# Economic Impact Study of the Ohio River Bridges Project 2014 Update

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# 1 INTRODUCTION

This report and its findings are offered in compliance with Indiana Statute IC 8-15.5-4-1.5 requirement for an economic impact study for the Ohio River Bridges Project ("the Project"). In particular, this report serves as an update to a previous April 2012 report of the same name. The principal differences between this updated and the original report are attributable to:

(1) This report uses updated input-output multipliers to reflect current economic conditions
(2) This report uses an updated travel demand model, reflecting more current forecasts of 2030 conditions (based on the 2012 traffic and revenue study for the Ohio River Bridges)
(3) This report addresses some effects on the Kentucky side of the bridge, reflecting some findings from the 2012 traffic and revenue study, and
(4) This report assumes a more rapid phasing of build-out for the River Ridge development, consistent with the rate of build-out since the original 2012 study was completed.

As the original report, this update addresses each of the provisions of the statute as cited below:

***From IC 8-15.5-4-1.5***

***…The economic impact study must, at a minimum, include an analysis of the following matters with respect to the proposed project:***

***(1) Economic impacts on existing commercial and industrial development.***

***(2) Potential impacts on employment.***

***(3) Potential for future development near the project area, including consideration of locations for interchanges that will maximize opportunities for development.***

***(4) Fiscal impacts on revenues to local units of government.***

***(5) Demands on government services, such as public safety, public works, education, zoning and building, and local airports.***
***…***

Some provisions of the statute involve analysis of interdependent aspects of the Project (such as provision 4 on the impact on revenues to local units of government and provision 5 on the demands on government services). For this reason, this report is organized to present the analysis and findings of each area required by the statute within the context of other relevant considerations. Table 1 summarizes where within this document each of the statutory items is addressed.

**Table 1: Statutory Compliance Lookup Table**

| Statutory Requirement | Chapter(s) of this Document |
|---|---|
| 1. Economic impacts on existing commercial and industrial development | 2 & 3 |
| 2. Potential impacts on employment | 2 |
| 3. Potential for future development near the project area, including locations for interchanges that will maximize opportunities for development | 2 & 3 |
| 4. Fiscal impacts on revenues to local units of government | 4 |
| 5. Demands on government services, such as public safety, public works, education, zoning and building and local airports | 4 |

This study includes quantitative modeling analysis of the overall regional impact of the Project for the five counties in the study region modeled in the environmental documentation. This includes the Indiana counties Clark County and Floyd County as well as the Kentucky counties Bullitt County, Jefferson County and Oldham County. Impacts of the Project on the region's long-term employment, personal income and business output are reported. In addition to the regional impacts from construction, access and enhanced transportation system employment, the employment analysis also assesses the specific land use impacts of the Project's "contingent development" in Floyd and Clark Counties on the regional economy.

The "contingent development" (or land use) impact in the Indiana counties represents the direct, induced and indirect employment in the region as a whole that is expected to be derived from the specific location of the Project in relation to developable land in Indiana, and the existing and potential future development affected by the Project.

Because the economic modeling and its findings are aggregate and regional in nature (consistent with the travel demand model on which it is based), the study goes on to analyze specifically how the regional economic impacts are expected to be experienced at specific locations in Indiana. This analysis includes a more detailed assessment of how existing and potential future development at locations in Indiana near the Project area or otherwise sensitive to the Project will be positioned within the larger economic context described in the modeling. This is where the strategic effects of area access, localized development patterns and strategies, and the business outlook for specific areas affected by the Project are described in detail.

The study concludes with analysis of how the economic changes associated with the Project (both Indiana's share of the overall transportation impacts, and the effects of contingent development) are expected to affect county and local fiscal revenues as well as the demand for public infrastructure and services.

# 2 POTENTIAL IMPACT ON EMPLOYMENT, PERSONAL INCOME AND OUTPUT

Applying a regional economic impact model to the five-county region provides a high-level quantitative understanding of the effects that the Ohio River Bridge Project ("the Project") is expected to have on the overall regional economy. By providing an aggregate economic impact for the region affected by the Project, the analysis is intended to fully satisfy the second statutory requirement (*potential impacts on employment*); and to provide context for fully addressing the first and third requirements (*impacts on existing commercial and industrial development, and potential for future development near the Project area*). It is understood that fully addressing the first and third requirement entails a more detailed analysis of specific development areas and impacts in the direct project area, which is thus covered in detail in Chapter 3 of this report.

The findings of the Project's impacts on employment, personal income and business output are based on the results of the regional travel demand model used in the 2012 traffic and revenue study in combination with the findings of a site visit made to Clark and Floyd Counties in February, 2012 and follow-up calls made in fall of 2013 to refresh and update the findings of this initial visit. The analysis relies on the synthesis of these elements in EDR Group's Transportation Economic Development Impact System (TREDIS), which uses transportation cost factors from USDOT to monetize transportation performance improvements, and uses an input-output framework from the Minnesota IMPLAN Group (MIG) to derive direct, indirect and induced economic impacts.[1] Full documentation of the TREDIS methodology is available from www.tredis.com.

The impacts are experienced in terms of jobs, personal income (wages earned from jobs) and output (the value of goods made and sold by businesses). Overall, from 2012 to 2042, the Project is expected to generate an average of 15,556 jobs per year and a cumulative total of $29.5 billion in personal income and $86.7 billion in economic output (in constant 2012 dollars) in the regional economy. These changes are pertinent to existing, near-term, and long-term potential of new development throughout the region.

## Key Drivers of Regional Impact

The regional economic impacts of the Project are driven by five key factors:

- Construction
- Market Access

[1] IMPLAN® (IMpact analysis for PLANning) is an economic impact modeling system used to create complete, extremely detailed Social Accounting Matrices and Multiplier Models of local economies. See www.implan.com for more information.

- Transportation Efficiency/Operations
- Tolls
- Land Use

## Construction

Construction Impact is the activity in the region that is expected to be generated directly by construction outlays for the Project (including the costs of operation and maintenance). These impacts include the jobs and income of people involved in constructing and maintaining the facility and the output of firms employed constructing and maintaining the facility, as well as the induced (employee spending in the regional economy) and indirect effects (supplier purchases of materials). These impacts tend to peak during the construction period, and decline once the facility is fully built. These impacts are reflective of the total cost of the Project, under the currently assumed phasing patterns from 2012 through 2019.

## Market Access

Market Access Impact is the increased productivity businesses enjoy when their region is accessible to a larger market area or to other metropolitan areas. In the case of the Ohio River Bridges Project, easier access to the interstate system enhances access to the surrounding trade centers (Indianapolis, IN; Frankfort, KY; Columbus, OH; and Cincinnati, OH), expanding the range of goods and services available to businesses and households in the region as well as the market for regional businesses. The productivity of this improved access is reported as “Market Access” impacts in the region. The impacts include the increased output of firms benefitting from better matching of employees and businesses, shared inputs, knowledge spill over, and overall economies of scale. The improvement in these categories are expressed in increased jobs and income from surrounding firms as the induced (employee spending in the regional economy) and indirect (supplier purchases of materials) effects that occur in the regional economy.

## Transportation Efficiency/Operations

Transportation Efficiency/Operations Impact is the increased productivity and reduced costs that businesses and households enjoy due to lower travel times or travel costs from less congested roads, as well as the lower costs and reliability risk associated with operating vehicles under congested conditions. In the case of the Ohio River Bridges Project, the transportation efficiency/operations impact is derived from the change in the overall regional vehicle miles and vehicle hours of travel (and the share of traffic occurring under congested conditions) based on the travel demand modeling from the 2012 traffic and revenue study. The impact includes increased output of firms and households benefitting from transportation efficiency savings, and the jobs and income created by these savings as well as the induced and indirect effects that occur when transportation savings are spent in the regional economy.

## Tolls

Toll Impact is the adverse impact of tolling on the regional economy. The toll impact is a function of the overall amount of toll revenue which is generated from the share of trips paying the toll that are expected to be based within the region. The direct incidence of the toll is assumed to be shared between the transportation industry (trucking) and households in proportion to the relative shares of passenger cars and commercial trucks paying the toll (based on their share of VMT using the facility and their toll rates for cars and trucks, respectively).

The impact includes reduced output and consumption of firms and households accruing as cost of tolls are passed through the economy, and the adverse effect on jobs and income created by these costs, as well as the induced and indirect effects that occur when toll costs are spent in the regional economy. The analysis assumes that without tolling, the project (and its associated positive impacts) will not occur. If the project were to be financed through some mechanism other than tolling, then in lieu of tolling impacts, the adverse impacts of whatever taxes, fees or reductions in other programs used to fund the bridges would have been modeled.

Just as construction outlays have a positive impact on the regional economy by “putting money into” the economy, if the toll revenue from households or businesses in the region is used to fund the construction, the positive impacts of the Project may offset the revenues and associated output and employment “taken out” of the economy due to tolling. The adverse impact of tolling can be seen as the “price paid” for the positive impacts of the Project. It is expected that the positive impacts of other types should offset the adverse impacts of tolling (resulting in a positive overall economic impact).

## Land Use

Land Use Impact is the impact of strategic development in the area that occurs because of how *specific* land uses or development processes near the Project are affected by the nature of the Project. Unlike the other drivers of impact, the Land Use Impact can be understood as impact that is not caused directly by the performance of the transportation infrastructure, but rather by the degree to which the area in which the Project is implemented is sensitive to a particular connection, resource or amenity provided by the Project. In the case of the Ohio River Bridges Project, the direct land use development impact (or “contingent development” because it is dependent on the Project) associated with the Project is based on the site visit to Clark and Floyd Counties in February, 2012.

Based on the site visit and the observations further reported in Chapter 3, the Project can be expected to directly result in an estimated 11,987 Indiana jobs in the 30-year analysis period. The 11,987 jobs estimate is based on the size of developable land that will be made accessible by the Project, the industries expected to occupy that land and the average jobs per square foot for development of this type in the industries anticipated to be attracted. These jobs are the “direct” jobs that are expected to be attracted to the Indiana portion of the study area over a 30-year period. As a result of these 11,987 “direct” jobs, by 2030 an additional

10,548 jobs will result from the increase in population and the increased consumption of local goods and services associated with the establishments and people that these 11,987 "direct" jobs bring to the region. Table 2, below, shows the total number of average annual jobs (15,556 by full build out) that will result from this initial attraction of 11,987 by the Project itself. (The scope of this study only assesses the contingent impact in Indiana, although it is understood that further study may also find contingent development impacts in Kentucky).

The majority of the contingent development impacts in Indiana will be located in eastern Clark County in the vicinity of the Port of Indiana-Jeffersonville and the River Ridge Commerce Center. The planned East End Bridge will directly serve these two unique facilities. The Port of Indiana-Jeffersonville provides multimodal transportation services including rail, river barge and highway, making it attractive to businesses that rely on a range of transportation modes for shipping and receiving goods. The planned East End Bridge will enhance the highway network available to multimodal businesses, will open markets to the south, and will better connect to a fourth mode – aviation at the Louisville, KY International Airport (SDF). Based on interviews with economic development officials and businesses, as well as a review of recent industry trends in the region, existing businesses that are likely to expand because of the planned new bridge include: transportation providers (stevedores[2], rail, trucking & warehousing), fabricated metal, and food processing.

River Ridge Commerce Center currently has over 3,000 acres of land within an existing commerce park and expects to add 2,700 additional acres over time. This park is unrivaled in size in the region and in the nation. It can provide businesses with access to the port facilities as well as accommodating businesses that need very large tracts of land. The planned East End Bridge will enhance the marketability of the site for national and international businesses that need large development sites, access to multimodal transportation, and access to markets throughout the United States. The River Ridge Development Authority believes that the Ohio River Bridges Project will lead to the development of an additional 2 million square feet of new space per year until full build-out. To determine the contingent benefits of this area, a conservative growth estimate of 25% was assumed. Industries likely to benefit include food production (because of proximity to the barge facilities at the river port), fabricated metals, machinery manufacturing, computer and electronic equipment manufacturing, transportation, and mail/package delivery/warehousing. These industries are expected to grow based on the mix of current businesses using the facility, a review of recent industry trends, and discussions with developers and economic development officials about the types of businesses that are showing interest in the property. Included in the employment estimate is the new Amazon.com facility (estimated 2,600 employees), which noted the importance of the planned East End Bridge in its location decision.

The employment estimates also include some small increases in educational services—based on discussions with two colleges in the study area—as well as some increase in waste management—based on survey responses. The total land use impact reported includes the

[2] "one who works at or is responsible for loading and unloading ships in port" *Merriam-Webster Dictionary*

direct 11,987 jobs, the induced and indirect effects, as well as the construction impacts funded by toll revenues in the regional economy. Chapter 3 of this report describes in detail the basis for the contingent development assumption in Indiana associated with the Ohio River Bridges Project.

# Magnitude and Timing of Impact

Over the 30-year analysis period of the economic model (2012-2042), construction impacts accrue the most rapidly (as they begin immediately when the Project construction begins). The operating, market access and contingent development impacts occur more gradually as the Project is fully completed and becomes fully operational. Table 2, Table 3 and Table 4 show the magnitude of the economic impact during the construction period and in twelve-year increments thereafter.

**Table 2: Employment Impact by Category**

| Employment (average jobs per time period) | 2012-2018 | 2019-2030 | 2031-2042 | 30 Year Annual Average (All Periods) |
|---|---|---|---|---|
| Construction Spending | 4,338 | 1,275 | 1,277 | 1,968 |
| Enhanced Market Access | 0 | 899 | 1,956 | 1,105 |
| Transportation Efficiency/Operations | 0 | 450 | 492 | 364 |
| Impact of Tolls | 0 | (2,333) | (2,552) | (1,891) |
| Impact of Land Use | 0 | 15,211 | 20,981 | 14,010 |
| **Total Economic Impact** | **4,338** | **15,502** | **22,154** | **15,556** |

**Table 3: Personal Income Impact by Category**

| Labor Income (In $M's) | 2012-2018 | 2019-2030 | 2031-2042 | 30 Year Cumulative Total |
|---|---|---|---|---|
| Construction Spending | $1,560 | $727 | $722 | $3,010 |
| Enhanced Market Access | $0 | $491 | $1,068 | $1,559 |
| Transportation Efficiency/Operations | $0 | $223 | $244 | $466 |
| Impact of Tolls | $0 | ($1,172) | ($1,282) | ($2,454) |
| Impact of Land Use | $0 | $11,296 | $15,581 | $26,878 |
| **Total Economic Impact** | **$1,560** | **$11,566** | **$16,333** | **$29,459** |

**Table 4: Business Output Impact by Category**

| Output (In $M's) | 2012-2018 | 2019-2030 | 2031-2042 | 30 Year Cumulative Total |
|---|---|---|---|---|
| Construction Spending | $3,661 | $1,461 | $1,422 | $6,544 |
| Enhanced Market Access | $0 | $1,484 | $3,229 | $4,714 |
| Transportation Efficiency/Operations | $0 | $623 | $682 | $1,305 |
| Impact of Tolls | $0 | ($3,033) | ($3,317) | ($6,350) |
| Impact of Land Use | $0 | $33,828 | $46,659 | $80,487 |
| **Total Economic Impact** | **$3,661** | **$34,363** | **$48,675** | **$86,699** |

It should be noted in Table 2 that the average annual impacts tend to under-state the actual impacts accruing for many of the specific expenditure types. For example most of the construction jobs are created from 2012 to 2018, with relatively few generated after 2018, making the 30-year average significantly lower than the average during the construction period. The same is true with market access efficiency and land use impacts, for which the 30-year average is much lower than the annual impact accruing during the periods when the project is open and generating impacts.

The above described impacts reflect a quantification of the regional economic impact of the Project on the five-county region. The construction spending, enhanced market access, transportation efficiency and toll impacts are directly associated with the transportation performance characteristics of the Project that have been modeled and studied for engineering purposes as well.

However, the manner in which these regional impacts is expected to affect existing and future potential development specifically in the Indiana counties and how the Project is expected to create the jobs associated with the land use impact requires further analysis, as provided in the following chapter.

# 3 Economic Impacts on Indiana's and Kentucky's Existing and Future Commercial and Industrial Development

A thorough strategic analysis of the specific business environments in Indiana and Kentucky areas directly affected by the Ohio River Bridges Project provides the detailed findings required by the first and third statutory requirements (*impacts on existing commercial and industrial development and potential for future development near the Project area, including locations for interchanges that will maximize opportunities for development*). Whereas the modeling analysis in Chapter 2 entailed a large, regional "systems" view of the Project, the development analysis entails a more micro-level qualitative and strategic analysis of how Indiana's existing development and future commercial and industrial development patterns are likely to respond to the changed business environment resulting from the Project. Floyd and Clark Counties, and the municipalities within their borders, are positioned to realize substantial economic impacts from the Project. This chapter provides a narrative description of these potential impacts in the counties and several jurisdictions within these counties.

The analysis of the economic impacts of the Project on Floyd and Clark Counties relies on several sources. The research team conducted on-the-ground site reconnaissance to gain an understanding of the current economic base of the region—where businesses are located in relationship to the Project, the access changes that will occur as a result of the Project, and the characteristics of development sites within the region. As part of the site reconnaissance, the team conducted interviews with 45 individuals representing businesses, local and state governments, colleges and universities, and economic development agencies to discuss potential impacts of the Project.

The 45 individuals interviewed for the project were chosen to provide a range of geographic and industry perspectives of the potential impacts of the Project on the Indiana economy. Through a web search, the consultant team identified key groups including business associations and chambers of commerce, tourism organizations, and elected officials who could provide a broad perspective on project impacts and could suggest additional people to interview. Telephone contacts were made with these groups to set up interviews. Each person was asked to recommend additional individuals to interview and to bring additional people to the scheduled interview to help facilitate additional contacts. One Southern Indiana also provided a list of potential interviewees, including representatives of the development community, which was used to schedule additional interviews. During the interview process, the consultants asked for additional contacts for follow-up questions. An online survey was used to supplement the interviews, allowing the consultant team to collect information on potential project impacts from a wider range of participants. Notice of the survey was sent to more than 2,000 members of the business community, with 81 people responding by the survey deadline.

The team also reviewed recent trends (2001-2009) in employment by industry from IMPLAN, projected growth by industry from Moody's/Economy.com, and data on retail sales and employment for select subareas within the counties from ESRI Business Analyst Online.

# Floyd County

Floyd County occupies the western portion of the Indiana study area. In 2010, the population was 74,578.[3] In 2010, there were an estimated 24,167 jobs in the County.[4] Its largest city is New Albany (discussed separately, below). Smaller municipalities include Georgetown and Galena.

## Existing Businesses

The economic impact of the Project on most parts of Floyd County is expected to be minimal. The County's industrial parks are at capacity and the County is focusing efforts at attracting high-tech businesses that can utilize its highly educated workforce and the access to high capacity data lines put in place to serve Indiana University Southeast (IUS) in New Albany. Most existing businesses use the Sherman Minton Bridge to go to Kentucky, and will use the new planned bridges on a limited basis. Tolling will have a limited impact on existing businesses.

## New Development

Floyd County is expected to see an increase in housing development as a result of the Project. The Knobs, an area of higher end housing that includes parts of New Albany (Silver Hills), Georgetown, and unincorporated Floyd County (Floyds Knobs), has experienced growth in recent years and is forecasted to grow in population in response to the Project. Areas within the County to the north and west of New Albany are also expected to see an increase in population in response to the improved access to Louisville provided by the Project.[5] New retail and service businesses will follow this population increase. Most new retail in the County is expected to be in New Albany.

[3] US Bureau of the Census, 2010

[4] US Bureau of the Census, County Business Patterns 2009

[5] This study relies on the projected population growth by TAZ described in the Project Supplemental Environmental Impact Statement for conclusions about how the Project will affect population growth within Southeast Indiana

# New Albany

The economy of New Albany includes growing retail and food services sectors, as well as established industrial and commercial office areas. Retail and dining is concentrated in the downtown, along Charlestown Road, and on Grant Line Road. Downtown New Albany has experienced a renaissance in recent years, with new restaurants and specialty retail establishments opening and succeeding. With the temporary closing of the Sherman Minton Bridge in the fall of 2011, New Albany braced for a downturn in business activity in the downtown. Instead, through creative marketing and advertising, many of the shops and restaurants experienced an increase in activity as residents of Floyd and Clark Counties chose to remain on the Indiana side of the river for dining and shopping.

## Existing Businesses

There is limited space available for new industrial development in New Albany. The City's two industrial parks are near capacity. Existing businesses in the parks generally use the Sherman Minton Bridge for access to the south. The Project should increase the labor market from which these businesses can draw employees by opening access to Oldham and Shelby Counties. The majority of existing businesses are not likely to be affected by the Project except insofar as the bridges open up labor markets to the east of Louisville.

Downtown businesses likely will benefit from the Project as some traffic is diverted to the Sherman Minton Bridge to avoid tolls. This will funnel new traffic into the downtown area, creating more awareness of the opportunities for shopping and eating in the area.

Retail establishments along Charlestown Road and Grant Line Road may see some loss of sales as retail shifts to the east along Route 62 between Jeffersonville and Charlestown to better serve the expanding business base in the area of the Port of Indiana-Jeffersonville and River Ridge Commerce Center, the increased population in eastern Clark County, and the access to new markets on the Kentucky side of the river that are opened because of the planned East End Bridge. This potential shift in retail activity should be somewhat mitigated by new customers (derived from the expected increase in population in Floyd County and western Clark County). Access to existing customers living in the western areas of Louisville will not be changed. These customers will retain access across the Sherman Minton Bridge, although they may face some degree of increased congestion as travelers avoid tolls on the new I-65 bridge. Any shift in retail is not expected to result in a net loss of retail sales or establishments in Indiana.

New Albany is home to Indiana University Southeast (IUS). IUS has a reciprocal agreement with six Kentucky counties, allowing students from these counties to attend at in-state tuition. There is a master plan for the campus that projects expansion over the next decade. One new technology and education building has been approved. The university also expects to grow in response to the Project. The planned East End Bridge will help the university grow in two ways. First, development generated by the Project in Clark County will increase the pool of potential applicants for the university. Second, it will improve access to a broader geographic area, further increasing the pool of potential students and faculty.

The Paul Ogle Cultural and Community Center at the university offers arts and cultural events which are open to the public. The University believes the new bridges would open up a broader market area for this resource.

Purdue Research Foundation has an incubator building in New Albany on Charlestown Road and I-265. It is for technology and research firms. All of Purdue's programs in southeastern Indiana are housed here. When the new technology building is built at IUS, the Purdue research program is also expected to grow. The bridges will also help Purdue grow in New Albany, and will allow their course offerings at IUS to grow, due to the increased population of students to which the bridges will provide access. University officials do not believe tolls will be a significant deterrent for attracting students, faculty or visitors.

### New Development

The city of New Albany does not expect to compete with River Ridge Commerce Center, Northport Commerce Center and the other commerce parks in eastern Clark County. Instead, it has focused its economic development efforts on attracting high-tech businesses and office development to the city, with an emphasis on attracting businesses that can utilize the high capacity data lines installed along I-64 to the west.

Downtown New Albany should benefit from the additional traffic that uses the Sherman Minton Bridge. This will help with the continued redevelopment of the downtown, potentially supporting additional shops and restaurants. Additional housing development is projected for the Silver Hills area of the city.

## Clark County

In 2010, the population of Clark County (including the incorporated areas) was 110,232.[6] The County was home to 42,629 jobs in 2010.[7] Cities include Clarksville, Jeffersonville, Charlestown and Sellersburg, each of which is discussed separately below.

### Existing Businesses

The construction of the planned East End Bridge will impact 53.14 acres of prime agricultural land in Clark County.[8] The average agricultural receipts per acre in Clark County in 2007 were $274.02. The takings will result in an annual decrease in agricultural receipts in the County of $14,561.42 ($2007). The Project will likely also result in the development of some agricultural land into housing, further reducing agricultural receipts in

[6] US Bureau of the Census, 2010

[7] US Bureau of the Census, County Business Patterns 2009

[8] *Supplemental Draft Environmental Impact Statement – Louisville Southern Indiana Ohio River Bridges Project*, Table 5.2-1 Acres of FPPA Farmland/LESA Evaluation Rating, p. 5-38.

the County over time. At the same time, residential development will support new jobs in the retail and personal service industries.

Clark County is rich in limestone and has the most limestone quarries of any county in the State of Indiana. The quarry operators expect to reap substantial benefits from the Project, both during construction and afterward, as new growth at the commerce parks, new commercial/retail developments, and new housing developments increase demand for crushed stone and asphalt. An interview with one of the quarry operators revealed that the company has been increasing its production capabilities for the past seven years in anticipation of the Project. It expects to quadruple production and sales as the Project is built, and then scale back to double its current capacity in the following years. Additional survey respondents in the construction industry expect similar expansion opportunities. The planned East End Bridge will also expand the market area in which these companies can compete.

Based on survey results, the majority of business sectors expect to benefit from the Project. Almost all businesses involved in the following industries expressed a belief that the bridges will help them expand operations and/or reduce costs: manufacturing, construction, financial services, specialty services and retail, personal services, and transportation. These industry representatives felt that the improved access to a broader market, reduced travel time, and reduced accidents outweigh any negative impact of tolling. The businesses most concerned about negative impacts are retailers and eating and drinking establishments, which rely on discretionary trips for business discussed in more detail by municipality, below).

### New Development

Unincorporated areas of Clark County and its smaller municipalities are forecasted to see an increase in population, and thus housing development, as a result of the Project. This increase in population will also spur supporting retail and service development, with much of this focused on the Route 62 corridor.

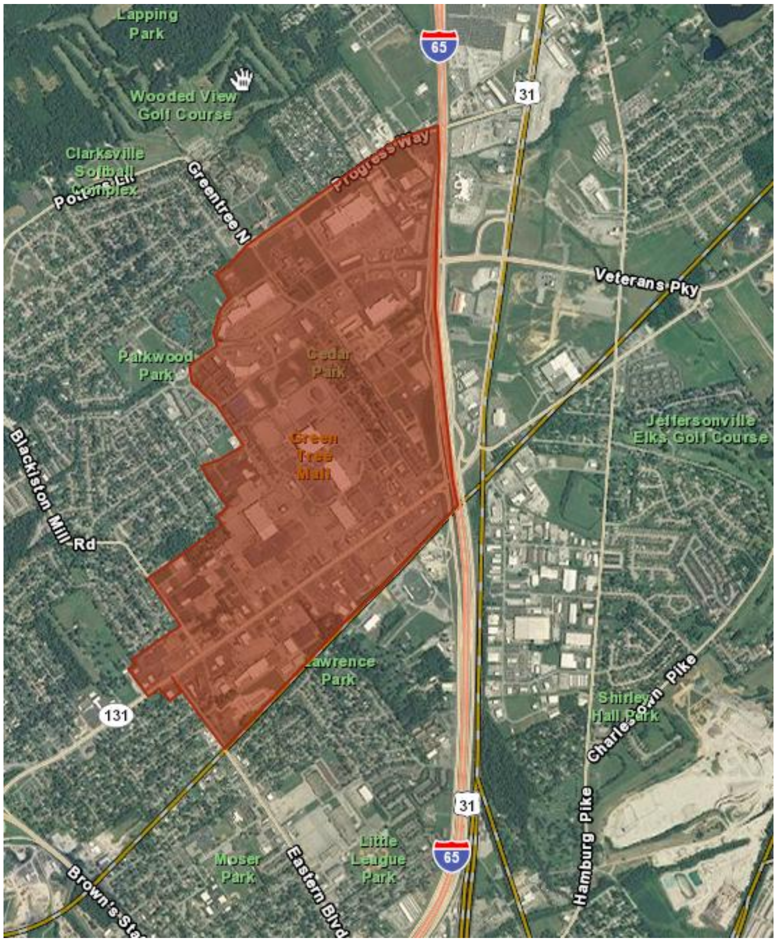
## Clarksville

The Veterans Highway retail area (see Figure 1) is a destination retail area for southeastern Indiana as well as western Louisville. The area grew up in direct response to the access created by the interchange at exit 5 on I-65, and is a good example of how highway access can spur retail development. The area is anchored by several chain retailers and restaurants, such as Target, Walmart, the Bass Pro Shop, Olive Garden, Dick's Sporting Goods, and Red Lobster. In 2010, this area realized an estimated $316,646,719 in retail sales (3.4% of the total sales in the five-county project region) and an additional $73,070,722 in sales at eating and drinking establishments (3.4% of the total regional sales in this industry).[9] The area attracts customers from southern Indiana, as well as the Louisville Area. In particular, it

[9] ESRI Business Analyst Online and Economic Development Research Group

serves as the retail center for western Louisville, a lower income area that has not attracted chain retailers.

**Figure 1: Veterans Highway Retail Area**




*Credit: ESRI Business Analyst Online*

## Existing Businesses

There may be some loss of retail sales in this area as retail competition locates in eastern Clark County along Routes 62, 3, and 403 in response to project-induced new population and employment growth in Clark County, as well as improved access to the eastern suburbs of Louisville. Importantly, this will not be a net loss of retail sales to Indiana, but rather a potential shift in sales from one area of Indiana to another. This shift should be somewhat mitigated by increases in population in Floyd and western Clark Counties anticipated as a result of the Project. Retailers have some concern that Kentucky customers will choose to shop elsewhere due to the tolls on the Kennedy Bridge north. This impact, however, should be mitigated by the access provided by the Sherman Minton and Clark Memorial Bridges.

# Jeffersonville

Jeffersonville's economy is anchored by a quaint, waterfront downtown retail and restaurant district in the west, and an industrial/warehouse area around the port and the commerce parks in the east. The Project will affect each area and in very different ways.

## Existing Businesses - Downtown

The development of the new bridge parallel to the existing Kennedy Bridge and the redevelopment of the Kennedy Bridge will result in the relocation of seven downtown businesses. These businesses are listed Table 5. Total employment in these businesses is estimated at 130 jobs.[10] Since all of these businesses are expected to be relocated within Jeffersonville or within the two-county region, their relocation will not result in a loss of jobs to southern Indiana, but may result in a shift of these jobs out of downtown Jeffersonville. Until these businesses are relocated, the impact on downtown employment cannot be precisely estimated.

**Table 5: Business Relocations**

| Business | Building Square Footage |
|---|---|
| McDonald's | 5,046 |
| Waffle House | 2,232 |
| Freserius Medical Care/ Southeast Indiana Dialysis | 12,870 |
| Lifespring House | 7,756 |
| Token Club | 6,060 |
| Storage Express | 31,948 |
| VFW | 7,924 |

Many customers who patronize shops and restaurants in downtown Jeffersonville access the area from I-65 via exit 0 (see Figure 2). Coming from Louisville, customers use both the Kennedy and Clark Bridges, which empty into the downtown area approximately 1,000 feet apart. In 2010, the area shown in Figure 2 accounted for an estimated $40,133,924 in retail sales (0.4% of the sales in the five-county project region) and $18,079,028 in sales at eating and drinking establishments (1.1% of the region's total).[11]

Through both in-person interviews and the business survey, several businesses in downtown Jeffersonville expressed concern that the Project will have negative impacts on their businesses. Of the nine survey respondents that provided comments that the Project would negatively impact their businesses, five were located in Jeffersonville, and the majority of

[10] Jobs were estimated based on the square footage of each business and factors for employees per 1,000 square feet of space for different types of establishments from the ITE Trip Generation Manual, the Urban Land Institute and the US Energy Information Administration.

[11] Ibid.

them were either retailers or restaurant operators. Their own estimates ranged from a 15% to 50% reduction in business as a result of the Project.

**Figure 2: Downtown Jeffersonville**


*Credit: ESRI Business Analyst Online*

Business owners in this area identified three major concerns regarding how the Project will impact their businesses. First, there is concern about access during the construction phase of the Project. It is important to merchants that Exit 0 remains open during construction to allow patrons access to the area. Retail businesses often survive on marginal profits, and even a small loss in sales for an extended period of time can cause some businesses to close.

Preliminary plans for construction include phasing the Project so that the existing Kennedy Bridge and exit 0 will remain open while the new, parallel northbound bridge is built. After completion of the northbound bridge, traffic will be diverted to the new bridge while work is done on the existing Kennedy Bridge and approach. During this phase, access northbound from I-65 would be available at a new ramp at Court Street. Exit 0 southbound would not be available, and northbound traffic would access the area from an exit farther to the north. This phasing will help mitigate the impacts of the construction period on downtown businesses. Signage that alerts potential customers that the stores are open and accessible will also be important for supporting these businesses during construction. Public service announcements could also be used to remind residents of both sides of the river that Jeffersonville businesses are open during construction. The Clark Bridge will remain open and will provide additional access during construction.

Second, merchants, restaurants and other destinations on the waterfront expressed concern about the permanent loss of exit 0 southbound. Customers traveling south on I-65 will need to exit at Stansifer Avenue and travel by access roads and surface streets to get to these businesses. Patrons who miss this exit would have to travel across the Kennedy Bridge and return via either the new bridge or the Clark Bridge. This will have the greatest effect on pass-through traffic that might visit the area, but who miss the exit and choose to forgo the trip. Residents likely will adjust to the change over time. Signage will be important for mitigating this impact, with signs north of the exit announcing the availability of shops and restaurants in downtown and on the waterfront via the Stansifer Avenue exit. Signage on the local streets guiding patrons to the downtown and the waterfront can also help. New traffic to the area from diverted trips across the Clark Bridge may also help mitigate this impact by bringing new customers to the area.

Third, merchants, restaurants and hotels are concerned that tolls on the new bridge will dissuade people from Kentucky or visitors to Louisville from patronizing their businesses. An adverse impact from tolling could occur in the first several months after the bridges are built, as some patrons from Kentucky avoid the bridges because of the tolls. This impact likely will dissipate over time for several reasons. The Clark Bridge will provide toll-free access to downtown Jeffersonville, helping to alleviate the impact of tolls. In addition, over time, local travelers will become accustomed to the toll and to the extent there was any drop-off in use at the outset will return to using the bridge, based on experience elsewhere in the country when new toll bridges are introduced. Further, the hotels in Jeffersonville attract visitors from out-of-town who want to be located near downtown but do not want to pay downtown hotel prices. Most visitors will not be aware of the toll when they reserve a hotel, so tolls will not factor into the decision of where to stay. Most hotel visitors will not be making multiple trips across the bridges each day. Thus, the toll should be not significant enough to make these hotels uncompetitive with hotels on the Kentucky side of the river, especially because the location directly across the river from downtown Louisville is more desirable than price-competitive hotels located south of downtown Louisville. Finally, many patrons of the waterfront restaurants in Jeffersonville are attracted to these establishments because of the superior view that diners can enjoy from the restaurants.

Overall, it is possible that some more marginal businesses in downtown Jeffersonville may lose enough sales in the short term, as a result of the tolls, to cause them to close. Many of the businesses may suffer a short-term loss in sales, but will recover over time. Negative impacts can be reduced through good signage and a marketing campaign that reminds people that these areas are accessible from the Sherman Minton and Clark Bridges. It is noteworthy that many of the survey respondents involved in financial services and specialty retail/services believe that their businesses will benefit from the Project.

IUS's MBA program is housed at the MCM (formerly McCauley Nichols) Center at the corner of Southern Indiana Avenue and North Shore Drive in Jeffersonville. The University believes that the Project will help their students, many of whom work in Louisville and attend night classes at the MCM Center.

## Existing Businesses - Eastern Jeffersonville

Easternmost Jeffersonville is characterized by farmland and several industrial and commerce parks. This area is poised to attract significant economic growth as a result of the Project.

The improved highway access will supplement the multimodal attractiveness of the Port to businesses that receive production supplies and ship products using different modes of transportation. Current industries at the port that are likely to experience growth due to the planned East End Bridge access include transportation (such as stevedores, trucking and the railroad industry), fabricated metals manufacturers, and food processors. One metals manufacturer noted that the wider lanes on the bridges will improve safety when shipping wide loads, and will make the Indiana location more attractive for expansion in products that require large pieces of metal. Others noted that the travel time savings, fuel cost savings, and improved reliability created by the new bridges will more than offset the impact of tolls on their businesses. According to several businesses at the existing commerce parks and the port, the planned East End Bridge will help them expand their businesses, by opening up new markets, improving safety, and increasing access to a broader workforce.

Northport and Bridgeport are established commerce parks with limited additional development area. These parks house a diverse group of industries, ranging from a call center, distribution facilities, and manufacturers making products including billiard tables, fabricated metal products, medical instruments, circuit boards and furniture finishes. The planned East End Bridge is expected to decrease shipping costs by reducing travel times and fuel consumption for existing businesses.

## New Development

The planned East End Bridge will provide direct access from I-265 in Kentucky to four major commercial/industrial development sites in Indiana, and will complete the connection with I-265 north. Specific sites where development is likely to occur include Northport Business Center, Bridgeport Business Center, the Port of Indiana-Jeffersonville, and River Ridge Commerce Center. The planned new bridge access should make available sites within these parks more marketable.

Plans for Northport Commerce Center call for retail development along Port Road. This type of development will be supported by the new employment and population that will be attracted to eastern Clark County in conjunction with the Project.

The Port of Indiana-Jeffersonville and the River Ridge Commerce Center will each realize significant benefits from the improved access provided by the planned East End Bridge. The 1,000 acre Port of Indiana-Jeffersonville (see Figure 3) is already a multimodal facility that provides rail and river transportation to its 26 tenants, occupying 623 acres and employing a total of 1,350 people.[12] If developed at current densities, the remaining 300 vacant acres at the Port can support an additional 602 employees.

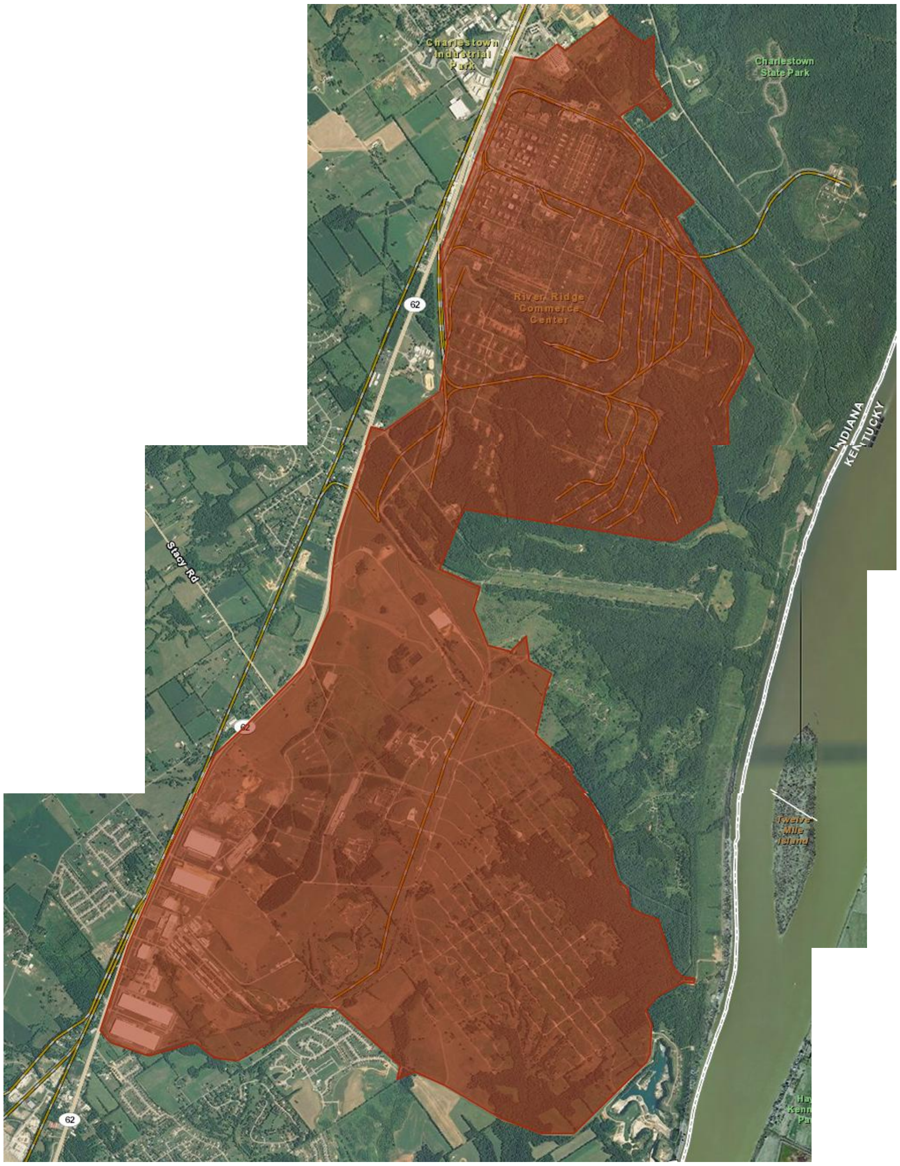
**Figure 3: Port of Indiana-Jeffersonville**


*Credit: ESRI Business Analyst Online*

The River Ridge Commerce Center, shown in Figure 4, is a unique development opportunity that will attract businesses from around the United States. The current business center comprises 3,126 acres, of which 335 have been developed with 3 million square feet of manufacturing and warehouse space. This development supports 2,850 jobs at a density of 0.95 jobs per 1,000 square feet. An additional 2,700 acres of land will be transferred to the commerce center in the future, but must undergo an environmental cleanup before the transfer can occur.

[12] Scott Stewart, Director, Port of Indiana-Jeffersonville

**Figure 4: River Ridge Commerce Park**




*Credit: ESRI Business Analyst Online*

Interest in sites at the River Ridge Commerce Center has intensified recently as the prospect of the construction of the planned East End Bridge has become more likely. Most notably, Amazon.com constructed a 1 million square foot warehouse and distribution center that employs 2,600 full-time workers (5,000 during the Christmas holiday season.) According to the owner of the River Ridge property, the planned new bridge figured prominently in Amazon's decision to locate at the site. The same land owner recently leased about 335,000 square feet of space to Standard Register Company, a communications company focused on health care. The new facility, which will employ 360 people by 2016, will perform digital printing, kitting and distribution. Another firm, CatamaranRX (a provider of pharmacy benefits management and technology services), is building a new facility at River Ridge that will employ 205 people by 2015, including pharmacists, technicians, and call center personnel.

The River Ridge Development Authority, which is governed by a five-member board of directors, appointed by the City of Jeffersonville, the City of Charlestown, Clark County, the Town of Utica and the Port of Indiana-Jeffersonville, believes the new bridges will result in substantial development at River Ridge. The long-term plan for the park is shown in Table 6. Representatives from the Development Authority estimate that the bridge could spur up to 2 million square feet of development per year because of the improved access to I-265 and I-65, as well as to the Louisville International Airport and the UPS facility in Louisville. Industries that are likely to find the site attractive, as a result of the new access, include: transportation, warehousing and distribution, food processors, machinery manufacturing, fabricated metals, computers and electronic equipment, and instruments manufacturing. These may include suppliers to the large auto and appliance manufacturers already in the region. One Southern Indiana (the economic development agency for the region) recently partnered with Conexus Indiana to create a Southern Regional Logistics Council to strengthen the desirability of the region as a logistics and distribution center.

**Table 6: River Ridge Commerce Center Long Term Plan**

| Development Type | Acres |
|---|---:|
| Retail | 105 |
| Office | 187 |
| Industrial | 2,602 |
| Light Industrial / Warehouse | 1,189 |
| Mixed Industrial / Office | 1,286 |
| Sewage Treatment Plant | 54 |
| City of Charlestown municipal site | 123 |
| Green Space | 65 |
| Drainage Easement | 19 |

*Source: River Ridge Commerce Center Long Term Plan*

The River Ridge Commerce Center will need to make infrastructure investments, including roads, sewer, and a rail connection to the Port of Indiana-Jeffersonville, to fully benefit from the new bridges. One such investment that will benefit both the Port and River Ridge is a new transportation corridor between the Port and River Ridge. The governor recently announced that funding for this project ($22.5 m) is now in place as a result of a partnership between the state, city, county, Port and River Ridge. The project will build a heavy truck road and rail corridor between the two facilities, which will also connect to the planned East End Bridge.

# Charlestown

From 1940 through the early 1970s, Charlestown's economy was directly tied to the army ammunition facility that is now home to River Ridge Commerce Center and the Charlestown State Park. When the facility was built in 1940, the City's population was 935, and it increased to 14,000 shortly thereafter. The population is currently 8,500. At its height, the ammunition facility employed 29,000 and many workers lived in modest housing in Charlestown, built to house army personnel.

The closure of the facility in 1976 hit Charlestown hard, leaving many people out of work and leading to deterioration of the housing stock and the downtown economy. Despite this decline, the City's industrial park has been able to attract businesses and is currently at capacity. In addition, efforts by the local government to increase the number of students attending college have met with great success, with the percent of high school graduates attending college rising from 27% four years ago to 77% in 2011. The City currently has a strip shopping mall and a Save-a-Lot grocery store.

Speculation about the planned East End Bridge has already had an impact on Charlestown. The City has been anticipating the River Ridge development for 12 years, including building some new infrastructure at River Ridge. In 2002-2003, the City began attracting the development of higher end homes around the outskirts of the City. To encourage this development pattern, the City rezoned parts of the City for larger lots to accommodate larger homes. The City did commercial rezoning and created a defined commercial district along the Highways 3, 403 and 62 corridors. In 2001, the City built a new sewer plant that will allow it to more than double in size.

## Existing Businesses

The Project will benefit existing retail establishments in Charlestown, as the population and employment base in the area is projected to surge, adding to the customer base. Existing businesses at the industrial park should benefit from reduced travel times, improved reliability, and access to a broader labor market.

## New Development

The planned East End Bridge should create an economic stimulus for Charlestown, due to its proximity to both the bridge itself and to vacant development sites at the Port, River Ridge and the other commerce parks in eastern Clark County. New industrial and commercial jobs created at the commerce parks and port, as well as the improved access to jobs in downtown Louisville and the Kentucky side of the river, will support the development of new homes in Charlestown for residents of all income levels. Route 62 is poised to capture a significant amount of new retail/commercial development, and the City has rezoned for commercial development along this corridor as well as Routes 3 and 403. This retail area will support new residents and employees, attract shoppers from the eastern suburbs of Louisville, and also customers from existing residents of both Clark and Floyd Counties. It is likely that some of the new retail along the Route 62 corridor will compete directly with the existing Veterans Parkway retail district in Clarksville.

# Sellersburg

The small community of Sellersburg is home to Ivy Tech Community College, as well as some manufacturing and retail, and serves as a bedroom community for the larger cities in the metropolitan area.

## Existing Businesses

Ivy Tech Community College sits on 90 acres of land in Sellersburg, and has room for expansion. Current enrollment is approximately 6,000 students, and the college needs to add space to accommodate additional enrollment. The college expects to add a new 40,000 square-foot building within the next five years. Until then, it is using off-site facilities for additional classrooms.

The College expects the Project to increase its marketability in a broader geographic area. Access provided by the planned East End Bridge would make the campus more accessible to students throughout the region. The college also believes that the new access provided by the bridges would be beneficial to many of its students who participate in clinicals at downtown Louisville hospitals, and many of its graduates who take jobs in Louisville.

The College noted that tolls will increase the cost of their programs to students who use the bridges to commute to school. However, they do not expect the tolls to be a deterrent to student enrollment.

## New Development

The City is expected to see an increase in population as a result of the Project. This will occur both because of improved access to the Kentucky side of the river with the opening of the planned East End Bridge, and because of the growth in industrial, commercial and retail businesses in eastern Clark County in the vicinity of the Port of Indiana-Jeffersonville, River Ridge Commerce Center, and the Route 62 corridor. Some additional retail activity will follow the population growth.

# Oldham County

In 2010, the population of Oldham County was 60,316. The County was home to 10,262 jobs in that year. There are three cities in the County: La Grange (the county seat), Pewee Valley, and Crestwood. Only Crestwood and La Grange are sewered.

## Existing Businesses

Oldham County is primarily a "Bedroom community" for the Louisville area. The eastern part of the County has numerous horse farms and is primarily residential, with no infrastructure serving the northeast section of the county. There is more commercial development as one heads west. The Oldham Reserve, an area of 1,000 acres owned by both the County and the City of La Grange, is located just south of I-71 between exists 18 and 22. This area is zoned as a Planned Unit Development (PUD), and the expectation is that this area will develop with a mix of office, commercial and retail development in a campus-like setting, with residential on outlying parts of the Reserve. So far the Reserve is home to one company—The Rawlings Group—an insurance segregation company,[13] which currently employs 700 people and expects to increase employment to 900. The company relocated to Oldham County from downtown Louisville, and is the largest employer in the County. There are additional areas that could support small amounts of industrial development in the La Grange area, but there are no large parcels available.

In the western part of Oldham County, there is more retail and service development. Some retail development has occurred in Brownsboro, but the community is less boosteristic than some areas in the region and while there will likely be some additional retail here, it will not be substantial. East Point development is located between Crestwood and Old Henry. The 700-acre development includes a medical center, a private university, several technology companies and other health-related businesses, as well as a Kroger's distribution center.

## New Development

Oldham County is expected to see considerable high-end housing development, especially as a result of the Project. The school system is among the best in the state, and the County has already attracted one Amazon executive, despite the long commute over the Kennedy Bridge. Housing is likely to occur near the Oldham Reserve and in the southwestern part of the County. Retail and services to support the new population will also locate in the County. Economic development and planning officials believe that La Grange will attract some of this development. In addition, there is a 250-acre site just south of I-71 at exit 14 and east of Floydsburg Road that is in single ownership and is likely to attract commercial and retail uses.

The Oldham Reserve will attract high-end office uses and some smaller scale retail. Industrial development will likely be attracted to an area of 250 acres (several parcels owned by different owners) north of I-71 near La Grange. The County is targeting this area for light industrial, distribution and service jobs. The County does not have any large, flat parcels that could attract a large manufacturer, but could support smaller industrial users.

[13] Insurance segregation companies make sure that the correct insurance provide pays each claim.

# Jefferson County and Louisville

In 2010, the population of Jefferson County was 741,096, with 560,135 of those people living in the City of Louisville. Louisville is the largest city in Kentucky. The County was home to 380,789 jobs and is the center of the region's employment.

## Existing Businesses

Jefferson County is the region's and state's commercial hub. The County is known as a center of health care, and is home to major hospitals and major insurance companies (such as Humana). Building on its strong healthcare base, it has become the nation's leader in elder care services. The City of Louisville has established the Nucleus Innovation Park, a 10-acre business campus in downtown Louisville that is focused on incubating and promoting companies that develop and manufacture health care products for the elderly. A major tenant of the complex is Signature HealthCare, an operator of 72 long-term health care facilities in 6 states. The Nucleus Innovation Park is being developed by the University of Louisville.

The County's geographic location within the United States and along major transportation lines has made it a major hub for distribution facilities as well as major manufacturers. Ford has a major manufacturing plant in the eastern part of the county, as does General Electric. Located near the airport, UPS WorldPort is the major distribution hub for UPS in the country.

Riverport, an industrial park with a port facility, is located in the western part of the County along the Ohio River. This 2,000 acre industrial park is currently home to 100 companies occupying 13 million square feet of space, and employing approximately 6,300 people. Most of the firms are either manufacturing or distribution companies. Many of their companies located at the park because of access to UPS. The park has 1.8 million square feet of space available.

As the retail center for the region, the area has a large number of shopping destinations. Downtown Louisville is home to a major high-end commercial district. There are several retail/commercial areas in the eastern part of the region along the Gene Snyder Freeway. These include Springhurst Town Center (Kohl's, Target, Dick's Sporting Goods, TJMaxx, OfficeMax, and other stores), the Summit (high-end retail), and The Paddock (lifestyle center). These centers are all built-out, but are expected to increase sales as a result of the new population expected to move into Oldham County as a result of the Project.

Two additional centers in eastern Jefferson County—Old Brownsboro Crossing and Norton Commons—have room for expansion and are expected to attracted retail and service development as the population of the region grows. Old Brownsboro Common has attracted big box retailers such as Lowes and Costco, is home to the new Cabela's outdoor sporting goods store, and has several fast food and casual restaurants. It is also the location of Norton Hospital. The area is attracting additional medical services businesses. There are several outparcels available for development. Nearby Norton Commons has 600 acres of land available for development. The area is being developed as a "town center" with small-scale retail shops along with residential development.

There are a number of colleges and universities in Louisville, most notably the University of Louisville, which has over 22,000 undergraduates and several thousand graduate students. Other institutions of higher education include Bellarmine University, Spalding University, Simmons College of Kentucky, Louisville Bible College, and Jefferson Community and Technical College.

Jefferson County and Louisville also boast a growing tourism industry. The Kentucky Derby brings thousands of tourists to the region each May and is an international sporting event. The sports teams of the University of Louisville draw large crowds throughout the college year, as Kentucky has no major-league professional sports teams. The area is known as a bourbon producing region, and the local tourism officials are working to create a tourism sector around this industry. Additionally, Louisville has developed several neighborhoods with a strong nightlife featuring restaurants and entertainment venues.

The construction of the new Kennedy Bridge and interchanges will result in the relocation of 23 businesses and one non-profit. According to the FEIS for the project, there is sufficient available land and buildings to accommodate these businesses in Louisville.

## New Development

New commercial/industrial development in the County will be focused around RiverPort and the Louisville International Airport where UPS WorldPort is located. UPS may well expand in response to new distribution facilities attracted to River Ridge Commerce Center as a result of the planned East End Bridge. UPS currently works with Amazon.com for shipping and would likely work with other distributors at the park. RiverPort has hundreds of acres of space within a fully developed industrial park and is the County's target for new industrial and distribution firms. There are also some parcels south of the airport that could attract industrial and warehousing uses.

Commercial/retail development will likely be focused in the eastern part of the County. North Commons and Old Brownsboro Crossing will be centers of new residential-serving retail and office development. These developments will benefit from new residential development in Oldham County spurred by the planned East End Bridge.

# Bullitt County

In 2010, the population of Bullitt County was 74,319. A total of 15,092 people worked in the County in that year. There are eight cities in Bullitt County: Fox Chase, Hebron Estates, Hillview, Hunters Hollow, Lebanon Junction, Mount Washington, Pioneer Village, and Shepherdsville. Shepherdsville is the largest city and the center of commerce.

## Existing Businesses

Since 2003, there has been an explosion of development along the I-65 corridor in Bullitt County, especially at the Cedar Grove exit. In this area, approximately 6,000 jobs have been added distribution and light manufacturing. This growth is in response to the expansion of the Louisville International Airport and the development of UPS WorldPort. The Cedar Grove Industrial Park attracted Zappos.com, the online seller of shoes, which opened a distribution center that started with 22 employees in 2002 and has increased to about 3,500 today. Other companies near the Cedar Grove exit include TSI/Ebay (distributor of toys), APL Logistics (3rd party logistics for Dow), Magna Seating (manufactures seats for the Ford Escape), Woodgreen Distributors (distributor of wood moldings), Rue LaLa (clothing distributor), and several others.

A second phase of Cedar Grove Industrial Park is underway, anchored by Gordon's Food Services. Best Buy also bought 600,000 square feet of space there in 2010. Another 600,000 square foot building pad is built and ready for a tenant.

Salt River Business Park is located in close proximity to Cedar Grove. A defense contractor recently leased part of a 936,000 spec building there. Settlers Point is a new retail/commercial development along I-65 at exit 112. So far, about 70 acres out of 270 have been developed at this site. Recent residential activity has been concentrated in Mount Washington, Hillview, Pioneer Village, Herbron Estates, and Fox Chase.

## New Development

Cedar Grove Industrial Park still has between 800 and 1,000 acres of land available for development. Salt River Business Park still has 634,000 square feet of space available. These parks will likely continue to attract distribution and light manufacturing firms that can take advantage of the sites' proximities to I-65, UPS WorldPort and two metropolitan areas (Louisville and Elizabethtown.) Additional retail and commercial development can be accommodated on over 200 acres left at the Settlers Point project. Residential development will continue to be focused in the communities that have seen recent development, as noted above. Overall, development in Bullitt County is not expected to be significantly affected by the Ohio River Bridges Project.

# 4 Fiscal Impacts on Revenues to Local Units of Government and Demands on Government Services

This section evaluates the net impacts to local government revenues and expenditures resulting from the Project. This analysis covers fiscal impacts to all county and sub-county budget units within the study area of Clark and Floyd County including cities, towns, townships, school districts and special purpose districts (with the exception of those funded on a fee-for-service basis, as discussed below).

This project is expected to have the following impact on fiscal revenues and expenditures:

- Increases in fiscal revenues occur as a result of population growth, new jobs, project operation and maintenance and economic activity occurring as a result of improved market access. Decreases in revenues are the result of property acquired for project construction as well as businesses displaced either by construction or by the resulting change in travel patterns.
- Increases in fiscal expenditures are driven by population growth, increases in school children, and added jobs, which necessitate additional government services such as fire and police protection.

This analysis captures annual fiscal impacts for a single representative year ("analysis year" - 2030), reported in today's dollars, based on current tax rates and policies. The analysis year represents a point in time after project completion once the project's operations have stabilized and transportation impacts are fully realized. 2030 is selected because it is the forecast year of the traffic and revenue model on which the analysis is based.

## Summary of Fiscal Impacts

Fiscal impacts of this project accrue in three general categories: 1) through project operation, maintenance, and market access benefits; 2) property acquisition for project right-of-way; and 3) net new population and employment (including contingent development). Table 7 presents a summary of fiscal impacts in each category, in the analysis year reported in today's dollars. These impacts can be expected to continue at this level in subsequent years. As the table shows, project operation, maintenance and economic activity occurring as a result of improved market access is expected to generate a net gain of approximately $293,500 per year in local tax revenues.

Properties acquired for right-of-way for project construction would be removed from local property tax rolls, resulting in an annual loss of approximately $506,234 in property tax revenues to local government units.

The project is expected to generate net new population (5,974) and jobs (11,987) in Clark and Floyd Counties, along with associated contingent development. Net fiscal impacts from new population is estimated at -$1.9 million in the analysis year, while new jobs are expected to largely offset this loss with a net gain of nearly $9.2 million.

The net fiscal impact from all three categories (project operation, maintenance, and market access benefit; loss of property tax due to acquisition for right of way; and job/population changes and contingent development) is approximately $7.0 million.

**Table 7: Summary of Annual Fiscal Revenues and Expenditures and Net Fiscal Impact (2012 $)**

| | | | |
|---|---|---|---|
| **Fiscal Impact of Project Operation, Maintenance and Market Access Benefit** | | | |
| **Annual Local Taxes due to Project Operation, Maintenance & Market Access** | | | $293,500 |
| | | | |
| **Fiscal Impacts due to Property Acquisition for Right of Way** | | | |
| Value of Acquired Properties | | | ($24,214,260) |
| Property Tax Levy per $100 AV | | | $2.09 |
| **Property Tax Impact** | | | **($506,234)** |
| | | | |
| **Fiscal Impact of Population Change and Contingent Development** | | | |
| | **Jobs** | **Population** | |
| Net Change in Jobs/Population Due to Project | 11,987 | 5,974 | |
| | | | |
| **Per Capita Impact Factors** | **Per Job** | **Per Population** | |
| Revenue Impact Per Job/Population | $1,161 | $649 | |
| Expenditure Impact Per Job/Population | ($395) | ($974) | |
| | | | |
| **Estimated Impacts** | **Due to Jobs** | **Due to Population** | **TOTAL** |
| Revenue Impact Per Job/Population - | $13,922,000 | $3,875,800 | $17,797,800 |
| Expenditure Impact Per Job/Population | ($4,739,300) | ($5,820,300) | ($10,559,600) |
| Net Fiscal Impact from Jobs/Population | **$9,182,700** | **($1,944,500)** | **$7,238,200** |
| | | | |
| **TOTAL NET FISCAL IMPACT** | | | |
| **Total Net Fiscal Impact** | | | **$7,025,466** |

*Source: Indiana Department of Local Government Finance, Indiana Gateway, and US Census Bureau with EDR Group Calculations.*

# Methodology

## Fiscal Impacts of Project Operation, Maintenance and Market Access Benefit

The portion of the regional economic benefits from project operation, maintenance and improved market access that accrues to Clark and Floyd counties will generate fiscal revenues for those county and sub-county governments. These fiscal impacts were quantified using TREDIS, which incorporates the IMPLAN fiscal model. Detailed information on the model's fiscal impact methodology can be found on IMPLAN's website (www.implan.com, see "Tax Impacts", Aaron Alward, Tuesday, 14 December 2010).

Because the model was run at the regional level, which includes impacts to counties in Kentucky, it was necessary to determine the share of fiscal impacts that would accrue within Clark and Floyd counties. This was done by allocating fiscal impacts due to businesses based on the share of regional growth resulting from the project expected to accrue to Clark and Floyd counties (30%).

IMPLAN/TREDIS output combines state and local impacts. The local portion was netted out using assumptions regarding the proportion of each of the IMPLAN/TREDIS output line items (income tax, property tax, vehicle tax/license fees, etc.) attributable to local taxes. For example, property taxes were allocated entirely to the local level, social insurance taxes were considered entirely state-level, while income tax was allocated between state and local based on CAGIT (County Adjusted Gross Income Tax) tax rates relative to state personal income tax rates. The resulting local revenue shares were then summed.

## Impacts to Property Taxes due to Acquisition for Project Construction

The Project will result in the removal of a number of currently taxable properties from local property tax rolls. The loss of property tax revenue was estimated by multiplying the acquisition cost of the properties from the Environmental Impact Statement by a weighted average property tax levy per $100 of assessed value (described in greater detail below). The property value from the EIS was based on fair market values in 2000 and have not been re-valued to reflect today's market conditions. The market value of $18.6 million in 2000 dollars was adjusted for inflation, equaling $24.2 million in 2012 dollars. It is assumed that this fair market value approximates assessed value.

The weighted average property tax levy represents an average of levy rates for all budget units and property types. This value was calculated using the 2012 total assessed value for Clark and Floyd Counties, as well as all sub-county budget units within those counties, divided by the total property tax collections. The result was a property tax levy of $2.09 per 100 of assessed valuation. Applied to the assessed valuation expressed above, the total property tax impact due to acquisition for project construction is estimated at approximately $506,200.

## Fiscal Impacts of Population Change and Contingent Development

This analysis employs a per capita multiplier method for both revenues and expenditures resulting from the net change in population and employment resulting from the Project. Budget data was obtained for Clark and Floyd counties, as well as all sub-county budget units from the Indiana Department of Local Government Finance (DLGF) and through the Indiana Gateway (the statewide clearinghouse for local government finance data). The data covers the 2012 adopted budgets, the most recent year for which all necessary data is available.

Budget lines for services provided on a fee for service/cost recovery basis were omitted from this analysis as, by definition, they have a net neutral budget impact. To avoid double counting, transfers between local government units (such as aid from the county to a locality) were omitted whenever they could be identified.

Revenue and expenditure streams not affected by the Project were also excluded. Excluded revenue streams include fines and forfeitures, rental of county/municipal property, federal/state grants, and interest on investments. Excluded expenditures include debt service, dues and subscriptions, and major capital projects such as the Clark County Aviation department’s runway extension. Capital expenditures that represent ongoing maintenance or routine increases in capacity that may be affected by changes in activity as a result of the subject project were included.

Specific assumptions for each revenue and expenditure stream are detailed below.

### *Revenue Impacts*

**Impacts to Property Tax Revenues.** New jobs and population will contribute to an increase in property tax revenues as undeveloped land is developed to accommodate new residential and business uses.[14] Residential and commercial/industrial property tax data was obtained from property tax summary documents for each county. (https://gateway.ifionline.org/report_builder/Default2.aspx?rptType=PropertyTax)

**Impacts to Other Revenues.** Other local revenue sources include local option income taxes, vehicle license fees, and cigarette and alcoholic beverage excise taxes. To estimate other tax revenues, detailed revenue data for all study area county and sub-county budget units was obtained from Indiana Gateway (https://gateway.ifionline.org/default.aspx). The data was scrutinized to identify all revenue sources that would be affected by the subject project. Then each relevant revenue source was proportionally allocated to either business or population based on assumptions regarding the distribution of revenue generation. For example, 100% of commercial vehicle license taxes were allocated to business uses, while regular vehicle license taxes were to residential and business based on known proportions of licenses. CAGIT (County Adjusted Gross Income Tax), COIT (County Option Income Tax) and

[14] The subject project may also cause changes to the value of existing residential and business properties, however it was not possible to quantify this potential impact due to data limitations.

CEDT (County Economic Development Tax) are paid on income of Indiana residents as well as out-of-state residents employed in Indiana. Revenues from Indiana residents was captured by population, while out-of-state workers was captured using the proportion of jobs held by out-of-state residents based on Census Bureau Journey-to-Work data.

**Revenue Impact Factors.** Per job and per resident revenue impact factors were obtained as follows: Total revenues (property tax plus other revenues, described above) generated by businesses divided by total jobs in Clark and Floyd counties; total revenues generated by population divided by the total population. These factors were then multiplied by new jobs and new population (respectively) created by the subject project, yielding an estimate of fiscal revenues.

## *Expenditure Impacts*

Expenditure data for all study area county and sub-county budget units was obtained from Indiana Gateway and scrutinized to identify those that would be affected by the Project through population or employment generation. Affected expenditures fall into the following basic categories: General government, public safety, public works, health and welfare, recreation and culture, and education. Expenditures in each category were then allocated based on the assumed proportion of generation by population or by business activity, as follows.

The general government and public safety categories provide services to both population and businesses; therefore, these expenditures were allocated based on proportion of residential and non-residential property assessed valuation. The public works, health and welfare, and education categories are population-serving, and these expenditures were allocated accordingly. Note that the education category includes only non-general fund expenditures, as discussed above. Public works expenditures serve both population and businesses; however, those covered by user fees on a cost recovery basis were removed as they are budget neutral. As with revenues, expenditures due to jobs was divided by total jobs in Clark and Floyd counties and expenditures due to residents was divided by total population. These resulting per job and per population factors were then applied to new jobs and population created by the Project to yield expenditure impacts.

# 5 CONCLUSION

Overall, the Ohio River Bridges Project is expected to have a positive impact on the overall five-county study region, allowing the regional economy to generate significantly more jobs, personal income and business output than could occur without the Project. Furthermore the positive impacts of the Project's economic impact from construction jobs, market access, transportation efficiency and land use impacts far outweigh any adverse regional economic effects of tolling. The overall land use impacts on development near the Project will be positive and are expected to lead to a gain of over 11,000 direct new jobs in Indiana over the life of the project as well as the induced and indirect (multiplier effects) of this new employment on Indiana's economy (Land use impacts in Kentucky are not addressed as part of this study).

Other changes in the Indiana business environment include changes in the access to downtown Jeffersonville, both during and after construction. Marketing and appropriate signage will be key success factors for enabling Jeffersonville's downtown business environment to adjust to these changes.

Because of the amount of additional economic growth that is enabled in Indiana as a result of the Project, significant increases in population and employment are anticipated with the associated increases in government revenue, and corresponding demand for government infrastructure and services. By full build-out of the land use impact in 2030, all of the cost of county and local services needed to accommodate this growth is anticipated to be covered by tax revenue generated by project-related growth, leaving a local fiscal annual surplus of just over $7.0 Million ($2012) annually (at full build-out) in 30 years.

# APPENDIX

## Sources:

### Contributing Entities

- Bass Pro Shops
- City of Charlestown
- Clark-Floyd Counties Convention & Tourism Bureau
- City of Clarksville Redevelopment Agency
- Clarksville Town Council
- Crossdock Development
- Downtown Jeffersonville merchants
- Floyd County Board of Commissioners
- Greater Louisville, Inc.
- Indiana Department of Transportation
- Indiana University Southeast
- Ivy Tech Community College
- Jeffersonville Main Streets
- MainSource Banking
- City of New Albany
- Ohio River Metal Services- Eagle Steel
- One Southern Indiana
- Port of Indiana-Jeffersonville
- River Ridge Development Authority
- Rocky's and Buckheads
- Schimpff's Confectionery
- Sellersburg Stone Company

### Additional Contacts

**Jim Henkel**, Indiana Department of Transportation; **Craig Moore**, Parsons Transportation Group; **Jim Hilton**, Community Transportation Solutions; **Jim Urban**, Director of Development and Planning, Urban County; **Deanna Epperly Karem**, Executive Director of Oldham County Chamber and Economic Development; **Phillip Bills**, Director of Planning and Design Services, City of Louisville; **Larry McFall**, Executive Director, RiverPort; **Roanne Hammond**, County Planner, Bullitt County; **Robert Fouts**, Executive Director Bullitt, County Economic Development Authority (formerly Director of Cabinet for Economic Development); **Daryl Snyder**, Executive Vice President, Economic Development, Greater Louisville Inc.; **Nick D'Andrea**, Director, State Government Affairs, UPS

### Documents

*Supplemental Draft Environmental Impact Statement – Louisville Southern Indiana Ohio River Bridges Project*

*River Ridge Commerce Center Long Term Plan*

## Data Sources

- ESRI Business Analysts On-Line
- ITE Trip Generation Manual
- Urban Land Institute
- US Energy Information Administration
- TREDIS
- US Census Bureau, 2010 Decennial Census
- US Census Bureau, County Business Patterns, 2009