weekly publication whose target audience is the African-American community.

Website

The project’s website, www.kyinbridges.com, was updated to reflect the release of the DEIS. On November 9, 2001, the day of the news conference announcing the DEIS release, a new homepage was featured on the website to provide information about the DEIS and ways to comment. As a result of the new information posted and extensive publicity, the website received 49,701 hits on the day of the news conference and 171,055 hits during November 2001, a 300 percent increase from the previous November. The site has received more than a total of 2.6 million hits. In November 2001, a link was added which allowed visitors to submit comments about the DEIS by sending an e-mail via the website.

The new homepage on the website coinciding with the DEIS release, included three key links to information about the DEIS. One link allowed visitors to read the news release about the DEIS including accompanying fact sheets on DEIS highlights, estimated costs of the options and a chart showing impacts of each option. The homepage also included a link allowing visitors to read the executive summary. A final link took visitors to a page listing public open houses and hearings and ways to comment. This included directions to each meeting location and information on public transit routes. People with disabilities were invited to call to receive transportation or special accommodations. At the same time, TARC posted a notice about the upcoming public hearings and public transportation routes. At the conclusion of the comment period, the website was again updated to include information on comments received from the public and a link to comments received from federal government agencies for the public to review.

Mailings/E-Mails

On November 8, 2001, INDOT Commissioner, J. Bryan Nicol and KYTC Secretary, James C. Codell, III sent a letter and a copy of the DEIS executive summary to members of the project’s public involvement groups that met periodically with the project consultant during the development of the DEIS. These included members of four AWG and members of the RAC. The letter informed them of the upcoming public forums, and other ways to get information and make comments.

During the same week, the entire database of 4,500 names was sent a notice about the release of the DEIS, the public open house and the hearing schedule. E-mail was sent to 800 addresses with the same information and a link to the project website. In January 2002, another e-mail was sent to publicize the hearings held on February 6 and 7, 2002. The entire mailing list of 4,500 names also received a reminder mailing the week before the public hearings again notifying them of the hearings and locations. All notices provided a number for individuals to call to receive accommodations in accordance with the Americans with Disabilities Act.

Environmental Justice

Public involvement efforts with minority and low-income communities, part of the development of the DEIS, continued after the release of the DEIS. During the DEIS review and comment period, efforts relating to environmental justice included news coverage by media targeted to the minority community, direct mail notices and meetings with residents in their neighborhoods, including a public open house.

On January 15, 2002, a public open house was held at the Louisville Urban League in western Louisville. Flyers were placed in restaurants, businesses and high-traffic areas to notify the community of the meeting. The media was notified and two radio stations with a predominantly minority audience reported schedule for the meeting. Forty-six elected officials and representatives of churches, civic groups, neighborhood and business organizations and area residents were mailed notices about the open house and received phone calls two or three days before the event personally inviting them to attend. Less than 10 people attended the meeting.

During the public comment period, stakeholder meetings were held with four low-income and minority communities in their public housing developments. The meetings were held January 31, 2002 at Beecher Terrace housing development; January 29, 2002 at Dosker Manor; January 18, 2002 at Clarksdale and January 17, 2002 at Avenue Plaza. Each of these areas is near the Downtown area. Notification was made by placing flyers in and around the neighborhoods and through direct contact with housing authority resident association representatives. At each meeting, a project overview was presented, maps were displayed and specific information was provided about potential impacts of the alignments to the neighborhood. A presentation was given on the potential noise impacts in response to residential concerns. A total of 44 residents participated in these meetings.

Before the public hearings, the "Louisville Defender," a newspaper that targets the minority community, ran a story about the DEIS and how citizens could comment. This notice included bus route information to public forums and meetings and a phone number to call for special accommodations and transportation needs. Every known media that targets a minority audience in the region regularly received project information. Seven outlets were identified, including five radio stations and two print publications.

In addition, numerous African Americans and representatives of low-income communities were members on the project's public involvement groups and received at least two notifications by mail of public forum and comment opportunities. The entire mailing list, which grew to more

than 5,000 contacts, included more than 500 individuals or organizations with western Louisville zip codes. These addresses also received notification of the DEIS release, public forums and hearings and how to obtain information and submit comments. The DEIS was distributed in November 2001 to 33 public libraries including five located in areas of low-income and minority communities in western Louisville and near Downtown. Project information displayed at these locations included a stand-up table poster directing visitors to the project website, which could be accessed at the libraries.

Brochures

In January 2002, a two-color brochure explaining the options in the DEIS and giving information about the comment period was widely distributed and sent to elected officials, civic, neighborhood and interest groups for display and distribution. The brochures also were distributed to libraries and government offices. These brochures were handed out to attendees at the public hearings.

7.1.12 Summary

The public involvement program has generated substantial community participation in the project. A summary of the Public Involvement and Participation Plan and the elements of this plan follow.

- Attendance at public meetings has totaled more than 2,700.
- Attendance at other stakeholder meetings has totaled more than 1,000.
- More than 1,100 comment forms have been received, with about half of those coming from public meetings and the rest from stakeholder meetings and other means.
- The project website has received more than two million visits.
- More than 250 people have submitted comments or questions by e-mail.
- The RAC and the AWG have played a substantial role in the project, and their input has been instrumental in adding or refining alternatives.
- Extensive media coverage of the project has complemented other public involvement initiatives, increasing community awareness and interest.



Louisville-Southern Indiana Ohio River Bridges Project Public Involvement and Participation Plan

Goal

Ongoing, two-way communication to help decision-makers find the best possible solution to address cross-river mobility between Jefferson County, Kentucky and Clark County, Indiana.

Participants

- General public
- Stakeholders who have a special interest in the outcome of the project or who may be impacted: environmental groups, the business community, historic preservation organizations, neighborhood and residential associations, civic organizations, transportation interests and individual property owners
- Elected officials whose constituencies may be affected
- Government agencies involved in transportation issues
- Media

Objectives

- A variety of tools to inform and involve as many people as possible
- Timely, accurate, concise information
- Meaningful feedback from target audiences to reflect community desires in the work
- Address broad, regional needs relating to transportation, economic development and quality-of-life
- Consider local and neighborhood needs and concerns in developing options
- Foster understanding for why options are selected

Actions

- Identification of key stakeholders
- Based on thorough research of other projects and consultation with specialists in public involvement initiatives, development of a public involvement structure that includes groups that will meet regularly with the project team to review the work and to provide feedback
- Hold public meetings at key intervals in the process to update the work and to get feedback to ensure all voices are being heard
- Development of a variety of communication methods to distribute information to target audiences
- Continual identification of stakeholders and community-based groups and organizations with consistent meetings to keep individuals informed of the project's progress and to hear concerns and suggestions
- Development of a written feedback communication loop to record issues and concerns
- Development of a proactive media relations program

Elements of the Public Involvement Program

A comprehensive mailing list/database of stakeholders based on news clippings, lists provided by government agencies, civic and environmental organizations and interviews conducted by project staff was developed and continually updated.

Public Involvement Groups

Broad-base, inclusive groups of stakeholders who met regularly with project staff. This included the arrangement of meetings, written agendas, handouts and summaries. Groups were selected for participation in the project development:

- **Regional Advisory Council:** Comprised of representatives of business, environmental, civic groups to focus on big-picture issues relating to economic development, transportation and quality-of-life issues.
- **Area Work Groups:** Four geographic-based groups made up of residents and representatives of small cities, civic and neighborhoods groups from areas most likely to be impacted by the project.

Public Forums/Meetings

- Public Meetings were held at key intervals in the process to ensure that all voices are heard.
- Special public workshops on specific topics of interest were conducted.

Communications Tools

- Website: A website, www.kyinbridges.com, that was developed in a visually pleasing manner, thoroughly explained the work process without jargon and provided up-to-date information with an e-mail component so visitors could submit questions or comments to the project staff. Tracks use of the site and make adjustments based on the data.
- Newsletter: A newsletter, "Riverlink," was published and featured upcoming meetings and project updates and methods for submitting comments. The newsletter was mailed to all stakeholders and placed in public libraries and government agencies.
- Speaker's bureau: Presentations were made throughout the community.
- Brochures, information booklets/handouts: These items explained the project work and timeline and described the public involvement program.
- Video: Several videos were made available for viewing at public meetings and also to stakeholders and for distribution to schools and libraries as an introduction to the project work and community issues and opinions.
- Toll-free number: A toll-free telephone hotline was developed for public use. The hotline was used to field comments and questions from the general public.
- Library materials: Displays were developed at more than 30 branch libraries in the LMA that contained: stand-up boards directing visitors to the website; a binder that contain

project hand-outs including the most current set of project mapping on possible routes and comment forms.

Media relations

- News releases and media briefings were made at key intervals during the project process.
- Editorial board meetings with regional media were conducted.
- Before each public meeting, public service announcements were written and distributed that reported the project engineers' schedules for morning television shows, radio talk shows, graphics and related web links.

7.2 Agency Coordination

The coordination process for the EIS has been multi-faceted, involving publications of legal notices, agency briefings and coordination meetings and solicitation of agency jurisdictional concerns. The following chronology summarizes this effort, followed by a description of each point of the coordination process. Appendix C contains notices of intent, meeting summaries and correspondence from agencies regarding EIS issues.

7.2.1 Notice of Intent

Two Notices of Intent (NOI) were prepared for this project. The initial NOI was published in the "Federal Register" of March 27, 1998 and announced the intent of INDOT and KYTC to prepare an EIS building upon the analyses of the ORMIS. It did not contain information about the scoping process or meeting.

A supplemental NOI was prepared and published in the "Federal Register" of August 20, 1999. The NOI reiterated the intent to prepare an EIS, and described the scoping process. It reviewed the public involvement activities conducted to date. This supplemental NOI announced the scheduling of the formal agency scoping meeting and outlined future public involvement opportunities. A copy of each NOI appears in Appendix C.1.

7.2.2 Federal Stakeholders Executive Briefing

The Federal Stakeholders Executive Briefing was hosted by the Kentucky Division, FHWA on October 6, 1998 in Louisville, Kentucky. The intent of the meeting was to acquaint the federal resource agencies with information about the project history, schedule and potential impact issues and to initiate a collaborative, interagency coordination process. A detailed summary of this executive briefing is contained in Appendix C.2.

7.2.3 Early Coordination

On December 3, 1998 and on December 22, 1998, the KYTC and INDOT respectively initiated early coordination with state and federal government resource agencies. The coordination provided a project overview and location map, a preliminary listing of potential impact issues,

and a schedule of key project activities. During the coordination, agencies were requested to identify issues of concern under specific agency jurisdiction. An analysis of potential impacts and an outline of recommended mitigation and permitting requirements were also requested. Each agency was asked to respond within 45 days of the date of the coordination. Response letters received from the agencies are included in Appendix C.3.

During the course of the coordination effort, meetings were held with various individuals and agencies to discuss project development and compatibility with specific concerns. Appendix C.3. Also provides a listing of all the public involvement meetings, stakeholder meetings and presentations from April 1998 to present.

7.2.4 INDOT – State Agency Coordination Meeting

The INDOT State Agency Coordination Meeting was held on February 10, 1999 in Indianapolis, Indiana. The meeting was hosted by the INDOT to acquaint Indiana resource agencies with information about the project history, schedule and impact issues and to further define the aforementioned collaborative, interagency coordination process. A detailed summary of this coordination meeting is contained in Appendix C.4.

7.2.5 KYTC – State Agency Coordination Meeting

The KYTC hosted a State Agency Coordination Meeting in Frankfort, Kentucky on February 16, 1999. The objectives of this meeting were similar to the previous INDOT meeting: to acquaint state agencies with the project history, project schedule, impact issues and to initiate the collaborative, interagency coordination process previously described. A detailed summary of this coordination meeting is contained in Appendix C.5.

7.2.6 Agency Scoping Meeting

As announced in the supplemental NOI of August 20, 1999, the Agency Scoping Meeting was held in Louisville, Kentucky on September 8, 1999. The purpose of this meeting was to provide preliminary information about the proposed project, and to identify issues of potential concern with input from the attending federal and state regulatory agencies. At the meeting, the NEPA/Section 404 permit process and KIPDA's RTP were reviewed. The meeting was hosted by the Kentucky Division, FHWA with project assistance from the Indiana Division, FHWA and the FHWA, Midwest and Southern Resource Centers.

A formal Scoping Document and the Draft Purpose and Need Statement were distributed to meeting attendees. The Scoping Document identified the purpose and need, project status, preliminary alternatives and potential issues and future project actions. The Draft Purpose and Need expanded on the travel delays, accidents and related incidents and transportation system linkage/multimodal access. Although the Purpose and Need is an integral part of any EIS, it was distributed as a separate document in the interest of maximizing public involvement and input into the project. A summary of the Agency Scoping Meeting is contained in Appendix C.6.

7.2.7 Scoping Document and Purpose and Need Statement Coordination

The Scoping Document and the Draft Purpose and Need Statement, both of which were made available to scoping meeting attendees on September 8, 1999, were also mailed to members of the RAC, AWG and members of the general public who were identified on the project mailing list. The documents were also available on the project website.

Comments were received on both documents from various federal, state and non-profit organizations. Comment letters are included in Appendix C.7. Comments received were utilized and included in preparation of the DEIS, and revisions were also made to the Draft Purpose and Need in response to the stated concerns. The revised Draft Purpose and Need was circulated to federal and state agencies and interested persons again for comment on February 11, 2000. The document was also available for viewing and copying on the project website. Agency comments were again received during the review period (Appendix C.7.). Further revisions were considered in preparing the Purpose and Need.

7.2.8 Agency Coordination Meeting on Indirect and Cumulative Effects Analysis

On April 19, 2001, a meeting focusing on the potential ICEA of the project was held in Louisville, Kentucky. Approximately 30 representatives of local, state and federal agencies attended. The topics of the meeting included the presentation of the seven-step assessment process and discussion of key aspects of the ICEA. These key aspects were: identifying land use, ecological, historical and other potential resources affected by the project; delineating geographic boundaries and time frames; describing other planned major actions in the region (such a commercial and residential development) and considering possible mitigation strategies for wetland loss and other impacts identified. A detailed summary of the ICEA Meeting is contained in Appendix C.8.

7.2.9 U.S. Fish and Wildlife Service Coordination for Threatened and Endangered Species

An informal consultation meeting was held on August 13 and 14, 2002 with the USFWS. The purpose of the meeting was to discuss the potential impacts of the Preferred Alternative upon threatened and endangered species and to discuss appropriate mitigation measures. The meeting also included a windshield survey of the Preferred (East End) Alternative. Individuals in attendance represented the USFWS – Cookeville Field Office, FHWA, INDOT and KYTC.

The USFWS documented seven federally protected species with potential to occur within the project impact area. They include the Indiana bat, Gray bat, Peregrine falcon, Running buffalo clover, Short's goldenrod, Pink Mucket pearly mussel and Orange-footed Pimpleback mussel. In addition, the KSNPC provided records of the Fat Pocketbook mussel, Ring Pink mussel and the Interior Least tern. The Indiana field office of the USFWS provided records of the Bald eagle and Clubshell mussel within the project vicinity.

The Biological Assessment (BA), which was prepared for these identified species, was the topic of meeting discussions with the USFWS. As a result, it was determined that the species of particular concern identified in the BA were the Indiana bat and Gray bat. Although no officially designated critical habitat occurs within the project limits for either species, mitigation measures are required. The mitigation measures were developed and forwarded to the USFWS for concurrence. On March 13, 2003 the USFWS concurred in the “Not Likely to Adversely Affect” finding issued by the FHWA. As such, the FHWA has satisfied the requirements of Section 7 of the ESA. Refer to Appendix C.9.

7.2.10 U.S. Army Corps of Engineers Wetland Coordination

A coordination meeting was held on August 29, 2002 to discuss the wetland areas that would be impacted by the Preferred Alternative. The purpose of the meeting was to determine USACE jurisdictional authority over these identified wetlands. The meeting included field visits to all identified wetland areas.

Within the limits of the Preferred Alternative, a total of 4.11 acres of jurisdictional wetland would be impacted. Encroachments would occur to 0.12 acre of palustrine emergent wetland, 0.25 acre of lacustrine wetland, and 3.74 acres of riverine wetlands, which includes two ditches, the stream channels of Lentzier Creek and tributaries, a tributary to the Ohio River, and Harrods Creek and tributaries. In addition, the Preferred Alternative will encroach upon the Ohio River, although this encroachment is anticipated to be limited to the placement of piers only.

The USACE met with FHWA on March 17, 2003 to discuss the selection of a Preferred Alternative, assure that the Preferred Alternative is the least damaging practicable alternative, and discuss potential mitigation sites. The USACE issued a letter dated March 25, 2003 to summarize their preferences (see Appendix C.9). The USACE suggested that it would be best to complete final delineations as final design commences, so that efforts can be made to further minimize wetland impacts during final design. These delineations and minimization efforts are needed for the detailed permit application that will be required at that stage, to fulfill the USACE review requirements under the Section 404(b)(1) Guidelines. The USACE noted that **Alternative A-15** has the smallest wetland impacts (from practicable alternatives), and as such expressed skepticism that Alternative A-16 (with greater wetland impacts) could demonstrate compliance with the Section 404(b)(1) Guidelines. The USACE noted that prior converted cropland is available in Clark County, Indiana that could be used for wetland mitigation. They noted that such mitigation is their preference and that alternative mitigation such as wetland banks or in-lieu-fee programs should only be used as a last resort.

The USACE, in a letter dated March 25, 2003, stated that once the design of the Preferred Alternative is completed and a Department of the Army permit is submitted, all wetlands impacted by the alignments need to be identified and delineated in accordance with the USACE Wetlands Delineation Manual (1987). The USACE also stated that because of the impacts to special aquatic sites associated with the project, which include wetlands, compliance with the Section 404 (b) (1) Guidelines would be difficult to prove, as Alternative A-16 would have had the largest amount of impacts to wetlands.

The FHWA agrees with the USACE, that it is preferable that final delineations, minimization efforts, and detailed mitigation plans be developed during final design. Since construction of the project may not occur for some time, wetland areas may be naturally created or destroyed. Excess ROW and remnant parcels will be identified as right-of-way acquisition proceeds. Detailed delineations, which will indicate the exact wetland impacts, will be undertaken during the design phase. FHWA commits to make a rigorous effort to minimize wetland impacts during final design. Wetlands directly impacted by the project will be mitigated in accordance with the existing Indiana Wetland Mitigation MOU ratios; at a minimum 1:1 for farmed wetlands, 2-3:1 for scrub-shrub and palustrine/lacustrine/emergent wetlands, to 3-4:1 for palustrine forested wetlands. The INDOT Memorandum of Understanding (MOU) between the INDR, INDOT and USFWS of 1991 will be utilized in the mitigation of wetland impacts. A copy of the MOU has been included in Appendix B.3.

7.2.11 Coordination with Waterfront Development Commission

A coordination meeting was held on July 16, 2002 to review project options and seek information about the options under consideration. An overview of the alternatives in the Downtown area was presented and discussed relative to impacts upon the Waterfront Park. The position of the Waterfront Development Corporation Board, in support of **Alternative C-1**, was confirmed at the meeting. One of the principal reasons for that position was the importance of the “Great Lawn” in the overall planning for the park and the greater impacts that would occur if Alternative C-3 were selected.

The two options under consideration for the Kennedy Interchange were also discussed. The Board’s preference was for the relocation option because it opened additional lands that could be integrated into the park environment. Construction of the relocation option would result in approximately 33 acres of lands that “surplus” to the needs of the highway agency. The desire that any surplus land(s) be granted to the Waterfront Development Corporation for use in expansion of the waterfront park was made.

The Development Corporation is proceeding with implementation of their phased (Phase II) park construction. Acquisition of the Ashland property upstream of the “Great Lawn” and adjacent to **Alternative C-1** was proceeding. Remediation was expected to be completed by late summer 2003, so that the property would be available for use in further implementation of Phase II. Condemnation had been initiated on another property between the existing Kennedy Bridge and Big Four Bridge.

7.2.12 Consulting Party Coordination under Section 106

During the continuing development of the Section 106 process subsequent to distribution of the DEIS, various coordination meetings were held with the Indiana SHPO, the Kentucky SHPO and the identified consulting parties. The meetings with the Indiana SHPO and Kentucky SHPO were held independently of the consulting party meetings and included the FHWA, INDOT, KYTC, ACHP, Native American Tribes and CTS. These meetings focused on discussions of

eligibility of specific properties for inclusion on the NRHP, and generally preceded the consulting party meetings (although the SHPOs attended these meetings also).

The purpose of the following consulting party meetings was to incorporate their comments and concerns into the development of the historical review process at the property identification and assessment phases.

January 23 – 24, 2002

Prior to this meeting, the consulting parties had received information on the project APE, the identification of historic properties that might be affected by the project and assessments of potential effects on those properties. In addition, descriptions of the Section 106 process and evaluation methodologies used for the undertaking were also distributed. This meeting focused on a discussion of the additional historic properties identified by the CTS historical subconsultants within the expanded portion of the APE. To facilitate the discussions of this meeting, a binder was prepared and distributed to each consulting party that contained a description of the APE, a listing of properties identified and evaluated in the APE, including summary descriptions of NRHP listed and eligible properties, and a list of all consulting parties. The binder was compiled to facilitate the consultation process with the consulting parties.

The two days of discussion centered on the historical resources located on the Kentucky portion of the project. Individual property descriptions were evaluated and comments received from the consulting parties for possible revisions of the identification/eligibility. Ninety individual properties were discussed, as well as two properties in Indiana, for which the eligibility determinations had been modified. The consulting parties were asked to review these determinations and to provide any additional comments by March 5, 2002.

March 5, 2002

This meeting was a continuation of the property identification/eligibility discussions of January 23 – 24, 2002. Twenty additional properties in Kentucky and 103 properties in Indiana were presented and discussed. Archaeology was presented, but was not discussed in great detail. An additional period of 30 days was provided to the consulting parties for review and comment of all identified properties.

Following these consulting party meetings and evaluation of received comments, the Final Determination of Eligibility was made in consultation with the Indiana SHPO and the Kentucky SHPO. FHWA approved this documentation on June 26, 2002 and provided it to all consulting parties on July 12, 2002. This completed the identification of historic properties phase of the Section 106 process.

May 15 – 16, 2002

The Assessment of Effects Documentation was distributed to the consulting parties for review and comment on May 10, 2002. The established deadline for receipt of comments was June 21,

2002, after which the final documentation was to be prepared and distributed based upon received comments. As part of this review, a two-day workshop was held with the consulting parties to discuss the prepared assessments on May 15 – 16, 2002. The resources and assessments for the Indiana portion of the project were discussed on May 15, 2002; similar discussions were held for resources in Kentucky on May 16, 2002.

After June 21, 2002, the assessment of effects for all properties was completed. The Final Assessment of Effects was coordinated for approval through the Indiana SHPO and the Kentucky SHPO and approved by the FHWA on July 17, 2002. It was distributed to all consulting parties on July 26, 2002. An update of this documentation was distributed by FHWA for consideration by the consulting parties on August 6, 2002. This completed the assessment of effects phase of the Section 106 process.

August 22 – 23, 2002

Following completion of the assessment of effects, a two-day workshop was held with the consulting parties to initiate consultation on the resolution of adverse effects. This presentation illustrated many varied mitigation techniques; diverse noise barriers, different bridge structures, lighting techniques, and the like. This workshop included initiation of preparation of the preliminary MOA. For inclusion in the MOA, the consulting parties were asked to provide specific stipulations to minimize the identified adverse effects. These stipulations were discussed and recorded. After the meeting, these stipulations, as well as others received from the consulting parties, were amended to a preliminary MOA for discussion at a future consulting party meeting.

September 5 – 6, 2002

This meeting was a continuation of the meeting held on August 22 – 23, 2002. Many of the consulting parties brought minimization and mitigation proposals for their respected areas of concern to the meeting. The “Menu of Potential Minimization and Mitigation Actions” were expanded to include both the written and oral comments brought forth in this meeting and those comments received after the meeting.

October 28 – October 29, 2002

The MOA was the area of discussion of this two-day working session. Consulting parties discussed the draft in detail and were requested to make written comments.

December 4, 2002

Archaeology and archaeological resources were the topics of this two-part meeting. The first portion of the meeting addressed Native American Consultation; the second portion was a discussion of the archaeology section of the MOA.

January 23 – 24, 2003

At this meeting, consulting parties continued the dialogue of the draft MOA from previous meetings and discussed the resolution of adverse effects.

7.3 Listing of Comments and Responses

During the DEIS comment period from November 9, 2001 to February 25, 2002, comments were received with 3,987 signatures. Ninety-two comments were received from government agencies, and local, state and federal elected office holders; copies of these comment letters appear in Appendix E.1.

Table 7.3-1 presents the distribution of comments received, classified by format type. An alphabetic listing of all individuals and agencies who provided comments on the DEIS is included in this chapter under the heading INDEX TO OHIO RIVER BRIDGES PROJECT CROSS-REFERENCE. Comments from the public and interest groups were received in the following six different formats:

- Comment Form: Comments written on the comment sheet provided at each of the public hearings and open house meetings;
- Court Reporter: Oral comments transcribed by a court reporter at each of the public hearings and meetings;
- Open Microphone: Oral comments recorded and subsequently transcribed at an open microphone at the public hearings;
- E-mail: Letters sent via e-mail to the FHWA, INDOT, KYTC or the project website;
- Letter: Letters delivered at each of the public hearings or sent via U.S. mail; and
- Form Letters: Preprinted form letters indicating support for or against particular alternatives.

**TABLE 7.3-1
DISTRIBUTION OF COMMENTS BY FORMAT**

Format	Number of Signatures
Comment Form	500 (IN-257 / KY-243)
Court Reporter	255 (IN-116 / KY-139)
E-mail	1,217 (IN-451 / KY-766)
Letters	488 (IN-253 / KY-235)
Form Letters	1,527 (IN-1, 462 / KY-62)

A variety of comments were received about alternatives. Many of the people commenting favored two new bridges and said that both are needed to relieve traffic, improve safety and to meet the demands of recent growth to the east of the region's core. Some of those in favor of an East End only bridge option said it was needed to complete an interstate link across the river on the east and to address growth. Many of those in favor of a Downtown bridge but against an East End bridge said there were no need for an East End bridge, and that traffic congestion and safety problems downtown need to be addressed. Some also said an East End Bridge would hurt the urban core and contribute to sprawl. Others did not support building one or two new bridges. Some expressed that they wanted a non-highway option such as light-rail and more emphasis on

bicycle and pedestrian paths. Others did not express a preference on alternatives, but focused their comments on impacts and other concerns.

In addition to specific preferences, comments generally focused on the following topics: A) Purpose and Need; B) Alternatives Identification and Evaluation; C) Traffic and Travel Demand Forecasts; D) Socio-Economic Analysis; E) Environmental Justice; F) Historic Properties and Section 4(f) Evaluation; G) Air Quality; H) Noise; I) Vibration; J) Water Resources and Floodplains; K) Natural Resources; L) Wetlands; M) Visual and Aesthetic Resources; N) Hazardous Substances; O) Agricultural Resources; P) Construction; Q) General and R) Neighborhood-Specific. The following are highlights of the governmental and public comments relating to each of these areas. Detailed responses to the comments and an annotated summary follow.

Following the detailed Responses to Comments, is the alphabetic listing of all individuals and agencies who provided comments on the draft EIS. This list indicates where the responses to each comment can be found in Chapter 7.

A. Purpose and Need

Some expressed that the Purpose and Need statement and the project area were too narrowly defined. Some also commented that the environmental clean-up costs at INAAP would hinder its development and the need for an East End bridge. Others said sufficient data was not presented about traffic to support claims about travelers in eastern portions of the LMA nor is there evidence to support a need for an East End bridge based on system redundancy. Another comment was that federal agencies have not reached a consensus on the Purpose and Need. Some who commented supported the Purpose and Need statement.

B. Alternatives Identification and Evaluation

Rail and other non-highway options were the subject of several comments. Some said they thought these options should have been stand-alone alternatives, or that the DEIS did not evaluate these alternatives in enough depth. Another comment was that efforts to improve traffic flow through the use of travel management tools, such as reversing lane directions to accommodate peak traffic flow during rush hour, were not evaluated thoroughly. Others said a tunnel under the river was not adequately considered, and that a hazardous materials route was not addressed. Another comment was that there was no need for a Frankfort Avenue/I-71 Interchange or an extension of Witherspoon Drive to Frankfort Avenue. A more thorough explanation was requested to explain the Spaghetti Junction options in relation to each of the bridge routes. Others requested more information about the Step 1 screening process. A variety of comments were made in support of the specific options.

C. Traffic and Travel Demand Forecasts

Some who commented questioned traffic data and methodology used to predict traffic volumes in 2025. Some said improper adjustments were made to the travel demand

modeling to show higher cross-river traffic flows in the future. Another comment was that erroneous socio-economic data was used in the travel demand forecasts. The comment said that this data contained mathematical errors. Some felt an origin/destination study was needed. Those commenting also said that the DEIS overestimates the reduction in vehicle hours of delay from the construction of an East End bridge. Some also questioned terms used to describe satisfactory travel conditions, describing them as misleading. Another comment was that the DEIS did not adequately address traffic impacts to downtown streets. Some called forecasts biased because they said they rely on assumptions that land use plans for eastern Jefferson County will be realized while land use plans for the city of Louisville will not be realized.

D. Socio-Economic Analysis

Some said the demographic analysis for the DEIS was based on an unrealistic “wish list.” Projected growth for the city of Louisville, some said, was understated and erroneously capped without consideration of revitalization and land available for development downtown. Others said Indiana growth rates were overestimated. Another comment was that the DEIS analysis was based on the assumption that there would be two bridges. A determination that one or more new bridges would have no impact on overall population and growth in the LMA also was questioned. Others questioned how an eastern bridge could increase growth rates in eastern Clark County while decreasing growth rates in Oldham County. Another comment stated that costs of infrastructure investments associated with an eastern bridge should be considered. Other comments included: the DEIS failed to address social and economic effects of an East End bridge on the urban core; there was a lack of information on community impacts and an East End bridge would contribute to sprawl.

E. Environmental Justice

Some said that the DEIS public involvement effort did not properly involve minority and low-income residents and that the comment period did not allow sufficient time for low-income and minorities to comment. Comments included that environmental justice impacts were based on what they said was referred to, as “the false premise,” that most job and household growth associated with the project would be within 10 miles of downtown Louisville. Another comment was that not enough analysis was made to determine who would benefit and who would lose, based on the project alternatives.

F. Historic Properties and Section 4(f) Analysis

Some felt that indirect and cumulative effects, such as sprawl and urban disinvestments, were not adequately considered in the identification of the APE for historic properties. Another comment was that factors relating to the historic property evaluations were inconsistent with other DEIS evaluations. Some also said that constructive use impacts are ignored or understated for historic properties and some historic and archaeological sites were omitted from the DEIS. Comments also addressed how the Section 106 historic review process under the National Historic Preservation Act coincided with the NEPA DEIS process. These

comments included: completion of the DEIS before the Section 106 historic review process led to premature DEIS determinations and inadequate public participation in the historic review process; FHWA failed to begin the Section 106 process at a required early stage and that data provided to Section 106 consulting parties was not made in a timely fashion.

G. Air Quality

Some expressed that the air quality analysis relied on low travel volume estimates that are inconsistent with the data used in the DEIS traffic analysis. One comment expressed that the DEIS should be changed to reflect updates in air quality attainment designations. Other comments cited a need for additional analyses relating to: carbon monoxide modeling; hazardous air pollutant levels; eight-hour ozone and particulate matter standards and air quality impacts from congestion relief with downtown and Spaghetti Junction options.

H. Noise

Some expressed that the area in which noise samples were taken was too small. The number, locations, timing and duration of measurements were described as inadequate. Some questioned the type of noise model used and said measurements were not reliable. One comment claimed that the sound propagation characteristics over ground and water were not adequately considered, nor were noise impacts from construction. Some expressed that attractive noise walls should be constructed to mitigate noise.

I. Vibration

Some said the DEIS does not identify sensitive receptors for ground-borne vibration and does not identify receptor locations or stipulate how long construction would take. Additional information was requested on how properties would be protected from potential vibration impacts. One comment expressed that there is no supporting data for the conclusion that traffic vibration will not damage structures.

J. Water Resources and Floodplains

Some felt potential impacts of the construction and operation of an eastern interstate and bridge on drinking water aquifers were overlooked and that impacts to wellhead protection areas were not adequately addressed. Other comments cited insufficient information on short and long-term impacts to surface waters and streams, river environs and navigation. Roadway runoff was also a subject of comments. Some felt not enough information was provided on the impacts from roadway runoff, which they said should be treated before it enters streams. Some commented that the ecological value of floodplains is not mentioned or analyzed and that some of the most productive and valuable floodplain forest is along the Ohio River in the eastern project area.

K. Natural Resources

Comments included: information on fauna lacks relevance; habitats are addressed in an overly generalized way; the DEIS does not adequately address impacts to public and private natural areas and public parks and additional information was needed regarding impacts to karst features. Another comment was that the references to some wildlife that would use karst features were inaccurate; in other cases, information relating to specific species and fauna is incomplete or missing. Some expressed that all habitats adjacent to right-of-way will suffer indirect impacts. Another comment suggested that the Peregrine falcon's presence in the area and its removal from the endangered species list should be noted.

L. Wetlands

Comments included that the discussion of wetlands was incomplete and the assessment of wetland plants was inadequate. One comment said that instead of saying impacts would be "negligible," the DEIS should say they would be "minimized." Another comment said there are discrepancies between the wetland impacts summary tables in the DEIS and the wetlands section of the indirect and cumulative effects analysis technical table.

M. Visual and Aesthetic Resources

One comment was that incorrect guidelines were used in evaluating visual and aesthetic resources and there was inadequate analysis of viewshed impacts. Another comment was that the conclusion that there would be no adverse visual impacts on downtown historic properties was based on insufficient information. One viewpoint was that roadway lighting impacts should be taken into consideration.

N. Hazardous Substances

Among the comments was that more information should be provided about potential hazardous waste sites and their regulatory status. Other comments included: hazardous substance sites should be shown on maps to see where they are located in relation to alignments; site remediation coordination should be explained in the FEIS and how public participation will be handled relating to decisions involving hazardous sites also should be included in the FEIS.

O. Agricultural Resources

Comments included that the DEIS did not provide adequate information on the amount of Indiana farm property that will be lost due to an East End bridge, and that the amount is understated. Another comment was that the indirect and cumulative effects impact analysis contained inconsistent conclusions relating to farmland.

P. Construction

One comment said that disrupting access at a church might violate the Religious Land Use and Institutionalized Persons Act of 2000. Others felt that utility relocations and disruptions are not adequately explained and may result in takings or impacts to properties including historic properties. Some said there is inadequate information about impacts to downtown neighborhoods as a result of a downtown bridge. Concerns also were expressed about the procurement of labor, materials and equipment if two bridges are built simultaneously. Others said more information is needed on construction impacts including: land needs for materials; the potential costs of delay; and congestion and suspension of business activities during construction.

Q. General

Comments included: There should be a comment period on the preferred alternative. The DEIS does not meet the strategic goals of the FHWA. Some felt I-265 should be designated as a hazardous route. The impacts of Kennedy Interchange options should be more clearly explained. Resources in the project area were omitted from the DEIS. There is no evidence in the DEIS that public comments were actually analyzed instead of just listed or mentioned. The permit analysis in the DEIS was incomplete and inadequate. Costs for a bridge could divert state funds from other transportation programs including a proposed light rail system.

R. Neighborhood – Specific

Comments included specific references to various residential subdivisions that fell within the project area and effects upon historical and cultural resources. Neighborhoods identified of concern included Bridgepointe, Wolf Pen Woods, Shadow Wood, Green Spring, Rose Hill, Clifton and Butchertown

A. Purpose and Need

- A.1 The purpose and need statement is too narrowly defined. The purpose should not be defined only as improving cross-river mobility. The most serious traffic need is relief from congestion in the Kennedy Interchange, but this issue is relegated to secondary significance. River crossings are impacted by congestion, but are not the primary cause.

Response: *As set forth in greater detail in Chapter 2, previous studies identified several interrelated needs affecting cross-river mobility between Jefferson County, Kentucky, and Clark County, Indiana. The primary needs relate to: inefficient cross-river mobility for existing and future population and employment growth on both sides of the Ohio River; peak period traffic congestion in the downtown area; traffic safety problems downtown; inadequate cross-river system linkage and freeway rerouting opportunities; and consistency of the transportation system with locally adopted transportation plans. The relief of congestion in the Kennedy Interchange, as well as safety improvements in that area, has not been relegated to secondary significance, but is recognized as a major component of the transportation need to be addressed by the proposed action. As set forth in Chapter 3, each of the “build bridge/highway” alternatives considered in detail in the DEIS included a reconstruction of the Kennedy Interchange to address identified congestion and safety needs. No resource or permitting agencies indicated in their DEIS comments that the characterization of the project’s purpose and need was inappropriate.*

- A.2 The project area is too narrowly defined geographically. Detailed analyses of the direct environmental effects of the alternatives should have extended to areas such as Bullitt and Floyd counties, which were included in the indirect and cumulative effects analysis area.

Response: *Preliminary versions of the project area used for environmental analyses were presented in early coordination and scoping meetings. The area was adjusted in accordance with resource and permitting agency comments. The area was expanded in particular to provide an adequate scope for the indirect and cumulative effects analyses and the historic property identification and assessment process. The geographic extent of analyses for direct, indirect, and cumulative impacts were appropriate to the nature and extent of impacts likely to result from the alternatives evaluated in the EIS.*

- A.3 Two separate environmental impact statements should have been prepared for two projects: (1) a new downtown crossing and (2) an eastern crossing of the Ohio River. The reason for their linkage was that a case could not be made for the construction of an east end bridge. The only basis for an eastern bridge is that it will satisfy the political decisions and economic development desires of certain segments of the region.

Response: *After thorough study of this important issue, FHWA concluded that the NEPA requirements could best be met by one environmental impact statement, which comprehensively examined the issues associated with improving cross-river mobility in the Louisville metropolitan area. As noted in Chapter 2, previous studies identified several needs related to improvement of cross-river mobility between Jefferson County, Kentucky, and Clark County, Indiana. Some of those needs relate to the downtown area, while others suggested a potential solution through construction of an eastern bridge. For example, the lack of any river crossing upstream of the downtown Kennedy Bridge forces all cross-river traffic with an eastern orientation onto the downtown crossings, contributing to downtown congestion, network inefficiency, and increasing travel distances and times. In addition, the lack of cross-river freeway rerouting opportunities can impede mobility for travelers to and from the eastern portions of the area if incidents or construction adversely affect the Kennedy Bridge. At the same time, the eastern areas are showing significant population and employment growth.*

Consideration of potential solutions to all of the cross-river mobility needs in one EIS is consistent with the requirements of NEPA. Potential solutions to a portion of those needs may affect solutions to other, related needs. In addition, the potential solutions may have similar or cumulative environmental effects that should be analyzed together in one EIS to allow an informed decision on any ultimate solution(s). Because these needs are interrelated, and have arisen at the same time and in the same geographic area, evaluation of the full range of potential solutions, or combinations of solutions, in one EIS achieves the intent of NEPA. That evaluation properly included various one- and two-bridge combinations, as well as the no action alternative. Failure to analyze these needs together in one EIS would have run the risk of having FHWA's NEPA compliance efforts invalidated for "segmentation" of the project.

The travel analysis presented in Chapter 3 demonstrates the interrelationship between potential downtown and eastern river crossings. For example, when daily vehicle miles or vehicle hours of travel are considered, the synergistic effects of the two-bridge alternatives are shown to be greater than the sum of those associated with the single-bridge alternatives.

- A.4 Numerous previous studies were based on the assumption that an eastern bridge and ring road would solve the congestion problems downtown and that the Kennedy Interchange could not be fixed. Those studies proved that only a new downtown bridge would significantly address those problems, and that an eastern bridge would not solve the problems within the Kennedy Interchange.

Response: *The DEIS acknowledged that previous studies concluded that an eastern bridge alone would not solve the problems within the Kennedy Interchange. It*

also acknowledged that previous studies recommended a new downtown bridge to help address the congestion and safety problems downtown. However, those studies also concluded that an eastern bridge would contribute to the efficiency of the transportation system. The analyses contained in Chapter 3 demonstrate that both an eastern bridge and a new downtown bridge would contribute significantly to the efficiency of the cross-river transportation system. Moreover, while an eastern bridge alone may not “solve” the congestion problem downtown, it would improve efficiency and reduce congestion in the Kennedy Interchange and on the Kennedy Bridge (either alone or combined with a new downtown bridge).

- A.5 The “need factors” in the DEIS related to traffic congestion and safety problems in the Kennedy Interchange represent current, identifiable problems that are supported by data. The “need factors” related to planned growth and realization of land use plans are not related to any quantifiable need for cross-river mobility. The project consultant admitted that a focus on cross-river mobility, without consideration of either system integration or support for existing and planned land uses, would undermine “the bases for consideration or implementation of east-end alternatives.”

Response: *The needs related to inefficient cross-river mobility for existing and future population and employment growth and land use plans are set forth in detail in Section 2.2.2. The overall purpose of the proposed action is to improve cross-river mobility, which encompasses the specific need factors discussed in detail in Chapter 2. A focus on cross-river mobility does not foreclose consideration of system integration/efficiency issues or existing and planned growth, which relate directly to overall cross-river mobility. Concerns expressed by a representative of the project consultant in a monthly status report were resolved satisfactorily after consultation among the consultant, FHWA, INDOT and KYTC. FHWA explained to the project consultant that the description of the purpose as addressing “cross-river mobility” was not intended to foreclose consideration of the need for better system integration in the eastern portion of the metropolitan area or for more efficient cross-river mobility for high growth areas. Rather, the overall purpose description encompasses the several specific needs that are described in Chapter 2, all of which relate to cross-river mobility, and which warranted the evaluation of new bridges in the downtown and eastern portions of the metropolitan area. The range of alternatives identified and evaluated in the DEIS was reasonably related to the full range of needs identified in Chapter 2.*

- A6 No data on congested travel, travel time, or traveler delay are presented to support claims about additional travel times and distance incurred by those traveling between eastern portions of the metropolitan area. The number of eastern cross-river trips is not substantiated, and the percentage remains constant from 1990 to 2025.

Response: *Data on the number of cross-river trips with an eastern orientation, as well as the predicted increases in such trips, are presented in Section 2.2.1. These data show that the number of such trips is predicted to increase at a faster rate than the overall number of cross-river trips between 1990 and 2025. These data also show that the total vehicle miles and hours of travel for trips with an eastern orientation are predicted to grow at even faster rates than the rate of growth in the number of such trips, meaning that the average length and duration of each such trip is expected to increase. See Table 3.6-5. The lack of any river crossing upstream of the Kennedy Bridge results in lengthier trips for many with eastern origins and destinations. The data presented in Chapter 3 support this conclusion, showing that construction of an eastern bridge would result in significant reductions in vehicle miles and hours of travel, as compared to the “no build” scenario as well as the single downtown bridge option. These data are summarized in Section 3.6, which evaluates each of the alternatives, and in Section 3.7, which explains the basis for the selection of the Preferred Alternative.*

A.7 Data in the KIPDA 2000 regional household travel survey and the Indiana State Road 62 corridor study refute the claimed current mobility need for an eastern bridge, but neither study is referenced or used in the DEIS.

Response: *Nothing in the KIPDA 2000 regional household travel survey or the Indiana State Road 62 corridor study is inconsistent with this EIS. The KIPDA 2000 regional household travel survey contains general information on travel in the metropolitan area, based on a survey of 4,433 households. That survey did not take into account all travel in the metropolitan area, as a household survey excludes commercial travel as well as traffic passing through the metropolitan area. In addition, although that survey contained estimates of cross-river travel, it did not focus on specific needs related to cross-river travel or the adequacy of the existing cross-river transportation system to address cross-river travel needs. Information contained in the DEIS and FEIS includes estimates of current and future cross-river travel demand, and measures the performance of various alternatives for improving cross-river mobility, including an eastern bridge.*

The Indiana State Road 62 corridor study was focused on a specific transportation corridor and did not address cross-river transportation issues. Conclusions about the adequacy or future needs of the S.R. 62 corridor do not address issues related to the efficiency of the cross-river transportation system or the need for one or more additional bridges.

The mobility needs that support consideration of eastern bridge alternatives are set forth in detail in Chapter 2.

- A.8 The infrastructure needed to support the economic goals associated with an eastern bridge is not in place, and development may occur in areas not now anticipated. The cost of the cleanup of the INAAP will retard its proposed redevelopment and, therefore, lessen the need for related complementary transportation improvements.

Response: *Conclusions contained in Chapter 2 concerning inefficient cross-river mobility for existing and future population and employment growth are based on a number of factors, including documented growth patterns, projections of future growth, and locally adopted land use plans, all of which predict significant growth in the eastern portion of the metropolitan area through 2025. In addition, Section 2.2.2 contains information on infrastructure, such as roads, sewers, water lines, etc., already in place or planned, in the eastern portion of the metropolitan area—especially in southeastern Clark County. Historical and forecasted growth patterns suggest that the continued development of such infrastructure will occur through 2025, particularly in light of the elements of the referenced land use plans that call for or anticipate additional growth in this area. It is possible that growth in some areas may be greater or less than the amounts forecast in Chapter 2; however, the estimates included in Chapter 2 are the most reasonable estimates of likely growth in the metropolitan area through 2025 and are based on professional forecasting methodologies and the input of numerous officials and land use planners from local jurisdictions throughout the metropolitan area.*

The redevelopment of the Indiana Army Ammunition Plant (INAAP) is one factor that contributes to those growth predictions. The schedule for the redevelopment of the INAAP is compatible with the Year 2025 planning horizon assumed for development and assessment of project alternatives. The Plan adopted by the INAAP Redevelopment Authority indicates that the entire site would be cleared environmentally and turned over to local authorities by 2021.

- A.9 The DEIS does not provide facts or analysis to support a “system redundancy” need for an eastern bridge.

Response: *Additional discussion has been added to Chapter 2 concerning the lack of cross-river system redundancy in the metropolitan area, particularly upstream of the Kennedy Bridge. The fact is that there is no river crossing upstream of the Kennedy Bridge, and that all traffic with eastern orientations must utilize the Kennedy Bridge or one of the bridges further downstream. The occurrence of an incident or construction on or in the vicinity of the Kennedy Bridge or Kennedy Interchange can have significant adverse effects on transportation throughout the metropolitan area, leaving only one other interstate freeway river crossing, i.e., the Sherman Minton Bridge, which is located west of downtown Louisville. The Sherman Minton Bridge is not a*

viable alternative river crossing option for much eastern-oriented travel, particularly if east-west travel on I-64 through the downtown area is impeded by congestion and/or incidents in the vicinity of the Kennedy Interchange. Travel in the eastern portion of the metropolitan area has no convenient river crossing option. The United States Department of Defense also has expressed its support for the provision of additional cross-river system redundancy in the Louisville metropolitan area, to avoid interference with troop deployments that may pass through the area.

- A.10 The accident problems cited in the DEIS are primarily related to the Kennedy Interchange, not the Kennedy Bridge.

Response: *Traffic safety problems exist both in the Kennedy Interchange and on the Kennedy Bridge. For example, Section 2.2.4 contains crash rate information for I-65 just north of the Kennedy Bridge in Indiana, which demonstrates a crash rate approximately twice the average rate for urban interstate highways in Indiana. In addition, while many of the design geometry problems are located in the Kennedy Interchange itself, past capacity improvements on the Kennedy Bridge have substantially eliminated shoulders on the bridge, making it difficult for emergency equipment to quickly reach crash sites and/or remove disabled vehicles. Alternatives were identified and evaluated to address the safety problems in both the Kennedy Interchange and the Kennedy Bridge.*

- A.11 Despite early assurances from FHWA, the NEPA process has not obtained federal agency consensus on purpose and need, and has not addressed early concerns raised by U.S. EPA and the U.S. Fish & Wildlife Service.

Response: *The project sponsors carefully reviewed all early coordination and scoping comments provided by U.S. EPA, U.S. Fish & Wildlife Service, and other governmental agencies and interested parties. The DEIS was prepared in light of those comments. FHWA, along with INDOT and KYTC, worked closely with U.S. EPA to identify that agency's concerns about early drafts of the Purpose and Need Statement and to explain the history and basis for the proposed action. This included several meetings in which U.S. EPA's concerns were discussed and its questions were answered prior to publication of the DEIS. In response to those meetings, FHWA revised the Purpose and Need Statement included in the DEIS to incorporate additional information in response to U.S. EPA's concerns. Neither U.S. EPA nor U.S. Fish & Wildlife Service objected to or questioned the Statement of Purpose and Need in their written comments on the DEIS.*

- A.12 The Purpose and Need Statement includes editorial comments and speculation not supported by the underlying data. The purpose and need should be factual so that alternatives can relate back to it in a meaningful way.

Response: *The Purpose and Need Statement is based on factual information related to existing and forecast cross-river transportation needs. Each of the major need factors is discussed in detail in Sections 2.2.2 through 2.2.6. Moreover, Section 2.3 presents several transportation performance measures that are used in Chapter 3 to evaluate each of the alternatives evaluated in the EIS.*

A.13 Section 2.2.2 of the DEIS makes statements relevant to both sides of the Ohio River that are not addressed in the DEIS. Both sides of the river have undertaken efforts to slow or stop the decline of downtown population. This fact is ignored in the balance of the DEIS, and the effects of alternatives on downtown revitalization efforts are overlooked.

Response: *Section 2.2.2 of the DEIS noted that downtown Louisville and Jeffersonville are expected to see healthy employment growth through 2025, but that some loss of population in those areas is projected. Meanwhile, both employment and population are expected to grow at moderate to high rates in eastern Jefferson County and southeastern Clark County. Section 2.2.2 also notes that such growth is generally consistent with locally adopted land use plans, except that land use planners in both Jefferson and Clark counties have indicated their desire to slow or reverse the rate of population decline in the downtown areas. The socioeconomic analysis contained in Section 5.1 indicates that the construction of one or more new bridges across the Ohio River is not likely to significantly affect population or employment levels downtown or impede downtown revitalization efforts. Some commenters have disagreed with the conclusions of this analysis and argue that an eastern bridge will harm downtown revitalization efforts and cause urban disinvestments. However, the detailed socioeconomic analysis conducted for the project indicates that the accessibility changes brought about by the construction of one or more new bridges will primarily affect population and employment growth rates in far eastern Jefferson County and Oldham County, Kentucky, and in portions of Floyd and southeastern Clark counties in Indiana.*

A.14 Section 2.2.3 focuses its attention on the lack of river crossings as the cause of congestion on the Kennedy Bridge and in the Kennedy Interchange. The data indicates additional bridges will not solve the problem. No bridge will solve the problem without a reconfiguration of the Kennedy Interchange. The discussion should begin with a focus on the Interchange and its problems, which require reconstruction regardless of any other construction, and not merely focus on directing traffic to the east end, which would only be a small percentage of overall traffic.

Response: *Section 2.2.3 states that the lack of viable river crossing options for much of the Kennedy Bridge traffic aggravates the traffic congestion problems on the Kennedy Bridge and in the Kennedy Interchange. Sections 2.2.3 and 2.2.4*

discuss in detail the problems associated with the Kennedy Interchange and the need for improvements to that facility to reduce congestion and safety problems. As noted in Section 2.2.3, the congestion problems on the Kennedy Bridge and in the Kennedy Interchange are interrelated. Numerous factors contribute to that congestion. Notably, all of the “build” bridge/highway alternatives evaluated in the DEIS (including the eastern single-bridge alternatives) included the reconstruction of the Kennedy Interchange, in recognition of the importance of the Kennedy Interchange to the identified traffic problems. The DEIS also evaluated both one- and two-bridge alternatives to determine the effectiveness of one or more new bridges in solving the identified traffic problems, including downtown congestion.

- A.15 The Purpose and Need Statement blurs the distinctive needs underlying the eastern bridge and a rebuild of the Kennedy Interchange along with a parallel downtown bridge.

Response: *See response to Comment A.3 above. The needs underlying consideration of an eastern bridge and a new downtown bridge, as well as reconstruction of the Kennedy Interchange, are interrelated. The performance of the potential transportation solutions and their environmental effects are interrelated. For example, construction of an eastern bridge will affect the traffic demand for a new downtown bridge, and vice versa. Thus, it is both prudent and legally appropriate to present the various needs related to cross-river mobility between Jefferson and Clark counties, and to consider the potential solutions to those needs, in one EIS.*

- A.16 The areas inside the Watterson Expressway (I-264) are not “built out.” There are ongoing efforts to continue economic development within the current City limits. This assumption skews the emphasis of the DEIS to east end traffic problems.

Response: *The DEIS acknowledged ongoing efforts to encourage economic development within the current City limits. However, the areas inside the Watterson Expressway are generally more densely developed and likely cannot support the same amount of population and employment growth as areas outside the Watterson. The socioeconomic projections incorporated in the travel demand model take into account ongoing efforts to revitalize the urban core. However, they recognize the ongoing pattern of growth in the eastern areas, where developable land is more plentiful.*

- A.17 The DEIS overlooks the point that there are more trips through the Kennedy Interchange that do not cross the Ohio River than the trips that do cross the river.

Response: *The information included in the DEIS included all trips passing through the Kennedy Interchange, regardless of whether they were cross-river trips. The forecast of future “no build” conditions in Chapter 2, and the evaluation of “build” alternatives in Chapter 3, were generated using the KIPDA travel demand model and the FHWA’s CORSIM freeway operations computer simulation model. The use of CORSIM allows for an analysis of the operation of the Kennedy Interchange as a whole, including the interrelationship between the performance of individual segments of the interchange and the interchange as a whole. This includes trips through the Kennedy Interchange that do not cross the Ohio River on the Kennedy Bridge. Thus, the evaluation of the Kennedy Interchange reconstruction options in the DEIS took into account the efficiency of travel through the interchange for all travelers, as well as the interrelationship between the performance of the Kennedy Interchange and the Kennedy Bridge.*

A.18 Statements in the DEIS imply that a far greater number of cross-river trips would use a new eastern bridge, rather than the Kennedy Bridge, than is actually the case. Some trips would shift east, but the DEIS’s own analysis indicated that in 1990, only 12.25 % of river crossing trips would have used an eastern alternative, if available, versus 13.33 % of total river crossings in 2025. While it is true that the number of trips will increase, it is also true that an increasing number of trips will continue to utilize the downtown bridges. Based on the DEIS, the number of river crossings downtown would be six times greater than the number of eastern crossings.

Response: *Information on the number of river crossings for each Ohio River bridge under each of the alternatives, including the one- and two-bridge combinations as well as the “no build” scenario, is presented in Section 3.6 and in Table 3.6.2. This information shows clearly how many trips are expected to use a new eastern bridge as opposed to the downtown (I-65) bridges for two-bridge alternatives.*

A19 The Purpose and Need Statement’s emphasis on cross-river trips with a “variety of origins and destinations” is intellectually dishonest. The DEIS demonstrates that the downtown bridges would provide better access to seven to eight times as many cross-river trips as an eastern bridge. The DEIS artificially inflates the significance of the unmet eastern crossing needs as a cause of cross-river problems.

Response: *The Purpose and Need Statement identifies cross-river trips with an eastern orientation as contributing to cross-river mobility needs. The Purpose and Need Statement also identifies other factors, such as inefficient cross-river mobility for existing and future population and employment growth and the need for additional cross-river rerouting opportunities, which support the evaluation of eastern bridge options. The interrelationship between*

downtown and eastern travel needs and potential solutions to address those needs supports the consideration of those solutions in one EIS. Thus, the DEIS evaluated various one- and two-bridge combinations. This approach allowed for an evaluation of the relative improvements afforded by the various downtown and eastern bridge options, as well as combinations thereof. The results of that analysis are presented in Chapter 3 and demonstrate that an eastern bridge creates significant travel efficiencies and contributes to a decrease in congestion downtown.

- A.20 The DEIS's use of percentages in the presentation of increases in cross-river trips with eastern origins and destinations is misleading. The increases are measured against a relatively small base, and the use of percentages appears to be intended to emphasize the need for an eastern bridge and de-emphasize the need to correct the downtown traffic problem.

Response: *See responses to Comments A.6, A.18, and A.19.*

- A.21 Section 2.2.2 of the DEIS presents information that is inaccurate and inconsistent, based on the al Chalabi Group report. The high growth areas in the east are the main focus of the text, and there is no acknowledgement of the high employment growth and increased travel demand in downtown. This may be caused by the al Chalabi Group's incorrect conclusions that holding capacities in Jefferson County will soon be reached, and that growth will shift to Indiana as a result of a lack of capacity in Kentucky.

Response: *Section 2.2.2 contains considerable information on growth forecasts and land use plans for downtown, as well as areas in the east. This section notes that population in the downtown areas is expected to continue to decline—although employment in the downtown area is expected to grow significantly through 2025. The conclusions regarding “holding capacities” in the City of Louisville, which are included in the Socioeconomic Baseline Report and incorporated in the DEIS analyses, are based on the input received from local government planners through the KIPDA consultation process. The socioeconomic forecasts derived from those conclusions were reviewed and approved by KIPDA, the Metropolitan Planning Organization for the Louisville metropolitan area.*

- A.22 The DEIS indicates that major construction could cause delays because there are no alternative river crossings. This discussion ignores how the various reconstruction options for the Kennedy Interchange could and would ameliorate the current problem.

Response: *Reconstruction of the Kennedy Interchange is expected to contribute to a reduction in congestion and improvements in safety. This may in turn reduce the number of incidents and help to reduce the severity of delays caused by*

incidents and construction. However, any incident or construction on or in the vicinity of the Kennedy Bridge still could cause congestion and delays in cross-river traffic, and the adverse effects of such delays on cross-river mobility could be aggravated by the lack of any alternative upriver crossing. The adverse effects could be particularly severe in the event of major construction on the Kennedy Bridge and/or its major approaches, including the Kennedy Interchange. Additional river crossing options would help to reduce the concentration of cross-river traffic, and the resulting dependency, on the limited number of current crossings.

- A.23 The “purpose” definition of the project, to “improve cross-river mobility,” is meaningless because the purpose of all bridges is to improve cross-river mobility.

Response: *The comment is correct, in that bridges generally will improve cross-river mobility, and most, but not all, of the options evaluated in the DEIS would rely on bridges to improve mobility across the Ohio River. Most other possible methods for improving mobility across the river, such as ferries, are relatively impractical in light of the existing and forecast travel demand. However, the DEIS evaluation included a variety of measures that could be combined to achieve the overall purpose of the project, including additional general purpose freeway lanes, additional mass transit, and bicycle and pedestrian facilities. In addition, some of the options presented in the DEIS (e.g., Transportation Demand Management measures) would not necessarily require additional bridges, insofar as they are designed to decrease travel demand. The preliminary alternatives screening process (described in Section 3.3) demonstrated that none of the non-bridge/highway options on its own would be sufficient to address the cross-river mobility needs identified in the Purpose and Need Statement. In order to improve cross-river mobility, enhanced bridge capacity is needed. Thus, with the exception of the Transportation Management and No Action Alternatives, all of the alternatives evaluated in detail included one or more new bridges with additional freeway lanes across the Ohio River. Nevertheless, elements of the non-highway options were included in each of the bridge/highway alternatives evaluated in the DEIS.*

- A.24 The only justification for considering an eastern bridge is the relocation of jobs, not any job creation.

Response: *The consideration of an eastern bridge was not based on potential job creation. Rather, the consideration of alternatives was based on an evaluation of the transportation need factors identified in Chapter 2: inefficient cross-river mobility for existing and future population and employment growth; traffic congestion; traffic safety; inadequate cross-river system linkage and freeway rerouting opportunities; and locally-adopted*

transportation plans. Moreover, the DEIS did not purport to forecast the creation of any new jobs as a result of the construction of one or more new bridges across the Ohio River. There was no analysis to determine whether a new bridge or bridges would cause additional job or population growth. Projecting growth as a direct result of a transportation project is subjective and highly controversial. Such an analysis was not needed to evaluate options to create a more efficient cross-river transportation system. However, the effect of the Project alternatives on the distribution of population and employment in the metropolitan area was evaluated and presented in Section 5.1 and is summarized in Tables 5.1.1 through 5.1.3.

A.25 An east end bridge is needed because of the already-existing rapid development in northeast Jefferson County.

Response: *The historical and predicted high growth rates in eastern Jefferson County and southeastern Clark County were identified in Section 2.2.2 as contributing to the need for improvement in cross-river mobility and enhanced network efficiency, especially in the eastern portion of the metropolitan area. The construction of an eastern bridge was identified as an alternative, or part of an alternative, to address those needs.*

A.26 An east end bridge to connect I-265 in Kentucky and Indiana is needed to make Louisville a “major-league” city and to give the city a future.

Response: *Chapter 2 identifies the needs related to the improvement of cross-river mobility in the metropolitan area. Those needs include the improvement of efficient cross-river mobility for the high growth areas of eastern Jefferson and Clark counties and the provision of additional cross-river system linkage and freeway rerouting opportunities, as well as the reduction of congestion and safety problems. Based on those needs, and as described in detail in Chapter 3, an eastern bridge was identified as one of the alternatives for improving cross-river mobility and addressing the identified transportation needs.*

A.27 There is no need to build an east end bridge simply because I-265 on both sides of the river lines up at that point.

Response: *While the simple fact that the two ends of I-265 line up on either side of the Ohio River is not a sufficient justification to consider constructing an eastern bridge, the provision of efficient cross-river system linkage and the enhancement of the substantial investment in the metropolitan area’s circumferential freeway system are legitimate factors to consider in evaluating improvements to cross-river mobility. In addition, the provision of alternate cross-river freeway rerouting opportunities is a legitimate transportation need, in light of the limited existing freeway crossings,*

particularly in the eastern portion of the metropolitan area. Thus, the existing portions of I-265 (actually, KY 841 in Kentucky and State Road 265 in Indiana) are relevant considerations in identifying the best solution to the identified cross-river mobility needs. To that end, Chapter 3 describes how an eastern bridge was identified as one of the alternatives for consideration in addressing the project's purpose and need.

- A.28 The need for the bridge is automobile-driven. There are other factors more important to our lives that should be taken into account.

Response: *Chapter 2 identifies the transportation needs that FHWA, INDOT, and KYTC are attempting to address through the proposed action. Many of those needs are related to automobile traffic in the metropolitan area. The purpose of the NEPA process and the preparation of an EIS are to evaluate alternative solutions to the identified transportation needs in light of numerous other important factors, including environmental, social, and community impacts. The information presented in the FEIS provides a basis for the balancing of those various public interests, including providing an efficient transportation system and protecting the natural and human environment of the metropolitan area. FHWA has identified the Preferred Alternative as the best option for balancing those interests.*

- A.29 The needs of the many who rely on spaghetti junction and I-65 should outweigh the needs of business owners who want an East End bridge to improve access to their facilities. Improvement of the junction and I-65 will help those businesses as well as the driving public.

Response: *Chapter 2 identifies several needs related to cross-river mobility and the improvement of the metropolitan area's transportation system. Those needs include reducing congestion and improving safety, especially in the Kennedy Interchange. Those needs also include providing additional cross-river system linkage and additional cross-river freeway rerouting opportunities, as well as providing more efficient cross-river mobility for the high growth areas of eastern Jefferson and Clark counties. The long-range transportation plan for the metropolitan area currently calls for two new Ohio River bridges, one downtown and one in the east, along with a reconstruction of the Kennedy Interchange, to address these needs. The purpose of the EIS is to evaluate various alternatives for addressing those needs, including various one- and two-bridge alternatives. Section 3.7 describes the rationale for the selection of the Preferred Alternative, which includes two new bridges and a reconstruction of the Kennedy Interchange.*

- A.30 An East End bridge is needed since it makes no sense for residents of that area to come into town to cross the bridge.

Response: *The FEIS demonstrates this need. The lack of any Ohio River bridge in the eastern portion of the metropolitan area has been identified as one of the needs to which this action should respond. That lack places additional traffic pressure on the downtown crossings and makes travelers with eastern origins and/or destinations vulnerable to accidents or incidents in the downtown area. Completion of the eastern portion of the I-265 “outer belt” would result in a significant enhancement to network efficiency. Reduced user costs totaling \$1.6 billion over 20 years would accrue as a result of implementation of the Preferred Alternative.*

A.31 Without new bridges, a few well-placed accidents will halt traffic in all directions.

Response: *The proposed eastern bridge will help address the problem of crashes and provide additional river crossing options. The lack of cross-river freeway rerouting opportunities as identified in Section 2.2.5 as one of the needs to which this action should respond. The current concentration of traffic on the Kennedy Bridge and in the Kennedy Interchange makes the cross-river transportation vulnerable to accidents and incidents in the downtown area. In addition, Kennedy Interchange congestion can impede movements on I-65, I-64, and I-71.*

A.32 “Consistency with local transportation plans” is fatally flawed as an Evaluation Criteria.

Response: *Providing consistency with locally adopted transportation plans is a legitimate consideration in evaluating potential solutions to the metropolitan area’s cross-river transportation needs. As described in more detail in Section 2.2.6, the local jurisdictions, through the transportation planning process of KIPDA, the local Metropolitan Planning Organization, have spent years evaluating potential solutions to the area’s cross-river mobility needs. Three decades of evaluation, culminated by a Major Investment Study, led to a local consensus concerning the best solution to the area’s cross-river mobility needs, which has been formally adopted as part of the area’s long-range transportation plan. The consistency of various alternatives with that local consensus, as evidenced in the long-range transportation plan, is a legitimate consideration in evaluating solutions to the transportation needs identified in Chapter 2. The CEQ NEPA regulations, 40 C.F.R. § 1502.16(c), specifically require that an EIS examine possible conflicts between the proposed action and the objectives of regional and local land use plans, policies, and controls for the area concerned. The fact that the proposed federal action is not in conflict, but is consistent, with local transportation plans is of high importance.*

A.33 No city the size of Louisville has only two bridges across the Ohio.

Response: *The FEIS does not identify whether any other city the size of Louisville has only two cross-river bridges. However, the needs identified in Chapter 2, along with many years of careful study, indicated that one or more additional bridges across the Ohio River are necessary to address the long-term cross-river mobility needs of the Louisville metropolitan area. The information presented in Chapter 3 demonstrates that two new bridges are needed to satisfy those needs.*

A.34 There is no need for an East End bridge.

Response: *Section 3.6 provides information that indicates that an East End Bridge will make the metropolitan transportation system operate more efficiently. See Responses to Comments A.4, A.6, A.8, A.9, A.24, and A.27 above for additional information.*

A.35 The DEIS approach to the evaluation criterion “traffic safety problems that hinder cross-river mobility” is problematic. Relegating traffic safety problems to “tight roadway geometry and narrow shoulders” is too narrow a focus. It ignores accidents related to speed, tailgating, alcohol and drugs, youthful and inexperienced drivers, and a host of other factors. Before investing in road improvements on the basis of “safety” factors, we need to know the root cause of accidents, which has not been determined.

Response: *The existing Kennedy Interchange and Kennedy Bridge suffer from demonstrable design deficiencies that contribute to safety problems, including increased crash rates. Those deficiencies include poor roadway geometry and inadequate shoulders, as well as weaving sections and left hand entrance/exit ramps. Section 2.2.4 provides additional information on the documented safety problems associated with these design features. The commenter is correct that other factors also contribute to crashes, and that remedying the problems identified in Chapter 2 will not eliminate all crashes. However, these safety problems clearly increase the risks for drivers on the affected facilities and can be addressed reasonably through the proposed improvements. The agencies’ inability to entirely eliminate safety risks is not a reason to avoid addressing those risks that it can reduce.*

B. Alternatives Identification and Evaluation

B.1 Bicycle and pedestrian alternatives were not fully evaluated.

Response: *The regional plans for non-motorized facilities in Jefferson and Clark Counties were reviewed at the outset of the development of project alternatives. It was concluded that bicycle and pedestrian improvements alone would not satisfactorily address the project’s purpose and need because they would not significantly reduce projected vehicle demand for Ohio River*

bridges or address geometric roadway deficiencies of the Kennedy Interchange. Section 3.2.2. However, the bridge/highway alternatives evaluated in the Draft EIS were developed to incorporate and/or be compatible with planned non-motorized facilities. Both the proposed downtown bridge and the proposed eastern bridge will include bicycle paths/pedestrian walkways connecting with existing or proposed non-motorized facilities on both sides of the Ohio River. Cross-river bicycle and pedestrian access downtown also would continue to be provided by the Clark Memorial Bridge, as well as the proposed connection on the redeveloped Big Four Bridge.

- B.2 Current non-motorized options available are not ADA compliant. This comment was made mostly with reference to the narrow sidewalks on the Clark Memorial (U.S. 31) Bridge.

Response: *The Clark Memorial Bridge is on the National Register of Historic Bridges. As such, any modification, such as the widening of the sidewalks, would be difficult at best or, more likely, prohibited. Bicycle/pedestrian facilities will be placed on both the downtown bridge and the eastern bridge, including approach designs that will be ADA compliant. (See Section 3.2.2.) See also Response to Comment B.1 above.*

- B.3 FHWA Guidelines allow an investment of up to 20 % of a project's budget in bicycle and pedestrian improvements.

Response: *The proposed bicycle/pedestrian facilities on the downtown and eastern bridges are examples of projects that could be considered under these guidelines. Other bicycle and pedestrian improvements can be considered during the final design process. See Response to Comment B.1 above.*

- B.4 Traffic Demand Management (TDM) and Transportation Systems Management (TSM) alternatives were not fully evaluated.

Response: *Several TSM and TDM improvements were considered during the initial screening process. (See Sections 3.2.2 and 3.2.3.) A Travel Management Alternative comprised of selected improvements that survived the initial screening process was developed. (See Sections 3.3.6 and 3.5.2.) However, as demonstrated in Chapter 3, the Travel Management Alternative would not satisfactorily meet the project's purpose and need as a stand-alone alternative. Nevertheless, the elements of the Travel Management Alternative, including expanded employer-based trip reduction programs, expanded Intelligent Transportation Systems applications, non-motorized facility enhancements (pedestrian and bicycle paths), expanded incident management programs, and enhanced cross-river bus service, were integrated with all bridge / highway alternatives evaluated in the Draft EIS.*

- B.5 Proposed improvements should accommodate future provision of HOV facilities.

Response: *The provision of HOV lanes was investigated and dismissed in the initial screening of alternatives. (See Sections 3.2.2 and 3.2.3). KIPDA's long-range transportation plan includes HOV lanes on I-64 between I-265 (the Gene Snyder Freeway) and the Kennedy Interchange. However, KIPDA has determined that HOV lanes are not possible on I-65 as a result of geometric constraints. Because of the lack of sufficient HOV systems in the vicinity of the project, HOV lanes were not incorporated in the project alternatives.*

- B.6 Rail transit alternative(s) were not adequately identified or analyzed.

Response: *Two cross-river rail transit alternatives serving the project area were developed and subjected to detailed analyses in the initial screening process. (See Sections 3.2.4 and 3.3.4.) Their specifications and subsequent analyses were performed in accordance with guidelines used by the Federal Transit Administration to evaluate rail transit funding proposals. As described in detail in Section 3.3.4, the initial screening analysis determined that the rail transit alternatives would not sufficiently meet project purpose and need, and should not be carried forward for further evaluation in the Draft EIS. Ridership projections for both the single-line and three-line rail alternatives evaluated in Section 3.3.4 demonstrated that neither option would generate sufficient additional cross-river transit trips to provide a substantial improvement in cross-river mobility, and the high cost of both alternatives (\$329 to \$948 million) foreclosed their inclusion in any of the Draft EIS alternatives. Instead, the inclusion of enhanced bus service with each of the bridge/highway alternatives was recommended as the most cost-effective mass transit alternative.*

- B.7 Proposed roadway improvements should not preclude future transit options.

Response: *The future implementation of a cross-river light rail line on the Clark Memorial Bridge, the routing of preference indicated by the Transit Authority of River City (TARC), has not been precluded by any of the conceptual designs of the downtown highway/bridge alternatives. The Preferred Alternative will be designed to avoid foreclosing future cross-river transit options to the extent practicable and foreseeable.*

- B.8 If the need for an eastern bridge is based on current and projected jobs deficits in some areas, or is to stimulate residential or commercial development, then a non-transportation sector alternative must be evaluated.

Response: *The need for the eastern bridge is not based on current and projected jobs deficits or a need to stimulate development. As stated in Chapter 2, the*

purpose of the project is to improve cross-river mobility between Clark County, Indiana, and Jefferson County, Kentucky. The primary needs relate to providing more efficient cross-river mobility for existing and planned growth in population and employment; alleviating traffic congestion; improving traffic safety; providing cross-river system linkage and freeway rerouting opportunities; and achieving consistency with locally-adopted transportation plans.

- B.9 The DEIS does not prioritize funding and construction between the downtown and eastern bridges. Funding and construction prioritization must be addressed as part of the “hard look” requirement of NEPA. Which bridge will be built if there is only enough money for one?

Response: *The Financing Options Document is available at the local project office. This report discusses the staging of construction for the project over the 2007-2020 time period and the associated revenues needed to support the project. A possible funding strategy is presented, along with a menu of techniques for managing the requisite cash flow.*

The Preferred Alternative includes two bridges and a reconstruction of the Kennedy Interchange, and the project sponsors intend to proceed with all elements of the Preferred Alternative as expeditiously as possible. The precise construction schedule will be dictated by complex considerations of funding availability and engineering requirements. A single-bridge alternative has not been selected as the Preferred Alternative. Any significant change in the Preferred Alternative (such as the decision to build only one new bridge), after the issuance of a Record of Decision, would require the reopening of the NEPA environmental review process.

- B.10 The DEIS implies that an eastern bridge will be built first. This tiering of construction does not seem to be justified given the (downtown) safety and capacity concerns identified in the DEIS. Moreover, there is no true regional consensus that an eastern bridge deserves first priority. The eastern bridge is not needed as an alternate route during construction of a downtown bridge. Previous studies have shown that an eastern bridge would not divert a substantial volume of traffic from the Kennedy Bridge, and that the Kennedy Interchange can be rebuilt under traffic conditions.

Response: *There was no implication in the DEIS that an eastern bridge should be built first or that there exists any regional consensus concerning the construction of an eastern bridge first. Construction of the two new Ohio River bridges does not necessarily have to proceed in a strictly sequential manner. Staging of construction of the various elements of the Preferred Alternative is discussed in the Financing Options Document, which is available for viewing at the local project office. It provides for constructing both bridges at the same*

time. It is anticipated that the I-265 bridge will open in 2014 and the new downtown I-65 bridge will open in 2020. The eastern bridge will provide redundancy in the metropolitan freeway system as the downtown bridge is completed.

- B.11 There was no analysis of downtown streets to determine if they could accommodate future traffic projected for bridge alternatives.

Response: *The estimated cost of the downtown bridge and Kennedy Interchange relocated south is approximately \$934.9 million. A Cost Estimate Review was accomplished on March 18-19, 2003 to refine the estimate and incorporate the cost of mitigation and contingencies. The updated costs are summarized in Section S.2.3 and the associated reference documents that demonstrate that the States have a reasonable strategy to finance the project. This strategy can be found in the Financing Options document which is available at the local project office.*

- B.12 The Kennedy Interchange reconstruction that is proposed with all eastern single-bridge alternatives should be presented.

Response: *Two Kennedy Interchange reconstruction options (In-Place and Relocated South) were developed for each of the alternatives evaluated in the DEIS (both one- and two-bridge alternatives). The two Kennedy Interchange reconstruction options (In-Place and Relocated South) presented for the C-2 (Ninth Street) Alignment (as shown in Appendix A.4) also would be coupled with any eastern single-bridge alignment to comprise the respective complete eastern Single Bridge/Highway Alternative. See Page 3-18 in Section 3.2.5, which has been clarified with respect to this point.*

- B.13 The presentation of impacts and construction costs of the alternatives is confusing, especially when two-bridge alternatives are considered.

Response: *The impacts and construction cost information for each alternative were presented separately in the Draft EIS for bridge crossing alignments and the Kennedy Interchange reconstruction options. This led to some confusion among readers when attempting to combine the impacts and costs of the single-bridge alternatives to determine the impacts and costs for the two-bridge alternatives. Combined impact and cost information for the Preferred Alternative (Alignments A-15 and C-1, with Kennedy Interchange Relocated South) has been added to the appropriate tables.*

- B.14 Maintenance costs are not presented for Highway/Bridge Alternatives.

Response: *The differences in maintenance costs of highway/bridge alternatives would not be enough to be a discriminator among them except when considering the*

maintenance of a long tunnel underneath the Ohio River. Similarly, when compared to the capital costs of the alternatives, maintenance costs are relatively small and not a significant consideration when evaluating alternatives. The Kentucky Transportation Cabinet estimates that annual maintenance costs for the existing Ohio River bridges range from \$150,000 to \$200,000 per bridge. This compares to an approximate \$100 million capital cost for a new Ohio River bridge structure. Thus, the decision whether to build one or two new bridges, including the consideration of likely costs, would not be substantially altered by the relatively small maintenance costs associated with any new bridges.

B.15 A trans-Ohio River tunnel was not given an adequate assessment.

Response: *As related in Section 3.3.5, an east end Ohio River tunnel alignment was considered in the initial screening of alternatives. Preliminary horizontal and profile alignments were developed. The tunnel option was estimated to cost \$1.2 billion to construct, or up to three times the estimated cost of the other bridge/highway alternatives in the Near East and Far East corridors. A cross-river tunnel also would have higher operating and maintenance costs than a bridge. Thus, the excessive cost of this option as compared to comparable bridge alternatives in the same corridor was determined to constitute a “fatal flaw,” and a trans-Ohio River tunnel was not carried forward for evaluation in the Draft EIS.*

B.16 Why were reversible lanes eliminated from consideration with most alternatives, but included on the Kennedy Bridge as part of the C-2 Alternative?

Response: *Reversible lanes were previously recommended by KIPDA for the Clark Memorial Bridge, but recently were dropped from the regional transportation plan by the KIPDA Transportation Policy Committee. The addition of reversible lanes on the Clark Memorial would not be feasible because of narrow lane widths and approach constraints. As described in Section 3.3.3, reversible lanes also would only minimally address the purpose and need for the project. Thus, reversible lanes were not carried forward either as a stand-alone option for the Kennedy Bridge or as part of an alternative including a new downtown bridge parallel to the Kennedy Bridge (Alignment C-1 or C-3). However, because Alignment C-2 (the Ninth Street option) would include no improvements to the existing Kennedy Bridge, reversible lane operation would be required on the existing Kennedy Bridge just to achieve peak-hour Level of Service of D (LOS D), which is still less than the desired Level of Service of C (LOS C). Thus, despite the limited desirability of reversible lanes, Alignment C-2 included a Kennedy Bridge peak hour reversible lane option in order to explore the fullest range of possible downtown bridge alternatives in the Draft EIS. This undesirable feature was one, among others, that led to the C-2*

alternative not being selected as the downtown bridge element of the Preferred Alternative.

- B.17 The DEIS does not demonstrate that an eastern bridge would contribute significantly to the economic efficiency of the transportation system for moving freight via trucks. The amount of trucks that might be diverted from the Kennedy Bridge during the morning and afternoon peak hours is likely to constitute about 1.1 % of total Kennedy Bridge traffic and less than 10 % of Kennedy Bridge truck traffic.

Response: *The reduced VMT (Vehicle Miles of Travel) and VHT (Vehicle Hours of Travel) projected for eastern bridge alternatives, when compared to that for the No-Action and Transportation Management alternatives, would accrue to all regional travelers, including commercial vehicles. It is estimated that user costs would be reduced by \$1.6 billion over 20 years for the Preferred Alternative, as compared to the No Action Alternative. See Table 3.6-1 for user cost benefits accrued from each of the alternatives. A reason for the relatively low diversion of peak period commercial traffic is that many truck drivers already choose not to travel on the Kennedy Bridge during peak hours of travel. However, removal of even 10 percent of truck traffic from the Kennedy Interchange is expected to result in a significant improvement in its operation. Finally, while freight movements are part of the purpose and need for this action, they are only a part of the problem and the Preferred Alternative has been identified as the best overall solution to all of the needs identified in Chapter 2.*

- B.18 The DEIS does not demonstrate that the eastern bridge is needed as a hazardous materials interstate route.

Response: *Provision of a hazardous materials route is not specified as a project need or justification. Indiana and Kentucky generally do not designate hazardous materials routes. Metropolitan transportation officials have designated portions of I-65 and I-465 around Indianapolis as a hazardous materials route. In addition, certain types of hazardous materials are prohibited from the Cumberland Gap Tunnel (a non-interstate route) in Kentucky. Any hazardous material route designation in the Louisville metropolitan area would be made in the future, based on input from local jurisdictions, and is not part of the Preferred Alternative.*

- B.19 There is no justification for construction of either the proposed Frankfort Avenue/I-71 Interchange or the extension of Witherspoon Street to Frankfort Avenue.

Response: *These roadway improvements were proposed for consideration by the City of Louisville to provide additional access to the redevelopment of the East Main*

Street area and ongoing expansion of the Medical Center complex. Regional access to these areas is limited and requires traversal of congested local streets. Both surface street roadway improvements would address and ameliorate this issue by providing an alternate means of access. Construction of the Frankfort Avenue/I-71 interchange also would provide an additional point of diversion from I-71 in the event of congestion or incidents on I-71 or in the Kennedy Interchange. Currently, there are no interchanges on I-71 between Zorn Avenue and the Kennedy Interchange in downtown Louisville—a distance of 2.7 miles.

- B.20 Some requests were made to provide additional discussion regarding the Kennedy Interchange improvements that would be provided with all eastern bridge alternatives.

Response: *See Response to Comment B.12 above. The Kennedy Interchange would be reconstructed as part of any of the bridge/highway alternatives evaluated in the EIS. The Kennedy Interchange improvements that would have been constructed in combination with each of the eastern single-bridge alternatives would have been the same as those that would have been provided with the Kennedy Interchange improvements for the C-2 alignment. Two options were considered – Rebuild in Place and Reconstruct to the South. Additional text has been provided in Section 3.2.5 (at page 3-18) elaborating on the nature of these improvements. References to Appendix A.4 and the C-2 option graphics have also been included in Section 3.2.5 to clarify that the Kennedy Interchange designs provided for Alignment C-2 also would be used in conjunction with any of the eastern single-bridge alternatives.*

- B.21 There should be more explanation for the Step 1 screening process.

Response: *The Step 1 screening process and results are described in detail in Sections 3.1.2, 3.2, and 3.3. The purpose of the initial screening process was to preliminarily identify those alternatives that would not, or would only minimally, meet the project’s purpose and need or would have a “fatal flaw” associated with them (i.e., engineering feasibility and/or impacts/costs of extraordinary magnitude). See pages 3-2 and 3-3. The preliminary screening was done in several ways. Experiences of implementation of travel management actions in both Louisville and other parts of the country were reviewed to estimate their travel demand impact in the project area. Travel demand and cost estimates were made for mass transit alternatives, including light rail and enhanced bus service. Travel demand estimates were prepared for new bridge crossings in several potential river crossing corridors. Cost estimates were prepared for all of the options, including the proposed Ohio River tunnel crossings. Based on this review, only those alternatives that had a reasonable likelihood of contributing substantially to a solution to the project’s purpose and need—either individually or in combination with other*

alternatives—were carried forward for detailed analysis in the Draft EIS. (Alternative alignments within each of the bridge/highway corridors carried forward out of Step 1 were evaluated further in Step 2 to identify a reasonable range of river crossing alignment options to evaluate in the Draft EIS. That evaluation is described in Section 3.4.).

- B.22 The DEIS failed to consider a viable alternative that would satisfy true cross-river mobility needs without the adverse indirect and cumulative effects associated with most of the DEIS alternatives: (1) construction of a new downtown bridge; (2) reconstruction of the Kennedy Interchange; (3) revitalization of the urban core; (4) arterial improvements; and (5) transit improvements. Federal transportation legislation emphasizes preservation and management of existing highway systems over the construction of new highways.

Response: *Each of the Single Bridge/Highway Alternatives in the Downtown Corridor (C-1, C-2 and C-3) was comprised of elements 1, 2, 4, and 5 listed above. The impact of these transportation system improvements upon the urban core (element 3) was explicitly considered when determining the socio-economic impacts of alternative bridge locations and combinations. Those components also were included in the two-bridge alternatives.*

- B.23 The full diamond interchange proposed at U.S. 42 for alignments A-13 and A-15 will cause increased traffic in Bridgepointe and on Wolf Pen Branch Road. This increase in traffic will degrade property values. A one-way interchange should be chosen.

Response: *The Preferred Alternative does not include a full diamond interchange at U.S. 42. A partial diamond interchange—with access to and from KY 841 in the direction of I-71 in Kentucky—is included in the Preferred Alternative. As explained in Section 3.7.2, a full diamond interchange at this location would have had significant adverse effects on Wolf Pen Branch Road and adjacent areas. Construction of that interchange would require a connection at Wolf Pen Branch Road southeast of U.S. 42 and the improvement of Wolf Pen Branch Road to five lanes (from its current two lanes) from the interchange to its intersection with U.S. 42. The expansion of Wolf Pen Branch Road in this location would have substantial impacts on adjoining residential areas and would cause a dramatic increase in traffic on this stretch of road. It also likely would increase development pressure on the undeveloped land along Wolf Pen Branch Road between the new interchange and U.S. 42. Public input from area residents also overwhelmingly opposed this full interchange option and supported construction of a partial interchange that would maintain the existing access. For all of the foregoing reasons, a full diamond interchange was not included in the Preferred Alternative.*

B.24 Alignments A-13 and A-15 could create a danger of hazardous materials spills near the Bridgepointe subdivision, which would be compounded by the proposed tunnel. Hazardous materials transportation should be banned along an eastern bridge, and strict speed limits should be enforced, perhaps with cameras.

Response: *Designation of a hazardous materials route, or prohibition of hazardous materials on the eastern bridge and highway, has not been included in the Preferred Alternative. See also Response to Comment B.18 above. Enforcement of posted speed limits on the new bridge and roadway would be the responsibility of state and local law enforcement authorities. Designing the highways and bridges to meet AASHTO standards would reduce the chances of hazardous materials spills.*

B.25 The Purpose and Need Statement justifies a two-bridge solution, and the best alignments are A-13 and C-1. Alignment A-13 does not introduce undesirable curves (as do other eastern alignments); it is least disruptive to the community because it is the most direct route across the river; it maintains current interstate access via a partial interchange; it helps to preserve the rural character of the area through the inclusion of a tunnel under the Drumanard property; it provides the most beneficial noise mitigation because KY 841 would be depressed; and it reduces visual effects on adjacent neighborhoods. Construction of an eastern bridge is consistent with all earlier studies and is consistent with community consensus obtained after ORMIS.

Response: *The Preferred Alternative includes a Two Bridges/Highway Alternative consisting of Alignments A-15 and C-1, along with Kennedy Interchange Relocation to the South. Alignment A-15 was selected over Alignment A-13 because of its minimization of impacts to communities on the Indiana side of the Ohio River. The impacts of Alignments A-15 and A-13 on the Kentucky side of the river are largely the same. A complete explanation for the identification of the Preferred Alternative is provided in Section 3.7.*

B.26 The DEIS adequately supports the conclusions reached by ORMIS several years ago that two bridges plus reconstruction of the Kennedy Interchange are needed to support future transportation needs. The bridges themselves will not resolve the problems with the Kennedy Interchange. A full reconstruction of the Kennedy Interchange with a new bridge parallel to the existing Kennedy Bridge is necessary to resolve the current congestion in downtown Louisville.

Response: *The Preferred Alternative includes the reconstruction of the Kennedy Interchange and a new bridge parallel to the existing Kennedy Bridge, as well as an eastern bridge between Utica, Indiana, and Prospect, Kentucky. Data presented in Section 3.6 demonstrate that the implementation of the Preferred*

Alternative will alleviate the current congestion on the Kennedy Bridge and in the Kennedy Interchange.

- B.27 Alignment B-1 will not fulfill the purpose and need of the project, and will create a new area of traffic congestion at the confluence of I-265, I-264, and I-71, and may present new air quality problems.

Response: *Alignment B-1 is not part of the Preferred Alternative. An explanation for the rejection of Alignment B-1, and the selection of Alignment A-15 for the eastern bridge component of the Preferred Alternative, is provided in Section 3.7.2.*

- B.28 Alignments A-9 and C-1 are at river crossing locations not previously approved by the U.S. Coast Guard. The U.S. Coast Guard will need to review those crossings and pier placements to determine if they are acceptable.

Response: *Since the publication of the Draft EIS, the U.S. Coast Guard has reviewed the river crossings on Alignments A-9 and C-1 crossings and provided clearance requirements for both locations. Both locations were found acceptable for use. The Alignment C-1 crossing would require consideration of three additional issues: visibility of the Kennedy Bridge for marine traffic; span and pier placement relative to the existing piers; and computer modeling for marine traffic. These conditions as well as all other requirements placed on any of the crossing locations would be resolved during the development of bridge construction plans. See Appendix E, U.S. Coast Guard letters dated February 12, 2002; April 11, 2002; and May 9, 2002.*

- B.29 An eastern bridge would be favorable to the Department of Defense because it will allow deployments from Colorado and Kansas to Hampton Roads, Virginia, to avoid recurring and non-recurring downtown congestion. The project will affect the Strategic Highway Network because any additions to the interstate highway network will be included in the Strategic Highway Network.

Response: *An eastern bridge along Alignment A-15 is included in the Preferred Alternative.*

- B30 The DEIS should have analyzed the impacts of reconstruction of the Kennedy Interchange separate from the other alternatives. This would allow the public to better assess the role of the Kennedy Interchange and how each alternative affects the transportation network. Furthermore, an assessment of those effects will help in planning construction phasing.

Response: *The reconstruction of the Kennedy Interchange alone will not adequately meet the project's purpose and need. As such it was not carried forward from the*

Step 1 screening process. However, the reconstruction of the Kennedy Interchange was evaluated in combination with the various one- and two-bridge alternatives evaluated in the Draft EIS to determine the effectiveness of each alternative.

- B.31 The DEIS refers to two options for the Kennedy Interchange reconstruction, but the two Interchange options really present six options because the effects for each will be different depending on the downtown alignment chosen. The discussion of each option should also delineate the design criteria used in the analysis.

Response: *All Single Bridge/Highway alternatives evaluated in the Draft EIS included reconstruction of the Kennedy Interchange because the existing interchange does not meet current design standards. Either Kennedy Interchange reconstruction option (in-place or relocated) can be combined with any single bridge alternative. The environmental impacts of the combination of each bridge alternative with each Kennedy Interchange reconstruction option are presented in Chapter 5 and Table 5.18-1. Both reconstruction options conform to AASHTO urban freeway design standards. These standards are available for review at the local project office. The relocation option would provide safety benefits over the in-place option from the elimination of left-hand entrances/exits and the consequent elimination of weaving movements.*

- B.32 Step 1 screening indicates that the rebuild of the Kennedy Interchange is only a partial solution, and does not “stand alone.” However, the bridge alternatives also do not “stand alone” because they all include a rebuild of the Kennedy Interchange. Thus, no bridge alone supports purpose and need. The addition of the Kennedy Interchange reconstruction does not provide an accurate reflection of each individual bridge’s impact on purpose and need.

Response: *All of the “build” bridge/highway alternatives—excluding the No Action and Transportation Management alternatives—include the reconstruction of the Kennedy Interchange. No bridge alternative alone, without the inclusion of the Kennedy Interchange reconstruction, meets the project purpose and need. Thus, no bridge alternatives were evaluated in detail in the DEIS without the inclusion of the Kennedy Interchange reconstruction. The different impact of each bridge alternative on purpose and need can be evaluated by comparing the various bridge/highway alternatives. For example, the additional benefit provided by an eastern bridge (versus a downtown bridge alone) can be determined by comparing the downtown Single Bridge/Highway alternatives with the Two Bridges/Highway alternatives. The inclusion of the Kennedy Interchange reconstruction with each of the bridge/highway alternatives does not prevent this comparison of the different bridge options.*

- B.33 The remaining Step 1 analysis treats the bridge alternatives differently from a Kennedy Interchange reconstruction. The analysis of bridge alternatives against the four “need factors” is less objective and more general. Plus, the alternatives are not treated individually and are in one narrative comparing the various alternatives. There should have been more specific descriptions of how each relates to purpose and need.

Response: *The Step 1 screening of alternatives was performed to determine whether individual alternatives were likely to contribute significantly to a solution to the five need factors identified in Chapter 2, either individually or in combination with other alternatives. Sufficient detail was provided with respect to each alternative to determine whether it was likely to contribute to a solution to the Project’s purpose and need. Greater detail about the relation of each alternative to purpose and need is provided in Chapter 3.*

- B.34 The analysis of consistency with local transportation plans is biased toward the eastern alignments as completing the circumferential freeway system, with the downtown bridges’ consistency with local plans treated as an afterthought.

Response: *Only the construction of two new bridges (one downtown and one in the Far East corridor), with a reconstruction of the Kennedy Interchange, is fully consistent with the locally adopted transportation plans. Either bridge alone only partially satisfies those plans. Thus, an eastern bridge is not “more consistent” with local transportation plans than a downtown bridge, and vice versa. The text in Section 3.6.4 of the Final EIS has been modified to clarify this analysis.*

- B.35 Table 3.3-1 shows results that are not substantiated, including measures identified for the Far East, Near East, Downtown, and Kennedy Interchange alternatives for population and employment growth, traffic congestion, and traffic safety. Rather than receiving medium marks for all of these categories, the Downtown and Kennedy Interchange alternatives should have received high marks.

Response: *The results shown in Table 3.3-1 reflect preliminary assessments of the potential for individual alternatives to address the components of purpose and need, as well as whether any alternatives had a “fatal flaw.” The rationale provided for the “marks” of the alternatives considered in the initial screening and summarized in Table 3.3-1 is given in Section 3.3. These assessments were based on preliminary information and were not intended to serve as the final evaluation of any alternatives for the purposes of selecting a Preferred Alternative. The Step 1 screening process served simply to determine which alternatives should be carried forward for detailed evaluation in the Draft EIS. Although the downtown bridge alignment and Kennedy Interchange reconstruction were given “medium” or “low” scores*

for growth, traffic congestion and traffic safety in this preliminary evaluation (because each, on its own, would only partially address those needs), they nevertheless were carried forward into the Draft EIS because of their potential to contribute meaningfully to an overall solution to the needs identified in Chapter 2. The detailed evaluation of those alternatives and their ability to satisfy the Project's purpose and need is provided in Sections 3.6 and 3.7. Table 3.6-6 presents a summary of the performance of each of the alternatives evaluated in detail in the EIS and reflects the expected performance of the combination of elements included in each alternative. Based on that detailed evaluation, a new downtown bridge and the reconstruction of the Kennedy Interchange (relocated) are part of the Preferred Alternative, as described in Section 3.7, in part because of their contributions to meeting the needs listed above.

- B.36 In Step 2 Screening, the DEIS expressed concern that Alignment C-1 may have an impact on Clark Memorial Hospital. However, all downtown alignments appear to have similar impacts near the hospital. The DEIS should determine whether there are other impacts on Clark Memorial Hospital.

Response: *The C-1 and C-3 alignments would take the westerly portion of the parking lot and access roadway of Clark Memorial Hospital. The C-2 alignment would take half of the roadway west of the parking structure. This latter taking would require that the roadway be limited to one-way traffic operations.*

- B.37 Tables 3.6-1 through 3.6-3 are of too poor quality to allow meaningful review of data.

Response: *It is not clear if this comment was intended to refer to Tables 3.6-1 through 3.6-3, or Figures 3.6-1 through 3.6-3. The referenced tables provide various regional and local highway system performance measures to allow for a comparison of the performance of the alternatives. The information is presented in a clear, tabular fashion, with explanation and analysis in the accompanying text. Figures 3.6-1 through 3.6.3 are a graphical representation of the performance of the Kennedy Interchange under various Project alternatives. These figures, which previously depicted the efficiency of traffic flow using color-coded markings, have been revised to depict the projected levels of service for each of the roadway segments in the Kennedy Interchange. The reader now can determine how well the Kennedy Interchange will perform in each scenario by reference to the level of service designations included on these figures.*

- B.38 Table 3.6-4 is inaccurately portrayed in the narrative. Alignments C-1 and C-3 are shown to provide good average speeds in both A.M. and P.M. peak hours, but the narrative states "most alternatives provide average speeds in excess of 45 mph." Alignment C-2, on the other hand, provides average

speeds of 33 and 31 mph, respectively. This Section should reflect that Alignments C-1 and C-3 provide the best speeds.

Response: *The text in Section 3.6.2 has been modified to indicate that A.M. peak operating speeds in the Kennedy Interchange for the eastern and downtown (C-2) single-bridge options are projected to be 33 mph and 31 mph, respectively, compared to speeds of 47 to 49 mph for the other one- and two-bridge options. Afternoon (PM) peak operating speeds in the Kennedy Interchange are comparable for all alternatives (47-50 mph) See Section 3.7.4 regarding the reasons why the relocation of the Kennedy Interchange is preferable to a reconstruction in place.*

B.39 The value of data in Section 3.6.4 on total trip demand from eastern Clark County to eastern Jefferson/Oldham County is unclear, and the presentation of total numbers is misleading because they only demonstrate small increases in the percentage of total cross-river trips. This data should be removed.

Response: *The information presented shows the increase in daily travel between eastern Clark and Jefferson Counties (with an origin of travel in one area and a destination in the other area) under different bridge construction alternatives. Under the No Action Alternative, daily traffic crossing the Ohio River with origins and destinations in eastern Clark and Jefferson counties is projected to increase by about 25,000 trips, or a 125 percent increase, between 1990 and 2025. The vehicle miles of travel (VMT) associated with those trips would increase by about 781,000 miles per day, or a nearly 150 percent increase. Similarly, the vehicle hours of travel (VHT) associated with those trips would increase by about 16,000 hours per day, or about 145 percent. The number of such trips and associated VMT and VHT under any of the downtown Single Bridge/Highway alternatives would be essentially the same as under the No Action alternative. This results in network inefficiencies and longer trip distances and times.*

With the provision of a new eastern bridge (whether alone or in combination with a downtown bridge), the number of trips with an east-east orientation is projected to increase by an additional 11,000 trips per day, or about a 25 percent increase over the No Action levels. Thus, the construction of an eastern bridge would result in more cross-river trips with an east-east orientation. However, vehicle miles of travel (VMT) and vehicle hours of travel (VHT) associated with such trips would only increase by eight to nine percent over the No Action levels. Moreover, the average east-east trip length would decrease by about 13 percent from the No Action scenario to the Preferred Alternative (Far East and Downtown C-1 bridges). Similarly, the average east-east trip duration also would decrease by about 13 percent. This indicates transportation efficiencies attributable to the new bridges.

B.40 The southerly reconstruction of the Kennedy Interchange is preferable to reconstruction in place because of several advantages it presents based on design considerations that are not discussed, such as higher design speed and safety concerns. In addition, it would allow for elimination of the abandoned tank farm and junk yards, for redevelopment of property vacated by the old Kennedy Interchange, improved linkage of Butchertown and the riverfront, and better traffic flow during construction.

Response: *The southerly reconstruction of the Kennedy Interchange has been included in the Preferred Alternative. The reasons for its inclusion are summarized in Section 3.7.4.*

B.41 The southerly reconstruction of the Kennedy Interchange may adversely affect Butchertown, but those effects can be minimized by working with Butchertown residents.

Response: *The potential adverse effects on the Butchertown neighborhood from the southerly reconstruction of the Kennedy Interchange are described in Chapter 5. These include potential impacts to the neighborhood from the increased proximity of the interchange, and in particular, potential adverse effects to historic properties in the Butchertown Historic District. Continued and ongoing coordination with Butchertown residents and merchants will occur as the Preferred Alternative is refined and implemented. Potential mitigation measures for historic property impacts also have been identified and evaluated through the Section 106 consultation process and are documented in the Section 106 Memorandum of Agreement, in Chapter 8. The Butchertown Neighborhood Association has served as a consulting party in the Section 106 process.*

B.42 The City of Louisville supports the Frankfort Avenue (Ohio Street) interchange on I-71, with an extension of Witherspoon Street to Frankfort Avenue. Clay and Adams Streets also should be connected to the new Witherspoon extension and extended to River Road.

Response: *The proposed Frankfort Avenue interchange on I-71 and extension of Witherspoon Street have been included in the Preferred Alternative. Street connections are included for Shelby Street and Campbell Street to provide for connections between Witherspoon Street and River Road. Other connections may be included either to Witherspoon Street from the south or extending through Witherspoon Street and the relocated Kennedy Interchange to River Road, if provide for in the Butchertown Historic Preservation Plan and approved by the Bi-State Management Team after consultation with the Kentucky Historic Preservation Advisory Team. See the Section 106 Memorandum of Agreement, in Chapter 8 for more details.*

- B.43 Even though Alignment C-3 has many of the same benefits as Alignment C-1, it has a more severe impact on residential and commercial properties in Indiana and on recreational facilities in Kentucky.

Response: *Alignment C-1 was chosen as the downtown bridge component of the Preferred Alternative. This selection was based, in part, on the higher residential and commercial property impacts in Indiana caused by Alignment C-3, as well as the greater impacts on Waterfront Park in Kentucky caused by that alignment. The complete rationale for the selection of Alignment C-1 is summarized in Section 3.7.3.*

- B.44 Alignment C-1 is the best downtown alternative in conjunction with a reconstruction of the Kennedy Interchange, based on: direct connection to the Kennedy Interchange; the largest reduction in VMT, VHT, and VHD; sufficient capacity for river crossings; greatest improvement in level of service and traffic safety; lowest cost; only alternative that does not exceed criteria for noise abatement; improved geometrics; impacts fewer parklands, historic and residential properties than Alignment C-2; and impacts fewer commercial properties than Alignment C-2 or C-3.

Response: *Alignment C-1 was chosen as the downtown bridge component of the Preferred Alternative. This selection was based on a variety of factors, including traffic impacts, residential and commercial displacements, environmental justice impacts, costs, and impacts to public parklands and historic properties. The complete rationale for the selection of Alignment C-1 is summarized in Section 3.7.3.*

- B.45 The DEIS makes clear that Alignment C-2 does not address Purpose and Need, and in particular does not address the problems with the Kennedy Interchange. This alignment depends on the use of reversible lanes, which was identified as a fatal flaw. Even with reversible lanes, Alignment C-2 would not operate as favorably as Alignments C-1 and C-3. Alignment C-2 also has numerous problems related to: resolving capacity problems on the Kennedy Bridge; improving congestion; resolving safety problems; substandard grades; visual problems associated with fly-over ramps; traffic and community impacts along Ninth Street in Louisville; changes in access and community cohesion; environmental justice concerns; and parkland, historic property, and noise impacts.

Response: *Alignment C-2 was not selected as part of the Preferred Alternative. Alignment C-1 was determined to be preferable to Alignment C-2 based in part on concerns about traffic impacts to Ninth Street in Louisville, associated community and environmental justice impacts to the neighborhoods near Ninth Street, greater impacts to historic properties and publicly owned parks, greater river navigation clearance issues, and higher costs. The complete*

rationale for the selection of Alignment C-1 over Alignment C-2 is summarized in Section 3.7.3.

- B.46 The two-bridge solution is needed to accommodate future traffic conditions in the region based on providing: a potential diversion route for cross-river travel; additional capacity to meet cross-river demand; greatest reduction in VMT, VHT and VHD; best level of service for each bridge; and best traffic operations within the Kennedy Interchange.

Response: *The Preferred Alternative includes two new Ohio River bridges, including a new downtown bridge parallel to the Kennedy Bridge (Alignment C-1) and an eastern bridge connecting KY 841 and Indiana SR 265 (Alignment A-15), as well as the southerly reconstruction of the Kennedy Interchange (Relocated). The complete rationale for the selection of the Two Bridges/Highway Alternative is summarized in Section 3.7.1.*

- B.47 The City of Louisville declines to comment on a preferred eastern alignment, except to say that a Far East alignment (vs. near east alignment) would provide the greatest benefits with the least residential impacts. The Downtown Development Corporation agreed that an eastern bridge is needed, but will not take a position on the most appropriate route.

Response: *An alignment in the Far East Corridor, Alignment A-15, has been included in the Preferred Alternative. The basis for the selection of Alignment A-15 is summarized in Section 3.7.2.*

- B.48 The DEIS should better identify the TDM, TSM, and mass transit alternatives that are part of the alternatives analyzed. Multiple transportation management alternatives will play a role in future transportation development in the region, and the City of Louisville supports their continuation and expansion.

Response: *The TDM, TSM, and mass transit alternatives evaluated in the initial alternatives screening process are described in detail in Sections 3.2.2 through 3.2.4. The evaluation of which of those alternatives to carry forward into the Draft EIS alternatives is presented in Sections 3.3.2 through 3.3.4. While none of the TDM, TSM, and mass transit alternatives was carried forward as a stand-alone alternative, because of their inability to individually satisfy the Project's purpose and need, several TDM, TSM, and mass transit alternatives were carried forward as part of the Transportation Management, One Bridge/Highway, and Two Bridges/Highway alternatives. Section 3.5 describes the alternatives selected for evaluation in the Draft EIS, and Section 3.5.2 lists the TDM, TSM, and mass transit elements that were included in each of the Bridge/Highway alternatives and the Transportation Management Alternative.*

- B.49 The DEIS is biased toward an eastern bridge and does not fully recognize the importance of the Kennedy Interchange.

Response: *The reconstruction of the Kennedy Interchange has been included in all the bridge/highway alternatives evaluated in the EIS, including the Preferred Alternative, in recognition of its importance in providing a meaningful, long-term solution to the metropolitan area's cross-river mobility needs. The Preferred Alternative also includes both an eastern bridge and a new downtown bridge. The combination of these elements, together with the Transportation Management elements identified in Section 3.5.2, provides the best solution to the identified needs.*

- B.50 The proposed bridges have remarkably few impacts, and any delay in building the bridges would only increase the impacts in the future.

Response: *The Preferred Alternative was selected as the most feasible and prudent alternative that would meet the Project's purpose and need while minimizing environmental impacts to the extent possible*

- B.51 The DEIS Summary does not distinguish between rebuilding the Kennedy Interchange both with and without a parallel I-65 bridge. The effects on the Interchange are different depending on the presence or absence of a parallel bridge, and a fuller discussion of the Kennedy Interchange and the different impacts should be developed. As is made clear from a table in the DEIS, a parallel bridge along with a direct connection to the Kennedy Interchange is the only downtown route that provides a sufficient level of service.

Response: *The analysis presented in Chapter 3 supports this conclusion. The information presented in Section 3.6.2, Table 3.6-4, and Figures 3.6-2 and 3.6-3 describes the effect of the different downtown bridge alignments on the Kennedy Interchange. For example, Table 3.6-4 shows that a single downtown bridge in the C-2 alignment would result in considerably lower morning peak hour average speeds than a single downtown bridge in the C-1/C-3 alignment (31 mph vs. 48 mph). This also results in about three times as much delay and less throughput during the morning peak. However, there is little difference between the effects of the downtown alignments on the Kennedy Interchange in the Two Bridges/Highway Alternatives. As shown on Table 3.6-2, the C-1/C-3 alignment results in much better performance of the Kennedy Bridge than does the C-2 alignment, under either the one- or two-bridge scenario. Alignment C-1 has been included as the downtown bridge component of the Preferred Alternative. The rationale for this selection, including the better traffic performance of Alignment C-1 over Alignment C-2, is summarized in Section 3.7.3.*

- B.52 The DEIS does not explain its conclusion that a reconstruction of the Kennedy Interchange to the south of the existing interchange would be twice as expensive as a reconstruction in place, particularly when management costs for a rebuild in place must be higher than for a rebuild to the south.

Response: *Typical unit costs were applied to major elements of the two Kennedy Interchange options (In-Place and Relocated). Contingencies were added to these estimated construction costs to allow for design and construction management activities. These analyses showed that the Relocated option would be more expensive than the In-Place option because of increased roadway and structure costs (e.g., more roadways and more on structure), as well as additional right-of-way costs. The costs for the Preferred Alternative will be refined as the project is advanced to design and construction.*

- B.53 The DEIS states on page 2-21 that the level of service is poor in the Kennedy Interchange because of weaving movements, but that section does not discuss how a reconstruction could end those weaving movements or the benefits of removing those movements.

Response: *Section 3.5.2 has been expanded, describing in more detail both options for reconstructing the Kennedy Interchange. Both options would improve Kennedy Interchange operations by removing elements such as left hand exits and entrances that cause undesirable weaving movements. Essentially, such movements occur when vehicles must “weave” across multiple lanes to reach desired exit ramps—such as the current movement from I-64 westbound to I-65 northbound. Those elements would be replaced by the provision of braided ramps that would eliminate the undesirable weaving movements (by separating ramp grades) and would improve safety and reduce congestion in the interchange. However, the In-Place Reconstruction option does not remove all of the undesirable movements, while the Relocated option would eliminate all left hand exits and entrances. Thus, the Relocated option is included in the Preferred Alternative.*

- B.54 Section 3.6.4 points out that an eastern bridge would complete the cross-river transportation system, and therefore would be consistent with local transportation plans. On the other hand, this section indicates that a downtown bridge also is consistent with local plans, “but would not complete the eastern portion of the circumferential highway transportation system.” The downtown bridge was never intended to complete the circumferential system. It is curious that the DEIS does not also state that the eastern bridge will not resolve the downtown traffic problem, which is also part of the local transportation plan. This is especially curious in light of the fact that an eastern bridge alone will not solve the problems at the Kennedy Interchange.

Response: *Only the construction of two new bridges (one downtown and one in the Far East corridor), with a reconstruction of the Kennedy Interchange, is fully consistent with the locally adopted transportation plans. Either bridge alone only partially satisfies those plans. The commenter is correct that a downtown bridge was not intended to complete the circumferential highway system. Likewise, the commenter is correct that an eastern bridge alone will not solve the problems at the Kennedy Interchange. Thus, an eastern bridge is not “more consistent” with local transportation plans than a downtown bridge, and vice versa. Consequently, the Preferred Alternative includes both a new downtown bridge and an eastern bridge. The text in Section 3.6.4 of the Final EIS has been modified to clarify this analysis. Section 3.7.1 summarizes the rationale for the selection of the Two Bridges/Highway Alternative.*

B.55 Alternatives should not be penalized for not completing planned infrastructure improvements, such as a planned eastern bridge. Alternatives should be judged by the transportation benefits they provide.

Response: *The transportation benefits provided by each of the alternatives evaluated in the EIS are described in Section 3.6. The rationale for the selection of the Preferred Alternative is summarized in Section 3.7. One element of the Project’s purpose and need is achieving consistency with locally adopted transportation plans, which reflect the reasoned judgment of the metropolitan area’s local governments and transportation planners. Those plans were adopted pursuant to the federally prescribed transportation planning process and reflect years of study of the region’s cross-river mobility needs and extensive prior public involvement. Achieving consistency with those plans is a legitimate consideration in the overall weighing of factors to arrive at the best solution to the metropolitan area’s cross-river mobility needs. However, many other factors, including transportation system performance measures, safety considerations, accommodation of existing and projected growth, and numerous measures of potential impacts to the community and natural resources, were evaluated in identifying the Preferred Alternative.*

B.56 The statement that an eastern bridge will have no effect on the central core of Louisville, Bullitt or Clark County, or western Jefferson County is correct in and of itself. However, the construction of an eastern bridge without a downtown bridge and improvements to the Kennedy Interchange would produce significant disbenefits to downtown, and any decisions on construction phasing that delays the implementation of the downtown components would produce significant disbenefits to downtown and west Louisville.

Response: *The Preferred Alternative includes two new bridges, including a new downtown bridge and an eastern bridge, as well as the reconstruction of the*

Kennedy Interchange. The socioeconomic analysis described in Section 5.1 indicates that the construction of an eastern bridge, along with the reconstruction of the Kennedy Interchange but without a new downtown bridge, would not cause any significant loss of population or employment in the downtown area, as compared to the No Action Alternative. However, a new downtown bridge clearly would provide significant transportation and economic benefits and is necessary to sufficiently satisfy purpose and need, and consequently has been included in the Preferred Alternative.

- B.57 Without major improvements in the Kennedy Interchange prior to 2025, the worsening conditions will have serious economic impacts on the downtown area. If full reconstruction of the Kennedy Interchange and a parallel I-65 bridge are not in the final recommendations, or if they are included but delayed in the construction phasing schedule, the ability to conduct business in the central core will be compromised.

Response: *A full reconstruction of the Kennedy Interchange and the construction of a parallel I-65 bridge (Alignment C-1) are included in the Preferred Alternative. The phasing of construction of the elements of the Preferred Alternative will be determined after final design is completed and will be based on numerous considerations, including engineering constraints, availability of funds and impacts to the existing transportation system.*

- B.58 Continuing congestion is a serious disbenefit to west Louisville. Traffic access (especially interstate freeway access) is a major component of successful businesses in that area. The only alternatives that provide that access are the downtown parallel alignments along with a rebuild of the Kennedy Interchange in a relatively short period of time.

Response: *The Preferred Alternative includes a new downtown bridge parallel to the existing Kennedy Bridge and a full reconstruction of the Kennedy Interchange, as well as an eastern bridge. This solution is designed to alleviate current and projected congestion in the downtown area, and address the long-term need for efficient cross-river mobility.*

- B.59 The two-bridge solution discourages investment in the urban core, increases air and water quality problems, increases oil dependency, reduces quality of life, rewards developers at the expense of the minority community, and forces auto mobility on citizens when they should be focused on mass transit.

Response: *The socioeconomic analysis described in Section 5.1.1 shows that the Preferred Alternative is not expected to cause any significant loss of population or employment in the urban core, as compared to the No Action Alternative. Air and water quality impacts of the Two Bridges/Highway Alternatives, as well as the other alternatives evaluated in the EIS, are*

presented in Sections 5.4 And 5.8. Impacts to communities are presented in Section 5.1. The potential environmental justice impacts of the alternatives are presented in Section 5.1.8. The Preferred Alternative is not expected to have significant adverse impacts on environmental justice communities. Mass transit alternatives were evaluated as part of the Step 1 screening process described in Section 3.3. That evaluation demonstrated that mass transit alternatives alone would not adequately address the Project's purpose and need. However, enhanced cross-river bus service was determined to be cost-effective and is included in each of the Bridge/Highway alternatives evaluated in the EIS.

- B.60 Kentucky is being asked to sacrifice nationally significant historic properties and communities for an eastern bridge that will contribute nothing to curing congestion in the Kennedy Interchange, bring no new jobs to the region, and disastrously relocate thousands of Kentucky jobs and economic activity to Indiana. This will be disastrous for downtown, south and west Louisville, which can least afford to endure the economic consequences.

Response: *No historic properties would be taken for highway purposes in eastern Jefferson County, and no historic properties in eastern Jefferson County would be substantially impaired by the implementation of the Preferred Alternative. Indeed, much of the time, attention, and expense that has been devoted to this project over 15 months has been devoted to exploring and devising alternatives that would minimize any impact on the historic properties on the Kentucky side of any eastern bridge. Indeed, the Preferred Alternative represents what, in our considered opinion, is the alternative with the least impact on historic resources. Moreover, the potential effects of the project on historic properties has been addressed and resolved through the Section 106 historic properties consultation process, which is documented in the Section 106 Memorandum of Agreement, presented in Chapter 8. The transportation benefits of an eastern bridge are presented in Section 3.6, and the rationale for inclusion of an eastern bridge in the Preferred Alternative is summarized in Section 3.7.2. The creation of new jobs was not analyzed as part of this Project, as the purpose of the Project is to improve cross-river mobility, not to create new jobs. The projection of job creation as a result of transportation improvements is highly subjective and controversial, and was not necessary in this case to evaluate the improvements in transportation efficiency that would occur as a result of implementing each of the alternatives, including the construction of an eastern bridge. The socioeconomic analysis performed for this Project did reveal that construction of an eastern bridge may lead to a slightly lower rate of growth in population and employment in far eastern Jefferson and Oldham counties in Kentucky, with a corresponding increase in population and employment growth rates in portions of southeastern Clark and Floyd counties in Indiana. However, the changes in growth rates are relatively small, and all areas*

would continue to see steady growth through 2025. None of the change in employment or population growth rates would affect downtown, south or west Louisville, which would not see any significant change in growth as a result of construction of an eastern bridge. The socioeconomic analysis is summarized in Section 5.1.1

- B.61 There were project segmentation issues in the definition of alternatives with particular reference to non-highway alternatives. The analysis of light rail options should have included light rail lines extending out from the urban core in Jefferson County as well as Clark and Floyd counties. This omission results in lower projected rail ridership and increased the per-rider capital costs for fixed facilities.

Response: *All of the potential project alternatives were evaluated based on a future transportation system in which all of the elements of the KIPDA adopted transportation plan were in place, with the exception of the east end and downtown bridges and reconstructed Kennedy Interchange. The only light rail element in the long-range transportation plan is the TARC Transportation Tomorrow line running from the central business district to the vicinity of the Louisville International Airport. The inclusion of additional light rail lines in Jefferson County may have increased light rail ridership, but it also would have increased the already high capital costs associated with construction of a light rail system. The analyses performed in response to the CART light rail proposal demonstrated that the benefits provided by additional light rail lines are more than outweighed by the substantial costs. See Section 3.2.4 concerning the analysis of light rail options.*

- B.62 The Light Rail Transit Alternative was incorrectly specified and analyzed with inappropriate procedures.

Response: *Two rail transit alternatives were identified in Section 3.2.4. The first consisted of a single line extending across the Ohio River from downtown Louisville (using either the L&I Railroad Bridge or the Clark Memorial Bridge) and then traveling approximately ten miles north, roughly parallel to I-65, to the vicinity of Sellersburg, Indiana. The second consisted of three rail lines with a combined total length of approximately 30 miles. This alternative would include a single line extending across the Ohio River from downtown Louisville on a new bridge located near the L&I Railroad Bridge, and then branching into three lines in Indiana. The three lines would extend to the Indiana University Southeast campus north of New Albany, Sellersburg (along I-65), and Charlestown, northeast of Jeffersonville. Both alternatives were assumed to connect with the planned TARC Transportation Tomorrow light rail "Starter Line" running from the Louisville central business district (CBD) south along I-65 to the vicinity of I-265 south of the Louisville International Airport. Both alternatives also included an extensive feeder bus*

system in Indiana to provide access to the proposed light rail route(s). The projected travel demand for these rail transit alternatives was determined using the KIPDA regional travel forecasting process. This procedure evaluates travel time and the proposed extent of service in forecasting travel demand. The results of the analysis of these alternative are presented in Section 3.3.4. Based on this analysis, rail transit was determined not to be a cost-effective component of a solution to the Project's purpose and need. However, enhanced bus service was included as a more cost-effective mass transit option for analysis in conjunction with the Transportation Management and Bridge/Highway alternatives in the EIS.

B.63 Fiscal constraints have been ignored when assessing alternatives.

Response: *Per 40 CFR 93.107, KIPDA must amend their 2025 RMP to reflect the FEIS Preferred Alternative "design concept and scope" and updated project cost estimates. The Financing Options Document (available for viewing at the local project office) includes a reasonable financing option. KIPDA must demonstrate fiscal constraint and conformity before FHWA approves the ROD.*

B.64 The impacts of the proposed relocation of the CSX rail lines in the Kennedy Interchange were not analyzed.

Response: *In the early stages of alternative development, the relocation of the CSX rail was considered. This was dismissed when Kennedy Interchange alternatives were refined. The CSX rail line will remain in its current location.*

B.65 Requests were made that other needed highway projects in the vicinity of the project area should be considered as integral elements of the project alternatives.

Response: *All other projects, which could have cumulative impacts with the present project, were included and considered. With respect to any other projects the commenter has in mind, they should be presented to appropriate local government agencies and KIPDA for consideration for inclusion in the region's transportation plan.*

B.66 Based on the information in the DEIS, the C-1 or C-3 alignments with reconstruction of the Kennedy Interchange in-place appear to satisfy the safety and congestion issues identified and substantiated in the DEIS and have the least environmental impacts among the one bridge/highway alignments. This alignment also appears to acceptably handle the projected Year 2025 regional traffic volumes and has the lowest cost (\$601 to \$943 million).

Response: *Construction of a single new bridge downtown along Alignment C-1 or C-3, along with reconstruction of the Kennedy Interchange, would provide some improvements in congestion over No Action levels, and would address the current safety problems on the Kennedy Bridge and in the Kennedy Interchange. However, that alternative would result in the Kennedy Bridge and the new downtown bridge operating at Level of Service (LOS) D in 2025 (just five to 10 years after opening to traffic), which is comparable to the current unacceptable level of service on the Kennedy Bridge. In contrast, the addition of an eastern bridge, when combined with a downtown C-1/C-3 bridge and reconstruction of the Kennedy Interchange, would result in LOS C on the Kennedy Bridge and its new companion bridge. See Table 3.6-3 and accompanying text. Similarly, all of the single bridge alternatives would leave the Kennedy Bridge operating near or above its capacity in 2025, whereas the Preferred Alternative (combining Alignments A-15 and C-1) would result in the Kennedy Bridge operating at only 74 percent of capacity, leaving room to accommodate additional traffic demand beyond 2025. Looking at the overall capacity of all Ohio River bridges in the metropolitan area, the single-bridge alternatives again would leave the area operating near or above its total cross-river capacity. In contrast, the Preferred Alternative would reduce the overall demand-to-capacity ratio to 78 percent, allowing room for future traffic growth. See Table 3.6-2 and accompanying text.*

In addition, a One Bridge/Highway Alternative, with a C-1/C-3 bridge downtown, would not address other important elements of the project's purpose and need, including improving the efficiency of cross-river mobility for the high growth areas in the eastern portion of the metropolitan area, providing better cross-river system linkage on the circumferential freeway system, and providing additional cross-river freeway rerouting opportunities, particularly for dealing with incidents or construction activities in the downtown freeway complex. The Preferred Alternative would provide reductions in vehicle miles of travel, vehicle hours of travel, and vehicle hours of delay in the metropolitan area. Enhanced network efficiency provided by the Preferred Alternative will result in a reduction of user costs of \$1.6 billion over 20 years, as compared to the No Action Alternative. See Table 3.6-1. The One Bridge/Highway Alternative would provide little or no improvement in vehicle miles of travel and less of a reduction in vehicle hours of travel and vehicle hours of delay. The One Bridge/Highway Alternative also is only partially consistent with the area's long-range transportation plan, which calls for two new bridges. Please see Section 3.7.1 for a detailed explanation for the conclusion that the Two Bridges/Highway Alternative is the only feasible and prudent long-term solution to the region's cross-river mobility needs.

B.67 The Two Bridges/Highway alternative would meet traffic and safety issues and provide redundancy in handling the projected Year 2025 regional traffic volumes identified in the DEIS.

Response: *See Response to Comment B.66 above and Section 3.7.1 of the FEIS. The Two Bridges/Highway Alternative, with bridges in the A-15 and C-1 alignments and a relocation of the Kennedy Interchange to the south, was selected as the Preferred Alternative.*

B.68 If the Two Bridges/Highway alternative is chosen as the preferred alignment careful thought and consideration should be given to choosing the East End alignment and identifying and implementing all mitigation measures to mitigate adverse impacts that cannot be avoided. Due to the potential environmental impacts associated with this alternative, as well as the need to mitigate those predicted impacts, all avoidance and mitigation measures, and the mechanisms for their implementation, should be included in the FEIS.

Response: *Careful consideration was given to the selection of the Preferred Alternative and the alignments that comprise it. Section 3.7.2 provides a detailed explanation for the selection of Alignment A-15 as the eastern bridge component of the Preferred Alternative. The FEIS, Section 106 Memorandum of Agreement and Section 4(f) Evaluation include detailed information on measures to avoid and mitigate adverse impacts to the human and natural environment. Refer to Chapter 8.*

B.69 An east end bridge will reduce pollution in the city and traffic in the areas where people want to spend time.

Response: *None of the bridge/highway alternatives evaluated in the EIS would result in any violations of applicable air quality standards. See Section 5.4 for a discussion of the air quality impacts of the alternatives. Although the FEIS does not contain specific data on this issue, a reduction in congestion, as well as a reduction in the number of vehicle miles traveled, could be expected to reduce emissions of regulated air pollutants. The Preferred Alternative is expected to reduce congestion and reduce both vehicle miles of travel and vehicle hours of travel, as well as associated emissions, in the metropolitan area.*

B.70 Kentucky and Indiana should build only an east end bridge or build it first. An east end bridge is logical since it will connect I-265 on both sides of the river. An east end bridge would divert traffic from downtown and downtown rush-hour traffic would be reduced. Interstate truck traffic needs to be out of downtown and hospital curve.

Response: *The Preferred Alternative includes both an eastern bridge and a new downtown bridge. Construction of an eastern bridge will provide more efficient cross-river linkage between Kentucky and Indiana by connecting the two eastern ends of I-265 (KY 841 and SR 265) located in high growth areas in Kentucky and Indiana. An eastern bridge also would help to reduce congestion downtown and an alternate river crossing in the event of incidents or construction downtown. See Section 3.7.1 for a detailed explanation for the selection of a Two Bridges/Highway Alternative.*

B.71 Another downtown bridge will add to confusion in the Kennedy Interchange.

Response: *The proposed downtown bridge, along Alignment C-1, actually would contribute to the proposed reconstruction of the Kennedy Interchange by allowing for better movements to and from I-65. While a reconstruction of the Kennedy Interchange without a new downtown bridge is possible, such an alternative would not resolve all of the problems in the Kennedy Interchange. For example, with construction of an eastern bridge alone (or construction of the downtown C-2 bridge), average morning peak hour speeds in the Kennedy Interchange would be considerably worse than alternatives that include a C-1/C-3 bridge (31-33 mph vs. 47-49 mph). Consequently, the single eastern or downtown C-2 bridge options would result in considerably more vehicle hours of delay in the Kennedy Interchange in the morning rush hour. See Table 3.6-4 and accompanying text. The Relocated Kennedy Interchange would have higher design speeds than the In-Place option. The latter option's design speeds would meet standards, but the speeds would be lower than those on the Relocated option. Extra lanes across the Ohio River would be necessary to satisfy total cross-river travel demand at an acceptable level of service. For Alignment C-1, the proposed extra lanes would provide adequate capacity for peak period northbound traffic. Without the additional capacity downtown, northbound cross-river traffic would back up into, and congest, the Kennedy Interchange.*

B.72 The route selected should take the least number of residences possible and inconvenience the least number of people possible.

Response: *In identifying the Preferred Alternative, FHWA minimized the number of residential relocations to the maximum extent practicable in light of other environmental and community impacts and the transportation benefits provided by each of the alternatives. Alignment A-15 has the second lowest number of residential displacements among the eastern alignments, with only one more displacement than Alignment A-9. Likewise, Alignment C-1 has the second lowest number of residential displacements among the downtown alignments, with only two more displacements than Alignment C-2. Despite slightly lower residential impacts, Alignments A-9 and C-2 would have greater commercial displacements than Alignments A-15 and C-1,*

respectively: one for A-9 vs. none for A-15, and 40 for C-2 vs. 30 for C-1. Alignment C-2 also poses serious environmental justice concerns for residents of West Louisville. For these reasons, Alignments A-15 and C-1 were selected as the alignments that would best minimize residential displacements while balancing other environmental impacts. See Section 3.7.2 and 3.7.3 for a detailed explanation of the selection of the alignments in the Preferred Alternative.

- B.73 All of the alternatives need to be reconsidered. There is no traffic on I-71. Rather, the problems are on I-64. Solutions to that problem should be considered.

Response: *The purpose of the proposed action is to improve cross-river mobility between Jefferson County, Kentucky, and Clark County, Indiana. As outlined in Chapter 2, several factors contribute to the need for action. Among the transportation deficiencies to be addressed are problems with the Kennedy Interchange, where I-64, I-65 and I-71 converge. Solutions to those problems will address portions of both I-64 and I-71. However, this project is not designed or intended to solve transportation problems on other portions of the metropolitan area's transportation system not associated with cross-river mobility.*

- B.74 A-13/15 is the best option and will have the least impact on east end residents.

Response: *Alignment A-15 has been identified as the eastern bridge component of the Preferred Alternative for the reasons outlined in Section 3.7.2.*

- B.75 The East End bridge should be build farther upriver than Prospect.

Response: *As described in Section 3.3.5, an alignment further east (upriver) than the "A" corridor alignments was evaluated in the initial screening of alternatives. This alignment, identified as the "Oldham County" corridor, would not divert as much traffic from the existing Ohio River bridges or reduce vehicle hours of travel or vehicle hours of delay in the metropolitan area, as compared to the Far East ("A"), Near East ("B"), and Downtown ("C") corridors. In addition to having less potential to satisfy the purpose and need, the Oldham County corridor would be approximately 10 miles longer than the Far East corridor, resulting in substantially greater expense, and would likely result in environmental impacts comparable to the impacts of the Far East corridor. For these reasons, and as described in Section 3.3.5, the Oldham County corridor was not carried forward for detailed evaluation in the DEIS.*

- B.76 Alignments A-2, A-13, A-15 and A-16 do away with beautiful landscapes and homes. A-9 and B-1 are thus preferable.

Response: Each of the eastern bridge alignments results in different degrees of impact to different environmental resources. Section 3.7.2 explains FHWA's conclusion that Alignment A-15 is likely to have the least overall harm to important natural and community resources in Indiana and Kentucky.

B.77 Alignment A-2 is preferable because A-13/15 will have the loudest noise impacts and will be disruptive.

Response: See Response to Comment B.76 above. While noise impacts were one consideration in the identification of the Preferred Alternative, they were balanced with a variety of other environmental impacts to identify the overall least harmful alignment.

B.78 A-13/15 is too close to the Prospect City Hall, will be visible from the Prospect area, will affect too many historic homes, will create too much pollution, and will cause property values to decline in Prospect and the Harrods Creek/Harbors area. There is also a possibility that the A-13/15 tunnel will not be feasible, and a bridge along that Alignment will be raised.

Response: See Response to Comment B.76 above. Alignments A-13 and A-15 would not be visible from Prospect City Hall, and because of its inclusion of a tunnel and depressed approach roadway, would not be visible for most of the Prospect area. The results of preliminary geotechnical analyses indicate that construction of the proposed tunnel under the Drumanard estate along Alignment A-15 is feasible. If subsequent analyses were to refute those analyses and indicate that a tunnel was not possible along Alignment A-15, FHWA would be required to reevaluate the environmental impacts of the project before proceeding with implementation of the Preferred Alternative.

B.79 A-9 is the preferable east end alignment because it directs the approach to the bridge away from Prospect, thus minimizing adverse effects on Prospect. Also, A-9 will not pose any particular construction issues in Indiana because it goes over a quarry and affects a smaller population than in Kentucky.

Response: See Response to Comment B.76 above. While Alignment A-9 would minimize impacts to Prospect, it would result in greater impacts to other area resources, including the Country Estates of River Road Historic District, the Six Mile Island Nature Preserve buffer area, and Goose Creek and Little Goose Creek in Kentucky. Alignment A-9 also would result in only one less residential displacement—and one more commercial displacement—than Alignment A-15.

B.80 Alignments A-2 and A-16 should not be selected because they would ruin a heavily wooded natural environment and other natural resources, cause noise

pollution, devalue property and would bisect Prospect, a closely-knit community.

Response: *Alignments A-2 and A-16 were not selected as part of the Preferred Alternative, in part because of their environmental and community impacts. See Section 3.7.2 for a detailed discussion of the selection of Alignment A-15 as the eastern bridge component of the Preferred Alternative.*

B.81 When the bridge connecting the Pennsylvania-New Jersey turnpike was built, the commission building the bridge assured the public that there would be no impact on surrounding communities. However, the area around the bridge is now abandoned and covered with trash. Thus, FHWA should utilize the tunnel option and should place the bridge in an undeveloped area that may be later developed around the structure.

Response: *The Preferred Alternative combines the alternatives that best meet the purpose and need outlined in Chapter 2 while minimizing environmental impacts to the extent practicable. As described in Section 3.3.5, a full tunnel underneath the Ohio River was determined not to be a reasonable alternative because of extraordinary costs. However, a tunnel under the Drumanard estate is proposed as part of Alignment A-15. The FEIS contains the best available information on the likely environmental impact of the Preferred Alternative, and the other alternatives.*

B.82 A-9 and A-16 are the best options because those alignments will do the most to alleviate traffic problems and create an orderly traffic flow around the community.

Response: *All of the Far East "A" alignments would perform comparably with respect to traffic flow. As explained in Section 3.7.2, the identification of Alignment A-15 as part of the Preferred Alternative was based primarily on impacts to natural and community resources.*

B.83 There should be no bridge in the Prospect area. A bridge would be better placed along Zorn Avenue because that area is already developed and the bridge would be cheaper.

Response: *An alignment in the vicinity of Zorn Avenue, Alignment B-1, was evaluated in the EIS. However, Alignment B-1 was not selected as the eastern bridge portion of the Preferred Alternative for the reasons summarized in Section 3.7.2. Among its impacts, Alignment B-1 would result in many more residential and commercial displacements than the other eastern alignments. It would also pose environmental justice concerns in Indiana.*

B.84 An east end bridge should be built with the shortest and straightest route.

Response: *As explained at the conclusion of Section 3.4.1, an alignment located straight across the river in the Far East corridor was evaluated in the early alignment development process. This alignment would have impacted the largest number of residential and commercial properties of any of the Far East corridor alignments, as well as historic and archaeological sites in both Indiana and Kentucky. For these reasons, this alignment was eliminated from further consideration prior to publication of the DEIS.*

B.85 A bridge in Prospect will be underutilized.

Response: *The travel demand forecasts presented in Table 3.6-2 demonstrate that a new bridge in the Far East corridor, when combined with a new downtown bridge along Alignment C-1/C-3, would be expected to carry approximately 68,200 vehicles per day in 2025. (For comparison, the existing Kennedy Bridge carried a weekday traffic volume of approximately 133,000 vehicles in 2000, resulting in substantial congestion on that facility.) This constitutes substantial travel demand and would justify construction of an eastern bridge.*

B.86 An east end bridge would not be convenient to Southern Indiana restaurants.

Response: *The FEIS does not contain specific information on the location of restaurants in the metropolitan area or the additional accessibility to restaurants that would be provided by the alternatives. Providing accessibility specifically to Southern Indiana restaurants was not identified as part of the purpose and need in Chapter 2. However, the Preferred Alternative is expected to improve accessibility to portions of Southern Indiana, and therefore, to any restaurants located in those areas.*

B.87 A-9 is ridiculous, but unobjectionable.

Response: *Alignment A-9 was not selected as part of the Preferred Alternative. See Section 3.7.2.*

B.88 B-1 is the most effective alignment, will relieve congestion, and will have the least effect on existing residences.

Response: *See Section 3.7.2 for a discussion of the selection of Alignment A-15 over Alignment B-1 and the other "A" alignments. Alignment B-1 would provide somewhat better relief to downtown congestion than a Far East bridge. See Table 3.6-2. However, the complex interchange required at the junction of I-264, I-71, and the new B-1 bridge would pose the risk of a new "Spaghetti Junction" and would pose difficult maintenance problems. In addition, Alignment B-1 actually would impact the greatest number of residences (252)*

of any of the alignments, and also would require the displacement of approximately 24 commercial properties and five community resources.

- B.89 If an East End bridge is to be built, it should be built in the Near East corridor (B-1). The closer to the Kennedy, the more traffic the East Bridge will divert, the more it will support the revitalization of downtown Louisville and Jeffersonville, and provide access to the Clark Maritime Center, and the better it will support the existing transportation system in both states. This alignment will also have the least effect on streams, wetland, and historic sites, and is the only route with the potential to smoothly integrate the interstate routes of I-265, I-71, and I-264.

Response: *See Response to Comment B.88 above. Any potential advantages Alignment B-1 might have with respect to the natural environment are outweighed by the substantial adverse community impacts and significant engineering and traffic challenges of that option.*

- B.90 A-2 has minimal impact on Green Spring, and is least harmful to historical districts and encroaches least on the floodplain. But it cuts Prospect in half, and it would have all the problems of an elevated bridge (inability to soundproof, inability to shield light). It may also complicate emergency services from Louisville, since these services may have difficulty reaching the area if US 42 becomes blocked by a serious accident or serious waste spill. It is unlikely that any mitigation could make this orientation acceptable.

Response: *Alignment A-2 was not identified as part of the Preferred Alternative because of its environmental and community impacts. See Section 3.7.2.*

- B.91 A-2 is a preferable alternative because it will spare the most residential areas and will be farthest from Harrods' Creek. A-13/15 and A-16 would devastate the Harrods Creek area.

Response: *Alignment A-15 would have fewer residential displacements than Alignment A-2, and fewer than all of the eastern alignments but Alignment A-9. Alignment A-16 would have significant impacts on Harrods Creek by crossing it on structure three times. As described in Section 3.7.2, Alignment A-15 would have the least overall impacts on natural and community resources among the eastern alignments.*

- B.92 A-16 cuts through Harrods Creek, which has a hollow in the middle, and would have too many light and noise pollution effects. It also has the highest number of impacts to wild habitats, streams, and floodplains. It would have a particularly great impact on Harrods Creek.

Response: *Alignment A-16 was not selected as part of the Preferred Alternative, in large part because of its greater impacts to the natural environment, including Harrods Creek.*

B.93 The DEIS should have addressed a downtown option of building two three-lane bridges on either side of the existing Kennedy Bridge. The side bridges would be used for turning movements and the existing Kennedy Bridge for through traffic. This option was originally suggested as early as 1993 and was not studied in the DEIS. This option is feasible and would ease the traffic problems existing in the Kennedy Interchange.

Response: *This option was evaluated after being presented to FHWA, INDOT and KYTC in public comments. The option was later addressed during Section 106 consultation on avoidance of impacts to historic properties. A detailed explanation about this option was included in the documentation provided to Section 106 consulting parties concerning the assessment of effects of the project on historic properties. In summary, the option for two, three-lane bridges was dismissed for the following concerns: (1) a three-lane bridge on either side of the existing Kennedy Bridge would reduce but not eliminate impacts to the Old Jeffersonville Historic District (four buildings versus seven buildings); (2) it would increase project costs significantly (both right-of-way costs associated with the acquisition of the Harbours Condominium building and construction); (3) this option would increase the complexity of interchange movements on the Indiana side of the Ohio River as a result of the proximity to the U.S. 31 connection (Clark Memorial Bridge and Second Street); and (4) inability to meet navigation and hydraulic requirements to fit a bridge on either side of the existing Kennedy Bridge. This option also would prove problematic should the existing Kennedy Bridge require replacement or major reconstruction in the future, as it would be surrounded by the new bridge structures.*

B.94 The reconstruction of spaghetti junction does not require the existence of an East End bridge; the Sherman Minton bridge can be used to divert traffic.

Response: *The construction of an eastern bridge, as part of the Preferred Alternative, will contribute to a reduction of congestion in the Kennedy Interchange and on the Kennedy Bridge. See Section 3.6.2. In addition, an eastern bridge will help to address other aspects of the purpose and need, such as providing additional cross-river system linkage and freeway rerouting opportunities, especially in the eastern portion of the metropolitan area, and providing more efficient cross-river mobility for the high growth eastern areas. The Sherman Minton Bridge will not help significantly to address these latter needs.*

B.95 Build the downtown bridge and redesign spaghetti junction first. Only then can we determine whether an East End bridge is needed.

Response: Section 3.7.1 explains why the Two Bridges/Highway Alternative is the only alternative that sufficiently meets all of the needs identified in Chapter 2 so as to constitute a feasible and prudent long-term solution to the region's cross-river mobility needs. An eastern bridge is needed now to enhance network efficiency and is an essential part of the Preferred Alternative.

B.96 The DEIS did not seriously consider whether even more additional bridges are needed.

Response: The Preferred Alternative, consisting of two new bridges and a reconstruction of the Kennedy Interchange, was determined to sufficiently meet the purpose and need outlined in Chapter 2. Therefore, construction of any additional bridges would not be necessary and would result in additional impacts to environmental resources. The Preferred Alternative is the best solution to the area's long-term cross-river mobility needs.

B.97 We have not made enough use of the west corridor of I-264 to route traffic from downtown.

Response: As explained in Section 2.2.1, the Sherman Minton Bridge already is heavily utilized and will be over capacity (120 percent) by 2025 under the No Action Alternative. Thus, it will be of limited utility in addressing cross-river mobility problems in the future. In addition, as explained in Section 2.2.5, while the Sherman Minton Bridge is an interstate bridge, it provides limited opportunities to effectively serve traffic with an eastern orientation, particularly if an incident within the Kennedy Interchange limits east-west access through the interchange. Thus, an incident in this area can magnify the existing congestion and impede cross-river mobility throughout the metropolitan area.

B.98 The best downtown alternative is C-2 because it is the least disruptive to residences, historical sites, and streams.

Response: Section 3.7.3 describes the basis for the selection of Alignment C-1 as the downtown component of the Preferred Alternative. Alignment C-1 would require only a few additional residential displacements, and would provide significantly better operations on the Kennedy Bridge, as compared to Alignment C-2. Alignment C-2 also would cause a large traffic increase on Ninth Street in Louisville and pose environmental justice concerns for neighboring communities. Alignment C-2 also would have greater impacts to historic properties and publicly owned parks and recreation areas than Alignment C-1, and would cost approximately \$180 million more.

B.99 If an East End bridge is needed, it should be placed close to the Watterson or far enough outside the city to not disturb large concentrations of existing housing.

Response: See Responses to Comments B.75 and B.88 above.

B.100 There is no guarantee that my home will not be impacted if A-13/15 is selected.

Response: Alignment A-15 would result in approximately 63 residential displacements. Every effort has been taken to minimize potential residential displacements. See Response to Comment D.59 regarding relocation assistance for those displaced by FHWA-funded projects.

B.101 It will do no good to complete an outer loop of I-265 or build any new bridges if existing downtown problems are not addressed such as hospital curve and spaghetti junction.

Response: The Preferred Alternative will address downtown congestion problems through the construction of a new downtown bridge parallel to the existing Kennedy Bridge and the reconstruction/relocation of the Kennedy Interchange. The construction of an eastern bridge also will contribute to relieving congestion problems in the downtown area. As explained in Section 3.3.5, while the project is not intended specifically to address the problems associated with the area of the reverse curve on I-65 known locally as "Hospital Curve," construction of a full collector-distributor (CD) system as part of the Kennedy Interchange reconstruction would require rebuilding the northernmost of the two curves to meet 60 mph design standards. This may alleviate some of the safety problems associated with this facility.

B.102 An East End bridge will improperly damage Prospect and decrease property values.

Response: The environmental impacts of the eastern bridge alignments, including impacts to the City of Prospect, are described in detail in Chapter 5. Alignment A-15 will have some adverse effects on the Prospect area. However, there are generally no legal prohibitions, per se, on such impacts, and all reasonable efforts have been taken to minimize such impacts to the extent possible. Selection of the Preferred Alternative involved balancing the potential effects of the project on the natural and human environment, including communities, versus the significant benefits to be provided by the project.

B.103 More exits to downtown are needed, not more bridges. If more bridges are needed, find ways to use the bridges not currently in use.

Response: See Section 3.7.1 for an explanation of the identification of the Two Bridges/Highway Alternative as the Preferred Alternative, which best meets the region's long-term cross-river mobility needs. Options that included no new bridges were evaluated in the initial screening process, and two alternatives, the No Action Alternative and the Transportation Management Alternative, were carried forward for detailed evaluation in the DEIS. None of those alternatives ultimately was determined to sufficiently meet the purpose and need outlined in Chapter 2.

B.104 I-71 could be widened to accommodate more traffic.

Response: The widening of I-71 is part of the long-range transportation plan for the metropolitan area and is currently undergoing NEPA studies. Thus, the widening of I-71 was included in the analysis of the No Action Alternative, which demonstrated a continued need to improve cross-river mobility and to address the needs outlined in Chapter 2. The widening of I-71, along with the other projects in the KIDPA long-range transportation plan, were assumed to be complete and open to traffic in analyzing travel demand in 2025, for the No Action Alternative as well as all of the build alternatives. Thus, despite the improvement of I-71, needs for additional capacity would persist under the No Action scenario.

B.105 Large trucks will still cause wrecks and back-ups on bridges, regardless of where the bridges are built.

Response: Incidents likely will continue to occur on freeways and bridges in the metropolitan area. However, improving roadway geometrics and ramp configurations, and eliminating weaving sections, will result in a safer facility. Construction of an eastern bridge, as proposed with the Preferred Alternative, will provide an additional cross-river freeway route, allow for rerouting in the event of an incident in the Kennedy Interchange, and allow transportation and safety officials more flexibility in responding to incidents, as well as scheduling necessary maintenance activities.

B.106 Traffic problems are rush hour problems and not "24/7" problems and mainly have to do with conflict between interstate and commuter traffic. A less expensive alternative to bridges would be to close several exit ramps on either side of the river during rush hour.

Response: The purpose and need of this project call for efficient cross-river mobility for existing and future population and employment growth. This includes serving both interstate and local commuter transportation needs during peak demand, as well as at other times. Closing exit ramps in the downtown area during the peak hour would contribute to congestion and transportation inefficiencies, and would poorly serve the large percentage of local traffic during that time.

B.107 River Road should be widened and an exit should be constructed to link I-71 and River Road. This will divert drivers headed downtown on I-71.

Response: *The Preferred Alternative includes a new partial interchange on I-71 at Frankfort Avenue, just east of the Kennedy Interchange. This partial interchange would allow I-71 westbound traffic to exit before entering the Kennedy Interchange, and would allow traffic to enter I-71 eastbound. Access to and from the west would not be provided. This interchange would be connected to a new extension of Witherspoon Street, providing an alternate route for commuters entering and existing downtown Louisville.*

B.108 There is nowhere to build a bridge downtown because of the Waterfront development.

Response: *The proposed downtown bridge (Alignment C-1) would impact a portion of the planned Waterfront Park. The area to be impacted has been used as a commercial asphalt distribution facility until recently and requires environmental remediation before it can be developed into parkland. The Waterfront Development Corporation has expressed its support for Alignment C-1 as the downtown portion of the Preferred Alternative. See Sections 3.6.7 and 3.7.3, and the Section 4(f) Evaluation, Section 6.4.1, for more information on these impacts. All practicable planning has been undertaken to minimize impacts to this park.*

B.109 A new bridge should be built downtown east of the Big Four bridge.

Response: *A new bridge east of the Big Four bridge was not considered in detail because of its likely impacts to densely developed areas of Louisville and Jeffersonville, and lack of convenient access to existing interstate freeways downtown.*

B.110 If a bridge is needed in the East End, it should include a tunnel from U.S. 42 all the way to the Ohio River.

Response: *Alignment A-15 includes a tunnel from just before U.S. 42 for a distance of approximately 2,000 feet. However, continuing the tunnel to the Ohio River would not be feasible because of the need for elevating the roadways approaching a bridge over the river. Moreover, as explained in Section 3.3.5, a full tunnel underneath the Ohio River was not evaluated in detail because of its extraordinary costs. Thus, the tunnel would end in the vicinity of the Shadow Wood subdivision and proceed onto structures as the roadway approaches the proposed new bridge across the Ohio River.*

B.111 A bridge should be built in the Frankfort Ave. area.

Response: See Response to Comment B.109 above.

B.112 Either one or two bridges should be built downtown.

Response: The Preferred Alternative includes a new downtown bridge along the C-1 Alignment. A second new downtown bridge was not considered a reasonable alternative, and was not evaluated in the DEIS. See also Response to Comment B.93 above.

B.113 An East End bridge is too expensive.

Response: The estimated cost of the eastern bridge and the associated improvements is approximately \$464.8 million. See Table 3.6-8. The estimated cost of the downtown bridge and Kennedy Interchange Relocated South is approximately \$934.9 million. A Cost Estimate Review was completed on March 18-19, 2003 to refine the estimate and incorporate the cost of mitigation and contingencies. The updated costs are summarized in Section S.2.3 and the associated reference documents that demonstrate that INDOT and KYTC have a reasonable strategy to finance the project can be found in the Financing Options document, which is available for review at the local project office.

B.114 A-13/15 is too close to residential properties.

Response: All of the alternative alignments evaluated in the EIS require the taking of residential properties and pass near other residential properties that would not be acquired. Alignment A-15 was selected as the eastern bridge component of the Preferred Alternative in part because it would have the second lowest number of residential displacements of the eastern alignments. Mitigation for residences remaining in the vicinity of Alignment A-15 is described in Sections 5.3 and 5.6.

B.115 Wolf Pen Branch Road is not appropriate for an interstate interchange.

Response: The full interchange option associated with Alignments A-13 and A-15, which would have placed the interchange at Wolf Pen Branch Road, was not selected as part of the Preferred Alternative. Instead, a partial interchange at U.S. 42, largely in the location of the existing interchange at the terminus of KY 841, is part of the Preferred Alternative. This interchange would provide access to and from Kentucky in the direction of I-71, but would not provide access to and from Indiana in the direction of the new Ohio River bridge.

B.116 Spaghetti Junction should be rebuilt in place in order to preserve Butchertown.

Response: Section 3.7.4 describes the rationale for the selection of the Kennedy Interchange Relocation as part of the Preferred Alternative. The Kennedy

Interchange Relocation was selected primarily based on its ability to provide better traffic operations and safety than the in-place reconstruction option. The relocation option would move the interchange closer to Butchertown, but would only require the taking of 0.06 acre from the Butchertown Historic District—in an area currently used as a junkyard. Even though the relocation option would require taking 50 commercial properties, and would bring the interchange closer to the Butchertown neighborhood, the design of the relocated interchange will be designed to minimize noise and visual impacts where reasonable. Many of these issues have been addressed through the Section 106 historic properties consultation process, and mitigation measures are documented in the Section 106 Memorandum of Agreement, which is included in Chapter 8.

- B.117 An East End bridge and improved access to I-71, I-64 and I-65 will cut travel times in half to the Clark Maritime Center, the Chamberlain Lane Ford Plant, and the industrial park off of LaGrange Road.

Response: *An eastern bridge is expected to reduce travel times for trips between various origins and destinations in the metropolitan area, especially those located in the eastern portions of Jefferson and Clark counties. However, specific predictions of the time savings (e.g., half) cannot be made, and will vary based upon the specific origin and destination. The information included in Table 3.6-5 demonstrates that, for trips between eastern Clark and eastern Jefferson and Oldham counties, the average trip duration (and length) should decrease with construction of an eastern bridge. The estimated reduction in peak hour travel time between the Ford Kentucky Truck Plant in eastern Jefferson County and the Clark Maritime Center in southeastern Clark County as a result of construction of the eastern bridge is approximately 17 minutes (from 42 minutes for the No Action Alternative to 25 minutes with an eastern bridge).*

- B.118 A downtown bridge will do nothing to help East End traffic.

Response: *Although the One Bridge/Highway Alternative with a bridge downtown would not provide additional cross-river system linkage or freeway rerouting opportunities in the eastern portion of the metropolitan area, and would not provide direct access to those high growth areas, the reduction of congestion downtown would likely have some benefits for travelers with origins or destinations in the east who must cross the Ohio River. As noted above, the estimated reduction in peak hour travel time between the Ford Kentucky Truck Plant in eastern Jefferson County and the Clark Maritime Center in southeastern Clark County as a result of construction of the eastern bridge is approximately 17 minutes (from 42 minutes for the No Action Alternative to 25 minutes with an eastern bridge).*

- B.119 Spaghetti Junction should be redesigned as follows: I-64 West should be split into two separated alignments from before the Junction with I-71—a “through” movement west and north of that, and an alignment to connect to the bridge. Merging I-71 traffic would maintain a right-hand movement into the bridge ramp, merging with bridge-bound I-64 traffic. The movement from I-71 into the main stem of I-64 would be accomplished by going over or under the bridge ramp onto I-64. Those alignments would be on the northernmost side of the current configuration. A similar dual alignment should be considered on the south side of the present configuration such that the northern alignment in that case would go to I-71 and the southern alignment merging with eastbound I-64 on the southernmost side. Movement from I-64 to I-71 would come from a right lane exit set as close as possible to Story Ave. A total of 10 or 12 lanes will be necessary.

Response: *The relocated Kennedy Interchange separates I-64 east-west “through” movements from weaving movements associated with ramps, which would occur on the adjoining collector-distributor lanes. All exits would be right-hand exits. The current deficiencies of the Kennedy Interchange would be corrected with the proposed relocation.*

- B.120 A bridge should be built in the southwest part of Jefferson County to allow better access to the Riverport and the Airport. That will also fully complete the I-265 loop.

Response: *As explained in Section 3.3.5, this corridor (labeled as the “West Corridor”) was evaluated in the initial screening process, but was determined not to be a reasonable alternative. The West Corridor was projected to carry less than one-fifth of the traffic projected for the Far East Corridor (14,200 vehicles per day vs. 72,100 vehicles, respectively). While completing one end of the circumferential freeway system and providing another river crossing, the West Corridor is not in close proximity to the high growth areas downtown or in the eastern portion of the metropolitan area. Travelers in the eastern part of the metropolitan area would still experience network inefficiencies and would be required to travel downtown to cross the Ohio River. For these reasons, the West Corridor was not carried forward for detailed evaluation in the DEIS.*

- B.121 The East End bridge should be a direct route without a tunnel since a tunnel will delay completion of the project.

Response: *See Responses to Comments B.84 and B.110 above. The proposed tunnel under the Drumanard estate is designed to avoid a property listed on the National Register of Historic Places, pursuant to the requirements of Section 4(f) of the Department of Transportation Act, which requires the avoidance of such properties where feasible and prudent.*

B.122 The B-1 interchange is relatively inaccessible to emergency vehicles. It would be more dangerous than the present I-64/I-71 junction, which is already notoriously bad.

Response: *Alignment B-1 was not selected as part of the Preferred Alternative. See Section 3.7.2 and Response to Comment B.88 above.*

B.123 The downtown Ninth Street bridge will reduce VHD for many of those who travel to Louisville or Indiana on a daily basis. Increased traffic flow to Louisville will provide economic and urban development in and around the Ninth Street area. Similarly, Clarksville will benefit from easier access and increased frequency of travel to its many retail locations.

Response: *The Ninth Street (C-2) alignment was not selected as the downtown bridge component of the Preferred Alternative. See Section 3.7.3. While Alignment C-2 would provide some traffic benefits, it would result in significantly less improvement in Kennedy Bridge traffic by 2025, as compared to Alignment C-1. Alignment C-2 also poses the risk of serious environmental impacts, including environmental justice impacts to neighborhoods just west of the Louisville central business district, and greater impacts to historic properties and publicly owned parks and recreation areas. This option also would be about \$180 million more expensive than Alignment C-1 or C-3. For these reasons, Alignment C-2 was not selected.*

B.124 The cost of providing bridge access to bicyclists and pedestrians is not an issue. Such access can be provided for 1-2 % of the total project cost. This is well below the twenty percent and under threshold, which would allow for such a facility to be built with federal funding. A design exception from the FWHA, INDOT and KYTC for such accommodations should be made. Access to the bridge is the cyclists' most critical concern. The location of the bridge(s) is not the most important issue; the issue is simply being able to travel on the bridge.

Response: *A design exception is not required for separate pedestrian and bicycle facilities on freeway bridges. Both of the new Ohio River bridges would include separate facilities for pedestrian and cyclists to cross the Ohio River. Those facilities eventually would connect with planned bicycle and pedestrian facilities along the Ohio River in both states. In addition, the Waterfront Development Corporation has proposed converting the inactive Big Four Bridge into a pedestrian and bicycle facility.*

B.125 KIPDA's Regional Bicycle and Pedestrian Plan calls for the "safe accommodation of bicyclists" in "plans and design phases for all bridge, overpass, and underpass construction." Hence, including bicycle and

pedestrian access facilities to the bridge(s) will be consistent with local transportation plans.

Response: *See Response to Comment B.124 above. Sections 3.2.2 acknowledges that such facilities are proposed on the region's long-range transportation plan.*

B.126 An additional study should be conducted addressing the existing problems with the U.S. 42 connection to Story Avenue as well as the existing route of Story Avenue. The Spaghetti Junction designers can take this opportunity to address this ill of prior construction.

Response: *The improvement of the I-64/Melwood Avenue interchange, and the addition of the I-71/Witherspoon Street connection would reduce traffic demand at U.S. 42 and Story Avenue. The reduction of circuitous travel that is currently required by the existing Story/Mellwood interchange configuration will result in more efficient travel and reduced congestion on U.S. 42 in this area.*

B.127 Streets connecting to the new Witherspoon Street extension should not become streets for through traffic. Feeder streets bring more unwanted commercial, industrial and through traffic into the neighborhood and create unsafe environments for children and pedestrians. Heavy industrial and large commercial trucks should be rerouted around the neighborhood. Clay Street and Frankfort Avenue should be the only two streets in the neighborhood that carry through-traffic. Traffic calming devices should be installed to discourage through traffic on other streets.

Response: *Access to the extended Witherspoon Street will be designed in consultation with the Butchertown Neighborhood Association and the Louisville-Jefferson County Metro Government. Other issues that will be addressed will include traversal across the redesigned Kennedy Interchange between the Waterfront Park area and Butchertown.*

B.128 The elevated portion of the new Spaghetti Junction should be constructed on fill with architecturally appropriate structure facings or sloped sides. Trees and shrubs should be used at every opportunity to reduce noise, visual and dust impacts.

Response: *Design of the relocated Kennedy Interchange, as well as the provision of access through the Kennedy Interchange between the Waterfront Park area and Butchertown, will be determined in consultation with, among other, the Louisville/Jefferson County Metro Government, the Butchertown Neighborhood Association, and the Waterfront Development Corporation. Revegetation will be included as mitigation for the project.*

B.129 Louisville is not user friendly for visitors. Finding a way to get off I-64 is difficult. Getting back on is even harder. The new plans to rework Louisville traffic do not seem to improve this nightmare for tour bus drivers.

Response: *The reconstruction of the Kennedy Interchange will reduce vehicle-maneuvering requirements in the downtown area. Roadway signing on the improved and simplified interchange will make it easier for unfamiliar drivers to use the Kennedy Interchange and adjacent interstate freeways.*

B.130 If you do plan for bridges, extend the plan to include all the roads in the area. Do not cut off the process at the limited roads leading directly to and from the bridges.

Response: *The roadway improvements included in the Preferred Alternative include all necessary modifications to allow the two new bridges and the reconstruction of the Kennedy Interchange to integrate with the existing transportation system. This includes transition areas, such as the area of I-65 just south of the Kennedy Interchange, in the vicinity of the double reverse curve known locally as "Hospital Curve." However, a reasonable limit on the project must be established, and not all of the transportation needs of the metropolitan area can be addressed through this one project. The Preferred Alternative, as designed, has independent utility and will serve important transportation needs even if no other improvements are made to the transportation system.*

B.131 The bridge downtown should have an upper level reserved for express lanes only. We should have a two-deck expressway through Louisville that would keep through traffic on the upper level and local traffic on the bottom. Access to the upper level would begin around Arthur Street in Louisville and terminate north of the Eastern Blvd. exit in Indiana.

Response: *The existing Kennedy Bridge could not be modified to accommodate a second level roadway without its demolition and reconstruction. The costs and impacts of this alternative would be greater than that of the Preferred Alternative.*

B.132 Build both bridges as an underpass at Highway 42.

Response: *The roadway element of Alignment A-15, the eastern portion of the Preferred Alternative, would consist of a depressed roadway leading from the I-71 interchange to a tunnel that would pass under U.S. Highway 42.*

B.133 The Ohio River's breadth at the Ninth Street alignment might decrease its attractiveness as an option.

Response: *The length and complexity of the bridge span for Alignment C-2 was part of the reason for not selecting that option as part of the Preferred Alternative. Alignment C-2 would cost about \$180 million more than the other downtown alignments. See Section 3.7.3 for a more detailed explanation for the rejection of Alignment C-2.*

B.134 Revamp the 29th Street Bridge for local and pedestrian traffic.

Response: *This option was not evaluated in the EIS. Pedestrian and local (non-freeway) traffic are currently served by the Clark Memorial Bridge and will be included on new structures. Bicycle paths/pedestrian walkways are included on both of the proposed bridges in the downtown and eastern areas.*

B.135 We should build two bridges, one off the Gene Snyder, and the other off the Watterson. This would create two alternative routes for traffic while Spaghetti Junction is under repair. Another bridge downtown would make downtown even less attractive place to live/would be a temporary fix to a long-term problem.

Response: *Two eastern bridges were not evaluated in detail in the EIS. Construction of a downtown bridge is an important part of the Preferred Alternative because it contributes to the reconstruction of the Kennedy Interchange and would allow for the Kennedy Bridge to be restored to six lanes of traffic.*

B.136 A tunnel, such as that required by A-13, would cause traffic problems such as those now experienced near the I-64 tunnels.

Response: *Congestion problems near the existing I-64 tunnels are caused by insufficient lane capacity relative to traffic demand in that area. The tunnel proposed with Alignment A-15 as part of the Preferred Alternative would provide sufficient lane capacity to handle foreseeable traffic demand without creating congestion. Moreover, the partial interchange at U.S. 42 would not require any weaving movements in the vicinity of the tunnel, and therefore would not be expected to cause or contribute to any traffic problems.*

B.137 Bridge construction should avoid creating barriers. If more crossings are provided for local roads, pedestrians, and bicycles, it will lessen opposition to the bridges from East End residents.

Response: *The Preferred Alternative has been identified as the solution that best addresses the transportation needs identified in Chapter 2 while protecting important community and environmental values. Much of the crossing is on structure over existing roadways. Bicycle paths/pedestrian walkways are part of the proposed bridges in both the downtown and eastern areas.*

- B.138 Leave enough width in the new bridges and underpasses for additional lanes. Adding to existing highways is less costly than building entirely new roads.

Response: *In 2025, the eastern bridge is projected to be at 63 percent of its design capacity, meaning there would be an additional 37 percent of capacity available through the tunnel and on the bridge for future increases in traffic demand. Similarly, the proposed downtown bridge and the existing Kennedy Bridge would be at 74 percent of design capacity in 2025, leaving an additional 26 percent of capacity for future traffic increases.*

- B.139 The best downtown route is C-2, but this route should be a tunnel under the Ohio. C-1 and C-3 will merely add to the congestion downtown, and would overburden Spaghetti Junction. A Ninth street throughway would provide relief for traffic flowing from Shively and Southwest Jefferson County. This route should be extended to connect to the Watterson near the Manslick road overpass. This will offer a route via I-264 back to I-65 South near Standiford field.

Response: *The cost of an Ohio River tunnel is estimated to be \$1.2 billion. This does not include the cost of roadway facilities to tie the tunnel back into I-65 in both Indiana and Kentucky. This cost compares to a downtown bridge cost of \$105 million. This greater than tenfold difference in river crossing costs would make the tunnel alternative prohibitively expensive and impractical to consider. See Section 3.7.3 and Responses to Comments B.45 and B.98 above regarding the selection of Alignment C-1 rather than Alignment C-2 for the downtown bridge.*

- B.140 The downtown bridge should not be built until I-64/I-71 is made 3 or 4 lanes wide in each direction all the way to the county line. This would, however, require either demolishing or reworking the Cochran tunnel.

Response: *The Kennedy Bridge is already congested, and that congestion would not be eliminated if construction of a new downtown bridge were postponed pending the expansion of I-64 and I-71. The needs identified in Chapter 2 are based on the assumption that all other elements of KIPDA's long-range transportation plan will be completed by 2025. Those improvements include the widening of I-71 and adding HOV lanes to I-64. Even with those improvements, significant congestion is predicted by 2025. Finally, reconstruction of I-64 and I-71 by itself would not satisfy the purpose and need of the project, as outlined in Chapter 2.*

- B.141 Please specifically define in the FEIS what is meant by the term "Rebuild the Kennedy Interchange." It is not clear whether this term refers to adding lanes, on/off ramps, emergency lanes, etc. Also include figures in the FEIS that depict the two Kennedy Interchange Options for a one bridge/highway

alternative that utilizes one of the East End alignments. Identify whether or not these Kennedy Interchange options would have the same impacts as those identified and depicted in the DEIS with downtown alignments.

Response: See page 3-18 and pages 3-36 through 3-38 regarding the elements of the Kennedy Interchange reconstruction. See Response to Comment B.20 above regarding Kennedy Interchange options with the eastern bridge alternatives.

B.142 We do not need five bridges across the Ohio River.

Response: See Section 3.7.1 for an explanation of the need for two new bridges across the Ohio River.

B.143 The bridges we have now are enough to support our traffic needs. All that is needed is to redesign spaghetti junction and improve existing highways and bridges.

Response: The information presented in Chapter 2 indicates that, without any new bridges across the Ohio River and a reconstruction of the Kennedy Interchange, congestion and delays will continue to worsen, safety problems will persist, and travelers will experience increasing costs related to longer trips. Moreover, the preliminary screening of alternatives, as described in Section 3.3, determined that the reconstruction of the Kennedy Interchange, without any new bridges across the Ohio River, would not provide sufficient improvement to cross-river mobility, or adequately reduce congestion or improve safety. That option also would not address the need for efficient cross-river mobility for the high growth areas in the eastern portion of the metropolitan area, or provide additional cross-river system linkage or freeway rerouting opportunities. Additional lanes are needed across the Ohio River in the downtown area (via a new bridge) at a minimum to adequately address the transportation deficiencies of the Kennedy Interchange. Thus, the alternative of reconstructing the Kennedy Interchange without building any new bridges was dismissed from further evaluation. See Section 3.5.5 for more details.

B.144 Not everyone can afford a car. Others cannot obtain a driver's license. These persons must walk, ride a bike, or attempt to use a confusing and often unaccommodating public transit system. Others choose to commute by bicycle for fitness or environmental-consciousness reasons. As of this writing, there is no safe way to traverse the river in the Louisville area. The Second Street bridge, is unsafe due to narrow lane widths, dangerous motor vehicle speeds and volumes, and a treacherous grate system, which only accommodates the bicycle's narrow tires with a small metal plate on each side.

Response: See Responses to Comments B.1 through B.3 above. The Preferred Alternative includes transit improvements to enhance cross-river mobility in combination with the proposed new bridges and highways. Both of the proposed bridges in the downtown and eastern areas will include bicycle paths/pedestrian walkways that will connect to existing or proposed non-motorized facilities on both sides of the Ohio River.

B.145 The downtown bridge needs at least two more lanes to the north and south.

Response: The design of the downtown bridge component of the Preferred Alternative, Alignment C-1, includes a new six-lane bridge to handle northbound I-65 traffic. The existing Kennedy Bridge would be restored to six lanes of traffic to handle I-65 southbound. This will constitute an addition of two new northbound lanes and three new southbound lanes, as compared to the existing condition. The number of lanes planned for Alignment C-1 has been determined to provide a sufficient level of service in the design year, 2025.

B.146 We should restrict commercial travel during certain hours through the downtown area in order to reduce traffic congestion.

Response: Restrictions on commercial travel in the downtown area during certain hours (presumably the morning and afternoon peak hours) would be difficult to manage and disruptive to the economy of the metropolitan area, as well as to interstate traffic passing through the metropolitan area. Moreover, much of the congestion problem in the downtown area is caused by commuter automobile traffic. The improvements included in the Preferred Alternative are designed to reduce the existing congestion and provide adequate levels of service in the downtown area during the peak period.

B.147 An East End bridge will allow medical personnel to have better access to the East End in case of a traffic jam downtown.

Response: Construction of an eastern bridge will provide an alternate cross-river route, which will allow governmental authorities to respond more effectively in cases of incidents or construction that adversely affect travel in the downtown area, and in particular on the downtown I-65 river crossing. This benefit is particularly important for the eastern portion of the metropolitan area because of the existing lack of any river crossing upstream from the downtown Kennedy Bridge (I-65).

B.148 Move the downtown bridge alignment so that the expressways no longer detract from the waterfront development.

Response: The only practicable downtown alignment that would avoid the Waterfront Park in Kentucky was Alignment C-2. However, that alignment would take

land from riverfront park facilities in Indiana and would adversely affect areas of downtown Louisville in the vicinity of the Ninth Street interchange. There is no practicable downtown alignment that would avoid all impacts to waterfront development. Alignment C-1 has been designed to minimize impacts to waterfront development, including parks and recreational resources.

- B.149 The DEIS provides inadequate information regarding lighting, sound, and design options of the interchange at U.S. 42.

Response: Extensive design options were proposed and analyzed at the U.S. 42 interchange with the East End roadways. Considerations included traffic impacts and property takings. Traffic impacts are summarized in Section 3.6. More detailed analyses are reported in the Traffic and Transportation Technical Report. The property takings are elaborated upon in the Socio Economic Baseline Report in the Conceptual Stage Relocation Report. Both reports can be reviewed in the project office.

Interchange lighting studies for the U.S. 42 interchange will be performed as the Project advances into more detailed design studies. These will be complemented by more detailed traffic and relocation analyses.

- B.150 There should be a full diamond interchange at U.S. 42. It will allow the best access while minimizing traffic.

Response: As described in greater detail in Section 3.7.2 and in Response to Comment B.23 above, a full diamond interchange at U.S. 42 and KY 841 was not selected as part of the Preferred Alternative.

- B.151 There should be a bridge off the Watterson Expressway [I-264] in western Jefferson County where it turns north heading toward I-64.

Response: An alignment in southwestern Jefferson County, between KY 841 in Kentucky and I-64 in Indiana, was evaluated and dismissed in the preliminary screening of alternatives. See Section 3.3.5 and Response to Comment B.120 for additional detail concerning the dismissal of this alternative. A cross-river alignment near the southwestern "corner" of I-264 was not evaluated in detail in the DEIS because it would be in close proximity to the existing Sherman Minton Bridge (I-64) and was not expected to generate sufficient travel demand. Such an alignment also would travel through a relatively densely developed area, resulting in significant adverse environmental effects.

C. Traffic and Travel Demand Forecasts

- C.1 FHWA's CORSIM program models the Kennedy Interchange and the Kennedy Bridge as a system, so that failure of one bottleneck causes failure of the whole system. The Kennedy Interchange is the actual source of bottlenecks. Improvements to the Kennedy Interchange require additional capacity on the Kennedy Bridge.

Response: *It is correct that the CORSIM analysis models the Kennedy Interchange and Kennedy Bridge as a system, because these facilities in fact operate as a system. As a system, the failure of one segment often causes the failure of the whole system. The purpose of the CORSIM simulation analyses is to identify types and locations of bottlenecks and develop alternatives to address them, so that the entire system is less susceptible to failures of individual segments. The above logic substantiates that the only feasible and prudent alternative downtown is Alignment C-1 or C-3.*

Although the Kennedy Interchange itself is the source of much congestion, the Kennedy Bridge also is part of the problem. As demonstrated in Figure 2.2-9 (showing projected levels of service in the Kennedy Interchange under the No Action Alternative), the Kennedy Bridge is expected to operate at LOS E or F in 2025. Thus, there is a capacity problem associated with the Kennedy Bridge, not just the Kennedy Interchange.

The Preferred Alternative includes a new bridge parallel to the Kennedy Bridge, in part to provide additional capacity on the bridge itself and to complement a complete reconstruction of the Kennedy Interchange. The proposed configuration of southbound I-65 immediately south of the Ohio River would consist of three through lanes and three ramps to I-64 (two eastbound and one westbound). The configuration of northbound I-65 at the same location would consist of three through lanes and three ramps to I-64 (two eastbound and one westbound).

- C.2 Improper adjustments were made to the travel demand modeling results to show higher cross-river traffic flows in the future. Comparison of actual travel counts for 1990 to 2000 to outputs from the recalibrated travel demand model showed that the model had underestimated actual growth rates by over 3 % per year. Instead of adjusting the model to obtain correct results, the model output was simply increased by 16 % to derive the 2025 river crossing projections. The result is that the travel demand forecasts do not recognize the effect of engineering constraints of limited capacity. A more appropriate assumption would be that under the no action scenario, traffic volumes would grow at a decreasing rate as capacity is approached.

Response: *In the application of the regional travel demand projection model to current (2000) travel conditions, the current (2000) travel volumes on the three existing Ohio River Bridges estimated by the travel demand model were less than the actual travel volumes on those bridges as determined by observed traffic counts. Regional travel demand models are routinely modified at the local level. As a consequence, a bridge volume under-prediction factor was applied to future bridge volume forecasts. This adjustment process, termed “pivot-point” analysis or adjustment, is commonly applied to travel demand forecasts for elements (roadways, bridges, transit lines) derived from application of regional travel demand models, which are designed to provide regional travel information to make system-level decisions. Recalibration of the travel demand model to correct for this underprediction would have not been possible without Year 2000 census data, which has only recently begun to become available, and is still not completely available. Thus, a reasonable professional method for adjusting future cross-river volumes was utilized.*

This method used to forecast future cross-river travel demand resulted in a conservative estimate of future cross-river volumes for project design purposes. Thus, while the observed average annual growth rate in cross-river trips between 1990 and 2000 was 3.9 percent, the forecast average annual rate of growth between 2000 and 2025 is predicted to be 1.4 percent. As noted in the Transportation and Traffic Analysis Report, at Section 2.5.1 (page 2-9), a reason for the difference between the observed historical growth rate and predicted future growth rate “is that the model is reflecting and accounting for the increasing Ohio River bridge congestion by diverting trips to destinations that do not require river crossings.” Thus, the effect of decreasing capacity on cross-river trip growth rates cited by the commenter has been accounted for in the projections included in the EIS. Note that the adjustment of cross-river bridge volumes did not affect the overall number of trips in the metropolitan area, but consisted of a redistribution of trips from other destinations.

C.3 Because of flaws in the travel demand analysis, no useful assessment can be made as to capacity needs for the downtown bridge or whether a new downtown bridge and rebuild of the Kennedy Interchange would meet future river crossing needs of eastern corridor travelers.

Response: *Travel demand and traffic projections for the Project alternatives were made using the approved travel demand model of KIPDA, the MPO for the Louisville metropolitan area. The Project consultant performed extensive work to extend the KIPDA’s 2020 projections through the year 2025, in order to provide at least a 20-year planning horizon for the Project. All of the modifications to the travel demand model, including revisions to the socioeconomic forecasts, were reviewed and approved by KIPDA before the travel demand model was used to forecast travel demand and traffic volumes*

for each of the Project alternatives. The travel demand modeling process is described in greater detail in the Traffic and Transportation Technical Report, which is available for review at the local project office. The current, updated 2025 long-range transportation plan utilizes the same population and employment projections as those used in the EIS analyses.

The application of the travel demand model to the Project alternatives provided several measures for evaluating the effectiveness of a downtown bridge and Kennedy Interchange reconstruction in addressing the Project's purpose and need. Those measures are summarized in Section 3.6. The measures related to the efficiency of the overall cross-river transportation system and the performance of the Kennedy Bridge and the Kennedy Interchange specifically under each of the Project alternatives. Those measures also include an evaluation of daily vehicle traffic between eastern portions of Clark County, Indiana, and Jefferson County, Kentucky. The results of that analysis are summarized in Table 3.6-5 and discussed in greater detail in Response B.39, above. As presented in that response, the inclusion of an eastern bridge in the Preferred Alternative will contribute substantially to the efficiency of both the overall cross-river transportation system and cross-river trips occurring between eastern portions of the metropolitan area.

- C.4 Erroneous socio-economic data was used when making travel demand forecasts. The model inputs contained significant math errors in the employment data.

Response: The development of Year 2025 socio-economic projections (population and employment) was iterative in nature. Early in the course of development of these projections (January 2000), the total employment numbers were incorrectly added for three traffic analysis zones (of the total 757 zones in the metropolitan area). Review of these forecasts detected these errors, and corrections were made to the appropriate data files. Corrected versions of this data were used in making the travel demand forecasts for the Project alternatives that appeared in the Draft EIS. Before those data were corrected, one public stakeholder requested, and was provided, preliminary travel demand information that was relied upon in an early draft of the Project's Statement of Purpose and Need, which was circulated for early public comment. Subsequent to that time, the above-referenced socio-economic information was corrected. Following publication of the Draft EIS (with the corrected data), that same stakeholder was provided complete travel demand modeling information for all of the analyses presented in the Draft EIS. That updated information included the correct socioeconomic information. Thus, the data relied upon in preparing the travel demand forecasts for the Project alternatives included in the Draft EIS, and in selecting the Preferred Alternative, did not contain the referenced erroneous socioeconomic data.

- C.5 The travel demand forecasts lacked the basis (or foundation) of a comprehensive Origin-Destination Study.

Response: *The regional travel forecast procedure is based on origin-destination data from surveys made in 1993 and 2000, which in turn built on earlier work going back as far as the 1960s, and has been continuously improved over the years. It has been enhanced and updated during that period and is representative of the state of the art. The enhancements have included additional expansion of modules contained in the process and augmentation/calibrations activities, primarily through information gathered from origin-destination studies, reflecting updated current travel patterns in the metropolitan area.*

The regional travel demand forecasting procedure was initially developed using travel data derived from a mid-1960's comprehensive travel demand (origin-destination) survey. This procedure has been modified and extended with information assembled in two subsequent origin-destination surveys conducted in 1993 (1600 households) and in 2000 (4200 households). Performance of a new, "comprehensive" origin-destination study as part of this Project was not necessary in order to apply the MPO's (KIPDA) established travel demand forecasting procedures to evaluate the Project alternatives. Those procedures are based on a reasonable level of origin and destination information obtained from previous studies, as verified and applied by KIPDA in its ongoing refinement of the travel demand model. KIPDA completed a peer review of the travel demand model in 1995, and determined that the model is in compliance with accepted professional standards. Old origin-destination data is a common concern around the country. This project is fortunate that KIPDA has enhanced origin-destination data from surveys in 1993 and 2000. Indiana's limitations on survey procedures on high volume roadways and disallowance of phone surveys limit available mechanisms to collect origin-destination data.

- C.6 The DEIS's use of the terms "capacity" and "acceptable operating conditions" is misleading. Rather than using a level of service (LOS) C as an "acceptable" operating level, an LOS of D or E should be used. This would result in a volume to capacity ratio for current weekday peak hour, peak direction traffic on the Kennedy Bridge of 87 %, rather than the 106 % presented in the DEIS (for LOS C).

Response: *The analysis of proposed roadway improvements used a level of service of D (LOS D) to evaluate roadway "capacity," or the minimum acceptable vehicle density on a given roadway link. This density is measured in terms of the number of vehicles per lane per hour. Any density greater than the roadway's capacity will lead to unacceptable operating conditions, including uneven flow and significant congestion. As demonstrated by Figure 2.2-6, much of*

the Kennedy Interchange and the Kennedy Bridge will operate at unacceptable levels of service in 2025 under the No Action Alternative. This will result in significant congestion and delays.

The elements of the Project alternatives evaluated in the Draft EIS were evaluated both with respect to their projected “capacity” (i.e., performance in relation to minimum acceptable vehicle density), and in relation to their ability to provide the desired level of service for such an improvement. It is generally undesirable to design a project for the long term to meet only minimally acceptable performance criteria, such as LOS D. Under such a scenario, if the facility is already operating at capacity by the design year (2025), there will be no additional capacity available for subsequent increases in travel demand—just five to ten years after construction is completed and the new Kennedy Interchange is opened to traffic. Moreover, LOS E is not used as a standard for analysis and design in any situation because it results in undesirable traffic operations, including forced flow and congestion. Evaluating the Project alternatives based on an LOS D or E standard would not provide adequate relief to the congestion problems identified in Chapter 2, which are one of the primary needs to which this Project is intended to respond. In fact, the Kennedy Bridge currently operates at an LOS of D, which has been widely recognized as an unacceptable operating condition and has contributed to demands for improvements on that facility. Because any facilities constructed, as part of this Project will likely be expected to serve for at least 50 years, design of Project elements to provide a minimum LOS of C in the design year (2025) is reasonable and prudent.

- C.7 The DEIS inappropriately uses vehicle hours of delay (VHD) to measure the benefits of alternatives. FHWA has abandoned VHD as a meaningful performance metric. VHD is biased toward longer routes with less traffic. VHD increases exponentially with link-level traffic volumes, causing a small portion of the system links to dominate VHD. Travel time is more understandable and meaningful than vehicle delay time.

Response: *Vehicle hours of delay (VHD) are one of three measures presented in the EIS to evaluate system-level improvements in transportation efficiency. Vehicle miles of travel (VMT) and vehicle hours of travel (VHT) also are presented in Section 3.6 to evaluate the performance of each of the Project alternatives. That analysis shows that the Preferred Alternative provides the greatest improvement for each of these measures.*

FHWA has never mandated the measure(s) that must be employed in the assessment of specific transportation system improvements during the NEPA process. The specification of evaluation measures has always been the prerogative of the State and Regional Planning jurisdictions. The use of VHD

is appropriate to assess Project alternatives as long as it is applied in a consistent manner. Moreover, VHD is not the only measure being used to evaluate Project alternatives, but has been used in conjunction with VMT and VHT, as well as other performance measures related specifically to the existing Ohio River bridges and the Kennedy Interchange, to evaluate the relative transportation benefits of the Project alternatives.

- C.8 An eastern bridge does not significantly reduce VHD on other bridges, and the DEIS's implied reduction of VHD outside I-265 is illogical and unsupported. VHD reductions are created by the consultant's movement of future employment from one side of the Ohio River to the other. In the downtown-only bridge scenario, the DEIS assumes an increase in the number of jobs in Oldham County in an area where the road infrastructure is inadequate to support the assumed level of employment. In the two-bridge scenario, the employment is assumed to have moved to Indiana, which has better infrastructure. An illustration of the unreliability of the VHD approach is provided with a 0.35 mile stretch of Old Floydsburg Road in Oldham County, which provides the greatest VHD reduction in the DEIS. This accounts for 6.6 % of the total difference in VHD between the downtown-only and two-bridge scenarios. At least half of the improvements in vehicle hours of travel (VHT) in the DEIS, and more than half of the improvements in VHD, are attributable to the differences in Oldham County employment inputs.

Response: *VHD reductions were calculated on a system-wide basis for each Project alternative. VHD levels were derived by applying alternate socio-economic projections (for both population and employment) in the context of each of the highway system alternatives. A different set of socio-economic projections was applied to the highway system associated with each of the various build bridge/highway alternatives, based on the accessibility afforded by each alternative. The elements of the highway system were consistent for all of the build bridge/highway alternatives, except for the different proposed bridges, interchanges, and approach roadways associated with each of the alternatives. Thus, in eastern Jefferson and Oldham counties in Kentucky, and in southeastern Clark County, Indiana, the only difference in the highway network for each of the alternatives was whether a new Ohio River bridge and its associated approach roadways were provided.*

With a new eastern Ohio River bridge (as reflected in the original KIDPA two-bridge socio-economic projections), the areas of southeastern Clark County would become more accessible, increasing the population and employment growth rates in those areas, and resulting in a comparable decrease in the growth rates in eastern Jefferson and Oldham counties. On the other hand, without a new eastern bridge, southeastern Clark County would remain relatively less accessible, resulting in some of the projected

growth occurring in relatively more accessible eastern Jefferson and Oldham counties. Because this increase in population and employment growth rates in eastern Jefferson and Oldham counties (caused by their relatively greater accessibility) would occur under the single downtown bridge or no bridges scenario, congestion on the existing roadway network would be expected to increase. Thus, for example, Old Floydsburg Road would be expected to handle considerably more traffic, as employers and residential development would be more concentrated in the vicinity of the major highway interchanges in eastern Jefferson and Oldham counties. This would result in greater delay on that roadway and other area roadways, as reflected by the increase in VHD for the alternatives including only a new downtown bridge.

- C.9 If errors in the travel demand projections are corrected, all of the bridge scenarios bring Kennedy Bridge traffic volumes below 100 % capacity in 2025; building an eastern bridge solves no traffic problem related to the Kennedy Bridge; and construction of an additional downtown bridge and reconstruction of the Kennedy Interchange would address all safety and capacity needs in the DEIS and provide capacity for the year 2025.

Response: *See Responses C.2 through C.7 regarding alleged errors in the travel demand modeling process. As explained above, appropriate and acceptable procedures and assumptions were used to estimate travel demand and to analyze the service levels provided by Project alternatives. Table 3.6-2 shows projected daily traffic volume and demand-to-capacity ratios for the Kennedy Bridge for each of the Project alternatives, and Table 3.6-3 presents projected 2025 levels of service on the Kennedy Bridge. The Two Bridges/Highway alternatives with an eastern bridge and a downtown (C-1/C-3) bridge provide the greatest improvement in Kennedy Bridge performance. Construction of an eastern bridge, as part of a two-bridge solution, clearly would provide a substantial improvement to traffic volumes on the Kennedy Bridge. Moreover, as discussed in Chapter 2, the Project is not intended solely to solve traffic problems on the Kennedy Bridge. The Project is intended to improve cross-river mobility between Jefferson County, Kentucky, and Clark County, Indiana, and is specifically intended, among other things, to address inefficient cross-river mobility between the high growth areas of eastern Jefferson and Clark counties (including the lack of any river crossing in the metropolitan area upstream of the Kennedy Bridge). The project also is intended to improve cross-river system linkage and to provide additional freeway rerouting opportunities. Thus, construction of an additional downtown bridge and reconstruction of the Kennedy Interchange, without construction of an eastern bridge, would not adequately address all of the needs identified in Chapter 2 and would not provide sufficient cross-river mobility in 2025.*

- C.10 There are no interim year operation forecasts or maintenance of traffic plans for the reconstruction of the Kennedy Interchange. Traffic data should be provided for interim years (i.e., 2010 and/or 2015) so that the public can assess effects on the traffic network before the full build-out in 2025. This should be provided for the Ohio River bridges as well as the Kennedy Interchange.

Response: *Maintenance of traffic plans will be developed for all elements of the Project as part of the final design process, to ensure minimum disruption to the transportation system. A detailed operational model will likely be developed to provide a maintenance of traffic plan for the Kennedy Interchange, because of its size and complexity. This multi-phased maintenance of traffic plan will be developed for a construction period currently projected for 2007-2020.*

- C.11 The DEIS contains no analyses of the impacts of the alternatives on downtown streets and circulation patterns.

Response: *Travel forecasts for downtown streets were prepared as part of the air quality analysis for those streets that would provide access to or egress from freeway ramps serving downtown. See Section 3.4 and the Air Quality Baseline Report, which is available for review at the local project office. Impacts to Ninth Street in downtown Louisville as a result of the C-2 alignment were evaluated and presented in the Transportation and Traffic Analysis Report (November 2001) (p. 5-21), which was made available for review by the public during the DEIS comment period, and is currently available for review at the local project office. In addition, peak hour traffic forecasts were prepared for 25 downtown Louisville intersections. Those forecasts showed that the surface street system would operate at acceptable levels of service, and traffic on the ramps would not back up onto the interstate. Those forecasts are included in the Air Quality Baseline Report, which is available at the local project office.*

- C.12 The travel demand forecasts used in the DEIS are based on socioeconomic forecasts derived from land use plans that assumed two bridges will be constructed.

Response: *This comment is largely incorrect. Several alternative distributions of population and employment (No Action, three single-bridge alternatives, and a two-bridge alternative) were developed to evaluate the alternatives in the DEIS. While each distribution utilized the same overall population and employment forecasts for the Louisville metropolitan area (as explained in the Response to Comment D.4 below), the relative effects of one or more (or no) new bridges on the distribution of population and employment were taken into account in generating travel demand forecasts for each alternative. Only the*

Two Bridges/Highway Alternative utilized a socioeconomic distribution that assumed the construction of two new Ohio River bridges.

The travel demand forecasts included in the DEIS were based on the socioeconomic forecasts generated by KIPDA, the Metropolitan Planning Organization, and used in the current (2025) KIPDA long-range transportation plan. Those forecasts take into account many planning factors and assumptions, including adopted land use plans, zoning density considerations, environmental preservation policies, land holding capacities, and economic development goals and strategies, as well as regional and local plans for various infrastructure improvements, including new highway facilities. To the extent that some locally adopted land use plans assume that two new Ohio River bridges will be constructed in the future, that assumption invariably has played a role in shaping the socioeconomic forecasts (i.e., population, households and employment distributions) developed by KIPDA for use in the travel demand modeling process. However, because land use plans are adopted by local jurisdictions after considerable review and public involvement, it would be inappropriate for FHWA to discard those plans and to create its own land use plans for the metropolitan area in an effort to entirely eliminate any underlying local preference for construction of two bridges. Local land use plans reflect the vision of the respective communities for their future land use. Those visions are a legitimate factor for consideration in determining future population and employment trends. However, as summarized below and presented in greater detail in the Socioeconomic Baseline Report (which is available for review at the local project office), reasonable efforts were made to isolate the effects of construction of new bridges and to develop travel demand forecasts that accurately reflect the socioeconomic conditions that could be expected with each Project alternative—whether one, two, or no new bridges.

In order to provide a planning horizon of at least 20 years for the Project, the socioeconomic forecasts generated by KIPDA for the year 2020 were extended to the year 2025. This work, which was performed by the project consultant under the guidance of FHWA, KYTC, and INDOT, was reviewed by KIPDA's Transportation Technical Committee and revised by the consultant in an iterative process until that committee determined that the forecasts were appropriate. The 2025 socioeconomic forecasts were then reviewed and approved by the KIPDA Transportation Policy Committee in March 2000. (Initial approval was provided in December 1999, and the forecasts were reapproved in March 2000 after the correction of some errors.) The revised forecasts reflected the improved economic conditions experienced by the metropolitan area during the 1990s, resulting in greater growth in employment than previously forecast. These forecasts showed projected total metropolitan area population, household and employment levels in 2025, as

well as the distribution of population, households and employment across the 757 transportation analysis zones used in the travel demand model.

Although using the KIPDA-approved socioeconomic forecasts as a starting point, this Project sought to determine the effect of each of the Project alternatives (including the various one-bridge and No Action options) on the distribution of population, households and employment in the metropolitan area, while holding all other plans, policies and assumptions constant. In other words, while the basic KIPDA socioeconomic forecasts were based on the inclusion of two new bridges (and the reconstruction of the Kennedy Interchange)—and thus provided the socioeconomic forecast for the Two Bridges/Highway Alternative—it was also necessary to determine the socioeconomic distribution that would be associated with the No Action Alternative and each of the Single Bridge/Highway alternatives (Far East, Near East, Downtown (C-1/C-3), and Downtown (C-2)).

The detailed methodology for determining these alternative socioeconomic forecasts is presented in the Socioeconomic Baseline Report and is available for review at the local project office. Essentially, the different socioeconomic scenarios for each alternative were determined by evaluating the relative changes in accessibility brought about by construction of one or two new bridges in various locations. All other factors, such as existing land uses, land use plans and policies, political structures, and zoning classifications, were held constant in order to determine the differential effect of the transportation improvements. The total population, households and employment for the year 2025, as reviewed and approved by KIPDA, were then redistributed through the metropolitan area based on the changes in accessibility afforded by the Project alternatives. This led to a No Action socioeconomic distribution, as well as four single-bridge socioeconomic distributions—in addition to the initial two-bridge distribution.

Finally, once each of the alternative socioeconomic forecasts was developed, those socioeconomic factors were applied using the KIPDA travel demand model to determine the travel demand and traffic patterns on the Ohio River bridges and in the Kennedy Interchange under each of the alternatives evaluated in the DEIS. Thus, for example, the travel demand predicted for the No Action Alternative not only reflects the absence of any new bridges or reconstruction of the Kennedy Interchange in the transportation system, but also reflects the different distribution of population, households and employment that would be expected under the No Action Alternative (as compared to the various “build” alternatives).

- C.13 The DEIS’s travel demand forecasts are biased because they assumed that land use plans for eastern Jefferson County will be realized and that land use plans for the City of Louisville will not be realized.

Response: See Response to Comment C.12 above for an explanation of the development of the year 2025 socioeconomic forecasts utilized in the travel demand model. The DEIS's travel demand forecasts did not assume that land use plans for eastern Jefferson County will be realized while land use plans for the City of Louisville will not. As described above, all of the land use plans for the metropolitan area are considered by KIPDA in developing the socioeconomic forecasts that are used in the travel demand modeling process. Moreover, representatives of the City of Louisville participate in the KIPDA decision-making process to ensure that the plans and priorities of that jurisdiction have been reflected in the adopted socioeconomic forecasts.

The initial 2025 socioeconomic forecasts utilized for the Project were reviewed and approved by the KIPDA Transportation Technical Committee and Transportation Policy Committee. Prior to that approval, preliminary 2025 forecasts were reviewed in an iterative process that provided for input and suggestions from the member jurisdictions of KIPDA. As part of that review process, representatives of Jefferson County indicated that it is unrealistic—based on existing land uses, holding capacities and zoning regulations—to expect the number of households in the City of Louisville to increase over 1990 levels. Because the average household size is expected to decrease, population in the City of Louisville is therefore expected to decline. This result is expected despite the desire to revitalize the urban core expressed in *Cornerstone 2020*, Jefferson County's comprehensive land use plan. However, the rate of population decline in the City of Louisville is expected to be less than half the rate of decline between 1990 and 2000. Also, employment is expected to continue to grow, with 80,000 new jobs in the City of Louisville between 1990 and 2025, of which 37,000 are predicted in downtown Louisville. These population, household and employment forecasts were reviewed by KIPDA and approved by the Transportation Policy Committee in March 2000. Thus, they are the best and most reliable guides to future socioeconomic conditions for use in the travel demand forecasting process.

C.14 By manipulating projected employment and redistributing jobs from downtown to suburban areas, the DEIS consultants have developed a scenario that allows for no accessibility gains in the urban core, even from construction of the downtown project.

Response: Jobs were not redistributed from downtown to suburban areas. The socioeconomic forecasts used in the DEIS show continued strong employment growth in the City of Louisville, and particularly in downtown Louisville, through 2025. The analysis of the impact of bridge locations upon projected local growth focused on the relative accessibility afforded to different areas by the alternatives. Eastern bridge alternatives made eastern Clark County more accessible relative to eastern Jefferson County. Thus, with construction

of an eastern bridge (either alone or as part of a two-bridge solution), projected employment and population growth in eastern Clark County is expected to be higher than for the downtown-only bridge options, because of the improved accessibility afforded by an eastern bridge. Conversely, eastern Jefferson County would be relatively more accessible than eastern Clark County if only a downtown bridge were constructed—because the accessibility improvements associated with an eastern bridge would not be experienced in Clark County. As a consequence, more growth is projected in Kentucky with only a new downtown bridge, as opposed to one of the options including an eastern bridge. In both the downtown and the east end bridge one-bridge scenarios, the differences in population and employment growth rates take place in eastern Jefferson or Clark County. When viewed from a downtown perspective, these differences in socioeconomic projections are both 10 to 15 miles distant from downtown. Therefore, no relative changes in accessibility of the downtown to the areas of land change are discernable between the downtown only and east end only bridge alternatives.

There are no discernible differences in employment growth in the former City of Louisville and its downtown, under any of the bridge alternatives, because it has been allocated substantial growth—80,096 jobs—a growth of 30 percent between 1990 and 2025, and 26 percent of the total job growth in the five-county metropolitan area. With this growth in place, under all alternatives, the area is unable to accommodate additional development. The development that cannot be accommodated, therefore, will seek a substitute location.

The major difference among the various build alternatives is the ability of Clark and Floyd counties in Indiana or Oldham and eastern Jefferson counties in Kentucky to attract this unaccommodated development. This attraction depends on the accessibility of the employment development prospects of those respective areas. These areas compete for the future job growth not accommodated by the former City of Louisville. With an eastern bridge, Clark and Floyd counties are expected to attract more of this unaccommodated growth, and thus grow somewhat more, as compared to eastern Jefferson and Oldham counties.

- C.15 The DEIS overlooks the likelihood that an eastern bridge will generate traffic. The assumption that an eastern bridge will not generate traffic is contrary to current research literature on the topic that indicates that if you build it, they will come. In fact, one-third to one-half of the increase in traffic will be caused by induced demand.

Response: *The analysis of the effect of the Project alternatives on the transportation system shows that construction of an eastern bridge, in combination with a new downtown bridge, will result in a reduction in regional vehicle miles of*

travel (VMT) and vehicle hours of travel (VHT). Construction of a single new downtown bridge, without an eastern bridge, would result in an increase in regional VMT and a much smaller decrease in regional VHT (as compared to the two-bridge solution). Thus, a two-bridge solution, including an eastern bridge, contributes to the efficiency of the transportation system by providing the greatest reduction in regional VMT and VHT. Moreover, it is reasonable to assume a relatively fixed number of total regional trips in the forecast year based on given population and employment levels, and then to determine the differential effect of the Project alternatives on the origin and destination of those trips. Thus, while construction of one or more bridges may determine whether a given trip will be solely on one side of the Ohio River or will cross from one state to the other, the construction of one or more new bridges is unlikely to significantly alter the total number of trips that will occur in the region. This Project has evaluated the extent to which the redistribution of travel associated with each of the Project alternatives leads to a more or less efficient transportation system, measured in terms of the total number of vehicle miles and hours traveled per day in the region. This provides a reasonable basis for the evaluation of the relative transportation efficiencies afforded by each of the alternatives.

- C.16 An eastern bridge will induce thousands of trips from Kentucky to Clark County, Indiana, which otherwise would have been directed to Kentucky destinations. This will result in a relocation of economic activity from Kentucky to Indiana. The travel needs of eastern Jefferson and Oldham counties are adequately served already. There is nothing in Clark County that Kentuckians need to reach.

Response: *The results of the socioeconomic analysis and travel demand modeling process show that with the construction of an eastern bridge, some new population and employment that otherwise would have located in far eastern Jefferson and Oldham counties in Kentucky will locate in Clark and Floyd counties in Indiana. This is a relatively small number of the total jobs and population in the metropolitan area. In any event, population and employment are both expected to continue to grow steadily on both sides of the Ohio River, regardless of which alternative is selected. The travel demand analysis also shows that construction of an eastern bridge leads to a more efficient regional transportation system (as measured by regional VMT and VHT, as well as vehicle hours of delay (VHD)), thus serving the needs of travelers throughout the metropolitan area. Some trips that otherwise would have been directed to Kentucky destinations may be redirected to Indiana destinations, and vice versa, with construction of an eastern bridge. Judgments as to whether there are any amenities in Clark County that Kentuckians need to reach, or vice versa, are opinions that require no response here.*

C.17 An east end bridge will ease traffic downtown, will make roads safer, ease air pollution, and will shorten travel times.

Response: *As described in Sections 3.6 and 3.7, an eastern bridge, as part of the Preferred Alternative, will contribute to the reduction of traffic congestion downtown and a reduction in travel times and distances. For example, as shown in Table 3.6-1, an eastern bridge alone will result in fewer vehicle miles of travel, vehicle hours of travel, and vehicle hours of delay in the metropolitan area than a new downtown bridge alone. Moreover, the combination of an eastern bridge and a downtown bridge will result in the greatest reductions in those measures. Similarly, the construction of an eastern bridge, particularly when combined with a new downtown bridge, will contribute to the reduction of congestion on the Kennedy Bridge and in the Kennedy Interchange. See Tables 3.6-2, 3.6-3, and 3.6-4. The primary safety improvements associated with the Preferred Alternative are related to improvements in the Kennedy Interchange, as described in Section 3.6.3. None of the alternatives evaluated in the EIS would result in exceedances of applicable air quality standards. See Section 5.4.*

C.18 An east end bridge is needed to handle the traffic already existing in that area.

Response: *Traffic analyses included in the FEIS indicate that construction of the proposed eastern bridge would make travel between eastern Clark County and eastern Jefferson and Oldham counties more efficient. See Section 3.6.5 and Table 3.6.5.*

C.19 An east end bridge will not have as much of an effect on traffic as would a properly designed spaghetti junction.

Response: *Both construction of an eastern bridge and reconstruction of the Kennedy Interchange would have beneficial effects on the transportation system. The rationale for inclusion of both of these elements in the Preferred Alternative is provided in Section 3.7.1. The combination of all of the elements of the Preferred Alternative provides the most efficient solution to the long-term cross-river mobility needs identified in Chapter 2.*

C.20 The DEIS does not factor in the reduction of traffic from mass transportation and e-commuting.

Response: *The travel demand forecasts presented in the DEIS and FEIS were generated using KIPDA's travel demand model. That model is a state-of-the-art computer program that considers numerous factors, including participation rates in mass transportation and e-commuting, as well as consumer behavior patterns and forecast socioeconomic trends, to estimate future travel demand. Thus, reasonable and foreseeable reductions in vehicular traffic from mass*

transportation and e-commuting were incorporated into the travel demand forecasts used for this project. In addition, as described in Sections 3.2.4 and 3.3.4, mass transportation alternatives were evaluated in the initial screening of alternatives to determine their effectiveness in meeting the purpose and needs identified in Chapter 2.

- C.21 Traffic moves steadily along River Road and over the Second Street Bridge, even during rush hour.

Response: *The downtown-related needs identified in Chapter 2 relate primarily to the interstate freeway system, including the Kennedy Interchange and the Kennedy Bridge. Adjacent surface routes, such as River Road and the Second Street Bridge (Clark Memorial Bridge), have limited capacity to address the transportation needs identified in Chapter 2.*

- C.22 Bridges are simply an extension of the interstate highway system. If the bridges merely expand the system, “you’re not really solving the problem of congestion.”

Response: *Section 3.6.2 summarizes the predicted reduction in traffic congestion attributable to each of the alternatives evaluated in detail in the EIS. This analysis demonstrates that one or two new Ohio River bridges will reduce congestion and improve the efficiency of the cross-river transportation system. In addition, the TSM and TDM measures included in the Preferred Alternative (summarized in Sections 3.2 and 3.5.2), as well as those TSM and TDM measures already planned by KIPDA will help somewhat to reduce vehicle travel demand.*

- C.23 No traffic planning projection for 2025 can be accurate because by this time the country will be “gas starved.”

Response: *Travel demand projections for 2025 are based on a reasonable assumption that a sufficient fuel supply will continue to be available to travelers in the metropolitan area. Conclusions regarding the decline of fuel supplies in the next 20 to 25 years are speculative and not supported by the preponderance of available evidence. Vehicle technology is also likely to continue to evolve over this period as well.*

- C.24 Separating East-West traffic from North-South traffic via a second downtown bridge will allow compatible traffic speeds on each bridge.

Response: *The Preferred Alternative includes a new downtown bridge parallel to the existing Kennedy Bridge (I-65). However, traffic would not be separated into east-west and north-south components. The proposed configuration of southbound I-65 immediately south of the Ohio River would consist of three*

through lanes and three ramps to I-64 (two eastbound and one westbound). The configuration of northbound I-65 at the same location would consist of three through lanes and three ramps to I-64 (two eastbound and one westbound). The existing Kennedy Bridge would carry six lanes of I-65 southbound, and the new bridge would carry six lanes of I-65 northbound. This configuration would allow for north-south through traffic on I-65, as well as sufficient connections to ramps connecting to/from I-64 to the east and west, and I-71 to the north. Implementation of the Preferred Alternative is expected to result in traffic operations at Level of Service C on the Kennedy Bridge and the new parallel span. See Section 3.6.2.

- C.25 An East End bridge will do nothing to solve the problem of backup during rush hours on I-71 South. In fact, it will increase traffic if Indiana drivers use an eastern bridge and then come downtown via I-71.

Response: *The provision of an eastern bridge will provide I-71 users who desire to cross the Ohio River with an alternative crossing location. Removing cross-river traffic that does not have a downtown origin or destination from I-71 between I-265 and downtown will release capacity on that segment of I-71, which can serve those I-71 users who do have a downtown origin or destination.*

- C.26 An East End Bridge will cause too much traffic on Brownsboro Road/U.S. 42.

Response: *Traffic volume on U.S. 42 immediately north/east of the KY 841 interchange is currently estimated to be 27,000 vehicles per weekday. Under the No Action Alternative, the volume is projected to increase to 49,500 vehicles per weekday. For the Preferred Alternative, a volume of 48,000 vehicles per weekday is projected for U.S. 42 at KY 841. Thus, the impacts of the Preferred Alternative on U.S. 42 traffic are expected to be substantially similar to the No Action Alternative.*

- C.27 I-71 and a widened River Road are sufficient to allow Story Avenue to return to two-way traffic. This will make the area more of a neighborhood center, as opposed to a raceway to downtown from the east end.

Response: *The extension of Witherspoon Street may provide some traffic relief for Story Avenue, but any reduction would likely be modest. Story Avenue primarily serves traffic exiting I-64, rather than I-71 traffic. River Road and the proposed I-71/Frankfort Avenue interchange would primarily serve I-71 traffic. Thus, improvements to the latter facilities would have only a modest effect on Story Avenue traffic. The Preferred Alternative includes the reconstruction of the Mellwood/Story interchange, and the maintenance of one-way traffic on Mellwood and Story avenues. However, the Section 106 MOA provides for a study of the traffic effects of the conversion of those*

streets to two-way traffic, and the consideration of the results of that study during the final design process.

- C.28 The DEIS overestimates the future increase in daily trips across the Ohio. The DEIS assumes that trips will increase in proportion to current automobile/transit ratios. But demographic realities (higher future costs to automobile traffic/an aging population) suggest that a higher percentage of these trips will require public transit.

Response: *The travel demand estimates included in the DEIS were generated using the approved KIPDA travel demand model, which incorporates numerous factors for predicting future travel demand. Those factors include forecast demographic and socioeconomic trends, as well as modal choice (e.g., automobile vs. transit) factors.*

- C.29 An East End bridge will reduce travel time to Lexington and Cincinnati.

Response: *An eastern bridge would reduce travel times to Lexington and Cincinnati for trips originating in the northern and northeastern portions of the metropolitan area (north of the Ohio River), as well as interstate trips entering the metropolitan area from the north. Reductions in congestion downtown, some of which would be attributable to construction of an eastern bridge, also could reduce travel times for travelers passing through downtown Louisville toward Lexington or Cincinnati.*

- C.30 On page 3-22 the DEIS states that implementing non-motorized facility alternatives “is not consistent with locally approved transportation plans.” This is incorrect. KIPDA’s 1998 Regional Bike and Pedestrian Plan states on Page 56, item 20 that plans and designs for all bridge, overpass and underpass construction “should provide for the safe accommodation of bicyclists and pedestrians.”

Response: *The conclusion in Section 3.3.2 that non-motorized facility alternatives are not consistent with locally approved transportation plans was made with reference to these alternatives in isolation. Such alternatives, without additional cross-river bridges or improvements to the Kennedy Interchange, are not consistent with the elements contained in the long-range transportation plan related to cross-river mobility. The non-motorized facility enhancements included in KIPDA’s Regional Bike and Pedestrian Plan would contribute only minimally to purpose and need. As such, non-motorized facility enhancements have been evaluated in the DEIS in combination with the various bridge/highway alternatives and the Transportation Management Alternative. See Section 3.3.2 for this recommendation. Non-motorized facility enhancements are included in the Preferred Alternative, described in Section 3.7. Specifically, the Preferred Alternative includes bicycle*

paths/pedestrian walkways on both the proposed downtown bridge and the proposed eastern bridge, and those facilities would connect with existing or proposed non-motorized facilities on both sides of the Ohio River.

- C.31 It would be helpful to have a better estimate on the number of increased vehicles traveling on U.S. 42 as a result of the proposed bridge alternatives.

Response: *See Response to Comment C.26. The U.S. 42/KY 841 interchange is projected to be at LOS E during the peak period in 2025. This compares to LOS B projected for the Preferred Alternative at the same location.*

D. Socio-Economic Analysis

- D.1 The demographic analysis used for the DEIS was not reached through accepted demographic procedures, but was based on a local “wish list” from city and county planners. Projections for 2025 also improperly relied on straight-line projection from KIPDA’s 2010 or 2015 projections.

Response: *Accepted demographic procedures were used in the development of 2025 population and employment forecasts. Regional projections of year 2025 population and employment for the Louisville metropolitan area used in the DEIS analyses were synthesized from KIPDA’s 2020 projections and projections of 2025 regional socioeconomic conditions prepared by two national forecasting firms (Woods and Poole Economics and NPA). KIPDA’s projections were developed through the federally-prescribed, consensus-based local transportation planning process, which involves representatives of local jurisdictions to ensure that local land use plans and knowledge of local economic conditions are reflected in the socioeconomic forecasts that form the basis of travel demand forecasts. Those projections served as the basis for the transportation planning decisions embodied in KIPDA’s previously adopted Horizon 2020 long-range transportation plan, and the current Horizon 2025 long-range plan. The national forecasting firms, Woods and Poole Economics and NPA, also prepare forecasts of population and employment for major metropolitan areas of the United States, including the Louisville metropolitan area. The national and local economic climate and regional/metropolitan growth patterns and trends are used in making these forecasts. Year 2025 forecasts of population and employment prepared in 1993, 1997 and 1999 by Woods and Poole and in 1998 and 1999 by NPA were reviewed. Another one of the forecasts reviewed was a regional 2025 population projection derived by application of a 1990 – 2020 growth rate developed from KIPDA planning data. The 2025 projections were not derived from straight-line projections from KIPDA’s 2010 or 2015 projections. Recommended projections of population, households, total employment, and retail employment for the Louisville metropolitan area in 2025 were then prepared by synthesizing the values derived from Woods & Poole and NPA*

projections, as well as those prepared by KIPDA. The KIPDA Transportation Technical and Policy Committees reviewed these recommendations and approved them in March 2000 as appropriate for use in the analysis of Project alternatives. In 2002, KIPDA used these projections to update its long-range transportation plan to 2025.

- D.2 The projected growth for the City of Louisville was understated, in part because local planners and the project consultant erroneously capped growth based on existing zoning and land availability in Louisville. The DEIS did not give serious consideration to revitalization and land use plans in downtown Louisville, or to 1350 acres of land available for development downtown. At the same time, the DEIS gave unwarranted consideration to suburban land use plans that encourage sprawl, even in the absence of adequate supporting infrastructure.

Response: *At the project outset, FHWA determined that Year 2025 projections of population, households and employment would be required to perform analyses of Project alternatives. These projections were necessary to maintain compliance with FHWA requirements that a planning horizon of at least 20 years be used in the development of transportation plans and analysis of projects included in the plan. To this end, Year 2025 socioeconomic projections at the traffic analysis zone level of detail were developed by the Project consultant in consultation with KIPDA. (There are 757 traffic analysis zones in the Louisville metropolitan area.)*

After the Project consultant developed preliminary forecasts, they were reviewed by the KIPDA Transportation Technical Committee to determine their reasonableness and conformity with local area plans. Factors considered by KIPDA included the presence of, or plans for, infrastructure to support the projected development, the presence of appropriate zoning, and the existing and planned local transportation system. Based on this review, members of the KIPDA Transportation Technical Committee indicated that the Project consultant's initial projections had overestimated the likely 2025 population in the City of Louisville. This conclusion was based on a judgment that, in light of existing land uses, holding capacities, and zoning regulations, the number of households in the City of Louisville is not expected to increase over 1990 levels. Because the average household size continues to decrease, the overall population of the City of Louisville is not expected to grow as rapidly as the Project consultant had initially forecast. The projections were thus modified and reviewed in an iterative manner until the KIPDA Transportation Technical Committee (TTC) determined that they were appropriate for analysis of Project alternatives. This resulted in the so-called "cap" on population growth in the City of Louisville. No such "cap" was placed on employment growth, and in fact, the final 2025 employment projections show continued healthy growth in employment in the City of

Louisville, including the central business district. At the completion of this iterative process, the 2025 forecasts were forwarded to the KIPDA Transportation Policy Committee (TPC), the official transportation decision-making body of the MPO, for approval. Approval was given by the TPC in March 2000.

Both the KIPDA TPC and TTC are made up of elected officials and technical staff of governmental jurisdictions comprising the five-county KIPDA area, including representatives of the City of Louisville. These officials and staff are responsible for ensuring that their individual jurisdictions' plans are reflected in regional transportation (and other) planning for the Louisville metropolitan area. The TPC and TTC actions set the context in which regional transportation planning activities are performed. The relative growth in different parts of the region, including related issues of zoning and developable land in the City of Louisville and elsewhere, were discussed at length by the TTC in the development of the 2025 socioeconomic forecasts that were approved by the TPC in March 2000.

- D.3 The demographic analysis in the DEIS arbitrarily redistributed jobs and population to eastern Jefferson County, based on the assumption that two bridges will be constructed.

Response: *In order to be consistent with KIPDA's long-range transportation plan, the initial set of small area (traffic analysis zone) socioeconomic projections made for the five-county Louisville metropolitan area assumed the presence of two new bridges. As explained in detail in Response to Comment C.12 above, five alternative socioeconomic forecasts were developed assuming: the construction of no new Ohio River Bridges; and the construction of one bridge at three different locations (Far East, Near East, and Downtown). These five alternative socioeconomic distributions were used to analyze each of the respective alternatives in the DEIS. The alternatives that include an eastern Ohio River bridge (either alone or as part of a two-bridge combination) actually would result in a slight decrease in population and employment growth in eastern Jefferson County, as compared to the No Action Alternative. Under those alternatives, eastern Clark County would experience a comparable increase in growth rates. None of the alternatives would involve any significant transfer of employment or population growth from the urban core to eastern portions of the metropolitan area.*

- D.4 The determination that the construction of one or more new bridges would have no impact upon overall population and employment growth rates in the metropolitan area was questioned. Commenters questioned the approach of the DEIS, in which the impacts of alternative bridge locations and combinations on regional growth patterns were measured in terms of the reallocation of population and employment growth within the region, rather

than projecting whether any additional employment or population could be expected overall within the metropolitan area with the construction of one or more new bridges. According to one commenter, the DEIS's "no build" scenario improperly uses the 2025 "two-bridge" socio-economic forecasts, resulting merely in a redistribution of jobs that were predicted if the two bridges were built.

Response: *This issue was discussed with the KIPDA TTC at the project outset. The determination of the impact of major transportation projects, such as construction of a new Ohio River bridge, on overall regional growth is speculative because the new jobs and people would need to relocate from other metropolitan areas. Thus, assumptions must be made regarding economic growth, including transportation plans and the business climate, of metropolitan areas that compete with Louisville, such as Indianapolis, Nashville, Memphis, St. Louis and Cincinnati. Consensus is rarely reached on how alternative transportation plans influence regional growth and what factors influence the shift of jobs and people between competing metropolitan areas. To be conservative and not bias the analyses toward the bridge alternatives, one projection of Year 2025 total regional population and employment, the one adopted by the KIPDA TPC, was used to analyze Project alternatives. (As described above, alternative distributions of regional population and employment were developed to analyze each of the alternatives.)*

D.5 The 2025 population projections used in the DEIS overstate growth rates for Indiana between 1990 and 2000, as reported by the U.S. Census Bureau. This contributes to an overstatement of cross-river traffic projections.

Response: *Regional socio-economic projections for each major jurisdiction (county) in the metropolitan area should not be viewed as separate, independent and closed units. This is because growth in different parts of the metropolitan area is not projected to occur at the same rate over a thirty-five year period (1990-2025). Growth projections take into account, among other things, adopted local land use plans, the availability of developable land, and existing or planned infrastructure improvements. The timing or introduction of these factors will result in differential growth rates throughout the metropolitan area over the forecast period. In addition, regional growth rates for population were assumed to be lower in the 1990s than after 2000. Thus, comparison of actual year 2000 census statistics to a point on a straight-line extrapolation of the 1990-2025 population growth rate for a portion of the metropolitan area is not a fair or accurate comparison. The socioeconomic forecasts developed in the preparation of the DEIS are intended to provide a reasonable estimate of the distribution of population and employment in the forecast year (2025), taking into account variable growth rates in various parts of the metropolitan area over the forecast period.*

On a regional basis, the projected 1990 – 2000 annual population growth rate is on target as of 2000 -- 0.73 percent actual versus 0.75 percent projected. Jefferson County is reaching capacity, and will experience a slowdown in growth rates, forcing more regional growth outward. Additional growth can then be expected in areas such as Clark and Floyd counties. Although the actual average annual population growth rate was lower for Clark and Floyd counties in 1990 – 2000 than the average annual rate forecast for the entire 1990-2025 period, employment growth rates showed the opposite result. The Clark and Floyd County 1990 – 2000 actual employment growth rate is greater than the average projected growth rate for 1990-2025. These short-term variations do not undermine the reasonableness of the overall 2025 socioeconomic projections that served as the basis for the travel demand forecasts included in the DEIS.

- D.6 The total employment numbers in the DEIS do not equal the sum of the retail and non-retail employment numbers for the two-bridge scenario. The total household numbers used in the travel demand model do not equal the sum of the low-, medium-, and high-income households for the two-bridge scenario.

Response: *There are two parts to this response. First, the development of Year 2025 socio-economic projections (population and employment) was iterative in nature. Early in the course of development (January 2000) of these projections, total employment for three traffic analysis zones was incorrectly summed. Review of these forecasts detected these errors, and corrections were made to the appropriate data files. Corrected versions of this data were used in making the travel demand forecasts for the Project alternatives that appeared in the DEIS. As noted in Response to Comment C.4 above, one public stakeholder was initially provided some socioeconomic data that contained the erroneous information. However, that party was subsequently provided the corrected data as part of the complete travel demand modeling information for all of the analyses presented in the Draft EIS.*

The second part of this response is that some rounding errors were introduced when disaggregating regional projections of employment, households, and population to traffic analysis zones. These differences are nominal and have insignificant impacts on the travel demand projections.

- D.7 The construction of two new Ohio River bridges would cause the loss of up to 12,000 Kentucky jobs that would relocate to Indiana. The construction of an eastern bridge would account for the loss of approximately 10,000 of those 12,000 jobs.

Response: *None of the Project alternatives would result in the “loss” of jobs from either Kentucky or Indiana. However, the construction of one or two new Ohio*

River bridges (regardless of location) likely would have some effect on relative employment growth rates in the metropolitan area. Thus, with construction of an eastern bridge (whether alone or as part of a two-bridge scenario), the employment growth rate in eastern Jefferson and Oldham counties in Kentucky would be slightly lower—although this area would still continue to experience healthy employment growth and a significant number of new jobs by 2025. Conversely, because an eastern bridge would make eastern Clark County relatively more accessible, the employment growth rate in that area would be expected to increase slightly. Overall, this is likely to constitute a shift of about 10,000 new jobs, or about 1.5 percent of the total employment growth over the forecast period. However, no existing jobs would be lost. In addition, none of the changes in employment growth rates between Kentucky and Indiana are expected to have a significant effect on downtown or the urban core. (Similar results are expected with respect to population growth.) See Response to Comment E.1 below for additional information on this subject.

- D.8 The procedures used by the DEIS consultants failed to follow the “Guidebook for Assessing the Social and Economic Effects of Transportation Projects,” sponsored by the National Cooperative Highway Research Program.

Response: *This guidebook, published in 2001, is a summary of techniques used to analyze and determine the economic and social impacts of transportation projects. These include impacts on community cohesion, economic development, noise, aesthetics, and property values. The guidebook also reviews procedures to assess transportation and distributive effects of proposed projects. Different procedures to address these issues are presented, along with a critique of their strengths and weaknesses. In some instances, examples or case studies of the different procedures are presented. All of the issues contained in this guidebook were considered and addressed in the EIS. The procedures used to address social and economic issues in the EIS were included in the Guidebook. The results of the social and economic impact analyses are presented in Section 5.1 and in the Socioeconomic Baseline Report.*

- D.9 The DEIS assesses little beyond the immediate and direct effect from building the project’s infrastructure. The DEIS has not adequately assessed indirect and cumulative impacts on land resources, land use, and settlement patterns. The DEIS ignores completely the geographic area affected by the project’s traffic levels.

Response: *The indirect and cumulative effects of alternatives were assessed for land use and community resources, historic and cultural resources, ecological resources and air quality. These are presented in Sections 5.1, 5.3, 5.8, 5.10, and 5.11, and are documented in more detail in the Indirect and Cumulative*

Effects Analysis Technical Report, which was completed in November 2001. That report is available for review at the local project office. In that report, the areas of potential impact were identified separately for each resource, and analyses were conducted accordingly. With respect to traffic levels, differences in accessibility afforded by the different alternatives were assessed to identify the effects of the alternatives on population and employment projections. Those projections in turn were used to estimate travel demand and also to analyze the indirect and cumulative effects of the alternatives.

- D.10 Although job redistribution was supposedly based on increased access provided by new bridges, Oldham County, which presumably would be more accessible if an eastern bridge were built, loses jobs to Indiana under the two-bridge scenario. This is not supported by data on the availability of industrial property. If an eastern bridge would improve accessibility for both counties, why would development increase in Clark County and decrease in Oldham County?

Response: *The job redistribution analysis considered the relative changes in accessibility to households and employment opportunities afforded by each bridge construction scenario. The construction of an eastern bridge increases the accessibility of eastern Clark County to regional population and employment much more than it does for eastern Jefferson and western Oldham counties, which are already relatively accessible. Thus, development is projected to accelerate in Clark County and to slow slightly in eastern Jefferson and western Oldham counties if an eastern bridge were to be constructed (either alone or as part of a two-bridge scenario). Existing development would not leave Jefferson and Oldham counties with construction of an eastern bridge. Rather growth would be less than projected under a No Action or downtown-only bridge alternative. In contrast, if no new bridge, or only a downtown bridge, were constructed, eastern Jefferson and western Oldham counties would remain relatively more accessible than eastern Clark County, and consequently would experience more employment growth. The availability of developable land was assumed to be the same for all alternatives when determining the impact of alternative bridge locations on local development patterns.*

- D.11 The Indiana Army Ammunition Plant (INAAP) Master Development Plan does not base its jobs projections on the construction of an eastern bridge and cannot serve as the basis for the DEIS's redistribution of projected jobs from Oldham County, Kentucky, to Indiana. The Plan itself recognizes many uncertainties associated with INAAP redevelopment. The DEIS also gives no recognition to the benefits to INAAP from a downtown bridge, which would eliminate traffic congestion in the I-65 corridor.

Response: *As discussed in the Response to Comment D.10 above, the availability of industrial land was assumed to be the same for all bridge construction scenarios. The job projections contained in the DEIS did not rely on the INAAP for the redistribution of employment growth from Kentucky to Indiana with a new eastern bridge. However, an eastern bridge would make the INAAP site more accessible to regional distributions of population and employment than would the construction of an additional downtown bridge. While a downtown bridge might make the INAAP site somewhat more attractive for redevelopment, the benefits provided to the INAAP site from constructing an eastern bridge would be greater than that of a downtown bridge, making it more attractive for development than would a downtown bridge.*

D.12 The DEIS's land use impact analysis does not address the critical factors of planning and infrastructure in place, and costs of investments required for future growth. Infrastructure inadequacies and significant investment costs have been identified in southern Indiana, including for redevelopment of the INAAP. An "expert panel" convened for this project expressed concern about potential hindrances to development in this area.

Response: *Section 5.1.1 of the DEIS discusses land use, comprehensive plans, and the growth impacts of the Project alternatives. Representatives of southern Indiana agencies were consulted to determine existing and planned infrastructure improvements within their jurisdictions. Development projected for eastern Clark County is in areas where significant infrastructure improvements have already been made or additional improvements are proposed. This area, in accordance with current planning policies, is undergoing transition from agricultural use to one of suburban residential and industrial use. The INAAP property is one element of the growth plans in this area. The expert panel referenced in this comment was comprised primarily of City of Louisville planning and engineering staff, whose expertise is focused primarily within their own jurisdiction.*

D.13 The construction of an eastern bridge and completion of the eastern I-265 beltway would lead to the creation of an "Edge City" in Clark County, Indiana, in the vicinity of the INAAP and the Clark Maritime Center.

Response: *Construction of an eastern bridge would likely accelerate development in southeastern Clark County. Considerable growth is already located there and is rapidly expanding. The additional growth associated with an eastern bridge would not come at the expense of the urban core, which is not expected to suffer any loss of population or employment as a result of construction of an eastern bridge. The density and type of development that would occur in this area is dependent on zoning decisions by local jurisdictions. However, this growth is in an area that has been identified by local planners for*

additional commercial and industrial development. These conclusions are presented in Section 5.1 of the FEIS and in the Socioeconomic Baseline Report.

- D.14 The DEIS contains no community impact assessment. The analysis of neighborhood community impacts in the DEIS is entirely inadequate. The definitions of neighborhoods and neighborhood cohesion are inadequate. Instead of 1989 newspaper articles on neighborhoods, the DEIS should have used information from local historians.

Response: *Community impacts were assessed in Section 5.1 of the DEIS, and additional detail is provided in the Socioeconomic Baseline Report, which is available for review at the local project office. Section 5.1.1 relates socioeconomic analyses at three geographic levels of detail: regional, vicinity, and direct (local). The vicinity impact analyses focus on project impacts to neighborhoods and communities. Issues concerning access to community facilities such as police and fire protection, schools, churches, and neighborhood division were considered. Discussions were held with community spokesmen and leaders regarding project impacts on their constituents. Several of these discussions led to the modification of the alternatives to address issues raised during these discussions. These public involvement activities are summarized in Section 7.1. The selection of the Preferred Alternative was respectful of concerns about bisecting Prospect and the Country Estates of River Road Historic District.*

- D.15 The DEIS fails to address the social and economic effects of new bridges, particularly an eastern bridge, on the urban core.

Response: *The DEIS did address the social and economic effects of the new bridges in Section 5.1, and in particular, Sections 5.1.3 (“Social Impacts”) and 5.1.6 (“Economic Impacts”). As described in more detail in the Responses to Comment D.2 above and Comment E.1 below, construction of one or two new Ohio River bridges in the metropolitan area is not expected to have a significant effect on population or employment in the urban core. Thus, no “urban disinvestment” is expected as a result of constructing an eastern bridge. As described in Section 3.4.3, construction of a new bridge in the downtown C-2 alignment would likely have particularly adverse effects on the western edge of downtown Louisville by displacing commercial properties, directing a large amount of additional traffic onto Ninth Street (Roy Wilkins Boulevard), and creating an additional socioeconomic barrier between low-income and minority areas of western Louisville and the central business district. Construction of a bridge along the C-1/C-3 alignment downtown would have adverse effects on downtown Jeffersonville and downtown Louisville, including residential and commercial displacements.*

Reconstruction of the Kennedy Interchange also would have adverse effects on urban areas, especially the Butchertown and Phoenix Hill neighborhoods.

- D.16 The DEIS assumed a 10-mile “sprawl boundary” and redistributed jobs and households among transportation analysis zones within the 10-mile radius of downtown Louisville. The DEIS also used that 10-mile limit to analyze urban sprawl effects. The effect of shifting jobs from outside a 10-mile radius of downtown Louisville to an area in Indiana barely within a 10-mile radius misleads the reader about the effects of bridges on the urban core and sprawl.

Response: *Circles centered on downtown Louisville with radii of five (5), ten (10), and fifteen (15) miles were placed on several maps in the Socio Economic Baseline Report to assist in the interpretation of the effects of the alternatives on regional development patterns. These circles were placed to orient the viewer to the relative locations of projected changes in development patterns among the Project alternatives. These interpretive aids were not labeled or utilized as a “sprawl boundary,” nor were jobs or households simply redistributed among traffic analysis zones within the 10-mile radius. The DEIS did point out that most of the additional growth in Indiana that would occur with an eastern bridge would occur within the 10-mile radius, while most of the corresponding reduction in growth rates in Kentucky would occur outside the 10-mile radius. Thus, the eastern bridge would have the effect of concentrating growth somewhat closer to the center of the metropolitan area (i.e., downtown). In any case, none of the Project alternatives would have any significant adverse effect on the urban core or encourage significant additional sprawl.*

- D.17 The use of 10-mile increments for analyzing sprawl issues is not consistent with local development patterns. Any redistribution of development from the inner core to points 10 miles outside would be extremely harmful to downtown development. To suggest that such development patterns are anti-sprawl because they are not further removed from the core is not a valid argument.

Response: *The analysis of the impact of alternative bridge locations on the distribution of future development was performed at the traffic analysis zone level of detail. There are 757 traffic analysis zones in the five-county KIPDA planning area. Concentric circles centered on downtown Louisville with 5-, 10-, and 15-mile radii were placed over the maps of traffic zones to orient the viewer as to where changes in development patterns are projected for different bridge locations as compared to the No Action Alternative. The results showed that eastern bridge locations would have no development impact on downtown Louisville and would not redistribute development from the urban core to suburban areas. While all of the Project alternatives have a negligible effect on so-called “sprawl” development patterns, construction of*

an eastern bridge would have the effect of concentrating growth slightly closer to the urban core (in eastern Clark County) than under the No Action and single-bridge alternatives (which would result in more growth further out in eastern Jefferson and Oldham counties in Kentucky).

- D.18 The statement about bridges slowing growth ten miles from downtown was not qualified by the fact that the overall impact is small related to total growth. The best that can be said is that the eastern bridge will not contribute to an acceleration of sprawl.

Response *The accessibility analysis demonstrated that an eastern bridge would redirect growth from the outer regions of the metropolitan area to those areas closer to the center of the region. The assertion that these changes are small relative to overall development is true. When the differences in population or employment growth projections are compared at the county level, they are less than one percent of the projected regional population and employment totals.*

- D.19 Completion of a circumferential beltway by building an eastern bridge will contribute to significant indirect and cumulative effects from induced growth in the beltway area (sprawl), and will contribute to significant indirect and cumulative effects from urban disinvestment for the Louisville metropolitan area.

Response: *The analysis of these issues is summarized in Section 5.1, and is discussed in greater detail in the Indirect and Cumulative Effects Analysis Technical Report (November 2001), which is available for review at the local project office. The analyses of the impacts of the completion of the circumferential beltway (construction of an eastern bridge) indicated that some future growth would be directed from eastern Jefferson and Oldham counties to eastern Clark County. The accessibility analyses also concluded that an eastern bridge would have no quantifiable change on downtown Louisville's access to projected regional distributions of population and employment. As such, it would have no impact on disinvestment or investment in downtown Louisville. See the Responses to Comment D.15 above and Comment E.1 below for additional information on this subject.*

- D.20 There is no empirical or experiential basis for the DEIS's premise that completion of the I-265 beltway would contain dispersed land development patterns in the Louisville metropolitan area. In fact, over the past 30 years, the Louisville area has consumed a great deal of land to accommodate little or modest population growth.

Response: *See Response to Comment D.19 above. The analysis of the effect of the Project alternatives on land development patterns was based on changes in*

accessibility brought about by the various alternatives. This process is summarized in greater detail in the Responses to Comments C.12 and D.7 above.

- D.21 The DEIS did not evaluate the project alternatives' conformity to Kentucky Governor Patton's Smart Growth Initiative.

Response: *Local land use plans were reviewed and local officials were consulted to determine the effects of the Project alternatives on land use and their consistency with the local land use plans. That analysis is presented in Section 5.1.1 of the FEIS. The Preferred Alternative is consistent with the locally adopted transportation plan and supports planned growth. Moreover, the Preferred Alternative results in increased growth within the I-265 beltway, as compared to the No Action Alternative. The Kentucky General Assembly did not adopt Governor Patton's Smart Growth Initiative during its 2002 session.*

- D.22 The DEIS claims that only adopted land use plans were considered, yet the draft Prospect Small Area Plan, which has not been approved, is referenced in the DEIS.

Response: *Reference to the draft Prospect Small Area Plan has been removed.*

- D.23 *Cornerstone 2020*, the Jefferson County (Kentucky) comprehensive land use plan, is silent on both a downtown and an eastern bridge. The DEIS does not give effect to goals in *Cornerstone 2020* relating to the importance of downtown, promoting transit, pedestrian and bicycle use, and preserving historic properties.

Response: *The Cornerstone 2020 plan itself is silent concerning any new Ohio River bridge(s). However, one of the Core Graphics, which are included with Cornerstone 2002 as interpretive aids, shows two new transportation corridors across the Ohio River, one in the east end and one downtown. These corridors roughly correspond with the two corridors recommended during the ORMIS process and the two bridge alignments included in the Preferred Alternative. While recognizing the inclusion of these two corridors on Core Graphic 10, the EIS acknowledges and analyzes the goals of Cornerstone 2020 with respect to both the downtown and eastern portions of the metropolitan area. Chapter 2 provides a detailed discussion of the goals and objectives of Cornerstone 2020 relevant to this Project, including the emphasis in that plan on the importance of downtown as the economic center of the region.*

Transit and non-motorized facilities (pedestrian and bicycle) were considered in the development and screening of alternatives. That screening process is

described in Section 3.3. As a result of that analysis, enhanced bus service has been included as an element of the Preferred Alternative. Pedestrian and bicycle paths also will be included on both of the new bridges included in the Preferred Alternative. Extensive analyses of the impacts of the alternatives on cultural resources, including historic properties, were performed, and are presented in Section 5.3 and in the documentation prepared as part of the review process under Section 106 of the National Historic Preservation Act. Section 3.7 describes how all of these goals and impacts were balanced in identifying the Preferred Alternative. The Section 106 Memorandum of Agreement includes extensive commitments to historic preservation and planning. See Chapter 8.

- D.24 The construction of a Far East bridge will obstruct the formation of the Harrods Creek Village Form District.

Response: *The eastern bridge element of the Preferred Alternative (Alignment A-15) would be elevated between the Shadow Wood subdivision and the Ohio River. It would cross Harrods Creek approximately 1,000 feet north of the River Road bridge. Graphics provided with the Cornerstone 2020 comprehensive land use plan show the Harrods Creek Village Form District to the south of Alignment A-15. Thus, construction of the preferred eastern alignment will not obstruct this form district.*

- D.25 The assumption that a beltway will make the residents of Louisville better off is not supported by data looking at real quality of life and economic indicators of other cities that have considered similar decisions and investments. There is a striking correlation between loss of per capita sales and services with the presence of a beltway.

Response: *The FEIS contains no assumptions, discussions or conclusions that a beltway, per se, would lead to improved quality of life or a change in economic indicators. The FEIS concludes that construction of an eastern Ohio River bridge, in combination with a new downtown bridge and reconstruction of the Kennedy Interchange, would improve cross-river mobility and provide a more efficient regional transportation system. To the extent that a more efficient transportation system improves quality of life and/or saves people money (through shorter travel distances or less time spent traveling), the FEIS supports the conclusion that the eastern beltway should be completed through the construction of an eastern Ohio River bridge. General academic conclusions about the effect of "beltways" have no direct applicability in this case and are superseded by specific information developed during the NEPA process for this Project.*

D.26 The DEIS contains no quantification of the loss of business activity and to the tax base from construction, or the loss of property values through right-of-way acquisition.

Response: *Tax base changes associated with different alternatives are presented in Section 5.1.6. Projection of property value changes is highly speculative and dependent on a wide range of factors, only one of which is the proximity to a major transportation facility. As such, no analyses or projections of property value impacts were made.*

D.27 The DEIS does not address the direct implications of the project's redistribution of jobs on state and local revenues, particularly tax revenues. Potential losses to Kentucky and to Jefferson and Oldham counties (in Kentucky) amount to over \$25 million per year.

Response: *Section 5.1.6 discusses the relative income impacts of the alternatives on different governmental jurisdictions in the metropolitan area and presents projected changes by county and alternative in Table 5.1-10. In addition, the forecast tax impacts, by state and alignment, are listed in Table 5.1-12.*

D.28 The false implications of the prediction that almost 1,600 jobs would move from Kentucky to Indiana with construction of a downtown bridge have not been addressed in the DEIS.

Response: *The analysis of the impact of bridge construction locations upon projected local growth patterns focused on the relative accessibility afforded to different areas by the alternatives. In this analysis, there were no conclusions that employment (or population) would migrate, or move, from Kentucky to Indiana. Rather the growth of economic activity (and population) would be accelerated slightly in Indiana and dampened in Kentucky with the construction of one or more new bridges across the Ohio River. Construction of a single bridge downtown would be expected to make areas of Floyd County in Indiana relatively more accessible, resulting in slightly greater growth in Floyd County and slightly less growth in eastern Jefferson and Oldham counties in Kentucky. Again, this is not a loss of existing jobs, but a slight change in relative growth rates, constituting less than one percent of the total new employment over the forecast period.*

D.29 The DEIS does not include a discussion of the potential for a barrier effect and isolation of west Louisville neighborhoods and Portland from the Ninth Street (downtown) alignment.

Response: *These issues were discussed in Section 5.1.7, Environmental Justice. The DEIS acknowledged that construction of the so-called Ninth Street alignment (Alignment C-2) would pose serious concerns about adverse impacts to*

minority and low-income populations in the areas of western Louisville near that alignment. This was one of the reasons for not selecting Alignment C-2 as the downtown element of the Preferred Alternative.

- D.30 Construction of an interchange in the Butchertown area could undo many years of labor spent in restoration and rebuilding of this neighborhood.

Response: *The impacts to Butchertown from reconstruction of the Kennedy Interchange in-place or relocated to the south, are presented in Section 5.1.5. They also are presented in more detail in the Conceptual Stage Relocation Report, which is included in the Socio-Economic Baseline Report available for review at the local project office. The Butchertown Historic District is described in Section 4.3. The impacts to the Butchertown Historic District are presented in Section 5.3 and Chapter 6 (the Section 4(f) Evaluation). The Preferred Alternative would acquire one commercial property. The majority of the physical impact to the Butchertown Historic District will be in the industrial areas that do not contain contributing elements to the historic district. Mitigation for impacts to the historic district is described in the Section 106 Memorandum of Agreement, in Chapter 8. Mitigation for impacts to the neighborhood is also presented there.*

Representatives of Butchertown have been involved in the Project since the inception of the NEPA process and have been consulted on a regular basis concerning potential impacts and design options to avoid or minimize adverse effects. Representatives of the Butchertown Neighborhood Association served on the Project's downtown Area Work Group, which met seven (7) times during the preparation of the DEIS. The Butchertown Neighborhood Association also was granted consulting party status in the Section 106 historic properties review process, and association representatives have participated actively in the numerous Section 106 consultation meetings. Great effort has been undertaken to identify and address the concerns of Butchertown residents in order to minimize the adverse effects of the Kennedy Interchange reconstruction on this community.

- D.31 No other routes besides alignments A-13, A-15 and A-16 would leave as many residential properties "in the shadow" of the eastern bridge.

Response: *Fewer residential properties would be adjacent to Alignments A-2 and A-9 than to Alignments A-13, A-15, and A-16. All of the eastern alignments would be elevated between U.S 42 and the Ohio River. As a consequence, the number of properties "in the shadow" of the eastern alignment roadways and bridges would be higher for Alignments A-13, A-15 and A-16 than for Alignments A-2 and A-9.*

D.32 Property values will decrease at the Harbors of Harrods Creek if alignment A-13, A-15, or A-16 is chosen.

Response: *This is an opinion. Change in property values in the vicinity of new roadways is specific to the project and location. Whether property values at this property would decrease as a result of the cited alternatives is speculative.*

D.33 The conclusion that Alignment C-1 will have 115 residential displacements is not believable. The discussion of Alignment C-3 states that all 160 residential displacements for that alignment come from The Harbors condominiums. Because Alignments C-1 and C-3 are similar north of 6th Street, all 115 residential displacements for Alignment C-1 must be between the Ohio River and 6th Street. Given that most of this area is commercial, 115 displacements are unlikely.

Response: *The area affected by Alignment C-1 north of the Kennedy Bridge was reevaluated, and the estimate of residential displacements for Alternative C-1 was revised. The FEIS now reflects that Alignment C-1 will result in 23 residential displacements.*

D.34 Final right-of-way lines and disturbance limits should be reviewed and revised to reduce a number of residential displacements.

Response: *These activities will be performed for the Preferred Alternative as the Project is advanced in the final design stages. This will occur after issuance of a Record of Decision.*

D.35 The Religious Land Use and Institutionalized Persons Act of 2000 may prohibit placement of a bridge near both Saint Francis in the Fields Episcopal Church and First Christian Church, particularly since a portion of the First Christian Church would be condemned for Alignments A-9, A-13, and A-15.

Response: *The potentially relevant portions of the Religious Land Use and Institutionalized Persons Act of 2000 (“RLUIPA”) prohibit any “land use regulation” that “imposes a substantial burden on the religious exercise of a person, including a religious assembly or institution,” unless the regulation is in furtherance of a compelling government interest and is the least restrictive means of furthering that compelling government interest. A “land use regulation” is a “zoning or landmarking law that limits a claimant’s use or development of land . . .” The RLUIPA does not generally limit or prohibit impacts to religious exercise imposed by federally-sponsored actions, other than with respect to land use regulations. None of the Project alternatives would involve the implementation or establishment of any land use regulations, and no land use regulations would be adopted so as to impose a substantial burden on the religious exercise of any person, assembly or*

institution. Thus, the RLUIPA would not prohibit the implementation of any of the Project alternatives. Nevertheless, potential impacts to Saint Francis in the Fields Episcopal Church and First Christian Church have been identified in the FEIS and its supporting documentation. See Section 5.3. While those churches may experience some minor impacts from construction activities and potential impacts from traffic associated with an eastern bridge/highway, including traffic noise, none of those potential impacts would substantially burden the religious exercise of any persons at those or any other religious institutions in the Project area. Saint Francis in the Fields Episcopal Church also has been an active participant as a consulting party in the NHPA Section 106 consultation process. Potential impacts to this historic property are documented in Sections 4.3 and 5.3, and in the documentation prepared as part of the Section 106 process. Mitigation measures for potential adverse effects to the church property are identified in the Section 106 MOA, which is presented in Chapter 8.

Alignment A-15 (the eastern element of the Preferred Alternative) would not require the taking of any property from First Christian Church or Saint Francis in the Fields Episcopal Church.

- D.36 The al Chalabi Group report is correct that the “smooth functioning” of Metropolitan Louisville’s economy is dependent on improved accessibility, but (1) there is no discussion of areas that are currently not “smooth” (e.g., Kennedy Interchange); (2) there is no discussion of negative impacts from failure to remedy “non-smooth” conditions which would remain in some one-bridge scenarios; and (3) there is no discussion or prioritization of major transportation interchanges that have the most impact on the overall transportation system.

Response: *Analyses to determine the accessibility afforded by the different bridges in different parts of the metropolitan were performed, as described above in the Response to Comment C.12. The unsatisfactory peak period operating conditions of the Kennedy Interchange are related in Section 2.2.3. Section 3.6 relates the impacts of Single Bridge alternatives upon Kennedy Interchange operations that would result in unsatisfactory peak operating conditions. The prioritization for the implementation of different elements of the Preferred Alternative will be determined as the Project is advanced. A description of likely phasing is provided in the Financing Options document, which can be viewed at the local project office. The implementation schedule will be dependent on funding levels.*

- D.37 The entire socioeconomic analysis is based on the following circular reasoning: if the construction of both bridges will encourage a redistribution of households and jobs to more outlying zones in the network, then the analysis of the impact of both bridges will likely show greater benefits to this

outlying development. This makes it impossible to determine the true benefits of the downtown bridge in addressing current and future problems.

Response: *The socioeconomic analysis is not based on circular reasoning. As described in detail in Responses to Comments D.3, D.17 and D.18 above, the construction of two bridges—or an eastern bridge alone—would not encourage the redistribution of households and jobs to more outlying zones in the network. To the contrary, although there would be a small redistribution from eastern Jefferson and Oldham counties to Clark County, the net effect would be to concentrate develop slightly closer to the urban core. Moreover, the construction of an eastern bridge is not expected to cause any significant loss of population, households, or employment from the urban core, as compared to the No Action Alternative. Finally, the benefits of a single new downtown bridge (as a Single Bridge/Highway Alternative) were evaluated based on socioeconomic projections developed for the single downtown bridge scenario. Thus, the assessment of the performance of the downtown bridge alone was not based on a “two bridges” socioeconomic distribution.*

D.38 The statement that residential holding capacities in the City of Louisville have been reached but that employment in downtown will increase by 40 % by 2025 is inconsistent with later statements that the location of households is dependent on the location of jobs. If the “cap” were not in place, would residential numbers in Louisville increase?

Response: *As explained in the Response to Comment D.2 above, a so-called “cap” was placed on population forecasts for the City of Louisville in 2025. This was the result of input from local jurisdictions through the KIPDA TTC (based on land availability, existing zoning, etc.) and the combination of a static number of forecast households and a decreasing average household size. Without the decision by KIPDA to limit the 2025 household forecast, Louisville household and population projections would be larger than those used in the analysis of alternatives.*

D.39 The socioeconomic analysis concludes that work trips will be longer because population will be expanded throughout the metropolitan area, resulting in increased river crossings. New bridges will encourage scattered development, increasing travel time and distance. The conclusion is that a new eastern bridge is needed to accommodate the growth and reduce travel times and distances. This reasoning is circular.

Response: *The analysis of the impact of eastern bridge alternatives indicated a reduced distribution of households and jobs to outlying zones compared to the No Action Alternative. Moreover, the results presented in Section 3.6.1 indicate that the total vehicle miles of travel and vehicle hours of travel in the metropolitan area would decrease under the two-bridge scenario, as*

compared to the No Action Alternative. Thus, longer trips neither would result from construction of two new bridges nor are the justification for the Preferred Alternative.

- D.40 The statement that the overall 2025 socioeconomic forecasts are assumed to be constant under all alternatives is important and is validated by the data. However, the small differences in the distribution of population and household growth among alternatives are overemphasized and used to reach a pre-determined conclusion.

Response: *Differences among the alternatives in the distribution of population and households are relatively minor in relation to regional totals. However, those differences, combined with the accessibility afforded by two new bridges, would result in significant improvements in regional vehicle miles of travel, vehicle hours of travel, and vehicle hours of delay, as demonstrated in Section 3.7. The network efficiencies from the Preferred Alternative are expected to reduce user costs by \$1.6 billion over 20 years, as compared to the No Action Alternative. The transportation efficiency gains associated with cross-river transportation improvements in high growth areas are emphasized as part of the justification for the Preferred Alternative.*

- D.41 The statement in the socioeconomic analysis that travel friction could force employees to live on the same side of the river as their jobs is subjective and offensive, and suggests that people will only live downtown if forced to. Efficiency and other facts normally lead people to the conclusion that close proximity to their jobs is desirable, and the decision on location of residence is predicated on a number of factors.

Response: *Accessibility to employment is one of several considerations in residential location decisions. Travel friction (i.e., inefficient or congested travel) is another factor in residential location decisions. Poor cross-river mobility can affect residential location decisions to the extent that travel to residents' places of employment is impaired, possibly resulting in decisions to reside on the same side of the river as one's place of employment despite preferences to the contrary. However, as the commenter correctly noted, several factors contribute to individual decisions concerning location of residence. Improving cross-river mobility would help to reduce the effect of cross-river travel friction in individual residential location decisions. There was no intention to suggest that people will only live downtown if forced to.*

- D.42 It does not make sense that there are no differences in employment projections for downtown and west Louisville between the no-build alternative and any of the build alternatives, even with a new downtown bridge and Kennedy Interchange reconstruction, but employment in Clark County increases by 11 % if an eastern bridge is built.

Response: *The change in relative accessibility for downtown and west Louisville afforded by the construction of a new downtown bridge and reconstruction of the Kennedy Interchange is minimal, as compared to the No-Action Alternative. Thus, no modifications to growth rates in these areas are projected. Conversely, eastern Clark County accessibility is markedly increased with the presence of an eastern bridge. Thus, growth would be accelerated in eastern Clark County, with lower growth expected in eastern Jefferson and western Oldham counties.*

D.43 A better indicator of sprawl would be to assess how many acres of farmland, forested areas, wildlife habitats, undeveloped land, wetlands and floodplains would be taken directly or indirectly by the project. The DEIS does not respond to criteria suggested by a U.S. Department of Housing and Urban Development environmental officer in 1999 for analyzing effects on settlement patterns, likely because if FHWA had responded to those criteria, the DEIS would not have reached the conclusion it did. The eastern bridge is not intended to meet any transportation need and is promoted as a tool of economic development. This is not an appropriate use of highway funds.

Response: *Chapter 3 describes how the various alternatives meet the transportation needs identified in Chapter 2, using objective, measurable transportation performance measures. The U.S. Housing and Urban Development Department (HUD) indicated that the development and evaluation of alternatives in the NEPA process should consider local plans for growth and infrastructure development. Relevant portions of local land use plans are summarized in Chapter 2 (Purpose and Need), and the effects of the Project alternatives on land use and related issues are summarized in Chapter 5 (Environmental Consequences). Chapter 5 of the DEIS presented information on the potential impacts of the Project alternatives on farmland, forested areas, wildlife habitats, wetlands, and floodplains. The potential indirect and cumulative effects of the alternatives were summarized in the DEIS, and are discussed in more detail in the Indirect and Cumulative Effects Analysis Technical Report. Those include potential impacts to land use, communities, historic and cultural resources, and ecological resources. FHWA did not receive any comments on the DEIS from HUD. Implementation of the Preferred Alternative would result in significant network efficiencies that would equate to an estimated reduction in user costs of \$1.6 billion over 20 years, as compared to the No Action Alternative.*

D.44 Three critical economic realities relate to completing the I-265 loop with an eastern bridge: (1) the literature and experience show that beltways cause Edge Cities; (2) Edge Cities do not create new jobs, they just relocate them from the urban core; and (3) the negative effects are greatly magnified when the beltway crosses state borders.

Response: *The specific, detailed analyses performed for this Project are documented in the FEIS and its supporting technical documents. The potential socioeconomic impacts of the alternatives are presented in Section 5.1.*

D.45 Edge Cities along beltway loops result in negative social, economic, and cultural consequences. The cumulative circumstances around the undeveloped land in Clark County make it among the most ideal of locations of a future mammoth Edge City upon completion of the eastern beltway. Where accessibility increases relative to land costs in rural areas, those areas become attractive for development. The body of literature on this phenomenon is ignored in the DEIS.

Response: *The presently occurring and projected growth is generally consistent with locally adopted land use plans. The DEIS acknowledged that construction of an eastern bridge would make portions of eastern Clark County more accessible, resulting in an acceleration of population and employment growth in those areas. Conversely, with an eastern bridge, population and employment growth would slow slightly in eastern Jefferson and Oldham counties. This information is summarized in Section 5.1, and is presented in more detail in the Socioeconomic Baseline Report, which is available for review at the local project office.*

D.46 Louisville and Kentucky cannot tax economic activity relocated to Southern Indiana, and there is no legal mechanism for Louisville and Southern Indiana to merge. Thus, upon construction of an eastern bridge, Louisville will lose where Southern Indiana wins. Kentucky will be utterly powerless to stop any Southern Indiana development that begins to sap the vitality out of downtown Louisville and its environs. Southern Indiana will not even need to provide economic development incentives, while Kentucky will be forced to give even more monumental tax concessions and financial inducements to retain businesses.

Response: *These are issues, or opinions, that should be addressed by regional and local jurisdictions when developing plans for these areas.*

D.47 Southeastern Clark County is located in close proximity to wealthy areas across the Ohio River in Kentucky, which is home to many corporate CEOs. The construction of an eastern bridge will effectively make Clark County much closer, providing an incentive for those CEOs to move their businesses to Indiana. The negative effect in Kentucky will increase the farther away from the wealth areas one get (i.e., downtown, south and west Louisville).

Response: *Individual decisions with regard to relocation by specific individuals or businesses are difficult to predict, any such predictions are likely to be highly*

speculative, and they are beyond the scope of the NEPA process. The analyses performed as part of the NEPA process did not indicate that any existing employers would relocate from Kentucky to Indiana, or vice versa, with construction of an eastern bridge.

- D.48 Consistent with previous patterns of relocation, it is clear that the bulk of the 20,000+ “new” jobs forecast for the INAAP will come from the relocation of existing businesses from downtown, south, and west Louisville. This is true because the DEIS admits that an eastern bridge will not create any new jobs; thus, the jobs at INAAP must really be relocations.

Response: *While the construction of one or two new Ohio River bridges is not predicted to create any additional jobs, the Louisville metropolitan area is nevertheless expected to experience significant job growth through 2025. The socioeconomic analyses presented in the FEIS predict that a small percentage of that new job growth would occur in eastern Clark County, rather than eastern Jefferson and Oldham counties, with the construction of an eastern bridge. There is no evidence that any of the bridge options would result in the relocation of existing jobs or employers. Moreover, the only change in growth rates in Kentucky is expected in eastern portions of the metropolitan area, not in downtown, south or west Louisville. See the Response to Comment D.4 above for more information on this subject.*

- D.49 The proposed timing of the Kennedy Interchange reconstruction, occurring only after an eastern bridge opens, will accelerate growth of the Clark County Edge City and create a completely new artificial barrier to downtown access for approximately 10 years. (This construction schedule is based on the report of JHK Associates, produced as part of the ORMIS process.) This will also impede downtown, south and west Louisville residents from competing for jobs in Clark County.

Response: *The implementation schedule for the elements of the Preferred Alternative will be addressed after the issuance of a Record of Decision. Potential impacts to portions of the metropolitan area, including downtown, during construction of the Preferred Alternative will be considered in the establishment of the Project schedule.*

- D.50 The issue of relocations resulting from an eastern bridge has never been addressed as a cumulative effects issue.

Response: *This issue was addressed and documented in Section 6.2 of the Indirect and Cumulative Effects Analysis Technical Report, which is available for review at the local project office. Relatively few relocations are expected as a result of construction of a bridge/highway along Alignment A-15, and consequently, any potential cumulative effects are negligible.*

D.51 The socioeconomic analyses failed to follow procedures recommended by the National Cooperative Highway Research Program, including study of relocation vs. net growth impacts, and evaluation of equity concerns.

Response: *See the Response to Comment D.8 above. The elements considered in the socioeconomic assessment are those contained in a Guidebook issued by the NCHRP in 2001 regarding the state of the art socio-economic analyses. The analysis of some issues and the structure of the EIS differ in some areas from those as suggested in the Guidebook. However all appropriate issues are considered in the EIS.*

D.52 The analysis performed by the al Chalabi Group lacked independence and objectivity, because the al Chalabi Group worked for Community Transportation Solutions, Inc., and KIPDA, which both advocate a two-bridge solution including an eastern bridge.

Response: *Community Transportation Solutions, Inc. (CTS) was the Project consultant retained by INDOT and KYTC to assist them and FHWA in the preparation of the NEPA documentation. The al Chalabi Group served as a sub-consultant to CTS. CTS was not an advocate of a two-bridge solution. The role of the Project consultant was to assist the transportation agencies in performing the analyses and preparing the documentation required by NEPA. CTS had no preferences with respect to alternatives. The al Chalabi Group performed its tasks under the supervision of CTS, INDOT, KYTC, and FHWA. The socioeconomic projections prepared by the al Chalabi Group were reviewed by the KIPDA TTC and TPC pursuant to those entities' roles in the regional transportation planning process.*

D.53 The DEIS gives inadequate consideration to concerns about the simultaneous procurement of labor, materials, and equipment during a simultaneous construction period (i.e., building two bridges at the same time). The DEIS provides no support for the conclusion that direct and secondary construction resources will not be in short supply.

Response: *The Preferred Alternative implementation schedule will be developed in accordance with the financial plan prepared for the Preferred Alternative. Assuming a ten-year implementation period, an average of 2,350 construction related jobs are projected. The Louisville labor market could accommodate these requirements. The Financing Options Document (available at the local project office) includes the likely phasing of construction over the 2007-2020 time frame. See Section 5.1.6, Economic Impacts, for further discussion.*

D.54 The model used to calculate the direct and indirect impacts of construction on the regional economy (IMPLAN) is not well suited to a regional context.

Also, the modeling design used for the DEIS did not include extensive survey data collected from local businesses.

Response: *IMPLAN has been successfully employed to estimate construction impacts at the county level of detail. It is appropriate to analyze impacts at the regional multi-county level of detail. The modification of IMPLAN to represent the Louisville regional economy was accomplished by accepted methods of national data adjustments to reflect regional specialization, size and industrial composition. These adjustments do not require extensive local business survey data.*

D.55 The multipliers derived from the IMPLAN model used in the DEIS are suspect.

Response: *The multipliers, ranging from 1.4 to 1.8 for bridge/highway alternatives, are typical of those projected for major construction projects.*

D.56 Opponents of the east end bridge seem to think they can return the east end to a less crowded, more rural atmosphere. Those days are long gone regardless of the bridge.

Response: *The socioeconomic analysis documented in Section 5.1 and the Socioeconomic Baseline Report, evaluated potential effects on socioeconomic conditions in the metropolitan area, including the distribution of population and employment. Those findings showed that, regardless of the construction of the proposed Project, growth in the Louisville metropolitan area has been steadily increasing as major economic restructuring of the 1990's have been absorbed and become productive. Long-range economic and demographic forecasts for the metropolitan area reflect a strong and vibrant regional economy. Much of the recent growth in the metropolitan area has occurred in eastern portions of Jefferson County. The socioeconomic analysis demonstrated that population and employment in this area are expected to undergo significant additional growth by the year 2025. That analysis also indicated that construction of an eastern bridge would slow growth rates slightly in eastern Jefferson County (Kentucky) while accelerating growth slightly in eastern Clark County (Indiana).*

D.57 An east end bridge will increase property values and development in Oldham, Trimble, and Henry Counties.

Response: *The FEIS does not document whether construction of an eastern bridge will increase property values in Oldham, Trimble and Henry counties. Construction of an eastern bridge is expected to cause a slight decrease in the growth rate in Oldham County through 2025. Development forecasts were*

not made for Trimble and Henry counties, which are not part of the Louisville metropolitan area.

- D.58 An east end bridge will open up jobs in Indiana to Kentuckians and jobs in Kentucky to people from Indiana.

Response: *The socioeconomic analysis documented in Section 5.1 of the FEIS and in the Socioeconomic Baseline Report projected that construction of an eastern bridge will improve accessibility to employment and residences in both Kentucky and Indiana by improving cross-river mobility.*

- D.59 I have a low income, and I support two children. If I am displaced by the bridge, I will not be able to find a place to live.

Response: *Proposed roadway projects that utilize federal financial assistance must comply with the regulations for Uniform Relocation Assistance and Real Property Acquisition For Federal and Federally Assisted Programs, 49 CFR Part 24. The purpose of 49 CFR Part 24 is to ensure that owners of real property acquired for federally assisted project are treated fairly and consistently.*

49 CFR § 24.204 (a) requires that “no person to be displaced shall be required to move from his or her dwelling unless at least one comparable replacement dwelling (defined at Sec. 24.2) has been made available to the person.” In addition, Section 24.204(a) states, “Where possible, three or more comparable replacement dwellings shall be made available.”

Comparable replacement housing is available for the anticipated residential displacements in eastern Jefferson and Clark counties and in downtown Jeffersonville. See Conceptual Stage Relocation Report, included in the Socioeconomic Baseline Report, which is available for review at the local project office.

- D.60 An East End bridge will move jobs and associated tax dollars from Kentucky to Indiana. We shouldn't spend our money to make their lives better and risk harm to our community.

Response: *The socioeconomic analysis presented in Section 5.1 indicates that a small percentage of future job growth in eastern Jefferson and Oldham counties would relocate to eastern Clark County if an eastern bridge were constructed. That analysis did not indicate that any existing jobs would relocate from Kentucky to Indiana, and both areas will continue to see healthy employment growth through 2025 under any of the build bridge/highway alternatives evaluated in the EIS. Implementation of the Preferred Alternative is expected to produce significant benefits for residents in both Kentucky and Indiana by*

improving cross-river mobility, especially in the eastern area, and making the transportation system more efficient.

D.61 An East End bridge may lead to a Casino on the Indiana side of the bridge.

Response: *The potential for construction of a casino on the Indiana side of an eastern bridge is speculative and beyond the scope of this EIS. The EIS contained no information to support this prediction*

D.62 An East End bridge may lead to more crime.

Response: *The socioeconomic analysis documented in Section 5.1 did not specifically evaluate the potential for increased crime, as improvements of the sort evaluated in the EIS are not normally associated with an increase in crime rates. However, the proposed project is not expected to adversely affect the level of public service, including law enforcement, within the project corridor.*

D.63 A shift of economic activity to the East will hurt communities such as St. Matthews, as older shopping centers become obsolete. This is what happened in such "sprawl centers" as California and Atlanta.

Response: *The socioeconomic analysis documented in Section 5.1 and the Socioeconomic Baseline Report predicted that construction of any of the bridge/highway alternatives evaluated in the EIS would not lead to any significant loss of population or employment from the urban core or older established communities such as Saint Matthews (in Kentucky). As described in Response to Comment D.7 above, the construction of one or more new Ohio River bridges is not expected to result in the loss of any existing economic activity (measured through population and employment), but would likely redistribute a small percentage of new population and employment growth between the far eastern portions of the metropolitan area.*

D.64 It will be difficult for those in areas affected by the bridge to relocate to less affected areas since appraisers are docking the value of affected properties.

Response: *See Response to Comment D.59 above. 49 C.F.R. § 24.103(b) states: "To the extent permitted by applicable law, the appraiser shall disregard any decrease or increase in the fair market value of the real property caused by the project for which the property is to be acquired, or by the likelihood that the property would be acquired for the project, other than that due to physical deterioration within the reasonable control of the owner." Owners of properties acquired for construction of the Preferred Alternative will be compensated based on the fair market value of the property in the absence of the proposed project (i.e., what the property would be worth if the project had not been proposed). Property owners retain their rights to challenge any*

property appraisal through the appeals processes established under the respective state's laws.

- D.65 A downtown bridge must allow downtown communities both to expand and to integrate with the waterfront park system.

Response: *The proposed downtown bridge and the reconstruction of the Kennedy Interchange are designed as part of a solution to alleviate transportation deficiencies and improve cross-river mobility. This solution will provide economic benefits to the surrounding areas, including the downtown communities in Louisville, Kentucky, and Jeffersonville and Clarksville, Indiana. The proposed downtown bridge also will include a pedestrian and bicycle facility.*

Along the riverfront, just under the Kennedy Bridge, the Waterfront Park serves as the largest park within the downtown Louisville area. Recreation usage in the vicinity of the Ohio River downtown has seen resurgence with the creation of Waterfront Park and the ongoing development of the Greenway Linear Park in Indiana. Usage is expected to increase as these projects are completed, providing more downtown dockage space for recreational craft and enhancing the opportunities for recreational use on the Ohio River. Extensive coordination has occurred between project planners and representatives of the Waterfront Development Corporation, the U.S. Army Corps of Engineers, the cities of Jeffersonville and Clarksville, and other agencies responsible for recreational facilities along the river. The design of the Preferred Alternative will take into account the existing and planned recreational facilities in order to minimize any potential adverse effects. Approximately 40-45 acres of land vacated as a result of the relocation of the Kennedy Interchange will be made available for public use to the Waterfront Development Corporation through the Louisville/Jefferson County Metro Government in accordance with 23 C.F.R. § 710.403. Fifteen (15) of these acres will be donated for inclusion into Waterfront Park as mitigation for impacts to park properties by Alignment C-1 and the Relocated Kennedy Interchange. The remaining approximate 30 acres will also be made available to the Waterfront Park through the Louisville/Jefferson County Metro Government. .

- D.66 Two bridges will displace more people than any option previously considered, including the single bridge option.

Response: *As summarized in Sections 3.7.2 and 3.7.3, the Preferred Alternative would have the second lowest number of residential displacements of any of the two-bridge alternatives. It is true that any of the "A" alignments or Alignment C-1 alone would have fewer residential displacements than a two-bridge option. However, as explained in Section 3.7.1, the Single Bridge/Highway*

Alternatives were determined not to provide a feasible and prudent long-term solution to the region's cross-river mobility needs. Of the Two Bridges/Highway Alternatives, only the combination of Alignments C-1 and A-9 would have fewer residential displacements than the Preferred Alternative. However, Alignment A-9 has only one fewer residential displacement, and has much greater impacts to historic properties than Alignment A-15 and encroaches on a Kentucky State Nature Preserve. Accordingly, Alignment A-15 was determined to be preferable to Alignment A-9.

D.67 The only real effect of an East End bridge will be to allow Indiana residents to cut 10 to 20 minutes off their commute. This is not enough to compensate for the loss of homes, property value, and historic land caused by an East End bridge.

Response: *As discussed in detail in Section 3.7, an eastern bridge, in combination with a new downtown bridge and the reconstruction of the Kennedy Interchange, would create substantial transportation network efficiencies for residents throughout the metropolitan area. Construction of an eastern bridge would contribute to reductions in forecast vehicle miles of travel, vehicle hours of travel, and vehicle hours of delay, resulting in substantial savings to the traveling public. In addition to providing improved cross-river mobility for the high growth areas of eastern Jefferson and Clark counties, construction of an eastern bridge also would help to reduce congestion on the interstate system in the downtown area. These transportation benefits will accrue to residents of both Kentucky and Indiana. Improved network efficiencies associated with the Preferred Alternative are expected to result in approximately \$1.6 billion in reduced user costs over 20 years, as compared to the No Action Alternative. After carefully reviewing all of the environmental consequences of the alternatives identified in Chapter 5, FHWA has determined that the Preferred Alternative, including a bridge along Alignment A-15, will provide the best solution to the area's cross-river mobility needs.*

D.68 Only 1 % of residents will benefit from the expenditure of \$2 billion.

Response: *See Response to Comment D.67 above. Better cross-river mobility and a more efficient transportation system will benefit residents throughout the metropolitan area, as well as interstate travelers passing through the region.*

D.69 The construction of either bridge will negate efforts to preserve the region's rural areas.

Response: *Construction of the Preferred Alternative will result in the loss of a small amount of farmland associated with roadway right-of-way. See Section 5.2. Construction of the Preferred Alternative may result in the loss of some*

additional land in Indiana that is currently undeveloped, as some new growth shifts from eastern Jefferson County and Oldham County in Kentucky, to portions of Clark and Floyd counties in Indiana. However, the overall change in land use should be negligible. In addition, much of the growth predicted in Indiana is in areas that local jurisdictions have planned for additional residential and commercial development. See Sections 2.2.2 and 5.1. The area of southeastern Clark County, Indiana, through which Alignment A-15 passes already is experiencing rapid residential and commercial development, resulting in losses of existing rural areas. This rapid growth is occurring without regard to the proposed construction of an eastern bridge and highway along Alignment A-15. In order to mitigate potential changes in land use and development in Clark County as a result of the implementation of the Preferred Alternative, INDOT has committed to provide a \$300,000 grant to Clark County that will be used to accomplish one or more of the following objectives: (1) hiring professional planning consultants to revise Clark County's comprehensive plan, zoning maps, zoning code, and subdivision control ordinance; (2) developing strategies for funding on-going planning and zoning functions; (3) creating a public education campaign; and in general, (4) developing other strategies to encourage wise, aesthetically pleasing, environmental protective, history-minded, and economy generating "smart growth" in the areas affected by the Project. This mitigation commitment is documented in Chapter 8.

D.70 Experiences of other towns indicate that expansion of beltways ruins the life of a community and encourages deterioration of older areas, and that an outer beltway will be underutilized.

Response: *The identification of the Preferred Alternative was based on the specific, detailed analyses performed for this project, as presented in this FEIS, the DEIS, and the numerous supporting reports, all of which are available for review at the local project office. As explained in Section 5.1 and in Response to Comment E.1 below, the Preferred Alternative is not expected to cause any decline in the urban core. The travel demand forecasts presented in Chapter 3 demonstrate that an eastern bridge would experience a large number of trips.*

D.71 An I-71/Frankfort Ave. interchange will displace a scrap yard, concrete plant, and tow-in lot, which will improve the neighborhood.

Response: *The I-71/Frankfort Avenue interchange will displace a portion of the Allied Ready Mix facility and the scrap yard facility located at 360 Ohio Street. The interchange also will displace a portion of the current City of Louisville Tow Yard. Displaced property owners will be compensated according to applicable relocation guidelines.*

D.72 Jefferson County is running out of developable land, which will stall job growth. The future of this region depends on developing a regional perspective, including the construction of two bridges.

Response: *The socioeconomic analysis summarized in Section 5.1 predicted that the Preferred Alternative would result in slightly less growth in population and employment in far eastern Jefferson County, with a comparable increase in growth rates in eastern Clark County. This should result in a slight reduction in the amount of developable land used in Jefferson County. However, the change in growth rates, relative to overall growth through 2025, would be relatively small. The construction of an eastern bridge, in conjunction with a new downtown bridge, would make areas of eastern Clark County more accessible, facilitating future development of the former Indiana Army Ammunition Plant site, further development of the Clark Maritime Center, and neighboring areas planned for commercial development.*

D.73 A complete loop around Louisville will open up Jefferson, Bullitt, Meade, Oldham and Shelby counties to needed development. Cincinnati's beltway has had a similar effect on surrounding counties in Ohio, Northern Kentucky, and Southeast Indiana.

Response: *The Preferred Alternative includes an eastern bridge to connect the gap in the existing outer beltway (I-265) across the Ohio River in the eastern portion of the metropolitan area. As described in Section 3.3.5, a new bridge in the western portion of the metropolitan area, which could connect to existing portions of the area's beltways, was determined not to be a reasonable investment, based on limited travel demand. Thus, a bridge in the western corridor was not carried forward for detailed analysis in the DEIS. The FEIS does not address potential changes in development in Meade and Shelby counties, as they are outside the Louisville metropolitan area. Construction of the Preferred Alternative is not likely to have any effect on forecast growth patterns in Bullitt County, and may slightly slow the rate of population and employment growth in Oldham County. Nevertheless, Oldham and Bullitt counties are both expected to experience significant growth through 2025, with or without new Ohio River bridges. See Section 5.1 and the Socioeconomic Baseline Report.*

D.74 The DEIS states that property tax impacts will be more fully investigated once the preferred alternative is selected. Those studies should occur before selection of the preferred alternative.

Response: *Table 5.1-12 summarizes potential property tax impacts. The Conceptual Stage Relocation Report, included in the Socioeconomic Baseline Report, provides additional details concerning potential property tax impacts. This report is available for review at the local project office.*

D.75 The socioeconomic and environmental justice impacts are poorly analyzed. There are copious lists and tables, but no analysis is presented.

Response: *Detailed analyses of the socioeconomic effects of the alternatives, including narrative descriptions, are provided in Section 5.1, and are described in greater detail in the Socioeconomic Baseline Report. The environmental justice impacts of the alternatives are presented in detail in Section 5.1.7, and in Section 4.10 of the Socioeconomic Baseline Report. Section D of this Response to Comments document provides detailed responses to comments addressing the socioeconomic analyses. Section E of this Response to Comments document provides detailed responses to comments addressing the environmental justice analyses.*

D.76 Data on median housing prices are presented in a “higher” or “lower” format that is not statistically valid.

Response: *This presentation was intended to demonstrate the relative housing values by small areas that cover the total project area. The use of “higher” and “lower” was appropriate for this general purpose.*

D.77 The Harrods Creek neighborhood is improperly defined and is too large. Neighborhoods with nothing in common are lumped together in this analysis. Harrods Creek should be split and assessed in the following smaller parcels: (1) The area in the immediate vicinity of the River Road Harrods Creek Post Office; (2) Areas north of Harrods Creek; and (3) Areas south of Harrods Creek. For example, Glenview has nothing to do with Caperton Swamp, and is improperly defined as the “first suburban area.” The Highlands were the first suburbs, and the Harrods Creek Area was settled in the 1700s.

Response: *Neighborhoods were defined by field review after the alignments had been initially specified. The assessment of the alternatives upon these neighborhoods was at an appropriate level to determine the impact on the localities as defined in the EIS.*

D.78 The indications of community used in the DEIS are flawed and could only be used as screening level assessments. Thus, assessments of neighborhoods are flawed, and include large neighborhoods that should be broken into smaller, more realistic neighborhoods. The best example of this problem is Harrods Creek, where the inclusion (or exclusion) of the minority neighborhoods skews the neighborhood analysis.

Response: *See Response to Comment D.77. Environmental Justice populations were identified. The impacts of project alternatives upon these populations were determined at a level to determine difference, if any, among them.*

D.79 The assessment of east end neighborhoods is flawed because it does not assess impacts to the large boating community in that area. The boating community is highly diverse, and some members live on the river 8 months of the year. The few mentions of boating are based on 1998 information when newer information should have been available. This area will be severely impacted by all Far East alignments, and it is not even analyzed.

Response: *Construction of the eastern bridge and its approaches along Alignment A-15 would have minimal effects on the boating community. The approach roadways would span Harrods Creek, thereby not interfering in boating activities. The bridge over the Ohio River would have only minimal effect on recreational boaters, through placement of several support piers in the river.*

D.80 Additional lanes through urban neighborhoods impact the livability of those neighborhoods and promote the loss of population to the sub- and ex-urban areas. This fact has not been dealt with in the DEIS.

Response: *The FEIS considered effects the proposed project would have on livability through its Socioeconomic Impact Analysis. This analysis included the anticipated short and long-term socioeconomic effects of the proposed project on the human environment including elements such as: gentrification; institutional resources; community cohesion; economic status; air quality; noise; and visual and aesthetic changes.*

The socioeconomic analysis presented in Section 5.1 indicated that construction of the Preferred Alternative would not have a substantial effect on population growth in the urban core. The additional lanes to be constructed in urban areas are not along entirely new alignments, but constitute improvements to existing facilities. Thus, the marginal impact on the affected areas is not expected to result in any significant loss of population.

D.81 The DEIS overestimates job growth in the Louisville area. Available workforce is unlikely to meet projected job increases even when the high number of retirees is ignored. Hence, the only way the workforce can meet job requirements is by bringing an increasing number of workers from outside the MSA. This assumes those workers can afford the drive in spite of the large fuel tax increases required to maintain the roads. It also assumes that the lower income workers from the urban center will be able to access the jobs moving out of the city.

Response: *The Kentuckiana Regional Planning and Development Agency (KIPDA) is responsible for employment estimates in the Louisville metropolitan area. Prior to commencement of work on the DEIS, KIPDA had completed*

employment forecasts for the year 2020. A comparison of these forecasts, which were made in 1993, with recent employment forecasts prepared by two national forecasting firms (Woods & Poole Economics and NPS) indicated that there has been a marked improvement in the regional economy since 1993. This change in conditions suggested that the KIPDA employment forecasts should be reviewed. Moreover, because FHWA requires the use of a 20-year planning horizon for major transportation projects such as this, the existing 2020 forecasts were determined not to be sufficient for use in evaluating this project. As a result, FHWA, in consultation with INDOT and KYTC, determined that the employment (and population) forecasts for the metropolitan area should be extended to 2025.

CTS, the project consultant, worked closely with KIPDA and its constituent governments, technical advisors and staff to achieve a revised, extended and approved set of socioeconomic factors, including employment estimates. Those estimates were determined through an iterative process of review and revision by the KIPDA Transportation Technical Committee (“TTC”), which is composed of representatives of the area jurisdictions. After being approved by the TTC, the 2025 forecasts were reviewed and approved by the KIPDA Transportation Policy Committee (“TPC”)—the transportation decision-making body for the MPO—for use in this project. This approval is documented in the March 2000 meeting minutes of the KIPDA TPC.

The 2025 forecasts prepared by CTS and approved by KIPDA show a small loss of manufacturing jobs in Jefferson County, but an overall growth of approximately 194,000 jobs, between 1990 and 2025. The distributions of population and employment in the 2025 forecasts were based on an assumption that the transportation network could accommodate regional economic growth. Because the regional long-range transportation plan includes the construction of two new Ohio River bridges and the reconstruction of the Kennedy Interchange, the forecasts of population and employment in the initial KIPDA-approved 2025 forecasts were based on a transportation system that included those elements. As explained in Response to Comment C.12 above, alternate population and employment distributions were then developed for each of the alternatives evaluated in the EIS, including the No Action Alternative. However, the overall population and employment totals for the metropolitan area did not vary among the alternatives. As explained in detail in Response to Comment D.4 above, the determination of the impact of major transportation projects, such as the construction of a new Ohio River bridge, on overall regional growth is speculative, and therefore, one set of overall population and employment forecasts was used for all of the alternatives.

The approved 2025 forecasts indicate that total employment within the former City of Louisville boundaries will grow by nearly 40 percent from 1990 to

2025; and will drop only slightly, from 48 to 41 percent, as a percentage of total employment in the metropolitan area. Jefferson County, with major development in east, will account for 77 percent of total jobs in 2025, a slight drop from 82 percent in 1990. However, the modest numerical increases are large enough to nearly double, and in the case of Oldham County nearly quadruple, the job availability in the surrounding suburban counties.

Because considerable portions of the population growth will be in Indiana counties (one-third of the 1990-2025 increase), while more than three-quarters of the jobs remain in Jefferson County—both in the traditional downtown of Louisville and in major east end concentrations—there will be increased Ohio River crossings, particularly at rush hour. KIPDA's approval is documented in the March 2000 meeting minutes of the KIPDA TPC.

- D.82 An east end bridge will increase Charlestown's population and would save time and money.

Response: Construction of an eastern bridge is expected to increase the population growth rate in eastern Clark County, as compared to the No Action Alternative. This area includes Charlestown. Notably, all alternatives evaluated in the EIS, including the No Action Alternative, would result in significant population growth in eastern Clark County. Construction of an eastern bridge is forecast to increase that growth rate slightly. This analysis is documented in Section 5.1.

Construction of an eastern bridge, as part of the Preferred Alternative, is expected to save time and money for travelers in the metropolitan area by reducing the total vehicles miles of travel and vehicle hours of travel. Less time spent in vehicles and shorter travel distances can be expected to result in cost savings for travelers. Over 20 years, the resulting network efficiencies are expected to result in approximately \$1.6 billion in user cost savings. This analysis is presented in Section 3.7.

- D.83 The DEIS excluded a number of important socioeconomic maps, choosing only to include the two No-Action Alternative Forecast maps.

Response: Current and anticipated socioeconomic conditions were considered, and presented in the FEIS utilizing text, tables and illustrations. Graphic comparisons of population, household, and total employment projections for the No Action and Bridge/Highway alternatives are presented in Section 5.1.1. Chapter 2 contains socioeconomic forecast maps for only the No Action Alternative, because that chapter addresses the need for action, not the results of the alternatives to address that need.

- D.84 Many questions relative to indirect and cumulative effects went unanswered. How many acres of land will be occupied by one or two new interstate bridges and their supporting structures? What will be the indirect and cumulative effect of two bridges on: public transit and its users, pedestrians, cyclists, neighborhood schools, asthma sufferers, and Kentucky's petroleum market. The bridge projects should collect information on the following: (1) the number of urban residents desiring jobs at Ford and the Bluegrass Industrial Park, (2) the cost/benefit ratio of a comprehensive light rail system in a vehicular demand management environment, (3) the economic impact on low income and disadvantaged groups when light rail investment is made, and (4) the ability of light rail to promote equality of access to cultural, recreational, social, and economic resources for all our citizens.

Response: *The Indirect and Cumulative Effects Analysis ("ICEA") Report documents the methodology by which the potential indirect and cumulative effects of the alternatives were evaluated. That report also documents the results of those evaluations. The ICEA methodology and results are summarized in the FEIS and presented along with the analysis of direct and indirect effects for each major impact category. The ICEA Report was made available for public review during the DEIS public comment period, and is available for review at the local project office.*

See Tables S.3-1, 3.6-7 and 5.18-1 for a summary of the acreage impacts of the alternatives.

Potential mass transit alternatives, including light rail and enhanced bus service, were evaluated in the identification and evaluation of preliminary alternatives. As summarized in Section 3.3, and analyzed in greater detail in the Analysis of CART's Regional Cross River Transportation Plan (Nov. 2000), prepared by Community Transportation Solutions (which is available for review at the local project office), light rail was determined not to be a reasonable alternative for addressing the purpose and need identified in Chapter 2 and was not carried forward for detailed analysis in the DEIS. This report considered several enhanced transit alternatives, including two light rail alternatives and an enhanced bus alternative, as well as other transportation measures such as Transportation Systems Management (TSM) and Travel Demand Management (TDM). The report also considered the costs and benefits of a comprehensive light rail system in a vehicular demand management environment. The conclusion of the report was that the high cost of implementation and the low projected ridership for either light rail alternative made both light rail alternatives unreasonable. Enhanced bus service was identified as the most reasonable transit element of any solution to the identified cross-river mobility needs.

The detailed analysis of transit options also noted that the recent rise in oil prices has raised some question as to how the cost of gasoline is reflected in the travel forecasting models. The current practice is to keep fuel costs constant over time. Studies of automobile trip making characteristics during the oil crisis of the late 1970's determined that the only adjustment in travel habits in response to higher fuel prices was that people combined a number of short shopping trips, and families took fewer vacation trips with their automobiles.

The short and long-term indirect and cumulative effects of the alternatives on pedestrians, cyclists, air quality and neighborhoods are presented in Sections 5.1 and 5.4 of the FEIS, the socioeconomic impact analysis. In addition, the air quality impacts of the alternatives are presented in Section 5.4. The air quality analysis concluded that the implementation of any of the bridge/highway alternatives would not result in any exceedances of air quality standards (See Appendix C.10).

The FEIS does not include information on the number of urban residents desiring employment at the Ford Kentucky Truck Plant, the Ford Louisville Assembly Plant, or the Bluegrass Industrial Park. Such specific information is not necessary for the analyses conducted as part of the NEPA process. General information on population and employment trends, as well as a variety of other factors, are already incorporated in the KIPDA travel demand model, which was used to make the travel demand projections presented in the FEIS. Those projections were used to forecast both vehicular demand as well as the likely amount of transit demand under the three transit alternatives evaluated.

- D.85 The bridges are based on projection for the year 2025. These figures can be greatly affected by a number of factors: the national economy, global warming, and economic development opportunities in the Louisville-Southern Indiana area. The argument that an eastern bridge would spur economic development might turn out to be untrue.

Response: *The justification for inclusion of an eastern bridge as part of the Preferred Alternative was not based on any argument that an eastern bridge will spur economic development, nor was such a goal included in the Statement of Purpose and Need in Chapter 2. The primary economic benefits from the proposed eastern bridge would result from a more efficient transportation system, with fewer vehicle hours of travel, vehicle miles of travel, and vehicle hours of delay, as presented in Section 3.7. While growth in the eastern portion of the metropolitan area has created part of the need for an eastern bridge, the proposal for an eastern bridge is not specifically intended to spur additional economic development in the metropolitan area—although it may*

result in slightly higher growth in eastern Clark County and slightly slower growth in eastern Jefferson and Oldham counties.

FHWA planning for major transportation improvements such as this project requires a 20-year planning horizon. Reasonable efforts are made to forecast likely socioeconomic conditions over the planning period in order to determine future travel demand, forecast likely travel conditions, and predict likely impacts of the alternatives under investigation. As the commenter noted, numerous variables can affect the actual conditions, which may vary from the forecasts. Nevertheless, the forecasts are developed using well-accepted, professional procedures for forecasting future conditions. In particular, the KIPDA travel demand model is a state-of-the-art forecasting tool that incorporates information from various national economic forecasts and input from local government officials and planners to arrive at the most reasonable prediction of future conditions.

- D.86 Road access is vital to the development of an intermodal port such as the Clark Maritime Center (“CMC”). Improving the road access with an East End bridge will be extremely beneficial to current businesses and a major attraction to future business. In the past, some companies have told CMC officials they chose not to locate at CMC because there is no direct interstate access to the southeastern markets.

Response: *The socioeconomic analyses included in Section 5.1 of the FEIS and in the Indirect and Cumulative Effects Analysis (ICEA) Report (Nov. 2001) show that significant population and employment growth is occurring and will continue to occur in the eastern portion of the Louisville metropolitan area. In Indiana, such growth is apparent in the area of southeastern Clark County. Significant employment gains are predicted in the vicinity of the Clark Maritime Center and the former Indiana Army Ammunition Plant, part of which has been transferred to a local reuse authority for commercial and industrial redevelopment. Construction of an eastern bridge would provide greater accessibility to these areas. The socioeconomic forecasts presented in Section 5.1 indicate that construction of an eastern bridge would result in a slightly higher rate of employment (and population) growth in eastern Clark County (vs. the No Action Alternative), and a comparable slight decrease in the growth rate in far eastern Jefferson and Oldham counties in Kentucky.*

The Socioeconomic Baseline Report noted that access to national and international markets requires a free flow of workers and materials to those markets. Without additional cross-river access, the Ohio River, with its limited crossings, could become an impediment to that free flow of worker to job, product to market, consumer to marketplace.

The ICEA Report and the Socioeconomic Baseline Report are available for review at the local project office.

- D.87 The lack of bridges has hampered the Jefferson County Public Schools in a variety of ways. Many of our teachers live in Indiana and must traverse Spaghetti Junction on a daily basis. Too frequently, these employees are unavoidably late to work because they were caught up in congestion downtown. Whenever this happens, 20 to 25 students miss out on instruction. Whenever a bus driver is delayed, many parents are late to work since they cannot leave their children waiting at the bus stop unsupervised. The result is a ricochet through the workforce. The awareness of these problems also makes it more difficult for us to recruit new employees from affected areas.

Response: *The socioeconomic analysis summarized in Section 5.1 and presented in detail in the Socioeconomic Baseline Report concluded that, under the No Action Alternative, households and population are expected to expand throughout the metropolitan area in greater numbers than employment by 2025. This conclusion indicates that trips to work could increase in length, either in distance or in time. Because considerable portions of the population growth will be in Indiana counties (one-third of the 1990-2025 increase), while more than three-quarters of the jobs remain in Jefferson County—both in the traditional downtown of Louisville and in major east end concentrations—there will be increased Ohio River crossings, particularly at rush hour, which is expected to worsen traffic congestion at the crossings and in the vicinity of the crossings. Construction of the Preferred Alternative is expected to decrease travel times and distances in the metropolitan area, and to reduce congestion and safety problems in the Kennedy Interchange area. Construction of an eastern bridge will provide more efficient mobility between the high growth areas of eastern Clark County and eastern Jefferson County. Improved cross-river mobility, through less congestion, fewer incidents, and greater accessibility, will enhance mobility for many commuters in the metropolitan area.*

- D.88 Many JCPS teachers take, or would like to take, classes at Indiana University Southeast or downtown colleges. Traffic congestion at Spaghetti Junction makes it difficult for them to get from their teaching assignments to school on time. This discourages many from taking classes, and makes others late.

Response: *See Response to Comment D.87 above. The specific effect of the alternatives on individual choices, such as individual enrollment in educational programs, was not evaluated as part of the NEPA process.*

- D.89 Jefferson County Public Schools has initiated programs with Southern Indiana schools to open specialized classes to teach each other's students. Transportation difficulties make many of these students late, and prevent

others from participating in the program. This limits the educational alternatives of young persons who constitute the future of our workforce.

Response: See Response to Comment D.87 above. The specific effect of the alternatives on individual choices, such as individual enrollment in educational programs, was not evaluated as part of the NEPA process.

D.90 Sprawl can be eliminated by (1) limiting access points on either side of the river and (2) installing a greenbelt at least a half-mile deep on either side of the roadway, and one mile deep at the interchanges. This will stop the proliferation of trashy roadside development. If you want to slow down sprawl, install a growth boundary.

Response: The Preferred Alternative creates only two new access points on the metropolitan area's interstate system. A new interchange at Salem Road and State Road 265 would be constructed along Alignment A-15 in eastern Clark County, Indiana. A new partial interchange at Frankfort Avenue and Interstate 71 (with access to and from Interstate 71 to/from the north) would be constructed just east of the Kennedy Interchange in downtown Louisville. A greenbelt along the proposed roadways and in the vicinity of interchanges is not part of the Preferred Alternative. Land use regulation is the responsibility of local jurisdictions; FHWA, INDOT, and KYTC do not have the legal authority to regulate land use in the vicinity of interstate freeways. Likewise, the adoption of an urban growth boundary would be the responsibility of local land use authorities. Nevertheless, the socioeconomic forecasts for the Preferred Alternative indicate that, as compared to the No Action Alternative, population and employment growth rates would increase slightly in areas of Clark County, Indiana, within 10 miles of the center of the urban core, while growth rates would decrease slightly in areas of far eastern Jefferson and Oldham counties in Kentucky, which are more than 10 miles from the urban center.

D.91 Economic activity in any MSA county benefits each county through job growth, economic multipliers, and the opportunity for suppliers to new business to locate in each of the counties that are part of the MSA.

Response: According to the socioeconomic analysis presented in the FEIS and in the Socioeconomic Baseline Report, both population and employment will expand in the metropolitan area through 2025. In addition, increased household job participation rates will require the linking of the entire region to accommodate multiple worker households. Furthermore, Louisville's access to national and international markets requires a free flow of workers and materials to those markets. The Ohio River, with its limited crossings, could become an impediment to that free flow of worker to job, product to market, consumer to marketplace. The Preferred Alternative is expected to make the

transportation system more efficient and improve cross-river mobility, facilitating the free flow of workers, consumers, and products in the metropolitan area.

- D.92 Colgate-Palmolive will be directly and significantly impacted by all of the proposed Downtown alternatives for the Ohio River Bridges. Each design involves construction through the current site of a wastewater treatment plant (WWTP), which Colgate operates at its facility in Clarksville, Indiana. The upstream option (Alternative C-1) would result in the complete destruction of the WWTP. A similar impact would result from the downstream option (Alternative C-3). Even the Ninth Street option (Alternative C-2) involves design elements that would require destruction of the WWTP.

Response: *The current preliminary design for Alignment C-1 would require the taking of the Colgate-Palmolive wastewater treatment plant. If this facility is taken, the owner will be compensated for the cost of constructing a replacement treatment plant that meets all current environmental permitting standards. The specifics of any such relocation and compensation would be determined under applicable law and would be addressed during the design phase of the Preferred Alternative.*

- D.93 The last paragraph on page 56 of the al Chalabi report is misleading because the only reason a discrepancy between jobs and households is inevitable is if the East End bridge is built.

Response: *The projection of a discrepancy between jobs and households—described as an “excess jobs deficit”—in the Socioeconomic Baseline Report is based on the No Action Alternative, which does not include the construction of an eastern bridge. The discrepancy between the locations of jobs and households in the metropolitan area is projected to grow worse by the year 2025. Construction of the Preferred Alternative, including an eastern bridge, is expected to reduce that discrepancy. This analysis is explained in detail in the Socioeconomic Baseline Report, which is available for review at the local project office.*

- D.94 The al Chalabi Group states that all improvements [in accessibility] are small as a percentage of the regional total. That information is verified in Tables 5.1-1 to 5.1-3, but the statement is not included in the text.

Response: *The text of Section 5.1 refers the reader to Tables 5.1-1 to 5.1-3 for a demonstration of changes in the number of households and total employment within 10 miles of downtown Louisville versus beyond 10 miles of downtown Louisville for each of the alternatives in 2025. Overall household and employment levels are generally the same for all of the alternatives, as shown on Table 5.1-3. The commenter is correct that the changes in households and*

employment for each “build” alternative, as compared to the “no build” alternative, as shown on Tables 5.1-1 and 5.1-2, are relatively small in relation to the overall household and employment totals.

D.95 If sprawl is a concern, ban commercial development around an East End bridge.

Response: *Land use decisions, such as placing restrictions on certain types of development, are the responsibility of local land jurisdictions, through their respective land use planning and zoning processes. Jefferson County has adopted its Cornerstone 2020 comprehensive plan to guide land use decisions in the county, and any decisions to restrict development would come under that framework. Similarly, Clark County’s comprehensive plan should serve as a guide to development decisions in that county. As described in detail in Response to Comment D.69 above, INDOT has agreed to provide a \$300,000 grant to Clark County to assist it in land use planning in response to construction of the Preferred Alternative.*

D.96 If the purpose of the bridges is to divert through traffic around Louisville, we will have to minimize sprawl. This can best be achieved by not adding new interstate interchanges and by not enlarging existing interstate interchanges.

Response: *The purpose of the proposed action is to improve cross-river mobility between Jefferson and Clark counties. Chapter 2 identifies several specific needs that relate to that purpose, as summarized in Response to Comment A.1 above. The socioeconomic analysis summarized in Section 5.1 demonstrates that construction of the Preferred Alternative will not cause “sprawl,” and will actually help to concentrate growth within 10 miles of the urban core. The Preferred Alternative includes only two new interstate interchanges: (1) a full interchange at Salem Road in eastern Clark County, in close proximity to the Indiana Army Ammunition Plant redevelopment site and the Clark Maritime Center; and (2) a partial interchange at Frankfort Avenue and I-71 just east of downtown Louisville. Additionally, the existing SR 265/SR 62 interchange in eastern Clark County will be expanded insofar as it will connect to the proposed new roadway leading to an eastern bridge. Other interchanges, including the interchange at KY 841 and U.S. 42, will not be enlarged—although several, including the Kennedy Interchange, will be redesigned to improve their function. The potential socioeconomic impacts of the Preferred Alternative are presented in Section 5.1.*

D.97 The DEIS assumes that for the downtown project most of the 1600 jobs that would be expected under a no-build scenario would be moved from a TAZ in northeastern Jefferson County (the Kroger Industrial Park Distribution Area) to Floyd County, Indiana.

Response: *The socioeconomic analysis presented in the DEIS predicted that the construction of a downtown bridge would result in a slightly lower employment growth rate in eastern Jefferson County and slightly higher employment growth rate in Floyd County. The net result of that change would be about 1600 fewer new jobs in eastern Jefferson County by 2025, and a comparable increase in new jobs in Floyd County in the same period. Both areas are expected to show steady employment growth through 2025 regardless of which alternative is implemented, and the changes in growth rates for any of the alternatives are small in relation to overall employment numbers. The changes in employment growth rates result primarily from changes in relative accessibility of areas within the metropolitan area. Thus, with construction of a downtown bridge, some areas of Floyd County are expected to become relatively more accessible, resulting in making them more attractive for employment growth. The commenter is correct that the accessibility analysis showed that this shift in employment growth from Jefferson County to Floyd County would primarily affect the employment growth rate in the area near the current Kroger distribution center. However, it would not result in the loss of any existing jobs, including the distribution center itself—only a slight decrease in the future growth rate.*

E. Environmental Justice

E.1 The DEIS assumes away any environmental justice impacts by assuming that most of the job and household growth associated with the project will be within 10 miles of downtown Louisville. Thus, the DEIS assumes that the urban poor and minorities will benefit from increased jobs in Clark County, Indiana, even though 23 % of minority and low-income residents in west Louisville rely on mass transit for their travel needs.

Response: *The DEIS did not assume that most of the job and household growth associated with the project would be within 10 miles of downtown Louisville. In fact, the DEIS did not predict that any increase in employment, households, or population would occur as a result of implementing any of the project alternatives. Projecting growth as a direct result of a transportation project is subjective and highly controversial, and in any event, such an analysis was not needed to evaluate options to create a more efficient cross-river transportation system. Rather, the DEIS evaluated the redistributive effect of changes in access (via construction of one or more new bridges across the Ohio River) on employment, households, and population in the metropolitan area. The results of that analysis demonstrated that construction of any of the “build” alternatives—whether a single downtown bridge, a single eastern bridge, or both—would not have a substantial effect on population or employment in the urban core and West Louisville, which contain the largest concentrations of minority and low-income individuals in the metropolitan area. Most, if not all, of the additional growth in population and employment*

that would occur in Clark County, Indiana, as a result of construction of new bridges (as compared to the “no build” scenario) would occur there rather than in far eastern Jefferson County and Oldham County, in Kentucky. Moreover, the amount of future employment, household, and population that is expected to shift from eastern Jefferson and Oldham counties in Kentucky to Clark and Floyd counties in Indiana is very small in relation to the overall employment, household, and population levels in the metropolitan area, and those areas of eastern Jefferson and Oldham counties are still expected to grow (just not quite as rapidly). Finally, the areas in Indiana that are expected to grow more rapidly are somewhat closer to the urban core than the areas of eastern Jefferson and Oldham counties that may experience somewhat slower growth with construction of one or more new bridges.

No negative population or employment effects are anticipated in the urban core or West Louisville as a result of implementation of any of the project alternatives. Thus, the project is not expected to adversely affect the employment opportunities of residents in the urban core and West Louisville. As noted in Section 5.2.2 of the Indirect and Cumulative Effects Analysis Report (which is available for review at the local project office), healthy employment growth is expected in downtown Louisville through 2025, regardless of whether a new bridge or bridges are built, although population is expected to continue to decline in the urban core.

Public transportation to eastern Jefferson and southeastern Clark counties also is anticipated to continue to be provided by the Transit Authority of River City (TARC), and the Preferred Alternative includes enhanced bus service to provide greater cross-river mobility for the users of public transportation. The reduction of congestion and improvements in cross-river mobility will benefit users of public transportation as well as those who drive their own vehicles. Enhanced bus service should help to improve cross-river access to employment opportunities for those who rely upon mass transit.

- E.2 The DEIS is fatally flawed because it failed to analyze the environmental justice impacts of the project in terms of who benefits and who loses from greater accessibility to jobs and reduced cumulative travel times that would result from various bridge scenarios.

Response: *Potential environmental justice impacts were analyzed in the DEIS and are presented in Section 5.1.7 of the FEIS. In compliance with Executive Order 12898, DOT Order 5610.2, and FHWA Directive 6640.23, the DEIS evaluated whether any of the project alternatives will have disproportionately high and adverse effects on low income or minority populations. This analysis is described in detail in Section 5.1.7 of the FEIS and in Section 4.10.2 of the Socioeconomic Baseline Report. Most of the areas that were identified as having “environmental justice populations,” as identified by census block*

group, are concentrated in the greater downtown Louisville/Jeffersonville area and in West and South Louisville, although several other populations are scattered elsewhere in the metropolitan area. Economic impacts were evaluated comparing the effects of the various Bridge/Highway alternatives with the economic conditions expected with the No Action Alternative. As noted previously, the implementation of the Preferred Alternative is not expected to cause any substantial loss of employment in the urban core, and would result only in a relatively small shift in employment growth from eastern Jefferson and Oldham counties in Kentucky to southeastern Clark County in Indiana.

The environmental justice analysis of economic impacts found that, under the Preferred Alternative, 26 percent of minority or low-income census block groups would be expected to experience an increase in employment opportunities as compared to the No Action Alternative, while only four percent of such block groups would experience a decrease in employment opportunities. The environmental justice analysis also found most block groups are expected to experience decreased travel times as a result of implementation of the “build” alternatives, and that in all cases, a greater percentage of minority or low-income block groups would be positively impacted than would be negatively impacted. Moreover, the percentage of minority or low income block groups that would experience a decrease in travel time, as compared to the total number of block groups that would experience such a decrease, is generally much larger (approximately two to four times) than the percentage of minority or low income block groups (again as compared to the total number) that would experience an increase in travel time.

- E.3 Construction of excess housing units (as compared to growth in households) has negatively affected home values in Louisville, especially in African-American neighborhoods. An eastern bridge and beltway would accelerate excess housing construction, which would depress the growth in value of existing homes owned by Louisville-area residents. The DEIS failed to evaluate potential impacts on home values in west Louisville and southern Jefferson County.

Response: *The socioeconomic analysis summarized in Sections 4.2, 4.4 and 5.1.1, as well as Section 6.2.8 of the Indirect and Cumulative Effects Analysis Report, demonstrates that the construction of an eastern bridge generally is not expected to cause a net increase in households or population in the eastern portion of the metropolitan area. Rather, construction of an eastern bridge is expected to accelerate population and employment growth somewhat in southeastern Clark County, Indiana, and correspondingly slow the rate of growth somewhat in far eastern Jefferson and Oldham counties, in Kentucky. As noted in Response to Comment E.1 above, construction of an eastern*

bridge is not expected to have a substantial effect on the socio-economic characteristics and vitality of the urban core or West Louisville, nor is such an effect anticipated for southern Jefferson County. Thus, the Preferred Alternative will not have a significant effect on home values in those areas.

- E.4 The DEIS's analysis is based on the false premise that Louisville cannot absorb additional jobs or households and leads to the false implication that the project will have no significant socio-economic benefit for that area.

Response: *See Response to Comment D.2 above. The socioeconomic analysis summarized in Sections 4.7 and 5.1.1 actually shows that significant employment growth is expected in downtown Louisville through 2025, and the analysis placed no limit on employment growth. However, the socioeconomic analysis also predicted that population will continue to decline in the urban core, despite the efforts of local governmental and planning officials to reverse such declines. This conclusion was based in part on feedback provided by local government officials through the KIPDA consultation process, which indicated that existing land uses and zoning requirements will limit the amount of land available for new development or redevelopment. This limitation in turn will prevent significant growth in the number of households in the urban core. When combined with a predicted decrease in average household size, this is anticipated to result in a continued decline in population, despite the continued growth in downtown employment.*

The DEIS did not suggest that the implementation of the Project will not have socio-economic benefits for residents of the former City of Louisville, including the urban core. Rather, the significant transportation efficiencies that are expected as a result of implementation of the Preferred Alternative will benefit residents throughout the metropolitan area. Those include reductions in congestion, improvements in safety, and reductions in travel times and distances.

- E.5 Benefits from urban investment, including neighborhood vitality and cohesion, stabilization of home values, and induced development associated with a downtown bridge, were not adequately analyzed in the DEIS. Indirect and cumulative impacts on downtown neighborhoods and their revitalization efforts were ignored in the DEIS.

Response: *Sections 5.2.2 of the Indirect and Cumulative Effects Analysis Report discussed current trends in "smart growth" efforts. Smart growth is focused on reversing the trend of isolated poverty in urban cores, through revisions to the federal tax code, federal housing program incentives and regional tax base sharing strategies, in order to reduce fiscal disparities among localities. In particular, officials are creating strategies to assist the growing numbers of low-income and elderly in urban areas. Affordable housing is being*

developed in urban centers, ensuring that key workers are not priced out of the local real estate market and forced to commute from outside the area.

Project planners engaged in extensive coordination with representatives of the City of Louisville, the Waterfront Development Corporation, the Downtown Development Corporation, and the Butchertown and Phoenix Hill Neighborhood Associations regarding their plans in the project area. Roadway designs were developed recognizing these plans and, in several instances, modified to accommodate issues and concerns expressed by these groups. The indirect and cumulative impacts were determined to have mixed results. The Preferred Alternative would be supportive of local government's development plans for the downtown Medical Center Complex. The indirect and cumulative effects of the Preferred Alternative on the Waterfront Park were determined to be neutral. Some negative indirect and cumulative effects on the Butchertown and Phoenix Hill neighborhoods could be expected as a result of the Preferred Alternative when increased traffic on local streets and traffic-generated noise is considered.

The FEIS does not include an assessment of the impact of alternatives on property values in the vicinity of the project. Potential stabilization or changes in property values in the vicinity of a new roadway are speculative and are influenced by a variety of other non-transportation factors. The socioeconomic analysis presented in Section 5.1 does indicate that implementation of the Preferred Alternative will not have a substantial effect on population or household levels in the urban core, as compared to the No Action Alternative. This may indicate that the Preferred Alternative will not have a substantial positive or negative effect on home values in that area, although localized (positive or negative) effects on specific properties in the immediate vicinity of the Project are possible.

Consideration of regional planning within the LMA was one source of information used when assessing indirect effects associated with the Project. A detailed discussion of indirect effects can be found in the Indirect and Cumulative Effects Analysis available at your local project office. Plans pertaining to identified EJ areas within or in the vicinity of the City of Louisville such as the 1997 Visioning Report, conducted by Greater Louisville Incorporated for the City of Louisville, the Cornerstone 2020 Comprehensive Plan, prepared for Jefferson County were among those that were reviewed. Both of the planning documents state goals of supporting development and redevelopment in the downtown Louisville district, establishing it as the heart of the city and the economic center of the region. The 1997 Visioning report states that the economic strategy of its plan is anchored by transportation services and efficient and cost-effective employee and goods movement within the Greater Louisville region. The Cornerstone 2020 Comprehensive Plan calls for the development of downtown Louisville as a unique destination and

encourages land uses that recognize downtown as the regional center for employment, office space, transportation, medical care, government, culture, and entertainment. As stated in the plan, this view of downtown Louisville as the economic center of the region is consistent with the employment growth forecasts for the downtown area. Cornerstone 2020 also encourages housing and retail development in downtown districts. The project is compatible with the fore mention plans because of the transportation enhancements it offers, such as an increase in cross-river mobility and decrease in inter-regional roadway congestion.

In all cases of residential relocation within urban areas, the displaces are expected to have the option of relocation within the same community thus retaining their access to existing community resources and services. Also, in accordance to 49 CFR, Part 24, influence of the Project is disregarded when assessing just compensation of needed property. More specifically, the appraiser should disregard any decreases or increases in the fair market value of the real property caused by the Project for which the property is to be acquired.

- E.6 The public comment period on the DEIS did not allow sufficient time for the disenfranchised to comment on the DEIS.

Response: *The Draft Environmental Impact Statement public comment period was Nov. 9, 2001 through Feb. 25, 2002, or 108 days. Because of the size of the document and public requests, the comment period was more than twice as long as the standard comment period of 45 days on FHWA's DEIS documents. (which is the standard required by the Council on Environmental Quality for an EIS throughout the government). In addition, extensive efforts were made during the development of the DEIS and at the start of the comment period to engage the public, including low-income and minority communities. Extensive publicity accompanied release of the DEIS, including publicity in media with a predominantly minority audience. In addition to mainstream media that reach minority and low-income communities, radio and print media that focus on a minority audience were targeted. These outlets publicized open house meetings and public hearings, and how individuals could get information and provide comment. For a complete listing of media coverage, see the FEIS Public Involvement Appendix and the Title VI Complaint Response Document submitted to FHWA by KYTC and INDOT, which is available at the local project office. Also, direct mail notifying residents of ways to obtain information and to comment on the DEIS was sent within a week after the beginning of the public comment period to about 5,000 area residents, including about 500 individuals and organizations with western Louisville zip codes that include a predominantly African-American population and low income residents. Reminder notices were mailed before the two public hearings. All of these materials informed recipients how to obtain information. Also, meetings were held in minority and low-income*

communities during the public comment period, including a public open house at the Louisville Urban League on Jan. 15, 2002. Two other public open houses during the comment period were held in downtown Louisville. All open houses and public meeting notices provided information on public transportation routes and a number to call if additional assistance was needed for transportation or to accommodate a disability. Section 7.1 documents the public involvement initiatives including environmental justice outreach, meetings and notification. The Title VI Complaint Response Document, which is available for review at the local project office, provides a complete summary of all public involvement and outreach efforts targeted to environmental justice communities.

- E.7 The NEPA public involvement process did not properly involve minority and low-income communities. Specifically, the project sponsors have not made a sufficient effort to inform residents of western Jefferson County of potential effects on them.

Response: Extensive efforts were made to involve minority and low-income communities in the preparation of the Draft Environmental Impact Statement. Details of these efforts are documented in Chapters 3, 5 and 7 of the DEIS, and in the Title VI Complaint Response Document, which is available for review at the local project office. The FEIS public involvement appendix also includes a section detailing public involvement efforts focused on environmental justice issues. Key initiatives included securing representation from minority and low-income communities on public involvement groups that met a total of 35 times with the project consultant; targeting media in the minority community; distributing information and materials in low-income and minority communities at neighborhood gathering places and through direct mail and e-mail; and meetings with residents in their neighborhoods. Details of each of these initiatives are documented in Chapter 7 and the Public Involvement Appendix. These efforts included notification and discussion of neighborhood issues and concerns and project developments with the goal of two-way communication. For example, in May, 2001, public notification through the media and a direct mailing to public involvement group members who included minority and low-income neighborhood and organization representatives and an e-mail to about 800 people in a database informed citizens of opportunities to review and to comment on the Indirect and Cumulative Effects Analysis, which covered a wide variety of impacts, including socioeconomic and air quality impacts. At open houses and neighborhood meetings in west Louisville, detailed information about project options was shared, including information about impacts of potential options. At four neighborhood meetings and a public open house held in western Louisville during the comment period on the DEIS, detailed maps of the options were shared and impacts of those were discussed in discussions with

those attending. Comment forms were provided for attendees. A presentation on noise impacts also was made.

- E.8 It is not clear if any new jobs will be accessible via public transportation or if people will need private vehicles to get to those jobs. The eastern bridge appears to create employment opportunities only for eastern Jefferson County. Residents of west Louisville and southern Jefferson County will not benefit from an eastern bridge.

Response: *As set forth in Response to Comment E.1, there was no analysis to determine whether a new bridge or bridges would cause additional employment growth in the metropolitan area. Projecting such growth as a direct result of a transportation project is subjective and highly controversial. Such an analysis was not needed to evaluate options to improve cross-river mobility. Rather, the redistributive effects of the project alternatives were evaluated in terms of forecast employment, household, and population growth. Most, if not all, of the changes in growth rates are expected to occur between areas of far eastern Jefferson and Oldham counties in Kentucky, and southeastern Clark and portions of Floyd counties in Indiana.*

The analysis summarized in Sections 3.6 and 3.7 demonstrates that significant transportation efficiencies will be realized with the construction of an eastern bridge in combination with a new downtown bridge. Residents throughout the metropolitan area can be expected to benefit from construction of an eastern bridge, both for many of those with origins or destinations in the eastern portion of the metropolitan area, as well for those who will experience less congestion in the downtown area as a result of the congestion reduction afforded by the eastern bridge. Public transportation to eastern Jefferson and southeastern Clark counties also is anticipated to continue to be provided by the Transit Authority of River City (TARC), and the Preferred Alternative includes enhanced bus service to provide greater cross-river mobility for the users of public transportation. The reduction of congestion and improvements in cross-river mobility will benefit users of public transportation as well as those who drive their own vehicles. While specific benefits cannot be identified for individual travelers, improvements in the efficiency of the cross-river transportation system are expected for numerous residents of the metropolitan area.

- E.9 The DEIS failed to discuss needed improvements on the Watterson Expressway (I-264) from Dixie Highway (US 31W/US 60) west to I-64.

Response: *The previous transportation studies and planning efforts did not identify a need for improvements to I-264 between US 31W/US 60 and I-64 as part of the effort to improve cross-river mobility in the Louisville metropolitan area. Legitimate needs may exist for improvements to the interstate freeway system*

in that area. However, the alternatives identification and screening process conducted in the course of preparation of the DEIS and FEIS did not identify such improvements as part of the reasonable range of alternatives to address the identified cross-river mobility needs. If such transportation needs arise in the future, they can be pursued as a separate project, with independent utility, by the Kentucky Transportation Cabinet.

- E.10 An eastern bridge would be a prime example of “Environmental Injustice,” creating a wealthy segregated enclave in Southern Indiana.

Response: *None of the socioeconomic analysis conducted for this project has indicated that any of the “build” alternatives will create a wealthy segregated enclave in Southern Indiana. The socioeconomic analysis does show that construction of a new Ohio River bridge in the eastern part of the metropolitan area will result in a somewhat higher rate of growth in population and employment in southeastern Clark County in Indiana, while the rate of growth in far eastern Jefferson and Oldham counties in Kentucky would be somewhat lower (though still positive). This potential shift in population and employment growth largely would not affect areas with minority or low-income populations identified as environmental justice populations. Thus, the project is not expected to have disproportionately high and adverse effects on minority or low-income populations. Although construction of an eastern bridge is expected to provide greater transportation accessibility to some areas of southern Indiana (in Clark and Floyd counties), and thereby provide economic benefits, there is no evidence to suggest that construction of an eastern bridge will create a wealthy segregated enclave in any of those areas or deprive minority or low income populations of economic opportunities.*

- E.11 Page 3-42 states that risk of discovering contaminated materials on the Downtown alignments (C-1, C-2 and C-3) “...is high, due to documented past industrial uses that existed or continue to exist in downtown Louisville and Jeffersonville, Indiana.” This information was contained in the discussion of preliminary alignments (Section 3.4.3), but it should also be incorporated into the section on environmental justice/social impacts. In addition, it is unclear how these issues and impacts will be addressed or resolved. This information should be provided in the FEIS.

Response: *The area potentially affected by construction of the proposed project alternatives was investigated to determine the likelihood of encountering contaminated materials and/or hazardous waste. Specific data and information regarding this investigation can be found in the Hazardous Materials Phase I Report for this project, which is available for review at the local project office.*

In summary, it was determined that the risk of discovering contaminated materials and/or hazardous waste was high in downtown Louisville, Kentucky, and Jeffersonville, Indiana, as a result of documented past or continuing industrial use of property. Additional analyses are to be performed in the final design phase of the Preferred Alternative. The focus of the additional analyses will be to determine the presence and concentration levels of any Chemicals Of Concern (COC) occurring within soils or materials likely to be disturbed during construction activities or utility service relocation activities, associated with this project. The risk of COC exposure to humans and the natural environment is to be analytically evaluated and if deemed appropriate, project-specific procedures will be developed in accordance with federal, state and local regulations to minimize the potential of COC exposure and/or to reduce the level of exposure to acceptable levels.

- E.12 The DEIS states that disproportionate impacts for environmental justice areas adjacent to the C alignments such as noise, vibration, community cohesion, hazardous material, visual aesthetics etc., can be mitigated. Specific mitigation measures should be included in the FEIS.

Response: *Section 5.1.7 and the Environmental Justice Technical Report have been revised to clarify the analysis of potential impacts to environmental justice areas, including those areas adjacent to the "C" (downtown) alignments. No disproportionately high and adverse effects on environmental justice areas are anticipated, taking into account mitigation commitments, as a result of implementation of the Preferred Alternative. Mitigation measures have been incorporated in the Preferred Alternative to reduce or eliminate some potential minor impacts to environmental justice areas. The specific mitigation measures, including those recommended for noise, vibration, community cohesion, hazardous materials and visual aesthetics, are included in Section 5.1.7.3 and Chapter 8 of the FEIS. Enhancements identified in Chapter 8 include \$11.5 million for the rehabilitation of the Trolley Barn for use as the Kentucky Center for African-American Heritage, and the Minority Historic Rehabilitation Craftsman training program. These Minority Craftsmen will enhance the reservoir of craftsman available for implementing historic preservation commitments in the Section 106 MOA.*

- E.13 Table 4.1-3 on page 4-5 in Chapter 4 (Affected Environment) shows per capita incomes for 1989 for the proposed project area. Is there more recent data available for per capita incomes comparable to the population data found in table 4.1-2?

Response: *The latest data available on income by geographic area are based on the 1990 Census of Population. This data was presented in Table 4.1-3. Income data from the 2000 Census did not become available for the study area until March 2003. The income data was used in identifying low-income population*

Groups. Comparisons of available 2000 data to the 1990 data, such as the county-wide minority population percentages did not reveal any substantive change in these percentages. These comparisons validated the use of 1990 data for the analysis of Project impacts.

- E.14 Table 5.1-14, which presented a summary of Census Data in the Louisville metropolitan area, is confusing because of the way it is labeled and organized. The title should clarify whether the information refers to data for the county or data for the corridor. For example, the column entitled “number of block groups” should be identified as “number of block groups in the county.” All of the county information should have been grouped next to each other, (i.e., number of block groups in the county, number of minority poverty block groups in the county, etc.), and the same things should have been done with the corridor information.

Response: *The label headings used in Table 5.1-17 (formerly Table 5.1-14) have been modified to clarify the representation of estimated poverty and minority data for counties within the Louisville metropolitan area. The data represented in this table were not modified.*

- E.15 It is also unclear how the poverty and minority percentages for the five-county Louisville metropolitan area were derived. When you average percent poverty data for the five counties, one does not get the numbers shown in the figure. Therefore, these figures should be more clearly explained or reexamined.

Response: *The estimated poverty level percentages of counties in the Louisville metropolitan area were reexamined, comparing data provided by the 1990 Census, and found to closely match those that have been included in Table 5.1-17 (formerly Table 5.1-14). The percent estimates were within the 90 % confidence interval; thus, no data modification was made.*

- E.16 The DEIS mentioned that only data for block groups and single blocks that had the potential to be directly impacted by the Ohio River Bridges Project are presented in the table. An explanation should be provided in the document that explains why it is not necessary to also include block groups that may be indirectly impacted by this project. The NEPA document should address, direct, indirect and cumulative impacts of the proposed project on environmental justice communities.

Response: *A discussion of the potential socioeconomic effects within environmental justice areas, beyond the immediate vicinity of the Project, has been included in the FEIS. The potential indirect and cumulative impacts associated with the proposed Project in environmental justice areas are discussed in Section 5.1.7 of the FEIS.*

- E.17 Many projected jobs in urban environmental justice areas of Louisville (i.e., Jefferson County) will be lost to the eastern part of the Louisville metropolitan area, or across the river to Indiana, if the projected eastern development occurs. Even though this shift may result in an overall regional gain in jobs, areas that are in need of revitalization, such as downtown Louisville and surrounding potential environmental justice areas of concern, may be adversely impacted. While the DEIS acknowledges that economic redistribution will occur, it is unclear how these issues are being addressed or if there are opportunities to minimize or mitigate for these losses. These concerns should be addressed in the FEIS.

Response: *See Response to Comment E.1 above. No negative employment effects are anticipated in the urban core or West Louisville as a result of implementation of the Preferred Alternative (or any of the other “build” alternatives). Steady employment growth is expected to continue through 2025 in downtown Louisville. The only redistribution of future job growth that is expected with implementation of the Preferred Alternative is a small amount of growth that would be transferred from far eastern Jefferson and Oldham counties in Kentucky to southeastern Clark County and portions of Floyd County in Indiana. These small shifts in future employment growth are not expected to have an adverse effect on environmental justice communities.*

- E.18 The DEIS fails to comply with the environmental justice requirements of Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d-1 and its related regulations, executive orders, and FHWA orders and guidance. FHWA should take all actions necessary to bring this project into compliance.

Response: *See Response to Comments E.2, E.6, and E.7 above. The environmental justice compliance efforts related to this Project are described in detail in the Title VI Complaint Response Document submitted to FHWA by INDOT and KYTC, which is available for review at the local project office. FHWA is confident that all necessary and appropriate measures have been taken to identify potential adverse effects to environmental justice populations, to involve environmental justice populations in the NEPA and related processes, to document those efforts, and to provide ample comment opportunities. Based on this extensive process, the implementation of the Preferred Alternative is not expected to result in disproportionately high and adverse impacts on minority or low-income populations.*

- E.19 FHWA, KYTC, INDOT, and CTS personnel have refused to communicate with the public by answering questions about the DEIS and their conclusions at public meetings, even refusing to attend a public meeting suggested by Reps. Bather and Wayne in a minority area in West Louisville.

Response: *See Responses to Comment E.6 and E.7 above. The NEPA process for the Project has included extensive public involvement outreach and opportunities, including numerous measures focused specifically at environmental justice populations. Numerous meetings have been held since late 1998 to inform the public about the Project and to answer questions. Those efforts have included 29 public meetings and workshops, 35 public involvement group meetings, and 241 stakeholder meetings with individuals or groups. Special efforts were made to assure representation from minority and low-income communities on the five citizen advisory “public involvement” groups organized at the outset of the Project. Two stakeholder meetings were held in West Louisville at the Louisville Urban League, on July 22, 1999 and August 25, 1999. Thirty-three representatives of minority and/or low-income communities were invited to attend those meetings, including Representative Bather, who was a Louisville alderman at the time. Numerous other stakeholder meetings occurred with groups representing low-income and minority communities. In addition to minority attendance at general community meeting and workshops (including five public open houses and two public hearings during the DEIS comment period), a public open house was held on January 15, 2002 at the Louisville Urban League in West Louisville to provide information about the DEIS and answer citizens’ questions. Other public involvement tools, including mailings, newsletters, media public service announcements, placement of materials in public libraries, and posting of information on the Project Web site, provided additional opportunities for environmental justice community involvement in the Project. These extensive efforts are summarized in the Title VI Complaint Response Document, which is available for review at the local project office.*

Representatives of FHWA, INDOT and KYTC were not able to attend the public meeting proposed by Representatives Bather and Wayne for February 21, 2002. This event was described by Representative Bather as an opportunity to “openly debate environmental issues including the two proposed bridges, airport noise and West Jefferson County pollution.” FHWA, INDOT and KYTC determined that the range of issues to be addressed in the proposed debate—the majority of which had no relation to the Project—was not consistent with the ongoing NEPA review process for this specific Project, under which public involvement and input were being sought at the time. Concerns about airport noise and West Jefferson County pollution are not part of the scope of issues to be addressed by this Project and are the responsibility of other local, state, and federal agencies. It would not have been appropriate for the FHWA, INDOT and KYTC to participate in a debate on those issues, nor would it have contributed to the identification of the best alternative to improve cross-river mobility between Jefferson and Clark counties. In addition, a debate format would have been inconsistent with the legally prescribed public involvement and comment process established under NEPA, which is focused on obtaining comments and

reaction on the full range of alternatives and impacts described in the EIS. Because FHWA, INDOT, and KYTC had not identified a Preferred Alternative in the DEIS, the agencies had no predetermined choice to “defend” in such a debate, which would have required them to assume an inappropriate “advocacy” role. Such a role might have had a dampening effect on public comment on the DEIS. Thus, FHWA and KYTC informed Representative Bather in a February 13, 2002 letter that they would be unable to participate, and they encouraged Representative Bather to forward any comments on the DEIS that he received during his debate through the NEPA comment process for consideration in preparing the FEIS. The agencies also reminded Representative Bather of the extensive opportunities for public involvement and comment provided through the established public involvement program for the Project.

- E.20 Task 3 of the consultant's scope of work, which lays out public involvement tasks over seven pages of single-spaced type, contains no strategy whatsoever for involving low income and minority populations. In fact, those terms do not even appear at all. Since the consultant was not required to consider these populations, it felt free to ignore them.

Response: *Environmental justice considerations were not ignored in the DEIS. See Responses to Comments E.1, E.2, E.6, and E.7 above. Regardless of any language included or not included in the consultant’s scope of work, the FEIS contains a thorough and good faith evaluation of potential environmental justice impacts from the Project alternatives. An ongoing, proactive public outreach campaign solicited minority and low-income involvement and input before and after publication of the DEIS.*

- E.21 Since the need for a downtown bridge was easily demonstrated, the entire DEIS process has been an attempt to justify an eastern bridge which is unnecessary and has serious consequences for the urban core, the home of the highest concentration of minority and low income populations.

Response: *The rationale for selection of the Preferred Alternative, including an eastern bridge, is summarized in Section 3.7. Chapter 2 describes the Project purpose and need, which provides the metric for the evaluation of the alternatives described in Chapter 3. Potential impacts to the urban core are described in Section 5.1 and in the “Socio-Economic Report,” which is available for review at the local project office. Although construction of the proposed downtown bridge and reconstruction of the Kennedy Interchange will have localized adverse effects in their immediate vicinity, the implementation of the Preferred Alternative is not expected to have substantial adverse socioeconomic effects on the urban core, and is not expected to result in disproportionately high and adverse effects on minority and low-income populations.*

- E.22 CTS, the consultant, is biased because it hopes to get the estimated \$1.6 billion contract for the design and construction of the bridge. More than \$9 million of the \$22 million allocated for the study was for preliminary design. CTS has a financial incentive to propose the biggest project possible.

Response: *The preparation of the DEIS and FEIS has been overseen and directed by FHWA, INDOT, and KYTC. NEPA specifically authorizes preparation of an EIS for a federally funded project by a State agency of statewide jurisdiction, as long as the federal agency furnishes guidance and participates in the preparation, and independently evaluates the EIS before its approval and adoption. 42 U.S.C. § 4332(2)(D). Preparation of an EIS by a private consultant in turn is acceptable, provided the federal agency retains sufficient control of the work product. 23 U.S.C. § 112(g) allows for the preparation of an EIS for an FHWA project by a private consultant as long as the state has reviewed the document to assess its objectivity prior to submission to FHWA. In this case, FHWA, INDOT, and KYTC have been extensively involved in the preparation of the DEIS and FEIS, and FHWA independently evaluated both documents prior to their publication.*

- E.23 The bias toward the east end bridge has affected the way project monies have been spent. The biased al Chalabi report was based on the flawed assumption that the urban core has no potential for growth, and included modification of the metropolitan planning organization's 2020 projections. These modifications were not in the scope of work at the time the contract was awarded to CTS. On the other hand, compliance with Section 106 of the National Historic Preservation Act has not been done, and that work was explicitly part of the scope of work. The consultant has stated that there will be no adverse impacts on downtown, but can provide no explanation for this determination.

Response: *There is no bias in the NEPA process toward an eastern bridge. See Responses to Comments D.2 and E.4 above concerning assumptions about the growth of the urban core. Employment growth is expected to continue in the urban core through 2025, but population is expected to continue to decline as a result of land use limitations and declining household sizes. See Responses to Comments C.12 and D.1 above for a description of the modifications made to KIPDA's socioeconomic forecasts for the metropolitan area. Although not included in the consultant's initial scope of work, these modifications—which extended the socioeconomic forecasts from 2020 to 2025—were necessary to provide a 20-year planning horizon for the Project.*

Compliance with Section 106 of the National Historic Preservation Act has occurred, and is documented in the Section 106 Memorandum of Agreement, which is contained in Chapter 8. The assessment of potential effects of the

Project alternatives on historic properties, including those in the downtown area, is included in the Assessment of Effects report prepared during the Section 106 process, which is referenced in the Section 106 MOA and is available for review at the local project office.

- E.24 The consultant has refused to release information, robbing the public of a chance for meaningful comment. In spite of repeated requests and a lawsuit, CTS only released documents supporting the DEIS on November 9, 2001. Plus, there is no more money in the budget for the consultant to consider comments. There is only enough money to proofread and print the FEIS. CTS did this on purpose, knowing that the less time the public had to react to the information, the more likely it would be that the eastern bridge would be approved.

Response: *Extensive information has been provided to the public concerning the analyses contained in the EIS and the Section 106 documentation. Consistent with agency policy and practice, INDOT and KYTC have only refused to provide pre-decisional or draft documents, the release of which would be premature and potentially misleading. The 108-day comment period on the DEIS provided ample opportunity for interested parties to review the information contained in the DEIS and the supporting documentation and to provide comments to FHWA. Moreover, consulting parties in the Section 106 historic properties review process have been given numerous opportunities to review and comment on information. No limitations have been placed on the public's opportunities to comment in order to restrict the consideration of all reasonable alternatives.*

All comments on the DEIS, as well as those received in the Section 106 process, have been reviewed carefully by FHWA, INDOT, and KYTC, as well as the Project consultant. This Appendix contains detailed responses to all comments on the DEIS, and responses to Section 106 comments have been provided through that process. No financial considerations have affected the completion of this NEPA process.

- E.25 The measure of sprawl is based on an arbitrary 10-mile radius from the central business district having no factual basis. This arbitrary radius in fact includes undeveloped areas, a fact not addressed in the DEIS. The al Chalabi report concludes that land development impacts would be confined within the 10-mile radius, as if the outer beltway would be a sprawl boundary. This conclusion is unexplained and contrary to experience in other cities.

Response: *See Responses to Comments D.16, D.17, D.18 and E.1 above. The socioeconomic analysis did not use a 10-mile radius as a "sprawl boundary." Rather, radii of five, ten, and fifteen miles were used as interpretive tools to assist in the evaluation of socioeconomic forecasts associated with the Project*

alternatives. These radii did not have any effect on the underlying socioeconomic projections. This analysis is described in detail in the Socioeconomic Baseline Report, which is available for review at the local project office.

- E.26 The al Chalabi sprawl conclusion ignores whether or not adequate infrastructure is in place in predicted growth areas.

Response: *See Responses to Comments D.2 and D.12 above.*

- E.27 The socioeconomic reports take it as a given that the eastern bridge is only serving already-existing growth, meaning indirect impacts are not significant. This conclusion is unsupported because the DEIS fails to adequately analyze the likelihood of increased sprawl and its effects on minority and low-income communities.

Response: *See Response to Comment D.19 above.*

- E.28 The al Chalabi report ignored the advice of the City of Louisville that a failure to prioritize the downtown bridge would endanger downtown investments. The DEIS ultimately reports that there is no socioeconomic benefits from a downtown bridge and no risk to those investments.

Response: *See Responses to Comments B.56, B.57, and D.2 above.*

- E.29 The al Chalabi report ignored the City of Louisville's advice that the City of Louisville is not built out.

Response: *See Responses to Comments D.2 and E.4 above.*

- E.30 The economic impact to Louisville's urban core from an eastern bridge can be expected to be similar to what happened in the Cincinnati area after the I-275 eastern bridge and highway were built five miles east of downtown Cincinnati in the late 1970s. It is clear that sprawl there extended well beyond the outer beltway.

Response: *See Responses to Comments D.13, D.15, D.19, and E.1 above. The Preferred Alternative is not expected to have an adverse socioeconomic effect on Louisville's urban core. The detailed analyses performed for this Project indicate that implementation of the Preferred Alternative will result in a small transfer of future employment and population growth from far eastern Jefferson and Oldham counties in Kentucky to southeastern Clark County and portions of Floyd County in Indiana. This would concentrate growth slightly closer to the urban core. The experience of Cincinnati is based on the unique characteristics of that area. The conclusions contained in the FEIS are based*

on the detailed analyses performed for this Project in the specific context of the Louisville metropolitan area, and are more reliable than general comparisons to other communities in the region.

- E.31 The fact that the al Chalabi report found that the downtown bridge would create 55 % more jobs within 10 minutes of home, while the eastern bridge would create 50 % more jobs within 30 minutes of home, is itself an indication of sprawl.

Response: *The comment is incorrect, insofar as the socioeconomic analysis did not predict the creation of any new jobs by any of the alternatives. Rather, the alternatives will affect the distribution of employment in the metropolitan area. The Preferred Alternative is anticipated to contribute to the compactness of the Louisville metropolitan area. Development of an urban area generally radiates outward from that region's central area/downtown core/major job center. If concentric development is impeded – as it is in Louisville by a major river with limited bridges – a majority of that development will be restricted to the same side of the river as the region's central area. However, because development is confined to a segment rather than the full circle of development, that development will extend farther away from the central area. Development of bridges, particularly bridges in the un-accessible eastern portion of the metropolitan area, therefore, allows for a more-compact, concentric development. That is why the results of the accessibility tests showed a greater access to both jobs and households within 10, 20 and 30 minutes of the mean Transportation Analysis Zone under build conditions.*

- E.32 The DEIS's evaluation of indirect and cumulative impacts in the environmental justice evaluation focused solely on mobility—access to jobs and impacts to transit users. The DEIS claims on page 5-9 that the two bridge scenario results in most of the job growth occurring within 10 miles of downtown Louisville. This conclusion is the result of the consultant's deliberate choice about where jobs growth would occur, not the result of any credible analysis.

Response: *See Response to Comment C.12 for a description of the process whereby alternative socioeconomic forecasts were developed in evaluating the Project alternatives. As described in Response to Comment E.1 above, the DEIS did not assume or conclude that most job growth would occur within 10 miles of downtown Louisville. In fact, the DEIS did not predict any increase in employment as a result of implementing any of the Project alternatives. Rather, the DEIS evaluated the redistributive effects of changes in access on employment in the metropolitan area. Most of the changes that would occur involve transfers of small amounts of future job growth between eastern portions of the metropolitan area.*

E.33 The al Chalabi report claims that minority and low income populations benefit from an eastern bridge, and more so than a downtown bridge, concluding that a greater percentage of minority and low income groups would be positively affected than negatively affected. This conclusion is based on the flawed redistributive assignment of jobs under the eastern bridge scenario.

Response: See Responses to Comments E.1 and E.32 above.

E.34 When one looks at a combined map of the minority population density of Louisville with an overlay of the travel timesavings from the two bridge scenario, it is apparent that the minority population of the Louisville area will not benefit from completion of the eastern beltway.

Response: Travel savings would accrue to all travelers in the metropolitan area from improvements in travel efficiencies introduced by the Preferred Alternative, including a new eastern bridge. In addition, there are minority populations in eastern Jefferson County that would realize more direct benefits from the construction of the eastern bridge than residents of other parts of the area. See also Response to Comment E.2 above.

E.35 Low-income populations are least able to accommodate significant increases in commuting distances, which are outside public transit routes due to the high cost of operating an automobile.

Response: The Preferred Alternative is expected to decrease average travel times and distances, as compared to the No Action Alternative. As described in Response to Comment E.8 above, public transportation to eastern Jefferson and southeastern Clark counties is expected to continue, and the Preferred Alternative includes enhanced bus service to improve cross-river mobility for those who rely on public transportation. Moreover, the Preferred Alternative is not expected to result in any substantial loss of jobs in the urban core, thus not causing an increase of commuting distances for residents in the urban area. In fact, the Preferred Alternative is expected to cause future job growth to occur slightly closer to the center of the urban core, though somewhat more in Indiana than under the No Action Alternative.

E.36 The disadvantages for poor and minority populations are cumulative. The EIS did not evaluate how a further shift of jobs away from the urban core could tip the balance for struggling poor and minority families without access to these jobs, and with decreasing home values, their major monetary asset.

Response: None of the alternatives evaluated in the EIS are expected to result in a shift of jobs away from the urban core. Thus, the concern expressed by the commenter should not arise.

- E.37 All far eastern bridge routes impose an improper burden on the two minority neighborhoods in the eastern project area.

Response: *The environmental justice analysis included in Section 5.1.7 and in the Socioeconomic Baseline Report did not reveal any disproportionately high and adverse effects on minority populations, including predominantly minority neighborhoods in the vicinity of the eastern bridge alignment. The eastern alignments, including Alignment A-15, would not pose disproportionate impacts on minority populations that are of a greater magnitude than those potentially affecting populations that were not identified as being minority or low-income areas of concern.*

Evaluation of the eastern bridge alignments, including Alignment A-15, indicated that Alignment A-2 would have the greatest potential for indirect impacts to the James Taylor subdivision, originally established as an African-American community, which is located within the Harrods Creek neighborhood and is still predominantly African-American. However, these potential impacts would not be at a greater magnitude in terms of severity, when compared to non-minority and non-low-income populations in Harrods Creek, which have the potential to be affected directly through relocation.

Ken Carla has been identified in the DEIS and FEIS as an African-American neighborhood in the City of Prospect, Kentucky. Evaluation of the eastern bridge alignments indicated that there would be no direct impact to the Ken Carla neighborhood from any of the alternatives, including the Alignment A-15. Alignment A-16 would have the greatest potential for indirect impacts, when considering all of the eastern alignments, but these impacts would not be greater in magnitude or severity, when compared to non-minority and non-low-income populations in the general vicinity, which have the potential to be affected directly through relocation. In addition, the potential effects of none of the alternatives would be borne predominantly within the Ken Carla neighborhood boundary.

- E.38 Ken Carla is improperly removed from Harrods Creek, which skews the environmental justice analysis and improperly represents the minority concerns of the area.

Response: *The Ken Carla neighborhood is considered unique in that a high minority concentration was identified in a distinctive geographical area not integrated within the Harrods Creek community through land use.*

- E.39 Ken Carla is improperly placed on Little Goose Creek in the DEIS. It is actually on Harrods Creek. This mistake calls into question the thoroughness of the field data, review procedures, and quality control.

Response: *This has been corrected.*

E.40 The DEIS fails to assess effects on the James Taylor neighborhood, which is affected by all four far eastern alternatives. Though the James Taylor subdivision is marked on maps as a historic district, the DEIS does not mention it.

Response: *The James Taylor area was identified as a subdivision within the Harrods Creek neighborhood. Factors supporting this determination of this area as a subdivision within Harrods Creek included:*

- *The integrated transit system within Harrods Creek, which included the James Taylor subdivision;*
- *Common land-use characteristics; and*
- *Shared community facilities such as*
 1. *Recreational facilities, including Hays Kennedy Park*
 2. *Medical and health care facilities*
 3. *Educational facilities*
 4. *Religious institutions*
 5. *Commercial marketplaces/restaurants*
 6. *Public services.*

The Harrods Creek neighborhood, as a whole, did not represent a high-risk area for environmental justice concerns. However, the analysis did recognize the James Taylor subdivision as a special population area with a higher risk value in regards to environmental justice concerns, when compared to other block groups within the Harrods Creek neighborhood.

Evaluation of the eastern alignments, including Alignment A-15, indicated that Alignment A-2 would have the greatest potential for indirect impacts to the James Taylor subdivision, which is located within the Harrods Creek neighborhood, but these potential impacts would not be at a greater magnitude in terms of severity, when compared to non-minority and non-low-income populations in Harrods Creek, which have the potential to be affected directly through relocation.

The James Taylor Subdivision has not been nominated to the National Register of Historic Places and, thus, has not been designated by the State Historic Preservation Officer as a "historic district." However, the James Taylor Subdivision has been determined eligible for listing on the National Register as a Historic District.

E.41 By lumping the James Taylor subdivision with other census blocks in Harrods Creek, the DEIS improperly dilutes the concentration of minorities in that area.

Response: See Response to Comment E.40 above.

E.42 The DEIS concludes that there are no impermissible environmental justice impacts on minority neighborhoods in the east, but that cannot be possible when the James Taylor subdivision is not fully analyzed, and is only 200 yards from the A-2 alignment.

Response: *The eastern alignments, including Alignment A-15, would not pose disproportionate impacts on minority populations that are of a greater magnitude than those potentially affecting populations that were not identified as being minority or low-income areas of concern.*

Evaluation of the eastern bridge alignments, including Alignment A-15, indicated that Alignment A-2 would have the greatest potential for indirect impacts to the James Taylor subdivision originally established as an African-American community, which is located within the Harrods Creek neighborhood and is still predominantly African-American, but these potential impacts would not be at a greater magnitude in terms of severity, when compared to non-minority and non-low-income populations in Harrods Creek which have the potential to be affected directly through relocation. See Response to Comment E.37 above.

Ken Carla has been identified in the DEIS and FEIS as an African-American neighborhood in the City of Prospect, Kentucky. Evaluation of the eastern bridge alignments indicated that there would be no direct impact to the Ken Carla neighborhood from any of the alternatives, including the Alignment A-15. Alignment A-16 would have the greatest potential for indirect impacts, when considering all of the eastern alignments, but these impacts would not be greater in magnitude or severity, when compared to non-minority and non-low-income populations in the general vicinity, which have the potential to be affected directly through relocation. In addition, the potential effects of none of the alternatives would be borne predominantly within the Ken Carla neighborhood boundary. See response to E.37 above.

E.43 Routes A-9 and B-1 are the only eastern routes that do not pose disproportionate impacts on minority neighborhoods.

Response: See Response to Comment E.42 above.

E.44 The DEIS focuses too much on VHT and too little on HSSBS (Hours Spent Standing at Bus Stops). The bias is in itself a violation of Environmental Justice principles.

Lower-income and minority communities have not been adequately considered. Interstate highways do not serve the poor, who cannot afford road-worthy automobiles. Lower-income communities depend on mass

transit. According to KIPDA, only 6 % of our transportation funding has been programmed for public transit. This is tantamount to a denial of civil rights.

The Ohio River Bridges Project has failed to comply with the environmental justice requirements of Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d-1; its related regulations; The President's Executive Order on Environmental Justice, EO 12899 (Feb. 11, 1994) ("Executive Order"); the US DOT Order to Address Environmental Justice in Minority Populations and Low-Income Populations, DOT Order 610.2 (April 15, 1997) ("DOT Order"); FHWA Actions to Address Environmental Justice in Minority Population and Low-Income Population, FHWA Order 6640.23 (Dec. 2, 1998) ("FHWA Order"); and the FHWA's own guidelines regarding compliance with Title VI, Memorandum from Kenneth R. Wykle and Gordon J. Linton (Oct. 7, 1999) regarding Implementing Title VI Requirements in Metropolitan and Statewide Planning ("FHWA Memorandum"). We ask you to investigate this project and the facts we raise in this complaint, and take all appropriate actions to bring this project into compliance with our nation's Civil Rights Laws.

Response: *An Environmental Justice (EJ) Analysis was conducted for this proposed project and the findings were incorporated into the FEIS. The EJ analysis identified areas having the potential for relative environmental justice concerns and the probability that minority or low-income populations living in these areas could disproportionately bare potential impacts. The FEIS also evaluated the travel time changes for each alternative, including those in areas of relative environmental justice concerns.*

The analysis of CART's Regional Cross River Transportation Plan, prepared by Community Transportation Solutions (Nov. 2000), evaluated three different improvement alternatives. They ranged from an all-bus system to a very extensive rail network that envisioned implementation of three light rail lines and construction of a new, high-level transit bridge across the Ohio River. The analysis concluded that considering the high cost of implementation and the low projected ridership, that light rail transit alternatives should not be carried to the next level of analysis for the Ohio River Bridges EIS. The Preferred Alternative does include enhanced cross-river transit service, since it was shown to be more cost effective.

Transportation investment decisions are the responsibility of the KIPDA. Transit ridership and level of investment in the LMA equal, and in some cases exceed, the level of transit investment in other cities of comparable size in the Mid-west. The on going analysis of light-rail between Downtown and the airport demonstrates that Louisville is seeking the phased implementation of light-rail. The Preferred Alternative does not preclude the future expansion of light-rail into Indiana. Issues related to the KIPDA planning process are best addressed in the context of the planning certification review process.

F. Historic Properties and Section 4(f) Analysis

F.1 The DEIS did not take into account indirect and cumulative effects—including sprawl and urban disinvestments—in identifying the analysis area, or “area of potential effects” (APE), for historic properties. The areas of potential effect for historic properties identified in the DEIS are inconsistent with other resource evaluation work done for the DEIS. The DEIS’s indirect and cumulative effects analysis never makes a connection between induced growth and the analysis of the APE for historic properties, but only looks at direct impacts and noise/viewshed impacts. Neither the “broad APE” nor the indirect and cumulative effects analysis boundary for historic properties includes the entirety of the INAAP.

Response: *An extensive effort was included in the work undertaken for the environmental phase of the Louisville – Southern Indiana Ohio River Bridges Project to assess the indirect impacts and cumulative effects of the project on resources within the area, including historic properties. Discussions and coordination regarding indirect impacts and cumulative effects was initiated with the formal agency scoping meeting held in October 1999 and carried over into an agency coordination meeting regarding indirect and cumulative effects held in Louisville, Kentucky in April 2001 and an ICEA planning workshop held on August 28, 2001 with county and city planners and planning and economic development staff from Indiana and Kentucky. This work was used to address indirect impacts and cumulative effects of the Project on historic properties in the DEIS. However, since the evaluation of historic was an on-going process at the time the DEIS was released for comment in November 2001, the area of potential effects was re-evaluated and expanded for possible direct impacts in January 2002 and for possible indirect impacts in August 2002. The indirect and cumulative effects of Project alternatives on historic properties was also re-evaluated and additional material provided to consulting parties, included in a project report and made available for public review and comment. The evaluation of indirect and cumulative effects included a review of likely changes in population and employment within the area and project elements that cause or accelerate activities that could indirectly or cumulatively impact historic properties. A portion of the INAAP property was identified as meeting National Register eligibility criteria and the likely impacts of the Project evaluated for that portion of the property. A reuse plan is being developed for the INAAP property and an environmental document being prepared for the likely reuse of the property. Any planned reuse is not likely to have an impact on the development of the Bridges Project and any indirect and cumulative effects of the final reuse plan would most appropriately be addressed in the environmental document for that property.*

F.2 The DEIS did not identify all NRHP-listed or eligible historic properties that are subject to constructive use from the project, and the quality and magnitude

of historic properties that would suffer constructive use impacts has been, for the most part, ignored or understated in the DEIS. The DEIS does not support the conclusion that constructing a new six-lane interstate freeway, with interchanges, in eastern Clark and Jefferson Counties will “use” only one (1) to three (3) historic properties per alternative.

Response: *The DEIS did identify all NRHP-listed and eligible properties that fell within the APE for the project. Constructive use impacts are not evaluated as part of the Section 106 process, but under Section 4(f). Analysis of constructive use impacts was a part of the Section 4(f) evaluation (Constructive Use Technical Report). This report is available at the local project office. This analysis found that there are no constructive use impacts anticipated to occur by selection of the Preferred Alternative.*

F.3 The DEIS does not contain an integrated discussion of the requirements for historic property evaluation and protection relating to federal actions under the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and Section 4(f) of the Department of Transportation Act. In addition, separate processes were used for NEPA and NHPA compliance, although the DEIS contains components based on the Section 106 process.

Response: *As noted in the comment, these are three separate laws, and each has its separate implementing regulations and process. There is a considerable amount of overlap between the separate processes, however, and the requirements of all three laws are addressed in the DEIS. The DEIS is, of course, a part of the NEPA process, and the requirements of Section 106 of the NHPA and Section 4(f) of the DOT Act are addressed in the appropriate sections of the DEIS. Section 106 of the NHPA is addressed in Section 5.3; Section 4(f) of the DOT Act is addressed in Chapter 6. Neither the Section 106 process nor the Section 4(f) process could be completed prior to publication of the DEIS, since selection of a Preferred Alternative is necessary to complete each of those processes.*

F.4 The DEIS is internally inconsistent in its historic property discussion in the use of the terms “direct,” “indirect,” and “cumulative” and in the summaries of affected historic properties. Tabular summaries are insufficient for a valid historic properties analysis.

Response: *This has been rectified in the FEIS. The identification of resources and the assessments of effects appear in Sections 4.3 and 5.3, respectively, and have been revised in cooperation with the identified consulting parties to permit a better understanding of the analyses that were performed. In addition, the mitigation of adverse effects detailed in the Memorandum of Agreement (MOA) is also included in Chapter 8.*

- F.5 The historic properties review process conducted pursuant to Section 106 of the National Historic Preservation Act (Section 106) failed to foster meaningful dialogue among consulting parties. The consultation process was not commenced at the early stage required, and the data and technical information used to make Section 106 determinations was not provided to consulting parties in a timely manner. Without this detailed documentation, consulting parties could not fully assess the adequacy of the determination of the area of potential effects or the identification of historic properties.

Response: *Extensive Section 106 investigations were performed between July 2001 and July 2002. Meetings were held to receive comments regarding project area resource identification and analyses. Consulting parties attended these meetings. Minutes can be reviewed at the local project office. In addition, meeting summaries are included in Section 7.2.12, Consulting Party Coordination under Section 106.*

- F.6 FHWA failed to complete the Section 106 process prior to completion of the DEIS, causing non-final determinations to be used in the DEIS process. This effectively eliminated effective public participation in the historic properties section of the DEIS. FHWA should be required to prepare a supplemental DEIS and Section 4(f) evaluation.

Response: *It is not required to complete the Section 106 process and Section 4(f) Evaluation prior to the DEIS. As part of the Section 106 process, public involvement is required. There was extensive public participation in development of the alternatives and consideration of historic impacts. Public participation in the Section 106 process is addressed in Section 7.1.13 of the DEIS.*

- F.7 The DEIS treatment of historic properties does not fulfill FHWA's obligation to avoid the use of historic properties and to evaluate the extent to which its financial support of a proposed transportation project will indirectly contribute to the loss or decline of historic properties.

Response: *Section 106 does not mandate that the FHWA avoid the use of historic resources in the development of alternatives for the project. It does require that an APE be developed, historic resources (both listed and eligible) be identified within that APE and that the potential effects of the project on those resources be assessed and resolved, if found to be adverse. It also provides for the inclusion of consulting parties to assist in the formulation of the APE, identification of resources, assessment of effects and development of mitigation measures in an MOA. This process has been followed in the preparation of both the DEIS and FEIS. The FEIS demonstrates that every effort was made to avoid and minimize impacts to both historic and Section 4(f) resources. Documentation relating to the APE, property identification,*

assessment of effects and the MOA are available for review and inspection at the local project office.

- F.8 An alternative containing a single bridge in the downtown area would be a “prudent and feasible” alternative to either an eastern bridge alone or a two-bridge scenario.

Response: *As described in greater detail in Section 3.7 and Chapter 6 (the Section 4(f) Evaluation), a single bridge downtown would not sufficiently meet the Project’s purpose and need, as described in Chapter 2. Although the One Bridge/Highway alternatives were carried forward as reasonable alternatives meriting evaluation in the Draft EIS, the detailed analyses presented in that document and in this FEIS demonstrate that none of those single-bridge alternatives sufficiently meets purpose and need, and thus none of the single bridge alternatives is a prudent and feasible alternative.*

- F.9 Analyses of historic properties should be conducted and be in compliance with the Advisory Council on Historic Preservation’s Rules and Regulations (36 C.F.R. part 800).

Response : *The analyses of historic properties under the Section 106 process have been conducted in accordance with the Advisory Council on Historic Preservation’s regulations, found at 36 C.F.R. Part 800. Execution of the MOA demonstrates that FHWA has concluded its responsibilities under Section 106 of the NHPA.*

- F.10 Analyses of historic properties should be conducted and be in compliance with the Standards for Treatment of Historic Properties contained in the Guidelines for the Treatment of Cultural Landscapes (36 C.F.R. Part 68).

Response: *The identification of historic properties, the assessment of project effects and the mitigation of adverse effects have been conducted in accordance with the Advisory Council on Historic Preservation’s Section 106 regulations, found at 36 C.F.R. Part 800, with particular sensitivity shown for cultural landscapes within the APE. The Standards for Treatment of Historic Properties contained in the Guidelines for the Treatment of Cultural Landscapes (36 C.F.R. Part 68) are utilized during the implementation of the mitigation outlined in the MOA being developed as part of this project. These guidelines will be employed in the design phase of the project, which will be pursued in another phase of project development. The identification, assessment of effects and development of the MOA as part of this phase of project development satisfies the Section 106 requirements of 36 C.F.R. Part 800.*

- F.11 The DEIS did not adequately assess potential cumulative effects to historic properties, resulting in many cumulative effects being omitted.

Response: *The indirect and cumulative effects of the Project on historic properties was included as a part of a much more comprehensive evaluation of these effects for the Project as a whole. The determinations of indirect and cumulative effects was re-evaluated as part of the continuing review of historic properties and potential impacts that could be determined for alternatives carried forward into the DEIS. These revised effects have been incorporated into Chapter 5, included in the consideration of the impact of project elements on historic properties (direct, indirect, and cumulative effects) and used to develop mitigation measures that would resolve adverse effects of the preferred alternative on historic properties.*

F.12 The Section 4(f) analysis in Chapter 6 of the DEIS is significantly incomplete based on the status of the Section 106 process.

Response: *Neither the Section 4(f) process nor the Section 106 process could be completed prior to the selection of a Preferred Alternative. Since the DEIS did not have a Preferred Alternative, both the Section 106 process and the Section 4(f) Evaluation were developed and documented through the evaluation of alternatives in the DEIS. A Preferred Alternative has now been selected. The FEIS documents the selection of the Preferred Alternative and includes documentation of the completed Section 106 process and the executed MOA. The FEIS also contains the completed Section 4(f) Evaluation.*

F.13 Proposed mitigation should be presented for archaeological resources that may be impacted by the alternatives.

Response: *Additional archaeological investigations, avoidance, minimization and mitigation will be accomplished during final design in accordance with the MOA. Mitigation of archaeological resources impacted by the Preferred Alternative is discussed in Section 5.3.2 and in the Section 106 MOA. If any previously unidentified archaeological resources are discovered during construction of the Preferred Alternative, identification, assessment and mitigation will be addressed through the procedures set forth in the Section 106 MOA.*

F.14 Historic and archaeological resources, including the recently discovered 1853 mill ruins visible from the riverfront in Ashland Park in Clarksville and the Fort Finney/Fort Steuben ruins in Jeffersonville, were omitted from the DEIS analysis. These should be investigated before a final decision is made.

Response: *Further investigations regarding the location and presence of these resources were performed. The location of these sites could not be definitively determined. However, it was concluded that the Preferred Alternative would*

not physically impact the most likely sites of either ruins. If this is determined otherwise, appropriate mitigation actions will be taken by the states.

- F.15 The DEIS does not identify which archaeological resources have been evaluated for listing on the NRHP. The DEIS should discuss this and any phasing of analysis of resources.

Response: *The phasing of archaeological investigations during final design will be included in a MOA between the FHWA, INDOT, KYTC, ACHP and the State Historic Preservation Officers (SHPO). Archaeological investigations conducted to date indicate that sites are eligible under Criterion D for the information that may be recovered and are not critical for preservation in place.*

- F.16 The DEIS does not explain the process for determining if archaeological sites are worthy of preservation in place, and whether the sites have religious or cultural significance to Indian tribes.

Response: *An archaeological site is determined to be eligible for inclusion on the NRHP if the site has "yielded, or is likely to yield, information important in prehistory or history". No sites recommended for preservation in place were revealed in the archaeological investigations. During Native American Section 106 consultation meetings regarding archaeological sites, religious and cultural significance of the identified archaeological sites has been discussed. The MOA establishes a process to address unanticipated finds and balance the interests of Native Americans and archaeologists. Avoidance of archaeological sites is the desired outcome.*

- F.17 The documentation of historic properties included with the DEIS has omitted any mention of the national importance of Louisville's West Main Street Historic District.

Response: *The Section 106 resource description contained in Section 4.3.1 describes the District as one of the finest collections of cast-iron building facades in the country. The description also indicates that the District represents one of the last remaining groupings of nineteenth century cast-iron commercial storefronts in the country.*

- F.18 The DEIS omits a chronology of events, which would explain the importance of relationships between the diverse and multi-layered historic and cultural resources in the downtown areas. Downtown Louisville and southern Indiana contain numerous significant historic properties, including numerous individually listed properties and historic districts.

Response: Detailed chronologies of historic events shaping the greater Louisville area are contained within the historic baseline reports. These documents are available for inspection and may be reviewed at the local project office. The public and consulting parties have been afforded the opportunity to participate in the Section 106 process, as detailed in Section 7.1.13, Section 106 Historic Resources Review Public Involvement and Section 7.2.12, Consulting Party Coordination under Section 106. The Indiana and Kentucky SHPOs concurred in the identification of historic resources within the APE on July 5, 2002.

F.19 No Preferred Alternative should be selected until the Section 106 process is complete. Otherwise, it is impossible to comment on whether one eastern alternative more seriously impacts historic properties than another.

Response: Neither the Section 4(f) process nor the Section 106 process could be completed prior to the selection of a Preferred Alternative. Since the DEIS did not have a Preferred Alternative, both the Section 106 process and the Section 4(f) Evaluation were developed and documented through the evaluation of alternatives in the DEIS. A Preferred Alternative has now been selected. The FEIS documents the selection of the Preferred Alternative and includes documentation of the completed Section 106 process and the executed MOA. The FEIS also contains the completed Section 4(f) Evaluation.

F.20 All Far East alternatives will have both direct and indirect effects on the Swartz Farm in Indiana, given that the whole of the farm is historic, not just the buildings. The DEIS also does not clearly delineate where the Near East alternative (Alternative B-1) will cross the Swartz Farm, but the alternative will most certainly have visual impacts that are more than minimal, contrary to the assertion in the DEIS that such impacts will be “minor.”

Response: Effects of the Preferred Alternative upon the Swartz Farm Rural Historic District have been evaluated for the entire District. Although the District has been compromised by the construction of an adjacent large retention pond and other residential construction, all East End alternatives would further compromise the historic characteristics which qualify the District for inclusion on the NRHP. In the assessment of effects documentation, all alternatives were evaluated as having an adverse visual effect on the District. Alternative B-1 graphics relating to the Swartz Farm Rural Historic District have been revised as appropriate.

F.21 Alternative C-1 will have serious adverse physical effects on the Old Jeffersonville Historic District, and even farther-reaching noise effects. Alternative C-2 will have direct physical and likely visual and noise effects on

two historic industrial complexes. Alternative C-3 will have the least adverse impacts.

Response: *As a result of the Section 106 assessment of effects, it has been determined that all Downtown alternatives would have an adverse effect upon the Old Jeffersonville Historic District. The detailed assessment of project effects upon this District is contained in Section 5.3. This analysis has shown that Alternative C-1 would have an adverse effect on the District from physical encroachment, visual, noise and vibration impacts. Alternatives C-2 and C-3 would produce an adverse effect on the District from noise and vibration impacts. Alternative C-3 has a greater impact on Waterfront Park and many more relocation impacts. As such, Alternative C-1 was selected as the most prudent alternative in the Downtown area.*

F.22 The timing of the Section 106 analysis causes the DEIS to understate the impact on historic properties, even though the Section 106 process is ongoing and will eventually resolve some issues.

Response: *Neither the Section 4(f) process nor the Section 106 process could be completed prior to the selection of a Preferred Alternative. Since the DEIS did not have a Preferred Alternative, both the Section 106 process and the Section 4(f) Evaluation were developed and documented through the evaluation of alternatives in the DEIS. A Preferred Alternative has now been selected, and the FEIS documents the selection of the Preferred Alternative and includes documentation of the completed Section 106 process and the executed MOA. The FEIS also contains the completed Section 4(f) Evaluation.*

F.23 The Section 4(f) analysis is totally inadequate. The age and softness of the brick in the Belleview House make it particularly susceptible to vibration and pollution, resulting in irreparable damage over time. Also, the viewshed of the Belleview pastureland is part of its historic significance. River Road adjacent to the property is a Scenic Byway, and Belleview is part of an agricultural conservation district that covers approximately 500 acres of farmland in the area. There also is the likely presence of archaeological resources on the property.

Response: *The Section 4(f) Evaluation addresses the potential use of Section 4(f) properties by each alternative evaluated in the DEIS. Properties protected by Section 4(f) are publicly owned parks, recreational areas, wildlife or waterfowl refuges, or historic or archaeological sites that are on or eligible for inclusion on the National Register of Historic Places. A "use" occurs (1) when land from a Section 4(f) site is permanently incorporated into a transportation project, (2) when there is a temporary occupancy of Section 4(f) property that is adverse in terms of the statute's preservationist purposes,*

or (3) when the proximity impacts of the transportation project on the Section 4(f) site are so severe that the protected activities, features or attributes that qualify the resource for protection under Section 4(f) are substantially impaired.

The Vibration Analysis indicated that traffic vibration would not be perceptible beyond 40 feet from traffic on the Far East alternatives. The Belleview House would be over 500 feet from traffic on the nearest alternative. Visual impacts to the viewshed of the Belleview pastureland do not constitute a Section 4(f) use of the Belleview property. Section 4(f) does not protect scenic byways and agricultural conservation districts. The archaeological resources identified during field reconnaissance on the Belleview property will not be affected by the project.

The Section 4(f) Constructive Use Technical Report analyzed each adjoining property and presents the technical basis to support that there is no constructive use. The Indiana and Kentucky SHPOs have reviewed this analysis and have not taken exception to FHWA's findings that there is no substantial impairment of the adjoining properties.

- F.24 The Section 4(f) analysis does not point out that a new Downtown bridge and reconstruction of the Kennedy Interchange is a prudent and feasible alternative. The Eastern bridge was added to the DEIS because of hardball politics, not any real need. The need is congestion in the Kennedy Interchange; the INAAP can develop without an Eastern bridge; current east-to-east traffic is minimal; and the absence of an eastern bridge will prevent the INAAP from instantly capturing and cannibalizing economic activity from eastern Jefferson County and Oldham County. The "downtown only" option is also less expensive, eliminates the threat to the urban core, solves the only true transportation needs, eliminates Environmental Justice issues, and eliminates adverse tax consequences for Kentucky.

Response: *Determinations of whether alternatives are "not feasible and prudent" are not made in the Section 4(f) Evaluation in the DEIS, since all potentially reasonable alternatives are still under consideration. The Final EIS does conclude, however, that the one-bridge alternatives downtown would not sufficiently improve cross-river mobility, would not adequately reduce congestion or solve safety problems on the existing Kennedy Bridge and approach roads, or provide efficient cross-river transportation system linkage in the eastern portion of the metropolitan area. Therefore, the one-bridge downtown alternatives do not meet the purpose and need for the project as outlined in Chapter 2 of the FEIS. The Section 4(f) Evaluation in the FEIS concludes that, since the one-bridge downtown alternatives do not meet the purpose and need for the project, they are "not feasible and prudent" alternatives.*

- F.25 The Section 4(f) minimization analysis is insufficient. Cost alone is not a sufficient basis to discard the cross-river tunnel option for the eastern alternatives.

Response: *The initial construction cost of a cross-river tunnel was estimated to be approximately three times as much as a bridge across the river, and would not have eliminated Section 4(f) impacts because the Swartz Farm Rural Historic District still would have been impacted. Alternative A-15 does not use any Section 4(f) resources on the Kentucky side of the river. The cross-river tunnel option was, therefore, dropped from further consideration. Other factors that discourage a cross-river tunnel are high maintenance costs, concerns about accidents in the tunnel, and the prohibition of certain explosives from tunnels.*

- F.26 Information provided in the DEIS identifies numerous cultural and historic resources which could potentially be impacted by all the alternatives and the Kennedy Interchange options. EPA recommends that the FHWA include the results of the Section 106 consultation process in the FEIS. This will insure that any adverse effects to cultural/historic resources, and possible mitigation measures for adverse effects, are identified for each alternative, and taken into consideration when selecting the alternative(s) and options that compromise the Preferred Alternative identified in the FEIS.

Response: *As requested, the results of the Section 106 process of delineation of an APE, identification of historic resources within the APE, assessment of project effects on historic resources and mitigation of those adverse effects in a MOA have been developed and included in the FEIS in Sections 4.3, 5.3 and Chapter 8.*

- F.27 There should be no tunnel under Drumanard estate because the property has no historic significance.

Response: *The dwelling at Drumanard was listed on the NRHP in 1983 under Criterion C for its high design aesthetics. In 1989, the boundary was expanded to include all of the land, buildings, structures, sites and objects, which were originally and continue to be associated with the property. Since the property was carefully planned with each feature relating to the others, the entire estate was nominated. Drumanard was also included in the Country Estates of River Road Historic District, which was listed on the NRHP in 2000. The tunnel is proposed to avoid a Section 4(f) encroachment upon this historic property.*

- F.28 With respect to Transylvania Beach, Indian tribes lived along Transylvania Beach, not the mud field taken by the bridge.

Response: *Archaeological investigations to be completed during the final design and in accordance with the MOA will ensure that impacts to archaeological resources are avoided, minimized and mitigated.*

F.29 The McMahon family home built by Theodore Muir is one of the last large tracts of undeveloped scenic and sylvan true nature preserves in Jefferson County and is situated in the Harrods Creek area. Alternative A-9 will destroy this farm, as it has been known for years. A better alternative is Alternative A-2, which will better preserve the McMahon farm and Harrods Creek.

Response: *Neither Alternative A-9 nor Alternative A-2 were selected as the Preferred Alternative. The proposed alignment of the Preferred Alternative would not impact upon the McMahon farm. No impacts would occur to this property.*

F.30 Generally, an East End bridge will harm historical sites in the East End.

Response: *Sections 4.3 and 5.3 detail the delineation of the APE, the identification of historical resources within the APE, the assessment of project effects upon the identified resources and the mitigation of adverse effects. An impact of construction of the Preferred Alternative would be the adverse effects upon historical resources in both the East End and Downtown areas. The MOA in Chapter 8 describes how these adverse effects have been resolved.*

F.31 The caliber of the historical sites affected by the bridges is not high enough to justify punishing the living by elevated interstate highway noise and sight pollution.

Response: *Section 106 of the National Historic Preservation Act, as amended, protects the historical resources within the project area. It requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the ACHP an opportunity to comment on these undertakings. The regulations require consultation to identify historic resources, assess project effects upon the identified resources and seek ways to avoid, minimize or mitigate any adverse effects. A detailed analysis of each of these impacts is included in Sections 4.5 and 5.5 (Noise) and Sections 4.11 and 5.11 (Visual and Aesthetic Resources). The Section 4(f) analysis in Chapter 6 demonstrates that every effort has been made to avoid and minimize harm to Section 4(f)-protected resources.*

F.32 FHWA needs to list those federally recognized tribes who were contacted regarding the project, when they were contacted, and their responses.

Response: *FHWA initiated nation-to-nation consultation with Native American tribes on September 27, 2000. Section 5.3, Historic and Archaeological Resources, lists those tribes that were consulted. Correspondence received from the*

tribes was utilized in identifying culturally significant areas within the project corridor. Their responses are maintained in the administrative record for the project.

- F.33 The Eastern Shawnee of Oklahoma sent a statement of interest to FHWA that is not reflected in the DEIS.

Response: *All correspondence received on the project is maintained within the administrative record.*

- F.34 The 1995 cultural resources management plan for the Army Ammunition Plan identified over a thousand potentially NRHP-eligible structures within the expanded APE. The inventory, however, was apparently never completed, nor was the implementation agreement for the plan ever executed. The consultants need to receive this information and discuss them before these resources are lost.

Response: *The 1995 cultural resources management plan is maintained in the files of the Indiana SHPO and has been reviewed. Intensive coordination with the SHPO has concluded that the surveyed area of the INAAP property, which lies within the expanded APE, sufficiently addresses the potential impact resulting from the project. As a result of survey efforts, two potential historic districts were identified within the expanded APE, the Ranney Wells Historic District and the Igloo Storage Historic District. The assessment of effects documentation prepared for this project in July 2002 and concurred upon by the Indiana and Kentucky SHPO indicated that the project would have “no effect” on the Ranney Wells Historic District. However, Alternatives A-2, A-15 and A-16 were determined to have an “adverse effect” on the Igloo Storage Historic District and mitigation of the adverse effect is addressed in the MOA. Areas within the INAAP property outside the expanded APE are, therefore, outside the scope of this project and were not evaluated.*

- F.35 The level of attention directed to Kentucky historic resources raises questions about whether Kentucky and Indiana historic resources are being assessed and treated equally. Similarly, eastern and downtown resources do not always appear to have been evaluated equally, as in the DEIS where discussion of home values included riverfront properties in Utica, but not in downtown Jeffersonville (DEIS, p. 4-17).

Response: *An extensive effort was undertaken on the Louisville – Southern Indiana Ohio River Bridges Project (Bridges Project) to evaluate resources within the area of potential effect or APE for National Register criteria as historic properties. The documentation requirements within the two states is similar, however the application of the standards established by the National Park Service is the same. The evaluation of properties on the Bridges Project considered the*

integrity of location, design, setting, materials, workmanship, feeling, and association, and four categories of resources (A – D) established by the National Park Service. The evaluation of eligibility criteria for resources in Indiana and Kentucky included consultation with the State Historic Preservation Officer or his designee for that state in arriving at a final determination. A similar process was also used in assessing project impacts on those resources that were either listed or determined eligible from project research.

The discussion of properties on Page 4-17 of DEIS and several preceding pages provided a general overview of the types of properties that are located within the study area identified for this project. It is not intended to provide a detailed discussion of each individual property. Table 4.1-6 provided a summary of waterfront property values in both Jeffersonville and Utica. The preceding text provided a discussion of properties in both communities.

- F.36 The ability of consulting parties to provide meaningful comment on archaeological resources has been compromised by the lack of information that was provided in the DEIS. This is particularly true in the case of the aboveground resources such as the limekilns near Utica. The reasons why these resources were treated as archaeological sites rather than historic were never clarified. The discussion of the potential impacts to these sites was vague. The DEIS did not adequately explore the potential for encountering intact archaeology below fill materials in this area. Known resources such as Playsquare park cemetery were identified in earlier reports but were not acknowledge or discussed in the DEIS.

Response: *On July 17, 2002, consulting parties were provided information pertaining to archaeological sites in the Assessment of Effects documentation. The documentation included the time period of the site, the approximate size of the site and the type of artifacts collected. In accordance with federal and state regulations, the location of the sites is the only information that has not been divulged to consulting parties. Ambiguous language is required when discussing archaeological sites to prevent disclosing geographical descriptions, which may jeopardize the security of the site. Deep subsurface testing will be performed on the Preferred Alternative during the design phase of the project to ensure that sites are properly identified, documented and, if required, excavated. Playsquare Park Cemetery (Colston Memorial Park) was identified in earlier reports as being potentially eligible for the NRHP, but on May 28, 2002 was determined ineligible. This is also documented in Section 4.3 of the FEIS.*

- F.37 The noise, visual and vibration impacts caused by improvements to the access road located immediately adjacent to the Train Depot are of concern. These effects need to be clarified and quantified rather than dismissed with a vague

statement that “construction of the nearby access road will not change the character of the property’s use or features” (DEIS, 5-80).

Response: *The assessment of project effects upon the Train Depot is presented in Section 5.3, Historic and Archaeological Resources. Construction activities near this property would be limited to traffic control measures along Spring Street and 10th Street and minor reconstruction of this intersection that would be included with Alternative C-1. None of this work would introduce differing elements into the area of this property.*

The effect of noise is anticipated to increase by 2 dBA, resulting in a no effect determination.

The existing viewshed to the west includes commercial structures and open space immediately adjacent to existing I-65. The construction of Alternative C-1 would be visible from the resource. Enhancement or modification of the I-65 roadway and access points would be partially obstructed by the existing landscape. The existing viewshed presently contains a view of commercial structures and existing transportation systems. Construction of Alternative C-1 would not introduce differing elements into the viewshed, resulting in a no adverse visual effect on the property.

“Annoyance” vibration resulting from traffic is perceptible at a distance of 50 feet within the Downtown area. The distance from the property to the nearest driving lane of a project element (10th Street access point for Alternatives C-1) would be less than 50 feet. 10th Street would be reconstructed with the project between I-65 and Spring Street. Traffic conditions would not be changed east of Spring Street and would vary little within 50 feet of the resource. Alternatives C-1 would have an adverse traffic vibration effect on the resource.

F.38 The Colgate-Palmolive administration building is proximate to Alternative C-2. Accordingly, vibration impacts from construction and use of Alternative C-2 are of concern. The DEIS does not address this issue, despite the fact that it was identified as a concern by the Westerly Group in their Phase II report. More information on the proposed locations of ramps and access roads and their impacts on the buildings would have been helpful.)

Response: *Alternative C-2 has not been selected as part of the Preferred Alternative. As defined in the Assessment of Effects documentation that was prepared in the Section 106 process, Alternative C-2 might have required vibratory rolling within 590 foot of the Colgate-Palmolive administration building, which may have caused annoyance vibration at that property. Thus, Alternative C-2 would have had an adverse construction vibration effect on the District.*

- F.39 The proximity of Alternative C-2 to historic structures in the Ohio Falls Car and Locomotive Company Historic District raises concerns about vibration impacts of construction and use. Additional information about ramps and access roads and the five buildings that would be removed would help with assessment of impacts, as would a graphic representation of the visual impact of Alternative C-2 on the District.

Response: *Alternative C-2 has not been selected as the Preferred Alternative. As defined in the Assessment of Effects documentation that was prepared in the Section 106 process, construction activities for Alternative C-2 that may have affected this Historic District would have been limited to maintenance of traffic provisions. This would have involved construction through the northwestern edge of the District, and traffic control measures along Sixth Street and the street along the western edge of the District. Construction activities other than those involved with placing part of the roadway within the District would have been short-term and would not have altered the characteristics that made this property eligible for the NRHP. Alternative C-2 would have had no adverse construction effect on the District, other than that produced by vibration. Part of the project for Alternative C-2 involved potential pile driving within the 40 foot measure from the property for potential damage and within the 590 foot measure from the property for potential annoyance. Alternative C-2 would have had an adverse construction vibration effect on the District.*

- F.40 The George Rogers Clark Memorial Bridge, particularly the pylons, would be severely compromised by any of the Downtown alternatives. However, those impacts and potential solutions are never fully clarified or graphically represented. Vibration impacts are also an unaddressed concern for the bridge, pylons, and administration building, given their proximity to any of the Downtown alternatives and related improvements to U.S. 31.

Response: *Alternative C-1 would cause the relocation of the pylons, which lay within the existing U.S. 31 right-of-way. With the selection of this alternative, the significant character of the property would be altered. Approach reconstruction of U.S. 31 into I-65 would compromise the relationship between the bridge, the pylons and Administration Building. A determination of adverse effect was made. A graphical representation of this reconstruction was provided in the assessment of effects documentation, which was shared with the consulting parties in the Section 106 process.*

Vibration impacts were evaluated as part of this process. The bridge was designed and constructed to carry traffic, so there would be no traffic vibration effect on the bridge. Likewise, blasting would not be required for this alternative; blasting vibration would have no effect on the bridge. However, construction of an embankment in close proximity to the bridge would fall within the 40 foot measure from the property for potential damage

from vibratory rolling, causing a determination of adverse effect for construction vibration.

- F.41 The issue of the NRHP eligibility of a potential Historic District including the Swartz-Voight-Marble farm and a circa 1860 central passage house remains to be determined. We disagree with the finding in the Westerly Group's Phase II report that such a District should not be considered eligible. The size of the District and significance and integrity of its resources all appear to be adequate for eligibility.

Response: *The Swartz Farm, Swartz-Voight-Marble Farm, and Central Passage located on the east side of the Utica – Sellersburg Road were evaluated to determine if they met national register eligibility criteria. The initial evaluation determined that only the Swartz Farm itself met the criteria and that determination was used in development of the DEIS. However after further consultation on the properties and review of additional information, FWH determined the three properties collectively met national register criteria as a historic district and the evaluation of likely project impacts re-evaluated on that basis, included and used in the determination of a Preferred Alternative.*

- F.42 The 8 dBA noise increase with Alternative A-9 will have an adverse effect on the Fry House. The visual impact of the alternative, however, was impossible to assess given the information provided. The overall lack of graphic representation of visual impacts to Indiana resources was a continuing problem – of the 18 eastern representations in section 5.11, only one was of Indiana.

Response: *Alternative A-9 was not selected as the Preferred Alternative. In the assessment of effects documentation, it was stated that the alternative closest to the property was Alternative A-9. It was 1,317 feet from the eastern historic boundary of the resource, and is obstructed by the existing residential subdivision of which it is a part. However, a portion of the Utica-Sellersburg Road, 82 feet north of the historic boundary, would be realigned and reconstructed on the same elevation to intersect an access road to Alternative A-9, if selected. Therefore, this alternative would have no visual effect on the resource.*

- F.43 We disagree with the DEIS that only the area immediately surrounded the James A. Smith Farm house and cemetery would be NRHP-eligible, and urge that the boundary issue be referred to the Keeper. The effects of alternative other than Alternative A-9 need to be quantified, particularly if the boundaries are expanded to include more of the farmland. The 19 dBA noise increase from Alternative A-9 would seriously limit future options for rehabilitation and reuse. Indirect impacts from Alternative A-9 such as vibration and

induced growth could also negatively affect the character of the farm, especially given its current fragile state.

Response: *The James A. Smith Farm is eligible for the NRHP for its association with agriculture and early settlement (Criterion A). The farm consists of a farmhouse, an early cemetery, the farm lane and several outbuildings. Due to a lack of integrity and association with the land use of the main farm, only the area immediately surrounding the farm buildings and cemetery has been determined eligible under the criteria. However, the boundary was expanded to include the farm lane leading to the farmhouse. The Indiana SHPO concurred with this determination on July 16, 2002.*

Alternative A-9 would have encroached upon the farm lane; adverse effects also would have occurred to the resource from visual impacts, noise impacts, vibration and construction. However, as Alternative A-9 was not selected as the Preferred Alternative, these impacts from encroachment, visual impairment, noise, vibration and construction no longer apply. Alternative A-15, the Preferred Alternative, would be located substantially farther from this resource than Alternative A-9, being approximately 1,628 feet from the boundary and 1,824 feet from the primary structure. No adverse effects from encroachment, visual impacts, noise, vibration or construction are anticipated.

F.44 The noise and visual effect to the Federal Style House (IE-HC-45031) should be quantified, particularly for Alternative A-9.

Response: *The Preferred Alternative, Alternative A-15, would be more than 1,200 feet from the resource; therefore, this alternative would have no noise effect on the resource. Likewise, existing residential developments occupy the land between the resource and the alignment of Alternative A-15, the Preferred Alternative. This alternative would have no visual effect on the property.*

F.45 The visual impacts to the Prather Farm are described as minor, but no graphic is included to show these effects, particularly during the six months of the year when it will not be blocked by foliage.

Response: *Section 5.3 indicates Alternative B-1 would have an adverse visual effect on the Prather Farm due to its close proximity to the farm and the fact that Alternative B-1 would be on structure as it traverses the farm. The remaining East End alternatives were determined to have no adverse visual effect due to the partial obstruction by the Northport Business District, the Swartz Farm Rural Historic District and the rolling hills. The view from the Prather Farm would be further compromised as Alternatives A-2, A-9, A-13, A-15 and A-16 are in cut sections as they travel through the Swartz Farm Rural Historic District and eastward away from the farm.*

F.46 Apart from the noise effect of Alternative B-1 on the Woods House (IE-HC-45035) noted in the DEIS, we believe there would be an adverse visual effect from this alternative. If the house is indeed related to the Underground Railroad, as is believed, then its relationship to the river is a critical element of its character. A bridge with its centerline 540 feet from the property, as would be the case with Alternative B-1, would radically alter that relationship.

Response: *Alternative B-1 was determined to have an “adverse effect” on the visual setting of the Woods House in the assessment of effects documentation prepared in July 2002 and the FEIS. In addition, Alternative B-1 will have an “adverse effect” on the noise and vibration levels due to the proximity to the property. However, Alternative B-1 is not the Preferred Alternate, therefore, mitigation of the adverse effects will not be required.*

F.47 The NRHP eligibility of site #55005C should be reconsidered. The site includes a circa 1915 Craftsman style house and several outbuildings including a notable dairy barn. The Westerly Group’s Phase II report stated that “several of the buildings demonstrate early twentieth century agriculture, especially dairy farming” which was once a significant industry in the area, but few other examples remain in Clark County. Given the potential for adverse affects from B-1, its National Register eligibility should be reexamined.

Response: *Additional research was undertaken on this property; however, nothing to support eligibility of the farm under criteria A or B was found. The primary structure on this property, the gable Craftsman style cottage, was found not to be a significant example of its type, negating listing on the NRHP under criterion C. This property was obviously associated with the dairy industry; however, it has no special characteristics that would make it a significant example of a dairy operation. The property was therefore determined not to be a significant example that would qualify it for the NRHP. The SHPO concurred with this determination on July 5, 2002.*

F.48 A major portion of downtown Jeffersonville is included in the NRHP District and a smaller portion is within a local Historic District. There are many outstanding structures that should be preserved for future generations. There is a cemetery of unmarked graves that dates from at least the Civil War; this should be respected. The city currently uses the site for urban recreation such as softball, basketball, and a playground.

Response: *Section 106 of the National Historic Preservation Act of 1969 requires federal agencies to take into consideration all projects effects on those resources that are listed or potentially eligible for the NRHP. The portion of Jeffersonville that falls within the APE has been surveyed and those resources with local significance that were determined eligible for the NRHP have been carried*

forward to the assessment of effects phase. The assessment of effects documentation has determined that there will be an adverse effect on the Old Jeffersonville Historic District. Measures to minimize, mitigate or avoid adverse effects to this Historic District were evaluated in the Section 106 process and described in the Section 106 MOA, which is included in Chapter 8. Colston Memorial Park was evaluated for eligibility on the NRHP and determined ineligible. This determination was concurred in by the Indiana SHPO.

- F.49 The DEIS does not identify and cost potential mitigation options for adverse impacts to historic properties, particularly noise.

Response: *The Section 106 MOA, which is included in Chapter 8, identifies mitigation commitments made by FHWA to minimize and mitigate adverse effects on historic properties. Those commitments are legally binding on FHWA, and must be completed as part of the Project. FHWA completed a Cost Estimate Review on March 18-19, 2003, to refine the final cost estimate for the Preferred Alternative and build in costs for contingencies, mitigation and risks/unknowns based on experience from other major projects around the country. Those costs are reflected in Section 3.6.8. Additional information on costs and financing issues is presented in the Financing Options document, which can be reviewed at the local project office.*

- F.50 Alignments A-13 and A-15 and a full diamond interchange at U.S. 42 would encompass the Allison-Barrickman house, the surrounding farmland, and the Allison-Ferry Cemetery. The maps in the DEIS do not accurately show the locations of these historic resources, particularly the cemetery.

Response: *The location and status of all historic properties in the project vicinity, including the Allison-Barrickman house and its related features, were fully identified and evaluated in the Section 106 historic properties review process. While Alignment A-15 was selected as part of the Preferred Alternative, the full diamond interchange described in the DEIS was not selected. Rather, the Preferred Alternative includes a partial diamond interchange at U.S. 42, maintaining the existing access in the direction of I-71 but not providing access in the direction of Indiana. Thus, the Allison-Barrickman house is not encompassed by this interchange. Moreover, through avoidance and minimization, the design of Alignment A-15 was modified to avoid any direct impact to any historic properties in the vicinity of the Allison-Barrickman house. Measures to minimize and mitigate indirect adverse effects to this property (such as noise effects) are identified in the Section 106 MOA, which is included in Chapter 8.*

- F.51 Do not choose an alignment that would destroy the historic property at 6909 Wolf Pen Branch Road.

Response: *Alignment A-15, selected as part of the Preferred Alternative, would avoid taking any historic properties along Wolf Pen Branch Road. Measures to minimize and mitigation adverse effects to historic properties in this area are described in the Section 106 MOA, which is included in Chapter 8.*

G. Air Quality

G.1 The DEIS should be modified to reflect the recent attainment designation (November 2001) of the Louisville area for the 1-hour ozone National Ambient Air Quality Standard (NAAQS).

Response: *Section 4.4.1 has been rewritten concerning the 1-hour ozone attainment designation, the Louisville area's designation as a maintenance area and its ongoing transportation conformity determination requirements.*

G.2 The legislation cited requiring transportation conformity analysis is incorrect.

Response: *Section 4.4.1 has been corrected citing the appropriate regulations.*

G.3 Additional information should be provided regarding ozone ambient air quality data with reference to both one- and eight-hour National Ambient Air Quality Standard (NAAQS).

Response: *Historical ozone monitoring data for the Louisville Metropolitan Area (LMA) that was contained in Chapter 5 has been moved to Section 4.4.2. Additional text has been provided in Section 4.4.2 regarding the LMA's historical experience with meeting both the one- and eight- hour ozone NAAQS.*

G.4 The DEIS concludes that no additional mesoscale air quality analysis is needed because the two-bridge scenario is included in a "conforming" transportation plan. However, in determining air quality conformity, the KIPDA model's projection of future river crossings was not increased consistently with the increase made in the DEIS process to take into account the model's underestimation of future river crossings. Conformity needs to be redetermined if the increase in future river crossings presented in the DEIS is correct.

Response: *See Section 5.4.2. Pursuant to 40 C.F.R. § 93.107, KIPDA (the Metropolitan Planning Organization) will be redetermining conformity prior to issuance of the Record of Decision (NEPA process completion). This will allow KIPDA to amend its 20-year Regional Mobility Plan ("RMP") to reflect the updated "design concept and scope" for the Preferred Alternative, as reflected in the FEIS. Comments regarding this redetermination of conformity in accordance with 40 C.F.R. §§ 93.109 and 93.110 can be directed to KIPDA during the public comment period for the RMP amendment.*

The adjustment in 2025 cross-river travel volumes made for purposes of evaluating alternatives in the EIS did not undermine KIPDA's existing conformity determination or its subsequent conformity analyses. While analyses of current (2000) cross-river travel volumes revealed that the travel demand model was underestimating the number of cross-river trips, the adjustment to correct this under prediction would have had no significant effect on the air quality analyses associated with the conformity determination. This is because the adjustments to cross-river volumes involved the redistribution of trips from other parts of the LMA, rather than an overall increase in the number of trips. Any change in vehicle miles of travel in the LMA would therefore be negligible, and would have no effect on the air quality analyses associated with the conformity requirements. See Response to Comment C.2 above for additional information on this issue.

Regional travel demand VMT and speeds are used to both establish the emissions budget and demonstrate conformity. Projected VMT and speeds are estimates, used to evaluate changes between regional "build" versus "no-build" scenarios. Travel demand estimates on a link-by-link basis are not meant to be used for project-specific design, and are routinely factored to enhance project-level calibration and accuracy. Given that regional analyses are for comparative purposes, the conformity analysis of different regional scenarios is still accurate, even though the link-by-link volumes might need to be refined for project-level design purposes.

- G.5 When the additional bridge crossings that were used in the DEIS traffic analysis are included in the mesoscale air quality emissions calculation, the region substantially exceeds its year 2020 NOx air quality conformity budget.

Response: *KIPDA evaluated the Preferred Alternative, and has determined that the implementation of the Preferred Alternative is in conformity with applicable air quality plans and standards (See Appendix C.10). Per 40 CFR 93.107, KIPDA must amend their 2025 RMP to reflect the FEIS Preferred Alternative "design concept and scope" and updated cost estimate. The KIPDA must demonstrate that the amendment is fiscally constrained and conforms to the Clean Air Act budget established for that area. Comments regarding the KIPDA amendment may be directed to KIPDA during the public comment period.*

- G.6 Additional Carbon Monoxide modeling analysis should be performed for the Preferred Alternative's interchanges to ensure transportation plan conformity and compliance with NAAQS requirements of the SIP.

Response: *The interchanges were not the controlling locations for the CO hot-spot analysis. Peak hot-spot analyses were conducted at 25 high traffic intersections. The intersections studied are detailed in Section 5.4.1. The*

controlling intersection is 2nd Street at Main Street, where human exposure occurs. The CO hot spot analysis has been completed for all alternatives, and none of them will exceed the established CO health standards.

- G.7 The alternatives should be evaluated with respect to the proposed eight-hour ozone and particulate matter (PM 2.5) standards.

Response: *Conformity guidelines have not been promulgated regarding NAAQS eight-hour ozone and PM 2.5 standards. Non-attainment designations will be completed in 2004 and KIPDA will undertake conformity analysis regarding these standards in 2005.*

- G.8 Air emissions from construction activities and equipment should have been estimated in the DEIS, using the USEPA AP42 factors.

Response: *Procedures used by either state to mitigate construction related emissions, primarily fugitive dust, do not require use of modeling or analysis with information contained in AP42. Construction mitigation measures proposed to reduce impacts to air quality are included in Section 5.4.4.*

- G.9 Further analyses of hazardous air pollutant levels should be made using the EPA Complex model, MOBTOX5b and the yet-to-be-released Mobile Model 6.2.

Response: *The EPA has provided no guidance or standards for application of either the EPA Complex Model or MOBTOX5b to assess transportation alternatives. Mobile Model 6.0 was released for use in January 2002. Its use in project studies is not required until January 2004. Mobile 6.0 was used for the KIPDA RTP update and found to conform on December 9, 2002. Currently, the USEPA has not promulgated health standards for air toxins. The FHWA is currently engaged in research to identify acceptable health exposures for air toxins.*

- G.10 The DEIS should have analyzed the air quality impacts of congestion relief that would be afforded by the construction of a new Downtown bridge and reconstruction of the Kennedy Interchange.

Response: *The various two bridge alternatives result in increased network efficiency, reduced VMT, thus reduced emissions. The KIPDA conformity analysis for the Preferred Alternative (See Appendix C.10) demonstrates that this project conforms to the NAAQS. No CO hot spot exceedances were projected for any of the bridge alternatives. Per 40 CFR 93.107, KIPDA must amend their 2025 RMP to reflect the FEIS Preferred Alternative "design concept and scope" and demonstrate conformity and fiscal constraint prior to FHWA approval of the ROD (process completion).*

G.11 The DEIS should include analyses to determine the effect on air quality of the projected travel speeds and vehicle miles of travel associated with each alternative.

Response: USEPA is reviewing the KIPDA projections of travel speed and VMT, and it is expected that the Louisville SIP update using Mobile 6 will be completed and found adequate by May 2003. Per 40 CFR 93.107, KIPDA must amend their 2025 RMP to reflect the FEIS Preferred Alternative "design concept and scope" and demonstrate conformity to the new Mobile 6 SIP budget prior to FHWA approval of the ROD.

G.12 The DEIS contains erroneous references to Transportation Control Measures (TCM) included in the Kentucky State Implementation Plan.

Response: There are no USEPA approved TCM in the Kentucky SIP. Section 5.4 has been modified to reflect this.

G.13 The DEIS and its supporting technical documentation contain inconsistencies regarding indirect and cumulative air quality impacts.

Response: Both the DEIS and ICEA report indicated that there would be no indirect and cumulative air quality impacts anticipated with any of the alternatives. The regional conformity analysis in conjunction with the KIPDA RTP includes all future and cumulative air quality emissions. Conformity to the respective SIPs demonstrates that all future estimated emissions are in conformance to NAAQS (See Appendix C.10). This includes mobile, area and point sources.

G.14 Because the Harbors of Harrods Creek subdivision is lower than the proposed bridge for Alternatives A-13, A-15, [and A-16?], and exhaust from motor vehicles will settle into the Harbors and will be a health risk to residents.

Response: No negative air quality impacts (i.e. exceedances of air quality standards) are projected for the Preferred Alternative (See Appendix C.10).

G.15 Some discussion of the Louisville area's record with the 8-hour ozone standard should be included. As written, the document does not give a clear picture of the area's air quality status for ozone. The area is subject to the requirements of transportation conformity mainly because of exceedances of the 1-hour ozone standard. The document does, however, contain more detailed discussion of the air quality impacts of the project by analysis of carbon monoxide.

Response: See Responses G. 1, G.3, G.7 and G.10.

G.16 The second paragraph in Section 4.4.1 should be updated to reflect that Louisville's redesignation request is final, and that although the area has been redesignated as attainment, it is considered a maintenance area for the 1-hour ozone National Ambient Air Quality Standard. As such, the area is still subject to the requirements of transportation conformity.

Response: See Response G.1.

G.17 The DEIS discusses the inclusion of this project alternative in the current 2020 Long Range Transportation Plan conformity determination (this Plan will become outdated in 2002, after the release of a newer Plan), however, since conformity is being redetermined within the year, and the Draft 2025 Long Range Transportation Plan is available, the DEIS should include discussion about this project in terms of inclusion for the upcoming conformity determination as well.

Response: See Response G.4

G.18 Air quality and pollution have not received enough consideration knowing that heavy trucks contribute over 30 % of pollution, including NO_x and CO. It makes sense from an environmental standpoint to locate bridges far from downtown Louisville. An East End bridge will then help the area meet federal requirements.

Response: *The Preferred Alternative, including an Eastern bridge, will result in enhanced network efficiency and fewer Vehicle Miles and Vehicle Hours of Travel than the No-Action Alternative. This will result in fewer vehicle emissions and improved air quality.*

G.19 Any bridge alternative will encourage more traffic, leading to more air pollution.

Response: *The Preferred Alternative will result in fewer Vehicle Miles of Travel and fewer Vehicle Hours of Travel in the LMA than the No-Action Alternative. This will result in fewer vehicle emissions and improved air quality. The other single-bridge alternatives result in a larger VMT, and would have greater emissions than the Preferred Alternative.*

G.20 Expansion of economic activity in Eastern Jefferson County and in Indiana will lead to longer commutes, increased air pollution, and more costs associated with stricter emissions standards.

Response: *The Preferred Alternative will result in fewer Vehicle Miles of Travel and fewer Vehicle Hours of Travel than the No Action Alternative. Thus, trips*

actually will become slightly shorter on average. This reduction in VMT and VHT will result in fewer vehicle emissions and improved air quality.

- G.21 Emissions from the construction projects should have been estimated by AP42 or modeling.

Response: *Procedures used by either state to mitigate construction related emissions, primarily fugitive dust, do not require use of modeling or AP42 procedures. Construction mitigation measures proposed to reduce impacts to air quality are included in Section 5.4.4 and Chapter 8.*

- G.22 How is it possible to mitigate air pollution caused by exhaust from a raised roadway, affecting a community situated below the roadway?

Response: *The Preferred Alternative will result in no NAAQS exceedances. As such, there is no air quality problem that would necessitate mitigation.*

H. Noise

- H.1 The area in which background noise measurements were made and noise analyses were performed was too small.

Response: *Background noise measurements were made in the vicinity of all proposed roadway alignments, including proposed interchanges. Both the selection/designation of sensitive receptors and measurement of background noise levels were made in accordance with FHWA guidelines. Noise impacts on historic resources also were addressed through the Section 106 historic properties review process. The area in which potential noise effects were anticipated for Section 106 purposes was defined as the area in which any site might be expected to experience an increase of 5 dBA or more as a result of construction and implementation of the Project alternatives. (A 3 dBA change in sound level is generally the minimum change that is perceptible to the human ear.) Similarly, within the Section 106 process, the area of potential effect (APE) for potential noise impacts of the project alternatives was defined as that area projected to experience a minimum 5 dBA increase when comparing the year 2025 projected values to existing noise levels. The noise evaluation methodology is summarized in Section 4.5, and is presented in greater detail in the noise baseline technical report, which is available for review at the local project office.*

- H.2 The number and locations of noise measurements were inadequate. For example, noise measurements were not taken at several potentially eligible historic properties (e.g., the New Chapel House, Utica-Pike House, Meyers Farm, and Rosenwald School) and the monitoring location for the Country Estates of River Road Historic District was taken directly on River Road.

Response: *Noise measurements were taken at 124 locations throughout the project area. These locations were chosen to be representative of sensitive noise receptors in the project area. The noise measurement points on each site were in accordance with FHWA guidelines to represent typical ambient, meteorological and roadway conditions. Measurements were taken at or near that part of the receptor (usually a building) that would be nearest to the proposed alternative(s). In the course of conducting supplemental cultural resource analyses, additional noise measurements were made at 93 locations within and adjacent to historic properties. These are reported in Sections 4.3 and 5.3.*

H.3 The timing and duration of measurements were inadequate. For example, none of the noise monitoring for baseline sampling took place during the peak traffic period.

Response: *Measurements were taken in accordance with FHWA sampling guidelines when the number of measurements and their time and duration are considered. The existing noise levels at receptors located in proximity to existing roadway facilities are directly related to traffic. For receptors adjacent to existing roadways that were modeled, the traffic was counted and measurements were conducted during peak hours. Four 24-hour noise readings were taken in the project area and the results of those measurements have been incorporated in the FEIS (Section 4.5). The graphs of these measurements show that for the time periods considered “peak traffic hours”, the traffic is moving and generating high average noise levels near the existing facilities. It should be noted that the use of non-peak hour traffic would not reduce the impacts predicted by the computer model; conversely they would make any project derived increase over the ambient level greater.*

H.4 The DEIS should have used the FHWA Traffic Noise Model (TNM), rather than the STAMINA noise model.

Response: *The use of FHWA TNM is not required for this project. On March 30, 1998, FHWA released a new highway traffic noise prediction model, the FHWA Traffic Noise Model, Version 1.0 (FHWA TNM). The model was to be phased-in over the following 24 months, after which it would replace the existing STAMINA2.0/OPTIMA software. At the commencement of noise analyses for the Louisville-Southern Indiana Ohio River Bridges Project, FHWA had determined that there were problems and software bugs in the new FHWA TNM model and it was decided that STAMINA 2.0/OPTIMA would be utilized for the highway traffic noise analysis. The inconsistencies and problems with the new FHWA TNM were recognized in a FHWA memo from James M. Shrouds, Director, Office of Natural Environment dated December 16, 1999. The memo describes additional model validation activities and work to address problems and inconveniences in TNM 1.0. It stated that a 32-*

bit version of the model (FHWA TNM Version 1.1) "...is currently under final development and testing and should be released in approximately 6-9 months." In addition to recognizing the problems with TNM Version 1.0, FHWA extended the final phase-in of TNM from December 31, 2002 to six months from the date of the next release of FHWA TNM.

H.5 Additional information was requested regarding STAMINA data input assumptions/values used to analyze alternatives.

Response: *The technical baseline report, "Highway Traffic Noise Impact Analysis," relating all assumption and data input values used to perform noise impact analyses are available for review in the local project office. The baseline report is summarized in Sections 4.5, 5.5 and Appendix B.2 of the FEIS.*

H.6 The noise data contained in Table 5.18-1, "Summary of Impacts," in the DEIS are not consistent with noise data in Chapter 5 (Section 5.5, Noise) and in Appendix B.2, Noise Analysis Information. Appendix B.2 also mention "a" and "b" alignments for both A-13 and A-15, but "a" and "b" are not identified elsewhere in the document. These inconsistencies should be corrected, and Table 5.18-1 should be checked in its entirety for consistency with the other data in the EIS.

Response: *All tables have been revised and checked for congruities in the FEIS. The footnote to Table 5.5-1 notes that " the a and b designations are for a partial diamond interchange at U.S. 42 and the full diamond interchange at Wolf Pen Branch Road, respectively."*

H.7 The DEIS noise modeling did not take into account the different sound propagation characteristics over ground and water and assumed all ground cover to be soft ground. The DEIS also did not take into account noise levels caused by reflections.

Response: *The methodology developed for analyzing highway traffic noise impacts was structured to provide a worst-case analysis of noise levels due to the alternatives. This conservative methodology would ensure that no properties that could have a noise impact would be overlooked, garnering mitigation considerations. The effects analyses generated worst-case noise levels, based on line of sight propagation of noise levels. Refined analyses have been completed, such as analyses to determine barrier locations, include intervening terrain, ground zones (including water) and buildings, and provide a real-world prediction, rather than worst-case analysis. These elements were incorporated in the barrier analyses with the results presented in Section 5.5 of the FEIS.*

H.8 The DEIS noise analysis contained no estimates of traffic volumes on local roads, in either the “no build” or “build” scenarios, even for roads that receive traffic from new on- or off-ramps.

Response: *Type 1 noise analysis requirements only apply to new roadways or added travel lane projects. The noise impact analysis calculated the noise level increases due to the build alternative roadways and their associated interchanges.*

H.9 Although the socioeconomic forecasts made an adjustment to the KIPDA model output, increasing the number of river crossings, the unadjusted KIPDA model output traffic volumes were used in the noise modeling, resulting in an internal inconsistency in the DEIS.

Response: *Adjustments to projected bridge volumes were made to calculate projected levels of service on bridges. No similar adjustments were made to projected volumes on other roadways when analyzing transportation related impacts. Minor differences in ADT do not cause perceptible changes in noise levels. A doubling of traffic results in a three decibel increase, which is an imperceptible increase in noise.*

H.10 Noise impacts from construction equipment and operations were not addressed in the DEIS.

Response: *The FEIS acknowledges construction equipment generated noise and the noise generated from construction equipment will be controlled in accordance with standards prescribed under federal and state regulations, as outlined in Section 5.5 and Chapter 8.*

H.11 Contrary to FHWA guidance, the DEIS contains no discussion of noise abatement measures considered, no analysis of barrier effectiveness, and no cost-effectiveness analysis. Proposed abatement/mitigation measures should be presented for areas where noise levels are projected to exceed NAC [noise abatement criteria] levels.

Response: *Additional information has been provided in Section 5.5 regarding the location and kind of mitigation proposed for the Preferred Alternative.*

H.12 Additional studies should be conducted on the Preferred Alternative regarding the effectiveness of proposed mitigation where unavoidable impacts are projected. Potential mitigation should include barrier walls, vegetated screens, earth berms and building insulation. The results should be included in the FEIS.

Response: *Mitigation feasibility studies were performed for areas adjacent to the Preferred Alternative projected to have unavoidable noise impacts. The results are presented in Section 5.5. The mitigation section (Section 5.5) has been augmented to include additional information about specific mitigation measures proposed for the Preferred Alternative. FHWA commits to construction of feasible and reasonable noise walls, in accordance with the respective states' noise policies. A copy of the state noise policies can be viewed at the local project office.*

H.13 Decorative noise walls should be provided along U.S. 42, KY 841, and Downtown.

Response: *The location and design of noise walls will be an integral element of the design of the Preferred Alternative. It is anticipated that residents adjacent to the roadway alternatives will be proactively involved in this process in accordance with the respective state noise policies.*

H.14 Alternatives A-13 and A-16 will destroy existing sound barriers, including a berm, vegetation, and private sound barriers, and the proposed tunnel will amplify sound down the trench into Bridgepointe. Thus, a concrete sound barrier should be constructed along Bridgepointe's southern border, and some other noise mitigation should be installed along the western border. These barriers should blend into the natural environment.

Response: *Alternatives A-13 and A-16 are not part of the Preferred Alternative. Alternatives A-15 and A-13 are essentially contiguous at Bridgepointe. Refer to Section 5.5 for locations of proposed noise walls and the discussion of Receptors 28, 29 and 30. Detailed outreach to the neighborhood will occur during the final design.*

H.15 Some noise impacts will be impossible to mitigate (e.g., at the Harbors of Harrods Creek).

Response: *The mitigation of noise impacts was investigated during barrier analyses on the Preferred Alternatives and the results of those analyses are presented in section 5.5. In the specific case of the Harbors of Harrods Creek, it was shown that noise mitigation would be effective and likely at that location.*

H.16 Data presented for noise analyses for the Downtown and Kennedy Interchange alternatives do not indicate the number of receptor locations that currently meet criteria for noise impact thresholds. The DEIS cites numbers for each alternative, but it cannot be determined which properties these citations represent. Noise does not appear to be a significant factor with any of the downtown alternatives.

Response: *The noise impact tables in Appendix B.2 show the receptor impacts for each of the alternatives. Receptor tables are arranged by alternative, with receptor impacts highlighted. The receptors are identified with a numerical designator, which can be cross-referenced with the receptor location maps in Section 4.5.*

H.17 Selection of Alternative A-9, A-13 or A-15 will increase background noise at St. Francis in the Fields Episcopal Church as a result of increased traffic and anticipated development along U.S. 42 and Wolf Pen Branch Road. The noise analyses included in the DEIS do not accurately reflect the noise effects because baseline tests were conducted on a weekday, when most parishioners are not present, and were not close enough to the vicarage, the site of occasional outdoor services. Also, the noise tests did not include the influence of the anticipated commercial development. Noise from Alternatives A-9, A-13, and A-15 would have an adverse effect on St. Francis, and in particular would have a devastating effect on St. Francis' Olmsted Brothers-designed landscape.

Response: *Alternatives A-9 and A-13 are not part of the Preferred Alternative. Alternative A-15 is predicted to increase the noise level by 3 dBA Leq over existing levels. The first audibly discernable change in noise levels is 3 dBA Leq and therefore Alternative A-15 will have no adverse effect on St. Francis in the Fields Episcopal Church or the surrounding landscape. The noise measurements and studies were conducted in accordance with FHWA and the states' guidelines. The St. Francis vicarage is further from the Preferred Alternative than the monitored sites and therefore would have an even smaller elevation in future noise levels.*

H.18 An East End Bridge will cause noise.

Response: *A highway traffic noise impact analysis was performed for each of the alternatives in the DEIS, with the results presented in the technical baseline report and incorporated into the DEIS and FEIS. Noise impacts were identified for all alternatives, with levels and number of impacts for each alternative presented in the DEIS and FEIS (Sections 4.5 and 5.5 and Appendix B.2). These analyses confirmed that all of the Bridge/Highway alternatives, including any eastern alternative, would have noise impacts, as described in detail in Section 5.5, Appendix B.2, and the noise technical baseline report.*

H.19 The DEIS does not adequately consider the effect of noise on the Highway 22, Shelbyville Road, and Middletown corridors.

Response: *The highway traffic noise impact analysis investigated the noise levels generated, and impacts caused, by the proposed alternatives and did not*

investigate noise levels along local access roads or neighborhood streets. The analyses were utilized to quantify the noise increases due to the proposed alternatives and to identify impacted areas for mitigation analyses.

- H.20 In addition to traffic noise affecting residences and commercial sites along highways, the FEIS should note, relevant to the proposed project, that traffic across bridges can be particularly noisy. This is because bridges are high and exposed, sound travels well and is unimpeded over water, and vehicles tires traveling across expansion joints produce additional noise. Overall, traffic noise is an environmental concern in terms of the projected incremental increases over existing levels.

Response: *Refined noise and barrier analyses were performed for the Preferred Alternative in the FEIS. This incorporated the propagation of sound across the river as well as the topography, including bridge elevation and ability of sound waves to pass under the bridge structure. The results of these analyses are presented in the mitigation discussion in Section 5.5. All noise predictions in the technical baseline report, DEIS and FEIS compare projected noise increases with existing noise levels in order to assess the effects of the proposed alternatives.*

- H.21 Based on the noise information beginning on pg. 4-63 of the DEIS, the measurement of ambient noise at each receptor is provided in Leq units. Measurements were taken for 10 minutes and were updated by the monitor "10 times per second." The FEIS should explain why 10-minute readings were made (rather than 1 hour as for the Leq (1) metric), or were perhaps six 10-minute readings averaged to obtain data for one hour? Our concern is that it is possible to miss certain typical ambient noise sources when measuring for only a 10-minute time frame. The FEIS should further explain how the 10-minute measurements are addressed in FHWA guidelines.

Response: *The FHWA-promulgated Highway Traffic Noise Guidance includes ranges for many measurement and analysis parameters, from which each state is to construct a written Highway Traffic Noise Policy that defines noise analysis policies for that state, while remaining consistent with the FHWA guidance. The KYTC policy manual defines a 10 minute measurement as an appropriate period for the measurement of existing levels, and therefore 10 minute measurements were utilized for the project. The 10 minute measurement period is part of the Kentucky guidelines, which are in line with FHWA policy guidance. Indiana policy states that the measurements should be made in accordance with FHWA policy and, since FHWA doesn't spell out the time frame, Indiana's policy actually states that the time frame is up to their own organization but a time frame is not stipulated. As such, CTS elected to follow the Kentucky guidelines for both states.*

H.22 Pg. 4-63 also states that receptors “were measured only during peak traffic hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.)” It should be noted that “peak traffic hours” are not the “peak noise hours” if traffic becomes so congested that it is essentially not moving and therefore not very noisy (stop-and-go). The FEIS should determine if measurements for existing noise levels were indeed made during “peak noise hours” for this proposed project.

Response: *Four 24-hour noise readings were taken in the project area, and the results of those measurements have been incorporated in the FEIS (Section 4.5). The graphs show that for the time periods considered “peak traffic hours,” the traffic is moving and generating high average noise levels near the existing facilities. It should be noted that if the existing noise measurements were taken under situations in which traffic had become so congested that it was essentially not moving, then the measured ambient levels could be lower than actual peak levels, making any projected increase over existing levels appear even greater. Under this scenario, any error would result in the impacts of the project (i.e., existing peak levels vs. projected levels) appearing greater than if the actual peak noise levels had been used. However, the information gathered in the 24-hour noise readings indicates that measurements were taken during the peak noise hours.*

H.23 The DEIS indicates that the “high” end readings of the reported ambient ranges (pg. 4-63) are already at substantial levels (68.3, 68.6 & 75.2 dBA Leq) prior to any additional predicted project impacts. Specifically, these existing levels are already greater than the FHWA the new ENAC for Leq for residential and/or commercial receptors. Would noise mitigation in these areas be to existing levels or NAC levels? For reference, we note from Appendix B.2 that the 1999-2000 ambient levels, measured at receptors for Alternative A-2 ranged from 48.7 to 59.5 dBA Leq; for Alternative A-9 ranged from 45.8 to 68.6 dBA Leq; for Alternatives A-13a and A-13b ranged from 40.7 to 68.6 dBA Leq; for Alternatives A-15a, A-15b and A-16 ranged from 42.6 to 68.6 dBA Leq; for Alternative B-1 ranged from 43.2 to 66.4 dBA Leq; and for Alternative C-1 In Place, Alternative C-1 Relocated, Alternatives C-2 and C-3 ranged from 59.6 to 75.2 dBA Leq.

Response: *Noise mitigation for impacts resulting from the proposed project will not be designed to attain a target number, but rather to achieve an insertion loss that provides a substantial reduction, defined as at least a 5 decibel reduction at a benefited receptor with a desire to achieve a 10 decibel or more reduction if it can be determined to be reasonable. The reduction would be measured against the projected design year noise levels.*

H.24 The truck percentage portion of the traffic projections generically referenced on pg. 5-98 and used in the analysis should be specified as a percentage in the

FEIS. This is important since trucks are considerably noisier than cars (noise from one truck equals that of 32 cars).

Response: *The truck percentages vary for different alternatives and different segments, based on road type and location. The specific truck percentage for each segment can be found in the technical baseline report and the accompanying appendices, along with other model inputs and technical data. These documents are available for inspection at the local project office.*

H.25 For clarity, it is recommended that Table 2 in Appendix B.2 indicate that the presented data represent the Leq metric as opposed to the L-10 metric. It is assumed the Leq is used since NAC values of 67 dBA or 72 dBA provided in the table suggest the Leq metric.

Response: *The text of the Sections 4.5 and 5.5 has been altered to clarify that the dBA Leq metric was used in these analyses. The tables have been altered to show that the Leq metric was utilized.*

H.26 EPA agrees that the DEIS's referenced 67 and 72 dBA Leq are the FHWA NAC thresholds for project resultant noise levels for which noise abatement measures must be considered for residential and commercial receptors, respectively. As stipulated in the FHWA 23 C.F.R. 772 guideline, we wish to emphasize that such abatement consideration already applies for predicted noise levels *approaching* these levels within 1 dBA.

Response: *Section 5.5 states that if the noise level approaches (within one (1) dBA Leq) or exceeds the NAC then the receptor is identified as impacted.*

H.27 On the other hand, EPA notes that the DEIS indicates that thresholds for noise mitigation for this project will be unique to each state, which could be confusing and result in different levels of mitigation between the states. We recommend that FHWA provide additional direction in this regard, and that this issue is clarified for the Preferred Alternative.

Response: *The noise analyses presented in the EIS have consistently considered a 10 dBA Leq increase over the existing noise level to "substantially exceed" and therefore to warrant consideration of mitigation. Barrier analyses were conducted for all receptors that would substantially exceed the existing level as a result of the Preferred Alternative, regardless of the individual states' noise mitigation thresholds. The information obtained in those preliminary barrier analyses pertaining to barrier length, effectiveness, and cost will be carried forward for further feasibility and reasonableness studies during the final design process.*

H.28 Table 5.5-2b (pg. 5-101) references the “INDOT Highway Traffic Noise Policy” (specifically “Figure 1 - Proposed Impact Criteria”) in a footnote and presents the number of receptors with *No*, *Minor*, *Moderate* or *severe* noise impacts. In contrast to the noise Categories 1-4 used by Kentucky, which were clearly defined in the DEIS (pg. 5-100), the relative noise impact terms used by Indiana do not appear to be defined in the DEIS. The FEIS should define the Indiana terms and also attempt to reasonably equate the two state nomenclatures (e.g., “severe” impacts for Indiana approximates “x” category for Kentucky).

Response: *The Indiana designations of impact severity are not textually defined, as are the Kentucky definitions of severity, but rather are derived from mathematical and corresponding graphical determinations. The definition of the method is best elucidated by the referenced figure from the INDOT Highway Traffic Noise Policy. While the Kentucky definitions of severity consider NAC violation and absolute predicted noise level, the Indiana definitions (graphical determination) utilize the difference between the predicted noise level and the NAC, and the difference between the predicted noise level and the existing noise level (rather than absolute predicted level). Therefore, a direct correlation is not possible.*

H.29 Accordingly, rearrangement of the incremental impact categories, consistent with the Kentucky and EPA approach, to reflect those residences impacted by <10 dBA versus 10 dBA or greater, would have been beneficial and should be considered in the FEIS. In the absence of such data, the existing data arrangement generally representing the 10 dBA or greater category (i.e., elevations of 11-15 and >15 dBA) was used. These data show that several alignments have a considerable number of receptors substantially elevated, while others do not.

Response: *The data presentation is designed to give categorical summaries that can be used to quickly evaluate the numbers of impacts in relation to the states noise impact policies and the states’ definition of a substantial exceedance.*

H.30 No commitment to noise mitigation is offered in the DEIS. Given the substantial number and magnitude of the reported noise impacts, EPA requests that the FEIS document the efforts made to avoid noise impacts through various project design modifications (e.g., alignment shifts). Impact avoidance and minimization is particularly important for noise impacts due to the difficulty in effectively mitigating for noise. Unavoidable noise impacts should be reasonably mitigated. EPA recommends inclusion of an FHWA commitment in the FEIS to attenuate unavoidable noise impacts, once a Preferred Alternative is selected, using methods such as barrier walls or vegetated berms (suburbs). To this end, feasibility studies for the selected method(s) should already be completed for the FEIS, with the predicted

resultant noise levels after mitigation also being provided. As part of these feasibility studies, the FEIS should be more specific regarding barrier cost-effectiveness (i.e. what do Kentucky and Indiana consider a reasonable costs for a barrier wall in terms of cost per mitigated residence?). As such, the public would be able to determine from the FEIS what mitigated noise levels could be expected along the Preferred Alternative.

Response: *Barrier analyses were performed for impacted receptors where it was considered potentially reasonable and feasible to construct a mitigating noise wall. The conclusions of the analyses, including likely locations for noise wall construction have been incorporated in the mitigation section of the FEIS (Section 5.5). FHWA commits to construct feasible and reasonable noise walls in accordance with the respective states' noise policies. A copy of the state noise policies can be viewed at the local project office.*

H.31 Follow-up noise monitoring should also be conducted after prospective construction, to verify predicted attenuation levels and to determine whether additional mitigation is needed.

Response: *Following the construction of noise barriers, additional noise monitoring will be completed to evaluate the effectiveness of the constructed barriers.*

H.32 Other forms of noise mitigation should also be considered in addition to barriers or in lieu of barriers where they are shown not to be feasible. These forms might include sound proofing of any significantly affected public facilities, shifting of the right-of-way to include residential or commercial receptors that otherwise would be adjacent but outside the right-of-way and be heavily impacted, and/or development of vegetative screens as part of highway landscaping to provide at least a visual separation from the project right-of-way. It is also our [EPA's] understanding that the type of highway surfacing material used can substantially reduce noise impacts. The FEIS should discuss the forms of additional mitigation considered and rationales for selection or rejection.

Response: *All forms of mitigation were considered, with a summary of conclusions incorporated in Section 5.5 of the FEIS. These additional measures that will be considered include traffic management measures, alteration of horizontal and vertical alternatives, buffer zones, insulation of buildings, innovative pavement designs, bridge decks and joints, berms, noise barriers and landscaping. The Section 106 MOA provides for evaluation of noise mitigation for designated public buildings.*

H.33 Alternative C-3 is estimated to cause an 11 dBA increase in noise levels, which is described as a "substantial exceedance for residential land use" (DEIS, 5-79). Nevertheless, Alternative C-3 is deemed in the DEIS to have no adverse effect despite the residential usage of much of Riverside Drive.

Response: *There are multiple receptors for which the sound level contribution of Alternative C-3 was analyzed, with a range of dBA values. While an 11 dBA increase in noise substantially exceeds the existing level, the area in question, Riverside Drive does not exhibit an 11 dBA Leq increase. The designation of “no adverse effect” is a designator for Section 106 analyses with noise levels greater than five considered an “adverse effect”. For the historic receptors along Riverside Dr. (H.55 in proximity to the Pennsylvania Railroad bridge and H.56 in proximity to Clark Memorial Bridge), the noise increases are 0 and 4 dBA Leq for H.55 and H.56 respectively and therefore there is no adverse effect due to Alternative C-3.*

H.34 The DEIS argument that Alternatives C-1 and C-3 would have no effect on the City School is incorrect. While the building is currently vacant, the projected noise increase of 13 dBA for these alignments would seriously limit the potential reuse options for this building.

Response: *The Preferred Alternative (Alternative C-1) is projected to increase the noise level by 4 dBA Leq over the existing level. A 4 dBA increase is considered to have no adverse effect on the historic property. Alternative C-3 is not part of the Preferred Alternative.*

I. Vibration

I.1 The DEIS vibration report does not identify sensitive receptors for ground-borne vibration (including historic properties), and does not state where the receptors are located or how long construction is projected to last.

Response: *The location of sensitive receptors for ground-borne vibration is included in the vibration baseline technical report and is available for review at the local project office. This information was summarized in the EIS. Construction phasing has been included in the Financing Options document, which is available for review at the local project office.*

I.2 Additional information was requested regarding actions that would be taken to protect properties affected by vibration from construction blasting or from traffic using the roadway.

Response: *The DEIS indicated that there would be no vibration-induced damage to structures adjacent to roadway alignments. Blasting, if done, would be in compliance with a program that specifies maximum ground vibration levels to ensure that adjacent structures would not be damaged. There would be no vibration induced structural damage from either construction activities or traffic use.*

- I.3 The DEIS does not contain information to support its conclusion that traffic vibration will not damage structures.

Response: *Reference to the Vibration Study Technical Report is made in Section 5.6. In the technical report, the criteria for vibration-induced annoyance and damage are presented. That information supports the conclusion that traffic vibration will not damage any structures. The Vibration Study Technical Report is available for review at the local project office.*

- I.4 The DEIS does not mention any potential for “annoyance” vibration impacts during construction.

Response: *Reference to the Vibration Study Technical Report is made in Section 5.6. The number of sensitive receptors (structures) that would be subjected to vibration levels that exceed traffic and construction-induced annoyance levels are presented for each bridge alternative alignment. For the Preferred Alternative, a maximum of one hundred seventy three (173) structures would be subjected to construction-induced (vibratory rolling) annoyance levels. No receptors would experience vibration levels that approach damage criteria values. See Section 5.6.*

- I.5 Information regarding annoyance levels associated with traffic using the alternatives should be provided.

Response: *Information regarding structures that could experience traffic-induced vibration levels termed annoying is included in Section 5.6.2. For the Preferred Alternative, twelve (12) structures would be subjected to traffic-induced vibration annoyance levels. However, no receptors would experience vibration levels that approach damage criteria values.*

- I.6 The DEIS vibration report concludes that blasting could occur without damaging the Drumanard property structures even though vibration measurements from small-charge test blasts were not conducted in the vicinity of the proposed Drumanard tunnel.

Response: *This issue is discussed in Section 2.2 of the Vibration Study Technical Report. Information from available literature was used to make assessment of blasting on Drumanard property structures.*

- I.7 Blasting for road and tunnel construction for Alternatives A-13 and A-15 will have a detrimental impact on the Bridgepointe subdivision. Bridgepointe residents should be compensated monetarily for these impacts.

Response: *Vibration analyses indicated that all alternatives could be constructed with no impacts to structures in the project area. This is documented in the Vibration Technical Study. The results are summarized in Section 5.6.2.*

I.8 Vibration from construction on Alternatives A-9, A-13 and A-15 would have adverse impacts on St. Francis in the Fields Episcopal Church. Construction impacts do not appear to have been studied.

Response: *Vibration analyses indicated that all alternatives could be constructed and operated with no impacts to structures in the project area. Although some annoyance vibration levels to sensitive receptors would be associated with the Preferred Alternative, St. Francis in the Fields Episcopal Church would not be one of these sensitive receptors. Vibration from construction activities, as well as traffic induced vibration, was evaluated. These analyses are documented in the Vibration Technical Study. The results are summarized in Section 5.6.2 of the FEIS.*

J. Water Resources and Floodplains

J.1 The DEIS overlooks potential impacts on drinking water aquifers from construction and operation of an eastern interstate and bridge, and potential mitigation measures for those impacts. All of the Eastern alternatives would be built on foundations that would penetrate through the aquifer to the underlying bedrock and that could serve as potential conduits for the introduction of contaminants – including dense non-aqueous phase liquids – from interstate runoff, precipitation drainage, and hazardous materials spills. The DEIS also fails to qualitatively assess the indirect and cumulative effects of the construction and induced development on wellhead protection areas.

Response: *Aquifer protection will be incorporated into the design of the highways and bridges included in the Preferred Alternative. This will include specifications for materials used or permitted within staging areas and for construction. Wellhead protection is discussed in Section 5.8.2. Contacts were made with water suppliers in Indiana (the Indiana-American Water Company) and Kentucky (the Louisville Water Company) concerning the potential impacts of project alternatives on wellhead resources. Water supply officials expressed concern that an eastern bridge could adversely affect the water supply aquifer if not designed properly. Follow-up conversations and correspondence with the Louisville Water Company indicate that while this issue is a concern for water supply officials, it is an issue that can be satisfactorily addressed through careful design of the Preferred Alternative. Coordination with the Indiana-American Water Company has also been initiated to identify concerns of the utility and to develop effective methods for avoiding unnecessary encroachment upon such facilities.*

Numerous facilities throughout the country traverse wellhead protection areas, and methods have been developed to avoid any adverse effects from the construction and operation of such facilities. Aquifer protection also will be included in the procedures developed to respond to incidents on the roadway/bridge. In its correspondence on this subject, the Louisville Water Company requested that it be involved actively in the design of the project, to ensure that adequate measures are taken to protect water supplies. To that end, the design of elements of the Preferred Alternative that would traverse existing or proposed wellhead protection areas will be coordinated with appropriate agencies in each State, including the Louisville Water Company, to ensure that their concerns are addressed and accommodated in the design and construction of the Preferred Alternative.

The bridge included on Alignment A-15 over the Ohio River would be located within a proposed wellhead protection area. As a result, a “full containment” collection system will be incorporated into the design of the A-15 bridge to ensure that untreated runoff is not released into the alluvial floodplain area of the proposed Louisville Water Company wellhead protection area. Full containment in this situation would mean collection of runoff within the bridge deck, including bicycle path/pedestrian walkway, in a set of storm sewers that discharge into a holding area on the Kentucky end of the bridge. The holding area would be designed to collect and then release the one-hour peak discharge from a 100-year storm event. Specific requirements for the containment system will be determined in consultation with the Groundwater Protection Branch of the Kentucky Division of Water.

The holding area would be either a lined pond or a subsurface structure, designed to retain runoff for a predetermined period of time, and then allow it to be discharged into the existing surface drainage system or pumped into trucks and transported to an appropriate disposal facility. The system would be designed to prevent any release of runoff directly into the subsurface drainage system. The system also would provide for full containment of any accidental release of contaminants, such as gasoline, including holding capacity for containment of the contents of a typical, fully loaded tank truck (approximately 18,900 cubic yards). Any such contaminants within the system would be pumped out and transported to an appropriate disposal site. Any discharge from the containment system into the existing subsurface drainage system would occur down gradient from the wellhead protection areas and in compliance with all applicable environmental laws and regulations, and any permits required for the construction and operation of the Preferred Alternative.

Additional information has been provided in Section 5.8.2 concerning potential impacts on wellhead areas and mitigation proposed for the Preferred Alternative. Correspondence with the Louisville Water Company

and the Indiana-American Water Company concerning potential impacts on water supplies is included at Appendix C.3.

- J.2 Some of the eastern alignments will impact the Louisville Water Company's wellhead protection area, but these impacts can be managed through bridge design. The Louisville Water Company should be involved in the design of the Preferred Alternative to address affects to the B.E. Payne Plant and the Louisville Aquifer. Additional groundwater assessment should be conducted during design, and the design of bridge piers and caissons, and any accompanying dewatering, should be compatible with water supplies and wellhead protection areas. Materials used in bridge construction should be compatible with potable water supplies. Construction activities also should be compatible with the Louisville Water Company's intake at River Mile 594.6.

Response: *The Louisville Water Company was consulted during the development and assessment of alternatives. As described in detail in the Response to Comment J.1 above, potential impacts on the water supply aquifer and the facilities of the Louisville Water Company were considered in the development of the EIS. Ongoing coordination with the Louisville Water Company confirmed that potential impacts to wellhead protection areas could be sufficiently managed through proper design of the proposed bridge and highway facilities. Response to Comment J.1 above summarizes the measures that will be incorporated in the Preferred Alternative to prevent adverse effects to drinking water supplies and wellhead protection areas. The Louisville Water Company and other agencies responsible for water quality and protection will be consulted in the design and implementation of the Preferred Alternative to ensure that their concerns are adequately addressed.*

- J.3 Care should be taken to minimize construction related stream erosion and sedimentation to protect water supplies and water quality.

Response: *The NPDES permit that will be required for the Preferred Alternative will stipulate that an erosion control plan must be approved before commencement of construction. It will also require that regular periodic inspections are performed to ensure all erosion and sedimentation mitigation activities are being implemented appropriately. That NPDES permit will be subject to approval and enforcement by state regulatory authorities.*

The General Engineering Consultant (GEC) retained by the respective states will serve as an independent environmental monitor to ensure that all environmental commitments included in the FEIS and associated permits are implemented during final design and construction. The FHWA Project Manager will provide oversight to assure environmental commitments are effectively implemented. Each state will provide an ombudsman to follow-up

on any concerns that are raised to assure problems are dealt with in a timely manner.

- J.4 Roadway runoff should be treated before it enters streams and rivers. Road design should include containment of runoff from both normal and high-intensity storm conditions, as well as containment of hazardous materials spills.

Response: *It is the policy of Indiana and Kentucky to apply Best Management Practices (BMP) regarding roadway runoff. In urban areas this could involve treatment before discharge into streams. This issue will be addressed in the design of the Preferred Alternative.*

Accidental spills cannot be predicted, but emergency procedures are in place in both states to report, contain and clean-up hazardous materials. In Indiana, the IDEM Office of Land Quality, Emergency Response Section will respond to accidental spills or discharges of hazardous materials. In Kentucky, the Department of Environmental Protection, Environmental Response Team will respond to hazardous materials releases.

- J.5 The DEIS contains insufficient information on surface waters and streams. There is no assessment of benefits and risks, and no discussion of impacts on the development of TMDLs for Harrods Creek.

Response: *The DEIS provided a summary of the detailed water quality analyses prepared as part of the Terrestrial and Aquatic Baseline Report. The baseline report outlined the existing water quality conditions and projected specific impacts to streams and water quality based on construction of the project alternatives. This information is summarized in Section 4.8. As stated by the Ohio River Valley Water and Sanitation Commission (ORSANCO) Watershed Pollutant Reduction Program, established in 1995, a total maximum daily load (TMDL) is the maximum amount of a specific pollutant that can be assimilated by a water body without causing impairment or an exceedance of water quality standards. TMDLs are required by the Federal Clean Water Act for all waters in which beneficial uses are impaired. Both the Louisville Water Company and ORSANCO monitor the Harrods Creek exceedance of the TMDL. A significant improvement of the water quality of Harrods Creek is expected with the recent agreement between the city of Prospect and MSD. The city of Prospect has agreed to allow MSD to assume control of all the small wastewater treatment plants in the area. As MSD shuts down the small plants wastewater will be diverted to MSD's Morris Forman Wastewater Treatment Plant. Harrods Creek will continually be monitored by MSD, Louisville Water Company and ORSANCO to detect elevated levels of particular water quality parameters, which may pose a health risk to the natural or human environment.*

- J.6 The DEIS does not mention or analyze the ecological value of floodplains and especially floodplain forests in the eastern areas, which includes some of the most productive floodplain ecosystems remaining along the Ohio River.

Response: *Forested areas within the floodplain provide beneficial habitat areas for flora and fauna. Mitigation of impacts to floodplain forests along the Preferred Alternative will be coordinated with the Indiana Department of Natural Resources (IDNR), Kentucky Division of Water (KYDOW) and the U.S. Army Corps of Engineers (USACE) throughout the development of the design. In Indiana, the IDNR has requested a 2:1 replacement ratio for all woodland impacts within the floodway. Impacts to forested floodplain, or riparian forests, are discussed in Sections 4.7.2 and 5.9. Potential impacts to floodplains are presented in Tables 5.9-1 and 5.9-2. Impacts to upland woodlands in Indiana will be mitigated at a 1:1 ratio, and excess parcels acquired by INDOT for right-of-way but not incorporated into the freeway facility will be revegetated.*

- J.7 Some of the eastern alternatives will cause the loss of the Louisville Water Company lagoons, which will in turn create a loss of capacity.

Response: *All of the alternatives evaluated in the EIS, including the Preferred Alternative, would span the lagoons on an elevated structure. The Preferred Alternative will span a corner of the lagoon, but will not affect lagoon capacity. The Louisville Water Company has been consulted regarding this potential impact and has not expressed opposition to the Preferred Alternative. The Louisville Water Company will be consulted during the design and construction of the Preferred Alternative to ensure that its concerns are adequately addressed.*

- J.8 The discussion of the direct impacts of Alternative B-1 on the Lancassange Creek floodplain should be expanded to support the conclusion that it would be cost prohibitive to span it on structure.

Response: *Alternative B-1 is not part of the Preferred Alternative. As such, the subject text has not been modified. FHWA's floodplain encroachment policy requires longitudinal encroachments to be avoided where practicable. Alternative B-1 would have encroached longitudinally upon approximately 2.05 acres of floodplain whereas other alternatives, including the Preferred Alternative, would not require any longitudinal encroachment. The summation of impacts posed by Alternative B-1 has indicated that it does not warrant the time expenditure of performing a detailed engineering cost analysis of building a structure to span a floodplain.*

- J.9 The presentation of the short and long term impacts to the river environs and navigation is incomplete.

Response: Section 5.8.1 relates the impacts to water resources. Most are related to sedimentation that could occur during construction. Proposed mitigation is described in Section 5.8.5. Regarding navigation, all construction would be outside the navigation channel. Cofferdam construction would be at a minimum of 75 feet from the edge of the navigation channel. FHWA and the project consultant have coordinated with the U.S. Coast Guard regarding the reconstruction of the McAlpine Locks to ensure that navigation requirements would be maintained. (See Section 5.8.3.)

J.10 Future supply lines planned by the Louisville Water Company along the Ohio River may be affected by some of the eastern alternatives; design plans need to take this fact into account.

Response: See Response to Comment J.1 above concerning ongoing coordination with the Louisville Water Company and other agencies to avoid adverse impacts to water supplies. As stated above, FHWA will continue to consult with the Louisville Water Company during design and construction of the Preferred Alternative to ensure that its concerns about impacts to the water supply and its facilities are adequately addressed.

J.11 Page 5-119 of the DEIS contains an inaccuracy. The existing well referred to on that page only supplies half of the intake of the B.E. Payne Water Treatment Plant, not half of the intake of the entire Louisville Water Company system.

Response: This change has been noted and revisions have been made, as appropriate.

J.12 Wetlands, streams and water bodies should be placed on graphics showing alternatives.

Response: These water resources have been included in the graphics in Appendix A that depict all bridge/highway alternatives. Figures 4.8-1a and 4-8-1b show the build alternatives in relation to the water resources identified in the project area.

J.13 The DEIS downplays the impact of proposed bridges through the wellhead protection area. A chemical spill, even a relatively small one, can endanger water supplies for the entire city and could contaminate the deep aquifer for a number of years, especially if DNAPLs are spilled. The wellhead protection area is expected to supply 100 % of Louisville's water in the future, making the issue more important than the attention it receives in the DEIS. The fact that the area is comprised of karst terrain and that the Ohio River is prone to drawdown and backflow events means that even a small spill could contaminate the aquifer.

Response: See Response to Comment J.1 above. The preferred eastern alternative (A-15) would not impact the Indiana wellhead protection area, the Hertzsch well field or the Babb well field. The Preferred Alternative would impact the Louisville Water Company's (LWC) proposed wellhead protection area. However, as described previously, any potential risks can be managed adequately through proper design of the proposed facilities in consultation with the LWC and other responsible agencies. In the event of an accidental spill, collection systems incorporated into the roadway/structure can aid in the containment of contaminants, avoiding potential water supply contamination. Coordination with the LWC will continue to be a priority to ensure the protection of the local water supply throughout the design of the project. In addition, plans for an emergency response to an accidental spill are in place in both states to report, contain and clean up hazardous materials. Hazardous material spills by barge traffic on the Ohio River may be detrimental to drinking water supplies, as well. Emergency response to such events will remain a high priority for all possible forms of drinking water contamination throughout the area. However, construction of the Preferred Alternative will have only a minor effect on the potential for hazardous material spills associated with river barge traffic. There are no known sinkholes (karst features) within the area of the Preferred Alternative that might be affected by the Project. However, the containment and collection systems described above would help to minimize any potential risks to unidentified karst features in the area.

J.14 Even in the absence of a spill, normal runoff from a bridge and highway can contaminate the aquifer and degrade the quality of our drinking water. The DEIS "blows off" these concerns, quickly concluding that quantities will be so small that there will be no adverse impact.

Response: All potential impacts to water quality have been taken seriously in the development of the EIS. Through proper design, mitigation, and monitoring, any potential adverse effects can be effectively minimized and avoided. As stated by the Louisville Water Company (LWC), that agency "operates an EPA Certified Laboratory performing 300 water quality tests daily." They "test both the source of the drinking water (the Ohio River) and the finished product. LWC's distribution system monitoring is twice the requirement for federal compliance. LWC partners with the EPA and national and international water associations as part of a continual research effort into the Ohio River and drinking water." As such, the quality of the drinking water will be carefully monitored for the presence of pollutants. The presence of elevated contaminant levels would undoubtedly be identified. In addition, the LWC reports that on average, about 50 billion gallons of water flow by Louisville every day. Therefore, compared to the volume and flow of water, contaminants contained within roadway runoff would likely be in trace

amounts. Nevertheless, the introduction of elevated levels, if identified, must be rectified immediately.

Highway runoff may be a potential threat to receiving waters, but if handled properly, it need not be a serious problem. According to the FHWA Environmental Technology Brief of September 20, 1999, "highway runoff is generally cleaner than runoff from buildings, farms, mines, harbors or other non-point sources." The adverse effect of highway runoff water quality can be minimized through structural or non-structural best management practices (BMPs) or through a combination of both. Structural BMPs operate by physically trapping runoff until contaminants settle out or are filtered through the underlying soils. The basic mechanisms for constituent removal are gravity settling, infiltration of soluble nutrients through soil or filters, or biological and chemical processes. Non-structural BMPs, on the other hand, are source control practices such as street sweeping, land use planning, vegetated buffer areas, and fertilizer application controls. They are used to reduce the initial concentration and accumulation of contaminants in runoff. Non-structural BMPs may reduce the need for costly structural controls. Structural BMPs can be thought of as largely corrective measures to address existing and anticipated water quality problems. All BMPs will be considered during the development of the design of the Preferred Alternative. Information regarding the mitigation of construction impacts upon surface waters is contained in Section 5.7.1 of the FEIS.

- J.15 Data used in assessments compiled in 1999 should have been corrected for drought conditions, because the conditions that year are not consistent with normal conditions. New data should have been compiled in 2000.

Response: According to the National Weather Service Office for Louisville, KY, the Louisville area did not experience drought conditions until July 1999 (personal communication 9/13/02). At the end of June 1999, the Louisville area had exceeded the average rainfall records. All water quality analyses were conducted in the spring of 1999 and the summer of 2000. Sampling locations and sampling dates were as follows:

Goose Creek	April 5, 1999 and April 8, 1999
Little Goose Creek	April 6, 1999 and April 8, 1999
Wolf Pen Branch	April 6, 1999 and April 7, 1999
Hunting Creek	April 6, 1999 and April 7, 1999
Muddy Fork	April 7, 1999
Lancassange Creek	April 8, 1999
Lentzier Creek	April 8, 1999
Beargrass Creek	April 7, 1999 and June 13, 2000
Harrods Creek	June 13, 2000
Ohio River	June 12, 2000 and July 6, 2000

- J.16 Water quality assessments do not conform to EPA Rapid Bioassessment protocols.

Response: *The Environmental Protection Agency has been involved with the development of project since the Agency Scoping Meeting of September 8, 1999. The comments received from the U.S. Environmental Protection Agency (EPA) concerning the Draft EIS did not cite any failure concerning the water quality assessment methods used for this project. Acceptable water quality sampling methods were utilized. In addition, archival data, also gathered through scientifically sound methods, was also reviewed and utilized to provide additional data. Detailed discussion of the water quality data gathered by qualified biologists is contained in the Terrestrial and Aquatic Baseline Report. Agency involvement including KYTC/DEA, IDEM, ORSANCO, and MSD was pursued. Water quality assessment methods are also discussed in Section 4.8 of the FEIS.*

- J.17 Field methods used to assess fish are not normally used in an assessment of this type. The proper technique is electro shocking, and no tests of that type were performed. This makes the fish investigation improper.

Response: *The methods for obtaining field data were performed in accordance with the KYTC/DEA requirements for completing baseline studies. Archival data obtained through electro shocking of larger streams was used to supplement field data. Field methods used are acceptable for resource agencies. Electro shocking of small streams poses a risk of impacting rare species. Therefore, smaller streams that can be evaluated by seining were not electro shocked. Field studies were organized by the chief biologist and additional qualified biologists assisted in the investigations. Guidance was also obtained from professors of Morehead State University.*

- J.18 The DEIS states that specific conductivity in the waterways assessed is “elevated,” though this statement is given no context, and under the backwater conditions of the drought of 1999, specific conductivity would be higher than normal conditions.

Response: *According to the National Weather Service Office for Louisville, KY, the Louisville area did not experience drought conditions until July 1999 (personal communication 9/13/02). At the end of June 1999, the Louisville area had exceeded the average rainfall records. All water quality analyses were conducted in the spring of 1999 and the summer of 2000. At the time the water chemistry analysis was conducted, the greater Louisville area was not experiencing drought conditions. According to ORSANCO, conductivity ranges from 250 to 500 microSiemens per centimeter in the Ohio River. The DEIS was noting that conductivity measurements for most streams registered on the higher end of the normal range, and in some cases, exceeded 500*

microSiemens per centimeter. The higher the specific conductivity, the higher the total dissolved solids and salinity which equates to the elimination of desirable food plants and habitat-forming plant species for those organisms living in the water body. Detailed results of the water quality investigations are included in the Terrestrial and Aquatic Baseline Report.

- J.19 No IBI studies were performed to assess fish communities, macroinvertebrates, and water quality, which is a standard practice under EPA guidelines.

Response: *Index of Biotic Integrity (IBI) is an acceptable system for assessing the health of an aquatic system; however, it is not the only metric available for this purpose and was not the one selected for use on this project. In reality, IBI is the basis of the studies performed, but this study carried it further to identify the species of the organisms sampled. Resource agencies were involved throughout the development of these processes. Biological diversity and equitability values were calculated as part of the Terrestrial and Aquatic Baseline Report. Information regarding species identified can be found in Appendix B.5.*

- J.20 Based on IBI studies conducted by Regina Bergner (who provided comments on the DEIS), Goose Creek received a high score, which indicates good water quality, not the “degraded and impaired habitat” reported in the DEIS. The DEIS’s approach is overly simplistic.

Response: *Goose Creek exhibits a good riparian system in many areas. However, evidence of degradation is present, and was indicated by the studies conducted. The Goose Creek area has been affected by both agricultural and suburban development. According to the most recent MSD Water Quality Report (2000), the Goose Creek Watershed does still have some good-quality habitat, but the area has undergone intense development and moderate water quality damage has resulted. Construction sites have caused erosion, runoff and sedimentation. High levels of nitrogen and phosphorus are attributed to lawn care applications. The report also states that one third of all fecal bacteria samples were in violation of recreational standards. Large algal populations evidenced depleted available dissolved oxygen in the water. Removal of small wastewater plants in that area is helping to improve water quality.*

- J.21 Previous studies by Regina Bergner have found a number of macroinvertebrates in Harrods Creek, contrary to the claim in the DEIS that the numbers in Harrods Creek were insufficient to conduct biodiversity and equitability indices.

Response: *At least 100 specimens must be obtained to perform the macroinvertebrate analysis that was used for all streams in this project. An acceptable number of macroinvertebrates was not gathered within the standard sampling limits. Collecting additional specimens after the appropriate sampling period has expired would have biased the sample for comparison with the other samples collected. The grab sampling technique used in the deeper areas of Harrods Creek is an acceptable method for obtaining specimens. Due to the depth of sediment, numerous macroinvertebrates were not retrieved.*

J.22 The DEIS took an improper number of samples of macroinvertebrates in the Ohio River to be statistically valid. The DEIS concluded that there were none there. The absence of insects based on two samples does not establish that they are not there. CTS should choose a model that better fits the Ohio River.

Response: *Several samples were collected at each proposed bridge crossing location. The taxa collected were insufficient for statistical analysis, and were indicated as such in the Terrestrial and Aquatic Baseline Report. Information on macroinvertebrates is contained in Appendix B.5.*

J.23 Furthermore, a listing of species present in the Ohio River based on literature is not helpful unless it includes an analysis of metrics such as species richness, evenness, trophic relationships, and community structure.

Response: *Historical species data for the Ohio River were obtained from the Louisville and Jefferson County Metropolitan Sewer District (MSD) and the Ohio River Valley Sanitation Commission (ORSANCO). This archival data was obtained from studies conducted in 1957-1959, 1961, 1968-1970, 1974, 1976, 1978-1979, 1981, 1983-1991 and 1997.*

The MSD and ORSANCO data give the species that are known from the Ohio River. Evenness, trophic relationships and community structure cannot be determined from the data. True species richness cannot be determined from these studies since they were taken over a number of years presumably at different locations, however, the data does give the reader an indication of the diversity of species historically present within the river. The archival data shows 84 fish species observed from the Ohio River. This represents very high fish diversity.

J.24 With respect to Wolf Pen Branch, the DEIS correctly modified index scores, but improperly adjusted for macroinvertebrates that are a feature of the spring-fed condition in Wolf Pen Branch.

Response: *The following text has been taken directly from Section 4.8.1 of the FEIS. The diversity ($d=2.59$) and equitability ($e=0.33$) indices for Wolf Pen Branch were negatively influenced by the large number of Amphipods, Isopods and Physids*

included in the sample. These species indicate the presence of spring water flows and are facultative species. The stream is in the vicinity of a natural spring, and, therefore, these species were not included in the diversity and equitability value calculations to more accurately reflect water quality of the stream. Discounting these three groups and recalculating, the values for each index improved. While the recalculated diversity value improved to 3.27, suggesting reasonably good water quality, the improved equitability ($e=0.58$) continues to indicate unevenness across the taxa within the sample.

- J.25 The spring that feeds Wolf Pen Branch is not mentioned in discussions of groundwater resources.

Response: *The spring in the Wolf Pen Branch area is mentioned in Section 4.8.1.*

- J.26 The DEIS states that a diversity index score of 3 and an equitability score of 0.6 are considered good. A score of 2.59 for Wolf Pen Branch improved to 3.27 is not a statistically significant difference. Sampling methods, sampling error, misidentification of samples, and time of year of collection of samples could account for differences.

Response: *The figures were not adjusted based on statistical significance. Removing those specimens from the sample, which would have otherwise biased the sample, modified the figures, and then the index was calculated.*

Qualified biologists using approved methods during the spring, a common time for taking such samples, took the samples. A recognized expert in the field identified them. The numbers were adjusted by removing those specimens from the sample that would otherwise have biased the sample. Statistical significance of the difference between the original number and the adjusted value is irrelevant.

- J.27 Wolf Pen Branch is a shallow stream with a bedrock base of limestone. Hard-bottom streams are common in the area, and these streams commonly have lower diversity and taxa evenness scores because of their limited habitat.

Response: *This statement is true. Small streams with a bedrock substrate support a smaller, less diverse macroinvertebrates community.*

- J.28 Eleven species of fish in a lower order stream such as Wolf Pen Branch represents good diversity. The presence of common and pollution-tolerant fish is normal, and should not be taken as an indication of water quality.

Response: *Interpretation of results can be approached in a variety of ways. The number of fish species represented in a stream is only one of several methods for estimating the quality of stream. Water chemistry, macroinvertebrates and*

archival data were all compiled to provide a clearer picture of Wolf Pen Branch. The comment is well taken.

- J.29 Simple presence-or-absence surveys for endangered species are inadequate for a project of this magnitude.

Response: *Presence/absence surveys are the available survey methods for evaluating endangered species impacts. The U.S. Fish & Wildlife Service (USFWS) required this approach, and, as such, it was the method employed. The USFWS was involved from the inception of these field studies. The agency was aware of the sampling methods and results and has approved the completed processes. Coordination received from the USFWS can be referenced in Appendix C. The USFWS has authorized Section 7 clearance resulting in a "Not Likely to Adversely Affect" finding for endangered species identified within the project area on March 13, 2003 (See Appendix C.9).*

- J.30 Sprawl associated with the bridges will threaten drinking water because of new home construction.

Response: *Residential and commercial development is occurring throughout the project area, especially in eastern Jefferson and southeastern Clark Counties, and additional development has been planned within the project area prior to the initiation of the project. Project analyses indicate that implementation of the Preferred Alternative would result in a slight increase in the growth rate in southeastern Clark County (as compared to the No-Action Alternative), with a comparable slight decrease in the growth rate in eastern Jefferson and Oldham Counties. However, implementation of the Preferred Alternative is not expected to increase the growth rate in the overall project area, or specifically in the eastern portion of the project area. Thus, any potential effects of new home construction on drinking water associated with the Preferred Alternative would be insignificant.*

To the extent that it does occur, new home construction would increase the amount of impervious cover in the region. Design of appropriate drainage systems would be required as part of the zoning approvals for any such development. However, such issues are beyond the scope of this project.

- J.31 Design of the downtown bridge should take into account flood protection for waterfront communities.

Response: *The IDNR requires that the maximum backwater during the 100-year flood to be no more than 0.1 foot. In accordance with 23 C.F.R. 650, Subpart A, encroachment upon the floodplain must be analyzed. The hydraulic analysis of the bridge design will closely examine potential flooding risks from floodplain impacts, and will include all feasible and prudent measures to*

minimize harm. Construction of the downtown portion of the Preferred Alternative is not expected to have a significant impact on flood storage or protection.

- J.32 The DEIS proposes bridging across all of the named streams and some of the unnamed tributaries. EPA encourages bridging across the floodplains associated with streams, when feasible, in order to minimize impacts on flood flow and wildlife corridors. The DEIS also lists proposed mitigation measures to help protect surface water quantity and quality during construction and operation of any of the alignments. The FEIS should include the specific measures that will be implemented for the Preferred Alternative.

Response: *This recommendation will be applied to the design of surface water mitigation measures developed during the design phase of the project. Special conditions will be included in the Section 404 permit and the Section 401 Water Quality Certification to ensure water quality standards are met.*

- J.33 Based on the information provided in the DEIS, it is unclear whether or not local communities have zoning and/or land use plans or other provisions, for protecting and/or enhancing the water quality of their unimpaired and impaired streams. The DEIS does not reference the pertinent sections of the various local communities' planning and regulatory provisions that detail the protective measures that would be used for protecting and enhancing their aquatic resources. The FEIS should document or reference this information for the Preferred Alternative with its associated alignment(s) and Kennedy Interchange option.

Response: *The Clean Water Act (CWA) applies to all waters of the United States and the Corps of Engineers, Louisville District implements Section 404 of the CWA in the project area. The Indiana Department of Environmental Management (IDEM) and the Kentucky Division of Water monitor water quality and are responsible for implementing controls to enhance and/or maintain acceptable water quality. In addition, the local water companies, including the Louisville Water Company and the Indiana American Water Company, both continuously monitor the quality of the water supply. Several agencies, including the IDEM and the Louisville MSD inventory the quality of water within the project area. Reports summarizing the findings, including impaired and unimpaired streams, is available for public inspection. For example, the MSD of greater Louisville sponsors cleanup projects of local streams, promotes and assists in the removal of failing septic systems, provides education opportunities educating the public on environmental stewardship and voluntarily monitors local stream water quality.*

- J.34 The DEIS indicates that the Babb wellfields are managed in accordance with *The Southern Indiana Operations of Indiana-American Water Company, Inc.*

(INAWC) Wellhead Protection Management Plan (Plan). Details of the Plan are not provided. However, the DEIS (pp. 5-118 and 5-119) indicates that the Indiana Wellhead Protection Rule limits activities within a 200-foot sanitary setback, including roadways, paved and unpaved surfaces accessible to transportation activities. Please clarify whether or not this rule applies to the Babb wellfields.

Response: *The Indiana Wellhead Protection Rule (including the 200-foot sanitary setback) applies to all wellfields within the State, including the Hertzsch and Babb wellfields located in the project area. This comment has been addressed in the FEIS.*

J.35 Based on information provided in the DEIS, it is unclear whether the East End alternatives will adversely impact the aquifers that are utilized by the wells in WHPAs. Please clarify the extent of the potential impacts from the project, and how the Wellhead Protection Areas would be managed with respect to these impacts. Please clarify the regulatory and non-regulatory controls for the WHPAs. Please document in the FEIS the coordination with local water suppliers.

Response: *This comment has been addressed in Section 5.8.2. The Preferred Alternative does not pass through any wellhead protection areas in Indiana. However, the Preferred Alternative's Alignment A-15 would pass through the Louisville Water Company's proposed wellhead protection area. Aquifer protection will be incorporated into the design of the highways and bridges included in the Preferred Alternative. This will include specifications for materials used or permitted within staging areas and for construction. Numerous facilities throughout the country traverse wellhead protection areas, and methods have been developed to avoid any adverse effects from the construction and operation of such facilities. Aquifer protection also will be included in the procedures developed to respond to incidents on the roadway/bridge. The design of elements of the Preferred Alternative that would traverse existing or proposed wellhead protection areas will be coordinated with appropriate agencies in each State, including the Louisville Water Company, to ensure that their concerns are addressed and accommodated in the design and construction of the Preferred Alternative. Drainage will be intercepted and discharged down gradient from the wellhead protection areas.*

J.36 In addition, the DEIS (p. 4-87) states there are additional wells, owned by the State of Indiana, just east of the proposed Indiana WHPA. The FEIS should identify whether or not these wells are used as drinking water supply wells and whether they would be adversely impacts by any of the East End alternatives. The FEIS should also include mitigation measures for these wells, if applicable.

Response: Section 5.8.2 discusses the anticipated impacts to wellhead areas, and mitigation of these impacts is discussed in Section 5.8.5.

The Indiana Wellhead Protection Rule limits activities within a 200-foot sanitary setback. Activities excluded and/or limited by the existing sanitary setback are the spacing of the public water supply system wells, and the placement of sanitary and storm sewers and roadways, paved and unpaved surfaces accessible to transportation activities. The Indiana Wellhead Protection Rule protects all wellhead areas in the State including the Hertzsch and Babb wellfields located in the project vicinity.

Alternative B-1 would have traversed the wellhead protection area and would have directly impacted the Babb wellfield. None of the other bridge/highway alternatives, including the Preferred Alternative, would impact Indiana wellhead protection areas. Collection systems can be included on the bridge to contain potential water contaminants in a closed system to be disposed of safely. This would diminish potential contaminants to drinking water supplies.

The Preferred Alternative will include storm water management measures for quality and quantity. Mitigation measures will be incorporated into project planning to minimize impacts to the human and natural environment. This will include measures that address potential impacts from normal construction requirements and more specific measures for environmental resources requiring additional or enhanced mitigation measures identified during the studies and coordination completed for this project. Mitigation measures and permit conditions outlined in this section will be incorporated into the design plans developed and submitted to the project team.

J.37 The identification and location of karst features, and their relation to the alignments under consideration, are not included in the DEIS. Page 5-124 of the DEIS states, in part, that karst features and their relationship to the Preferred Alternative will be determined by INDOT in cooperation with IDNR, IDEM and US FWS, Bloomington Field Office during the project design phase. The FEIS should say what agencies would identify karst features for the Kentucky side.

Response: *This comment has been addressed in Section 5.8.5. There are no known karst features within the area affected by the Preferred Alternative. Appropriate mitigation measures and monitoring and maintenance plans will be developed for any identified karst features. The project area on the Indiana side is located just outside and to the east of the area designated in the 1993 MOU signed by IDEM USFWS, IDNR and INDOT as potential karst features of Indiana. Prior to acceptance of the final design plans, an agreement will be developed which will set out these appropriate and practicable measures to*

offset unavoidable impacts to karst features, should they be encountered. This agreement will become part of the contract documents for the project.

Groundwater protections measures will be addressed during design and implemented during construction for that portion of the project in Kentucky. Best management practices, FHWA guidelines, the Kentucky Department of Highways Standard Specifications, and the KYTC Generic Groundwater Protection Plan will be followed.

Potential impacts to unidentified karst features will be minimized through proper design and containment measures, as discussed above in Responses to Comments J.1 and J.13.

- J.38 Groundwater is extremely sensitive to contamination from the surface in karst regions. Efforts should be taken to identify sinkholes that could be impacted by storm water runoff. When sinkholes are identified, steps should be taken to ensure that runoff does not adversely affect aquifers.

Response: *There are no sinkholes within or near the Preferred Alternative. If unidentified sinkholes are encountered, NPDES notification procedures will be followed.*

- J.39 Please clarify whether there are any private wells, which could be impacted by storm water discharging to karst features. Issues associated with the Riverbank Infiltration Program in Kentucky should be given serious consideration when choosing the Preferred Alternative and if applicable, an East End alternatives. This project should be planned in cooperation and consultation with the local public water suppliers and representatives from the Kentucky and Indiana Wellhead Protection Programs. EPA encourages the sponsors of the project to contact representatives of the State of Kentucky Wellhead Protection Program (WHPP) and the Groundwater Section of the Indiana Department of Environmental Management and include them in the planning process and keep them informed of the project's progress.

Response: *There is always the inevitable potential that private wells may become contaminated. As a result, the Kentucky Division of Water (KDOW) requires each private well owner to develop a groundwater protection plan. The plan is designed to monitor and safeguard the quality of private well owners' water supply. The plan recommends a series of best management practices.*

As recommended, coordination and consultation with both the IDEM and KDOW will continue in an effort to preserve groundwater quality. Also, careful consideration will be taken to ensure that the proposed project complies with both the Indiana and Kentucky Wellhead Protection Programs.

J.40 The FEIS should include the mitigation measures, if applicable, that will be implemented to address impacts associated with karst features.

Response: *There are no known sinkholes or karst features within or near the Preferred Alternative. If unidentified sinkholes are encountered, NPDES notification procedures will be followed.*

J.41 The DEIS does not present the Clean Water Act section 103 impaired status of the Ohio River for specific pollutants.

Response: *The FEIS discusses the Ohio River as a Clean Water Act, Section 303(d) impaired stream in Section 4.8.*

J.42 The DEIS does not offer alternatives to allowing highly concentrated polluted runoff to drain directly into the Ohio River and Goose or Beargrass Creek, or estimates of the amounts of runoff these streams will receive.

Response: *The FEIS discusses the best management practices that may be utilized to mitigate for runoff of storm water and sediments in the Mitigation portion of Section 5.7.*

J.43 The DEIS does not disclose if storm water will be allowed to drain from multiple openings into the river below or if it will be collected and conveyed by storm water pipes to bridge piers and then downspouts.

Response: *Best management practices will be utilized to mitigate for runoff of storm water and sediments. Runoff from the proposed bridges and highways will be collected and discharged down gradient from any wellhead protection areas, and in compliance with all applicable laws and regulations and any environmental permits required for the construction and operation of the Preferred Alternative. No untreated or unpermitted discharges will occur in wellhead protection areas.*

Bridge deck runoff shall be collected within a drainage system designed as an element of Alternative A-15 that includes bridge-deck drains and storm sewers that will transport runoff to the Kentucky end of the bridge. Storm sewers shall be connected and runoff emptied into a storage area designed to hold the one-hour peak discharge for a 100-year storm event. The storage area to be retained and then either be released to a surface drainage system or pumped into trucks and transported to a facility approved to receive contents.

J.44 The DEIS does not thoroughly investigate the direct and indirect impacts using either current science regarding storm water pollution or easily obtainable field monitoring.

Response: *As described in detail in Responses to Comments J.3 and J.14 above, the NPDES permit that will be required for the Preferred Alternative will provide for erosion control and regular inspections to ensure that all erosion and sedimentation mitigation activities are being implemented appropriately. Best management practices will be identified during the planning and permitting process, and will be enforced during construction and operation as a condition of applicable permits and regulations. Potential risks to groundwater and surface waters can be managed adequately through proper design of the proposed facilities in consultation with regulatory agencies, the Louisville Water Company, and other responsible agencies. Coordination with those entities will continue to be a priority through Project implementation to ensure protection of the local water supply and water quality.*

Potential indirect effects to water quality could result from any changes in land use and development patterns caused by the Preferred Alternative, such as the slight increase in growth rates in southeastern Clark County. However, the effect of any such changes on water quality should not be significant because any such development would be required to comply with all applicable federal, state, and local environmental laws and regulations. Those laws and regulations generally require various permits and approvals before land-disturbing activities can be undertaken, and mitigation measures are generally required to minimize impacts to water quality and other environmental resources.

J.45 The DEIS does not identify pollutants such as copper, iron, zinc, chromium, chlorides, and cyanide abundantly produced by heavy automobile traffic.

Response: *The FEIS discusses the common pollutants produced by automobiles in Section 5.8.1. Those pollutants include, among other things, heavy metals such as copper, iron, zinc, chromium, etc.*

J.46 The DEIS does not identify alternatives for filtering or removing pollutants, accomplished by low cost BMP's.

Response: *The INDOT Standard Specifications and Special Provisions will govern construction activities in Indiana to control erosion and subsequent water pollution. The KYTC Standard Specifications for Road and Bridge Construction will guide construction activities in Kentucky. Best Management Practices (BMPs) will be utilized to prevent non-source point pollution, to control storm water runoff and to minimize sediment damage to water quality and aquatic habitats. As detailed in the mitigation portion of Section 5.7.1, BMP's will be implemented to protect the water quality of the region.*

J.47 Alternative A-2 is particularly destructive to Harrods Creek. The route crosses Harrods Creek far upstream where the banks are unstable. The route will also cross Little Hunting Creek and Putney's pond. The full size of Putney's pond (11 acres) was not listed on the inventory of natural areas in the DEIS for this route.

Response: *Alternative A-15 has been selected as the eastern portion of the Preferred Alternative. Alternative A-2 was dismissed in part because of its likely impacts on the Harrods Creek corridor. The hydrologic boundary of Putney's Pond was provided by LOJIC and field verified with the assistance of aerial photography. The boundary of the pond was calculated at 6.67 acres. The Preferred Alternative will not impact Little Hunting Creek or Putney's Pond.*

J.48 The soils analysis in the DEIS characterizes much of the eastern corridor soils as highly erodible. Storm water runoff from a decade-long eastern project will therefore pose substantial sedimentation concerns for both the Salt River and Silver-Little River watersheds. The geology of Jefferson County and Northeast Clark County includes limestone subject to karst development including depressions, sinkholes, caves, and underground stream channels. Increased development and urban sprawl from an eastern bridge will increase the likelihood of groundwater contamination as well as sinkhole collapses due to increased storm water runoff of impermeable surfaces.

Response: *There are no known sinkholes or karst features within or near the Preferred Alternative. If unidentified sinkholes are encountered, NPDES notification procedures will be followed. The mitigation discussion included as part of Section 5.7.1 discusses measures to avoid and/or minimize sedimentation, non-point source pollution and runoff concerns. BMP's will be implemented to protect the water quality of the region. Permanent erosion control features will also be incorporated into the project.*

J.49 The DEIS provides a good analysis of wetland and stream impacts in several tables presented in the appendices, but some significant impacts apparent from reviewing the appendices are not discussed in the body of the DEIS. For example, Table IV in Appendix B.3 provides greater detail about general construction impacts to streams.

Response: *Section 5.10.4 discusses waterbody modifications in the project area. In addition, Table 5.10-1 outlines stream crossings by alternative.*

J.50 Appendix A.1 provides a visual description of impacts with route alternatives superimposed on aerial photos. These demonstrate that the various Far East interchanges with Salem Road are very different in terms of their impacts on Lentzier Creek and its forested tributaries. Similarly, the Alternative B-1 interchange with Utica Pike is located directly over Lancassange Creek and

forested floodplain. These major impact differences should be addressed in the main text of the EIS.

Response: *Alternative B-1 was not selected as part of the Preferred Alternative. Alternative A-15 does not impact the floodplain of Lentzier Creek. Impacts to Lentzier Creek associated with the development of the Preferred Alternative in the East End have been addressed in Sections 5.9 and 5.10.*

J.51 The cumulative impact estimates should include the proposed Ohio River Greenway in Clark and Floyd counties since this project will affect the floodplain forest of the Ohio River and its tributaries within a few miles of the Ohio River Bridges study area.

Response: *Impacts to the Ohio River Greenway have been addressed in Chapter 6.*

J.52 Mitigation options should include enhancement of the Ohio River aquatic habitat, such as acquiring the large gravel pit adjacent to the river at the location of Alternative A-9, on the Indiana shoreline, which could be connected to the river to act as backwater habitat.

Response: *Mitigation options will be considered based on impacts identified during the design phase of the project. Typically, recommended mitigation measures include the creation of wetlands in like kind of the type of wetlands impacted. Through consultation with the USACE, the agency with jurisdiction over wetlands, it has been determined that the completion of a detailed mitigation report is not reasonable at this time. Since the construction of the project may not occur for some time, wetland areas may be naturally created or destroyed. Design modifications may become apparent during the design phase and could potentially avoid wetland impacts. Detailed delineations, which will indicate the exact wetland impacts, will be undertaken during the design phase. In general wetlands directly impacted by the project will be mitigated at an appropriate ratio. At that time, a more refined approach to the development of a mitigation plan will be initiated. Consequently, the course of time may naturally increase, decrease, eliminate or create wetlands, which does not support the current cost and effort to implement a final detailed mitigation plan.*

Typical mitigation ratios can range from 1:1 for farmed wetlands, 2-3:1 for scrub-shrub and palustrine/lacustrine/emergent wetlands to 3-4:1 for palustrine forested wetlands. These ratios are subject to change based on wetland function and value. In addition, a buffer area surrounding a mitigation area will be included. It is also recommended that mitigation occur within the same watershed of the impact. However, this is not always feasible and prudent and off-site mitigation may be acceptable, as approved by the appropriate regulatory agencies. Due to the complexity of creating

wetlands, often the restoration of existing wetlands is recommended. The enhancement of existing degraded wetlands can be an ecologically beneficial option for increasing the value of an existing wetland complex. In some instances, the acquisition of a wetland should ultimately result in an overall net increase of wetland area and the value of the habitat. For instance, the acquisition of a small emergent wetland dominated by cattails, an invasive species, can be replaced with larger emergent area containing vegetative species beneficial as cover, forage material and habitat for wildlife and would likely be surrounded by a buffer area and protected by conservation easement. The creation or enhancement of wetlands often involves the removal of invasive species. Plantings can then include the replacement of species, which provide good habitat, forage material, ground cover and species diversity. In addition, buffer areas surrounding wetland restoration/creation sites afford additional fringe wildlife habitat. Suitable species plantings are also incorporated into the surrounding buffer area, if appropriate. The INDOT Memorandum of Understanding (MOU) between the INDR, INDOT and USFWS of 1991 will be utilized in the mitigation of wetland impacts. A copy of the MOU has been included in Appendix B.3.

K. Natural Resources

- K.1 The DEIS lacks relevant information on fauna, and contains an overly general discussion of habitats.

Response: *The DEIS provided a summary of the types of habitats represented within the project area. This information is presented in Section 4.7.2. The Terrestrial and Aquatic Baseline Report provided a more detailed inventory of these habitats and the associated floral and faunal species identified within these areas. Because of the volume of this information, it was not practical to include it in detail in the DEIS or the FEIS. However, the Terrestrial and Aquatic Baseline Report was made available for public review during the comment period on the DEIS, and remains available for inspection at the local project office. A listing of faunal species observed within the project area is included in Appendix B.5.*

Resource agencies with jurisdiction over specific habitat types will be consulted during final design to determine minimization of impacts, and where impacts are unavoidable, to identify mitigation options, if appropriate.

- K.2 The DEIS implies that terrestrial and aquatic impacts are general and occur for all alternatives when in fact the eastern alternatives are the ones that have significant potential impacts to habitats.

Response: *Each alternative would have impacts to terrestrial and aquatic resources, and specific impacts from all alternatives were detailed in the DEIS. Terrestrial and aquatic impacts are clearly outlined in Section 5.7.*

K.3 The DEIS should contain additional information regarding the impact of project alternatives on karst features in the project area.

Response: *There are no known karst features within the path of the Preferred Alternative. Section 5.8.5 of the FEIS has been augmented regarding agencies in Kentucky that would be involved with karst-related issues in the design and construction of the Preferred Alternative.*

K.4 The DEIS text describing wildlife that would use karst features should be modified to delete reference to loggerhead shrikes and peregrine falcons.

Response: *The text has been modified accordingly. See Section 5.7.2.*

K.5 The DEIS analysis of potential impacts to bush honeysuckle, Indiana bats, and gray bats is missing or incomplete. The DEIS addresses species that are of no concern to the area being studied (e.g., cotton mouse, Short's goldenrod).

Response: *Biological Assessments have been completed for all endangered species that have been identified along the Preferred Alternative. Refer to Section 5.7.3 for information on the completed and approved Biological Assessment, and specific discussions regarding these species. Specific information regarding endangered species and their habitat was omitted from the DEIS to maintain the anonymity of their documented locations. Bush honeysuckle (*Diervilla lonicera*) is not a state or federal, rare, threatened or endangered species, and was not identified as such in the DEIS. There are no special considerations related to this species. All endangered species having a previous record within the project area were considered. The Indiana and Gray bats have been thoroughly considered. On March 13, 2003, the USFWS concurred in a "Not Likely to Adversely Affect" finding for the federally listed species in the project area (See Appendix C.9). The requirements of Section 7 of the Endangered Species Act have been fulfilled.*

K.6 All habitats adjacent to rights-of-way will suffer indirect effects by changes in movement of water through the habitat, invasion of exotic species, and reduction of faunal movements.

Response: *Potential impacts upon terrestrial and wildlife habitat are discussed in Section 5.7.2. Coordination with the USFWS, IDNR, the Indiana Department of Environmental Management (IDEM), the Kentucky Natural Resources and Environmental Protection Cabinet's Division of Water, and the Kentucky Department of Fish and Wildlife Resources during the design of the Preferred*

Alternative will ensure that relevant concerns about potential indirect effects on ecologically sensitive areas are addressed in the design. In addition, Executive Order 13112 requires federal agencies to evaluate their actions to ensure that they prevent the introduction of invasive plants and provide for their control to minimize the impacts that invasive plants cause. Invasive-free mulches, topsoil and seed mixtures, and eradication strategies to eliminate known invasive species will be incorporated into the final project. Potential indirect effects have been addressed in Appendix B.3, Table III.

K.7 Clarification of the peregrine falcon presence in the project area should be made. Its removal from the Federal list of endangered species should also be noted.

Response: *Table 4-7.2 has been modified to note the nesting of Peregrine Falcons on the Kennedy Bridge during the past years. Section 5.7.3 has been modified to note potential disturbances to this nesting area with the construction of a new Ohio River bridge along Alternative C-1 and the consequent impacts to the falcon that could occur. Reference to the Peregrine Falcon as a Federal endangered species has been removed from Table 5-10-2.*

K.8 Alternatives near or traversing Six Mile Island would pose threats to eelgrass and the varicose rock snail. Both are Kentucky Special Concern Species and occur on or in proximity to Six Mile Island.

Response: *The eastern bridge included in the Preferred Alternative is two miles upstream of Six Mile Island. Alternative A-9, which encroached on the Six Mile Island Nature Preserve, was not selected as part of the Preferred Alternative. Thus, this concern would be avoided.*

K.9 Some alternatives would impact the Goose Creek bat feeding areas.

Response: *The Preferred Alternative would not impact Goose Creek and its bat feeding habitats.*

K.10 The start date for the tree clearing period with respect to Indiana bat habitat should be changed from October 15 to November 15.

Response: *Section 5.7.3 has been modified reflecting this change.*

K.11 Reference to gray bat maternity caves in Table 4.7-1 should be removed.

Response: *Reference to maternity caves has been removed from Table 4.7-1.*

K.12 Text referring to foraging distances for Indiana and gray bats should be modified to indicate that these are typical distances and not maximums.

Response: *The text has been modified as suggested. See Section 5.7.3.*

K.13 References to mussel surveys conducted, as part of the project should be provided in Section 5.7.3.

Response: *A reference to the Terrestrial and Aquatic Baseline Report, which documents the mussel surveys conducted as part of the project, has been added, as suggested. See Section 5.7.3.*

K.14 Reference to “adverse effects” in conjunction with Biological Assessments conducted for clearance under Section 7 of the Endangered Species Act should be changed to “may affect”.

Response: *The text has been modified as suggested. See Section 5.7.3.*

K.15 The DEIS is significantly incomplete in identifying and assessing direct, indirect, and cumulative effects to publicly- and privately-owned natural areas and parks, including Hays Kennedy Metro Park, the Garvin Brown Preserve, and conservation easements on over 1,000 acres on the Wolf Pen Mill and Wallace farms.

Response: *Presently, there are no direct effects on the Hays Kennedy Metro Park, the Garvin Brown Preserve and the Wolf Pen Mill and Wallace Farm Conservation Easements. Indirect and cumulative effects to publicly owned natural areas and parks should be controlled through local zoning laws. Potential impacts upon terrestrial and wildlife habitat are discussed in Section 5.7.2. No indirect effects, such as noise or lighting interruptions, upon these parks from the Preferred Alternative are anticipated.*

K.16 Biological assessments performed for waterways, fish, macroinvertebrates, and endangered species such as bats are based on improper and unproven techniques, meaning that the assessments are useless. In particular, the DEIS uses screening level assessments that are improper for the final analysis of a project of this magnitude. The absence of a species in a screening level assessment is not proof that the species is not present.

Response: *Qualified biologists who used agency-approved methods conducted the sampling studies. The bat studies were conducted according to the specifications of the Indiana Bat Recovery Plan Agency Draft, issued by the USFWS. These are the standard methods used for determining the presence of the Indiana bat. At the time the bat studies were conducted, no other methods were available. Acoustical sampling is not widely accepted within the field, and at the time of this project, no published papers existed supporting the identification of endangered bats in this region through acoustical sampling. It is agreed that mist-netting surveys cannot definitively*

indicate that endangered bats are not present, as discussed in the Terrestrial and Aquatic Baseline Report. All appropriate bat-sampling sites within the project area were sampled. The USFWS approved the level of effort and methods of the sampling techniques.

- K.17 The entire project area north of Harrods Creek contains the state's largest conservation easement and the area provides one of the longest, developed travel corridors for wildlife travel. Thus, this area should have been assessed at an ecosystem level.

Response: *None of the alternatives developed in the DEIS would encroach upon a conservation easement north of Harrods Creek. Although wildlife impacts are anticipated as a result of construction, the continuing encroachment of development on available habitat contributes to declining populations. The construction of the Preferred Alternative will not substantially affect wildlife travel corridors.*

- K.18 Biological information is summarized in the DEIS to the point of being meaningless.

Response: *The DEIS is a public document, which summarizes all the environmental resources for the project in such a manner that it can be read and understood by the general public. It is not feasible that the document be written in a manner that can only be understood by experts in a given discipline. Rather, experts have reviewed and approved technical data and reports. The baseline reports were translated and summarized into language that can be reviewed meaningfully by non-experts. In addition, inclusion of all the details of each baseline study would be excessively voluminous. Detailed baseline studies are available for public inspection upon request at the local project office.*

- K.19 Simple presence-or-absence surveys for endangered species are inadequate for a project of this magnitude.

Response: *See Response to Comment J.29 above.*

- K.20 Field studies did not generate the level of data concerning the Gray and Indiana bats to provide sufficient information under the Endangered Species Act. The level of effort put into the field investigation will not establish that there are no species present, and it does not appear that an independent review occurred, and field investigators appeared to have ignored pertinent literature, particularly a plan developed by Regina Bergner for INAAP, which involves the same Gray bat colony.

Response: *The level of effort was approved by the USFWS. Members of the team reviewed the INAAP study and the documents were cited as a reference. The*

document was used for reference purposes only. A management plan for the INAAP is useful, but not directly related to the identification of the potential impacts of transportation alternatives on endangered species. The presence/absence of endangered bats was recorded, and recommendations for mitigation to offset potential impacts to these species have been developed in conjunction with the USFWS. Upon final review of these studies, in conjunction with additional field surveys, the USFWS issued a "Not Likely to Adversely Affect" determination for the impacts of the proposed project on endangered species in the project vicinity on March 13, 2003 (See Appendix C.9). Coordination letters from the USFWS can be referenced in Appendix C of the FEIS.

K.21 Alternative A-9 will decimate the foraging area for both the Indiana and Gray Bat.

Response: *Alternative A-9 was not selected as part of the Preferred Alternative. Foraging areas will not be impacted.*

K.22 The presence of baby bats, as detailed by the DEIS, indicates that riparian corridors along the Ohio River are exceptionally rich habitats. Any eastern bridge would disrupt this habitat.

Response: *Many stream corridors, even impacted stream corridors, support bat populations or provide corridors to such habitats. Potential impacts to riparian corridors will be mitigated, as directed by regulatory agencies. The Preferred Alternative is the most feasible and prudent alternative that is the least environmentally damaging to endangered species. Upon final review of these studies, in conjunction with additional field surveys, the USFWS issued a "Not Likely to Adversely Affect" determination for the impacts of the proposed project on endangered species in the project vicinity on March 13, 2003 (See Appendix C.9).*

K.23 The DEIS states that Gray bats made up 13 % of all bats in 1999 and 8 % of all bats in 2000. The DEIS does not go on to analyze this data, but these facts indicate a rich habitat in the area. Statistical methods indicate that the results obtained by CTS are not due to chance and the Gray bat preferentially forages on the area waterways.

Response: *Some individual Gray bats are preferentially selecting Goose and Lancassange Creeks as forage areas. As such, additional statistical analysis was not necessary. All pertinent conclusions are analyzed from the percent of capture. These conclusions are further supported by the radio telemetric data. Confirmation was obtained that bats captured and transmitted over these streams visited the same areas on subsequent nights. On March 13, 2003, the USFWS concurred in a "Not Likely to Adversely Affect" finding for*

the federally listed species (See Appendix C.9). The requirements of Section 7 of the Endangered Species Act have been fulfilled.

- K.24 If a bridge is placed in the middle of the Gray bat's foraging area, the entire ecosystem may collapse. Light from the bridge will pull insects out of their forested habitat, eventually affecting their populations. Some may argue that as insect density diminishes, so will Gray bat populations.

Response: *The bats are summer roosting in an area where light pollution currently exists. The bats travel through and forage within lighted areas. Additional lighting in some areas may have some effect on the bats or their food source; lighting erected within breeding areas and roosting habitat would be increasingly damaging to bat populations. Several of the alignments evaluated in the DEIS would have had a direct impact upon those areas. Alternatives with extensive impacts to Gray bat habitat were eliminated and are not part of the Preferred Alternative. On March 13, 2003, the USFWS concurred in a "Not Likely to Adversely Affect" finding for the federally listed species (See Appendix C.9). The requirements of Section 7 of the Endangered Species Act have been fulfilled.*

- K.25 There is no way to mitigate the impacts on the Indiana and Gray bat species for all of eastern alternatives except for Alternative B-1.

Response: *Coordination with the USFWS, the regulatory agency with jurisdiction over endangered species, has determined appropriate mitigation measures for the construction of the Preferred Alternative. These measures were incorporated in the final Biological Assessment. On March 13, 2003, the USFWS concurred in a "Not Likely to Adversely Affect" finding for the federally listed species (See Appendix C.9). The requirements of Section 7 of the Endangered Species Act have been fulfilled. These mitigation measures are further detailed in Section 5.7.3 of the FEIS.*

- K.26 An East End bridge will harm wildlife, and will have other detrimental environmental effects.

Response: *Impacts associated with the construction of an eastern bridge have been carefully examined throughout the development of the EIS. While some impacts are unavoidable, they have been minimized and can be mitigated. These potential impacts have been coordinated with the regulatory agencies having jurisdiction over the identified resources. Mitigation of impacts will be closely coordinated with regulatory agencies to minimize the impact to the natural environment.*

- K.27 Two bridges will put a strain on, and do damage to, our community.

Response: *Impacts associated with this project have been carefully examined throughout the development of the environmental impact statement. While some impacts though minimized, are unavoidable, they can be mitigated. These potential impacts have been coordinated with the regulatory agencies having jurisdiction over the identified resources. Mitigation of impacts will be closely coordinated with regulatory agencies to minimize the impact to the natural environment.*

K.28 According to Table 3.6-7 the Downtown alternatives would directly impact 39 acres of terrestrial wildlife habitat for Alternatives C-1 and C-3. Alternative C-2 would impact 37 acres. However, these numbers do not coincide with those on Table 5.7-2 *Direct Alignment Impacts by Habitat Type*. Table 5.7-2 indicates a 0.7 acre loss of non-developed land for Alternatives C-1 and C-3, and 0 acres of non-developed land for Alternative C-2. Table 3.6-7 shows the Kennedy Interchange reconstruction In-Place would impact 25 acres and relocated it would impact 70 acres. The information in these tables should be corrected and included in the FEIS.

Response: *This information has been reviewed and corrected in both Tables 3.6-7 and 5.7-2.*

K.29 Table 5.7-2 provides information on the acres of direct impact by alignment to riparian forest and upland forest habitat types. Impacts are not given for the Kennedy Interchange. Table 5.10-2 provides information on the direct, indirect and cumulative effects by alternative to “Woodland.” The direct acreage impacts provided in these tables do not coincide. For example: Table 5.10-2 indicates 80.6 acres of “woodland” would be directly impacted for Alternative A-2. However, Table 5.7-2 indicates 8.4 acres of direct impact to “riparian forest” and a 94.5 acres direct impact to “upland forest” for a total of 102.9 acres of direct forest impact for Alternative A-2. Similar discrepancies between these tables are noted for the other alignments. This discrepancy should be explained and, if applicable, remedied in the FEIS. Table 5.10-2 does not provide information on direct impacts from the Kennedy Interchange options.

Response: *This information has been reviewed and corrected in both Tables 5.7-2 and 5.10-2.*

K.30 The DEIS does not identify whether local communities in the study area have ordinances, zoning regulations or some other means to protect forest habitat. This information should be included in the FEIS.

Response: *The Jefferson County Planning Commission and the Clark County Planning Commission each review, approve and issue permits for all proposed*

construction in the project area. However, there are no specific ordinances that protect forest habitat.

- K.31 The FEIS should also contain a forest mitigation plan that compensates for any loss and fragmentation of forest habitat due to the alternative or alternatives chosen for the Preferred Alternative.

Response: *The removal of existing vegetation will be limited to only that which is necessary within the project limits. The principles of context-sensitive design will be incorporated into the final design of the project to enhance that effort. Blending the roadway into the natural or existing landscape will minimize the right-of-way area required for construction. Long-term effects associated with the removal of forested areas can be minimized by revegetation after construction.*

Trees requiring special attention identified during the environmental phase or in the design phase that fall within the right-of-way but outside the construction limits will be delineated by fencing or other measures to minimize impacts. Native hardwood trees will be planted along the right-of-way to replace the vegetation removed during construction. Additional selected areas may be included based on final design requirements in accordance with requirements of the INDOT and KYTC. A woody revegetation plan will be developed for the project and coordinated with INDOT and KYTC for inclusion in final plans. DO NOT DISTURB signs would be placed at the construction zone boundaries for those portions of the project within Indiana. Impacts to upland woodlands in Indiana will be mitigated at a 1:1 ratio.

Notes and details will be included in the final plans to further minimize the removal of trees and understory vegetation that fall within the required right-of-way but outside the actual limits of construction. Hollow trees, trees with sloughing bark, and other large trees that fall within the project limits will be avoided to the maximum practical extent and delineated by special notes in the plans and measures such as special fencing during construction.

- K.32 The DEIS (p. 5-53) indicates that mitigation for farmland impacts will be investigated. All mitigation measures should be identified, and committed to, in the FEIS. These activities should be coordinated with the appropriate state and federal agencies.

Response: *During final design, coordination with the NRCS, the Kentucky Division of Soil Conservation, and the property owners will be conducted to determine where right-of-way and construction limits can be minimized. This can be accomplished through minimizing construction limits through spacing of staging areas and utilizing temporary right-of-way (temporary easements) allowing some acreage to return to farm use. Best management practices will*

be utilized during construction to minimize runoff and other related impacts to the adjoining fields. There is no requirement to mitigate for farmland impacts.

- K.33 The one-bridge/highway alternative that utilizes one of the Downtown alternatives will have fewer direct, indirect and cumulative impacts on streams in the study area than any of the East End alternatives. If the two bridge/highway alternative is chosen as the Preferred Alternative, we recommend careful consideration of all stream impacts, including whether the alternative has first avoided, then minimized stream impacts, and then whether there are feasible mitigation measures that will be utilized to rectify any unavoidable impacts to these streams.

Response: *The size, shape and stability of natural stream channels unavoidably impacted by construction will be used as the basis for designing replacement channels. Work in the low-water channel of existing streams will be minimized to the maximum practicable extent by limiting construction to the placement of required drainage structures or structure components such as piers, pilings, footings, cofferdams, shaping of spill slopes around bridge abutments and placement of riprap. Channel work would also be avoided during the fish-spawning season between April 1 and June 30, and performed from stream banks in shallow waters or barges in deeper waters.*

Frequent fording of live streams will not be permitted. Temporary bridges or other structures shall be used whenever necessary. Unless otherwise approved in writing by the project engineer and upon receipt of any required permit or other local, state or federal approval, mechanical equipment shall not be operated in live streams or in wetlands. Only coarse granular material will be permitted to be placed in live streams during construction. Any temporary river accesses built in conjunction with this project will be completely removed upon completion of construction activities. Details of the mitigation for stream impacts requiring local, state or federal permits, certifications or other approvals will be developed during final design when detailed impacts have been calculated.

- K.34 The FEIS should identify whether the Preferred Alternative with its associated alignment(s) and Kennedy Interchange option, is the least environmentally damaging practicable alternative that satisfies the Purpose and Need per Clean Water Act Section 404(B)(1) guidelines (Title 40 of the Code of Federal Regulation, Section 230).

Response: *The Preferred Alternative will have the least amount of impact to wetlands with the exception of Alternative B-1, which is the most expensive alternative, and determined not feasible or prudent. Of the 4.11 acres of impacted wetlands required by the Preferred Alternative, 3.74 acres are riverine and*

are ditches and stream channels. As such, the least environmentally damaging and practicable alternative was selected. The acquisition of 4.11 acres of wetlands has been found to be an unavoidable impact of construction of the Preferred Alternative. Mitigation to replace these wetland losses will be implemented. Wetland impacts will be permitted in accordance with the Clean Water Act, as appropriate.

- K.35 EPA recommends that the FEIS describe how the Preferred Alternative avoids, minimizes or mitigates potential impacts to endangered species.

Response: *A detailed Biological Assessment was prepared in conjunction with the USFWS and has been approved. This documents potential impacts to endangered species and proposes mitigation strategies to minimize the impacts of the project. For more detailed information regarding the Biological Assessment and the associated impact finding, refer to Section 5.7.3 of the FEIS. On March 13, 2003, the USFWS concurred in a "Not Likely to Adversely Affect" finding for the federally listed species in the project area (See Appendix C.9). The requirements of Section 7 of the Endangered Species Act have been fulfilled.*

- K.36 Replanting native trees would take too long to grow to maintain the existing forest along Goose Creek (KY) or Lancassange Creek (IN) for the rare species, which need that habitat to survive.

Response: *Goose Creek and Lancassange Creek do not occur within the path of the Preferred Alternative. Potential stream impacts are included on Table 5.8-1.*

- K.37 The proposed Alternative A-9 crosses the buffer strip upstream of Six Mile Island, and support piers would be placed within the buffer area. The buffer strip is dedicated as part of Six Mile Island State Nature Preserve and therefore is afforded the same status and protection as the island itself. If it is possible to design a bridge using Alternative A-9 that does not require support piers on the nature preserve, a significant impediment can be avoided.

Response: *Alternative A-9 is not the Preferred Alternative. There will be no impacts to Six Mile Island or the adjacent buffer strip.*

- K.38 Table 4.7-2, State Threatened and Endangered Species Potentially Occurring in the Project Area, pg. 4.74 lists the Peregrine Falcons as only being observed flying over the Ohio River. This species has been documented as nesting on the Kennedy Bridge for the past several years and may have nested on the Clark Memorial and Big Four bridges in past years. The establishment of a nesting territory in the downtown area of Louisville should be noted.

Response: *The recommended changes have been made, as recommended, in Table 4.7-2.*

K.39 Section 5.7.3, pg. 5-116, addresses the environmental consequences of the alternatives on State listed species but fails to adequately address impacts to the nesting pair of Peregrine falcons in the Kennedy Bridge vicinity. Construction of a new bridge on either side of the Kennedy could have significant impacts to this species. Extended disturbance could result in the abandonment of this breeding territory. The painting of the bridge has caused the existing pair not to breed in the area during the past year. Hence, the FEIS should examine the impact of Alternatives C-1 and C-3 on the nesting pair of Peregrine falcons.

Response: *Construction activities would be planned to avoid disturbances to any nesting areas of the Peregrine falcon on the Kennedy Bridge and the Big Four Bridge during the months of January and December. During these months, the nesting territories are established.*

K.40 Potential development at the INAAP should be included as an indirect impact, since it may be accelerated by the Far East project alternatives. The INAAP has significant wildlife resources, including the federally endangered gray bat, and previous National Environmental Policy Act documents for the Ohio River Bridges Project identify INAAP as having extremely high development potential. While the majority of the best natural resources at the INAAP have been or will be transferred by the Department of the Army to the Indiana Department of Natural Resource, there are still wooded areas and karst features that are subject to development.

Response: *The potential indirect and cumulative effect of the project upon properties such as the INAAP is discussed in 5.3.1.3.*

K.41 The Ohio River is an active flyway for resident and migratory species, some of which are threatened or endangered. The DEIS fails to adequately forecast the expected mortality from bridge collisions. Review of data from other bridge sites may enable an easy computation and assessment.

Response: *Coordination with the USFWS, IDNR and KNREPC and field investigation of the Preferred Alternative did not identify any resting or nesting areas, waterfowl flyways or habitat used by migratory waterfowl. The proposed project shall not entail the taking, killing or possession of any migratory birds. In accordance with the Migratory Bird Act, no impact is anticipated to occur to any migratory waterfowl as a result of the construction of the Preferred Alternative. Bird collisions with bridges are not an anticipated impact and would be considered unusual and rare.*

K.42 Increased noise levels from an East End bridge placed near the Six Mile Island Nature Preserve could negatively affect wildlife that might otherwise

use the island for nesting, feeding and roosting, thereby reducing its aesthetic and ecological value.

Response: *The eastern bridge alternative closest to the Six Mile Island Nature Preserve, Alignment A-9, was not selected as part of the Preferred Alternative. That alignment would have encroached on the designated buffer zone upstream from Six Mile Island. The eastern alignment included in the Preferred Alternative, Alignment A-15, would cross the Ohio River almost two miles upstream from the upstream end of Six Mile Island and is not expected to have an adverse effect on the wildlife or other natural resources of the Six Mile Island Nature Preserve.*

L. Wetlands

L.1 The DEIS wetland discussion is incomplete, based on outdated criteria, and poorly assesses wetland plants relevant to the particular project area.

Response: *The information on wetlands in the DEIS was developed in accordance with the 1987 Corps of Engineers Wetland Delineation Manual (Y-87-1), which is required by the U.S. Army Corps of Engineers (USACE), Louisville District. Representatives of the Louisville District have been consulted throughout the development and review of the DEIS and FEIS, and have participated in field reviews of potential wetland areas. Comments from the USACE on the DEIS did not suggest any significant deficiencies in the wetland discussion. All preliminary wetland delineations performed for the Preferred Alternative have been confirmed with the USACE during the design of the Preferred Alternative. Construction of the Preferred Alternative will require a permit issued by the USACE under Section 404 of the Clean Water Act for any wetland impacts that cannot be avoided.*

Identification of potentially jurisdictional wetlands early in the environmental process was undertaken to guide the development of alternatives in order to avoid these areas as much as possible, minimize impacts where avoidance was not possible, and finally mitigate for any unavoidable wetland loss. Jurisdictional determinations were coordinated with the USACE. This is consistent with current IDEM, Kentucky Division of Water and USACE policy, which is to select the least environmentally damaging practicable alternative (LEDPA). During the alternative development process, NWI maps, preliminary windshield surveys and field delineations were used to identify wetlands to avoid and minimize potential impacts. Identification of jurisdictional wetlands early in the environmental phase was intended to guide the final design of the project to avoid these areas, if possible, to minimize impacts if avoidance was not possible and finally to mitigate for any unavoidable wetland loss. A field meeting was conducted August 29, 2002

with the USACE to ensure that wetlands identified within this document are indeed under the jurisdiction of the USACE.

Through consultation with the USACE, the agency with jurisdiction over wetlands, it has been determined that the completion of a detailed mitigation report is not reasonable at this time. Since the construction of the project may not occur for some time, wetland areas may be naturally created or destroyed. Design modifications may become apparent during the design phase and could potentially avoid wetland impacts. Detailed delineations, which will indicate the exact wetland impacts, will be undertaken during the design phase. In general wetlands directly impacted by the project will be mitigated at an appropriate ratio, at a minimum 1:1 for farmed wetlands, 2-3:1 for scrub-shrub and palustrine/lacustrine/emergent wetlands to 3-4:1 for palustrine forested wetlands. The final wetlands plans will be approved by the permitting agencies. At that time a more refined approach to the development of a mitigation plan will be initiated. Consequently, the course of time may naturally increase, decrease, eliminate, or create wetlands, which does not support the current cost and effort to implement a final detailed mitigation plan.

- L.2 The USFWS requested to review the wetland mitigation plans prepared for the Preferred Alternative before inclusion in the FEIS.

Response: *A preliminary discussion of likely wetland mitigation requirements has been included. During discussions with the U.S. Army Corps of Engineers, the federal agency with jurisdiction over wetlands, it was determined that detailed mitigation plans are not prudent or feasible at this time. Mitigation and associated requirements will be coordinated with both the USFWS and the USACE as the appropriate permits are sought to comply with Sections 404 and 401 of the Clean Water Act during the final design phase.*

- L.3 The DEIS incorrectly concludes that adverse impacts associated with water body modifications would be “negligible.” This wording should be deleted or changed to “minimized.”

Response: *The text has been modified, as recommended. See Section 5.10.4.*

- L.4 Table 5.10-2, relating indirect and cumulative wetland impacts of the different build alternatives, should be modified to delete statements of “little value.” The INAAP should be included as a project with indirect impacts and the Ohio River Greenway Project should be included as one with cumulative impacts.

Response: *Table 5.10-2 has been modified to accommodate these comments.*

- L.5 Wetland mitigation plans should be presented for any unavoidable wetland impacts.

Response: *Through consultation with the USACE, the agency with jurisdiction over wetlands, it has been determined that the completion of a detailed mitigation report is not reasonable at this time. Since the construction of the project may not occur for some time, wetland areas may be naturally created or destroyed. Design modifications may become apparent during the design phase and could potentially avoid wetland impacts. Detailed delineations, which will indicate the exact wetland impacts, will be undertaken during the design phase. In general wetlands directly impacted by the project will be mitigated at an appropriate ratio, at a minimum 1:1 for farmed wetlands, 2-3:1 for scrub-shrub and palustrine/lacustrine/emergent wetlands to 3-4:1 for palustrine forested wetlands. The final wetlands plans will be approved by the permitting agencies. At that time a more refined approach to the development of a mitigation plan will be initiated. Consequently, the course of time may naturally increase, decrease, eliminate, or create wetlands, which does not support the current cost and effort to implement a final detailed mitigation plan. The FHWA commits to meeting mitigation criteria that will be agreed to as this process is advanced. The respective State DOT's will be responsible for retaining the services of individuals qualified to delineate and design wetland mitigation sites at the appropriate phase of design. Buffer area(s) surrounding a mitigation area will be included. It is also recommended that mitigation occur within the same watershed of the impact. However, this is not always feasible and prudent and off-site mitigation may be acceptable, as approved by the appropriate regulatory agencies. Due to the complexity of creating wetlands, often the restoration of existing wetlands is recommended. The enhancement of existing degraded wetlands can be an ecologically beneficial option for increasing the value of an existing wetland complex. In some instances, the acquisition of a wetland should ultimately result in an overall net increase of wetland area and the value of the habitat. For instance, the acquisition of a small emergent wetland dominated by cattails, an invasive species, can be replaced with larger emergent area containing vegetative species beneficial as cover, forage material and habitat for wildlife and would likely be surrounded by a buffer area and protected by conservation easement. The creation or enhancement of wetlands often involves the removal of invasive species. Plantings can then include the replacement of species, which provide good habitat, forage material, ground cover and species diversity. In addition, buffer areas surrounding wetland restoration/creation sites afford additional fringe wildlife habitat. Suitable species plantings are also incorporated into the surrounding buffer area, if appropriate. The INDOT Memorandum of Understanding (MOU) between the INDR, INDOT and USFWS of 1991 will be utilized in the mitigation of wetland impacts. A copy of the MOU has been included in Appendix B.3.*

Subsequent to the creation/restoration of a mitigation plan, a monitoring plan would be prepared to observe the success of the mitigation site. Typically, a mitigation parcel qualifies as a jurisdictional wetland two to three (2-3) consecutive years within a five-year period after completion. If the mitigated area does not qualify as a jurisdictional wetland within the timeframe allotted, additional plantings, alterations to supporting hydrology or initiation of another mitigation site may be required.

- L.6 Mitigation for impacts to streams and stream channels in Kentucky should be at a 2:1 ratio.

Response: *This issue will be addressed with the USACE, the USFWS and the Kentucky Department of Fish and Wildlife Resources and appropriate state agencies during the design of the Preferred Alternative. Specification of any mitigation requirements will be provided in a permit issued by the USACE under Section 404 of the Clean Water Act.*

- L.7 Discrepancies were noted for the downtown bridge alignments' wetland impacts as related in the DEIS summary tables and in the wetlands section of the Indirect and Cumulative Effects Analysis technical report.

Response: *FEIS summary tables S.3.1, 3.6-7 and 5.18-1 have been modified to conform to the data presented in Indirect and Cumulative Effects Analysis Table 5.10.2.*

- L.8 Regardless of the alternative chosen, the project director will have to delineate all wetlands—preferably with the help of the USACE—and obtain all appropriate permits under Section 404 of the Clean Water Act. It appears that all alternatives will affect wetlands designated as “special aquatic sites,” and therefore, any disturbance to these sites will require compliance with the USEPA’s Section 404(b)(1) Guidelines.

Response: *See L.1 above. Wetland delineations along the Preferred Alternative will be conducted during the design phase. All wetland delineations will be conducted in accordance with the 1987 Corps of Engineers Wetland Delineation Manual (Y-87-1), which is required by the USACE, Louisville District. Representatives of the Louisville District will be coordinated with for all wetland impact determinations. In compliance with the Clean Water Act, appropriate permits will be secured prior to the disturbance of any waters of the United States.*

Through consultation with the USACE, the agency with jurisdiction over wetlands, it has been determined that the completion of a detailed mitigation report is not reasonable at this time. Since the construction of the project may not occur for some time, wetland areas may be naturally created or destroyed.

Design modifications may become apparent during the design phase and could potentially avoid wetland impacts. Detailed delineations, which will indicate the exact wetland impacts, will be undertaken during the design phase. In general wetlands directly impacted by the project will be mitigated at an appropriate ratio, at a minimum 1:1 for farmed wetlands, 2-3:1 for scrub-shrub and palustrine/lacustrine/emergent wetlands to 3-4:1 for palustrine forested wetlands. The final wetland plans will be approved by the permitting agencies. At that time a more refined approach to the development of a mitigation plan will be initiated. Consequently, the course of time may naturally increase, decrease, eliminate, or create wetlands, which does not support the current cost and effort to implement a final detailed mitigation plan. The FHWA commits to meeting mitigation criteria that will be agreed to as this process is advanced. The respective State DOT's will be responsible for retaining the services of individuals qualified to delineate and design wetland mitigation sites at the appropriate phase of design. Buffer area(s) surrounding a mitigation area will be included. It is also recommended that mitigation occur within the same watershed of the impact. However, this is not always feasible and prudent and off-site mitigation may be acceptable, as approved by the appropriate regulatory agencies. Due to the complexity of creating wetlands, often the restoration of existing wetlands is recommended. The enhancement of existing degraded wetlands can be an ecologically beneficial option for increasing the value of an existing wetland complex. In some instances, the acquisition of a wetland should ultimately result in an overall net increase of wetland area and the value of the habitat. For instance, the acquisition of a small emergent wetland dominated by cattails, an invasive species, can be replaced with larger emergent area containing vegetative species beneficial as cover, forage material and habitat for wildlife and would likely be surrounded by a buffer area and protected by conservation easement. The creation or enhancement of wetlands often involves the removal of invasive species. Plantings can then include the replacement of species, which provide good habitat, forage material, ground cover and species diversity. In addition, buffer areas surrounding wetland restoration/creation sites afford additional fringe wildlife habitat. Suitable species plantings are also incorporated into the surrounding buffer area, if appropriate. The INDOT Memorandum of Understanding (MOU) between the INDR, INDOT and USFWS of 1991 will be utilized in the mitigation of wetland impacts. A copy of the MOU has been included in Appendix B.3.

Subsequent to the creation/restoration of a mitigation plan, a monitoring plan would be prepared to observe the success of the mitigation site. Typically, a mitigation parcel qualifies as a jurisdictional wetland two to three (2-3) consecutive years within a five-year period after completion. If the mitigated area does not qualify as a jurisdictional wetland within the timeframe allotted, additional plantings, alterations to supporting hydrology or initiation of another mitigation site may be required.

- L.9 Wetlands should be clearly distinguished from streams and water bodies (see Figures 4.8-1a and 4.8-1b) and their identifying Alpha-Numeric Codes from Table I-III in Appendix B.3 included in the figures.

Response: *These figures have been revised, as recommended. In addition, the Cowardin classification is included on the wetland table in Appendix B.3 to further help differentiate the different types of wetlands. This is standard wetland practice.*

- L.10 Direct impacts range from 0.0 - 12.65 acres of wetlands for the one bridge/highway alternative and 2.99 - 12.65 acres for the two bridges/highway alternative. According to these tables, the Downtown bridge alternatives, (Alternatives C-1, C-2 and C-3), with In-Place Reconstruction of the Kennedy Interchange would not have direct wetland impacts. However, EPA notes that Table 5.10-2, *Direct and Indirect Impacts and Cumulative Effects by Alternative*, shows that Alternatives C-1 and C-3 would each impact two wetlands and Alternative C-2 would impact one wetland. Yet, Table 5.10-2 shows zero acres of direct wetland impact for Alternative C-2. The FEIS should correct this apparent inconsistency.

Response: *Table 5.10-2 has been revised, as recommended.*

- L.11 Depending on which table the reader consults, (i.e., Table III in Appendix B.3, Table 5.10-2 (pp. 5-138 to 5-154), or Table 3.6-7), Alternative A-16, (without considering Kennedy Interchange impacts), would impact either 13 or 15 wetlands (6.18 acres or 9.0 acres), including impacting either one or two forested wetlands, (i.e., wetlands KE-WE-7 and KE-WE-11A).

Alternative B-1 would impact 6 or 7 wetlands, for a total of 2.74 acres or 5.1 acres of direct wetland loss. Alternative A-2 would impact 13 or 15 wetlands, for a direct impact of 6.67 acres or 7.7 acres. Alternative A-15 would impact 11 or 12 wetlands, for a loss of 3.75 acres of wetlands. The FEIS should rectify the disparity between wetland information presented in the DEIS tables.

Response: *Tables 3.6-7, 5.10-2, and Appendix B.3-III have been revised, as recommended.*

- L.12 Forested wetlands are extremely hard to successfully replicate. When selecting a Preferred Alternative, avoidance to forested wetlands should be a top priority.

Response: *The Preferred Alternative does not impact forested wetlands.*

- L.13 Interchange areas are identified in the DEIS as most susceptible to induced development from a bridge/highway project. EPA suspects that, due to direct and indirect impacts to Lancassange Creek, and its associated wetlands and forested riparian areas, these areas will be lost and/or degraded due to induced development from the project, if Alternative B-1 is chosen.

Response: *Alternative B-1 has not been chosen as part of the Preferred Alternative.*

- L.14 Even though bridges are proposed for crossing all named creeks for this project, this will not prevent the destruction of forested vegetation in the floodplain, or in upland areas associated with these creeks. Consequently, wildlife habitat and wildlife corridors will be degraded, particularly due to habitat fragmentation. EPA encourages bridging across floodplains, when feasible, to reduce impacts on flood flow and wildlife corridors.

Response: *Floodplains will be crossed on-structure, and impacts will be minimized during the final design and permitting process. Executive Order 11988, Floodplain Management, requires that federal agencies must avoid significant impacts in a floodplain unless the responsible agency can demonstrate that there is no practicable alternative. Floodplains would be impacted as part of any of the studied alternatives, including the Preferred Alternative.*

FHWA's floodplain encroachment policy requires longitudinal encroachments to be avoided where practicable. If a longitudinal encroachment cannot be avoided, the degree of encroachment must be minimized to the extent practicable. Generally, any increase in the 100-year water-surface elevation produced by a longitudinal encroachment on a National Flood Insurance Program (NFIP) floodplain should not exceed the 1-foot allowed by the federal NFIP standards.

For more in depth discussion of floodplain impacts and proposed mitigation please refer to Section 5.9.

- L.15 EPA is pleased that the DEBE (p. 5-129) states: “Mitigation plan(s) would be incorporated for wetland impacts as part of the FEIS.” The FEIS should include the detailed wetland mitigation plan for the Preferred Alternative selected. If certain mitigation details cannot be provided at the time the FEIS is written, then the FEIS should contain statements of commitment to develop and do those portions of the mitigation work/plan that are not include. Any final mitigation plan should include, but not be limited to:

- A commitment to acquire and start work at the mitigation site/s or purchase mitigation credits at a mitigation bank prior to project construction;

- A detailed schedule of events in relation to bridge/highway work and wetland creation/restoration work;
- Detailed wetland construction plans;
- A detailed mitigation monitoring plan, including a time table;
- Detailed performance criteria to measure wetland mitigation success;
- Detailed specifications and commitments for corrective measures to be taken if performance criteria are not met; and
- A commitment to the establishment of a protection and management plan in perpetuity (i.e., legal surveys of the specific boundaries with buffers and conservation easements that are given to a land conservancy organization) for all mitigation areas.

Response: *The USACE met with FHWA on March 17, 2003 to discuss the selection of a Preferred Alternative, assure that the Preferred Alternative is the least damaging practicable alternative, and discuss potential mitigation sites. The USACE issued a letter dated March 25, 2003 to summarize their preferences (see Appendix C.9). The USACE suggested that it would be best to complete final delineations as final design commences, so that efforts can be made to further minimize wetland impacts during final design. These delineations and minimization efforts are needed for the detailed permit application that will be required at that stage, to fulfill the USACE review requirements under the Section 404(b)(1) Guidelines. The USACE noted that **Alternative A-15** has the smallest wetland impacts (from practicable alternatives), and as such expressed skepticism that Alternative A-16 (with greater wetland impacts) could demonstrate compliance with the Section 404(b)(1) Guidelines. The USACE noted that prior converted cropland is available in Clark County, Indiana that could be used for wetland mitigation. They noted that such mitigation is their preference and that alternative mitigation such as wetland banks or in-lieu-fee programs should only be used as a last resort.*

The FHWA agrees with the USACE, that it is preferable that final delineations, minimization efforts, and detailed mitigation plans be developed during final design. Since construction of the project may not occur for some time, wetland areas may be naturally created or destroyed. Excess ROW and remnant parcels will be identified as right-of-way acquisition proceeds. Detailed delineations, which will indicate the exact wetland impacts, will be undertaken during the design phase. FHWA commits to make a rigorous effort to minimize wetland impacts during final design. Wetlands directly impacted by the project will be mitigated in accordance with the existing Indiana Wetland Mitigation MOU ratios; at a minimum 1:1 for farmed wetlands, 2-3:1 for scrub-shrub and palustrine/lacustrine/emergent wetlands, to 3-4:1 for palustrine forested wetlands. FHWA commits to make every effort to identify replacement wetland on contiguous prior converted farmland within the watershed in Clark County. Alternative mitigation scenarios will only be pursued if it is determined that prior converted cropland is not

reasonably available. The respective State DOTs will be responsible for retaining the services of individuals qualified to delineate and design wetland mitigation sites during final design. Given that wetlands may naturally increase, decrease, be eliminated, or be created, FHWA believes it is a more prudent expenditure of public funds to develop detailed mitigation plans during final design to meet the requirements of the USACE, when details exist to support such development.

- L.16 The EPA recommends a minimum 100-foot vegetated buffer be provided around each wetland mitigation site. The buffer will enhance wildlife habitat and protect the site from sediment buildup that could result from land use practices immediately outside the buffer area, (e.g., general development construction, farming). We suggest the proponents consider planting indigenous tree samplings in the wetland buffer areas, to help mitigate for the loss of riparian and upland forested habitat. We recommend protection of the buffer area in perpetuity. Because of the difficulty and challenges of creating a new wetland, restoration of existing wetlands is preferred to wetland creation.

Response: *Recommendations specific to the proposed mitigation sites will be coordinated with the appropriate regulatory agencies during the final design. Input will be solicited from the EPA, USACE and USFWS during the development of the mitigation plans. Refer to Section 5.10.6 for a detailed discussion of wetland mitigation recommendations, including buffer areas.*

- L.17 Regardless of the mitigation options chosen for wetlands, it is critical to establish baseline, or existing conditions for the proposed mitigation site, and to develop quantitative success criteria based on local reference wetland conditions.

Response: *The function and value of impacted wetlands will be assessed. As such, the mitigation site must be of equal or better quality. A five-year monitoring plan will be conducted for each mitigation site to ensure the success of the wetland. If the function and/or value of the wetland are not meeting the established success criteria, modifications to the wetland site will be required. A wetland site is typically not released from the monitoring program until all wetland criteria are satisfied for three consecutive years.*

- L.18 If mitigation cannot be performed within the same watersheds where wetland impacts occur, and mitigation banking is proposed as an option, then details on the mitigation bank(s) should be included in the FEIS. This information should include, but is not limited to, the location of the mitigation bank(s), and the respective service area(s), description of the bank's landscape setting (geomorphology), water source(s), vegetative structure and composition, identification of the bank owner, total acreage to be purchased, types and

acreage of wetlands to be purchased, cost, and an explanation of how the functions and values of the wetlands lost are replaced by the proposed mitigation.

Response: *At this time, there is no intention to utilize mitigation banks within the project limits. It is not evident at this stage of project development if the use and/or development of a wetland mitigation bank will be necessary. The impacts to wetlands cannot accurately be established until the final design stage.*

L.19 In section 5.10.6, pg. 5-156, the document states that wetland mitigation will be developed to “address the replacement of wetland functions and values.” Any wetland mitigation plan that is developed should follow the format that was published by the Louisville District Corps of Engineers, titled Wetland Compensatory Mitigation and Monitoring Plan Guidelines for Kentucky.

Response: *The USACE, Louisville District, has jurisdictional authority over the wetlands within the project area. All delineations, impacts, permits and subsequent mitigation will be coordinated through that office. The Wetland Compensatory Mitigation and Monitoring Plan Guidelines for Kentucky will be utilized in the development of the mitigation plan.*

L.20 The proposed Alternative A-2 route crosses Putney’s Pond in Prospect. In 1998 the USACE identified this area as protected wetland. A 1999 CTS survey of plant and aquatic life in the pond has never been made available to the public. As of January 2001, the Bridge Project’s published maps did not show this area as a wetland. A large bridge will affect the entire wetland. Large construction material required at the site will impact very fragile banks, which are nesting sites for the Great Blue Heron and 18 other species of waterfowl. While current maps list Putney Pond as a wetland, the Summary of Impacts Chart shows only 6.67 acres of wetland affected by Alternative A-2. Putney’s Pond encompasses some 11 acres of land. Obviously, not all of these 11 acres have been included in the count.

Response: *The Preferred Alternative will not impact Putney’s Pond.*

M. Visual and Aesthetic Resources

M.1 In evaluating visual and aesthetic resources, the DEIS did not utilize recognized and relevant guidelines, including the Ohio River Corridor Master Plan; materials related to the identification and protection of historic properties; and FHWA’s Guidance Material on the Preparation of Visual Impact Assessments.

Response: *The approach used to assess impacts to the visual environment in the project area was based on the methodology outlined in the publication entitled*

“Visual Impact Assessment for Highway Projects” (USDOT 1981) and other related resources management publications (USDA 1974). The discussions on visual and aesthetic resources in Sections 4.11 and 5.11 address the issues in that publication. Visual impacts related to historic properties are addressed in Section 5.3.1 in accordance with Section 106 of the National Historic Preservation Act.

- M.2 The visual analysis downtown is not commensurate with the scope of the reconstruction of the Kennedy Interchange and an additional six lanes across the Ohio River.

Response: *Even though there is an existing interchange and river crossing at this location, construction of an additional bridge and reconstruction of the Kennedy Interchange will result in additional and somewhat larger, more visible transportation facilities downtown. The new facilities will have a visual impact on the downtown areas, particularly those immediately adjacent to the new structures. The visual impacts are not anticipated to be significant, however, due to the proximity of the new construction to the existing facilities and the already large scale of those existing facilities.*

- M.3 The DEIS fails to adequately inventory, organize, and evaluate potential impacts on visual and aesthetic resources, and potential mitigation measures. Opportunities for enhancement do not substitute for an analysis of negative viewshed impacts.

Response: *Existing landscapes are described in Section 4.11.3. Potential visual impacts of each alternative are evaluated in Section 5.11.3. Potential mitigation measures will be coordinated with local communities during the design phase of the project to determine the appropriate measures to incorporate into the final design. Examples of mitigation measures that will be presented to the public for consideration are described in Section 5.11.5.*

- M.4 The DEIS’s conclusion of no adverse visual impacts on historic properties in the downtown area is insufficient because it is based on no, or limited, baseline sampling and non-representative future traffic projections.

Response: *Determinations of Effect for all historic properties, within the APE for each alternative, were conducted in accordance with Section 106 of the National Historic Preservation Act, were concurred with by the SHPOs, and were coordinated with the Advisory Council on Historic Preservation.*

- M.5 The effects of roadway lighting on adjacent properties and mitigation measures proposed to address this issue should be presented.

Response: *Roadway lighting will be provided only at interchanges. To minimize impacts on adjacent properties, directional lighting will be utilized.*

M.6 The Butchertown Neighborhood Association requested that its designated representatives be involved in the design and construction phases of any downtown elements of a Preferred Alternative.

Response: *As implementation of the Preferred Alternative proceeds, residents adjacent to the roadway alternatives will be provided opportunities to be proactively involved in design and construction activities.*

M.7 The designation of River Road as a Kentucky Scenic Byway should be considered. The existence of this designation on seven miles of Upper River Road calls into question the DEIS designation of this roadway as having “low” viewer sensitivity.

Response: *Designation of a road as a Scenic Byway requires a formal action by the Governor of the state. While previously designated Scenic Byways receive additional consideration under the NEPA process, there are no provisions in the NEPA process for identifying potential scenic byways for future designation.*

M.8 The DEIS does not adequately assess impacts to the Country Estates Historic District. The potential alteration to land, landscape, vegetation, and viewsheds requires fuller analysis. This Historic District (and particularly the Drumanard property) will be adversely impacted by all of the Eastern bridge alternatives. Properties such as Nitta Yuma, Boxhill, Cobble Court, and Shady Brook Farm are at risk.

Response: *Impacts to all historic properties, within the APE for each alternative, were assessed in accordance with Section 106 of the National Historic Preservation Act. Determinations of Effect were concurred with by the SHPOs, and were coordinated with the Advisory Council on Historic Preservation.*

M.9 St. Francis in the Fields Episcopal Church would not be adequately protected from visual impacts because portions of the road created by Alternatives A-9, A-13 and A-15 would be visible from the church. In addition, expected commercial development would be visible from the church. Visual impacts will have a devastating effect on St. Francis’ Olmsted Brothers designed landscape.

Response: *Even though wooded terrain and residences will block most of the view of Alternatives A-9, A-13 and A-15 from the church grounds, portions of the road will be visible from some elements of the property. Any future*

development in this area would have additional visual impacts to the church and landscape.

- M.10 If an East End bridge is built, it should be a work of art and not a utilitarian structure like some of the current downtown bridges. The East End bridge should be built to include the most sensitive design standards to increase the aesthetic detailing of the structures and landscaping.

Response: *The bridge design team for this project will include one or more firm(s) that specializes in aesthetic detailing of structures and/or landscaping.*

- M.11 The new bridge should be a suspension or cable-stay design, but it might look out of place next to the truss-style Kennedy Bridge.

Response: *The bridge design team for this project will include one or more firm(s) that specializes in aesthetic detailing of structures and/or landscaping to ensure that the new bridge will blend into the existing setting and landscape.*

N. Hazardous Substances

- N.1 Elaboration should be provided regarding the regulatory source and status of potential hazardous waste sites identified in the project area. This includes the database source, and whether they are regulated as large or small quantity generators. This should include information regarding the regulatory status and existing remediation plans, if any, of the one Indiana site proposed for Phase II investigations.

Response: *Table 4.12-1 has been augmented to contain the requested information. Section 4.12 has been augmented to provide additional information regarding the proposed Phase II investigation site in Indiana.*

- N.2 Proposed alternatives should be shown on graphics to show their location relative to hazardous substance sites.

Response: *Figures 4.12-1a and 4.12-1b have been modified to depict the Preferred Alternative. The area of coverage of Figure 4.12-1d does not contain any of the alignments of the Preferred Alternative.*

- N.3 The FEIS should describe the proposed site remediation coordination activities with appropriate state and federal regulatory authorities.

Response: *Section 4.12 has been expanded regarding proposed site remediation coordination activities.*

N.4 The discussion in the DEIS concerning contaminated sites is limited to identification of properties and, for some, chemical constituents of concern based on Phase I environmental assessment. Only one site in the eastern corridor was recommended for a full Phase II investigation. The DEIS does not explain how sites would be remediated, including how public participation would be handled.

Response: *Sites identified in the Phase I investigation would first be characterized to determine if contamination is actually present and if the contaminant concentrations are above acceptable limits based on Kentucky Remediation Requirements. This above-mentioned site is not located within the Preferred Alternative right-of way; therefore, no remedial activities will occur at this site. There will be no direct involvement with the public during the remediation process, however management plans will be developed for the protection of the public and the workers during final design.*

N.5 The DEIS does not address the plan for remediation of contaminated sites, particularly in the industrial brown field area impacted by the proposed relocated Kennedy Interchange and the proposed I-71/Frankfort Avenue interchange.

Response: *Sites identified in the Phase I investigation would first be characterized to determine if contamination is actually present and if the contaminant concentrations are above acceptable limits based on Kentucky Remediation Requirements. Phase II investigation plans include selected sites identified in the Phase I investigation, including those sites that are impacted by the relocated Kennedy Interchange and the Proposed I-71/Frankfort Avenue interchange. Management plans will be developed for these specific sites for the protection of the public and the workers during final design.*

N.6 Page 4-114 states that a database search was performed to identify potential hazardous waste sites in the project area. Please clarify which database was searched. The DEIS does not mention whether any of the listed sites are regulated under CERCLA or RCRA, and what the regulatory status of those sites are.

Response: *In an effort to satisfy due diligence in accordance with the American Society for Testing and Materials Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-00 (ASTM Standards), the INDOT and KYTC initiated a database search, through Environmental Data Resources, Inc. (EDR), to identify any previously recorded hazardous materials site within the Downtown and East End Corridors (Figure S.1-1). The following databases were*

- *NPL and De-listed NPL sites - National Priority List*

- **CERCLIS** - Comprehensive Environmental Response, Compensation, Liability Information System
- **CERC-NFRAP** – Comprehensive Environmental Response, Compensation, and Liability Information System
- **CORRACTS** – Corrective Action Report
- **RCRIS-TSD** - Resource Conservation and Recovery Information System (Hazardous Waste Treatment, Storage and Disposal sites)
- **RCRIS-LQG** - Resource Conservation and Recovery Information System (Hazardous Waste Large Quantity Generator)
- **RCRIS-SQG** - Resource Conservation and Recovery Information System (Hazardous Waste Small Quantity Generator)
- **SHWS** – State Hazardous Waste System
- **SWF/LF** – Solid Waste Facilities List/Land Fill List
- **UST** – Underground Storage Tank Database
- **FINDS** – Facility index System/Facility Identification Initiative Program Summary Report.
- **HMRS** – Hazardous Materials Information Reporting System
- **MLTS** – Material Licensing Tracking System
- **PADS** – PCB Activity Database System
- **RAATS** – RCRA Administrative Action Tracking System
- **TRIS** – Toxic Chemical Release Inventory System
- **TSCA** – Toxic Substances Control Act

In addition to the database searches, appropriate state and local regulatory agencies and utility companies were also contacted to determine potential histories of past releases within the study area or on any adjacent properties that may impact a proposed alternative. These include, but are not limited to KYTC, INDOT, Kentucky Division of Waste Management General Files, Kentucky Division of Waste Management Underground Storage Tank Branch and Division of Water, Louisville Fire Department, Louisville Gas and Electric Company, IDEM and Local Emergency Planning Committees.

The project consultant conducted a windshield survey of the project study area to locate potential sites not identified in the database search.

An additional column has been added to Table 4.12-1 entitled “Source of Information,” which identifies the specific database(s) the potential hazardous materials site appeared in as a result of the database search conducted by EDR. Furthermore, additional information has been added to the “Site Status and Regulatory Sources” regarding the past operations, present environmental concern(s) with the site and source(s) utilized in identifying the site. As such, Section 4.12 has been augmented to contain the requested information.

N.7 The sources of the Phase I, II, and III data mentioned in the DEIS needs clarification; the sources of the information shown in Table 4.12-1 are not specified. In addition, it is unclear whether the information comes from a recent survey, from a file search of historical records, or both.

Response: *An additional column has been added to Table 4.12-1 entitled "Source of Information," which identifies the specific database(s) (identified in the response to comment N.6) the potential hazardous materials site appeared in as a result of the database search conducted by EDR. Furthermore, additional information has been added to the "Site Status and Regulatory Sources" regarding the past operations, present environmental concern(s) with the site and source(s) utilized in identifying the site. As such, Section 4.12 has been augmented to contain the requested information.*

N.8 The figures in this section show aerial photographs of hazardous materials sites. Please clarify whether the sites shown are listed in CERCLIS, RCRIS, and/or other specific databases. In addition, give further detail on whether they are regulated as large or small quantity hazardous waste generators, treatment, storage, and/or disposal facilities, etc.

Response: *Table 4.12-1 has been updated to indicate in which database the site was listed, the RCRA generator type (small, large or conditionally exempt small quantity generator). Each site was assigned a site number, which can be cross-referenced with Figures 4.12-1a to 4.12-1d. Furthermore, additional information has been added to the "Site Status and Regulatory Sources" regarding the past operations, present environmental concern(s) with the site and source(s) utilized in identifying the site. As such, Section 4.12 has been augmented to contain the requested information.*

N.9 On page 4-117, the acronym "ACM," listed next to Clark Nichols Quarry needs to be defined.

Response: *Section 4.12 has been augmented to reflect a concise historical view of this site, and the acronym "ACM" is no longer present. ("ACM" stands for asbestos-containing material.)*

N.10 Finally, if hazardous waste site remediation is needed in order for projection construction activities to proceed, the DEIS should mention how the FHWA, INDOT, and KYTC plan to coordinate these activities with EPA and the appropriate State agencies. Although Page 4-115 mentions that one property received a recommendation for Phase III (remediation), the DEIS does not mention the regulatory status of this site under EPA or Indiana state authorities, or whether there are any existing plans by these agencies and/or the Potentially Responsible Party (PRP) for site remediation.

Response: *A Preliminary Recommended Phase II Scope of Work has been submitted to both INDOT and KYTC. The plans focus on Environmental Risk Management of the Properties. Soil sampling will be conducted as necessary to protect the workers, the public and the environment from a potential exposure to contaminants above acceptable levels. If hazardous concentrations are discovered EPA will be notified and EPA Hazardous Waste Generator numbers will be obtained for appropriate disposal and tracking purposes.*

The Cotton Real Estate property in southern Indiana located at 530 Indiana Avenue. As noted in the initial baseline, historical Sanborn Maps and aerial photography indicate that a grocery was located at this site from the late 1800s to the early 1960s. During the on-site reconnaissance a fill port was visually observed in the center of the sidewalk at this location. No UST records were kept during this time; therefore, it is highly suspected that a UST may still be present at this location. A Phase II investigation should be conducted to determine if in fact the tank is present. If the tank is present, then Phase III work will begin to remove the tank in accordance with Indiana UST requirements. The responsible party will be the person that registers the tank.

N.11 A Downtown bridge must take into account the abatement of existing brownfields in the Waterfront/Butchertown area.

Response: *A detailed Phase I Hazard Material/Underground Storage Tank investigation has been conducted in the Waterfront/Butchertown area. The results are reflected in Section 4.12 of the FEIS.*

N.12 An East End bridge will merely shift the danger of hazardous materials from downtown to the East End.

Response: *An East End bridge would route traffic through a less densely populated area than the Downtown area, thus minimizing the potential threat in the event of a hazardous materials release due to an accident. Measures to contain a potential hazardous materials release will be considered during the design of the Preferred Alternative.*

N.13 Straightening out the curves in I-65 and reducing downtown traffic can reduce the harms from hazardous materials downtown.

Response: *While it is true that the realignment of Spaghetti Junction and hospital curve will decrease the potential risk of a hazardous materials release due to an accident, realignment alone will not reduce downtown traffic. The Purpose and Need (Chapter 2) indicates that construction of an East End bridge will reduce traffic in the Downtown area, thus decreasing the potential risk of a*

hazardous materials release due to an accident by enhancing the flow of traffic.

- N.14 INAAP stores heavy metals and hazardous materials and may become a Superfund site. We should not build a bridge to such a location.

Response: *Current plans call for the remediation and redevelopment of the INAAP property. Any remediation will be carried out in compliance with federal and state environmental laws. Construction of an eastern bridge, which would improve access to the INAAP property, would not adversely affect the remediation of any contamination located on that property. Moreover, local officials on both sides of the Ohio River have identified the INAAP property as a major economic development tool for the region and desire to improve access to the property in order to serve its redevelopment.*

- N.15 A new East End bridge will be designated a hazardous materials route, and it is not prudent to direct hazardous materials toward Prospect since a spill may require evacuation.

Response: *FHWA, INDOT and KYTC have no plan to designate the eastern bridge/highway as a hazardous materials route, and such a designation is not included in the description of the Preferred Alternative. A new bridge in the eastern corridor may divert some traffic containing potentially hazardous materials through less densely populated areas than the downtown corridor. This would make a potential evacuation in the event of a hazardous materials release due to an accident quicker and easier and affect less people. A new eastern bridge also may reduce the potential risk of a hazardous materials release due to an accident at hospital curve in downtown Louisville. However, there is no plan to direct hazardous materials to any particular route in the metropolitan area, including the proposed new eastern bridge.*

- N.16 An East End bridge should be designated a hazardous materials route.

Response: *Neither INDOT nor KYTC plans to designate hazardous materials routes in the Louisville Metropolitan Area, including on the proposed eastern bridge. Federal regulations would require an analysis and opportunities for public involvement before any future designation of a hazardous materials route in the metropolitan area.*

- N.17 The proposed bridge in Alternative A-13/A-15 is not safe for hazardous materials transport.

Response: *Alternatives A-13 and A-15 traverse less densely populated areas than the alternatives in the downtown corridor. Therefore, either of these alternatives would reduce the potential threat of a release of hazardous materials*

associated with an accident. In the event of an emergency, either of these alternatives would provide a quicker and more efficient evacuation response than the alternatives in the more densely populated downtown corridor.

- N.18 During this project, old regulated and non-regulated underground storage tanks may be encountered, as well as other contamination. Such tanks and contamination must be properly reported and remediated.

Response: *A Preliminary Recommended Phase II Scope of Work has been submitted to INDOT and KYTC that covers known and suspected sites that may contain old regulated and non-regulated underground storage tanks (USTs) as well as other sources of potential contamination. In the event that an unexpected underground storage tank or other sources of potential contamination are discovered during construction of the project, workers will follow the same health and safety guidelines as specified in the approved Health and Safety Plan. Work will cease in that area until the nature and extent of the potential contamination, if any, is determined. All tanks will be removed in coordination with the appropriate state agencies regulating UST's. Soils in that area will be characterized and any contaminated material will be handled and/or disposed of appropriately. All sampling will be conducted in accordance with the guidelines outlined in the Environmental Investigation Standard Operating Procedure and Quality Assurance Manual (EISOPQAM) USEPA Region 4.*

O. Agricultural Resources

- O.1 The DEIS has failed to fully quantify the Indiana farm property that will be completely lost from production because of the eastern bridge/highway, and has understated the affected amount by two- to three-fold.

Response: *The total loss in farmland projected for each alternative is given in Appendix B.4. The area of southeastern Clark County through which Alignment A-15 would pass is already experiencing rapid residential and commercial growth, and the consequent loss of farmland. This rapid growth is occurring without regard to the proposed construction of an eastern bridge and highway along Alignment A-15. In order to mitigate potential changes in land use and development in Clark County, including the loss of existing farmland, as a result of the implementation of the Preferred Alternative, INDOT has committed to provide a \$300,000 grant to Clark County that will be used to accomplish one or more of the following objectives: (1) hiring professional planning consultants to revise Clark County's comprehensive plan, zoning maps, zoning code, and subdivision control ordinance; (2) developing strategies for funding on-going planning and zoning functions; (3) creating a public education campaign; and in general, (4) developing other strategies to encourage wise, aesthetically pleasing, environmental protective, history-*

mindful, and economy generating “smart growth” in the areas affected by the Project. This mitigation commitment is documented in Chapter 8.

- O.2 The DEIS does not properly perform an indirect and cumulative effects analysis for farmlands, and contains internally inconsistent conclusions about the reasonably foreseeable potential for loss or fragmentation of farms and farmland resources from induced growth.

Response: *The Indirect and Cumulative Effects Analysis of agricultural land indicated that continued development of eastern Jefferson and Clark Counties would be associated with eastern bridge alternatives. This would continue the trend of farmland loss that has experienced in the past two decades.*

- O.3 Our priority should be to minimally disrupt existing farmland.

Response: *Every reasonable effort has been made to avoid and minimize disruption of existing farmland as a result of implementation of the Preferred Alternative. Anticipated impacts to agricultural resources are described in Section 5.2, and Section 5.2.3 describes proposed mitigation measures for agricultural impacts.*

- O.4 The DEIS’s statement that farmland conversion is “desired and planned for” is inconsistent with Governor Patton’s Smart Growth Task Force’s emphasis on “protecting family farms, biodiversity, and making the best use of our natural resources in the face of development pressures.”

Response: *The statement in the DEIS regarding planned conversion of farmland was not a general statement with respect to all farmland, but a specific reference to limited portions of the metropolitan area where such conversion has been identified and planned by local land use planning officials. This is particularly a reference to portions of southeastern Clark County where county planners have targeted future commercial and residential growth. There was no intention to suggest that land use plans in Jefferson, Oldham, Floyd or Clark counties generally call for the conversion of farmland. As noted in the DEIS (pgs. 5-52 to 5-53), the designation of some areas for conversion from farmland to commercial/residential development helps local jurisdictions to alleviate development pressure on rural areas further from the urban core, thus inhibiting “sprawl” development.*

The selection of the Preferred Alternative was based on a balancing of the transportation needs and environmental impacts identified and evaluated in the EIS. That includes efforts to protect family farms, biodiversity, and natural resources while meeting important community needs related to transportation and economic efficiency. While Governor Patton’s Smart Growth initiative was not enacted by the Kentucky General Assembly (see

Response to Comment D.21 above), FHWA believes that the selection of the Preferred Alternative is consistent with general smart growth principles.

P. Construction

P.1 Access disruptions to St. Francis in the Fields Episcopal Church may violate the Religious Land Use and Institutionalized Persons Act (RLUIPA) of 2000, particularly if construction activities make it difficult for parishioners to reach the parish or attendees of the preschool to reach the preschool.

Response: *Access would be provided to St. Francis in the Fields Episcopal Church during construction of the Preferred Alternative. No change in access to the church is proposed with the Preferred Alternative. No violation of the RLUIPA will occur due to this project.*

P.2 Potential effects from relocation of utilities as a result of construction of the project are not adequately addressed in the DEIS. Relocation of major utilities and structures may result in direct takings or proximity impacts to residences and businesses, including some historic properties.

Response: *Utility relocations will have to comply with all applicable laws and regulations. Coordination activities were carried out with utilities providing service in the project area during the preparation of the DEIS; these response letters are included in Appendix C.3. Takings and impacts to proposed utility relocations were considered, as appropriate, in the preparation of the EIS.*

P.3 Except for cursory discussions of noise and redirected traffic impacts, construction impacts from the downtown bridge alternatives on downtown neighborhoods have been ignored.

Response: *With the exception of displacements, noise and traffic impacts, other construction related impacts to the Bridgepointe, Phoenix Hill and West Louisville neighborhoods would be minimal.*

P.4 The DEIS overlooks the potential costs of delay, congestion and suspension of business activities during construction.

Response: *A preliminary maintenance of traffic plan has been developed for the Preferred Alternative. These issues will be considered in its refinement. Access to all properties, especially businesses will be maintained at all times.*

P.5 A road closure analysis was not included in the DEIS.

Response: *There would be no roads permanently closed with the highway/bridge alternatives. Some realignment of existing roadways may occur in the vicinity*

of proposed interchanges. In addition, there may be some limited, temporary road closures during construction. However, those closures would be of limited duration, and appropriate maintenance of traffic measures would be imposed to limit the effect of such temporary closures.

- P.6 Land needs for material and equipment storage and construction worker parking have not been disclosed. The consequences of transporting construction materials also have not been disclosed.

Response: *These construction issues will be addressed in the permitting stages of project development.*

- P.7 Hours of construction operation should be restricted.

Response: *This issue will be addressed in the design and construction phases of the project. Construction operations would comply with local noise ordinances.*

- P.8 Road closings on KY 841 between U.S. 42 and I-71 will impact traffic in eastern Jefferson and western Oldham Counties. The construction project should provide for adequate traffic control should these road closings become a reality.

Response: *No long-term construction-related closing of KY 841 is anticipated. If short-term closings were required, traffic controls would be implemented to accommodate diverted traffic.*

- P.9 The DEIS should include an analysis of effects on traffic during the years of construction of the total project. The City of Louisville is concerned about economic impacts on downtown should traffic congestion not be resolved quickly.

Response: *A preliminary maintenance of traffic plan has been developed for the Preferred Alternative. This issue will be considered during final design. By relocating the Kennedy Interchange to the south, impacts upon existing traffic patterns will be reduced. As part of the Financial Options Plan, a traffic maintenance plan has been developed for the Preferred Alternative. This plan is available for review in the local project office.*

- P.10 Staging construction should be carefully planned to reduce negative impacts and to avoid partial takings. Property remnants should be used as staging areas.

Response: *A preliminary construction staging plan has been developed for the Preferred Alternative. These issues will be considered in its refinement. The use of remnant parcels for construction will be addressed during the final design.*

P.11 The discussion of traffic maintenance is the most damaging example of the DEIS's failure to assess the effects of worsening traffic congestion on the Downtown area. The DEIS only comments on cross-river traffic management, and not the more important concerns of general congestion. A perfectly acceptable traffic management plan may be developed to alleviate these potential problems. In fact, that is one of the advantages of the reconstruction of the Kennedy Interchange to the south, but is not discussed.

Response: *A preliminary maintenance of traffic plan has been developed for the Preferred Alternative. This issue will be considered in its refinement. As part of the Financial Options Plan, a traffic maintenance plan has been developed for the Preferred Alternative. This plan is available for review in the local project office.*

P.12 Aerial photographs in the DEIS show areas of potential construction which are immediately adjacent to proposed interchanges. It is unclear whether the limits of the construction will extend over stream crossings that are not shown. Larger scale maps, which clearly illustrate the entirety of the proposed construction in relation to water bodies and wetlands, would be helpful.

Response: *Appendices A.1 through A.9, which show the alternatives with potential construction limits on an aerial photo base, have been augmented with the inclusion of water bodies and wetland boundaries.*

P.13 Alternatives A-13 and A-15 will require closure of U.S. 42 and diversion of traffic onto River Road during construction. This will create traffic problems.

Response: *Minimal traffic problems are anticipated with the construction of the East End bridge portion of the Preferred Alternative. Construction of the Preferred Alternative will not require the closure of U.S. 42.*

P.14 To begin work on Spaghetti Junction without first diverting some traffic to an East End bridge would be dangerous.

Response: *The construction sequence of different elements of the Preferred Alternative will be developed in the design stages of the project. Travel impacts including traffic diversion alternatives will be considered in the development of the implementation plan.*

P.15 The final designs for Spaghetti Junction should be done by someone who has to drive the Spaghetti Junction every day. Casual observers will not understand the traffic flow well enough to effectively redesign the interchange.

Response: Professional engineers using AASHTO and applicable state design standards will do the design of the Kennedy Interchange reconstruction.

P.16 The construction impacts, which the DEIS describes as “temporary,” will last for years. Entire watersheds will be impacted negatively for years. The mere staging of the construction will be substantial. These disruptions have not been adequately examined.

Response: The staging of construction for the 2007-2020 construction period is described in the Financing Options document, which is available for review at the local project office. While the project will be staged over a 14-year period, individual contracts are normally limited to one or two construction seasons. The Rule 5 Erosion Control Permits and the Section 404/401 permit conditions will be included in the construction contracts to ensure that best management practices are incorporated into the contract documents and implemented during construction. Construction impacts are discussed in Section 5.14. Final design plans coordinated with respective regulatory agencies to incorporate BMP.

P.17 The DEIS does not take adequate consideration of existing regulations and programs that will be impacted by construction and long-term operation of the bridges.

Response: These construction issues will be addressed in the permitting stages of project development. Final design plans coordinated with respective regulatory agencies to incorporate BMP, as detailed in the response to P.16.

P.18 The DEIS does not present construction and road maintenance materials alternatives that could reduce and mitigate storm water pollution.

Response: These construction issues will be addressed in the permitting stages of project development. Final design plans coordinated with respective regulatory agencies to incorporate BMP.

P.19 Construction should not take place at night or on the weekends. Construction truck traffic should be forbidden during these hours. Construction lighting should be directional and not spill over into the neighborhood.

Response: The staging of construction of the 2007–2020 construction period is described in the Financing Options document, which is available at the local project office. While the project is staged over a 14-year period, the individual contracts are normally limited to one or two seasons. The Rule 5 Erosion Control Permits and the Section 404/401 Permit conditions will be included in the construction contracts to assure best management practices are

incorporated into the contract documents and implemented during construction. Construction Impacts are discussed in Section 5.14.

P.20 Any delay in building the East End bridge will make such construction more difficult as the area becomes more populated with homes and businesses.

Response: *This is correct. Preservation of a highway corridor by execution of the Record of Decision (ROD) by the FHWA will assist local planning agencies in guiding future development patterns adjacent to the preferred corridors.*

Q. General

Q.1 There should be a comment period on the Preferred Alternative.

Response: *The FEIS describes a Preferred Alternative. A 60-day period will be provided for agency review and comment. This is twice as long as CEQ NEPA Regulations generally require for Federal agencies. Members of the public may submit comments to FHWA during this 60-day agency review period, although no formal written response to comments will be provided.*

Q.2 The DEIS fails to meet the five Strategic Goals of the Federal Highway Administration.

Response: *The FHWA's five strategic goals are: improve safety, provide greater mobility (access) and increase system productivity (efficiency), enhance the human and natural environment, ensure national security and raise the standard of organizational excellence (quality). The EIS identifies four needs the project should address: support for local planned growth, peak travel period congestion reduction, safety improvement and transportation system continuity/redundancy. These are compatible with the first four FHWA goals. Regarding the fifth FHWA strategic goal, the EIS process with provisions for reviews by the sponsoring groups, permitting agencies, local governments, organizations and individuals enhances the quality of the EIS.*

Q.3 Some commenters expressed concerns that I-265 should (or could) be designated as a Hazardous Materials route, particularly in light of the presence of the Medical Complex near the Kennedy Interchange.

Response: *Neither INDOT nor KYTC plans to designate hazardous materials routes in the Louisville Metropolitan Area, including on the proposed eastern bridge. Federal regulations would require an analysis and opportunities for public involvement before any future designation of a hazardous materials route in the metropolitan area.*

Q.4 The presentation of Kennedy Interchange impacts for the single bridge alternatives should be restructured and more clearly presented.

Response: *This issue arose because all single bridge alternatives included the reconstruction of the Kennedy Interchange. In presenting data regarding alternatives' impacts and related items e.g. costs, for mid- and far-east alternatives, information was presented only for their alternatives. The impacts of the Kennedy Interchange reconstruction were presented separately. The Kennedy Interchange reconstruction impacts must be added to the appropriate East alternative information to yield the total impacts of each East End alternative. In this instance, the Kennedy Interchange reconstruction information excludes that associated with the construction of a downtown Ohio River Bridge. This was because, with the exception of Alternatives C-1 and C-3, all single bridge alternatives would be considered a two bridge alternative with the inclusion of a downtown Ohio River crossing associated with the Kennedy interchange reconstruction. It was noted in the Section 3.2.5 that the Kennedy interchange reconstruction would require a new Ohio River bridge to provide acceptable levels of service. For single bridge alternatives, impact and cost information is presented separately, where appropriate, for single bridge alignments from that of the Kennedy interchange reconstruction elements.*

Q.5 Some resources in the project area were omitted from the DEIS. These included the Marina Village on River Road at Harrods Creek, selected parks and recreation areas and neighborhoods.

Response: *Information regarding the Marina Village has been added to the identification of resources.*

Q.6 There is a lack of minority representation on the Metropolitan Planning Organization.

Response: *FHWA/FTA conduct certification reviews of metropolitan planning processes every three years. KIPDA has had outreach to encourage increased minority participation.*

Q.7 Any construction of an eastern bridge on Alternatives A-13, A-15, or A-16 should include improvements to U.S. 42, with special reference to the Bridgepointe Subdivision entrance. This should include grading the rise in U.S. 42 south of the Bridgepointe entrance, widening U.S. 42 to include a turn lane at the Bridgepointe entrance, and installing a traffic signal at the Bridgepointe entrance.

Response: *In the regional transportation plan U.S. 42 is proposed to be upgraded from a four-lane undivided roadway to a five-lane roadway with a continuous two-way left turn lane.*

Q.8 Local fire departments should be involved in the bridge and tunnel design.

Response: *Agencies responsible for provision of emergency services have been involved in the development and assessment of alternatives. This involvement will continue as the Preferred Alternative is designed and constructed.*

Q.9 Elements of the DEIS contractor's scope of work were under-funded and under-scoped, and many significant items do not appear to have been conducted, although invoices appear to show that the work was completed and paid for.

Response: *All necessary elements of the CTS scope of work have been or are being completed to support FHWA's responsibilities under NEPA. INDOT and KYTC have actively supervised the work of CTS to ensure that all necessary work has been or will be completed to satisfy the legal requirements applicable to the Project, including NEPA, Section 106, and Section 4(f). Some minor adjustments in the consultant's scope of work were agreed upon among the parties as work on the Project progressed, in order to ensure full and good faith compliance with all applicable legal requirements. Compliance with those legal requirements, rather than strict adherence to the consultant's original scope of work, was the highest priority for completing this Project in compliance with the spirit and the letter of the law. INDOT and KYTC are satisfied that CTS has complied with all of its obligations under its contract.*

Q.10 The DEIS does not demonstrate that information received from the public was actually analyzed, not just listed or mentioned.

Response: *Development of Alternative A-15 was done by a recommendation from a member of an AWO in Utica. Information is presented in Chapter 7 and Appendix F regarding use of public input in the generation and analysis of alternatives.*

Q.11 The DEIS does not reflect any synthesis, serious analysis, or serious consideration of several agencies' and neighborhoods' concerns, including effects on the Ohio River aquifer, urban sprawl, urban disinvestments, and the construction of interchanges.

Response: *Impacts on sprawl and urban disinvestment issues are discussed in Section 5.1; impacts on groundwater are discussed in Section 5.8.2. The analysis of interchange impacts on different resource issues was not analyzed separately.*

as “interchange” impacts, but rather in the context as a component of each alternative, as appropriate.

- Q.12 The total earmarked federal funds for Kentucky and Indiana under the TEA-21 (the 1998 highway reauthorization bill) was less than \$400 million. A significant diversion of state funds to build the eastern bridge would have opportunity costs in terms of other transportation programs and needs, including the proposed light rail system in Jefferson County, Kentucky.

Response: *Information regarding project cost can be found in the FEIS Summary Section S.2.3. The associated Financing Options document further details project costs, project phasing, historical revenue trends and projected future revenues available to the States, and a reasonable financing strategy. The Financing Options document reflects the intent of the States to commit funds from their available resources to support construction of the Louisville Bridges over the estimated 2007-2020 construction period. The historical trend information, the projected future revenues available to the States, and the strategy articulated to finance the project serve as a reasonable demonstration that the States are positioning themselves to give priority to funding the Louisville Bridges project, at the same time as they continue to give priority to maintenance of their existing system.*

Table S.2-1 in the FEIS Summary illustrates that there will be an estimated \$1.63 billion reduction in user costs over a 20-year period after the Preferred Alternative is open to traffic due to the increased cross-river network efficiency throughout the 5-county LMA. This project results in a significant increase in network efficiency. This demonstrates that there is a large opportunity cost for highway users by implementation of the Preferred Alternative.

- Q.13 The “permits analysis” currently in the DEIS is incomplete and inadequate.

Response: *Section 5.15 has been updated reflecting the permits currently required to implement the project. The agencies responsible for obtaining the permits are also identified.*

- Q.14 The summary reports in the Executive Summary on pages S-9, S-10, and S-11 do not include critical information and at times do not accurately reflect underlying data. Changes should include:

In Table S.2-1, the Kennedy Interchange alternatives should be separated from each one bridge option to make clear how the individual alternatives impact various traffic measures. The table should indicate how each bridge alternative affects the Kennedy Interchange reconstruction. Effects

on LOS and average speeds should be shown. All information also should be shown for interim years.

In Table S.2-2, separate costs for all downtown alternatives should be shown, as with the A and B alternatives. It is not clear whether costs for maintenance of traffic have been included in both the In-Place and Relocated Kennedy Interchange options.

Response: *The information presented in Table S.2-1 is “summarized information”. It has been tailored to present the differences of project alternatives. If more detailed information is desired the user is directed to Section 3.6. Capital costs of both the Relocated and Reconstructed-In-Place Kennedy Interchange options are presented for all three downtown river crossing alternatives. Maintenance of traffic costs is contained in the information presented in Table S.2-2.*

Q.15 The DEIS failed to adequately and properly consider cumulative effects pursuant to the NEPA regulations and the CEQ guidance on such analyses. The cumulative effects analysis was not properly scoped (failure to identify significant issues, geographic scope too narrow, time horizon too short, other actions ignored). The DEIS only includes a list of resources that may be directly or indirectly affected by the proposed action, missing some cumulative effects. The description of the affected environment fails to address a number of significant baseline conditions (e.g., overburdened social services; unstable labor markets; disruption of community mobility; loss of neighborhoods).

Response: *An extensive effort was included in the work undertaken for the environmental phase of the Louisville – Southern Indiana Ohio River Bridges Project to assess the indirect impacts and cumulative effects of the project on resources within the area. A seven-step assessment process was used to identify and characterize resources that would be affected, the spatial and temporal boundaries of those resources, other major actions within the area, determine environmental consequences, and address mitigation/monitoring opportunities. Discussions and coordination regarding indirect impacts and cumulative effects began during project scoping. Communications with various state and federal agencies was initiated after the formal agency scoping meeting held in October 1999. An agency coordination meeting regarding indirect and cumulative effects was held in Louisville, Kentucky in April 2001 and subsequent to that meeting, follow-up meetings held with individuals and interest groups to further discuss issues concerning indirect and cumulative effects, answer questions, and obtain additional input. On August 28, 2001, an ICEA planning workshop was held to receive input from county and city planners and planning and economic development staff from Indiana and Kentucky regarding existing and future population and*

employment growth within the five-county Kentucky-Indiana Planning and Development Authority (KIPDA). The information gained through these meetings and communications was used to evaluate indirect and cumulative impacts on resources within the study area and provide information for the Environmental Impact Statement. Refer to Table 5.10-2.

Q.16 The socioeconomic analysis documents supporting the DEIS were not made reasonably available to the public. The DEIS is legally insufficient until those documents have been widely disseminated, and reasonable time for public comment has been allowed.

Response: *A 105-day comment period was provided for the DEIS. This is in excess of the FHWA recommended minimum of 45 days. Access to all supporting documents and other related information was provided in the Project office – centrally located in the project area.*

Q.17 An East End bridge is too expensive to justify.

Response: *The user benefits, comprised of travel time and distance savings compared to the No-Action Alternative, projected to accrue from the construction of the Preferred Alternative would exceed its estimated construction costs. Approximately \$1.6 billion will be saved by the vehicle users cost of constructing the Preferred Alternative*

Q.18 FICA and Social Security taxes should both be used to pay for a bridge.

Response: *FICA and Social Security taxes would not be used to fund this project. The Financing Options document identifies a reasonable strategy for financing the Project over the expected 2007-2020 design and construction period. The Financing Options document is available for review at the local project office. A more detailed Finance Plan will be prepared and approved by FHWA before the Project can be advanced to construction. It is anticipated that Highway Trust Funds (user fees) would be the major source of funds used for construction. See Section 3.6.8 for more information on project financing.*

Q.19 Displaced homeowners must be compensated fairly, with additional money for moving expenses and punitive damages for the loss of our lifestyles.

Response: *All displaced homeowners and tenants will be compensated fairly and in accordance with the Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Program Act. See Section 5.1.5 for elaboration.*

Q.20 If there is not enough money for the bridges, simply charge a toll to use the bridges.

Response: Section S.2.3 in the FEIS Summary describe the project costs and the associated Financing Options document demonstrates that the States have a reasonable strategy for funding this project with the future estimated revenues and the financing strategies discussed in the Financing Options document. A copy of the Financing Options document can be viewed at the local project office.

Q.21 The FHWA has no control or authority over mitigation. Mitigation measures should be included in the Memorandum of Agreement and in the record of decision. Public groups should be included in negotiation of mitigation issues.

Response: This is incorrect. FHWA does have control over mitigation proposed for the Preferred Alternative. The Section 106 Memorandum of Agreement (MOA) contains commitments by the FHWA (and other agencies) to mitigate adverse effects upon historic resources. Chapter 8 of the FEIS identifies all of the mitigation commitments of FHWA with respect to the Project. Those commitments will be confirmed and made legally enforceable through the issuance of the Record of Decision, which will complete the NEPA process. FHWA is obligated to ensure that those mitigation commitments are carried out.

The public has been given numerous opportunities to participate in the identification of mitigation measures for the Project. Within the Section 106 process, the Consulting Parties have participated in numerous meetings at which the Project's potential effects on historic properties and potential mitigation measures were identified and discussed. Those discussions led to the drafting of the Section MOA, which is included in Chapter 8. Similarly, through the NEPA process and the publication of the DEIS, the public was given the opportunity to review and comment on the potential environmental effects of the Project and potential mitigation measures. In addition, FHWA is providing a 60-day public comment period on the FEIS, which identifies all of the specific mitigation commitments for the Preferred Alternative.

Q.22 Federal impact funds should be made available on a continuing basis so that adequate personnel and equipment will be available to provide enforcement of traffic safety laws, investigation of traffic accidents and fire and emergency services at their present levels.

Response: This is an issue beyond the scope of an environmental impact assessment. The comment will be forwarded to appropriate agencies responsible for funding enforcement and emergency service response agencies for consideration.

Q.23 Overhead wiring should be buried as much as possible on existing streets and any streets affected by construction.

Response: *This issue will be addressed in the design of the Preferred Alternative.*

Q.24 All solid waste generated by the project should be disposed at a permitted facility.

Response: *All disposal of waste material shall be in accordance with federal, state and local requirements.*

Q.25 Appendix A.1 provides aerial photographs with color-coded overlays of the various alternatives. It would be helpful if the color codes were the same as those used in the main text.

Response: *The alternatives are clearly identified in both the main body of the EIS and Appendix A. The reviewer should have no problems relating to the alternatives in either document or comparison of each alternative's depiction in each.*

Q.26 Does the 200 foot right-of-way mean that there must be at least 200 feet between the highway and the closest house?

Response: *No. It means that the highway will be within an area that is 200 feet wide. No property outside this 200 foot swath (200 foot minimum in Kentucky, 260 foot minimum in Indiana; See Typical Sections in Appendix A.9) would be taken, or used, by construction of the highway. The distance from the highway to the nearest structure, such as a house, would be unique for each structure; its existing location would be compared to the adjacent location of the highway within the right-of-way to determine the distance between the highway and the structure.*

Q.27 If proposal Alternative A-13 were chosen, what would be the cost differential with the same route above ground with bridges over U.S. 42?

Response: *Preliminary cost analysis indicate a cost differential of \$65 million for the construction of the Alternative A-13 section at U.S. 42 as an elevated section rather than a tunneled section. This would have Section 4(f) impacts on the Drumanard property immediately to the west of U.S. 42. This is described in Chapter 6.*

Q.28 The bridge proposals should be on the ballot so that Jefferson, Bullitt, Spencer, and Oldham County residents can voice their opinions.

Response: *The LMA is made up of Jefferson, Oldham, Bullitt and Clark counties. The KIPDA forum is the process for debating the merits of elements of the RMP such as the bridge proposals for the LMA.*

Q.29 All the bridges should be multi-modal and contracted for by the process of competitive building.

Response: *Nonmotorized facilities will be constructed on the Preferred Alternative's Ohio River bridges. Both the proposed downtown bridge and the proposed eastern bridge will include bicycle paths/pedestrian walkways connecting with existing or proposed non-motorized facilities on both sides of the Ohio River. Cross-river bicycle and pedestrian access downtown also would continue to be provided by the Clark Memorial Bridge, as well as the proposed connection on the redeveloped Big Four Bridge. All construction will be in conformance with the INDOT's and the KYTC's construction procurement regulations and guidelines. These include competitive bidding for major construction projects.*

Q.30 While the DEIS is supposed to be a supporting document for the two bridges solution, the Transportation Policy Committee of KIPDA approved of the JHK Consultant's recommended solution before the DEIS was published. This decision by the TPC may have encouraged the production of a biased document. The TPC should review its approval subsequent to releasing the FEIS.

Response: *The DEIS was not supposed to be a supporting document for the two bridges solution. Rather, the DEIS identified and evaluated a reasonable range of alternatives to address the transportation needs that were identified in Chapter 2. The identification of those needs grew, in part, out of numerous previous studies of the problem of cross-river mobility in the Louisville metropolitan area, including the Ohio River Major Investment Study ("ORMIS"). The recommendation of the ORMIS process, as confirmed by the KIPDA TPC, was for the so-called "two bridge solution." JHK was the consultant for that process.*

Despite the ORMIS two-bridge recommendation and its adoption by the TPC as part of the metropolitan area's long-range transportation plan, FHWA, INDOT and KYTC were still required to complete the planning and environmental reviews required under NEPA, Section 106, Section 4(f), and other federal and state requirements before proceeding with implementation of any proposed solution. Environmental analysis of any change or augmentation of a major element of an urban area's transportation system can be done only if the project is a part of the adopted regional transportation plan. Thus, the DEIS presented a reasonable range of alternatives to address the cross-river transportation needs that had been identified. Among those alternatives was the ORMIS two-bridge recommendation, although it has been modified and refined through the current NEPA process. However, the DEIS also evaluated other alternatives, including single-bridge alternatives and the No Action Alternative. The recommendation of the Two Bridges/Highway

Alternative as the Preferred Alternative is based on the extensive information and analysis developed and presented in the DEIS and the FEIS, as well as extensive public involvement since 1998.

Per 40 CFR 93.107, KIPDA must amend their 2025 RMP to reflect the FEIS Preferred Alternative "design concept and scope." FHWA cannot issue the ROD, until KIPDA has demonstrated that the Louisville Bridges FEIS amendment both conforms and is fiscally constrained.

Q.31 Taken together, the downtown and eastern projects represent an investment of nearly \$2 billion, an amount that would make this the second largest transportation project to be potentially undertaken by FHWA in the next 10 years.

Response: *The FHWA is involved in several large-scale projects that are similar in scope and cost of the Bridges project. Among them are the Woodrow Wilson Bridge across the Potomac River between Virginia and Maryland, the reconstruction of the I-95 interchange in Springfield, Virginia, a second Tacoma Narrows Bridge in Washington, S.R. 125 near San Diego, and rehabilitation of the Oakland Bay area Bridge. INDOT and KYTC will visit the Woodrow Wilson Bridge Project April 28-30, 2003 to glean lessons learned from this other major bi-state bridge project.*

R. Neighborhood-specific comments

R.1 Alternatives A-2 and A-16 would be poor options for residents of Bridgepointe and Wolf Pen Woods because those alternatives would surround the neighborhood with road noise.

Response: *Alternatives A-2 and A-16 are not part of the Preferred Alternative.*

R.2 Alternatives A-13 and A-15 will have serious effects on Shadow Wood. Alternatives A-2 and A-9 are better alternatives.

Response: *The reasoning for the selection of the Preferred Alternative is discussed in Section 3.7. Alternatives A-2 and A-9 would have fewer impacts on Shadow Wood than Alignments A-13 or A-15. Alternative A-15 is included as part of the Preferred Alternative. The selection of the Preferred Alternative is based on a wide range of issues. Each alternative has impacts and advantages.*

R.3 Alternative A-9 is unacceptable since it will have the greatest impact on the Green Spring area, as well as on Historic Districts and wetlands. Since the bridge will be elevated, there is no way to soundproof it. Nor can light from the bridge be shielded. Further, it crosses U.S. 42 outside the zoning boundaries of any municipality. This could lead to commercial development

in an otherwise pastoral area. It cannot be modified in any way to make it acceptable to the city.

Response: *Alternative A-9 is not part of the Preferred Alternative.*

R.4 Alternatives A-2 and A-16 will directly negatively impact the value of all of the homes on Wolf Pen Woods Drive without compensation.

Response: *Alternatives A-2 and A-16 are not part of the Preferred Alternative.*

R.5 Alternative A-16 would reduce property values in the Ken Carla subdivision, the Woodlands community, and the Harbor.

Response: *Alternative A-16 is not part of the Preferred Alternative.*

R.6 DEIS Chapter 5 (Environmental Consequences) seems to assume that no Bridgepointe relocations will be necessary despite the fact that 11 properties are in the paths of the proposed alternatives.

Response: *Alternative A-15, part of the Preferred Alternative, would require the taking of one property in Bridgepointe.*

R.7 If I-264 is widened to three lanes in each direction as suggested in Alternative B-1, Calvin Presbyterian Church will lose valuable land used for parking, recreation, and outdoor ministries. If I-264 is widened to four lanes in each direction, the church will be forced to relocate to an area outside of the zip codes of most of its congregants. Even if land could be found, the price to purchase and clear the land for new facilities would be prohibitive.

Response: *Alternative B-1 is not part of the Preferred Alternative.*

R.8 If Alternative A-13 or A-15 is chosen, it will take a significant portion of our lot. This will destroy the essential characteristics of our lot, yet our property is not listed as a potential relocation. This will amount to an inverse taking.

Response: *During the final design phase, efforts will be made to minimize impacts to individual properties. This is based on preliminary data and will be refined during the detailed design phase. Property owners who are impacted will be compensated with fair market value.*

R.9 The Butchertown advisory committee should approve the final bridge designs.

Response: *There will be Butchertown Neighborhood Association representation on the Kentucky Historic Preservation Advisory Team that will be established to review plans, comment, and make specific recommendations regarding*

project design details and scopes of work for consideration by the Bi-State Historic Consultation Team, as outlined in the Memorandum of Agreement (Section 5.3).

- R.10 A new downtown bridge either upstream or downstream of the Kennedy Bridge would damage the Rose Hill neighborhood even more than the Kennedy Bridge already has. There would be more loud noise, vibration problems and the new bridge's girders would intrude even farther into the view from our residential area.

Response: *Introduction of a new bridge within close proximity to the existing John F. Kennedy (I-65) Bridge would result in adverse impacts to the Rose Hill neighborhood. These impacts were identified through the Section 106 Phase of the Project since Rose Hill is part of the Old Jeffersonville Historic District. Through the Section 106 process, consulting parties including representatives of the Rose Hill Neighborhood Association have participated in the identification of historic properties within the study area identified for the Project, assessment of effects of the Project on those historic properties and development of mitigation measures that would resolve adverse effects identified for the preferred alternative of A-15, C-1, and Kennedy Interchange Rebuild – Shift to the South. The memorandum of agreement developed as a part of the Section 106 Process will include measures to address the visual, noise, vibration, and construction impacts on the Rose Hill neighborhood and Old Jeffersonville Historic District.*

- R.11 The Clifton neighborhood will be adversely impacted by a the proposed widening of I-64 and I-71, the rebuild of Spaghetti Junction, the addition of a new interstate interchange at I-71 and Frankfort Avenue, an additional downtown interstate bridge, and an Eastern I-265 bridge. The sprawl caused by an Eastern bridge may lead to disinvestments in the neighborhood. The downtown projects will lead to a loss of diversity, livability, and economic opportunity. All urban neighborhoods will suffer from these negative impacts.

Response: *None of the alternatives carried forward into the Draft Environmental Impact Statement will cause any change to the Clifton neighborhood. This neighborhood, which also consists of a historic district, was determined to fall outside the area of potential effects delineated for the Project. Work on I-64 adjacent to this neighborhood is limited to a transition from the planned improvements included in the two Kennedy Interchange reconstruction options and the existing highway section north of the Payne Street overpass. None of the work included in the Preferred Alternative requires the taking of additional land from the Clifton neighborhood and there is no change in the type or magnitude of visual or noise impacts to this area. Addition of a partial interchange on I-71 at Frankfort Avenue will not cause a change in the*

traffic flowing through the Clifton neighborhood, since the major use of this facility would be travel to and from I-71 into and out of the downtown Louisville area. Providing a safer and more operationally efficient transportation system through the implementation of the preferred alternative would provide the communities currently located within the study area with opportunities to better plan for revitalization and strengthening of their neighborhoods.

- R.12 Butchertown has serious concerns with the downtown alternatives. The DEIS leaves many questions unanswered, particularly those regarding construction impacts, contaminated sites, relocations of businesses and residences and methods of determining all adverse impacts, including noise, visual, light, etc. The impacts of the projects are underestimated and minimized severely. The impacts for Chapter 6, 6-29 are severely minimized for the relocation and reconstruction scenario. Increasing noise levels, we feel, will reach intolerable levels of that those noise impacts spread well beyond the determined APE boundaries. It is not defensible for FHWA to conclude that increased noise levels will not result in an adverse effect because of the existing urban quality of our environment. We will not accept increased levels of impact of any type; they most assuredly will destroy our quality of life. The Butchertown area already suffers from noise, visual, and other impacts.

Response: *Butchertown is another of the neighborhoods impacted by the Project that also contain a portion that is listed on the National Register of Historic Places. Through the Section 106 Process, impacts to the historic district were evaluated for all of the alternatives carried forward into the Draft Environmental Impact Statement. The Preferred Alternative was determined to have an adverse effect on the historic district due to the additional taking of land from the historic district and adverse visual, noise, vibration and construction impacts. Through the Section 106 Process mitigation measures that address these impacts were identified and included in the Memorandum of Agreement that provides the basis for the development and implementation of measures to minimize or eliminate these impacts during construction of the Project.*

- R.13 The DEIS contains no construction impact study for Butchertown. We need to know about staging areas, construction worker parking and transport. What will be the effect on Butchertown's roads? What are the expected noise levels and construction times?

Response: *A possible phasing and maintenance of traffic plan is included in the Financial Options Report prepared for the Project. The impact of likely construction activities within the Butchertown Historic District were identified during the Section 106 consultation with consulting parties and used to*

develop measures to resolve adverse effect that were included in the Memorandum of Agreement developed through the Section 106 Process. The Butchertown Neighborhood Association was one of the consulting parties involved in that process and contributed to the identification of historic resources that may be impacted by the Project, assessment of effects for the various alternatives on those historic resources, and mitigation measures that were considered to resolve adverse effects. The development of details and implementation of these measures will involve continued participation by historic advisory teams for both the Indiana and Kentucky portions of the Project, including the Butchertown Neighborhood Association. Through this process, the location of staging areas on vacant properties or other measures such as the routing of traffic during construction can be considered with the participation of those representing the neighborhood within this historic district.

- R.14 How was the vibration impact report information for Butchertown gathered? How many sites in Butchertown are identified that will experience annoying vibration impacts during construction.

Response: *A vibration study was conducted for the Project, to identify characteristics within the study area that would impact the potential for vibration resulting from construction activities such as blasting, vibratory rolling for compaction of embankments, and pile driving operations required for the construction of bridge abutments and piers. Five sites were selected within the study area as representative sites to provide vibration measurements that were used in the preparation of the vibration report. Two of the sites were within the downtown Louisville area – one on the northern edge of the Kennedy Interchange near the south end of the I-65 Bridge and one on I-64 just west of I-65. Both of these sites are in close proximity to the Butchertown neighborhood. The areas within the Butchertown neighborhood where vibration impacts require attention in the development and implementation of the Project are along the northwestern and northeastern edges of the neighborhood where ramps from the Kennedy Interchange tie into I-65 and I-64. Approximately 5 to 6 buildings would fall within the area where attention would be required during construction of the Project to avoid the possibility of damage due to vibration.*

- R.15 The DEIS does not sufficiently analyze the potential human health risks associated with (1) the motor vehicle air emissions the Southern relocation of Spaghetti Junction would bring to Butchertown, and (2) the danger of moving contaminated soils and groundwater from contaminated properties such as the old ARCO terminals and tanks, the I-71 landfill, and junkyards within the Butchertown neighborhood.

Response: *All alternatives were evaluated for air quality requirements and none of the*

alternatives would add to the pollutant burden of the Louisville Interstate Air Quality Control Region (See Appendix C.10). The Project would not exceed either the one-hour or the eight-hour standards for carbon monoxide. A more detailed discussion of air quality can be found in Section 5.4. There is a likelihood of encountering contaminated soils within urbanized areas such as the area south of the Kennedy Interchange and areas within Jeffersonville. Just as construction activities other than highway construction are scheduled within these areas, provisions would be included to minimize the risk of any uncontrolled release resulting from project activities. The manner in which fills are constructed or pilings for bridge abutments and piers are placed would be developed with attention to the risk of exposure to any contaminants and possible release as a result of any work included in the construction of the project elements. Construction details will be developed to provide an appropriate method of handling for any of the contaminants likely to be located within the limits of this Project. Contaminated properties acquired for construction of the Project will be remediated.

- R.16 DEIS Chapter 5 suggests that Alternatives C-1 and C-3 will have few divisive or disruptive impacts, and minimal character change effects, to downtown neighborhoods (DEIS, 5-15). On the contrary, we are at risk of losing characteristics that keep Butchertown together. Our streets are in danger of becoming busy throughways, and noise will be raised to unacceptable levels.

Response: *Alternatives C-1 and C-3 both include modification to I-65. This requires little additional land from the neighborhood and historic district and the taking of one additional building from the historic district. Since neither of these alternatives introduces a new highway into the historic district and the work included with either of these alternatives is fairly small with respect to the historic district, there is expected to be little additional change to the character of the neighborhood. Noise increases between either of these alternatives and the no-build alternative are not expected to be significant (less than 5 dBA). Use of public streets through Butchertown other than East Main Street, Mellwood Avenue, and Story Avenue is not expected to increase either during or after construction based on the inclusion of an extension of Witherspoon Drive from Preston Street to Frankfort Avenue. This element of the Project is likely to be an early item of construction and can provide ingress/egress to Kennedy Interchange construction sites and also provide an alternative for traffic to and from the downtown area from I-71 and points to the east. Any noise generated along this roadway can be mitigated through the construction of a berm separating the northern edge of Butchertown from the extension of Witherspoon Drive.*

- R.17 How long will the “temporary” impacts noted in DEIS Chapter 5 for Butchertown last?

Response: The “temporary” impacts noted in Chapter 5 would be limited to the time allotted for individual construction contracts for work in that area. Construction of the new Kennedy Interchange could take up to 10 years; however it is likely the work will be completed through several individual construction contracts that would generally run from 2 to 4 years. Any of the temporary impacts identified in Chapter 5 would therefore be limited to no more than approximately 4 years. They would likely be for much shorter periods of time as work would be completed on many of the activities in much shorter periods of time (from six months to less than one year). Although any temporary impact to the Butchertown neighborhood could generally be expected to be in the six month range, there will be work underway within close proximity to this neighborhood for as much as 10 years.

R.18 A greenbelt should replace existing brown fields. There should be a minimum of a double row of evergreen landscaping to shield Butchertown from expressway impacts. Landscaping, berms, and other natural barriers should be considered not only to shield the neighborhood from the finished product but also during the first phase of construction to shield the neighborhood from construction dirt, noise and light.

Response: Construction of a new Kennedy Interchange to the south of its current location would place the interchange over much of the existing brownfield area along the northern edge of Butchertown. Placing landscaping to buffer this area therefore would probably not be effective, since little area would remain that required a buffer. Landscaping along the northern edge of the neighborhood however would be effective in mitigating the visual and, to some extent, the noise impacts of the Project. This opportunity was identified as a possible mitigation measure through the Section 106 Process and included in the Memorandum of Agreement developed for the Project. Remediation will be in accordance with each state’s environmental regulations.

R.19 An extensive study should be done to determine potential human health and environmental risks associated with motor vehicle air emissions from a Southern reconstruction of Spaghetti Junction on Butchertown, and moving contaminated soils and groundwater from contaminated property within the Butchertown neighborhood.

Response: As noted in the response to R.15, none of the Project alternatives was determined to have a negligible impact on the air quality within the region. Any contaminated soils encountered during construction can be appropriately handled to minimize the possibility of any human health risks for either the construction workers or adjacent landowners. Contaminated properties will be remediated.

R.20 An ombudsman should be made available for Butchertown with 24-hour phone access when problems occur with construction or problems initiated by construction.

Response: *As part of the mitigation measures identified through the Section 106 Process, an ombudsman for Indiana and one for Kentucky will be placed in an office located within the general vicinity of the Project and be available to citizens during the right of way and construction phases of the Project. The ombudsman will be responsible for questions, complaints or inquiries.*

R.21 Grants should be awarded to the Butchertown Neighborhood Association to fund a full time position to identify and implement mitigation projects that will be needed during the design and construction phases of the Spaghetti Junction and downtown bridge project.

Response: *Any of the mitigation measures included in the Project for the Butchertown neighborhood or any other neighborhood within the project area will either be included as part of the highway construction contracts or through separate construction contracts through the competitive bid processes within Kentucky or Indiana. They will be monitored by the Kentucky Transportation Cabinet, Indiana Department of Transportation, or General Engineering Consultant selected for the Project. The Butchertown Neighborhood Association would be included on a Historic Advisory Team that will be afforded a number of opportunities to review and comment on details as these mitigation measures are developed and implemented.*

R.22 The Butchertown Strategic Neighborhood Plan should not be compromised by the design and construction of any outside projects. The final design should comply with the Neighborhood Plan.

Response: *FHWA and KYTC have worked closely with the Butchertown Neighborhood Association and the Louisville/Jefferson County Metro Government to avoid, minimize and mitigate potential impacts to the Butchertown area. Detailed mitigation measures and ongoing coordination are specified in the Section 106 MOA and the mitigation commitments contained in Chapter 8 of the FEIS. Care will be taken in final design to ensure that all Project elements are as consistent as possible with all locally adopted land use and development plans. Coordination with the Butchertown Neighborhood Association and the Louisville/Jefferson County Metro Government will continue through final design and construction to ensure that all of FHWA's commitments are carried out.*

INDEX TO OHIO RIVER BRIDGES PROJECT
CROSS-REFERENCE

NAME	COMMENT
3K Machinery Co.	B.46
Aball, Thomas	B.69; C.17
Abbott, Amanda	B.69; C.17
Abell, Linda & Greg	B.69; C.17; D.58; D.72
Abney, Neil	B.15; B.26; B.70
Abrams, Mark	B.70
Adams, Dennis	B.46
Adams, James	B.46
Adams, Mark	B.19; B.23; B.25; B.26; B.27; B.41; B.42; B.46; B.74; R.18
Adams, Philip	B.1; B.6
Adams, Ralph	B.69; B.70; C.17
Adams, Thomas	B.69; B.70; C.17
Adrain, Carol	B.46; B.70
Advantage Chiropractic	B.46
Advisory Council on Historic Preservation	A.5; B.10; F.6; F.11; F.15; F.16; F.19
Ailemann, Tom	B.50
Aker, Debbie	B.46
Alberts, Barry	A.1; A.14; A.15; A.16; A.17; A.18; A.19; A.20; A.21; A.22; B.17; B.26; B.34; B.39; B.44; B.45; B.47; B.49; B.50; B.51; B.52; B.53; B.54; B.55; B.56; B.57; B.58; C.10; D.2; D.3; D.17; D.18; D.36; D.37; D.38; D.40; D.41; D.42; D.93; D.94; P.11
Albin, Earl	B.69; B.70; C.17
Albro, Leslie	B.69; C.17
Alexander, J. Russell	B.46
Alexander, James	B.69; C.17
Alexander, L.J.	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
All Points Trailer Service	B.46
All, Leslie	B.46
Allen, Julie	A.4; A.34; B.17; B.95; D.15; D.70; E.30; J.1
Allen, Leslie	B.46
Allen, Susan	B.46
Allen, Ted	R.18
Allgeier, Bill	B.70
Allgeier, Marilyn	B.46; B.70

NAME	COMMENT
Allumbaugh, Dr. Kimberly	A.4; A.14; B.95; K.21
Altimari, Catherine	B.77
Altman Insurance	B.46
AM National	B.46
Amatrol	B.46
Amburgif, Carla	B.46
American Capital Management, Inc.	B.46
American Family Insurance	B.46
Amettis, Barry	No response required
AML, Inc.	B.46
Anders, Charles	B.46
Andersen, Sheila	B.1; B.2; B.3
Anderson, Mary	B.46
Anderson, Matt	D.82
Anderson, Trude	B.46
Anderson, William	A.3; B.74; B.80; B.95
Andrew, Jan	No response required
Angel, Bobby L.	B.46
Angel, Edward	B.46
Apollo American	B.46
Aponte, Chris	B.84; B.88; B.122; Q.8
Arbuckle, Donnie	B.70
Arise Business Services	B.46
Armento, Ed	B.72; B.74
Armstrong, Armelia	B.70; F.21; F.48
Armstrong, Marilyn	B.70
Armstrong, Mayor David	A.12; A.13; A.14; B.16; B.26; B.30; B.31; B.32; B.33; B.34; B.35; B.36; B.37; B.38; B.39; B.40; B.41; B.42; B.43; B.44; B.45; B.46; B.47; B.48; C.10; D.4; D.33; D.34; D.44; H.16; P.10; Q.14
Armstrong, Shannon	B.70
Armstrong, Stephanie	C.17
Armstrong, Tom	B.1; B.2; B.6; B.124; B.125; B.144
Aseltine, Susan	B.70; B.79
Ashcraft, Elaine	B.46
Aspen, Bryan	B.46
Associates Plumbing	B.46
Atherton, Bill	B.70
Atkinson, James	A.25; B.44; B.50; B.70; B.120
Atwell, Mark	B.1; B.114; B.124; B.125
Austin, Bridgette	B.46
Austin, Maretta	A.31; B.70
AW Goodman & Associates	B.46

NAME	COMMENT
Axmour Conveying Services	B.46
B&L Enterprises, Inc.	B.46
Bache, Richard	B.70; M.10
Bachubel, Walter	B.46
Bagshaw Trucking	B.46
Bagshaw, Aisha	B.46; B.70
Bagshaw, Greg	B.46
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Bagshaw, Scott	B.46; B.70
Baird, Candace	B.69; C.17
Baird, Opal	B.69; B.70; C.17
Baize, Kenneth G.	B.69; C.17
Bajandas, Roberto	A.3; B.41; B.95; C.19; R.9
Baker, Charles A.	B.70; N.16
Baker, Charles E.	B.46
Baker, Dennis S.	B.46
Baker, John	B.6; D.17; R.11
Baker, Mark	B.46
Baker, Verlin	B.70; B.71; B.120
Balcombe, Brenda	A.4; A.34; B.10; B.60; B.95; D.15; D.60; D.63
Balcombe, Ken	A.34; B.95
Baldwin, Alan	B.1; B.2
Bales Motor Co.	B.46
Bales, Walter	B.46
Baliban, Deirdre	A.4; B.26; B.4; B.95; E.21
Ball, Wayne	B.70
Ballard, Patty	B.46
Ballert, Bruce	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Ballinger, Martin	No response required
Bandy, Langley	A.26; B.26
Banet, Allen	B.69; C.17
Banet, James	B.46; B.69; C.17
Bank One	B.46
Banks, Cynthia	B.78; B.91; B.92
Barber Grocery	B.46
Barber, Joy	A.26; B.26
Barker, J. Barry	B.5; B.7
Barker, Sharon	B.46
Barnes & Parker Bookkeeping	B.46
Barras, Leslie	A.4; A.14; C.7; C.8; C.12; D.4
Barrow, Gary	B.60; B.91; C.17; C.29

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Barry, Richard	B.70
Barthold & DeSimone	B.46
Bartholf, Clementine	B.46
Bartlett, Bill	B.46
Bartlett, Richard	A.26; B.70; B.120; N.16
Barton, Jenny	Not legible
Basel, Bobbie	B.46
Basham, Kay	B.70
Basham, Mark H.	B.46
Baskett, Morning Lark	B.32; F.33
Batchelor, Ross	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
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Bather, Rep. Paul	D.3; D.12; D.19; E.1; E.2; E.3; E.4; E.7; E.8; E.17; E.18; E.19; E.20; E.21; E.22; E.23; E.24; E.25; E.26; E.27; E.28; E.29; E.30; E.31; E.32; E.33; E.34; E.35; E.36
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Batson, Rose	B.57
Bauer, Chuck	B.46; B.120
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Baughman, Joann	B.26; B.80
Baumler, George	B.46; B.70; B.120
Baurle, Stephen	B.70; B.120
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Baust, Raz P.E.	B.29
Beach Mold & Tool, Inc.	B.46
Bean, Robert	P.20; P.50
Bear, David	B.46
Bearl, William	B.46
Beazly, Brian	B.84
Becher, Michael	B.46
Becher, Sara	B.46
Beck, Thomas	B.70
Beckman, John	B.70; B.120
Beckort, Paul	B.46
Bedan, Mary	B.46
Bedford, Sherman	B.74
Begshaw, Dale	B.74; B.92; B.98
Bein, Sara L.	A.4; B.4; B.26; B.95
Belden, Ray	B.46
Bell, Christopher	B.44; B.69; B.77; C.17
Bell, O. Thomas	B.70; B.118

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Bell, William	A.26; B.70; B.118
Bench, Joe	B.46
Bender, Otis	B.43; B.46
Bennet, Dawn	B.46
Bennett & Bennett Insurance, Inc.	B.46
Bennett, Betsy	A.4; A.5; A.23; B.1; B.4; B.6; B.59; D.16; D.17; D.19; D.21; D.43; E.1; E.17; E.21; E.36; G.4; J.1; J.5
Bennett, C. Thomas	K.7; K.10; L.5; L.6; L.8
Bennett, Larry	B.46
Bennett, Rick & Judy	B.70; B.120
Benson, Thelma	A.25; B.70
Bentley, Pamela	B.46
Bercope, Alan	B.70
Bergen, George	B.70; B.120
Berger, Stephen	H.13
Berger, William	B.26; B.70
Bergfeld, Jeffrey	A.26
Bergner, Regina	D.14; D.74; D.75; D.76; D.77; D.78; D.79; E.37; E.38; E.39; E.40; E.41; E.42; E.44; J.1; J.13; J.14; J.16; J.17; J.18; J.19; J.20; J.21; J.22; J.23; J.24; J.25; J.26; J.27; J.28; J.29; J.25; K.16; K.17; K.18; K.19; K.20; K.21; K.22; K.23; K.24; K.25; Q.3
Bernard, Betty	B.74
Berry, Larry & Denny	B.46
Berryman, James	B.46
Bersaglia, Cheryl	A.4; D.19; J.1; J.14; J.30; J.47
Bertram, Charlie	B.70; B.71
Best Wishes of Southern Indiana	B.46
Best, Cynthia	B.74
Bethony, G.	B.46; B.70
Better Quality Business Systems	B.46
Bewley, Don	B.74; Q.27
Bezoenik, Mary Rose	B.70; B.120
Bezoenik, Neal S.	B.69; B.70; C.17
Bickel, Steven	B.26; B.74
Bierman, Paul	B.70; B.120
Biery, Diane	B.46
Big O Tires	B.46
Big T Transfer	B.46
Bill Kuehn Insurance Agency	B.46
Binford, Frank	B.27; B.88

NAME	COMMENT
Bingham, Barry Jr.	A.4; B.26; B.95; B.101; B.106
Bingham, Emily	A.4; A.27; B.95; D.19
Binzer, Scott	D.19
Bironas, Joseph K.	B.26
Bishop, C.	B.46
Bishop, Jerry	A.26; B.70
Bishop, Joey	B.46
Bisig, Anthony	B.46
Blackwell, Brian	B.1; B.2
Blackwell, James	B.70; N.16
Blair, Deborah	B.95
Blake, Richard & Martha	A.26; B.26
Blankenbeker, David	B.29; B.69; C.17
Blankenbeker, David	B.46
Blasi, Gene	B.25; B.75; C.19; C.25
Blau, Brittany	A.26; B.120
Blau, Cecile	B.70; B.72
Blincoe, Brenda	B.74
Blincoe, Matt	B.74
Boden, Sam	B.70
Bodine, Thomas	B.46; B.70
Boiarsey, Barry	A.34; B.17; B.26; B.63; B.95; D.68
Boldrick, Carol	B.1; B.4; B.6
Bollinger, Patrick	B.95; B.102; B.120
Boltz, Bob & Coleen	A.14; B.70
Bonsell, Wanda G.	A.31; B.26; B.70; D.91; N.16
Booher, Jim	B.46; B.80; B.90
Booher, Olga	B.46; B.80; B.90
Booker, Joe	B.26; B.86; B.120
Booker, John	A.34; B.26
Boone, Emily C.	B.1; B.2; B.3; B.4; B.7 G.4; G.5; L.1
Borders, Tommy	B.70
Bornholdt, David	B.26; B.70; D.58
Borntraeger, Bruce	B.50; B.70
Bortz, Aaron L.	B.60; B.70; C.17
Botkins, Ellen	B.46
Bottorff, State Rep. James	B.46
Bowling, Rod	B.70; B.120
Bowyer, Donald R.	B.46
Brace, William	B.74
Brading, Ashley	B.69; C.17
Bradley, Jill F.	A.4; A.34; B.63; B.95; F.24; R.3
Bradley, B. Michael	A.4; B.10; B.63; R.3

NAME	COMMENT
Bradshaw, Harold	B.46
Branham, Judy	A.4; A.14; A.34; B.95; B.102; B.108; D.60
Branham, Kay	B.46
Brannon, Lynne	B.46
Brant, Greg	B.46
Brashear, Tawana	B.46
Brasill, Dennis	B.69; B.70; C.17
Brawner, Cheryl	B.1; B.124; B.125; B.144
Bray, Paul	B.70; D.58; D.86; N.16
Breetz, Beth	B.60; B.95; J.1; J.14
Breidenbach, Bonnie	B.69; C.17
Breidenback Investment	B.46
Brennan, Edward	B.46; B.70; B.120
Brewer, Bonnie	B.46
Brewer, Stephen	B.46
Bridgepointe Homeowners Association	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Broadbent, John S.	B.46
Broadstone, Daniel	B.74
Broady, Doug	B.46
Broady, Mary	B.46
Broady, Paul	B.46
Broady, Terry	B.46
Brodfehrer, Hank	B.26; D.91
Brodley, B. Michael	B.95
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Brooks, Carolyn & Richard	B.95
Brooks, Cordell	B.46
Broughton, Donna	B.46
Browder, Linda	B.46
Brown, Charles A. Jr.	B.70
Brown, Curtis	B.59; E.3
Brown, Cutia W.	A.4; 1.34; B.26; B.95
Brown, Edith	B.70
Brown, James	B.46
Brown, Ken	A.25; B.70
Brown, Leo J. Jr. & Barbara	B.22
Brown, Mac	A.3; B.95; D.19; D.59
Brown, Matt	B.70
Brown, Owsley	A.4; B.57; B.95; D.19

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Brown, Robert	B.50
Brown, Sharon	B.46
Brown, Stephen	B.46; B.69; C.17
Brown, Susan	B.70
Brown, Vincent	B.120
Brown, Zane	B.46
Brumleve, Ben	B.69; B.70; C.17
Brumleve, Michael	B.74
Brummet, Brenda	B.46
Bruner, Carla & Stephen	B.70
Bruner, Jim	B.46
Bruner, Justin	B.70
Bruton, Betty	A.26; B.71; B.132
Bryant, Judy	B.46; B.50
Bryant, Vivian	A.26; B.120; N.16
Buccola, Charles	B.7
Buckingham, Ann	B.70; P.14
Buckingham, Scott	B.70
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Buckner, Kirk	A.14; B.70
Buddhum, Faye	A.25; B.70
Bullock, James	B.46
Burcope, Alan	A.26
Bureau of the Census	B.46
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Burgin, Nick	B.69; C.17
Burgiss, Cynthia	A.34
Burke, Tom & Barbara	B.135
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Burkhart, John S.	B.46
Burks, Nathan	B.26
Burks, Stuart	B.69; B.70; C.17
Burns, J.	B.46
Burse, Raymond	B.23; B.24; B.88; B.95; H.14; I.7; J. 1; P.8; Q.7; R.6
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Bush, Katie	A.26; B.120
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Busky, Christa	B.46
Butchart, Jim	B.50; B.70
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Caldwell, Rita	B.46
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Carl L. Spalding Insurance	B.46
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Carpenter, John	B.69; B.70; C.17
Carpenter, Joy	B.69; C.17
Carpenter, Margaret	B.70; B.82; B.84
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Carter, Jack	B.70
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Carver, Heather	B.46
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Casi, Paul	B.95; D.60
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Chastain, Betty	B.120
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Cheeks, Vera	B.46
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Chesser, Beverly	B.46
Chester, Surlia	B.46
Chick, Auggie & Dottie	B.80
Chick's Archery & Sport Hdqts, Inc.	B.46
Childress, Robert H.	A.34
Chiles, Donald	B.70
Chilton, Timothy L.	B.1; B.3
Chinn, David P.	B.1
Chodynieceki, Cheryl	A.26; B.26; B.120
Christman, Loren	B.46
Christman, Mona	B.46
Christman, Mona	B.46
Church, Pat	B.132
Church, Winston E.	B.26; D.91; N.16



NAME	COMMENT
Cinergy, PSI	B.46
Cirrer, Maryann	B.46; B.70; C.17
Clark Co. Democrat Women’s Organization	B.46
Clark Co. Emergency Management	B.46
Clark Co. Fire Chief	B.46
Clark Co. REMC	B.46
Clark Co. Sheriff	B.46
Clark Co., IN Board of Commissioners	B.26; B.46; B.69; N.16
Clark Maritime Center	D.86
Clark Memorial Hospital	B.46
Clark Snacks	B.46
Clark, Cary L.	B.27; B.70; F.31
Clark, Marea	A.4; A.14; B.18; B.95; B.97; N15
Clark, Paul	No response required
Clark, Robert	B.50
Clark-Floyd Co. Convention Tourism	B.46
Clarksville Community School Corporation	B.46
Clarksville Riverfront Foundation	B.46
Clarksville Town Council	B.46
Clay, Frank III	B.92; E.7; Q.19
Clay, Henry	A.26
Cleary, Mike	B.26; B.70
Clegg, Sandy	B.46
Cliffinger, Luke	B.46
Clifton Community Council	B.4; B.6; D.14; D.15; D.19; D.84; E.1; E.2; R.11
Close, Carol	B.70
CM Smith Rests, Inc.	B.46
CMR Services Group	B.46
Coalition for the Advancement of Regional Transportation (CART)	A.1; A.2; A.5; A.28; A.32; A.35; B.1; B.2; B.3; B.4; B.6; B.7; B.11; B.14; B.17; B.30; B.59; B.61; B.62; B.63; B.116; B.125; B.143; C.5; C.11; C.22; C.28; C.30; D.15; D.19; D.81; D.83; D.84; E.7; E.18; E.44; G.19; J.4; J.14; J.41; J.42; J.43; J.44; J.45; J.46; M.2; M.3; P.16; Q.10; Q.15; Q.21
Cobb, Douglas F.	B.26
Cobb, Gregg	B.74
Cochran, Harold	B.70
Cochran, Mimi	B.70
Cochran, State Rep. William	B.46
Cochran, Tim & Mary	B.46
Cocke, Amanda	B.46; B.70
Coffman, Doug	B.46

NAME	COMMENT
Coffman, Robert F.	B.70
Cogen, Rich	D.19; G.19; G.20; J.1; J.3; J.4; J.9; J.23; J.40; K.16; K.18; K.32; K.35; K.41; L.15; Q.30
Cohen, Joseph	F.29
Cole, Beverly	B.26
Cole, Patricia S.	B.46
Cole, Tim	B.46
Colgate Baptist Church	B.46
Colgate-Palmolive Company	F.49
Collier, Janice	B.46
Collier, Paul	B.46
Collins, Teresa	B.46
Collins, Winter H.	A.4; A.34
Collins, Wynter Reneaux	A.4; A.14; A.34; B.10; B.80
Colone, Kima	B.46
Columbus, Shanna	B.26
Colville, Barbara	B.70
Colvin, John & Irene	B.26
Combs, Chad E.	B.46
Combs, Mary Ann	A.34
Comer, Carl	B.70
Community Bank Shares of Indiana	B.46
Community Foundation	B.46
Conn Hearing Aid Center	B.46
Conn, D.E.	B.46
Conn, Kelly	B.46
Connell, Donna G.	B.1; B.3
Conner, A.J.	B.50; B.70
Conner, Laura	B.70
Conover, William Jr.	A.34
Conrad, Jack R.	A.34; B.26; B.74; B.95
Conrad, Linda	A.4; A.34; B.4; B.80
Conroy, Francis	B.69; C.17
Conti, Jim	B.70; B.102
Contractor's Safety Supply	B.46
Cook Airtomic	B.46
Cook, Ashley	C.17
Cook, Lavena	A.34
Cooke, Jacqueline	B.60
Coomes, J.	B.113; C.15; J.1
Coomes, Mary Ann	A.34
Coots, Chris	B.46
Coots, Dana and Sharon	B.46

NAME	COMMENT
Corey, Nancy	A.4; B.95
Corn, Steve	B.46
Cornelius, Shar	B.70; B.75
Cornerstone Group	B.46
Costello, Patrick	B.70
Cotton, Doug	A.26; B.26; B.70
Couch, Andrew	B.46
Couch, Brian	B.70; D.58; D.72; D.86
Couch, Pamela	B.46
Covert, Sarah	B.135
Cowan, Mike	B.120
Cowling, Dr. Laurent	B.69; C.17
Cox, Joshua	B.143; D.19
Cox, Robert F.	B.46
Coyne, Brittney	B.69; C.17
Coyte, Mary F.	B.70
Cozzens, Rick	A.26; B.120
Crady, Lita	B.26; B.70
Craig, Beverly	B.70; B.74
Craig, Sherri	B.26; B.117; C.17
Craig, Wallace	B.70
Crane, Richard	B.70; B.84
Crawford, John Jr.	B.132
Crawford, Melissa L.	B.46
Creative Design Interiors	B.46
Creative Products Inc.	B.46
Crenshaw, Martha	B.46
Cress, Scott	C.17
Crestline Realty, Inc.	B.46
Crisp, Kevin	B.46
Cristiani Excavating Co.	B.46
Cristiani, Anne M.	B.46
Cristiani, Dan	B.46
Cristiani, Dan	B.46
Crooks, Edwin	B.46
Crowley, Cathleen (Kathleen)	B.26; D.91; P.20; P.50
Crowley, Kathleen	B.46
Crown Services	B.46
Crud, Sue	B.46
Crull, Matthew	B.46
Culin, Cassandra	B.1; B.2
Culpepper Group	B.46
Cummins, Joshua	B.69; B.70; C.17

NAME	COMMENT
Cummins, Rice	B.46
Cundiff, Ron	C.15
Cunningham, Floyd	B.46; B.69; C.17
Cunningham, Georgia	B.46; B.69; C.17
Cunningham, James	B.69; B.70; C.17
Cunningham, Sheriall	B.70
Curl, Larry	B.70; B.84
Curran, Stephen	B.120; N.16
Cuscaden, Dorothy E.	B.46
Custom Craftmakers, Inc.	B.46
Daeshner, Stephen	D.87; D.88; D.89
Dahlem, James A.	A.25; B.26; D.58; D.91
Dahnke, Jason	B.70
Dailey, James	B.46
Dailey, Marty	B.70
Daily, Evelyn	B.50
Daily, Patrick	B.70; N.16
Daily, Ronald	B.46
Dalgarn, Cynthia	B.46
Dancinger, Steven	B.69; B.70; B.84; C.17
Daniel, C.	B.46
Danner, Katherine	B.46
Danner, Sandra	B.46
Dantin, James	B.74; B.95; C.19
Dantin, Maria	B.74
Dantin, Terri	B.74
Dan-Van Inc.	B.46
Darnell, Carl	B.135
Daugherty, Patti	B.46
Daunhauer, Jennifer & John	B.74; R.4
Dave Dionne Insurance	B.46
David, Paul	B.69; C.17
Davidson, Melissa	B.46
Davies, Brian	A.25; D.56; P.20; P.50
Davis, Ella N.	B.46; N.16
Davis, Glenda	B.69; B.70; C.17
Davis, Heather	B.69; C.17
Davis, J.D.	B.70
Davis, Mary Ann	B.70
Davis, Phyllis	B.46
Davison, Paulette	B.46
Davison, Philip	B.46

NAME	COMMENT
Daweher, Jeffery W.	B.46
Dawn Food Products	B.46
Dawson, Tom	B.69; B.70; C.17
Day, Diana	B.46
Day, Don	B.70
Dean, Gary	B.70; B.120
Dean, Sara L.	B.95
Dearborn Co. Chamber of Commerce	B.46
Deaton, Sheilah	B.46
Decker, Margi	Not legible
Dehn, B.	B.46
Delanty, William	B.46
Delp, Eric	B.26; B.95
Denison, Michael	B.46; B.70
Denney, Vicky	B.46
Dennis Ott & Co.	B.46
Denny Transportation, Inc.	B.46
Denny, David	B.46; B.70; D.58; D.72
Denny, Jerry	B.70
Details Commercial Group	B.46
Details Matter	B.46
Detterman, Rev. Paul	R.7
Dettle, Joe	A.26; B.70; B.140; P.14
Develco Properties	B.46
Devine, Lee Anne	L.8
DeWeis, Rebecca	B.46
Deye, Gail	K.26; K.27
DiBord, Brenda	B.69; B.70; C.17
Dickey, John	B.46; B.79; B.74; B.98; B.144
Dickey, Ronald	B.46
Dickinson, Christopher	A.25; B.26; D.58; D.91
Dicks, John	B.46
Dickson, Frank	D.14; E.40
Dietrich, Ralph	B.46
Dietrich, Ronald	B.46
Diles, Brandon	B.46
Dirr, Michael J.	B.70
Discount Labels	B.46
Divore, Tony	A.30; B.70; D.58; D.72; D.86; D.91
DMLO	B.46
Do, Duc M.	B.1; B.2
Dobbins, Steven	B.70
Dobson, Richard	B.46

NAME	COMMENT
Doctors Eyecare	B.46
Dodd, Allen	A.14; A.21; B.59; B.60; B.101; D.60; Q.17
Dodd, Elizabeth	A.34; B.59; D.7
Dodd, Gary	B.90
Dodd, Portia	A.4; B.26; B.63; B.95
Dodd, Sarah	B.80; B.90
Dodds, Catherine L.	B.46
Dodds, Norma J.	B.46
Dodds, W.E.	B.46
Doerflinger, Christina	B.26; B.70
Dolson, Jacqueline	B.46
Donaldson, Edward	B.80
Donnelly, Barbara & Ray	B.117; D.91
Donohue, Elizabeth	B.69; B.70; B.120; C.17
Doors, Karen	B.46
Dorshane, Patika	No response required
Dott, Donald S.	K.8; K.37; K.42
Douglas, Melinda	B.69; B.70; C.17
Douglas, Michael	B.46; B.69; C.17
Douglas, Neal	A.26; B.71; B.120; N.16
Dowdle, Carolyn	B.46
Downard, Kelly	B.26; B.46
Downing, Rowan	A.26; B.120
Downtown Development Corporation	A.1; A.14; A.15; A.16; A.17; A.18; A.19; A.20; A.21; A.22; B.17; B.26; B.34; B.39; B.44; B.45; B.47; B.49; B.50; B.51; B.52; B.53; B.54; B.55; B.56; B.57; B.58; C.10; D.2; D.3; D.17; D.18; D.36; D.37; D.38; D.40; D.41; D.42; D.93; D.94; P.11
Dr. Nero	B.46
Drayer, Donald	A.4; A.34; B.88; B.89; B.95; D.60; Q.19 R.2
Dreckman, Amanda D.	A.4; B.95; B.102; D.60
Dreistadt, Laura (Historic Landmarks Foundation of IN)	A.8; F.1; F.5; F.20; F.21; F.34; F.35; F.36; F.37; F.38; F.39; F.40; F.41; F.42; F.43; F.44; F.45; F.46; F.47; H.1; H.34
Driver, Gerald and Patricia	B.69; C.17
Dryden, William	A.26; B.26
DuBarry, Pennie	J.1; J.30; N.14
Dues, Daniel	B.26; B.101
Duffy, Mark	A.13; B.116; D.30
Duffy, Thomas	B.116
Dufour, David	B.44; B.46; B.72
Dugan, Pamela	B.59; B.80

NAME	COMMENT
Duggins, David	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Dumesnil, Edward	A.4; A.26; M.10
Duncan, Jeremy	B.46; D.58; D.72
Duncan, Shaun	F.3; F.9; F.10; M.8
Dunn, Harold	B.70
Durbin, Linda	B.46
Durham, Bobby	B.46
Durrett, Eustace	B.1; B.4; B.6; C.22
Duerson, Paul Jr.	B.69; B.70; C.17
Dutschke, Barbara	A.26
Dutton, Steve	B.26; B.44; B.77
Dvorak, Jerry	M.10
Dyer, Robert	C.24
E&H Electric Supply	B.46
EA2 Systems	B.46
Eager, David	A.34
Eagle Environmental Management	B.46
Eagle Steel Products	B.46
Eastern Heights Baptist Church	B.46
Eastman, Steven	B.124
Eastside Animal	B.46
Eaton, Meredith	B.46
Eaton, Robert	No response required
Eberenz, Keith	B.84
Eberhart, Paul	B.70
Eckhart, Frederick A.	A.5; B.86; B.101; B.119
ECS, Inc.	B.46
Edens, William	B.69; B.70; C.17
Edsell, Mrs. Allan	B.70
Edward Vogt Valve Co.	B.46
Edward, Kathleen	B.46
Edwards, Ashlee	B.69; C.17
Edwards, Mary	B.46
Edwardson, Robin	A.16; B.56; B.59; B.60
Eerhgart, Nathan	B.46
Egan, Tom	Not legible
Ehringer, Judy Y.	B.46
Eiche, Jana	B.78; B.102
Eickholtz, John J.	B.46
Eifler, Mayor Thomas	B.27; B.74; B.84; B.88; B.122
Eker, Emmett	B.46



NAME	COMMENT
Elaine Risk Broker Associate	B.46
Elbert, Ethel	B.70; B.84
Elbert, Thomas J.	B.74
Elder, Linda	B.75
Elias, Michael	B.46; B.70; B.120
Elkins American RSM Transportation	B.46
Ellenburg, Rebecca	B.46
Elliot, Joseph	B.46
Ellis, Councilperson Ronald G.	B.46; B.69; B.98; C.17
Ellis, Jay Coursey	B.56; B.59; D.17; D.19; D.49; F.6; F.21; F.48; P.9
Ellis, Richard	B.46
Ellis, William & Frances	B.46
Ellison, T. Kyle	B.124; B.125; B.144
Elmore, Fletcher L.	B.26; B.74
Elmes, Walter	B.70
Elston, B.	B.46
Employment Plus	B.46
Empson, Thomas	B.46; B.70
Endris, Ronald	B.46
Eng, Henry	B.26
Ennis, Charles	B.70
Ennis, Donna	B.46
Ensor, M.	B.26; D.90
Eslton, Michael	B.46
Essroc Materials	B.46
Estes, Mark	A.26; B.70; B.120
Eswine, Verne	B.25
Eswinn, Vern	B.46
Etherton, Don & Valerie	A.4; A.34; B.143
Eurton, John	B.69; B.70; C.17
Evans, Brian	B.46; B.120
Evans, Chrissy	B.70; B.79
Evans, Jim	B.69; B.70; B.84; C.17
Evans, Mark	B.117
Evans, Parker	B.46
Everage, Jean	B.46
Excel Tool, Inc.	B.46
Fackler, Dwayne	B.46
Fagan, Tim	B.70
Falk, Dorissa	B.70
Falk, Mayor Lonnie	A.4; A.34; B.23; B.74; B.79; B.89; B.90; B.92;

NAME	COMMENT
	C.8; C.19; D.7; D.19; F.31; G.12; H.12; H.13; H.15; I.2; I.7; M.5; Q.8; R.3
Falls City Optimist Club	B.46
Family Care Chiropractic	B.46
Far Point	B.46
Farmer, Anne	B.46
Farnsley, Richard	B.46
Farris, William A.	B.70
Farrow, Latelleh Jr.	B.26; Q.19
Fatland, Dale	B.27
Faust, Doris C.	N.12
Federhofer, William & Joyce	B.24; B.26; B.70; B.78
Feige, George	B.46; B.74;
Fellows, Bonnie	B.95
Fellows, Jill K.	B.46
Fence, Jeffrey	B.69; B.70; C.17
Fenner, Roger	B.70; B.120
Ferty, Scott	B.46
Fetz, Lewis	B.70
Fey, Lawrence	B.69; B.70; C.17
Fielden, Jolie	B.70; B.84
Fielden, William	A.25; B.70; B.117; D.58
Fields, James	A.26; B.70; B.101
Fields, Ronda	A.25; B.70
Fields, William	B.46
Fifth Third Bank	B.46
Figg, David	B.69; B.70; C.17
Filis, Scott	B.91; B.102; B.139; C.25
Finn, Mike	B.69; .70; C.17
Finley, Sharon	A.4; B.95; D.19
Finn, Peggy	A.14; B.70
Finney, Dale	B.46
Fire King International, Inc.	B.46
First Baptist Church	B.46
First Harrison Bank	B.46
First Savings Bank	B.46
Fischer, Jim	B.46
Fischer, John	B.25; D.58; N.16
Fischer, Judith	B.76; B.78; B.84; B.91; B.114; D.31; D.32
Fischer, Scott	A.34; B.23; B.60; B.78; B.102
Fischer, Tanya	A.25; B.46; B.57; D.72; D.91; P.20
Fischer, Tonya	B.46
Fisher, Angela	B.46

NAME	COMMENT
Fitzgerald, Phyllis	B.95
Fitzloff, Greg	B.26; B.46
Flow Robotics	B.46
Flowers, Bill	A.26; B.26
Floyd Memorial Hospital & Health Services	B.46
Floyd, Charles	B.46
Foley, Jayne	A.26; B.120
Ford, _____	B.46
Ford, Jason	B.69; C.17
Ford, Rich	B.69; B.70; C.17
Formwood Products	B.46
Foster, Erle	B.46
Fowler, Connie	B.26; B.117; D.91; N.16
Fowler, Jeff	B.95; D.60
Fox, Daniel	B.70; B.71; B.120
Fox, Danny	B.70; B.120
Fox, Ruth	G.22; H.18; H.30
Fraley, Brian	C.17; C.29
Frank H. Monroe Htg. & Cooling Inc.	B.46
Frank, Charles	B.46
Frank, Rev. John G.	A.30; B.70
Frayman, Beth	B.46
Frazar, Bryan	B.124; B.125; B.144
Frazier, Debbie	B.70; B.77; B.98
Frazier, Lanny	B.46
Frazier, Mieg L.	B.46
Frazier, Owsley B.	B.95; D.60
Freeman, Alex	B.70
Freeman, Angela Romero	B.70; B.88
Freeman, Dale	B.70; B.88
Freeman, Mary Jo	A.26; A.31; B.70
French, Katina	B.46
French, Mark	B.24; B.144
Frend, Norma	B.46
Freund, Adrian	B.26; D.72; D.91
Friedman, Debra & Alan	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Friedman, Patricia	B.70
Friedman, Willaim D.	D.86
Friedmann, Fred & Rita	A.30; B.70
Friends of Beargrass Creek	J.4; J.14; J.41; J.42; J.43; J.44; J.45; J.46
Friends of Harrods Creek	B.80; B.92
Fries, Daniel	B.103

NAME	COMMENT
Frisbie, Mary	B.70
Fritz, Kenny	B.69; C.17; D.58; D.72
Froman, John	B.46
Fromme, Don	B.70
Frueh, Andrew	B.40; B.88; B148
Fry, David E.	A.26; B.71; B.120
Fryrear, Brent	B.70; N.16
Fryrear, William	B.46
Fuchs, James A.	B.46
Fulkerson, Belinda	B.46
Fulkerson, Nancy	B.70
Fulkerson, Vance	No response required
Fullenlove, James	D.91
Fuller, Bill Jr.	A.4; B.95
Fuller, Scott	B.70
Gadson, Arnita	B.9; B.10; B.60; D.26; D.60; D.74; E.7; E.8
Galligan, Mayor Thomas	B.46; B.74; B.98; B.123; B.139; F.48
Gambraff, Joyce	B.27
Ganote, Janet	B.70; N.16
Garcia, Gene & Deborah	B.23; B.24; B.88; B.95; H.14; I.7; P.8; R.6; Q.7
Garden, Doug	A.14
Gardner, Jeannie	D.72
Gardner, Jeff W.	B.70; B.120
Gardner, Louise	A.34; B.60; D.19; D.48
Gardner, Sam	B.46
Gardner, Sonia	B.46
Garmon, Charles	A.14; B.46
Garmon, Phyllis	B.46
Garmon, Phyllis	B.69; C.17; C.29
Garrison, Sean	R.12
Garver, Dr. & Mrs. David	A.4; B.6; B.57
Garver, Jan	A.4; A.14; B.18
Gates, Tom	J.1; J.14
Gatewood, Karen	B.70; B.120
Gauntner, Anthony	B.70
Gay, Susan & David	B.74
Gaylor Group, Inc.	B.46
Gearing, Robert	B.74
Geisler, Charles	A.26; B.95
Gentry, Mark	B.46
Geo. Pfau's Sons, Inc.	B.46
Gessner, Lawrence	B.46; B.70

NAME	COMMENT
Gessner, Lawrence & Mary	B.70; B.74
Gettlefinger, Timothy	B.70
Getz, Gary	B.46
Getz, Jerry	B.46
Ghazi, Jamie	B.80
Ghazipour, Aziz	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Gibbon, Martha	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Gibbs, Howard	B.46
Gibbs, Judd	B.88; B.89
Gillenwater, David	B.70
Gillenwater, Marilyn	B.46
Gillenwater, Pat	B.69; C.17
Gillespie, Steve	B.120
Gilmore, James	B.74
Gipe, Benjamin O.	B.46
Gish, James	B.46
Gitlings, Greg	B.70
Givan, Rick	B.63
Glancy, Charles & Mary	B.74; F.31
Glaser, Jennifer	B.70
Glaser, Lawrence	B.70
Glass, Cinda	B.46
Glass, Patricia	B.46
Gleeson, James	B.75
Glye, Theresa	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Godfrey, Edwin & Sue	B.74; B.95
Goforth, Roger	B.46
Goheen, David	B.143
Goheen, Megan	B.143; D.66
Goins, Thomas	B.70
Goldsmith, Linda Jane	B.95; D.70
Golladay, Lisa	B.70; B.120
Good, Brian	Not legible
Goode, Charles P.	A.4; B.95
Goode, Diane	A.4; B.95
Goode, Emily	A.34
Goodin, Henry	B.46; B.70
Goodin, State Rep. Terry	B.46
Goodman, A.W.	B.46
Goodwin, Don	B.70

NAME	COMMENT
Gordon, Linda	B.46
Goreham, Bruce	A.26; A.31; B.26; F.21; N.16
Goshton, Roger	B.46
Gosnell, Patricia	A.4; A.34; B.89
Goss, John	F.14; F.19; F.20; F.21; F.41
Goss, Lee	B.70
Gosser, Don	B.23; B.24; B.88; B.95; H.14; I.7; P.8; R.6; Q.7
Gottbraith, Vincent	B.70
Gov't Marketing Assist Group	B.46
Gowens, Carroll	B.46; B.69
Grady, Lowell Jr.	B.70
Graffis, Joe	B.72; K.26
Graham, Mayor William H.	B.46
Graham, Rita	D.72
Grannan, Charles & Ann	B.74; D.19; G.19; N.15
Grant Communications Inc.	B.46
Grant, Donald M.	B.70; C.17
Graphic Ventures, Inc.	B.46
Graston, James	B.50
Grauman, Kelly	B.19; B.64; B.116; B.126; B.127; B.128; D.30; F.1; H.13; M.6; P.19; Q.23; R.12; R.13; R.14; R.15; R.16; R.17; R.18; R.19; R.20; R.21; R.22
Graves, Brenda S.	B.46
Graves, Gina Maria	A.4; B.49
Grawemeyer, John	B.70
Gray Trucking	B.46
Grayson, Chris	B.46
Grayson, E.C. & Pat	B.50; B.70
Grayson, Jo Lynn	B.46
Grayson, Karen	B.46
Grayson, Paul	B.46
Greaf, John	B.46; B.88
Gream, Kelly	B.50
Greater Louisville Inc.	B.46
Greater Louisville Sierra Club	B.1; B.4; B.5; B.6; D.19; D.21; Q.2
Green Spring, City of	A.4; A.9; B.6; B.7; B.10; B.23; B.56; B.57; B.63; B.74; B.80; B.89; B.90; B.92; B.94; B.95; D.7; D.9; D.15; D.19; D.60; E.21; H.13; H.14; R.3
Green, Carol	B.46
Green, Jackie	B.1; B.4; B.6; D.69
Green, Susan	B.80; F.1; F.2; F.7
Greene, Grace & Don	B.70; N.16
Greene, Janis	B.69; C.17

NAME	COMMENT
Greene, Susan	E.42; F.40; J.2
Greenwell, David	B.50; B.70
Gregory, Helen	B.70; N.16
Grenough, Richard	B.75
Grider, Meredith	B.70
Gries, Jim	B.26
Griffin, Mary	B.83; B.102
Griffin, Wayne	C.17
Griffith, Robert	A.4; A.14; B.60; E.23; E.24; F.5; F.6; F.19
Grigsby, Charles	B.74; B.77; B.98
Grigsby, Judy	B.74; B.77; B.79; B.88
Grimes, William C.	B.46
Grismer, Michael	B.70
Grismer, Robert	B.70
Grockel, Wil	D.95
Groemling, Robert	B.46
Groener, David	F.49
Groffer, Devon	B.46
Groh, Ken	B.46
Grolf, Walter	B.46
Grosheart, Kendall	B.46
Gross, Rodney	A.14; B.46
Groth, Keith	B.46
Group 1 Realty	B.46
Guinchigliani, Janis	D.58
Guinn, Michael	B.70
Gupta, W.K. & Wendy	B.23; B.24; B.88; B.95; H.14; I.7; j.1; P.8; q.7; R.6
Gutterman, Charles	A.14; B.143
Guy Rhodes ENT, Inc.	B.46
Haas Cabinet Co.	B.46
Haas, Barbara	B.46
Hackmiller, Pat	A.26
Haddock, Lidna	B.120
Haeberle, Brent & Joan	B.23; B.24; B.88; B.95; H.14; I.7; j.1; P.8; q.7; R.6
Hagan, Bernard	B.123
Haines, Greg	C.17
Haley, Marty	B.46; B.70
Hall, Alicia	C.17
Hall, Anna	B.50; B.70
Hall, Bruce	B.80; B.95

NAME	COMMENT
Hall, Joe	B.70; B.120
Hall, Jonathon	B.69; C.17
Hall, Leo	A.26; B.26
Hall, Marsha	A.4; B.59; B.60; E.30
Hall, May Ann	B.46
Hall, Tony	B.46
Hall, William	A.34; B.59
Haller, Kathy	A.25; B.46; N.16
Hallmark, Betty	B.50
Halloway, Leann	B.46
Halvatgis, James	B.23; B.24; B.88; B.95; H.14; I.7; j.1; P.8; q.7; R.6
Hamilton, John	A.25; B.26; B.57; B.65; B.101
Haming Wanda	B.89
Haming, George	B.70
Haming, John	B.89
Hammer, Thomas	B.70
Hammett, Dory	B.46; B.69; C.17
Hammond, Chuck	B.46
Hammond, Thomas	B.46
Hammond, Tommy C.	B.46
Hampe, Kurt	D.19
Hancock, Mary	A.26
Handley, Anne	B.70
Handley, Edward	A.26; B.71; B.120; D.73
Hanewinkel, Rita	B.69; C.17
Hankins, Vaughn	B.46
Hanover College	B.46
Hansen, Terry	B.95
Harbin, Larry and Patty	B.46
Harbolt, Jim	B.74
Harbor at Harrods Creek	B.114; D.31; D.32; G.14; H.15
Hardison, Donna	B.74; B.98
Hargeson, Christine	B.46
Harmon, Alan	B.70
Harmon, Anne	B.70
Harmon, Hellen Jean	B.46
Harmon, Spencer	B.46
Harp, Lee Ann	A.25; B.70
Harper, Christina	B.46
Harper, May	B.46
Harreld, Michael	B.26; B.46; D.58
Harrett, Charles	B.70; N.16

NAME	COMMENT
Harris, Debra	B.70
Harris, John	B.69; C.17
Harris, Linda	B.69; C.17
Harris, Marvin	B.70
Harrison, George	B.26; N.16
Harrods Creek Fire Protection District	B.84; B.88; B.122; Q.8
Harrods Creek Task Force	A.34; B.6; B.15; B.76; B.80; B.91; B.92; J.4; J.30
Hart, Harold D.	B.46
Hartlege, Albert	No response required
Hartstein, John	B.46
Haupt, David	B.70
Hausman, Frank	B.120; B.135
Hausman, Marcia	A.26; B.120; P.20; P.50
Hauss, Beverlie	B.70
Hauss, Stuart	B.70
Hawes, Gerry	B.46
Haycos, Janet	B.46
Hayes, Kenton	A.4; B.95; E.37
Hayes, Margaret	B.46
Hayes, Rhu	B.95
Haynie, Ann	B.59; B.60; C.14; D.19; D.38; E.4; E.33
Hazard, Margaret	B.23; B.24; B.88; B.95; H.14; I.7; P.8; R.6; Q.7
Heads Up Pub	B.46
Hearold, Louise	B.46
Heauner, Bud	B.46
Hebel, Carol	B.95; D.19; D.60
Heck, R.	B.46
Hedge, Ruthann	B.46; B.69; B.98; C.17
Hedgepeth, Dorothy	B.60; B.80; D.15; E.21
Hedrick, Dan	A.4; B.4; B.26; B.60; B.95; D.15; F.8
Heil, James	A.26; A.31; D.19; D.46
Heil, Tom	B.50
Heim, Ann & Neal	B.72; M.10
Hein, Amy	B.10; B.46
Heins, Daniel	A.3; A.34; B.88; B.100; B.106; B.107; B; B.139; C.25; R.2
Heintzman, Joe	A.4; B.95; B.57; B.118; D.19; D.60; K.15; P.8; P.13
Heirhman, Dennis	B.46
Helbig, Kimberly	B.46
Helm, Wade Hampton	B.6; C.13; D.15; E.5; E.9
Helton, Virginia	B.46
Henderazhs, Janet	B.46; B.50

NAME	COMMENT
Henderazhs, Greg	No response required
Hendrix, Gary	B.70
Henley, Jim	C.23
Hennekes, Margaret & Edward	B.26; B.70; D.91
Henry, Diane	B.26; B.80
Hensel, Jerry	No response required
Hensley, Brenda	B.46
Hensley, Steven	B.69
Herbener, Marc	C.27; D.71
Heritage Hardwoods of KY	B.46
Herndon, Ken	B.40; B.140; D.90
Herndon, Richard & Carolyn	B.70
Herrington, Rachel	B.46
Herron, Lydia	B.74
Herzfeld, John	B.74
Hess, Deborah	B.70
Heuser, John	B.70
Heuser, Shirley	B.46
Hiatt, John	B.46
Hickox, Louise	A.4; B.95; D.19; D.69
Hicks, Garry	B.46
Hicks, John	B.46
Hicks, John H. Jr.	B.70; B.71; B.120
Highland Baptist	B.46
Hikes, John	B.26; B.70
Hill, John	B.69; B.120; C.17
Hill, Terrie	B.46
Hill, Tracy	B.26; B.70; P.14
Hillebrand, Mary	B.46
Hilpp, John	B.26
Hines, D.J.	B.69; C.17; N.16
Hinkle, Carol	B.69; B.70; C.17
Historic Landmarks Foundation of Indiana	A.8; F.1; F.5; F.20; F.21; F.34; F.35; F.36; F.37; F.38; F.39; F.40; F.41; F.42; F.43; F.44; F.45; F.46; F.47; H.1; H.34
Hitachi	B.46
Hixson, Clarence	J.4; J.14; J.41; J.42; J.43; J.44; J.45; J.46
Hoback, Kenneth	B.46
Hochn, Frances	B.46
Hockensmith, Cindy	B.46
Hodges, Charles	B.70; B.84
Hodges, Steve	B.46
Hoehn, Elmer	B.46

NAME	COMMENT
Hoehn, Elmer	B.70; B.98
Hoehn, G. Patrick	A.2
Hoffman, Brittany	B.69; C.17
Hoffman, Robert	B.26; B.120; B.123
Hoffmire, William L.	B.46
Hogan, Larry	B.46
Holcomb, Cindy	B.69; C.17
Hollis, Bruce	B.69; B.70; C.17
Holloway, David P.	B.70
Holloway, Henrida	B.69; B.70; C.17
Holmes, Rusty	B.69; B.70; C.17
Holt, Bill	B.50; B.70
Holtgrave, Cathryn	A.34; B.74; C.16
Holtgrave, Robert	B.95; B.102; Q.17
Holtzclaw, Dr. John	Not legible
Holub, Randolph	B.79; B.90; B.95
Holz, F.	B.46
Homester, Terry Sr.	B.46
Hometown Bank	B.46
Hommel, Margie	B.46
Hornek, Martin	B.69; B.70; C.17
Hoogland, James	B.46
Hook, Robin	B.46
Hooper, Ananna	B.100
Hoppes, John	B.44; B.46
Horn, Annie	B.70
Horn, Julie	B.78; B.79; B.80; B.88; B.95; N.15; P.13
Hornback, Barry	B.46
Hornback, Marla	B.46
Hornek, Mary	B.69; B.70; C.17; M.10
Horvath, Bernie	B.46
Hosmer, Charles	B.46
Houlette, Don	B.26; B.70
Hovekamp, Larry	A.26; B.6; B.70; C.17; D.72; D.91; N.16; Q.12
Howard, Dorothy	A.34; K.26
Howard, James Dr.	B.44; B.70
Howard, Jordan	B.69; C.17
Howard, R. Cory	B.69; C.17
Howard, Ron	B.26; B.70
Howlett, Gracie	B.70; B.131
Howser, Patrick	B.46
Huang, Dinah	B.23; B.24; B.88; B.95; H.14; I.7; j.1; P.8; q.7; R.6

NAME	COMMENT
Huang, Weifeng	B.23; B.24; B.88; B.95; H.14; I.7; j.1; P.8; q.7; R.6
Hubbach Staffing Services	B.46
Hubbard, Matt	B.69; C.17
Hubbs, Stephen	J.2; J.7; J.10; J.11
Huber Tire	B.46
Huber Winery	B.46
Huber, Gregory	B.70; N.16
Huber, John L.	J.2; J.7; J.10; J.11
Hubler, T.L.	B.46
Hubrich, Michael	B.69; B.70; B.74; C.17
Hudson, Pam	C.17
Huecker, Joe J.	B.46
Huelsman, Roland & Shirley	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Huff, Mayor William	A.4; A.9; B.6; B.7; B.10; B.23; B.56; B.57; B.74; B.80; B.89; B.90; B.92; B.94; B.95; D.9; D.19; D.60; H.13; H.14; R.3
Huffman, Sherry	B.46
Hughes Group, Inc.	B.46
Hughes, Beverly	B.46
Hughes, Damon	B.26
Hughes, Mitch	B.46
Hughes, Tricia	B.26
Hughley, Rebecca	B.46
Huguley, Daniel	B.70
Hulker, Joe	B.46; B.70
Hulp, Robert E.	B.46
Hulsman, Robert	B.46; Q.28
Hume, Ted	B.29; B.70; B.74
Hummel, Leo D.	B.46
Humphress, Owen & Linda	B.70; B.82
Humphrey, Michael	B.70; B.120
Humston, Sam	B.70
Hunt, Billy	A.26; B.70
Hunt, David & Donna	B.27; B.69; B.70; C.17
Hunter, Barbara	B.74
Hunter, K.	B.46
Hurst, Barbara	B.46
Hurst, Janet	B.46
Hurt, Edwin	B.46
Hurt, Edwin	M.10; M.11
Huston, Michael	B.41; D.30

NAME	COMMENT
Hutchen, Robin	B.46
Hutchens, Becky	B.46
Hutchings, James	B.46
Hutchings, Randy	B.46
Hutchinson, Samantha	B.69; C.17
Hyatt, Phillip & Joyce	A.4; A.34; B.23; B.143; I.7; Q.7
Hyde, Frank	A.26; B.70; B.74; B.120
Hyer, Michelle	B.46
Hynes, Jean	B.69; B.70; C.17
Ideal Wood Products, Inc.	B.46
Ideas Unlimited, LLC	B.46
Indiana Department of Natural Resources, Div. of Historical Preservation and Archaeology	F.14; F.19; F.20; F.21; F.41
Indiana Port Commission	D.86
INAAP (Indiana Army Ammunition Plant) Reuse Authority	B.46
Independent Bank	B.46
Indian Hills, City of	B.27; B.74; B.84; B.88; B.122
Indian Oak Church	B.46
Indiana AAP Army Staff	B.46
Indiana-American Water Co.	B.46
Infinite Solutions	B.46
Ingram, Jessica	B.69; C.17
Inman, Susan	B.70
International Union of Oper. Engr.	B.46
Interstate 65 Truck Sale, Inc.	B.46
IQ Copies	B.46
Ironworkers #70	B.46
Isaac, Walter D.	B.46
Isbell, Tommy	B.46
Isetti, Ampelio	B.70; N.16
Isetti, Rose	B.70; N.16; P.14
IU Southeast	B.46
Ives, Mary Jo	B.70
Ivey, Susan	A.26; B.26; D.58; D.91
Ivy Tech State College	B.46
J.O. Endris & Son	B.46
Jack Haywood/Prolaminators	B.46
Jackson, Bryan	B.46
Jackson, Jefferson County Judge Rebecca	A.31; B.26; N.13; N.16

NAME	COMMENT
Jackson, Ellis	J.1
Jackson, Frank	E.40; E.42
Jackson, James T.	B.46
Jackson, Renea	B.69; C.17
Jackson, Robert M.	B.46
Jacobi, . Dian	B.27
Jacobi, Lawrence	B.27
Jacobi, Sandra	B.46
Jaggers, Jeffrey	B.50
James L. Shireman, Inc.	B.46
James, Jeff	D.58; D.72
James, Theresa	B.46
James, Wanda	B.46
Jarboe, Don	B.71; B.95; B.120; B.135
Jasper, Brian	B.70
Jeff. Twp. Trustee	B.46
Jefferson Comm. College	B.46
Jefferson County Air Pollution Control Dist.	G.1; G.3; G.6; G.7; G.8; G.9; G.10; G.11; G.13
Jefferson County Planning & Dev. Services	B.1; B.2; B.3
Jefferson County Public Schools	D.87; D.88; D.89
Jefferson County Public Works Department	B.23; B.25; B.26; B.27; B.74
Jeffersonville Breakfast Optimist	B.46
Jeffersonville Housing Authority	B.46; B.69
Jeffersonville, City of	B.46; B.98; F.48
Jeffersonville Main Street	B.56; B.59; D.17; D.19; D.49; F.6; F.21; F.48; P.9
Jeffrey, Bill	B.46; C.17
Jeffries, Charlie	C.17
Jenkins, Allen	B.74
Jenkins, Josh	B.69; C.17
Jenkins, Laletta Hackett	A.4; B.6; B.63; B.113
Jenkins, Nancy	A.26; B.118; B.120; D.73; P.15
Jenkins, Ralph Jr.	A.26; B.120
Jenkins, Shellie	B.102
Jennings, Mary	B.9; D.7 D.60; M.9
Jennings, Robin	C.31
Jesse Ballew Enterprises	B.46
Jewell, Marti	B.70
Jinkins, Kelly	B.46
Jipsen, Shannon	A.30; B.26; P.20; P.50
Johannes, William	B.75; B.88; Q.21
John-Kenyon Eye Center	B.46
Johnson, Barbara	B.46

NAME	COMMENT
Johnson, Britni	C.17; D.58; D.72; D.86
Johnson, Chris	B.74; B.83; B.95; B.104
Johnson, Fred	B.46
Johnson, Gary	C.17, F.27
Johnson, Henrietta	B.46
Johnson, Lomer	B.79
Johnson, Marcia	B.78; H.15
Johnson, Molly	B.50
Johnson, Nancy	No response required
Johnson, Savannah	No response required
Jonas, Judy	B.69; B.70; C.17
Jones, David	B.26
Jones, Denny	B.95; C.21
Jones, Dick	B.46
Jones, Freddy	B.69; B.70; C.17
Jones, Jack	C.46
Jones, Jack Hewitt	B.26; B.84; I.39
Jones, JoAnn	B.46
Jones, Mark	B.70; Q.20
Jones, Matt	B.69; C.17
Jones, Richard	B.74
Jones, Ron	B.70; B.120
Jones, Stanci	B.69; C.17; D.58; D.72
Jones, Walter (Walton?)	B.26; N.14
Jordan, Jack	B.46
Jorden, Lary	B.46
Jovanovich, Nada	B.69; C.17
Juckett, William	M.8
Jupe, Paul	B.46
JW Advertising Spec.	B.46
K&T Kraft Marathon	B.46
Kaelin, Greg	B.26
Kaiser, Jim	B.124; B.125; B.144
Kaiser, Lynn	B.1
Kaiser, Mayor Jack	B.88; B.122
Kamer, David	A.26; B.120
Kamin, Howard	R.7
Kannapell, David	A.4; A.14; B.63; B.95; B.106
Kanning, Cindy	B.46
Karem, Marina	B.46; B.59; D.15
Karem, Nicholas	B.46; B.59; D.15
Karem, Phillip	B.46; B.59; B.135; D.15

NAME	COMMENT
Karley, Brian	B.70
Kase, Ron	B.50; B.70; C.17
Katz, Dawn	B.70
Kay Joanne	B.46
KD Stearley Publications, Inc.	B.46
Keefe, Michael	B.46; B.70
Kegebein, Fred	B.138; B.143
Keith, James	B.74; B.98
Keith, Judith	B.46
Keith, Vanessa	B.46
Kelleher, John	B.70
Kellems & Coe Tool Corp.	B.46
Keller, Lee	B.12; B.46; N.16
Kelley Dental	B.46
Kelly, Barbara	B.22; B.30; B.97; C.19; C.20; D.46; D.60; B.97; R.11;
Kelly, Charles	B.74; B.94; B.95; B.101; B.116; B.119; F.28
Kelly, Micle	B.46
Keltner, Josh	B.69; C.17
Kemble, Franchoise	B.116; R.18
Kemp, Brenda	B.69; C.17
Kemper, Shawn	No response required
Kennedy, Patrick	A.14; B.4
Kentuckiana Mack Sales & Service	B.46
Kentucky Dept. of Fish & Wildlife Resources	K.7; K.10; L.5; L.6; L.8
Kentucky Division of Waste Management	N.18; Q.24
Kentucky Division of Water	J.1; J.7; J.13; J.14
Kentucky State Nature Preserves Comm.	K.8; K.37; K.42
Kentucky Waterways Alliance	A.5; J.1; J.3; J.5; J.30; J.48; K.26; L.14
Kepel, Charles	B.46
Keraers, Mary Lynn	B.46
Kern, Rena	B.46
Kerr, Ann	B.46
Kerr, Marvin	B.46
Kersey, Linda	B.69; C.17
Kersey, Steven	D.65; N.11
Kessinger, Al	B.70
Kessler, Jay Linwood	N.16
Keswani, Naresh	D.19
Key, Steven	B.46
Kia of Clarksville	B.46
Kidwell, Mike	B.50

NAME	COMMENT
Kiesewetter, Vanessa	B.70
Kiger, Naomi L.	B.46
Kightlinger & Gray	B.46
Killion, Gwen	B.95; D.64
Killmer, Peggy	B.59; B.60; E.44
Kimberlin, G.	B.46
Kimberly, Charles	B.70
Kimmer, E.N.	B.46
Kinder, Charles	B.46
King, Douglas L.	B.46
King, Gene	B.70
King, Karen S.	B.46
Kinney, Charles	B.46
Kinsman, Mary Jean	A.4; A.43; B.17; B.26; B.80; B.95; D.13; D.45; D.49; D.60;
Kirbanke, Debra	B.46
Kirchgessner, Michelle	B.50
Kirk, Mary	B.46; B.88
Kitchen, Dan & Linda	B.69; C.17
Kittinger, Sue	B.46
Kitts, Connie	B.46
Klayko, Brandon	B.26; B.123; B.133; M.11
Klein, Christian	B.70
Klein, Tammy	B.70
Kline, Fred	B.79
KM Stemler Co., Inc.	B.46
Knezevich, John	B.102
Knight, Carrie	B.46
Knob & Valley Audubon Society	B.1; B.6; B.9; B.11; B.61; B.62; B.63; C.23; C.28; D.15; D.19; D.80; D.81; E.1; E.7; E.8
Knoerr, John	B.70
Knotts, Julie	B.46
Knowles, Steve	B.46
Kochent, Kim	No response required
Koetter Construction	B.46
Koetter, Kenny	B.46
Koetter, Randy	B.46
Koetter, Robert & Gladys	B.46
Koetter, Shellie	B.46
Kohorst, Cynthia	A.4; A.14; B.95; D.19; D.21; D.67; K.26; K.27
Korfhage, Harriet	A.31; B.26; B.70; B.84;
Kork, Cheryl	B.46
Kramer Assoc., Inc.	B.46

NAME	COMMENT
Kroh, Claire	B.74
Kroh, Clayton	B.74
Kruer, Bonita	B.46
Kruer, Brad & Kim	B.66; B.70
Kruer, Michael	B.46
Kruer, Phyllis	B.46
Kubancik, Mark	B.26; B.70
Kuenzig, Sister Karen	B.26; B.70
Kull, Michael	B.46; B.63; B.70;
Kulp, Bob	B.95
Kunzler, Sandra	B.46; B.70; B.120
Kuppersmith, Nancy	B.4; B.6; B.70; B.120; C.15
Kye's	B.46
L. Thorn Co., Inc.	B.46
La Presley, Vivian	B.111; D.59
Labhart, Norman & Lelax	B.69; C.17
Labruyere, Carolyn	B.70
Lachard, Norma	B.46
Lacy, Phillip	B.70
LaMaster, Ricky	B.46
Lamb, Barbra	B.46
Lambert, George S.	B.70
Lame, Linda	B.69; C.17
Lamothe, Owen	B.70
Lampe, John	B.70
Land Mill Developers, Inc.	B.46
Langness, Susan	B.46
Lanham, Wayne	B.26; B.120
Lanning, Cindy	B.26; B.84
Lanum, Robert (Regional Leadership Coalition)	B.50; D.58; D.72; D.73; D.86; D.91
Lapinski, Jane	B.69; B.78; B.97; C.15; C.17; D.60; G.19; G.20;
Larkin, Marcia Hasenour	A.34; B.78; B.97; C.15; D.60; G.19; G.20
Larkin, Tom & Gili	B.23; B.24; B.88; B.95; H.14; I.7; j.1; P.8; q.7; R.6
Latter, Bob	B.84
Latter, Marty	A.4; B.33; B.102; D.67
Laughlin Miller Architecture	B.46
Lawler, Mary	B.74; B.88; B.89
Lawrence, Christopher	B.46; B.70; C.17
Lawrence, Lindsey	B.46
Lawrence, William	B.70; B.84

NAME	COMMENT
Lawson, Josh	D.58; D.72; D.86
Lawson, Mark	B.70
Leachman, Betty	B.46
Leathers, Ray (Roll Forming Corporation)	B.26; D.86
LeBeau, Phyllis	B.70
Leclaire, Alan	A.26; B.26
LeCompte, Marilyn	B.70
Ledbetter, Ben D. Jr.	B.46
Ledford, Carolyn	B.70
Lee America Corp.	B.46
Lee, Hyun T.	B.46
Lee, James	B.46
Lee, Tom	B.70
Leezer, Pamela	B.46
Lehmann, Eric & Susan	B.20; B.26
Leibert, Colleen	A.4; A.32; B.143
Leight, Leonard	B.95
LeMay, Terry	A.4; A.14; B.6; C.21
Lemmons, Jerry and Lois	B.46
Leonard, Adele	B.141
Leonard, Donna	B.46
Leslie, Mike	B.26
Levine, Howard	B.60; B.70
Levinson, Stanley	A.4; B.74; B.95; D.60
Levy, Darrell	B.46
Lewellen, Alisa	B.46
Leweller, Nasmine	C.17
Lewis, Anna Mae	B.46
Lewis, Cara	A.4 B.95
Lewis, Dan	B.46
Lewis, Darlene	B.23; B.24; B.88; B.95; H.14; I.7; j.1; P.8; q.7; R.6
Lewis, David	B.70
Lewis, David	B.69; C.17
Lewis, David A.	B.46
Lewis, Flo	B.46
Lewis, Gary	B.46
Lewis, Richard	B.120
Lewis, Robert N.	B.46
Lewis, State Sen. James A. Jr.	B.46
Lewter, Connie	A.26; B.120; Q.28
Libs, Robert	B.46
Liebert, Colleen	A.4; D;15

NAME	COMMENT
Liebert, Gilbert & Connie	B.70
Liechty, Anne	A.4; A.34; B.59; B.60; B.78; D.15
Lighthiser, Michael	C.15; D.19
Likins, Jason	B.46
Lilly, Casper	Not legible
Lilly, Joe	B.70
Lilly, Sally	B.60; D.17; D.69
Lincoln Hills Health	B.46
Lindop, Joan	B.1; B.4; B.5; B.6; D.19; D.21; Q.2
Link, Gerald	B.70; C.17
Linser, Sandra & George	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Lisanby, James R.	B.46
Little, Hardy	B.46
Litz, Sue	B.46
Livers, Mike	B.46
Lloyd, Morris D.	B.80
Lockard, Joe	B.46
Lockard, Mary Alice	B.46; B.70
Loeb, Brandon	B.46
Logar, Terry	C.17
Logsdon, Todd	B.46
Long, Dan	B.46
Longworth Villa Health Center	B.46
Loop, E.	B.46
Lord & Neville	B.46
Losster, E.R.	B.46
Lotter, Betty	B.78; B.114; D.31; Q.19
Loughmiller, Susan	B.46
Louis, Hunter	A.4; A.14; B.17
Louisville Audubon Society	A.4; A.5; B.66; D.19; J.1; J.3; J.7; J.34; J.48; K.24; K.36
Louisville Bicycle Club	B.1; B.124; B.125; B.144
Louisville Olmstead Parks Conservancy	M.8
Louisville Veneer Group	B.46
Louisville Water Company	J.2; J.7; J.10; J.11
Louisville, City of	A.12; A.13; A.14; B.16; B.26; B.30; B.31; B.32; B.33; B.34; B.35; B.36; B.37; B.38; B.39; B.40; B.41; B.42; B.43; B.44; B.45; B.46; B.47; B.48; C.10; D.4; D.33; D.34; D.44; H.16; P.10; Q.14
Low, Jeff	B.46
Lowery, Elizabeth	B.69; C.17
Lowery, J.	B.46

NAME	COMMENT
Lucas, Deborah	B.26; D.58; D.72
Lucchese, Francis P. II	B.26; B.80; B.95; D.60; E.37
Lumbert, Lester	B.26
Lunsford, Ronald	B.46
Lyle, Sheri	B.95; D.67
Lynch, Chris	B.74
Lynch, Frank	B.46; B.70; B.120
Lynch, Jim & Sarah Jane	B.70; C.17
Lynch, R.C.	B.46
Lynch, Reagan	A.26; B.70; B.140; D.58
Lynch, Teresa	B.46
Lynn, Jeremy	B.70; P.14
Lynn, Ronald	B.46; B.70; N.16
Lyverse, Carolyn & Carroll	F.29
Maddux, Ron	B.25; B.46
Maddux, Ronald L. Sr.	B.70; B.78; B.102; C.17
Madison Chamber of Commerce	B.46
Madison Rotary Club	B.46
Madison Vision	B.46
Madison, Raymond	B.46
Madison, Robert L.	A.34
Madison, Tara	B.69; C.17
Madison-Jeffersonville Co. Indust. Devel. Corp.	B.46
Maertz, Carl	A.26; B.46; B.120
Magner, R. Todd	B.46
Magruder, Robert	B.46
Magruder, Scott	A.4; B.26; B.74; B.95; B.102
Mahaffey, Gretchen	B.46
Mahorney, John	B.1; B.124; B.125; B.144
Mail Boxes, Etc.	B.46
Makowsky, Paul D.	B.46
Malem, David	B.70; B.84
Malker, Barbra	B.46
Mancini, Donna Walker	B.70; C.17
Mand, Lawrence	B.46
Manger, K.L.	B.70
Mangun, Lex	B.46
Manly, Rhonda	B.46
Mann, Miriam	B.70
Mann, Ronald	B.46
Manpower	B.46
Marcum, Charles	No response required

NAME	COMMENT
Margan, C.	B.46
Maria, James	B.46
Marine Industries, Corp.	B.46
Markham ,Carolyn	B.26; B.70
Markley, John A.	B.15
Marks, Ivan & Lois	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Marks, Ryan	B.46
Marlatt, Amy	B.26
Marshall, Haskel	B.74; B.80
Marshall, Sandy	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Marshall, Wanda	B.46
Martin, Brenda	B.46
Martin, Caroline	B.69; C.17
Martin, Linda	B.69; C.17
Martin, Pamela	B.46
Martin, Reed Jr.	A.14; B.70; B.84
Martin, Susan G.	B.26
Martin, William	A.26; B.26
Mary Kay	B.46
Mascharich, John	B.26; B.70
Mascharich, Richard	B.120
Masden, Jean	B.70
Mason, Gary	No response required
Masterson, Gary	A.4; A.14; B.95
Mathes Pharmacy	B.46
Mathews, Janice	B.46
Mathews, Susan	B.46
Matthews, Blair	A.4; D.19
Matthews, Mary	B.46
Matthews, Robert	B.70; B.120
Mattingly, Dale	B.70; B.74
Mattingly, Marilyn P.	B.46
Mattox, Donna	B.46
Mattox, Kristy	B.46
May, Christine	B.46
Mayes, Richard	B.70
Mayes, Susan	A.4; B.26; B.74; B.95
Mayes, William	B.70; C.17
Mayfield, Angela	B.46; B.69; C.17; D.58; D.72
Mayfield, Charlotte	B.46; D.58; D.72; I.20
Mayfield, Gerald	B.43; B.44; B.46

NAME	COMMENT
Mayfield, Gerald	B.46; B.66
Maytum, Mary Jane	B.69; C.17
Mazzoni, Stephen	B.69; B.70; C.17
McAdams, Kevin	A.34; B.1; B.6; D.15; D.19; D.30
McAdams, Laura	B.70
McAtee, Morris	A.26; B.120
McAuliffe, Robert	B.74
McBride, Kate	C.17
McBride, Kitty	B.50
McCall, Douglas	A.4; A.14; B.15; B.95; B.110; Q.20
McCandless, Linda	B.69; C.17
McCartney, Anna & Jim	B.46
McClain, Dennis	B.46
McClelland, Bill	B.46
McClurg, Duane (Diane?)	A.26; B.26; B.70
McConkey, Dale & Susan	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
McCormick, Steve	B.70; B.84
McCubbins, Wendy	B.46
McDaniel, Ann	B.74
McDaniel, Pam	A.4; C.25
McDaniel, Paul	A.34
McDonald, Ann B.	B.85
McFadden, Robert	B.26; B.70
McFarland, Mr. & Mrs. R. Douglas	A.4; A.34; B.26; B.79; B.95; G.19
McFarlane, Michael	A.4; B.59; B.60; B.78; D.60
McGaha, Dale	J.1; J.13
McGavic, Susan	B.72; C.17; C.18; D.56
McGill, Roberta	B.46
McGuffin, Samuel	No response required
McHugh, Phyllis	B.9; B.10; B.60; B.63; B.95; C.16; D.7; D.46; D.47; D.60; D.67; F.30
McHutchen, Jeremy	B.46
McHutchen, Robin	B.46
McKinney, Ernest	B.46
McKinney, Tania	A.34
McKinney, William Jr.	B.70
McKulick, Ron	A.14; B.46; B.70
McLaughlin, Michael	B.70
McLellan, Linda C.	B.46
McMahan, Rory	F.29; O.1; O.2
McPheters, Max	B.46
McQueen, Dorle	B.26; B.80

NAME	COMMENT
McQueen, Jeff	B.26; B.80
McReynolds, Jim	B.46
McTyeire, Sherry	A.26; B.70
McWilliams, Janet	B.70; B.84
McWilliams, Jennifer	B.46
McWilliams, Scott	A.26; B.26
Means, Randi	B.26; P.14
Medden, Barbra	B.46
Medical Ctr. of Southern Indiana	B.46
Mehlbauer, Lori	B.70
Meka	B.46
Melhisier Endres Tucker	B.46
Mendenhal, Gene	C.17
Menedez, Melissa	B.46
Menendez, Thomas	B.46
Menz, Brian	B.1; B.70
Meredith, Neil	B.70
Meriwether, Angela	B.46
Meriwether, Angela	No response required
Meriwether, Ron	B.46
Merkley, Councilperson Les	B.70; B.98
Merriam, James	B.9; B.70; B.120
Merrick, Helen	B.70
Merrill Lynch	B.46
Merrill, Jayne	A.4; B.95; H.18; Q.19
Merritt, Elizabeth	A.4; B.10; C.15; D.16; D.19; D.84; F.6; F.12; F.22
Metals, USA	B.46
Metro Paving, Inc.	B.46
Metts, Sandra	B.26; B.70; P.14
Meves, Harris	B.70
Mewhinney, James	B.46
Meyer, Berl	B.70
Meyer, Brian & Jana	B.46
Meyer, Cheryl	B.69; C.17
Meyer, Ernie	B.46
Meyer, J. Michael	B.46
Meyer, John	B.46
Meyer, Kelly	B.26
Meyer, Martha	B.46
Meyer, Peter	B.60; B.102; D.26; D.32; D.46; D.47; D.60; D.63; G.20
Michael, Elias	B.70; B.120

NAME	COMMENT
Middleton, Kelly	B.70
Midwestern Training Center	B.46
Milam, David	D.58; D.72
Milburn, Kevin	B.70
Miles, Darlene	B.46
Miller Co.	B.46
Miller, Amber	B.70
Miller, Art	B.78; D.32; G.14; H.15
Miller, Carolyn	B.74; D.73
Miller, Christopher	B.26
Miller, David	A.31; A.33; B.26; B.69; B.70; C.17
Miller, Doris	A.31; B.26; B.46
Miller, Gloria	B.70
Miller, Karen	A.4; A.34; B.78; B.102
Miller, Larry	A.4; A.14; B.74; D.19; D.63; D.70; E.30
Miller, Robert	B.50; B.70; B.98; B.120
Miller, Ronald	B.46
Miller, Susan	A.2
Miller, Tammie and Paul	B.46
Miller, Thomas	A.14; A.34; B.109; H.18; N.12; N.15
Millhollan, Carol	B.70
Mills, Gary	B.56; B.57
Mills, Michelle	A.4; B.95; B.143
Mistler, Bonnie	B.102; Q.19
Mitchell, Marlene	B.26; B.70; N.16
Mitchell, Mel	B.70
Mkj, Juyt	B.70
MKM Machine Tool Co., Inc.	B.46
Mlinac, Vaughn	A.4; A.34; B.59; B.60; C.15; E.30
Moakler, Joe	M.11
Modden, Barbra	B.46
Moeller, Rudy Sr.	B.46; B.70; B.120
Mohn, Dan	B.74
Monroe Jump Vol. Fire Department	B.46
Monroe Shine	B.46
Monroe Township Volunteer Fire Dept.	B.70
Montgomery on Preston	B.26; B.46
Montgomery, Betty	B.46
Montgomery, Eileen	B.89
Moore, Amanda	B.46
Moore, Brett	B.46
Moore, Charles	B.46
Moore, Deanne	B.46

NAME	COMMENT
Moore, Detlef	B.70
Moore, Diane	B.74
Moore, Drury	B.46
Moore, James	B.72
Moore, Linda	B.80
Moore, Paula	B.26; P.14
Moore, Robert	B.46
Moore; Roszelle	A.4; B.101; J.1; J.14
Moore, Travis	B.46
Moran, Robert	B.46; B.69; C.17
Morgan, Thomas	B.70
Morris Images	B.46
Morris, Barbara	B.70
Morris, Clay	B.70
Morris, Constance	A.4; A.29; B.60; B.95; B.101; D.60
Morris, David	B.46
Morris, James	B.46
Morrison, Theodore	No response required
Morrow, Cathy	B.70
Morrow, Richard	B.70
Morton, Penelope	L.20
Mould, Laura	B.50; B.69; C.17
MTC-1, Inc.	B.46
Mucheirn, Michael A.	B.26; B.26
Mueller, David	A.4; B.26; B.59; B.95; D.67; E.30; D.67; Q.17
Mueller, Jill	A.34
Mueller, Julie Anne	A.25; A.27; A.34; B.59; B.60; D.19; D.60
Mueller, Michael	B.26; P.20
Muenighoff, Erin	B.69; C.17
Muenz-Winkler, Jayne	B.70; B.72; B.74; B.84
Muha, Carl	B.74; D.60
Mulligan, Patrick	D.86
Mullin, Kevin	A.26; B.70; B.120
Mullins, Chris	B.70
Murley, Helen	B.49
Murley, Helen	A.14; B.70
Murphy, Robert	B.26; B.44; B.74
Murphy, Shawn	B.26; B.80
Murray, Gloria	B.26; B.46; B.80
Murray, Mike	B.1; B.124; B.125; B.144
Musselman, Layla	A.4; A.34; B.26; B.95
Myers, Stanley	B.70
Myers, William	B.70

NAME	COMMENT
Nafziger, A. Daniel II	B.46
NAHS	B.46
Nall, Roy	A.26; B.120
Nalley, Paul	B.70
Napier, Melissa	B.46
Nash, Kasey	C.17
Nash, Robert McLane	A.4; A.34; B.60; D.60
Nash, Sissy	A.4; B.95; D.7; D.60; Q.17
National City Bank	B.46
National Insurance Group	B.46
National Trust for Historic Preservation	A.4; B.10; C.15; D.16; D.19; D.84; F.6; F.12; F.22
Nava-Perez, Jorge	B.46
Naville, Ronald	B.70; B.88; B.91
Neace Lukens	B.46
Neagle, Randy	B.70
Neal, Cheryl	B.46
Neal, Douglas	B.46; N.16
Neely, Randy	B.70
Neely, Sarah	B.46; B.70
Neill, Susan	B.46
Nein, Opal	B.46
Nein, Opal	B.27; B.69; C.17
Neirth, Robert L. Jr.	B.46
Nelson, Chuck	B.26; B.70
Nelson, James	B.9; B.63; B.70; N.16
Nemec, Brent	B.23; B.88; B.89; B.95; B.114; I.7; J.1; J.14; N.17; Q.7; Q.19; Q.21; R.6; R.8
Nemec, Diana, Brent, Nicole	A.4; A.14; B.23; B.78; B.88; B.89; B.95; B.114; I.7; J.1; J.14; N.17; Q.7; Q.19; Q.21; R.6; R.8
Nemec, Nicole	B.114; R.8
Nemeth, David	A.31; B.70; B.120
Netherly, Allison	B.69; C.17
New Albany BPW	B.46
New Albany Rotary	B.46
New Albany, IN City Plan Commission	B.46
New Albany-Floyd County School	B.46
New Hope Services, Inc.	B.46
Newkirk, George	A.26; B.114; B.120; N.17; R.8
Newkirk, Mike	B.70
Newman, Leon	A.4; B.25; B.74; B.88; B.95; B.139; H.13
Newton, C.	B.46

NAME	COMMENT
Newton, Earl	B.70
Nibco	B.46
Nichols, James & Alice	B.70
Nichols, John	B.71
Nicholson Insurance Agency	B.46
Nicholson, Christy	B.46
Nicholson, Joy	B.46
Nicklies, David W.	A.25; B.26; B.46; D.58; N.16
Nillett, Dorothy	B.46
Noah, Chris	A.4; B.95
Noah's Ark, Inc.	B.46
Nobles, Lynn	C.17
Nolte, Beth	B.6
Norbert, Simon	B.26
Nordhoff, Bill	B.70
Norman, John & Melissa	B.69; C.17
Norman, William	B.46
Norris, Mary Jane	A.26; B.26; B.70
Norris, Todd	B.26
North Continental Logistics	B.46
Northfield, City of	B.88; B.122
Northside Christian Church	B.46
Northup, Rep. Anne (KY)	No response required
Norton, Chris	B.46
Novotny, Robert	B.70
Nyeidss, Holly	B.46
O'Connor, Lisa	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
O'Hare Barney & Dolly	B.44; B.70
O'Hare, Bernard	B.46
O'Kiefe, Robert R.	B.46
Oak Park Baptist Church	B.46
Obelisk Federal Credit Union	B.46
Oberhausen, Tori	B.26; B.84; D.91
Odle, Tom	B.46
Oftendahl, Jessica	B.46; B.70
Ohio River Advocacy	D.19; G.19; G.20; J.1; J.3; J.4; J.9; J.23; J.42; K.16; K.18; K.33; K.36; K.41; L.15; Q.30
Ohio River Bridges Coalition	B.46; B.56; B.57; B.58
Ohio Valley R.M.	B.46
Ohstrom, William G.	A.26; B.25; B.26; B.70; B.150
Oldham, Cash	B.29

NAME	COMMENT
Olliges, Bruce & Donna	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Ollis, Belva	N.16
Ollisges, Paul	B.46
Olmstead, Diane	B.26
OMS	B.46
One Beacon Insurance Group	B.46
Optimist Club of Jeffersonville	B.46
Orange County, IN Board of Commissioners	D.58; D.86
Orem, Dale	B.46
Ormerod, Rosalyn	B.70
Osborne, Nevel	B.70
Osbourn, Jeff & Phyllis	B.121; D.58; F.51
Otter, John L.	A.4; A.34; B.95; F.24
Otto, Frederick	A.4; B.95; D.19
Overpeck, Lee	B.46; B.69; C.17
Overton, Mayor Regina (N.A., Ind)	B.46
Overton, Walter	B.46
Owen, Ann Hemdahl	B.69
Owen, Jesse	B.26
Owens, Commissioner Darryl T.	B.56; B.59; B.60; D.8; D.26; D.27; D.48; E.1; E.2; E.3; E.8
Oxley, Allan & Patricia	B.27; B.46
Oyler, Kent	A.25; B.26; B.75
Pace, Emma	B.46
Pace, Larry	B.46
Page, Joyce	G.18
Palmquist, Steven	B.46
Palmyra Baptist Church	B.46
Pamela Martin	B.46; B.69; C.17
Pank, John	A.33; B.70
Paradowskie, Brian	B.72
Parrino, Peggy	B.50; B.70
Paris, Anne & Joe	B.58; D.72
Parker, Ginger	A.25
Parker, Raymond J.	Not legible
Parker, W. Ed	B.70
Parkins, Frederick	B.78; B.102; K.27
Parkway Baptist Church	B.46
Paroch, Steve	Not legible
Parrino, Peggy	B.26; B.46

NAME	COMMENT
Parrish, Paul	A.26; B.120
Pasinski, Megan	B.69; C.17
Pate, Benita	B.46
Patterson, Debra	B.84; B.135
Patterson, Jim	B.50; B.70; C.18
Paul Semonin Realty	B.46
Paul, John	B.1; B.124; B.125; B.144
Paynter, Harry	B.46
Pearl Construction, Co.	B.46
Pearson, Robert F.	B.46
Pedal, Curtis	Not legible
Pedigo, Michael	B.70
Pell, William	B.26
Pellet, John	B.46
Pellit, John	B.46
Pendleton, Janice	B.70
Penner, Carol	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Penner, Daniel	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Pennington, Mary	A.4; B.49; B.74; D.60
Perkins, Frank	A.4; C.15; D.19
Perkins, Peggy	A.4; B.26; B.74; B.95; B.139
Perkins, Roberta	B.46
Perry, Dixon	B.70
Personal Travel	B.46
Peter, Cary	A.4; B.1; B.6
Peters, Jermoe H.	B.46
Peterson, Arthur	B.84; N.16
Peterson, William	A.4; A.14; A.34
Petry, Max	B.46
Pfeffer, Richard	B.50; B.70
Philip S. Duncan & Associates	B.46
Philip, Samuel	B.124; B.125; B.144
Phippe, Amy	B.46
Pierce, Savannah	B.69
Pigion, Gail	B.74; R.1
Pike, Debra	A.4; D.19
Pike, Greg	B.57
Pike, Hillary	A.4; A.34; B.26; B.95; D.60; D.61
Pike, Pat	A.4; A.34; B.143
Pike, Ron	A.4; B.95; D.60; D.70
Pillsbury/General Mills	B.46

NAME	COMMENT
Pinto, Mary	B.14; B.70
Pipes, Joseph	B.46
Pirtle Photo	B.46
Pitchford, Larry	B.26; B.70
Pitts, Don	A.34; B.1; B.4
Pitts, Glenda	B.6; B.48; B.62
Planet Telecom	B.46
Plato, Joann	B.70
Platt, Michael F. Jr. & Judith	B.46; B.50; B.70; B.84; B.120
Pleasant Ridge Baptist Church	B.46
Pleen, Edward	B.26; B.46
Pleen, Edward	B.70
Poff, Robert	B.46
Poganski, Gregory L.	B.143; D.19
Poindexter, Sarah	B.69; C.17
Pointer, Annetta	B.69
Poore, Bonnie	B.46
Popp, Alfred	B.46
Popp, Edna	B.46
Popp, Elmer	B.46
Popp, Kathleen M.	B.46
Popps, Marcella	B.46
Porter, Henry H. Jr.	B.46; D.69; Q.2
Poteet, Ruby	B.46; C.17
Powell, Martha	B.95; D.60; D.61; Q.18
Powell, Randy	A.4; A.34; B.143
Powell, Robert	A.4; B.26; B.95; D.60; D.61; Q.18
Powell, Shirley L.	D.60
Power Ministries, Inc.	B.46
Poynter, Clyde & Mary	A.4; A.34; B.26; B.74
Prater, Gary	B.70
Prather, Deborah	B.46; B.50
Prather, Gail	B.46
Prather, Margaret	B.46
Prather, Ronald	B.46
Precision Automation	B.46
Pre-paid Legal Services	B.46
Preuett, Jim	B.26; B.46; B.70; B.79; B.120; B.145
Price, James	A.26; B.26
Price, Loyd	B.46
Price, Minnie Jo	B.46
Prince, Sharon	A.4; A.34; B.26; B.95
Prince, Susan	B.70

NAME	COMMENT
Pro Audio, Inc.	B.46
ProMedia Group	B.46
Prospect, City of	A.4; A.34; B.23; B.74; B.79; B.89; B.90; B.92; C.8; C.19; D.7; D.19; F.31; G.12; H.12; H.13; H.15; I.2; I.7; M.5; Q.8; R.3
Prudential Financial	B.46
Purlee, Terry	B.46
Putney, Moseley	B.74; B.116; B.123; B.134; B.139; Q.29
Putney, Richard K. & Virginia P.	B.74
Pyke-Calloway Funeral Service	B.46
R/T	B.46
Rabeneck, Craig	B.70
Radcliff, Holly	Not legible
Rademaker, Ed	B.75; B.95; D.19
Rademaker, Judy	A.4; B.60; D.67; M.3
Rader, Frederick	B.70; B.98
Ragland, Channelle	B.46; B.70
Ragland, John	A.25; B.26; B.46; D.72
Ragsdale, John C.	B.70
Rahe, Melvin	B.50; B.120
Ralston, Bobby	A.1; B.50
Ramada Ltd. Suites	B.46
Randell, Kathy	B.46
Rapier, James	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Rapp, Joan	A.4; B.95; D.60
Rauch, Inc.	B.46
Raugh, Steve	A.4; A.14; B.6; B.78; B.91; B.92; D.79
Rauh, Virginia	B.95; D.60
Ray, Bill	B.46
Ray, Brenda	A.4; A.34; B.143
Ray, William Sr.	A.4; A.34; B.143
Re/Max Professionals	B.46
Real, Robert	B.46
Reames, Shiela	B.46
Reasor, Gary L.	A.26; D.73; D.120
Redmon, Jerry	A.26; B.26
Reed, Eric Sr.	A.26; B.26
Reed, Glenn	Not legible
Regional Bank	B.46
Regional Leadership Coalition	B.50; D.58; D.72; D.73; D.86; D.91
Regional Youth Services, Inc.	B.46



NAME	COMMENT
Reifsteck, Janice	P.14
Reilly, William	B.74
Reinhold, Paul	A.26; B.26; D.58; N.16
Reinstedler, Gerald	B.70
Reinstedler, Paula	B.50
Reis, Glenn and Pat	B.46
Reis, Pat	B.46
Rendrich, Hilda	B.46
Resihan Construction	B.46
Reynolds, John	B.46
Reynolds, Nancy	B.46
Rhodea, Joseph	B.69; C.17
Rhodes, Bill	A.26; B.26; B.70; B.120; P.14; P.10; P.20; P.50
Rhodes, Inc.	B.46
Rhodes, Marshe	B.46
Richards, Stan	B.46
Richardson, Bernice	B.46
Richardson, Roger	B.70
Richardson, Roy	B.46
Richart, John	B.26
Richman, Cinda	A.4; B.95
Richman, Cindy & Bill	B.7; B.95; D.19
Richmond, Laura	B.46
Rickard, James	A.31; B.26; C.17; N.16
Ricke & Associates	B.46
Ricketts, Kevin	B.46
Riddle, Cindy	B.46
Riedling, J. Sam	B.76
Riehm, Joan	B.46; B.56; B.57; B.58
Ries, Sally	B.46
Rigby, Cynthia	B.74; B.95
Rigby, Ron	B.74; B.87; B.95
Riggs, Lewis	B.26
Riley, Henry	B.70
Risk, Elaine	B.46
Risk, Elaine	B.46; B.69; C.17; D.58; D.72
Risk, Larry E.	B.46; B.77; B.82
Ritterman, Vicki	Not legible
River Fields	A.3; A.4; A.5; A.6; A.7; A.8; A.9; A.10; A.11;
	A.12; B.8; B.9; B.10; B.17; B.18; B.22; C.1; C.2;
	C.3; C.4; C.6; C.7; C.8; C.9; C.12; C.13; C.14;
	D.1; D.2; D.3; D.4; D.5; D.6; D.9; D.10; D.11;
	D.12; D.14; D.15; D.16; D.19; D.20; D.22; D.23;

NAME	COMMENT
	D.25; D.26; D.27; D.28; D.29; D.30; D.53; D.54; D.55; D.97; E.1; E.2; E.3; E.4; F.1; F.2; F.3; F.4; F.5; F.6; F.7; F.11; F.12; F.17; F.18; F.49; G.4; G.5; G.8; H.2; H.3; H.4; H.7; H.8; H.9; H.10; H.11; I.1; I.3; I.4; I.5; I.6; J.1; J.2; J.3; J.4; J.5; J.6; K.1; K.2; K.5; K.6; K.15; L.1; M.1; M.2; M.3; M.4; M.7; N.4; N.5; O.1; O.2; O.4; P.2; P.3; P.4; P.5; P.6; Q.9; Q.10; Q.11; Q.12; Q.13; Q.31
Riverton Truckers, Inc.	B.46
RMSI	B.46
Roach, Cassandra	B.69; C.17
Robb, Elizabeth	B.69
Robbins, Donald	B.26; B.70; B.82
Robbins, Donna	B.46
Roberts, Elza Jr.	B.70
Roberts, F. Morgan	B.92
Roberts, Gerald	B.88; B.95
Roberts, Justin and Norma	B.46
Roberts, Lois	A.34
Roberts, Philip	B.70
Roberts, Randy	B.70
Roberts, Waldon	B.74
Robertson, Bob	B.70
Robertson, Clarence	B.46
Robinson, Ellen	B.112
Robinson, Juanita	B.46; B.70
Robison, Raymond G. Jr.	B.26; B.44; B.70; B.74
Roby, Sandy	B.50
Roche, Barbara	B.76; B.78
Rodich, Vicki	B.69; C.17
Roe, Tandra	A.26; B.120
Roederer, Ryan	B.69; C.17
Roehrig, Richard	B.70
Rogers, Barbara L.	B.70
Rogers, David E.	A.25; B.26; B.75
Rogers, David L.	A.26; B.120
Rogers, Greg	B.70; B.101
Rogers, James	B.46
Rogers, Kimberly	B.70; P.14
Rojan, George	B.46; B.120
Rojan, Patricia	B.46; B.70
Roll Forming Corp.	B.46
Rose Acre Farms	B.46

NAME	COMMENT
Rose Hill Neighborhood Association	B.98; F.21; F.48; H.1; H.33; I.1; M.2; M.4; R.10
Rosenbaum, Ken	A.4; B.26; B.95; D.60
Rosenwall, Mary F.	B.23; H.17; H.18; R.3
Rosga, Dick L.	B.50
Rosga, Kathy	B.46; B.70
Ross, Jo	B.50
Ross, Michael	B.88
Ross, Tim	B.46
Rothinghouse, Nancy	B.70
Rowe, Daniel	A.14; B.70
Rowe, James	B.70
Roy, Irma Lee	B.69; B.70
Royce, Fred	A.34; B.113
Rucker, Gary	B.50; B.70
Ruckriegel, Michael	Not legible
Ruddell, Lynn	B.46
Rumpel, Don	B.46
Rumpel, Norma	B.46
Runyon, Meme Sweets	A.4; A.14; A.34; B.60
Rusk, David	D.7; D.19; E.3
Ryant, Mary L.	B.70
S&J Precision	B.46
S&R Truck & Tire Center, Inc.	B.46
Safe, Philip A.	B.46
Salzmann, Chris	A.4; B.60; B.80
Sampan Screenprint	B.46
Samser, Dean	B.70
Samtec, Inc.	B.46
Samuel, Philip	B.1; B.44; B.124; B.125; D.84
Samuels, Bill	B.26; B.46; C.1
Sandefur, Terry	B.70
Sander, Brent	B.46
Sanders, Daniel	B.70; N.16
Sanders, Henry	B.46; F.30; K.26
Sarin, Lalit	B.26
Sasse, Fred	A.14; B.70
Satley, David	B.46
Saunders, Heidi	E.1
Sawyer, David	No response required
Sawyer, Josh	B.69; C.17
Scanlan, Tom	B.46; B.69; C.17
ScanSteel	B.46

NAME	COMMENT
Schad, Ronald	B.50
Schaller, Steve & Gina	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Schardein, David & Sandra	A.25; B.69; B.70; B.74; B.90
Schardein, John	B.70
Scherer, Rolanda	B.60; B.70
Schill, Ian L.	B.124; B.125; B.144
Schimpff, Jill	B.46; B.77; B.88
Schimpff, Warren	B.46; B.77; B.98
Schimpff's Confectionary	B.46
Schindler, Micahel	B.46
Schipinski, Michael	B.70
Schlader, Donald	A.26; B.26; P.14
Schmeiten, Patricia	B.70
Schmidt, David	B.124; B.125; B.144
Schmidt, Patrick	B.26; B.70; D.91; G.18; N.16
Schmidt, Regina H.	B.49
Schneider DeMuth Advertising	B.46
Schneider, Janice	B.70
Schneider, Lynette	B.86; B.113
Schneider, Ron	Not legible
Schnurr, Martin J.	B.70
Schrank, Cathy	B.46; B.50
Schroeder, Beverly	A.34; B.60
Schroeder, Garrit	A.4; B.95; C.25
Schubnell, Edward	B.46
Schuhmann, Paul & Ellen	B.70; N.16
Schuler Bauer	B.46
Schuler, Arlene	B.95; B.115
Schuler, Arlene & Charles	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Schuler, Charles E.	Not legible
Schultz, Benson	B.46
Schultz, Kurt	No response required
Schupp, Chuck	B.74
Schwarz, Leland	B.70
Scott Co. Economic Dev. Corp.	B.46
Scott, Donald S.	B.70
Scott, Glenda	B.46
Scott, Howie	B.70; D.91
Scott, Karen	B.44; B.74; B.95
Scott, William	B.70
Scott, William	B.46; B.69; C.17

NAME	COMMENT
Scott, William David	B.49
Scottsburg, City of (Ind.)	B.46
Seals, Paula	B.46
Seaman, Janice	B.46; B.98
Seay, James	B.26; B.70; B.117; B.139; D.86; M.10
Seiler, Michael	B.124; B.125; B.144
Seis, Denise	B.74; B.98
Sell, Charlie	A.4; B.95
Sell, Ginnie	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Sellersburg Stone Co., Inc.	B.46
Sellner, Elise	B.46
Sem, Robert	B.46
Semones, Anthony	B.74; B.76
Semones, Anthony J.	B.46
Semones, Jerry	B.70
Semones, Julie	B.46
Semones, Paul	B.70; B.74; B.98
Semones, Tony	B.69; C.17
Serrano, Valentin	B.46
Settles, Ann	A.4
Sewell, Michael	B.46
Sexton, Stanley	B.26
Seyal, Sara	A.4; A.14; B.9; B.95; C.9
Seybold, Albert	B.135
Seymour, City of (Ind.)	B.46
Seymour, W.M.	B.25; B.26
Shaak, Kevin	B.70
Shacklett, Bridgette	D.7; D.60
Shaffer, Shelby	B.46
Shanks, Christian	B.69; C.17
Shannon, Thomas	B.15; B.72
Shaw, Dennis	B.26; B.120
Sheckles, Mary	B.46
Sheehan, Edward	B.50; B.70
Shelton, Dee	B.46
Shepherd, Jeff	B.69; C.17
Shepherd, Nancy J.	B.46
Shepherd's Heart	B.46
Sherry, Don	B.46
Shields, Betty J.	B.46
Shields, Cary	B.124; B.125; B.144
Shontz, Charles	B.70

NAME	COMMENT
Shott, Diane	A.4; A.14; D.17; E.25; K.26
Shpilberg, Karen	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Shuler, Arlene	B.23; B.95; B.110; D.19; D.60
Shultz, Mr. and Mrs. John	B.26; B.88
Shuster, Myron	A.4; B.59; B.60; E.30
Sieg, Mary	B.46
Siegrist, Linda	B.69
Sierra Club, Cumberland Chapter	A.4; A.5; A.23; B.1; B.4; B.6; B.59; D.16; D.17; D.19; D.21; D.43; E.1; E.17; E.21; E.36; G.4; G.5; J.1; J.5; L.1
Sies, Brian	B.46
Silgas	B.46
Silverman, David	B.46
Silverman, Isabel	A.26; B.24; B.123
Simmons, D.W.	B.78; B.95
Simms, Kevin	B.46
Simms, Tammy	B.46
Simon, Alan	A.4; C.26; D.62
Simon, Beruta	A.4; B.26; B.60; D.15; E.21
Simon, Norbert	B.46
Sink, Mary Kay	B.46
SISC	B.46
Skaggs, Donna	B.46
Skaggs, Marvin	C.17
Skinner, Robert	B.46; B.69; C.17
Skinner, Robert	B.27; B.46
Skipper, Jack	B.46
Slack, Dot	B.70
Slone Pontiac	B.46
Slusher, Scott C.	B.124; B.125; B.144
Sluss, Barbara	B.46; B.70
Small, Merrill	B.50; B.70
Small, S.	B.74
Small, Steven	A.34; B.26; B.95
Smigielski, Elizabeth	R.12
Smith & Missi Properties	B.46
Smith, Bartlett, Heeke, Carpenter & Thompson	B.46
Smith, Chad	B.46
Smith, Drew	B.70; B.74
Smith, Fred	B.46
Smith, Irene E.	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7;

NAME	COMMENT
	R.6
Smith, Jeff	B.58; B.95; B.102
Smith, Karen	D.19; D.23; J.1; J.3; J.5; K.15; K.26
Smith, Kelly	B.70
Smith, Kimberly A.	B.46
Smith, Laurie	No response required
Smith, Lisa	B.46
Smith, Mary	B.46
Smith, Michael	B.70
Smith, Olivia	D.60; D.70
Smith, Pamela K.	B.46
Smith, Perry L.	B.46
Smith, Rosa	B.78; B.80; K.26
Smith, Vicki	A.4; B.26; B.49; B.95
Smitson, Terry	B.46; B.70
Sneed, Lawrence & Lillie	B.46
Snelling, Richard	B.46
Snider, Glenn	B.46
Snook, James C.	B.46
Snyder, Marilyn	B.91
Snyder, Ronald	B.70
Sodrel, Mike	B.46; B.50; P.20
Soliday, Darren	B.46
Solley, Fay	B.70; B.74
Sonoco	B.46
Southeastern Baptist Assoc.	B.46
Southern Home Care	B.46
Southern IN Economic Develop.	B.46
Southern IN Economic Development Council	B.46; B.70; B.72
Southern Seven Workforce	B.46
Spalding, Lyle	No response required
Spalding, Patrick	B.70
Sparks, Linda	B.46
Spear, David	B.69; C.17
Spears, Greg	B.46; B.70; B.120
Spears, Susan	B.46
Spencer Machine & Tool Co.	B.46
Spencer, James M.	B.26
Spencer, Mark	B.46
Spiegel, Sanford & Selene	B.77
Spieth, James	B.44; B.74
Spurr, Sally	B.124; B.125; B.144

NAME	COMMENT
St. Francis in the Fields Episcopal Church	B.10; D.35; H.17; I.8; M.9
Stallings, Davy	Q.27
Stamler, Gerald	B.26; D.91
Stanley, Theresa	A.34; B.51; B.72; D.19; D.15; E.17; Q.19
Stansfield, Lynn	B.46
Star Electric	B.46
Starck, Laura	B.69; B.70
State Farm	B.46
Stauffer, Mark	B.46
Stayton, Barbara	B.70
Steele, Alice	B.84
Steele, Fred	A.28; B.95
Steele, Rcihard	B.46
Steely, Andrew P.	B.95
Steinbock, David	B.26; D.58
Steltenpohl, Joseph A.	B.70
Stemler Plumbing, Inc.	B.46
Stemwood Corp.	B.46
Stephens, Darryl	B.46
Stephens, Susan	B.46
Stephenson, Christell	B.70; N.16
Stephenson, Robert	B.69; C.17
Sternback, Clarence	B.46
Stevens, Burton	B.70; B.84; P.14
Stewart, Barbara	B.70; N.16
Stewart, Charles & Julie	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Stewart, Coy	B.46
Stewart, Jeb	B.46
Stewart, Linda	B.69; C.17
Stewart, Lloyd L.	B.46
Stewart, Mike	B.26; B.46; B.57
Stewart, William	
Stidham, Lonnie	B.46
Stigger, Cliff	B.70; N.16
Stigger, Tom	B.50
Stiles, Kenny	B.46
Stiller, Jeannie	B.46
Stites & Harbison	B.46
Stites, J. C.	A.14; B.95; D.19
Stites, Walker	A.4; A.14; A.34; B.26; B.17; B.94; D.15; F.5; F.23; I.1; I.2; I.3
Stivals, Joseph	B.46



NAME	COMMENT
Stivers, Bettie	B.70
Stock Yards Bank	B.46
Stock, Holly	B.46
Stone, Jessica	B.135
Stoner, Tiffany	B.69; C.17
Storey, Stephen	B.26; B.74; E.21
Storm, Blane	B.46
Storybrook Homes, Inc.	B.46
Stoudemire, Gordon	B.70
Stout, Glenn	B.46
Straka, Michael	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Straka, Sharon	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Strause, Gail	B.78; B.96; D.19; D.45; D.70; E.30
Streips, Patricia	B.95; N.12; N.13
Strunk, J.J.	B.69; C.17
Stuart, Sherry	B.70; B.120; B146
Stuckel, Glen E.	B.74
Stuckey, George	A.27; B.88
Stuckey, Kathryn	B.78
Stultz, Donna	B.46
Suell, Gerald	A.26; B.15; B.26; B.120; F.25
Suell, Raymond	B.25; B.26
Suggets, Robert	B.46
Sullivan, David & Sharon	B.26; B.120
Sullivan, Elaine	B.46
Sullivan, Harry	B.44; B.46
Sullivan, Harry A.	B.46
Sullivan, Sean	B.82; B.139
Sullivan, Terrance	B.82
Summerfield, Donald	B.70; B.98
Summers, Mildred	B.74; B.98
Summers, Teresa	B.46
Summers, William E. IV	B.26; D.58; D.91
SuperCoups	B.46
Sutton, Hank	B.44; B.79
Sweppy, Chuck	B.26; B.70
Switow, Mark & Tammy	K.26; Q.19; Q.25
Sycamore Health	B.46
Sykes, Andrew	B.112
Systems Design	B.46



NAME	COMMENT
Tackett, Mike	Not legible
Tafel, A.	B.70
Tafel, Art	A.26; B.26
Tagliarino, Tony	B.70
Tale, Liz	B.46
Tanner, Kimberly	B.70
Tarsa, Michael	B.124; B.125; B.144
Taylor, Forrest	B.83
Taylor, Ronald	B.70; B.76
Taylor, Sally	B.46
Taylor, Willie R. (U.S. Dept. of the Interior)	A.25; J.8; J.49; J.50; J.51; J.52; K.3; K.4; K.7; K.11; K.12; K.1; K.14; K.41; L.2; L.3; L.4
Technidyne Corp.	B.46
Terhune, Stephen	A.26; B.120
Terry, William	B.25; B.50; B.70; N.16; P.20
Terry-Boone; Jennifer	B.6; Q.12
Tetley, D.	Not legible
Tetz, Stacy	B.46
Thacker, Paul	B.46
The DePaul School	B.46
The Evening News	B.46
The Healthy Alternative	B.46
The Law Offices of Gary D. Miller	B.46
The Marketing Group	B.46
The Ohio River Greenway Develop. Commission	B.46
The Paris Group	B.46
The Young Group, Ltd.	B.46
Thielen, R.S.	B.69; B.70
Thieneman Realty, Inc.	B.46
Thieneman, Karen	B.26; B.74
Thieneman, Leo Jr.	B.74
Thieneman, Leo Sr.	B.74
Thomas Edison House	B.41; D.30; R.12; R.15; R.16; R.17; R.19; R.20; R.21
Thomas, Eugene A.	B.46
Thomas, Grace	B.46
Thomas, James	B.46
Thomas, Joy	B.46
Thomas, Keith	B.70
Thomasson, Mildred L.	B.74
Thompson, Alice	A.1; A.4; A.24; A.34; B.9; B.59; B.60; B.95; C.12; C.15; C.16; D.2; D.3; D.9; D.13; D.15;

NAME	COMMENT
	D.19; D.24; D.44; D.45; D.46; D.47; D.48; D.49; D.50; D.51; D.52; D.70; E.4; E.10; F.8; F.23; F.24; F.25; J.1; M.5; Q.15; Q.16
Thompson, Glenn	B.70
Thompson, Jason	B.99; B.139
Thompson, James	A.1; A.4; A.24; A.34; B.9; B.59; B.60; B.95; C.12; C.15; C.16; D.2; D.3; D.9; D.13; D.15; D.19; D.24; D.44; D.45; D.46; D.47; D.48; D.49; D.50; D.51; D.52; D.70; E.4; E.10; F.8; F.23; F.24; F.25; J.1; M.5; Q.15; Q.16
Thompson, Jimmy	B.26
Givan, Rick	B.63
Thornberry, Suzanne	N.16
Thornton, Alice	No response required
Thornton, Matthew A. (Thornton's)	B.50
Tibbs, Brian	B.46
Timberlake, Ralph	B.46
Tindall, Judy	B.46
Tipton, Rick & Katie	B.74; B.84
Tipton, Ruford L.	B.74
Tisheuar, Chris	B.46
Tobe, Chris	B.70
Today's Woman Magazine	B.46
Tolhurst, George	B.46; B.84; B.120; N.16
Tolliver, Susan	A.3; B.60; B.95; D.15; D.19; D.60; D.68; R.11
Toombes, Meghan	B.50
Toombes, Patricia	B.70
Torres, Mariana	B.46
Torstrick, David	B.50; B.70
Tostie, Curtis	A.30
Town of Clarksville, IN	B.46
Townplace Suites	B.46
Townsend, Jane M.	A.4; A.27; B.4; B.26; B.63; B.95
Tranflon, Rose	B.70
TransForce Member	B.46
Transit Authority of River City	B.5; B.7
Traub, Joyce K.	B.46
Trent, Carol	B.70
Tri-Mac Business Forms	B.46
Trimble County Water District Wellhead Protection Committee	D.19; D.23; J.1; J.3; J.5; K.15; K.26
Trindeitmar, Bob	B.46; B.70
Triplett, H.	B.46



NAME	COMMENT
Triplett, Jo Anne	B.120
Triplett, Patricia	B.120, N.16
Tri-Tek	B.46
Trowbridge, James	B.70
Trowbridge, Richard	B.139
Tryon, Richard	B.26
Tucci, Lee & Sandra	B.74; C.25; D.60
Tucci, Sandra	B.74; C.25; D.60
Tucker, Dale	B.26; B.120
Tucker, James C.	Not legible
Tully, Joan	B.74
Turnbull, Ruth	B.70
Turner, Jacqueline	B.46
Turner, Shirley	B.69; C.17
Turpin, Sarah	B.46; B.70
Tuttle, Stacy	B.69; C.17
Twenty First Century Scholars	B.46
Twigg, Les	B.46
Twyman, Marguerite	B.70
U.S. Army Corps of Engineers, Louisville District	L.8
U.S. Coast Guard, Eighth Coast Guard District	B.28; J.9
U.S. Dep't of Agriculture	No response required
U.S. Dep't of Defense, Office of the Special Asst. for Transportation Engineering	B.29
U.S. Dep't of Housing & Urban Development	D.15; D.19; D.59; O.2
U.S. Dep't of the Interior	A.25; J.8; J.49; J.50; J.51; J.52; K.3; K.4; K.7; K.11; K.12; K.1; K.14; K.41; L.2; L.3; L.4
U.S. Environmental Protection Agency	B.12; B.20; B.30; B.66; B.67; B.68; B.141; E.11; E.12; E.13; E.14; E.15; E.16; E.17; F.26; G.1; G.2; G.3; G.4; G.12; G.15; G.16; G.17; H.6; H.20; H.21; H.22; H.23; H.24; H.25; H.26; H.27; H.28; H.29; H.30; H.31; H.32; J.1; J.12; J.32; J.33; J.34; J.35; J.36; J.37; J.38; J.39; J.40; K.3; K.28; K.29; K.30; K.31; K.32; K.33; K.34; K.35; L.7; L.9; L.10; L.11; L.12; L.13; L.14; L.15; L.16; L.17; L.18; N.2; N.6; N.7; N.8; N.9; N.10; P.12; Q.4
UHL Truck Sales	B.46
Uhl, Darrell	No response required

NAME	COMMENT
Uhl, John	B.46
Uhl, Ruby	B.46
Uhl, Todd	B.46; B.70
Uhl, Todd	No response required
Ulferts, Stuart	B.124; B.125
Ulrich, Paul	B.46
Underhill, Bob	B.50
Underhill, Helen & Melvin	B.23; B.24; B.78; B.88; B.95; H.14; I.7; P.8; R.6; Q.7
Underwood, Alexis	B.120
United Mortgage Co. of Indiana	B.46
Upton, Kathy	B.70
Urbancic N.A.	A.4; B.95
USPS	B.46
Valla, Richard	B.70
Van Hook, Cathy	B.70
Van Meter, Eric	B.46
Vance, Cassy	B.46
Van Vooren, Andre	B.70
Vaughn, Doris Jo	A.4; B.95
Vaughn, Ida	B.46
Vaughn, Kerri	B.46
Vause, Marilyn	B.70; B.139
Veding, Betty	B.46
Veding, John	B.70; B.98
Vena, Robin	B.46
Vertrees, Virgil	B.70
Vest, Terry	B.46
Vester, Peggy	B.70
Veworen, Kathy	B.46
Vicari, Stacey	B.124; B.125; B.144
Vince, David	B.46
Vinnedge, Jim	B.70
Vish, David	B.143
Vissing, Jonathan	B.46
Vissings & Grayson, LLP	B.46
Voelker, David	B.46; B.70; N.16
Vogelsang, Pamela	B.46
Vogt, Gordon	A.14; B.46; B.88; B.89
Vogt, James & Nancy	B.70
Vogt, Phil	B.46
VoiceStream	B.46

NAME	COMMENT
Vollmer, Richard & Barbara	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Voss Clark	B.46
Voylie, Jack	B.46
Wade, David	B.70; B.74
Waggey, Michael & Alta	B.46
Wagner, Jeff	B.80; B.91; D.31
Wagner, Kevin & Valerie	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Wagner, Kim	B.83; C.26
Walker Equity Management	B.46
Walker Petsitting	B.46
Walker, Bruce	B.46
Walker, Colleen	A.4; A.27; B.95; H.19
Walker, Hugh	A.6; B.88; B.95; B.139
Walker, Jim	B.46; B.69; B.70; C.17
Walker, Joann	B.46
Walker, Judy	B.46
Walker, Matt	B.46
Walker, Robert W.	B.46
Walker, Susan P.	B.46
Walker, Wallace	B.46
Walker, Win Jr.	B.70
Wallace, Henry F.	B.74; B.95
Wallace, Jean	B.7
Wallace, Ruth	B.46; B.70; B.74
Waller Equity Management	B.46
Walling, John	B.70
Wal-Mart District Center	B.46
Walsburger, Robert A.	B.93
Walsh, Dennis & Julie	A.4; B.60; B.74; B.78; B.97; B.101; B.102; D.60
Walston, Jasmine	B.46
Walston, Rodney	B.46; B.70; N.16
Walter, T.	B.46
Walter, Terri	B.46
Wandy, John	B.46
Ward, Marse	B.70; B.84; B.120
Ward, Tyler & Scott, Attys.	B.46
Warnick, Charles	B.50; B.70
Warren, Eric	B.117; C.17; D.91
Washwoal, Alan	B.46
Waste Management	B.46

NAME	COMMENT
Waterfell, Ruthann	B.70; B.120
Waterfell, Ruthann	B.46; B.69; C.17
Waterhouse, Dr. Maurine	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Watkins, John	B.69; C.17
Watson, Clinton	B.46
Watts, Neal	B.46
Watts, Richard P. II	B.88; B.89
Watts, Ruby	B.60; B.70; C.17
Wayne, State Rep. Jim	A.4; B.4; B.6 D.3; D.12; D.19; E.1; E.2; E.3; E.4; E.7; E.8; E.17; E.18; E.19; E.20; E.21; E.22; E.23; E.24; E.25; E.26; E.27; E.28; E.29; E.30; E.31; E.32; E.33; E.34; E.35; E.36
Weatherbee, Harriette	B.50; B.70
Webb, Eli	B.45; B.88; B.89
Webb, Jim	B.46
Webb, John	B.46; B.70
Webb, Robert	B.46
Webb, William	B.26; B.95; B.137; B.138; M.10
Webster University	B.46
Webster, Carolyn	B.70
Weckman, R.	B.70; B.88; B.89
Weedman, Bill	B.70; B.120; N.16
Wehr, Sherry	B.23; B.74; B.95
Wehrle, Richard	A.31; B.74; B.120
Weihe, Harry	B.70
Welch, Alvin	B.135
Wellington Green Manufactures	B.46
Wells, Lee	B.1; B.6; B.59; B.60; D.19; D.60; K.26
Wemes, B.J.	B.46
Werenskjold, Gary	A.4; B.46; B.60; B.63; B.95; D.15; D.53; Q12
Werenskjold, Marilyn	F.50
Werle, Richard	B.74; B.98
Werner, Carl	B.50; B.70
Werner, Margaret	B.70
Wesering, Jeff	B.46
Wesley Enterprise	B.46
West Clark Community Schools	B.46
West, James N. Jr.	B.47; B.70; M.10
West, Julie	B.46
Western, Jimmy	B.46
Westminster Village	B.46
Wetsch, Eric	B.23; B.24; B.88; B.95; H.14; I.7; J.1; P.8; Q.7;

NAME	COMMENT
	R.6
Weyer, David A.	B.46
Whatley, Jean	B.69; B.70; C.17; D.58
Wheat, Susan	B.69; B.70; C.17
Wheatley, Paul	B.69; B.70; C.17
Wheeler, George	A.4; B.26; B.95
Whipple, Sandy	B.70
Whitaker, Carla	B.46
White, Ethel	B.4; B.6; B.96; P.11
White, Fred	B.26; D.86; D.91
White, J. David	B.70; D.91
White, Marilyn	A.25; B.69; C.17
White, Patricia	B.46
White, Robert	B.70
White, William	B.26; B.70
Whited, Dennis	B.46
Whitehouse, Wayne Jr.	B.46; B.120
Whitfield, Charles R.	B.23; B.24; B.73; B.88; B.95; H.14; I.7; J.1; P.8; Q.7; R.6
Whitlow, Heidi	No response required
Whitson, Lynn	B.44; B.88
Wickersham, James	B.76; B.98
Wiebusch, Roger	B.28; J.9
Wiggins, Darlene	B.46
Wilbert, Mary	A.4; B.88; B.89
Wilbourn, Lynda	A.25; B.69; B.70; C.17
Wilbourn, Mike	B.69; B.70; C.17
Wilder, Alicia	B.50; B.70; B.84
Wilkinson, Dean	B.46
Will, Beverly	A.25; B.69; C.17
Will, David	B.46
Will, David M.	B.143; C.16; D.19; D.27; D.60; D.69
Will, Kelly	B.46
Willey, David	B.46
Willey, Theresa M.	B.46
Williams, Andrew	B.46
Williams, Arthur L.	G.1; G.3; G.6; G.7; G.8; G.9; G.10; G.11; G.13
Williams, Bridgette	A.4; A.14; B.10; B.95
Williams, Frances & Ralph Duane	B.46; B.70; N.16
Williams, Henry L.	B.46; B.74
Williams, L.	B.46
Williams, Lawrence L.	B.23; B.46; B.149; H.12; H.19; M.5
Williams, Lisa	B.46

NAME	COMMENT
Williams, Stanley	B.70
Willis, Harvey	B.70; F.21
Wilson Education Center	B.46
Wilson, Ann	A.4; A.14; B.17; K.26
Wilson, Arthur E.	B.91
Wilson, Charles	B.46
Wilson, Charles H.	B.70; P.14
Wilson, Doris	A.34; D.19; D.69; K.26
Wilson, Richard Lee	A.3; A.4; A.34; B.105; D.14; K.27
Wilson, Scott M.	B.46
Winburn, Larry	B.69; B.70; C.17; K.79; N.16
Winburn, Sharon	B.46
Windhorst, Don E. Jr.	D.57
Wine, Kathleen	B.46
Wine, Leo	B.46
Wingfield, Joann	B.46; B.44; B.76
Wintergerst, Bonnye	B.70
Wiser, Albert	B.70
Wittenmyer, Robert	B.95; D.19
Wiyer, Melane L.	B.46
WMHC	B.46
Woerner, Barbara	H.18; K.15
Wolf, Jo Anne	B.46
Wolfe, Jammie	B.46
Wolfe, Mel	B.46
Wood, Joseph	B.46
Wood, Millard E.	B.46
Wooded Glen, Inc.	B.46
Woods, Josh	B.46
Woods, Steve	B.46
Woodward, Bruce & Shirley	A.27; B.28; B.95; B.99
Woolums, Glen	B.70
Woosley, Kathy	B.46
Wright, Nancy	B.46
Wright, Robert	B.74; B.120
Wright, Thomas	A.26; B.26; B.120
Wright, William	B.70; P.14
Wuetcher, William	B.70; B.74
Wulac, Barbra	B.46
Wulff, Keith & Judith	B.69; B.70; B.74
Wyandot, Inc.	B.46
Wyrick, Craig	B.46
Wyrick, Lisa	B.46



NAME	COMMENT
Yates, James	B.26; B.70
Yates, Joseph	B.46
Yelvington, Rube	A.4; B.101; D.19
Yetter, Richard	B.46
Younce, Guy	B.88; B.89
Young, Arthur	B.69; B.70; C.17
Young, Blantont	B.46
Young, Charles	B.70; D.91
Young, James	B.46; B.50
Young, Lind, Endres & Kraft	B.46
Young, Pat	No response required
Yount, Mary Lou	B.46; B.70
Your Pampered Pet	B.46
Yu, Jerry	A.4; B.113; C.25
Zalewski, Walter	B.95; B.110
Zanone, Mike	A.26; B.98; C.31; O.2; O.3
Zaricki, Stephen	B.88; B.89
Zehnder, Kathie	B.46; B.70
Zehnder, Stacy	B.46
Zehng, Jingjuan	A.34; B.102; Q.19
Zierer, Mary Ann	B.44; B.46; B.74
Zion, Cathy	B.70; B.84
Zitnik, Don	B.69; B.70; B.84; C.17; N.16
Zoeller, William A.	B.70
Zorio, Mario	B.46
Zynzmic Group	B.46