APPENDIX E-2

Environmental Justice Technical Report

Clarification Note: This document was completed before the development of Central Alternative 1B Modified (Selected); therefore, the alternative is not included in the document. Applicable information regarding Central Alternative 1B Modified (Selected) is provided in the FEIS.

November 2018

ORX 69

ENVIRONMENTAL JUSTICE TECHNICAL REPORT

I-69 Ohio River Crossing Project

Evansville, IN and Henderson, KY

Environmental Justice Technical Report

I-69 Ohio River Crossing Project
Evansville, IN and Henderson, KY

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CHAPTER 1 – INTRODUCTION

The purpose of this *Environmental Justice Technical Memo* is to identify environmental justice (EJ) populations and communities within the project area and to analyze potential effects on those populations and communities that could result from implementation of the I-69 ORX build alternatives. Information in this memo supports discussions presented in the DEIS.

1.1 PROJECT DESCRIPTION

The Federal Highway Administration (FHWA), Indiana Department of Transportation (INDOT), and Kentucky Transportation Cabinet (KYTC) issued a revised Notice of Intent (NOI) in the *Federal Register* on February 13, 2017 for the preparation of an Environmental Impact Statement (EIS) for the I-69 Ohio River Crossing (ORX) project in the Evansville, IN and Henderson, KY area, which is part of the National I-69 Corridor that extends between Mexico and Canada. An NOI was previously issued for the project on May 10, 2001. Under that NOI, a Draft Environmental Impact Statement (DEIS) was completed in 2004, but the project was subsequently suspended in 2005.

For the new DEIS that is being prepared for the I-69 ORX project, the project area extends from I-69 (formerly I-164) in Indiana on the south side of Evansville (i.e., northern terminus) across the Ohio River to I-69 (formerly Edward T. Breathitt Pennyrile Parkway) at the KY 425 interchange southeast of Henderson, KY (i.e., southern terminus) (**Figure 1.1-1**). The section of Edward T. Breathitt Pennyrile Parkway between KY 351 and KY 425 that was not re-designated as I-69, was recently re-designated as US 41. The western limit of the project area is parallel to and extends a maximum of about 2,000 feet west of US 41. The eastern limit of the project area extends about 1,500 feet to 3.4 miles east of US 41. Currently, I-69 does not cross the Ohio River and the only cross-river access between Evansville and Henderson is via US 41, which is classified as a principal arterial and does not meet current interstate design standards.

One of the first steps in the EIS process for the I-69 ORX project was the scoping phase which included the development of the project's purpose and need. As a result of this analysis, the following project needs have been identified:

- Lack of National I69 Corridor system linkage
- High cost of maintaining cross river mobility on existing facilities
- Unacceptable levels of service for cross-river traffic
- High-crash locations in the I-69/US 41 corridor

Based on these needs, the project's purpose is the following:

- Provide cross-river system linkage and connectivity between I69 in Indiana and I69 in Kentucky that is compatible with the National I69 Corridor
- Develop a solution to address long-term cross-river mobility
- Provide a cross-river connection that reduces traffic congestion and delay
- Improve safety for cross-river traffic

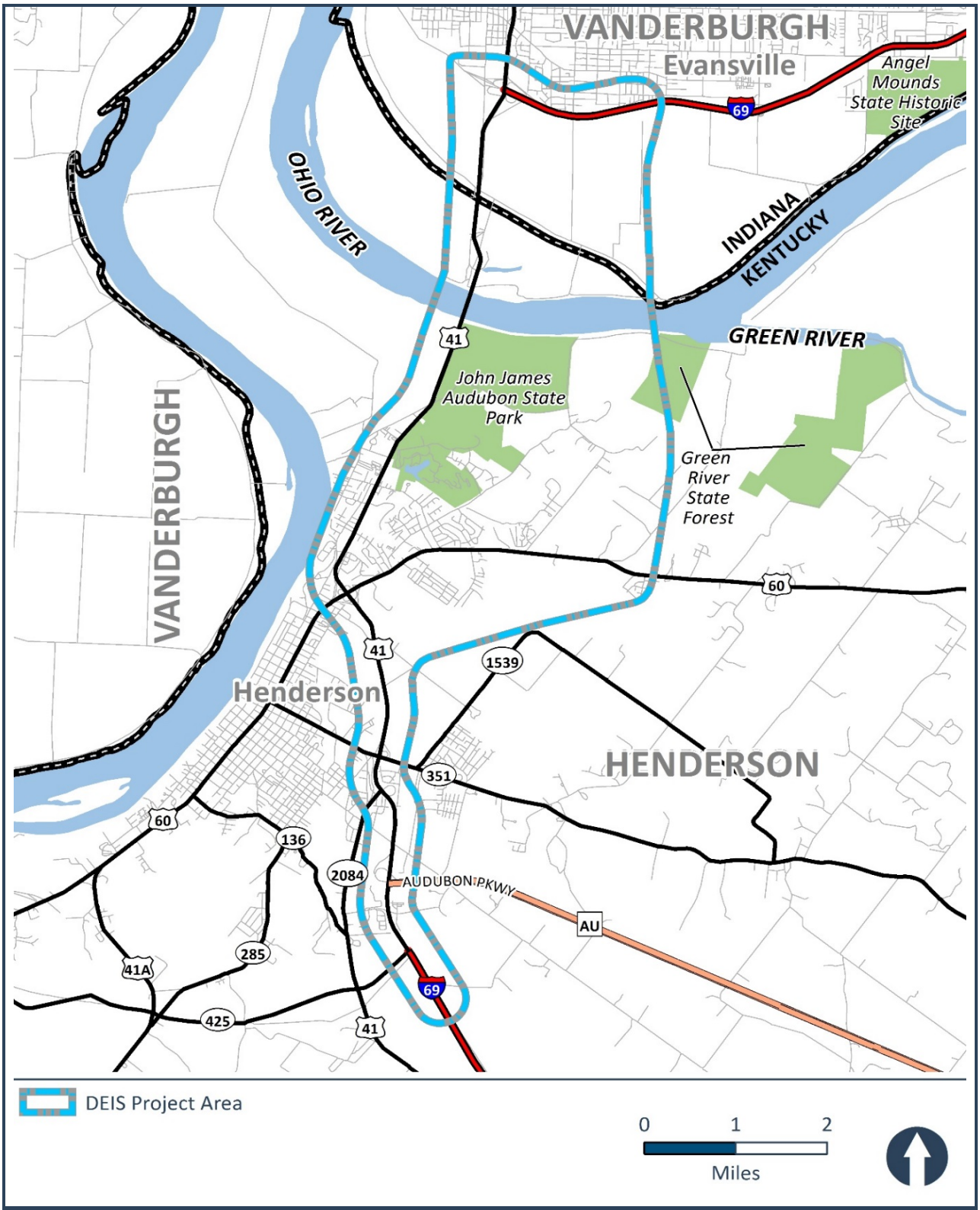

Figure 1.1-1. Project Area

CHAPTER 2 – ALTERNATIVES

Based on the project's purpose and need, an initial range of alternatives was developed, evaluated, and screened using secondary source and windshield survey data, and input from the public and federal, state, and local agencies. Because the range of alternatives was developed based on conceptual designs, they were referred to as corridors. Each corridor was evaluated on the degree to which it meets the purpose and need; its potential social, environmental, and economic impacts; and its conceptual cost. In addition to the No Build Alternative, the following five corridors were developed based on alternatives previously presented in the 2004 *Interstate 69 Henderson, Kentucky to Evansville, Indiana Draft Environmental Impact Statement* (FHWA, INDOT, and KYTC 2004) and the 2014 *I-69 Feasibility Study, Henderson, Kentucky, SIU #4, Final* (KYTC 2014a).

- West Corridor 1 (Based on Alternative 7 from the 2014 Feasibility Study)
- West Corridor 2 (Based on Corridors F and G from the 2004 DEIS and Alternatives 5 and 6 from the 2014 Feasibility Study)
- Central Corridor 1 (Based on Alternative 1a from the 2014 Feasibility Study)
- Central Corridor 2 (Based on the Preferred Alternative 2 from the 2004 DEIS)
- East Corridor (Based on Alternative 3 from the 2004 DEIS)

The results of the evaluation of these corridors were presented in a *Screening Report* (INDOT and KYTC 2017) that recommended three corridors — West Corridor 1, West Corridor 2, and Central Corridor 1 — be carried forward for more detailed evaluation in the DEIS, in addition to the No Build Alternative. In the *Screening Report*, for West Corridors 1 and 2, it was assumed that both US 41 bridges would be taken out of service for vehicular use and the new I-69 bridge would have six lanes. For Central Corridor 1, it was assumed that both US 41 bridges would remain open and the new I-69 bridge would have four lanes. However, the report stated that the future use of the existing US 41 bridges and corresponding number of lanes on the new I-69 bridge for each corridor would be subject to further evaluation.

Following the *Screening Report*, preliminary designs were then developed within these corridors based on public and agency input, assessment of potential environmental and right-of-way impacts, and results of a traffic analysis. Follow-on studies were conducted regarding the location and configuration of interchanges, the disposition of and long-term maintenance costs for the existing US 41 bridges, and tolling scenarios with resulting traffic patterns. This included the development, evaluation, and screening of the following three different US 41 and I-69 bridge scenarios for each of the three corridors.

- Build a six-lane I-69 bridge for all cross-river traffic and take both US 41 bridges out of service for vehicular use.
- Build a four-lane I-69 bridge and retain one US 41 bridge for local traffic.
- Build a four-lane I-69 bridge and retain both US 41 bridges for local traffic

The results from this next level of evaluation of the project corridors were presented in a *Screening Report Supplement* (INDOT and KYTC 2018a). The *Screening Report Supplement* identified the best bridge scenario for each corridor and the following alternatives to be carried forward for detailed evaluation in the DEIS and this Environmental Justice Technical Memo.

- No Build Alternative: required by NEPA to serve as a baseline for comparison
- West Alternative 1: four lanes on the new I-69 bridge and retain one of the existing US 41 bridges
- West Alternative 2: six lanes on the new I-69 bridge and take both existing US 41 bridges out of service
- Central Alternative 1: four lanes on the new I-69 bridge and retain one of the existing US 41 bridges

Following the *Screening Report Supplement*, it was determined that the northbound US 41 bridge would be retained and the southbound US 41 bridge would be removed for West Alternative 1 and Central Alternative 1 and both bridges would be removed for West Alternative 2. The three recommended DEIS build alternatives are shown in **Figure 2.1-1** and described in greater detail in the following sections.

Consistent with the Evansville Metropolitan Planning Organization's fiscally-constrained Metropolitan Transportation Plan, tolling I-69 will be a key part of the financing for this project. The toll policy will define toll rates for different vehicle types and will be developed with the federally required financial plan prior to construction. The NEPA process will not determine the toll policy but will evaluate, and document in the DEIS, the environmental consequences associated with tolling being a part of the project.

For most impact categories, the DEIS will evaluate potential impacts that would result from the placement of tolls on both the I-69 bridge and the remaining northbound US 41 bridge. This would provide a conservative estimate in terms of potential impacts associated with increased traffic volumes on I-69 for most impact categories. However, because these two toll scenarios could alter the distribution of traffic between I-69 and US 41 and, therefore, affect noise levels, both scenarios were analyzed in this report. For purposes of evaluation, it was assumed that all toll rates used in the analysis would be similar to the Louisville, KY metropolitan area bridges for the I-65 and KY 841/SR 265 Ohio River Crossings (i.e., $2.00 for cars, $5.00 for medium trucks, and $10 for large trucks). Both projects are located in metropolitan areas within the same geographical region and have comparable total costs.

2.1 WEST ALTERNATIVE 1

West Alternative 1 would include a new I-69 bridge approximately 5,400 feet long over the Ohio River and associated floodway that would be located approximately 70 feet west of the existing southbound US 41 bridge. The new bridge would include four lanes, with the capacity to expand to six lanes in the future, if needed, by restriping the lanes on the bridge; therefore, it would not require additional right-of-way or major construction. The rest of the alternative would also

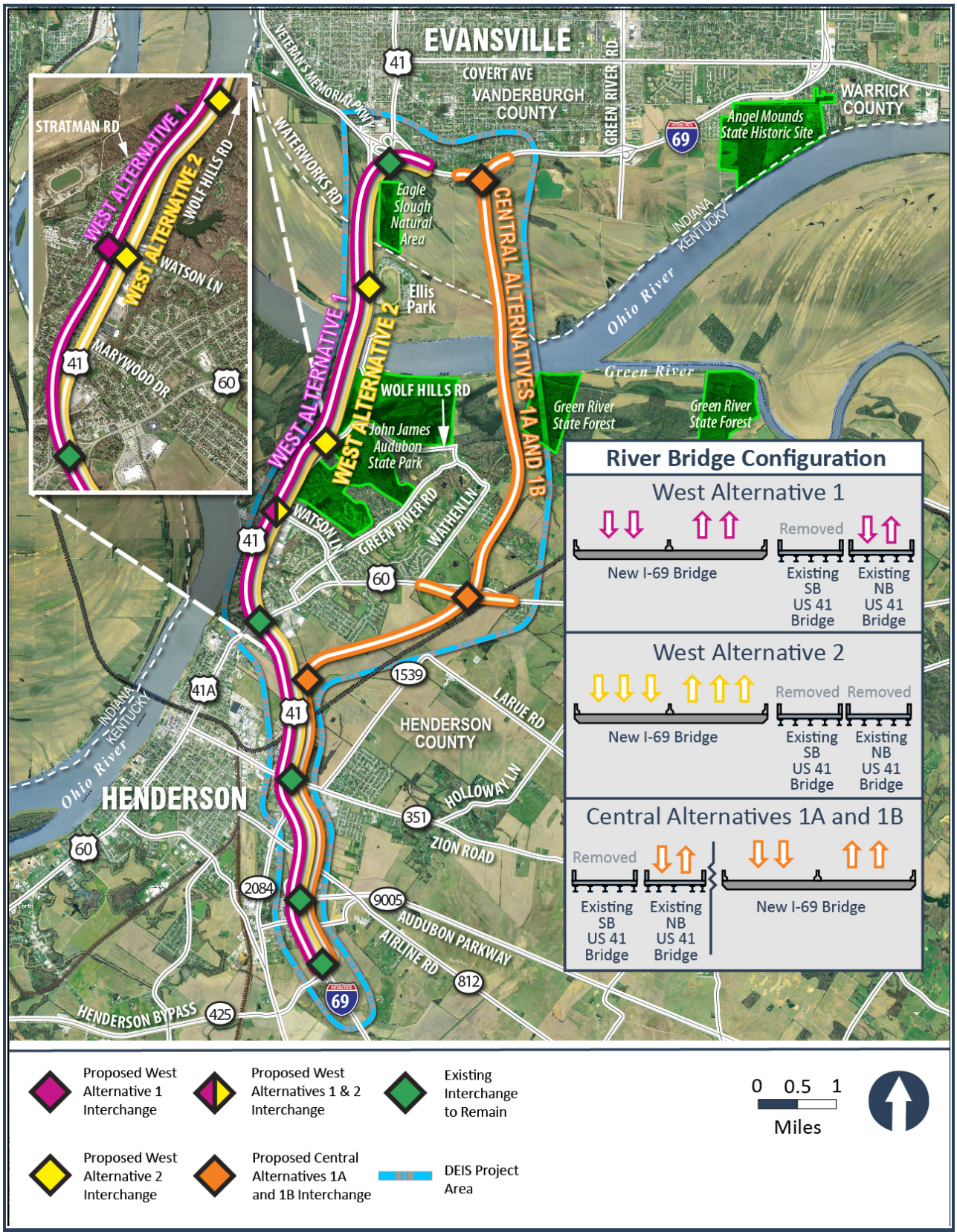

Figure 2.1-1. DEIS Alternatives

include four lanes but without the capacity to expand to six lanes by restriping lanes. The northbound US 41 bridge would be retained and the southbound US 41 bridge would be removed. The northbound US 41 bridge that would be retained, which has two lanes, would be converted from a one-way bridge to a two-way bridge for local traffic. Most of West Alternative 1 would use rural design standards, including a grass median; however, through Henderson, it would use urban design standards and include a narrower median with a concrete barrier. West Alternative 1 would begin on existing I-69 in Indiana just east of the US 41 interchange and become the through movement for I-69. Connections to US 41 to the north and Veterans Memorial Parkway to the west would be provided. The alternative would include a bridge to carry I-69 over Waterworks Road and Nugent Drive while local access to Waterworks Road and Ellis Park would be maintained by US 41.

In Kentucky, the alternative would include a bridge to carry I-69 over Stratman Road, with local access to Stratman Road and Wolf Hills Road provided by US 41 and the local bridge. The alternative would continue south and run parallel to and approximately one block west of US 41 and the Henderson commercial strip. There would be no changes to US 41 through this area. An interchange would be constructed at Watson Lane to provide highway access to the commercial strip and adjacent residential areas. An overpass (no interchange) would be provided at Barker Road to maintain connection to residential areas west of the alternative. A local access road with a sidewalk would be provided on the west side of the alternative between Barker Road and Atkinson Park. The alternative would then continue south and tie into the existing four-lane, fully-controlled access section of US 41 south of the US 60 interchange. The US 60 interchange would be modified to provide connections to and from existing US 41, US 60, and I-69. US 41 (formerly named the Edward T. Breathitt Pennyrile Parkway) south of US 60 to KY 425, where I-69 in Kentucky currently ends, would be modernized to meet interstate standards through improvements to ramps and merge areas. The total length of West Alternative 1 is 11.1 miles, which includes 2.9 miles of existing US 41.

2.2 WEST ALTERNATIVE 2

As with West Alternative 1, West Alternative 2 would include a new I-69 bridge approximately 5,400 feet long over the Ohio River and associated floodway that would be located approximately 70 feet west of the existing southbound US 41 bridge. The new I-69 bridge for West Alternative 2 would include six lanes and both existing US 41 bridges would be removed. The sections of the alternative north of the new bridge to Waterworks Road and south of the new bridge to US 60 would also include six lanes. South of US 60, the alternative would transition from six lanes to the existing four lanes on US 41. Most of West Alternative 2 would use rural design standards, including a grass median; however, through Henderson, it would use urban design standards and include a narrower median with a concrete barrier. Like West Alternative 1, West Alternative 2 would begin on existing I-69 in Indiana just east of the US 41 interchange and become the through movement for I-69. Connections to US 41 to the north and Veterans Memorial Parkway to the west would be provided. From the US 41/I-69 interchange to Ellis Park, the alternative would follow the existing US 41 alignment. An overpass bridge would carry Waterworks Road over I-69 and an interchange would be provided at Ellis Park.

In Kentucky, the alternative would follow existing US 41 through the Henderson commercial strip, with local access provided via a reconstructed US 41, which would function as a frontage road, located adjacent to and east of the alternative. The reconstructed US 41 would include two lanes plus a center, two-way left turn lane and a new sidewalk on the eastside. There are currently no sidewalks along US 41 in this area. An interchange would be provided at Stratman Road/Wolf Hills Road and at Watson Lane. At the Watson Lane interchange, US 41 would be relocated approximately 300 feet to the east to provide adequate spacing between the interchange and the US 41/Watson Lane intersection. An overpass (no interchange) would be provided at Rettig Road to maintain connection to residential areas west of the new interstate. In addition, a shared-use path would be provided on the west side of the alternative. The alternative would continue south, within the US 41 corridor, to the existing US 60 interchange, which would be modified to provide connections to and from existing US 41, US 60, and I-69. The existing four-lane section of US 41 (formerly named the Edward T. Breathitt Pennyrile Parkway) south of US 60 to KY 425, where I-69 in Kentucky currently ends, would be modernized to meet interstate standards through improvements to ramps and merge areas. The total length of West Alternative 2 is 11.0 miles, which includes 2.9 miles of existing US 41

2.3 CENTRAL ALTERNATIVES 1A AND 1B

Central Alternative 1 is described in the DEIS as two alternatives, Central Alternatives 1A and 1B. They are physically the same alternative, but differ with respect to tolling. Central Alternative 1A would toll both the I-69 and the US 41 bridges, and Central Alternative 1B would toll only the I-69 bridge. Central Alternatives 1A and 1B would both include a new I-69 bridge, approximately 7,600 feet long, over the Ohio River and associated floodway, located approximately 1.5 miles east of the existing US 41 bridges. The new I-69 bridge would include four lanes, with the capacity to expand to six lanes in the future, if needed, by restriping the lanes on the bridge; therefore, it would not require additional right-of-way or major construction. The rest of the alternatives would also include four lanes but without the capacity to expend to six lanes by restriping lanes. The northbound US 41 bridge would be retained and the southbound US 41 bridge would be removed. The northbound US 41 bridge that would be retained, which has two lanes, would be converted from a one-way bridge to a two-way bridge for local traffic. There would be no changes to US 41 through the commercial strip. Central Alternatives 1A and 1B would use rural design standards and include a depressed grass median outside of the bridge limits.

Central Alternatives 1A and 1B both begin at existing I-69 in Indiana, approximately 1 mile east of the US 41 interchange. The alternatives would continue south across the Ohio River just west of a gas transmission line. It would remain just west of the gas transmission line near the Green River State Forest, then turn southwest where an overpass would be provided to carry the access road for the gas transmission line over the alternatives. The alternatives would continue south to US 60 where an interchange would be provided. As part of the US 60 interchange, US 60 would be relocated approximately 400 feet south, which would require a new bridge over the CSX Railroad east of the interchange. The alternatives would continue southwest and connect with US 41 via an interchange approximately 1 mile south of the US 60 interchange. From the alternatives' interchange with US 41 to KY 425, the existing four-lane US 41 would be modernized

to meet interstate standards through improvements to ramps and merge areas. The total length of Central Alternatives 1A and 1B is 11.2 miles, which includes 2.8 miles of existing US 41.

CHAPTER 3 – AFFECTED ENVIRONMENT

The affected environment includes the social and economic aspects of the human/built environment of EJ communities (i.e., minority and low-income populations) within the project area and the Evansville Metropolitan Planning Organization (EMPO) Travel Demand Model (TDM) area.

3.1 REGULATORY CONTEXT

Title VI of the Civil Rights Act of 1964 (Title VI) states that "[n]o person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Title VI bars intentional discrimination as well as disparate impact discrimination (i.e., a neutral policy or practice that has an unequal impact on protected groups).

FHWA prepared Technical Advisory T6640.8A, *NEPA Implementation: Guidance for Preparing and Processing Environmental and Section 4(f) Documents*, which provides guidance to state Departments of Transportation to comply with Title VI (FHWA 1987). This Technical Advisory was finalized in 1987 and provides guidance for documenting communities, community facilities, and impacts to these resources. Updates to this guidance have included technical advisories on more specific socioeconomic issues.

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* states that each federal agency "shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations" (Office of the President 1994). Minority persons include citizens or lawful permanent residents of the United States who are African-American, Hispanic or Latino, Asian-American, American Indian, or Native Alaskan. Low-income persons are defined as those whose household income is below the U.S. Department of Health and Human Services (DHHS) poverty guidelines.

The Council on Environmental Quality (CEQ) is the implementing body of NEPA. It is a division of the Executive Branch and has oversight of the Federal Government's compliance with EO 12898 and NEPA (CEQ 1997). CEQ, along with the U.S. Environmental Protection Agency (USEPA), and other affected agencies have issued guidance and procedures to effectively identify and address EJ concerns in the NEPA process. The guidance appears in *Environmental Justice: Guidance Under the National Environmental Policy Act* (CEQ 1997). The CEQ guidance details four ways to consider EJ under NEPA. In summary, a federal agency needs to analyze effects, propose mitigation measures, provide opportunities for public outreach/involvement, and ensure compliance review.

EO 12898 and Title VI are implemented at the federal level by individual federal departments. As a division of the U.S. Department of Transportation (USDOT), FHWA follows the statutes, regulations, and guidance of USDOT. Upon the issuance of EO 12898, federal departments,

including USDOT, developed guidance to comply with the order. USDOT guidance was finalized in 1997. USDOT has continued to update its guidance. USDOT's most recent order on implementing EJ requirements (USDOT Order 5610.2(a), issued May 2012) states that:

> it is the policy of [US]DOT to promote the principles of environmental justice (as embodied in the Executive Order) through the incorporation of those principles in all [US]DOT programs, policies, and activities. This will be done by fully considering environmental justice principles throughout planning and decision-making processes in the development of programs, policies, and activities, using the principles of NEPA, Title VI, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, (URA), the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (Public Law 109-59; SAFETEA-LU) and other [US]DOT statutes, regulations and guidance that address or affect infrastructure planning and decision-making. (USDOT 2012)

FHWA implemented the USDOT order via FHWA Order 6640.23A, *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (FHWA 2012). The order provides methods to comply with existing applicable regulations and requirements as well as administer FHWA's:

> "governing statutes so as to identify and avoid discrimination and disproportionately high and adverse effects on minority populations and low-income populations by:
>
> - identifying and evaluating environmental, public health, and interrelated social and economic effects of FHWA programs, policies, and activities;
> - proposing measures to avoid, minimize, and/or mitigate disproportionately high and adverse environmental or public health effects and interrelated social and economic effects, and providing offsetting benefits and opportunities to enhance communities, neighborhoods, and individuals affected by FHWA programs, policies, and activities, where permitted by law and consistent with EO 12898;
> - considering alternatives to proposed programs, policies, and activities where such alternatives would result in avoiding and/or minimizing disproportionately high and adverse human health or environmental impacts, where permitted by law and consistent with EO 12898; and
> - providing public involvement opportunities and considering the results thereof, including providing meaningful access to public information concerning the human health or environmental

> impacts and soliciting input from affected minority populations and low-income populations in considering alternatives during the planning and development of alternatives and decisions." (FHWA 2012)

For the purposes of identifying minority populations, the following definitions are found in USDOT's Order 5610.2(a) (USDOT 2012):

- Black: a person having origins in any of the black racial groups of Africa
- Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race
- Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent
- American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition; or
- Native Hawaiian and Other Pacific Islander: people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands

CEQ guidance states that:

> Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50%, or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis… The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population. (CEQ 1997)

In USDOT Order 5610.2(a), the USDOT defined low-income as "a person whose … household income is at or below the DHHS poverty guidelines." (USDOT 2012)

CEQ guidance also states that:

> Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports.(CEQ 1997)

To comply with USDOT and CEQ guidance, both household income data and poverty data were collected to provide a more inclusive analysis of low-income populations and communities.

3.2 DATA COLLECTION

Data and information on demographics and community characteristics provide a baseline for analysis of potential impacts. To identify EJ populations and communities within the project area,

several sources were queried for minority and low-income persons data. Data products from the U.S. Census Bureau were used for demographic information, primarily the *2011 – 2015 American Community Survey* (*ACS*) (US Department of Commerce [DOC] 2016). Data obtained included: race and Latino/Hispanic origin, household income, poverty status (low-income persons), and the number of vehicles available per housing unit. Historic data from the U.S. Census (1990, 2000, and 2010) was also examined to study population growth trends throughout the EMPO TDM area. This larger geographic area was used as a basis of comparison and to provide a complete picture of the area surrounding the US 41 bridges.

Locations of public schools with Title 1 status or with 40 percent or higher percentages of low-income students were also identified. Title I, Part A (Title I) of the Elementary and Secondary Education Act, as amended, provides financial assistance to local educational agencies (LEA) and schools with 40 percent or higher of children from low-income families to help ensure that all children meet state academic standards.

The census analysis used the most recent data available at the census tract and census tract block group (CTBG) level from the U.S. Census Bureau's 2011 – 2015 ACS. A census tract block group is usually a smaller geographic area within a census tract. Within the project area, there are between one and five census tract block groups within individual census tracts. Census tract data was examined for the affected environment of the project area. Census tract block group data was examined for the environmental consequences to provide a more detailed look of potential environmental justice effects.

Persons with low-income are defined as those whose household income is below the DHHS poverty guidelines (USDOT 2012). DHHS guidance regarding low-income data states that "[t]he Census Bureau poverty thresholds are described using the phrase 'the official poverty line defined by the Office of Management and Budget' because … the Census Bureau poverty thresholds [are designated] as the federal government's official statistical definition of poverty" (DHHS 2017b). Therefore, as the official poverty line defined by the Office of Management and Budget as the official federal statistical definition of poverty, the Census Bureau poverty thresholds were used for the EJ analysis to identify low-income populations and communities.

3.3 POPULATION CHARACTERISTICS

The counties within the EMPO TDM area have a wide range of demographic data (**Table 3.3-1**). Minority populations range from 3.57 to 15.43 percent of the population. Low-income populations range from 9.9 to 18.9 percent.

Table 3.3-1. County Demographic Data in 2015

COUNTY	TOTAL POPULATION	MINORITIES (%)	LOW-INCOME PERSONS (%)
Gibson County, IN	33,668	1,950 (5.79)	3,675 (11.20)
Posey County, IN	25,567	912 (3.57)	2,801 (11.09)
Vanderburgh County, IN	181,305	27,979 (15.43)	28,870 (16.56)
Warrick County, IN	60,995	4,083 (6.69)	5,926 (9.92)
Henderson County, KY	46,396	6,024 (12.98)	8,602 (18.95)

Source: U.S. DOC 2016

Minority populations in the counties vary greatly (**Table 3.3-2**). Under the current choices available on the U.S. Census, respondents are asked to choose a race in one question and then are required to choose yes or no as a response to the question regarding Latino or Hispanic heritage. To avoid duplication of any person that chose Latino or Hispanic heritage and a minority, the numbers in the race columns include any person of that race that did not choose Latino or Hispanic heritage. The numbers in the Latino column include any person that chose Latino, regardless of their race. The percentages in **Table 3.3-2** are the percent of an individual category of the total minorities. Several of the counties, census tracts, and census tract block groups have very low numbers of a particular data point. In order to follow U.S. Census Bureau privacy guidance, these numbers are not provided in any of the census tables if they are less than fifty persons.

Table 3.3-2. Minorities in 2015

COUNTY	BLACK (%)	NATIVE AMERICAN/ ALASKAN[1] (%)	ASIAN (%)	NATIVE HAWAIIAN/ PACIFIC ISLANDER[1] (%)	SOME OTHER RACE/ TWO OR MORE RACES (%)	LATINO (%)
Gibson County, IN	553 (28.4)	*	84 (4.31)	*	774 (39.7)	504 (25.9)
Posey County, IN	339 (37.2)	*	109 (11.9)	*	200 (21.9)	264 (28.9)
Vanderburgh County, IN	16,391 (58.6)	351 (1.25)	1,940 (6.93)	155 (0.55)	4,727 (16.9)	4,415 (15.8)
Warrick County, IN	943 (23.1)	118 (2.89)	1,267 (31.0)	*	690 (16.9)	1,049 (25.7)
Henderson County, KY	3,304 (54.9)	59 (0.98)	174 (2.89)	*	1,473 (24.5)	1,014 (16.8)

Source: DOC 2016

Note: 1. Totals less than 50 persons are not shown due to U.S. Census Bureau privacy guidance

The project area includes parts of 10 census tracts (four in Vanderburgh County and six in Henderson County (**Figure 3.3-1**). One of these tracts contains no population data due to its location n within the northern floodplain of the Ohio River (Tract 80100 in Vanderburgh County) and is not included in the data tables.

Census tracts can have data that vary widely from other tracts based on their unique geographies.

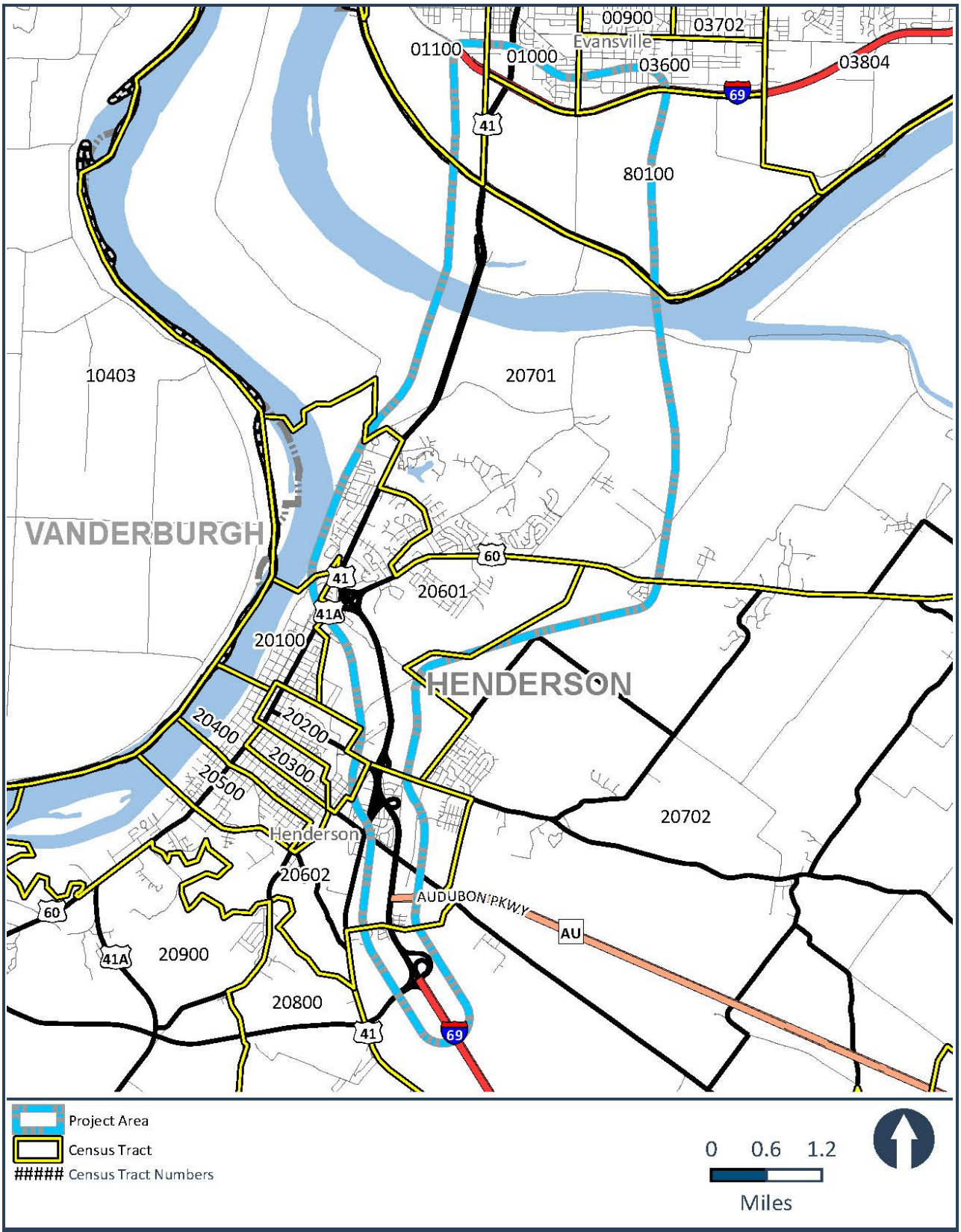

Figure 3.3-1. US Census Tracts in the Project Area

High populations in group quarters such as college dormitories, retirement communities, and correctional facilities can affect data. For example, Census Tract 206.02 in Henderson County contains an assisted living facility as well as the Henderson County Detention Center. The presence of these facilities affects the tract data. Some of the census tract boundaries are also along existing roadways (i.e., sides of the same street are in separate census tracts); therefore, they may not give the most accurate picture of a community.

Within the project area, the minority percentage of the population in the Vanderburgh County census tracts is above 20 percent with a high percentage of over 50 percent in Tract 01100 (**Table 3.3-1).** In the Henderson County census tracts, the minority percentage ranges from a low of 4.66 percent to a high of 24.06 percent.

In the Vanderburgh County census tracts, the low-income percentage of the population ranges from 23.43 to 44.59 percent. In the Henderson County census tracts, the low-income percentage of the population also varies widely, from 8.87 to 34.93 percent.

Table 3.3-3. Census Tract Demographic Data in 2015

CENSUS TRACT	TOTAL POPULATION	MINORITIES (%)	LOW-INCOME PERSONS (%)
Census Tract 01000, Vanderburgh County	4,191	1,505 (35.91)	1,254 (30.33)
Census Tract 01100, Vanderburgh County	2,532	1,432 (56.56)	1,129 (44.59)
Census Tract 03600, Vanderburgh County	4,397	1,113 (25.31)	1,030 (23.43)
Census Tract 20100, Henderson County	1,646	396 (24.06)	575 (34.93)
Census Tract 20200, Henderson County	1,591	285 (17.91)	548 (34.44)
Census Tract 20601, Henderson County	6,753	692 (10.25)	829 (12.85)
Census Tract 20602, Henderson County	5,482	1,185 (21.62)	1,296 (27.07)
Census Tract 20701, Henderson County	4,975	232 (4.66)	767 (15.42)
Census Tract 20702, Henderson County	6,913	402 (5.82)	613 (8.87)

Source: DOC 2016

In most of the project area census tracts, the predominant minority is Black/African-American (**Table 3.3-4**). In several tracts, Some Other Race or Two or More Races are the most numerous minority.

Table 3.3-4. Census Tract Race and Ethnicity Data in 2015

CENSUS TRACT	BLACK[1](%)	NATIVE AMERICAN/ ALASKAN[1]	ASIAN[1](%)	NATIVE HAWAIIAN/ PACIFIC ISLANDER[1]	SOME OTHER RACE/ TWO OR MORE RACES[1](%)	LATINO[1](%)
Census Tract 01000, Vanderburgh County	1,064 (70.70)	*	*	*	217 (14.42)	224 (14.88)
Census Tract 01100, Vanderburgh County	1,163 (81.22)	*	*	*	106 (7.40)	163 (11.38)
Census Tract 03600, Vanderburgh County	748 (67.21)	*	*	*	66 (5.93)	299 (26.86)
Census Tract 20100, Henderson County	250 (63.13)	*	*	*	130 (32.83)	*
Census Tract 20200, Henderson County	200 (70.18)	*	*	*	*	68 (23.86)
Census Tract 20601, Henderson County	179 (25.87)	*	84 (12.14)	*	147 (21.24)	259 (37.43)
Census Tract 20602, Henderson County	749 (63.21)	*	*	*	342 (28.86)	85 (7.17)
Census Tract 20701, Henderson County	*	*	*	*	176 (75.86)	*
Census Tract 20702, Henderson County	167 (41.54)	*	*	*	155 (38.56)	*

Source: DOC 2016

Note: 1. Totals less than 50 persons are not shown due to U.S. Census Bureau privacy guidance

The percent of the population in poverty varies widely in the project area. Two additional demographic factors are detailed in **Table 3.3-5**, households with no vehicles available, and Title 1 status of elementary schools either within an individual census tract or whose attendance zones are within an individual census tract. These demographic factors were used in addition to poverty data to get a better picture of, and confirm the location of, low-income populations and communities. In the case of households with no vehicle available, the data generally follows the poverty data.

As stated previously, schools with 40 percent or more of students eligible for free or reduced-price meals can apply for federal funding for school programs. Elementary schools have the

smallest attendance zones and a tighter geographic area of analysis; therefore, these are the schools that appear in **Table 3.3-5**. In the case of Title 1 data, the census tracts in Vanderburgh County either contain a Title 1 elementary school or are within the attendance zone of a Title 1 elementary school. All of the elementary schools in Henderson County are Title 1 schools. The data for all counties indicate that there are low-income persons throughout the project area.

Table 3.3-5. Census Tract Income and Title 1 School Data in 2015

CENSUS TRACT	LOW-INCOME PERSONS (%)	HOUSEHOLDS WITH NO VEHICLES AVAILABLE (%)	TITLE 1 ELEMENTARY SCHOOL
Census Tract 01000, Vanderburgh County	1,254 (30.33)	210 (12.89)	Yes
Census Tract 01100, Vanderburgh County	1,129 (44.59)	246 (22.69)	Yes
Census Tract 03600, Vanderburgh County	1,030 (23.43)	119 (6.56)	Yes
Census Tract 20100, Henderson County	575 (34.93)	159 (20.05)	Yes
Census Tract 20200, Henderson County	548 (34.44)	116 (19.05)	Yes
Census Tract 20601, Henderson County	829 (12.85)	395 (13.09)	Yes
Census Tract 20602, Henderson County	1,296 (27.07)	249 (12.47)	Yes
Census Tract 20701, Henderson County	767 (15.42)	157 (7.41)	Yes
Census Tract 20702, Henderson County	613 (8.87)	*	Yes

Sources: DOC 2016, US Department of Education (DOE), 2017

Note: *Household totals that would include less than 50 persons are not shown due to U.S. Census Bureau privacy guidance

3.4 COMMUNITY OF COMPARISON IDENTIFICATION

U.S. Census data were examined to determine what geographic area should be established as a COC. A COC needs to represent a larger community that can be used for comparison to the Affected Communities (AC) within a project. With the I-69 ORX project, there are two distinct geographic areas that are affected by the project: the immediate project area that would experience the direct effects of construction of the project and, because it is a river crossing with alternatives that include tolling, the larger geographic area with populations that use the existing US 41 bridges to cross the Ohio River.

Five different COCs were examined to best identify an appropriate geographic area for the EJ analysis. Two COCs were examined to determine the potential direct effects of the project:

- Project Area
- Project Area expanded to include the Evansville Promise Zone (EPZ).

The EPZ is an area of the City of Evansville that abuts and overlaps part of the project area. The EPZ was identified through the public involvement process, specifically the EJ Subcommittee of the River Cities Advisory Committee (RCAC), as a community to be considered during the EJ analysis. The EPZ was designated by the U.S. Department of Housing and Urban Development to revitalize the community through a partnership with federal agencies (http://evansvillepromise.org) (Evansville Promise 2017). The Promise Zone program lasts for 10

years and is an opportunity for the city to receive federal grants for neighborhood revitalization. The lead local organizations in the EPZ partnership include the City of Evansville and the Echo Housing Corporation, a non-profit organization that provides housing and other services in Vanderburgh and Warrick counties.

Three COCs were examined to determine the potential effects of tolling:

- EMPO Service Area
- EMPO TDM Area (to include a larger geographic network of users of the existing US 41 corridor, potential users of a new Ohio River bridge crossing, and/or combinations of existing and proposed users)
- Additional counties outside of the EMPO TDM Area (Daviess, Union, and Webster) identified through the public involvement process as having the potential for effects)

U.S. Census data were examined at the CTBG level for each of the five COCs described above. The CTBGs are the geographic area used for the Affected Communities (ACs) for the analysis.

3.4.1 Direct Effects Community of Comparison

Data for each COC for direct effects are detailed in the following sections.

Project Area Community of Comparison

There are 19 CTBGs within the project area (**Figure 3.4-1**). Several of the census tracts are not broken down into separate block groups by the US Census, but are a single block group. The total population within the project area CTBGs is 26,747 persons. Results of the analysis for this COC are below and summarized in **Appendix A, Table A-1**:

- One CTBG, 10002, has over 50 percent minorities.
- The percent of minorities in the project area CTBGs is 14.50 percent. For the AC comparison, 25 percent greater than this percentage would be 18.12 percent minorities. CTBGs (or ACs) that meet this threshold are highlighted in yellow in **Appendix A, Table A-1**. Five CTBGs have 18.12 percent or greater minorities, as highlighted in yellow **Appendix A, Table A-1**.
- There are 5,189 persons with low-income/below the poverty level in the project area, or 19.63 percent of persons. For the AC comparison, 25 percent greater than this percentage would be 24.54 percent persons with low-income. Seven CTBGs meet the low-income threshold, as highlighted in yellow **Appendix A, Table A-1**.
- Five of the CTBGs are identified as both minority and low-income ACs. Because of this overlap, there are eight total ACs within the project area.

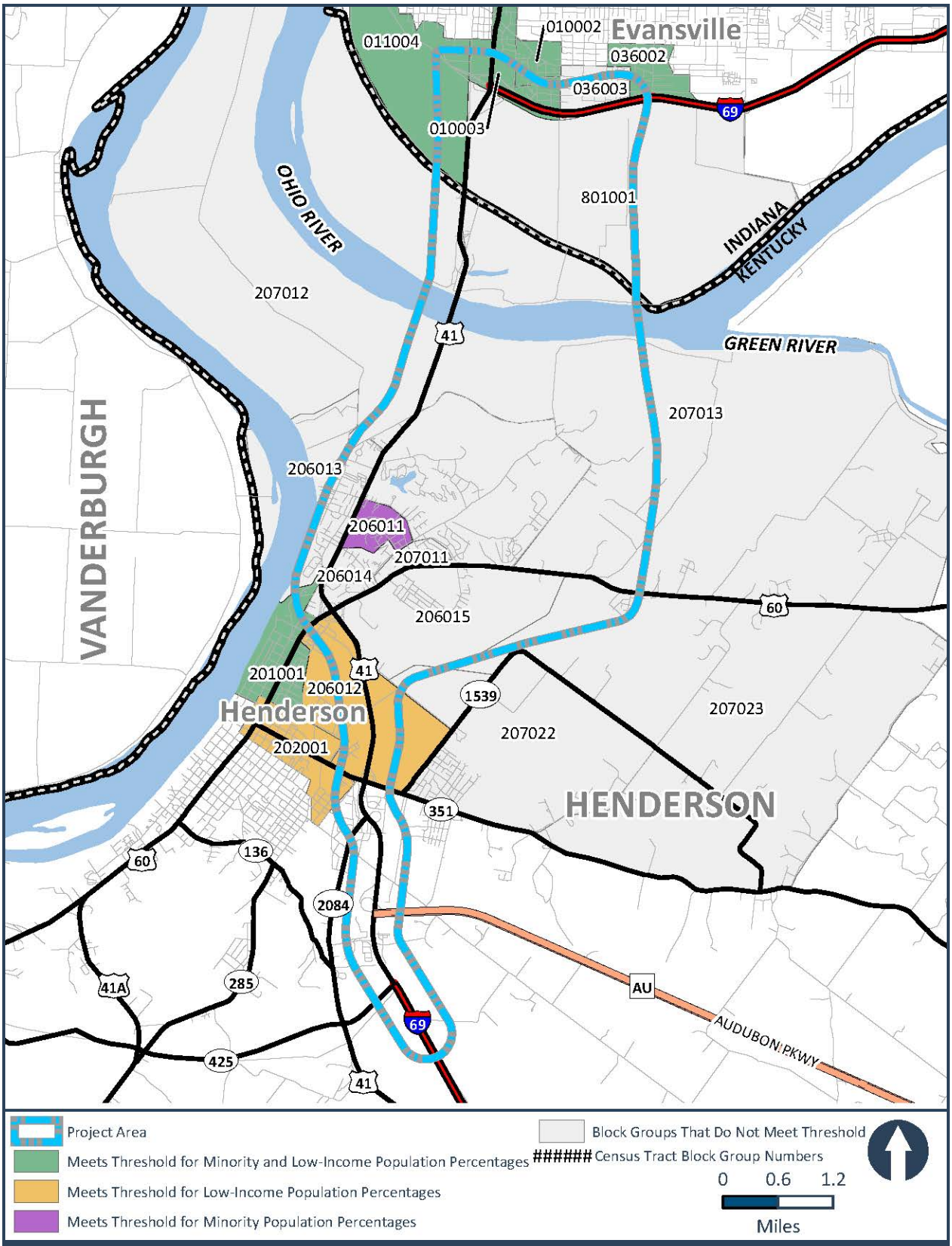

Figure 3.4-1. Affected Communities that Meet Environmental Justice Threshold in the Project Area Community of Comparison

PROJECT AREA/EVANSVILLE PROMISE ZONE COMMUNITY OF COMPARISON

As stated previously, the EPZ was identified through the public involvement process as a community to be considered during the EJ analysis. Including the EPZ in the EJ impact analysis adds an additional 21 CTBGs to the project area, making a total of 40 CTBGs. Census Tract 01000 in Evansville is within both the project area and the EPZ. As before, several of the census tracts are not broken into separate block groups by the U.S. Census. The total population in the combined project area and the EPZ is 45,755. Results of the analysis for this COC are below and summarized in **Appendix A, Table A-2**:

- Five CTBGs have over 50 percent minorities.
- The percent of minorities in this area is 23.64 percent. For the AC comparison, 25 percent greater than this would be 29.55 percent. Ten CTBGs meet this threshold, as highlighted in yellow in **Appendix A, Table A-2**.
- There are 11,629 persons with low-income in the project area, or 26.09 percent. For the AC comparison, 25 percent greater than this would be 32.61 percent. Sixteen CTBGs meet this threshold, as highlighted in yellow in **Appendix A, Table A-2**.
- There is an overlap of both minority and low-income ACs, as in the Project Area COC. Because of this overlap, there are 21 total ACs within the project area/EPZ COC.

DIRECT EFFECTS COC ANALYSIS SUMMARY

In both the Project Area and Combined Project Area/EPZ COCs, approximately one-third of the CTBGs were identified as meeting the threshold for minority populations, and are therefore ACs. In both, less than half of the CTBGs were identified as meeting the threshold for persons with low-income, and are therefore ACs. The proportion of CTBGs with low-income is higher in the Project Area/EPZ COC than in the Project Area COC.

The EPZ is not expected to experience any direct effects due to construction of the proposed project. In addition, U.S. Census commuting data for the EPZ shows only one census tract with a percentage of out-of-state commuters (i.e., those commuters using the existing US 41 bridges) at greater than five percent. Therefore, the COC to assess direct effects of the project should be based on the Project Area. Nevertheless, because the EPZ was specifically identified as having the potential for EJ populations through the public involvement process, the EPZ was analyzed closely in the tolling effects COC, as discussed in **Section 4.3**below.

3.4.2 TOLLING EFFECTS COMMUNITY OF COMPARISON

Potential tolling effects on EJ populations are primarily focused on low-income populations. It could appear that use of a toll facility by higher-income users may be more prevalent than by lower-income users. Therefore, expending federal tax dollars on a facility that appears to benefit one group over another could be perceived to be inequitable. In addition, tolling all users at the same rate could appear to be a regressive tax that would take a larger percentage of disposal income from a low-income user than from a higher-income user.

The US 41 bridges connecting Evansville to Henderson currently provide the sole Ohio River crossing in the region. The nearest crossing to the east is approximately 35 miles away, in Owensboro, KY while the nearest crossing to the west is approximately 70 miles away in Old Shawneetown, IL. Therefore, the population that uses the existing US 41 bridges is spread throughout a large area in both Indiana and Kentucky.

To fully assess the effects of tolling on potential users of I-69, taking into account the presence or absence of the US 41 bridges, three geographically larger COCs were evaluated for use in the assessment of effects of tolling.

EVANSVILLE METROPOLITAN PLANNING ORGANIZATION SERVICE AREA COMMUNITY OF COMPARISON

The EMPO's service area includes Vanderburgh and Warrick counties in Indiana, and Henderson County in Kentucky; as such, the service area was evaluated as a potential COC for the tolling effects analysis. The three counties within the EMPO Service Area COC contain 71 census tracts, which contains 234 CTBGs. To provide consistency between the direct effects and tolling effects COCs, CTBGs are also used in the EMPO COC analysis. The total population in 2015 was 288,696. Results of the analysis for this COC are below and summarized in **Appendix A, Table A-3**:

- There are ten CTBGs that have 50 percent or greater minorities.
- The percent of minorities was 13.19 percent for the COC. For the AC comparison, 25 percent greater than this would be 16.49 percent. Sixty CTBGs meet this threshold, as highlighted in yellow in **Appendix A, Table A-3**.
- There are 43,398 persons with low-income in the COC, or 15.53 percent. For the AC comparison, 25 percent greater than this would be 19.41 percent. There are 81 CTBGs that meet this threshold, as highlighted in yellow in **Appendix A, Table A-3**.
- There is an overlap of both minority and low-income ACs, as in the other COCs. Because of this overlap, there are 103 total ACs within the EMPO service area COC.

EMPO TRAVEL DEMAND MODEL AREA COMMUNITY OF COMPARISON

The EMPO TDM Area includes Vanderburgh, Gibson, Posey, and Warrick counties in Indiana and Henderson County in Kentucky. The five-county area was included in the traffic model used for this project. This larger geographic area better captures the existing users of the US 41 corridor, as well as potential users of any new crossing of the Ohio River.

The five counties within the EMPO TDM Area contain 85 census tracts, within which are 287 CTBGs. To provide consistency between the direct and tolling effects COCs, CTBGs were also used in the EMPO TDM COC analysis. The total population of this area in 2015 was 347,931 persons. Results of the analysis for this COC are below and summarized in **Appendix A, Table A-4**:

- There are ten CTBGs that have 50 percent or greater minorities.
- Minorities comprise 11.77 percent. For the AC comparison, 25 percent greater than this would be 14.71 percent. There are 76 CTBGs that meet this threshold, as highlighted in yellow in **Appendix A, Table A-4**.

- There are 49,874 persons with low-income in the project area, or 14.78 percent of persons. For the AC comparison, 25 percent greater than this would be 18.47 percent There are 92 CTBGs that meet this threshold, as highlighted in yellow in **Appendix A, Table A-4**.
- There is an overlap of both minority and low-income ACs, as in the other COCs. Because of this overlap, there are 118 total ACs within the EMPO TDM COC.

DAVIESS/UNION/WEBSTER COUNTIES AND EMPO TDM AREA COMMUNITY OF COMPARISON

U.S. Census data for three additional counties in Kentucky, Daviess, Union, and Webster, were also examined to determine the geographic extent of existing users of the US 41 bridges. These counties were identified through the public involvement process, specifically, the EJ Subcommittee of the RCAC.

Daviess County is to the east of the EMPO and includes the City of Owensboro, which has an existing crossing of the Ohio River. Union County is to the west of the EMPO, along the Indiana and Illinois border, and also has an existing crossing of the Ohio River into Illinois. Webster County is just south of Henderson County and contains the towns of Sebree and Providence.

Commuting data from the U.S. Census was analyzed to establish if persons in these counties were traveling outside of their county or state for employment. All three counties had six percent or less of persons traveling out-of-state for employment (US DOC 2016). The only census tracts where high proportions of persons traveling out-of-state for employment were in downtown and eastern Owensboro, where there is an existing crossing of the Ohio River, and on the western side of Union County near the existing bridge to Illinois. Residents of these three counties could be making discretionary trips across the existing US 41 bridges. The TDM analysis performed for the project confirmed that trips from outside the model area, including these counties, are primarily through-trips rather than commuting trips (INDOT and KYTC 2018c).

TOLLING EFFECTS COC ANALYSIS SUMMARY

In both the EMPO and EMPO TDM COCs, just under 30 percent of the CTBGs were identified as meeting the threshold for minority populations, and are therefore ACs. In both COCs, just over 30 percent of the CTBGs were identified as meeting the threshold for persons with low-income, and are therefore ACs. Due to the travel distance to Vanderburgh County and other trip destinations already within the Kentucky counties in Kentucky, the inclusion of Daviess, Union, and Webster counties into a COC is not warranted. Because the EMPO TDM Area is being used for the traffic analysis for this project, the travel-shed of the project is large due to its nature as a river crossing, and the proportion of CTBGs with minority and low-income populations meeting the thresholds is similar between the EMPO and EMPO TDM Area, the COC for tolling effects of the project is based on the EMPO TDM Area (**Figure 3.4-2**).

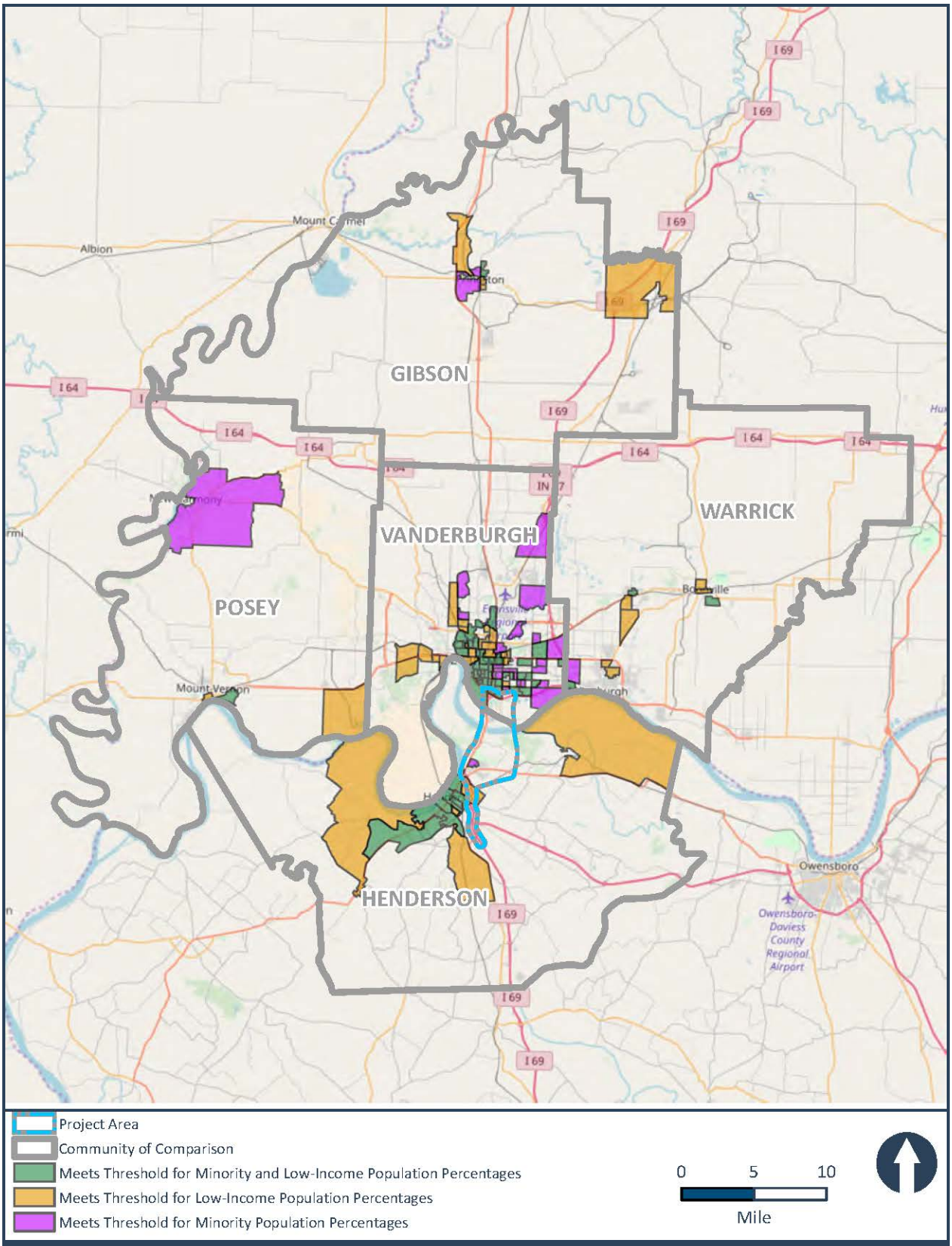

Figure 3.4-2. Affected Communities that Meet Environmental Justice Threshold in the EMPO Travel Demand Model Area Community of Comparison

CHAPTER 4 – ENVIRONMENTAL CONSEQUENCES

Data and information from the U.S. Census Bureau and other sources, such as free and reduced school lunch programs and the public involvement process, have been used to identify potential EJ populations and communities. The number of relocations, changes in community cohesion, relocations of community facilities, changes of access to these facilities, changes in response times for emergency services, noise and vibration effects, and the effects of tolling are all examined to assess effects to these populations. The trigger for an EJ effect is defined as "disproportionately high and adverse human health or environmental effects" (EO 12898). These effects were examined in CTBGs that have the potential for EJ populations or communities. They were then compared to effects in those CTBGs that do not meet the thresholds for EJ populations.

The identification of EJ populations and communities is based on whether the minority or low-income population percentage of a census defined area is greater than the minority or low-income population percentage of a broader geographic area. Individual block groups were identified where a minority population percentage "exceeds 50%" or is "meaningfully greater" than "the minority population percentage in the general population or other appropriate unit of geographic guidance" (CEQ 1997). INDOT guidance from 2012 states that:

> potential EJ impacts are detected by locating minority populations and low-income populations in and near the project area, calculating their percentage in the area relative to a reference population, and determining whether there will be adverse impacts to them. The reference community is typically a county, city, or town and is called the community of comparison (COC). The community that overlaps the project limits is called the affected community (AC). The AC needs to be contained within the COC. (INDOT 2012)

INDOT's guidance further states that the AC has a:

> population of concern for environmental justice if the population is more than 50 percent minority or low-income or if the percentage of low-income population or minority population in the AC is 25 percent higher than the percentage of low-income or minority population in the COC. (INDOT 2012)

For example, if Vanderburgh County was chosen as a COC, the percentage of minorities in a particular CTBG (the AC) would be identified as having the potential for an EJ population if its percentage of minorities was 25 percent higher than the county. KYTC guidance from 2014 notes that minority and low-income population percentages should be considered when deciding what alternatives to carry forward (KYTC 2014b).

The USDOT definition of disproportionately high and adverse effect on minority and low-income populations is an adverse effect that:

> is predominately borne by a minority population and/or a low-income population, or will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population. (USDOT 2012)

A series of six Community Conversation were held in the study area, in block groups identified as having the potential for EJ populations, in order to provide additional information on the project to these groups, as well as to hear residents' and business owners' feedback and questions about the project. Three were held in Henderson and three were held in Evansville and were promoted extensively to increase participation. Input received at these meetings has been incorporated throughout this chapter as it relates to specific effects that were concerns of the communities. Additional detail on public outreach for the project appears in the DEIS.

4.1 DIRECT EFFECTS

This direct effects analysis represents a preliminary examination of the potential relocations associated with the I-69 ORX build alternatives; therefore, direct contact with individual residents and landowners did not occur. Business owners were contacted through a Business Information Survey (BIS). A full discussion of this subject is provided in the *Socioeconomic Technical Report* (INDOT and KYTC 2018b). The BIS was conducted to gain insight into nearby businesses and how the alternatives could affect their operations. The BIS gathered information such as the business location, type, operating times, service area, employment area, client characteristics, specialized site requirements, customer and delivery traffic, access, and future plans. The BIS also gathered feedback on the alternatives, including potential impacts to business operations both during and after construction. The effects addressed by the BIS included physical impacts, such as the need to relocate, and other impacts such as altered traffic patterns and the effects of tolling. U.S. Census information and preliminary relocation data were supplemented with information from public involvement activities for this project, from federal education statistical information, and from regional and local agency planning information on communities.

4.1.1 RELOCATIONS

The No Build Alternative would require no right-of-way acquisition and, therefore, would not result in any residential or business relocations.

Each of the build alternatives has the potential to impact communities and populations in the project area through residential relocations (**Table 4.1-1**). However, there are no residential relocations in ACs, as shown in **Table 4.1-1**.

It should be noted that Race Track Road is the dividing line between two CTBGs (CTBG 206013 and CTBG 207012) and is also the center street of the Shady Tree Mobile Home Park. This division of the community separates the census data of the community between two different census tract block groups and may not best represent the mobile home park. This community would experience relocations of half of the community under West Alternatives 1 and 2 (**Figure 4.1-1**). There is the potential for low-income persons in this community because Bend Gate Elementary

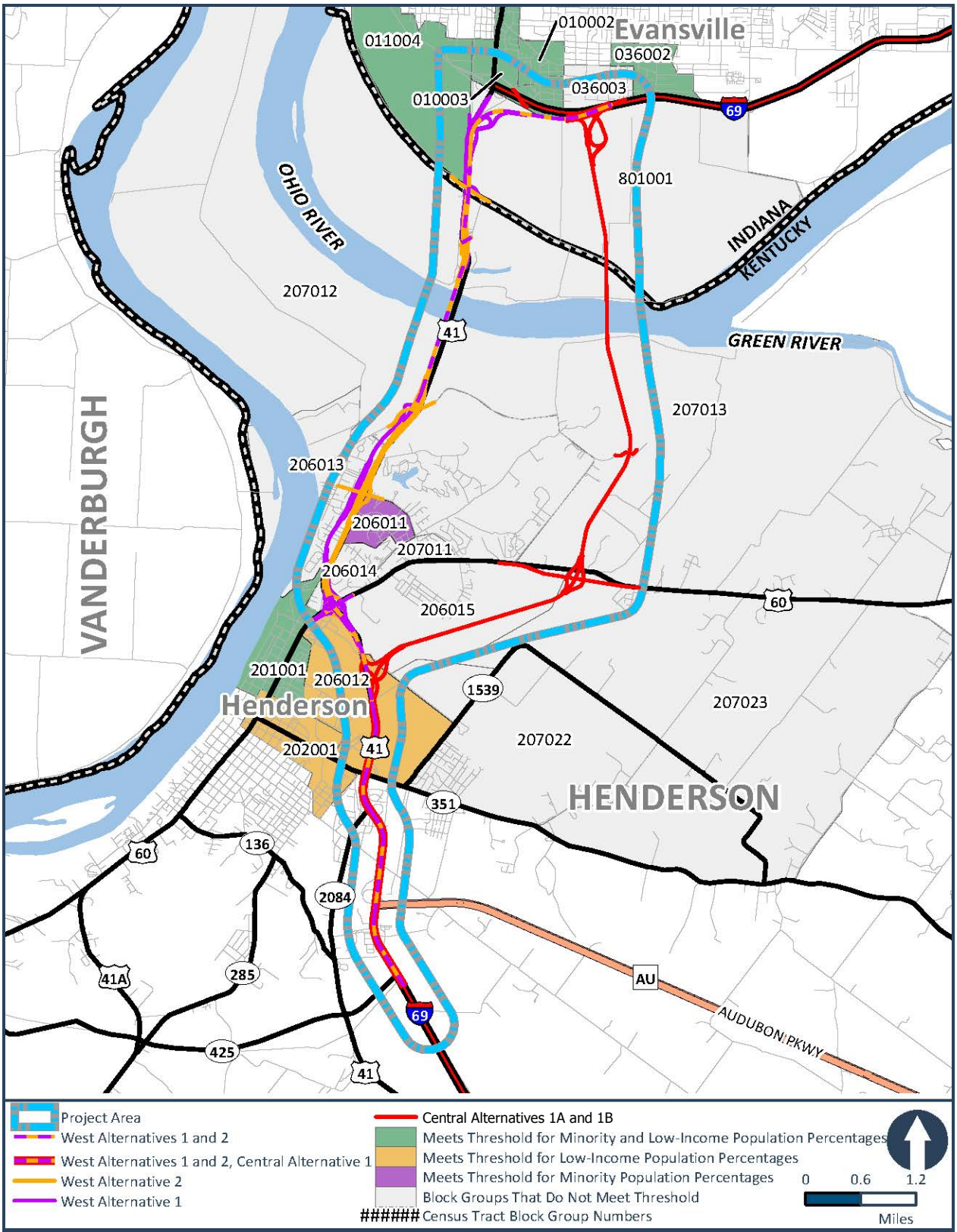

Figure 4.1-1. Affected Communities within the Alternatives

School has an attendance zone that covers the mobile home park and is a Title 1 school based on the high percentage of students that receive free and reduced-price lunches. Therefore, there are low-income populations in the attendance zone of the school, but this area is spread out among multiple CTBGs.

Table 4.1-1. Residential Relocations within the Project Area

COUNTY/CTBG	AFFECTED COMMUNITIES	NUMBER OF RELOCATIONS BY ALTERNATIVE		
		WEST ALT. 1	WEST ALT. 2	CENTRAL ALT. 1A AND 1B
BY COUNTY				
Vanderburgh County	N/A	0	0	0
Henderson County	N/A	242	96	4
BY CENSUS TRACT BLOCK GROUP[2]				
CTBG 206013 Henderson County	No	191	52	0
CTBG 206014 Henderson County	No	36	35	0
CTBG 206015 Henderson County	No	0	0	2
CTBG 207012 Henderson County	No	15	9	0
CTBG 207013 Henderson County	No	0	0	2
Project Area CTBGs	N/A	242	96	4

Source: DOC 2016. US DOE, 2017

Note: 1. Totals less than 50 persons are not shown due to U.S. Census Bureau privacy guidance. CTBG = Census Tract Block Group 2 Census Tract Block Groups with no relocation impacts are not included in the table.

Commercial relocations would occur under the West Alternatives. Through input received in the BIS, several of these relocations have EJ implications.

The Audubon Chrysler dealership, located at 2945 US Highway 41 North in Henderson, noted in its survey response that it is the area's primary provider for low-income and minority customers and for in-house auto-financing. The dealership reports that its customer base is primarily minority individuals and low-income households. This dealership would be relocated under West Alternative 2. A full discussion of the BIS is provided in the *Socioeconomic Technical Report* (INDOT and KYTC 2018b). There are used car dealerships along US 41 and south of the US 41/US 60 interchange that are not being relocated.

Several businesses at 2000 North Elm Street in Henderson would be relocated under West Alternative 1. One of these includes the Social Security Administration offices in Henderson. In the BIS response, it was noted that the office serves disadvantaged groups, including low-income and minority households.

Relocations are discussed in more detail in the DEIS. The acquisition of right-of-way and the relocation of displaced persons and businesses would be conducted in accordance with the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*, as amended. INDOT and KYTC would assure that relocation resources would be made available to all displaced businesses and non-profit entities without discrimination.

4.1.2 Neighborhoods and Community Cohesion

Community impacts were assessed based on changes in community cohesion, particularly relocations. A detailed analysis of community cohesion effects is provided in the DEIS.

The No Build Alternative is not expected to affect neighborhoods and community cohesion.

Direct effects to community cohesion in Evansville and Vanderburgh County would not be expected under any of the build alternatives.

Under West Alternatives 1 and 2, communities in Henderson, to the west of the alternatives between Wolf Hills Road and Watson Lane, could experience isolation and a loss of overall cohesion within the surrounding community. South of Barker Road, West Alternative 1 would split a residential area. Two mobile home parks and two apartment complexes would also be affected by relocations under both the West Alternatives. The CTBGs in these areas do not exceed the low-income or minority thresholds for EJ populations.

Central Alternatives 1A and 1B would not have any direct effects to neighborhoods or community cohesion in any ACs.

The build alternatives have minimal effects on access for emergency service response and school bus routes (INDOT and KYTC 2018b).

4.1.3 Community Facilities

The No Build Alternative is not expected to affect community facilities.

The West Alternatives would relocate one church, The Father's House, which is not in an Affected Community. There are no community facility relocations with Central Alternatives 1A and 1B.

4.1.4 Access to the Transportation Network

Effects from changes to the transportation network were assessed based on physical changes to the roadway network due to construction of the proposed project. This is discussed in greater detail in **Section 4.2.2** of the DEIS.

The No Build Alternative would not affect existing access to the transportation network.

Access by EJ communities to the transportation network within Evansville is not adversely affected by any of the build alternatives.

Both West Alternatives 1 and 2 would alter the access to and from the western side of Henderson, particularly between Walnut and Watson Lanes. Access to the eastern side of the project area and US 41 from Sunset Lane, Mark Drive, Elmwood Drive, Palmer Circle, and Marlou Court, would

be limited to new crossings of the build alternative, instead of via the existing access from Walnut Lane and Race Track Road. The CTBGs in this area were not identified as having EJ populations.

Central Alternatives 1A and 1B would not result in adverse effects on EJ community access to or from the existing transportation network.

4.1.5 NOISE

The No Build and build alternatives were analyzed to determine any disproportionate and adverse noise and vibration effects to EJ populations. A full discussion of noise impacts is provided in the *Traffic Noise Impact Analysis Report* (INDOT and KYTC 2018d). Five toll scenarios were evaluated as a part of the analysis of potential noise impacts:

- West Alternative 1: One US 41 bridge remains; toll rates of $2 per crossing for cars on I-69 and US 41
- West Alternative 1: One US 41 bridge remains and is not tolled; toll rates of $2 per crossing for cars on I-69
- West Alternative 2: US 41 bridges removed; toll rates of $2 per crossing for cars on I-69
- Central Alternative 1A: One US 41 bridge remains; toll rates of $2 per crossing for cars on I-69 and US 41
- Central Alternative 1B: One US 41 bridge remains and is not tolled; toll rates of $2 per crossing for cars on I-69

Noise impacts are determined by comparing future project sound levels: (1) to a set of Noise Abatement Criteria (NAC) for a particular land use category, and (2) to existing sound levels. FHWA noise standards, as well as INDOT and KYTC noise policies, state that traffic noise impacts require consideration of abatement when worst–hour sound levels approach (within 1 dB[A] L_{eq}) or exceed the NAC. Noise impacts were identified and noise abatement were considered if design year sound levels in certain land uses are 66 dB(A) or higher. FHWA, INDOT, and KYTC noise standards also define impacts to occur if there is a substantial increase in design year sound levels compared to existing sound levels. INDOT's criteria defines a substantial noise increase as an increase of 15 dB(A) or more over the existing noise level. KYTC's criteria uses 10 dB(A) or more over the existing noise level as its criteria for substantial noise increase. These noise impacts were all considered in the EJ analysis. Noise impacts are not predicted to occur disproportionately in ACs. Under the West Alternatives, between nine and ten percent of impacts occur in ACs under all the toll scenarios (**Table 4.1-2**) and would not be a disproportionate effect on EJ populations. These occur in CTBG 201001 and CTBG 206012. Under Central Alternatives 1A and 1B, one percent of impacts would occur in ACs; this would not be a disproportionate effect on EJ populations.

Table 4.1-2. Affected Noise Receptors and Census Tract Block Groups

COUNTY/CTBG	AFFECTED COMMUNITY	NUMBER OF NOISE RECEPTORS IMPACTED BY ALTERNATIVES				
		WEST ALT. 1		WEST ALT. 2	CENTRAL ALT. 1A AND 1B	
		WITH US 41 BRIDGE TOLL	WITHOUT US 41 BRIDGE TOLL		1A - WITH US 41 BRIDGE TOLL	1B - WITHOUT US 41 BRIDGE TOLL
BY COUNTY						
Vanderburgh County	N/A	0	0	0	104	0
Henderson County	N/A	167	180	140	153	149
BY CENSUS TRACT BLOCK GROUP						
CTBG 10003	Yes	0	0	0	4	0
CTBG 36003	No	0	0	0	100	0
CTBG 201001	Yes	0	1	1	0	0
CTBG 206012	Yes	17	17	12	0	0
CTBG 206013	No	52	54	37	0	0
CTBG 206014	No	19	29	10	0	0
CTBG 206015	No	0	0	0	24	21
CTBG 206021	No	79	79	79	79	79
CTBG 207012	No	0	0	1	3	3
CTBG 207013	No	0	0	0	47	46
Totals	N/A	167	180	140	257	149

Source: DOC 2016

Notes: Census Tract Block Groups with no noise impacts are not included in the table. CTBG = Census Tract Block Group

4.2 TOLLING EFFECTS

Alternative financing, including tolling, has become an integral part of the revenue stream for infrastructure projects. In other locations around the country, tolling has been viewed as potentially inequitable since higher-income persons could be more prevalent users than lower-income persons. The effects of tolling must be assessed to comply with EO 12898 regarding EJ. Adverse effects as well as offsetting benefits and mitigation measures are considered part of the EJ analysis.

To help evaluate the equity issues associated with tolling and usage of I-69 and US 41, an analysis was conducted using the EMPO TDM to determine whether low-income populations living within the EMPO TDM area counties could be expected to use any tolled facility less frequently than higher-income populations. Census data was disaggregated into the geographic areas comprising the Traffic Analysis Zones (TAZs) within the EMPO TDM. EJ TAZs and the trips that

originate within these TAZs were identified based on the thresholds detailed in **Section 3.4.2**. The updated EMPO TDM was used to estimate the percentage of trips crossing the Ohio River based on EJ categories, as follows:

- No Build Alternative – EJ trips
- No Build Alternative – Non-EJ trips
- Build Alternatives – EJ trips
- Build Alternatives – Non-EJ trips

Daily and peak period vehicle miles of travel (VMT) and vehicle hours of travel (VHT) for EJ and non-EJ trips were also compared. Travel diversion and trip trends were investigated to determine if EJ trips would experience disproportionately adverse effects and/or any benefits by comparing EJ trips to non-EJ trips between the different toll scenarios, as well as the No Build scenario. The *Traffic Technical Report* contains the full discussion of the methodology and results of the traffic and travel demand aspects of the EJ analysis (INDOT and KYTC 2018c). The following discussion is a summary of the methodology and results of the analysis.

The toll rate for I-69 is not being proposed at this stage of the environmental process. In order to conduct a conservative analysis of the direct tolling costs, costs at a similar river crossing of the Ohio River in the Louisville area, the Ohio River Bridges, were used for the analysis. The toll rate when the facility opened was $2 for each crossing in passenger vehicles. Five toll scenarios were evaluated as a part of the tolling traffic model:

- West Alternative 1: One US 41 bridge remains; toll rates of $2 per crossing for cars on I-69 and US 41
- West Alternative 1: One US 41 bridge remains and is not tolled; toll rates of $2 per crossing for cars on I-69
- West Alternative 2: US 41 bridges removed; toll rates of $2 per crossing for cars on I-69
- Central Alternative 1A: One US 41 bridge remains; toll rates of $2 per crossing for cars on I-69 and US 41
- Central Alternative 1B: One US 41 bridge remains and is not tolled; toll rates of $2 per crossing for cars on I-69

Each of these scenarios was evaluated for the individual measures listed in this section.

The No Build Alternative will not have any tolling effects and is not discussed further in this section.

4.2.1 Equity of Costs

Tolling all users at the same rate could appear to be a regressive tax that would take a larger percentage of income from a low-income user than from a higher-income user. Two measures of equity between these users were compared in this section: direct tolling costs to users and the costs of diverting to other non-tolled river crossing options.

DIRECT TOLLING COSTS

The decision to incur the costs of the toll rests on a driver's willingness and ability to pay. FHWA wrote a series of primers on tolling and pricing of transportation facilities, and notes in *Income-Based Equity Impacts of Congestion Pricing* (FHWA 2008) that tolling or pricing "places responsibility for travel choices squarely in the hands of the individual traveler, where it can best be decided and managed" (FHWA 2008). Choosing a route of travel is a function of the value of using I-69 relative to a non-tolled US 41. When the value of time savings for a potential user exceeds the toll charge, provided that the user has the ability to pay, that user is benefited by taking the tolled option.

As stated previously, a toll rate of $2 for each crossing in a car would provide a conservative scenario for toll rates. In this case, a daily commuter using a tolled bridge would pay $4 per day over an average 260 work-days in a year, or $1,040 annually. For those persons below the 2015 poverty guideline for a single person family/household of $11,770 (i.e., low-income), that would amount to almost 9 percent of their total income reported to the US Census Bureau (DHHS 2017a). In order to compare low-income users to other users in the EMPO TDM Area, the same calculation was made using the range of 2015 median household income of the counties within the EMPO TDM Area. At the county level, in the EMPO TDM Area, the median household income ranges from $41,036 to $62,185, which results in a direct tolling cost range of 1.7 – 2.5 percent of income. This is less than one-third of the percentage of total income for low-income users.

Under the West Alternative 1 US 41 tolled scenario, West Alternative 2, and the Central Alternative 1A (US 41 bridge tolled), with no available non-toll option, the low-income users would be expected to use I-69 for non-discretionary trips (employment or school). Direct costs to these low-income users, as detailed in the calculations in the previous paragraph, would be three times the percentage of total income for higher income users. The direct costs of the toll would likely be an adverse effect to low-income populations. In addition, this effect would likely be disproportionate because it is three times the proportion of their total income, compared to higher-income users. In the case of discretionary trips, such as shopping or entertainment, the low-income users could choose to remain on their side of the Ohio River or add to the cost of their trip by using I-69. In the case of the latter, direct costs would similarly be three times the percentage of income than higher-income users and would therefore likely be a disproportionate and adverse effect for the low-income users.

Under the West Alternative 1 and US 41 non-tolled scenario and Central Alternative 1B (US 41 non-tolled scenario), it is anticipated that the low-income users would use the free US 41 bridges. Direct costs to these users would not occur.

During the Community Conversations, the impact of tolling on household finances was a prominent theme at the events in Henderson. Residents noted that many people live on a limited income and they could not afford a toll of any amount, even for occasional trips.

COST OF TRAFFIC DIVERSION TO EJ POPULATIONS

As stated previously, the US 41 bridges are the current sole crossing of the Ohio River in the region. The nearest crossing to the east is approximately 31 miles away in Owensboro and the

nearest crossing to the west is approximately 40 miles away. A user that chooses not to use any of the tolled options would likely use the diversion through Owensboro, resulting in a maximum detour of approximately 62 miles. The cost of the diversion would be in the time and fuel spent driving the detour. The 2017 IRS reimbursement rate for business miles is $0.535 per mile (IRS 2017). This would equate to a cost of $33.17. The reimbursement rate for medical or moving purposes is $0.17 per mile, which would equate to a cost of $10.54. Either of these rates would result in a much higher cost to a user than choosing the tolled option of I-69. The addition of the user's time involved in taking a diversion would result in even higher costs. The likelihood of a user truly diverting to one of these other crossings is low, due to the distance and time involved. Users could feel compelled to use one of the tolled options.

4.2.2 Equity in Geographic Effects

Three different aspects of geographic effects were analyzed for equity: 1) locations of the users forecasted to use the crossings; 2) communities affected by traffic diversions; and 3) the location of access points to the new facility.

Locations of Users

The analysis included TAZs within the EMPO TDM Area and focused on trip length to compare EJ and non-EJ trips across the river. The analysis found that the length of EJ-trips was shorter than non-EJ trips. These trips did not lengthen by more than 0.2 miles between the different toll scenarios (**Table 4.2-1**). It is projected that EJ users from low-income areas would access I-69 at rates that are equivalent to those from higher-income areas.

Table 4.2-1. Average Trip Length 2045 AM Peak

BUILD ALTERNATIVE	EJ TRIPS (MILES)			NON-EJ TRIPS (MILES)		
	INTRA-INDIANA	CROSS-RIVER	INTRA-KENTUCKY	INTRA-INDIANA	CROSS-RIVER	INTRA-KENTUCKY
West Alt. 1 with US 41 toll	5.0	14.6	3.9	6.3	17.4	5.4
West Alt. 1 without US 41 Toll	5.1	14.6	3.9	6.4	17.4	5.3
West Alt. 2	5.1	18.4	3.9	6.4	22.9	5.3
Central Alt. 1A (with US 41 toll)	4.6	16.1	3.9	6.3	18.5	5.3
Central Alt. 1B (without US 41 Toll)	4.4	15.9	3.7	6.1	18.4	5.2
No Build Alt.	4.6	13.4	3.9	6.3	15.6	5.3

Source: Traffic Technical Report (INDOT and KYTC, 2018c).

Locations Affected By Diversions

Traffic diversions to avoid a tolled facility were analyzed to determine if they would travel through potential EJ TAZs. Ten corridors in Indiana and Kentucky were included in the analysis. Traffic was assigned to these corridors for both the No Build Alternative and build alternatives. Average Daily Traffic (ADT) was used as the measurement criteria between the alternatives. The

analysis results indicated that there were relatively minor variations between the alternatives. No particular communities are projected to be affected by traffic diversions.

LOCATION OF ACCESS TO I-69

Under both West Alternatives, access in Evansville to the new I-69 would be similar to the existing access to I-69 and US 41. The access to the new facility would be on existing I-69 in Indiana just east of the US 41 interchange. Connections to US 41 to the north and Veterans Memorial Parkway to the west would be provided. The alternative would bridge over Waterworks Road and Nugent Drive while local access to Waterworks Road and Ellis Park would be maintained by US 41. This would not adversely affect low-income or minority populations because it would allow the same access to the new facility as the existing facility.

Under Central Alternatives 1A and 1B, access in Evansville to the new I-69 would be from the existing I-69 and would be of a similar type to the existing crossing on the US 41 bridges. The new I-69 bridge would include four lanes and the sections of the proposed new I-69 beyond the new bridge would also include four lanes. The location of the access to I-69 would not adversely affect low-income or minority populations and would allow the same access to the new facility for all users.

In Henderson, access to I-69 is the same under both West Alternatives. There is access at Wolf Hills Road in one CTBG (CT 207012) that was not identified as an AC. There is access at Watson Lane that is in three CTBGs, one of which (CTBG 206011) has been identified as an AC, for minorities. There is also access at US 60 that is similar to the existing access to US 60 via US 41. In addition, the alternative would modify this interchange to provide connections to and from existing US 41, US 60, and I-69. These alternatives allow for the same access to the new facility for all users.

Under Central Alternatives 1A and 1B, access to I-69 would be in multiple locations via new interchanges. Access to I-69 via US 60 is not in an AC. Access to I-69 at US 41, south of Henderson, occurs in two CTBGs, one of which (CTBG 206012) has been identified as an AC for low-income persons. However, access to the new facility from this AC would occur from the existing interchange at US 41 and US 60. There is access at US 60 that is similar to the existing access to US 60 via US 41. In addition, the alternatives would modify this interchange to provide connections to and from existing US 41, US 60, and I-69. These alternatives would allow for the same access to the new facility for all users.

During the Community Conversations, attendees in Henderson expressed concern that they will be shouldering much more of the burdens, such as right-of-way impacts and tolls, than Evansville residents. Henderson residents felt that they may have to re-evaluate where they work, receive medical treatment, and travel for entertainment.

4.2.3 EQUITY BETWEEN MODES

The equity concerns associated with tolling are usually alleviated by the fact that a tolled facility enhances transit and other commuting choices within the project area or in a geographic area adjacent to the alternatives. In the I-69 ORX project area, this is not the case. The existing transit

systems in the area, Henderson Area Rapid Transit (HART), Metropolitan Evansville Transit System (METS), and Warrick Area Transit System (WATS), do not currently cross the Ohio River using the US 41 bridges. HART, METS, and the EMPO do not offer formal vanpool services for commuters. There are no formal park and ride lot facilities in the area.

The METS *Comprehensive Operations Analysis: Five Year Service Plan* includes a recommendation for a formal park-and-ride lot facility and includes a stand-alone report on an Evansville-Henderson Express Service (METS 2015). A transit transfer center already exists at the Lawndale Shopping Center which is recommended to be the location of a more formal park-and-ride lot. This location, or the downtown transfer terminal, could be designated as the stop/terminus for any express bus service between Evansville and Henderson. The Service Plan recommends the HART stop at 3rd and Water Streets as the other stop/terminus on an Evansville-Henderson express service. A regularly-scheduled service connecting two existing transfer terminals was considered the most feasible alternative. The cost of the service is proposed for $1, with reduced fares for senior citizens, persons with disabilities, and students.

Low-income users of I-69 would not have a formal choice to share the cost of tolls through carpools or to use transit across the river, which are traditionally viable options to avoid paying a toll. Users could attempt to form informal carpools to share the cost of tolls under the tolled scenarios. If a cross-river express service were implemented through a METS-HART partnership, the transit fare would be half of the I-69 toll, based on the proposed cost of the cross-river service (METS 2015). For the tolled scenarios, this would provide better equity between the modes of travel.

4.2.4 Availability of Free River Crossings

Under the three tolled scenarios there would be no free river crossings in the Evansville/Henderson area. As discussed in **Section 4.1.2**, the nearest free crossing would be 35 miles to the east of the area, in Owensboro, KY.

Under West Alternative 1 US 41 non-tolled scenario and Central Alternative 1B (US 41 non-tolled scenario), there would still a free river crossing.

During the Community Conversations, most attendees stated that they would accept a tolled I-69 crossing if one of the US 41 bridges remained free and in service. Residents said it is unfair for Evansville and Henderson residents to be expected to possibly pay tolls for all crossings, when compared to toll-free options available at similar bridges in Louisville, Kentucky. When specifically asked, most people who attended the events agreed that keeping only one US 41 bridge (instead of both bridges) in service is acceptable if it is not tolled. Finally, most attendees in both cities felt that with no toll-free options, West Alternative 2 was not a workable alternative.

4.2.5 Access for Emergency and Social Services

As stated previously, establishing a toll rate for either I-69 or US 41 is not part of the NEPA process. Other aspects of the toll operations, such as free or reduced-price access for regional, county, or local government or social service vehicles, are also not finalized at this time.

4.2.6 Travel Time

In order to assess potential impacts to EJ populations and communities, studies and reports on priced transportation facilities around the US were reviewed, including tolled facilities, managed lanes, and congestion pricing. Since the increasing implementation of pricing strategies on limited-access roadways throughout the United States, there has been new research and analysis on the effects of all forms of pricing on environmental justice populations. The FHWA developed a series of primers on tolling and congestion pricing including the effects on transit, tolling and road pricing, managed lanes, and individual project case studies. The primer *Income-Based Equity Impacts of Congestion Pricing* references independent research and articles on multiple tolled projects throughout the United States. In particular, travel time is a measurable criteria analyzed for priced transportation facilities. In addition to the location of users and trip lengths (**Section 4.2.2**), travel time differences between the alternatives were investigated in the EJ traffic analysis.

Travel Time Differences between Alternatives

The traffic analysis indicates that all trips in the project area would benefit from added capacity, including those on I-69 and US 41. While the average trip times (Table 4.2-2) increase by several minutes compared to the No Build, this is the result of increased trip distances (see Table 4.2-2). The trips generated from EJ TAZs would have slightly lower travel times than trips generated from non-EJ TAZs (**Table 4.2-2**). The highest travel times for both EJ and non-EJ trips would be on West Alternative 2 and the non-tolled US 41 alternatives. The travel time impacts are presented in more detail in the *Traffic Technical Report* (INDOT and KYTC 2018c).

Table 4.2-2. Average Trip Time 2045 AM Peak

BUILD ALTERNATIVE	EJ TRIPS (MINUTES)			NON-EJ TRIPS (MINUTES)		
	INTRA-INDIANA	CROSS RIVER	INTRA-KENTUCKY	INTRA-INDIANA	CROSS RIVER	INTRA-KENTUCKY
West Alt. 1	8.6	23.8	7.1	10.2	27.0	8.4
West Alt. 1 without US 41 Toll	8.8	27.0	7.0	10.4	30.1	8.3
West Alt. 2	8.8	27.2	7.0	10.4	32.4	8.3
Central Alt. 1A	8.8	23.7	7.0	10.4	26.4	8.3
Central Alt. 1B (without US 41 Toll)	8.9	27.6	7.0	10.4	30.3	8.3
No Build Alt.	8.8	22.2	7.0	10.3	24.6	8.3

Source: Traffic Technical Report, (INDOT and KYTC, 2018c).

Reliability of Travel Time

Based on the results of the travel time analysis, the build alternatives would benefit users because they would provide better access and mobility and a reliable travel time. Under the build alternatives that provide both a free and tolled option (i.e., US 41 without tolls and I-69 with tolls), when the value of time savings for a potential user exceeds the toll charge, that user is benefited by taking the tolled option. Some drivers may choose not to pay for access to I-69 or a tolled US 41 every day, but research from other facilities notes that "all income groups value the choice of

a reliable trip travel time that is available to them" (FHWA 2008). The choice to use a tolled facility by a driver instead of a non-tolled facility that could have a less reliable trip time would depend on the availability of adjustments to other personal choices within a particular commute, such as forming a carpool to share the cost of a toll and/or "flexibility of time" (working hours or other commitments, such as child care) (FHWA 2008). The decision to use I-69 or a tolled US 41 is based on the value of the user's time, when the choice must be made between the free or tolled option, because "all income groups value the 'insurance' of a reliable trip time when they absolutely need it" (FHWA 2008).

INDIRECT EFFECTS OF TRAVEL TIME DIFFERENCES

Changes in travel time would not be expected to adversely affect emergency response or access to employment, education, child care, and religious, community, and recreation facilities. As presented in the travel time analysis, the trips generated from EJ TAZs would have slightly lower travel times than trips generated from non-EJ TAZs.

4.2.7 TRANSPONDER ACQUISITION AND USE

Credit cards or bank accounts (cashless technology) have traditionally been the primary sources of funds to set up and use a transponder toll device. However, these forms of payment may not always be used by low-income users. Alternatives to the use of cashless technology for toll collection could be provided to allow for acquisition of transponders. Details of the toll system, including rates and transponder acquisition, are not being proposed at this stage of the environmental process. Transponders for any of the build alternatives could be the same or similar to those used in both Indiana and Kentucky, EZ-Pass. In northern Indiana, the concessionaire sells EZ-Pass transponders both on-line with a credit card or electronic funds transfer, and in person at retail locations with cash. The Louisville area has two EZ-Pass options, one for the local area only and one that is valid throughout the EZ-Pass system. Both options are available for cash or credit purchase and replenishment.

4.3 SUMMARY OF ENVIRONMENTAL JUSTICE EFFECTS

Table 4.3-1 presents a summary of the potential EJ effects for each of the alternatives. The effects are similar for several of the build alternatives. West Alternative 2 and the build alternatives with both a remaining tolled US 41 bridge and a tolled I-69 bridge would have more adverse effects on low-income populations. They do not offer a viable free option to cross the Ohio River and would likely have disproportionate direct user costs.

West Alternative 1 and Central Alternative 1B with a free US 41 bridge crossing would not be expected to cause adverse or disproportionately high effects on low-income or minority populations, in accordance with the provisions of EO 12898 and FHWA Order 6640.23A.

Table 4.3-1. Summary of Environmental Justice Effects

EJ IMPACT ASSESSMENT CRITERIA	BUILD ALTERNATIVE					NO BUILD ALT
	WEST ALT 1		WEST ALT 2	CENTRAL ALT 1A AND 1B		
	WITH US 41 BRIDGE TOLL	WITHOUT US 41 BRIDGE TOLL		1A - WITH US 41 BRIDGE TOLL	1B - WITHOUT US 41 BRIDGE TOLL	
Relocations in ACs	0	0	0	0	0	N/A
Community Effects in ACs	No	No	No	No	No	No
Noise Receptors in ACs	2	3	2	4	0	N/A
Equitable Direct Costs	No	Yes	No	No	Yes	N/A
Users from ACs	Yes	Yes	Yes	Yes	Yes	Yes
Adverse Diversion Effects	No	No	No	No	No	No
Availability of Free Crossings	No	Yes	No	No	Yes	Yes
Travel Time Equity	Yes	Yes	Yes	Yes	Yes	Yes
Would Likely Cause Disproportionate Effects	Yes	No	Yes	Yes	No	No

4.4 MITIGATION MEASURES

Mitigation strategies for low-income and minority populations due to tolling effects would likely include: transponder purchase via cash, cash-loading of transponders, widespread availability of transponders, and a frequent-user/commuter card.

4.4.1 TRANSPONDER ACQUISITION AND USE

The transponder proposed for the I-69 ORX project would likely be a part of the EZ-Pass System and would be available to be opened with cash or with a credit card. The transponder would be available on-line and via telephone service centers with other forms of payment. The transponder purchase and top-up replenishment options would be similar to the current system used in Louisville for the Ohio River Bridges. A survey of transponder users would occur after implementation to ensure that the implementation and use of transponders has been equitable across all income categories.

4.4.2 FREQUENT-USER/COMMUTER CARDS

Under the build alternatives that have no free option, a reduced tolling rate on US 41 could result in low-income users using US 41, using I-69, or choosing not to make a trip. A reduced rate of $1 per trip on US 41 for a frequent user or commuter would equate to $2 per day over an average 260 work-days in a year, or $520. For those persons below the 2015 poverty guideline for a single

person family/household of $11,770 (i.e., low-income), that would amount to 4.4 percent of their total income reported to the US Census Bureau (DHHS 2017a). This is almost double the percentage of total income for the EMPO TDM Area counties, 1.7-2.5 percent of total income (**Section 4.2.14.3**). Direct costs would be two times the percentage of income than higher-income users and would therefore likely be a disproportionate and adverse effect for the low-income users.

During the Community Conversations, several people in both cities favored a discounted rate for people who use the bridge frequently, if there is no toll-free option. Additionally, residents stated that low-income individuals should receive a discounted toll rate.

Another potential mitigation strategy for low-income users could be a reduced toll rate for verifiable low-income users. Those users that can verify, through federally-issued (e.g. W-2) and locally issued (e.g., utility bill) documents, that they have low-income and live locally, could qualify for a reduced toll-rate.

4.4.3 Enhanced Modal Equity

As discussed in **Section 4.2.3**, the METS Service Plan investigates a cross-river express service in conjunction with HART. The cost of the service is proposed for $1, which could be half of the toll for a single-occupant vehicle. Future coordination with METS and HART regarding the implementation of this service through a METS-HART partnership could provide better equity between the modes of travel and better access throughout the transportation network for all users.

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APPENDIX A – DATA TABLES

Table A-1. U. S. Census Demographic Data for Project Area Community of Comparison

PROJECT AREA COMMUNITY OF COMPARISON AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
Project Area	26,747	3,877 (14.50) (AC Comparison Threshold: 18.12)	5,189 (19.63) (AC Comparison Threshold: 24.54)
CTBG 10002, Vanderburgh County, IN	1,168	627 (53.68)	554 (48.13)
CTBG 10003, Vanderburgh County, IN	1,345	414 (30.78)	364 (27.06)
CTBG 11004, Vanderburgh County, IN	659	268 (40.67)	323 (49.01)
CTBG 36002, Vanderburgh County, IN	1,371	399 (29.10)	596 (43.47)
CTBG 36003, Vanderburgh County, IN	1,000	*	131 (13.10)
CTBG 201001, Henderson County, KY	1,646	396 (24.06)	575 (34.93)
CTBG 202001, Henderson County, KY	1,591	285 (17.91)	548 (34.44)
CTBG 206011, Henderson County, KY	1,105	328 (29.68)	99 (8.96)
CTBG 206012, Henderson County, KY	800	88 (11.00)	186 (31.58)
CTBG 206013, Henderson County, KY	1,951	77 (3.95)	310 (16.56)
CTBG 206014, Henderson County, KY	1,510	110 (7.28)	204 (13.62)
CTBG 206015, Henderson County, KY	1,387	89 (6.42)	*
CTBG 206021, Henderson County, KY	2,686	275 (10.24)	480 (17.87)
CTBG 207011, Henderson County, KY	466	*	*
CTBG 207012, Henderson County, KY	2,428	190 (7.83)	290 (11.94)
CTBG 207013, Henderson County, KY	1,334	*	*
CTBG 207021, Henderson County, KY	905	*	*
CTBG 207022, Henderson County, KY	1,795	218 (12.14)	222 (12.37)
CTBG 207023, Henderson County, KY	1,600	*	219 (13.69)

Source: DOC 2016
1. Totals less than 50 persons are not shown due to U.S. Census Bureau privacy guidance
CTBG = Census Tract Block Group
Orange Box – Affected Community with EJ Populations ≥ 50%
Yellow Box – Affected Community with EJ Populations ≥ 25% of the COC

Table A-2. U. S. Census Demographic Data for the Combined Project Area and Evansville Promise Zone Community of Comparison

PROJECT AREA WITH EPZ AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
Project Area and EPZ	45,755	10,816 (23.64) (AC Comparison Threshold: 29.55)	11,629 (26.09) AC Comparison Threshold: 32.61)
CTBG 10001, Vanderburgh County, IN	1,123	332 (29.56)	239 (21.28)
CTBG 10002, Vanderburgh County, IN	1,168	627 (53.68)	554 (48.13)
CTBG 10003, Vanderburgh County, IN	1,345	414 (30.78)	364 (27.06)

Table A-2. U. S. Census Demographic Data for the Combined Project Area and Evansville Promise Zone Community of Comparison

PROJECT AREA WITH EPZ AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
CTBG 10004, Vanderburgh County, IN	555	132 (23.78)	97 (18.83)
CTBG 11004, Vanderburgh County, IN	659	268 (40.67)	323 (49.01)
CTBG 12001, Vanderburgh County, IN	629	323 (51.35)	242 (38.47)
CTBG 12002, Vanderburgh County, IN	883	332 (37.60)	241 (28.76)
CTBG 13001, Vanderburgh County, IN	1,132	766 (67.67)	516 (46.65)
CTBG 13002, Vanderburgh County, IN	398	193 (48.49)	110 (27.64)
CTBG 13003, Vanderburgh County, IN	234	88 (37.61)	103 (44.02)
CTBG 14001, Vanderburgh County, IN	1,186	917 (77.32)	541 (46.52)
CTBG 14002, Vanderburgh County, IN	897	188 (20.96)	264 (31.02)
CTBG 17001, Vanderburgh County, IN	1,409	460 (32.65)	546 (40.53)
CTBG 17002, Vanderburgh County, IN	819	446 (54.46)	272 (37.73)
CTBG 18001, Vanderburgh County, IN	534	66 (12.36)	161 (37.53)
CTBG 19001, Vanderburgh County, IN	1,102	262 (23.77)	432 (41.62)
CTBG 20001, Vanderburgh County, IN	1,053	155 (14.72)	300 (35.93)
CTBG 25001, Vanderburgh County, IN	1,369	434 (31.70)	467 (34.82)
CTBG 25002, Vanderburgh County, IN	752	112 (14.89)	209 (27.79)
CTBG 36002, Vanderburgh County, IN	1,371	399 (29.10)	596 (43.47)
CTBG 36003, Vanderburgh County, IN	1,000	*	131 (13.10)
CTBG 37021, Vanderburgh County, IN	2,570	1,256 (48.87)	1,490 (60.40)
CTBG 37022, Vanderburgh County, IN	662	147 (22.21)	147 (22.21)
CTBG 37023, Vanderburgh County, IN	330	*	*
CTBG 37024, Vanderburgh County, IN	590	150 (25.42)	*
CTBG 37025, Vanderburgh County, IN	781	147 (18.82)	*
CTBG 201001, Henderson County, KY	1,646	396 (24.06)	575 (34.93)
CTBG 202001, Henderson County, KY	1,591	285 (17.91)	548 (34.44)
CTBG 206011, Henderson County, KY	1,105	328 (29.68)	99 (8.96)
CTBG 206012, Henderson County, KY	800	88 (11.00)	186 (31.58)
CTBG 206013, Henderson County, KY	1,951	77 (3.95)	310 (16.56)
CTBG 206014, Henderson County, KY	1,510	110 (7.28)	204 (13.62)
CTBG 206015, Henderson County, KY	1,387	89 (6.42)	*
CTBG 206021, Henderson County, KY	2,686	275 (10.24)	480 (17.87)
CTBG 207011, Henderson County, KY	466	*	*
CTBG 207012, Henderson County, KY	2,428	190 (7.83)	290 (11.94)
CTBG 207013, Henderson County, KY	1,334	*	*
CTBG 207021, Henderson County, KY	905	*	*

Table A-2. U. S. Census Demographic Data for the Combined Project Area and Evansville Promise Zone Community of Comparison

PROJECT AREA WITH EPZ AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
CTBG 207022, Henderson County, KY	1,795	218 (12.14)	222 (12.37)
CTBG 207023, Henderson County, KY	1,600	*	219 (13.69)

Source: DOC 2016
1. Totals less than 50 persons are not shown due to U.S. Census Bureau privacy guidance.
CTBG = Census Tract Block Group.
Orange Box – Affected Community with EJ Populations ≥ 50%
Yellow Box – Affected Community with EJ Populations ≥ 25% of the COC

Table A-3. U. S. Census Demographic Data for the EMPO Service Area Community of Comparison

EMPO SERVICE AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
EMPO Service Area	288,696	38,086 (13.19) (AC Comparison Threshold: 16.49)	43,398 (15.53) (AC Comparison Threshold: 19.41)
CTBG 001001, Vanderburgh County, IN	480	*	124 (26.27)
CTBG 001002, Vanderburgh County, IN	702	*	124 (17.66)
CTBG 001003, Vanderburgh County, IN	711	67 (9.42)	*
CTBG 002011, Vanderburgh County, IN	1,888	89 (4.71)	175 (9.27)
CTBG 002012, Vanderburgh County, IN	1,353	230 (17.00)	*
CTBG 002013, Vanderburgh County, IN	1,298	130 (10.02)	*
CTBG 002014, Vanderburgh County, IN	561	*	*
CTBG 002015, Vanderburgh County, IN	2,686	199 (7.41)	269 (10.19)
CTBG 002021, Vanderburgh County, IN	730	61 (8.36)	*
CTBG 002022, Vanderburgh County, IN	654	53 (8.10)	68 (10.64)
CTBG 002023, Vanderburgh County, IN	787	181 (23.00)	101 (12.83)
CTBG 003001, Vanderburgh County, IN	556	-	118 (21.22)
CTBG 003002, Vanderburgh County, IN	705	92 (13.05)	186 (26.38)
CTBG 003003, Vanderburgh County, IN	2,214	359 (16.21)	208 (23.29)
CTBG 003004, Vanderburgh County, IN	434	115 (26.50)	230 (53.00)
CTBG 004001, Vanderburgh County, IN	690	*	102 (14.78)
CTBG 004002, Vanderburgh County, IN	752	*	*
CTBG 004003, Vanderburgh County, IN	961	65 (6.76)	168 (22.43)
CTBG 005001, Vanderburgh County, IN	1,218	117 (9.61)	135 (11.28)
CTBG 005002, Vanderburgh County, IN	964	168 (17.43)	*
CTBG 006001, Vanderburgh County, IN	1,318	279 (21.17)	125 (9.81)
CTBG 006002, Vanderburgh County, IN	738	216 (29.27)	122 (16.67)
CTBG 008001, Vanderburgh County, IN	1,169	232 (19.85)	157 (13.43)

Table A-3. U. S. Census Demographic Data for the EMPO Service Area Community of Comparison

EMPO SERVICE AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
CTBG 008002, Vanderburgh County, IN	755	121 (16.03)	85 (11.26)
CTBG 008003, Vanderburgh County, IN	774	438 (56.59)	188 (24.29)
CTBG 009001, Vanderburgh County, IN	756	225 (29.76)	92 (12.17)
CTBG 009002, Vanderburgh County, IN	807	93 (11.52)	73 (9.05)
CTBG 009003, Vanderburgh County, IN	2,014	525 (26.07)	390 (19.61)
CTBG 009004, Vanderburgh County, IN	1,131	628 (55.53)	540 (47.75)
CTBG 009005, Vanderburgh County, IN	580	*	52 (8.97)
CTBG 009006, Vanderburgh County, IN	818	70 (8.56)	294 (35.94)
CTBG 010001, Vanderburgh County, IN	1,123	332 (29.56)	239 (21.28)
CTBG 010002, Vanderburgh County, IN	1,168	627 (53.68)	554 (48.13)
CTBG 010003, Vanderburgh County, IN	1,345	414 (30.78)	364 (27.06)
CTBG 010004, Vanderburgh County, IN	555	132 (23.78)	97 (18.83)
CTBG 011001, Vanderburgh County, IN	898	364 (40.53)	363 (40.42)
CTBG 011002, Vanderburgh County, IN	528	496 (93.94)	178 (33.71)
CTBG 011003, Vanderburgh County, IN	447	304 (68.01)	265 (59.28)
CTBG 011004, Vanderburgh County, IN	659	268 (40.67)	323 (49.01)
CTBG 012001, Vanderburgh County, IN	629	323 (51.35)	242 (38.47)
CTBG 012002, Vanderburgh County, IN	883	332 (37.60)	241 (28.76)
CTBG 013001, Vanderburgh County, IN	1,132	766 (67.67)	516 (46.65)
CTBG 013002, Vanderburgh County, IN	398	193 (48.49)	110 (27.64)
CTBG 013003, Vanderburgh County, IN	234	88 (37.61)	103 (44.02)
CTBG 014001, Vanderburgh County, IN	1,186	917 (77.32)	541 (46.52)
CTBG 014002, Vanderburgh County, IN	897	188 (20.96)	264 (31.02)
CTBG 015001, Vanderburgh County, IN	893	712 (79.73)	286 (32.03)
CTBG 015002, Vanderburgh County, IN	1,079	667 (61.82)	432 (40.04)
CTBG 017001, Vanderburgh County, IN	1,409	460 (32.65)	546 (40.53)
CTBG 017002, Vanderburgh County, IN	819	446 (54.46)	272 (37.73)
CTBG 018001, Vanderburgh County, IN	534	66 (12.36)	161 (37.53)
CTBG 019001, Vanderburgh County, IN	1,102	262 (23.77)	432 (41.62)
CTBG 020001, Vanderburgh County, IN	1,053	155 (14.72)	300 (35.93)
CTBG 021001, Vanderburgh County, IN	560	159 (28.39)	212 (37.86)
CTBG 021002, Vanderburgh County, IN	763	194 (25.43)	164 (21.75)
CTBG 021003, Vanderburgh County, IN	907	*	298 (33.00)
CTBG 023001, Vanderburgh County, IN	1,188	59 (4.97)	328 (27.61)
CTBG 023002, Vanderburgh County, IN	1,510	*	387 (25.63)

Table A-3. U. S. Census Demographic Data for the EMPO Service Area Community of Comparison

EMPO SERVICE AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
CTBG 024001, Vanderburgh County, IN	763	*	166 (21.76)
CTBG 024002, Vanderburgh County, IN	821	*	81 (9.87)
CTBG 024003, Vanderburgh County, IN	729	53 (7.27)	115 (15.78)
CTBG 024004, Vanderburgh County, IN	1,267	54 (4.26)	175 (13.81)
CTBG 025001, Vanderburgh County, IN	1,369	434 (31.70)	467 (34.82)
CTBG 025002, Vanderburgh County, IN	752	112 (14.89)	209 (27.79)
CTBG 026001, Vanderburgh County, IN	826	*	213 (28.29)
CTBG 026002, Vanderburgh County, IN	425	123 (28.94)	88 (20.71)
CTBG 026003, Vanderburgh County, IN	777	139 (17.89)	358 (46.07)
CTBG 026004, Vanderburgh County, IN	1,634	630 (38.56)	905 (55.39)
CTBG 028001, Vanderburgh County, IN	1,016	*	117 (12.81)
CTBG 028002, Vanderburgh County, IN	1,563	200 (12.80)	213 (13.88)
CTBG 029001, Vanderburgh County, IN	1,047	*	195 (18.82)
CTBG 030001, Vanderburgh County, IN	1,745	*	224 (13.55)
CTBG 030002, Vanderburgh County, IN	734	*	126 (17.17)
CTBG 030003, Vanderburgh County, IN	587	*	*
CTBG 030004, Vanderburgh County, IN	928	*	161 (17.35)
CTBG 030005, Vanderburgh County, IN	684	*	107 (16.51)
CTBG 031001, Vanderburgh County, IN	1,285	*	314 (24.96)
CTBG 031002, Vanderburgh County, IN	414	*	*
CTBG 031003, Vanderburgh County, IN	1,099	*	194 (18.16)
CTBG 032001, Vanderburgh County, IN	1,345	*	117 (8.70)
CTBG 032002, Vanderburgh County, IN	797	61 (7.65)	61 (7.65)
CTBG 032003, Vanderburgh County, IN	2,176	115 (5.28)	776 (35.66)
CTBG 033001, Vanderburgh County, IN	691	60 (8.68)	*
CTBG 033002, Vanderburgh County, IN	1,123	262 (23.33)	412 (39.96)
CTBG 033003, Vanderburgh County, IN	1,115	*	283 (25.38)
CTBG 033004, Vanderburgh County, IN	754	90 (11.94)	140 (18.57)
CTBG 034001, Vanderburgh County, IN	892	*	136 (15.25)
CTBG 034002, Vanderburgh County, IN	692	*	*
CTBG 034003, Vanderburgh County, IN	1,352	*	128 (9.47)
CTBG 035001, Vanderburgh County, IN	518	*	*
CTBG 035002, Vanderburgh County, IN	1,580	268 (16.96)	208 (20.68)
CTBG 035003, Vanderburgh County, IN	1,026	125 (12.18)	87 (8.48)
CTBG 036001, Vanderburgh County, IN	1,376	502 (36.48)	279 (20.28)

Table A-3. U. S. Census Demographic Data for the EMPO Service Area Community of Comparison

EMPO SERVICE AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
CTBG 036002, Vanderburgh County, IN	1,371	399 (29.10)	596 (43.47)
CTBG 036003, Vanderburgh County, IN	1,000	*	131 (13.10)
CTBG 036004, Vanderburgh County, IN	650	197 (30.31)	*
CTBG 037011, Vanderburgh County, IN	845	216 (25.56)	168 (24.63)
CTBG 037012, Vanderburgh County, IN	1,009	80 (7.93)	63 (6.24)
CTBG 037021, Vanderburgh County, IN	2,570	1,256 (48.87)	1,490 (60.40)
CTBG 037022, Vanderburgh County, IN	662	147 (22.21)	147 (22.21)
CTBG 037023, Vanderburgh County, IN	330	*	*
CTBG 037024, Vanderburgh County, IN	590	150 (25.42)	*
CTBG 037025, Vanderburgh County, IN	781	147 (18.82)	*
CTBG 038011, Vanderburgh County, IN	1,033	133 (12.88)	111 (10.76)
CTBG 038012, Vanderburgh County, IN	1,440	214 (14.86)	78 (5.42)
CTBG 038013, Vanderburgh County, IN	1,098	320 (29.14)	91 (8.29)
CTBG 038014, Vanderburgh County, IN	1,567	60 (3.83)	177 (11.30)
CTBG 038031, Vanderburgh County, IN	775	*	*
CTBG 038032, Vanderburgh County, IN	1,429	112 (7.84)	74 (5.18)
CTBG 038033, Vanderburgh County, IN	930	*	*
CTBG 038034, Vanderburgh County, IN	725	110 (15.17)	143 (19.72)
CTBG 038035, Vanderburgh County, IN	1,203	90 (7.48)	*
CTBG 038041, Vanderburgh County, IN	1,341	405 (30.20)	*
CTBG 038042, Vanderburgh County, IN	895	74 (8.27)	*
CTBG 038043, Vanderburgh County, IN	1,155	89 (7.71)	*
CTBG 038044, Vanderburgh County, IN	1,852	587 (31.70)	667 (36.02)
CTBG 038045, Vanderburgh County, IN	917	241 (26.28)	82 (8.94)
CTBG 039001, Vanderburgh County, IN	1,897	*	*
CTBG 039002, Vanderburgh County, IN	1,410	323 (22.91)	135 (10.72)
CTBG 101001, Vanderburgh County, IN	1,184	331 (27.96)	161 (13.60)
CTBG 101002, Vanderburgh County, IN	1,140	58 (5.09)	*
CTBG 101003, Vanderburgh County, IN	1,800	220 (12.22)	283 (15.72)
CTBG 101004, Vanderburgh County, IN	1,117	428 (38.32)	416 (37.24)
CTBG 101005, Vanderburgh County, IN	959	175 (18.25)	*
CTBG 102011, Vanderburgh County, IN	1,396	*	*
CTBG 102012, Vanderburgh County, IN	4,496	488 (10.85)	136 (3.04)
CTBG 102013, Vanderburgh County, IN	2,604	172 (6.61)	*
CTBG 102014, Vanderburgh County, IN	2,438	514 (21.08)	*

Table A-3. U. S. Census Demographic Data for the EMPO Service Area Community of Comparison

EMPO SERVICE AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
CTBG 102021, Vanderburgh County, IN	1,352	108 (7.99)	93 (6.88)
CTBG 102022, Vanderburgh County, IN	1,774	241 (13.59)	*
CTBG 102031, Vanderburgh County, IN	3,095	185 (5.98)	1,123 (36.60)
CTBG 102032, Vanderburgh County, IN	601	108 (17.97)	*
CTBG 102033, Vanderburgh County, IN	696	*	*
CTBG 102034, Vanderburgh County, IN	1,127	68 (6.03)	*
CTBG 102035, Vanderburgh County, IN	2,867	74 (2.58)	54 (1.89)
CTBG 102036, Vanderburgh County, IN	663	*	*
CTBG 104031, Vanderburgh County, IN	831	65 (7.82)	*
CTBG 104032, Vanderburgh County, IN	2,537	297 (11.71)	*
CTBG 104033, Vanderburgh County, IN	287	*	*
CTBG 104034, Vanderburgh County, IN	1,665	132 (7.93)	471 (28.29)
CTBG 104035, Vanderburgh County, IN	861	*	*
CTBG 104041, Vanderburgh County, IN	2,034	63 (3.10)	*
CTBG 104042, Vanderburgh County, IN	1,446	*	*
CTBG 104043, Vanderburgh County, IN	1,250	68 (5.44)	352 (31.29)
CTBG 104044, Vanderburgh County, IN	2,314	169 (7.30)	59 (2.55)
CTBG 105001, Vanderburgh County, IN	1,786	*	194 (10.86)
CTBG 105002, Vanderburgh County, IN	665	*	76 (12.46)
CTBG 105003, Vanderburgh County, IN	1,596	*	77 (4.82)
CTBG 105004, Vanderburgh County, IN	1,100	*	55 (5.00)
CTBG 105005, Vanderburgh County, IN	1,417	*	58 (4.12)
CTBG 105006, Vanderburgh County, IN	1,062	*	92 (8.66)
CTBG 106001, Vanderburgh County, IN	924	*	*
CTBG 106002, Vanderburgh County, IN	996	59 (5.92)	108 (10.84)
CTBG 107001, Vanderburgh County, IN	1,384	*	74 (5.35)
CTBG 107002, Vanderburgh County, IN	1,186	58 (4.89)	*
CTBG 107003, Vanderburgh County, IN	2,537	244 (9.62)	65 (2.56)
CTBG 107004, Vanderburgh County, IN	2,666	464 (17.40)	211 (7.91)
CTBG 107005, Vanderburgh County, IN	972	*	122 (12.55)
CTBG 301001, Warrick County, IN	924	*	78 (8.44)
CTBG 301002, Warrick County, IN	754	*	130 (17.50)
CTBG 301003, Warrick County, IN	968	*	92 (9.69)
CTBG 301004, Warrick County, IN	922	*	121 (13.12)
CTBG 302001, Warrick County, IN	775	*	55 (7.17)

Table A-3. U. S. Census Demographic Data for the EMPO Service Area Community of Comparison

EMPO SERVICE AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
CTBG 302002, Warrick County, IN	761	*	65 (8.62)
CTBG 302003, Warrick County, IN	608	*	*
CTBG 302004, Warrick County, IN	1,191	*	75 (6.30)
CTBG 303001, Warrick County, IN	3,505	260 (7.42)	80 (2.31)
CTBG 303002, Warrick County, IN	1,509	*	107 (7.20)
CTBG 304001, Warrick County, IN	1,377	*	247 (18.26)
CTBG 304002, Warrick County, IN	646	145 (22.45)	178 (27.55)
CTBG 304003, Warrick County, IN	663	*	232 (34.99)
CTBG 305001, Warrick County, IN	2,417	107 (4.43)	120 (5.07)
CTBG 305002, Warrick County, IN	1,515	73 (4.82)	86 (5.90)
CTBG 305003, Warrick County, IN	2,296	66 (2.87)	99 (4.73)
CTBG 305004, Warrick County, IN	1,160	67 (5.78)	52 (4.48)
CTBG 306001, Warrick County, IN	929	76 (8.18)	123 (13.95)
CTBG 306002, Warrick County, IN	1,449	*	311 (21.46)
CTBG 306003, Warrick County, IN	1,591	255 (16.03)	315 (19.80)
CTBG 306004, Warrick County, IN	315	*	*
CTBG 306005, Warrick County, IN	711	54 (7.59)	54 (8.54)
CTBG 306006, Warrick County, IN	504	*	*
CTBG 306007, Warrick County, IN	851	*	305 (35.84)
CTBG 307021, Warrick County, IN	2,947	486 (16.49)	*
CTBG 307022, Warrick County, IN	2,765	349 (12.62)	*
CTBG 307023, Warrick County, IN	918	*	194 (24.28)
CTBG 307024, Warrick County, IN	776	*	74 (9.54)
CTBG 307031, Warrick County, IN	535	*	59 (11.03)
CTBG 307032, Warrick County, IN	898	86 (9.58)	*
CTBG 307033, Warrick County, IN	2,514	96 (3.82)	659 (26.60)
CTBG 307034, Warrick County, IN	1,799	221 (12.28)	276 (15.34)
CTBG 307041, Warrick County, IN	2,382	282 (11.84)	434 (18.42)
CTBG 307042, Warrick County, IN	2,295	248 (10.81)	53 (2.31)
CTBG 307051, Warrick County, IN	1,243	*	261 (21.32)
CTBG 307052, Warrick County, IN	1,726	155 (8.98)	*
CTBG 307053, Warrick County, IN	2,758	116 (4.21)	*
CTBG 307054, Warrick County, IN	1,937	187 (9.65)	117 (6.04)
CTBG 308001, Warrick County, IN	940	189 (20.11)	201 (24.57)
CTBG 308002, Warrick County, IN	2,229	153 (6.86)	235 (10.54)

Table A-3. U. S. Census Demographic Data for the EMPO Service Area Community of Comparison

EMPO SERVICE AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS[1](%)
CTBG 308003, Warrick County, IN	1,274	*	*
CTBG 308004, Warrick County, IN	953	80 (8.39)	144 (15.11)
CTBG 308005, Warrick County, IN	1,765	97 (5.50)	114 (6.46)
CTBG 201001, Henderson County, KY	1,646	396 (24.06)	575 (34.93)
CTBG 202001, Henderson County, KY	1,591	285 (17.91)	548 (34.44)
CTBG 203001, Henderson County, KY	1,933	709 (36.68)	653 (33.92)
CTBG 204001, Henderson County, KY	1,563	437 (27.96)	600 (38.39)
CTBG 204002, Henderson County, KY	877	350 (39.91)	288 (32.84)
CTBG 205001, Henderson County, KY	1,194	110 (9.21)	342 (28.64)
CTBG 205002, Henderson County, KY	1,258	327 (25.99)	248 (19.71)
CTBG 206011, Henderson County, KY	1,105	328 (29.68)	99 (8.96)
CTBG 206012, Henderson County, KY	800	88 (11.00)	186 (31.58)
CTBG 206013, Henderson County, KY	1,951	77 (3.95)	310 (16.56)
CTBG 206014, Henderson County, KY	1,510	110 (7.28)	204 (13.62)
CTBG 206015, Henderson County, KY	1,387	89 (6.42)	*
CTBG 206021, Henderson County, KY	2,686	275 (10.24)	480 (17.87)
CTBG 206022, Henderson County, KY	2,796	910 (32.55)	816 (38.84)
CTBG 207011, Henderson County, KY	466	*	*
CTBG 207012, Henderson County, KY	2,428	190 (7.83)	290 (11.94)
CTBG 207013, Henderson County, KY	1,334	*	*
CTBG 207014, Henderson County, KY	747	*	419 (56.09)
CTBG 207021, Henderson County, KY	905	*	*
CTBG 207022, Henderson County, KY	1,795	218 (12.14)	222 (12.37)
CTBG 207023, Henderson County, KY	1,600	*	219 (13.69)
CTBG 207024, Henderson County, KY	2,613	128 (4.90)	172 (6.58)
CTBG 208001, Henderson County, KY	1,513	211 (13.95)	219 (14.47)
CTBG 208002, Henderson County, KY	732	99 (13.52)	211 (28.83)
CTBG 208003, Henderson County, KY	1,616	*	125 (7.74)
CTBG 208004, Henderson County, KY	900	*	149 (16.56)
CTBG 209001, Henderson County, KY	1,673	90 (5.38)	172 (10.28)
CTBG 209002, Henderson County, KY	575	*	89 (15.48)
CTBG 209003, Henderson County, KY	1,286	120 (9.33)	278 (21.65)
CTBG 209004, Henderson County, KY	1,104	*	*
CTBG 209005, Henderson County, KY	1,711	314 (18.35)	413 (24.14)
CTBG 209006, Henderson County, KY	1,101	*	176 (15.99)

Source: DOC 2016.

1. Totals less than 50 persons are not shown due to U.S. Census Bureau privacy guidance.

CTBG = Census Tract Block Group.

Orange Box – Affected Community with EJ Populations ≥ 50%

Yellow Box – Affected Community with EJ Populations ≥ 25% of the COC

Table A-4. U.S. Census Demographic Data for the EMPO TDM Area Community of Comparison

EMPO TDM AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS [1](%)
EMPO TDM Area	347,931	40,948 (11.77) (AC Comparison Threshold: 14.71)	49,874 (14.78) (AC Comparison Threshold: 18.47)
CTBG 501001, Gibson County, IN	1,436	138 (9.61)	147 (10.24)
CTBG 501001, Gibson County, IN	1,882	*	237 (13.02)
CTBG 501003, Gibson County, IN	697	*	*
CTBG 502001, Gibson County, IN	1,153	*	*
CTBG 502002, Gibson County, IN	1,010	*	*
CTBG 502003, Gibson County, IN	532	*	52 (9.77)
CTBG 502004, Gibson County, IN	1,076	*	151 (14.03)
CTBG 502005, Gibson County, IN	2,579	*	234 (9.07)
CTBG 502006, Gibson County, IN	843	*	*
CTBG 502007, Gibson County, IN	1,190	*	*
CTBG 503001, Gibson County, IN	829	*	189 (22.80)
CTBG 503002, Gibson County, IN	1,113	62 (5.57)	117 (10.55)
CTBG 503003, Gibson County, IN	1,063	*	161 (15.15)
CTBG 503004, Gibson County, IN	1,307	106 (8.11)	149 (13.23)
CTBG 503002, Gibson County, IN	1,325	52 (3.92)	135 (10.83)
CTBG 504011, Gibson County, IN	846	59 (6.97)	157 (18.56)
CTBG 504012, Gibson County, IN	595	*	*
CTBG 504013, Gibson County, IN	1,861	54 (2.90)	141 (7.58)
CTBG 504021, Gibson County, IN	2,025	*	146 (7.28)
CTBG 504022, Gibson County, IN	772	111 (14.38)	59 (7.96)
CTBG 504023, Gibson County, IN	665	*	119 (17.89)
CTBG 504024, Gibson County, IN	842	*	139 (16.61)
CTBG 505011, Gibson County, IN	598	*	127 (21.24)
CTBG 505012, Gibson County, IN	1,662	162 (9.75)	228 (13.78)
CTBG 505013, Gibson County, IN	962	67 (6.96)	148 (20.22)
CTBG 505021, Gibson County, IN	2,596	453 (17.45)	279 (11.23)
CTBG 505022, Gibson County, IN	741	*	107 (15.88)
CTBG 505023, Gibson County, IN	835	126 (15.09)	195 (24.87)
CTBG 505024, Gibson County, IN	633	173 (27.33)	*

Table A-4. U.S. Census Demographic Data for the EMPO TDM Area Community of Comparison

EMPO TDM AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS [1](%)
CTBG 401001, Posey County, IN	725	*	*
CTBG 401002, Posey County, IN	770	*	111 (14.42)
CTBG 401003, Posey County, IN	939	*	135 (14.38)
CTBG 401004, Posey County, IN	1,252	*	152 (12.52)
CTBG 401005, Posey County, IN	1,277	*	*
CTBG 401006, Posey County, IN	862	*	*
CTBG 402001, Posey County, IN	528	*	*
CTBG 402002, Posey County, IN	735	117 (15.92)	*
CTBG 402003, Posey County, IN	947	*	*
CTBG 403001, Posey County, IN	1,348	*	101 (7.51)
CTBG 403002, Posey County, IN	1,328	*	*
CTBG 404001, Posey County, IN	976	*	*
CTBG 404002, Posey County, IN	2,245	120 (5.35)	111 (4.94)
CTBG 404003, Posey County, IN	1,094	*	442 (40.40)
CTBG 404004, Posey County, IN	1,173	*	*
CTBG 405001, Posey County, IN	982	*	131 (13.34)
CTBG 405002, Posey County, IN	407	*	*
CTBG 405003, Posey County, IN	1,564	*	189 (12.68)
CTBG 406001, Posey County, IN	1,678	159 (9.48)	254 (15.14)
CTBG 406002, Posey County, IN	1,092	*	79 (7.79)
CTBG 406003, Posey County, IN	841	*	354 (42.09)
CTBG 407001, Posey County, IN	1,448	85 (5.87)	186 (12.85)
CTBG 407002, Posey County, IN	951	*	101 (10.62)
CTBG 407003, Posey County, IN	405	106 (26.17)	176 (43.46)
CTBG 001001, Vanderburgh County, IN	480	*	124 (26.27)
CTBG 001002, Vanderburgh County, IN	702	*	124 (17.66)
CTBG 001003, Vanderburgh County, IN	711	67 (9.42)	*
CTBG 002011, Vanderburgh County, IN	1,888	89 (4.71)	175 (9.27)
CTBG 002012, Vanderburgh County, IN	1,353	230 (17.00)	*
CTBG 002013, Vanderburgh County, IN	1,298	130 (10.02)	*
CTBG 002014, Vanderburgh County, IN	561	*	*
CTBG 002015, Vanderburgh County, IN	2,686	199 (7.41)	269 (10.19)
CTBG 002021, Vanderburgh County, IN	730	61 (8.36)	*
CTBG 002022, Vanderburgh County, IN	654	53 (8.10)	68 (10.64)
CTBG 002023, Vanderburgh County, IN	787	181 (23.00)	101 (12.83)
CTBG 003001, Vanderburgh County, IN	556	-	118 (21.22)

Table A-4. U.S. Census Demographic Data for the EMPO TDM Area Community of Comparison

EMPO TDM AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS [1](%)
CTBG 003002, Vanderburgh County, IN	705	92 (13.05)	186 (26.38)
CTBG 003003, Vanderburgh County, IN	2,214	359 (16.21)	208 (23.29)
CTBG 003004, Vanderburgh County, IN	434	115 (26.50)	230 (53.00)
CTBG 004001, Vanderburgh County, IN	690	*	102 (14.78)
CTBG 004002, Vanderburgh County, IN	752	*	*
CTBG 004003, Vanderburgh County, IN	961	65 (6.76)	168 (22.43)
CTBG 005001, Vanderburgh County, IN	1,218	117 (9.61)	135 (11.28)
CTBG 005002, Vanderburgh County, IN	964	168 (17.43)	*
CTBG 006001, Vanderburgh County, IN	1,318	279 (21.17)	125 (9.81)
CTBG 006002, Vanderburgh County, IN	738	216 (29.27)	122 (16.67)
CTBG 008001, Vanderburgh County, IN	1,169	232 (19.85)	157 (13.43)
CTBG 008002, Vanderburgh County, IN	755	121 (16.03)	85 (11.26)
CTBG 008003, Vanderburgh County, IN	774	438 (56.59)	188 (24.29)
CTBG 009001, Vanderburgh County, IN	756	225 (29.76)	92 (12.17)
CTBG 009002, Vanderburgh County, IN	807	93 (11.52)	73 (9.05)
CTBG 009003, Vanderburgh County, IN	2,014	525 (26.07)	390 (19.61)
CTBG 009004, Vanderburgh County, IN	1,131	628 (55.53)	540 (47.75)
CTBG 009005, Vanderburgh County, IN	580	*	52 (8.97)
CTBG 009006, Vanderburgh County, IN	818	70 (8.56)	294 (35.94)
CTBG 010001, Vanderburgh County, IN	1,123	332 (29.56)	239 (21.28)
CTBG 010002, Vanderburgh County, IN	1,168	627 (53.68)	554 (48.13)
CTBG 010003, Vanderburgh County, IN	1,345	414 (30.78)	364 (27.06)
CTBG 010004, Vanderburgh County, IN	555	132 (23.78)	97 (18.83)
CTBG 011001, Vanderburgh County, IN	898	364 (40.53)	363 (40.42)
CTBG 011002, Vanderburgh County, IN	528	496 (93.94)	178 (33.71)
CTBG 011003, Vanderburgh County, IN	447	304 (68.01)	265 (59.28)
CTBG 011004, Vanderburgh County, IN	659	268 (40.67)	323 (49.01)
CTBG 012001, Vanderburgh County, IN	629	323 (51.35)	242 (38.47)
CTBG 012002, Vanderburgh County, IN	883	332 (37.60)	241 (28.76)
CTBG 013001, Vanderburgh County, IN	1,132	766 (67.67)	516 (46.65)
CTBG 013002, Vanderburgh County, IN	398	193 (48.49)	110 (27.64)
CTBG 013003, Vanderburgh County, IN	234	88 (37.61)	103 (44.02)
CTBG 014001, Vanderburgh County, IN	1,186	917 (77.32)	541 (46.52)
CTBG 014002, Vanderburgh County, IN	897	188 (20.96)	264 (31.02)
CTBG 015001, Vanderburgh County, IN	893	712 (79.73)	286 (32.03)
CTBG 015002, Vanderburgh County, IN	1,079	667 (61.82)	432 (40.04)

Table A-4. U.S. Census Demographic Data for the EMPO TDM Area Community of Comparison

EMPO TDM AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS [1](%)
CTBG 017001, Vanderburgh County, IN	1,409	460 (32.65)	546 (40.53)
CTBG 017002, Vanderburgh County, IN	819	446 (54.46)	272 (37.73)
CTBG 018001, Vanderburgh County, IN	534	66 (12.36)	161 (37.53)
CTBG 019001, Vanderburgh County, IN	1,102	262 (23.77)	432 (41.62)
CTBG 020001, Vanderburgh County, IN	1,053	155 (14.72)	300 (35.93)
CTBG 021001, Vanderburgh County, IN	560	159 (28.39)	212 (37.86)
CTBG 021002, Vanderburgh County, IN	763	194 (25.43)	164 (21.75)
CTBG 021003, Vanderburgh County, IN	907	*	298 (33.00)
CTBG 023001, Vanderburgh County, IN	1,188	59 (4.97)	328 (27.61)
CTBG 023002, Vanderburgh County, IN	1,510	*	387 (25.63)
CTBG 024001, Vanderburgh County, IN	763	*	166 (21.76)
CTBG 024002, Vanderburgh County, IN	821	*	81 (9.87)
CTBG 024003, Vanderburgh County, IN	729	53 (7.27)	115 (15.78)
CTBG 024004, Vanderburgh County, IN	1,267	54 (4.26)	175 (13.81)
CTBG 025001, Vanderburgh County, IN	1,369	434 (31.70)	467 (34.82)
CTBG 025002, Vanderburgh County, IN	752	112 (14.89)	209 (27.79)
CTBG 026001, Vanderburgh County, IN	826	*	213 (28.29)
CTBG 026002, Vanderburgh County, IN	425	123 (28.94)	88 (20.71)
CTBG 026003, Vanderburgh County, IN	777	139 (17.89)	358 (46.07)
CTBG 026004, Vanderburgh County, IN	1,634	630 (38.56)	905 (55.39)
CTBG 028001, Vanderburgh County, IN	1,016	*	117 (12.81)
CTBG 028002, Vanderburgh County, IN	1,563	200 (12.80)	213 (13.88)
CTBG 029001, Vanderburgh County, IN	1,047	*	195 (18.82)
CTBG 030001, Vanderburgh County, IN	1,745	*	224 (13.55)
CTBG 030002, Vanderburgh County, IN	734	*	126 (17.17)
CTBG 030003, Vanderburgh County, IN	587	*	*
CTBG 030004, Vanderburgh County, IN	928	*	161 (17.35)
CTBG 030005, Vanderburgh County, IN	684	*	107 (16.51)
CTBG 031001, Vanderburgh County, IN	1,285	*	314 (24.96)
CTBG 031002, Vanderburgh County, IN	414	*	*
CTBG 031003, Vanderburgh County, IN	1,099	*	194 (18.16)
CTBG 032001, Vanderburgh County, IN	1,345	*	117 (8.70)
CTBG 032002, Vanderburgh County, IN	797	61 (7.65)	61 (7.65)
CTBG 032003, Vanderburgh County, IN	2,176	115 (5.28)	776 (35.66)
CTBG 033001, Vanderburgh County, IN	691	60 (8.68)	*
CTBG 033002, Vanderburgh County, IN	1,123	262 (23.33)	412 (39.96)

Table A-4. U.S. Census Demographic Data for the EMPO TDM Area Community of Comparison

EMPO TDM AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS [1](%)
CTBG 033003, Vanderburgh County, IN	1,115	*	283 (25.38)
CTBG 033004, Vanderburgh County, IN	754	90 (11.94)	140 (18.57)
CTBG 034001, Vanderburgh County, IN	892	*	136 (15.25)
CTBG 034002, Vanderburgh County, IN	692	*	*
CTBG 034003, Vanderburgh County, IN	1,352	*	128 (9.47)
CTBG 035001, Vanderburgh County, IN	518	*	*
CTBG 035002, Vanderburgh County, IN	1,580	268 (16.96)	208 (20.68)
CTBG 035003, Vanderburgh County, IN	1,026	125 (12.18)	87 (8.48)
CTBG 036001, Vanderburgh County, IN	1,376	502 (36.48)	279 (20.28)
CTBG 036002, Vanderburgh County, IN	1,371	399 (29.10)	596 (43.47)
CTBG 036003, Vanderburgh County, IN	1,000	*	131 (13.10)
CTBG 036004, Vanderburgh County, IN	650	197 (30.31)	*
CTBG 037011, Vanderburgh County, IN	845	216 (25.56)	168 (24.63)
CTBG 037012, Vanderburgh County, IN	1,009	80 (7.93)	63 (6.24)
CTBG 037021, Vanderburgh County, IN	2,570	1,256 (48.87)	1,490 (60.40)
CTBG 037022, Vanderburgh County, IN	662	147 (22.21)	147 (22.21)
CTBG 037023, Vanderburgh County, IN	330	*	*
CTBG 037024, Vanderburgh County, IN	590	150 (25.42)	*
CTBG 037025, Vanderburgh County, IN	781	147 (18.82)	*
CTBG 038011, Vanderburgh County, IN	1,033	133 (12.88)	111 (10.76)
CTBG 038012, Vanderburgh County, IN	1,440	214 (14.86)	78 (5.42)
CTBG 038013, Vanderburgh County, IN	1,098	320 (29.14)	91 (8.29)
CTBG 038014, Vanderburgh County, IN	1,567	60 (3.83)	177 (11.30)
CTBG 038031, Vanderburgh County, IN	775	*	*
CTBG 038032, Vanderburgh County, IN	1,429	112 (7.84)	74 (5.18)
CTBG 038033, Vanderburgh County, IN	930	*	*
CTBG 038034, Vanderburgh County, IN	725	110 (15.17)	143 (19.72)
CTBG 038035, Vanderburgh County, IN	1,203	90 (7.48)	*
CTBG 038041, Vanderburgh County, IN	1,341	405 (30.20)	*
CTBG 038042, Vanderburgh County, IN	895	74 (8.27)	*
CTBG 038043, Vanderburgh County, IN	1,155	89 (7.71)	*
CTBG 038044, Vanderburgh County, IN	1,852	587 (31.70)	667 (36.02)
CTBG 038045, Vanderburgh County, IN	917	241 (26.28)	82 (8.94)
CTBG 039001, Vanderburgh County, IN	1,897	*	*
CTBG 039002, Vanderburgh County, IN	1,410	323 (22.91)	135 (10.72)
CTBG 101001, Vanderburgh County, IN	1,184	331 (27.96)	161 (13.60)

Table A-4. U.S. Census Demographic Data for the EMPO TDM Area Community of Comparison

EMPO TDM AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS [1](%)
CTBG 101002, Vanderburgh County, IN	1,140	58 (5.09)	*
CTBG 101003, Vanderburgh County, IN	1,800	220 (12.22)	283 (15.72)
CTBG 101004, Vanderburgh County, IN	1,117	428 (38.32)	416 (37.24)
CTBG 101005, Vanderburgh County, IN	959	175 (18.25)	*
CTBG 102011, Vanderburgh County, IN	1,396	*	*
CTBG 102012, Vanderburgh County, IN	4,496	488 (10.85)	136 (3.04)
CTBG 102013, Vanderburgh County, IN	2,604	172 (6.61)	*
CTBG 102014, Vanderburgh County, IN	2,438	514 (21.08)	*
CTBG 102021, Vanderburgh County, IN	1,352	108 (7.99)	93 (6.88)
CTBG 102022, Vanderburgh County, IN	1,774	241 (13.59)	*
CTBG 102031, Vanderburgh County, IN	3,095	185 (5.98)	1,123 (36.60)
CTBG 102032, Vanderburgh County, IN	601	108 (17.97)	*
CTBG 102033, Vanderburgh County, IN	696	*	*
CTBG 102034, Vanderburgh County, IN	1,127	68 (6.03)	*
CTBG 102035, Vanderburgh County, IN	2,867	74 (2.58)	54 (1.89)
CTBG 102036, Vanderburgh County, IN	663	*	*
CTBG 104031, Vanderburgh County, IN	831	65 (7.82)	*
CTBG 104032, Vanderburgh County, IN	2,537	297 (11.71)	*
CTBG 104033, Vanderburgh County, IN	287	*	*
CTBG 104034, Vanderburgh County, IN	1,665	132 (7.93)	471 (28.29)
CTBG 104035, Vanderburgh County, IN	861	*	*
CTBG 104041, Vanderburgh County, IN	2,034	63 (3.10)	*
CTBG 104042, Vanderburgh County, IN	1,446	*	*
CTBG 104043, Vanderburgh County, IN	1,250	68 (5.44)	352 (31.29)
CTBG 104044, Vanderburgh County, IN	2,314	169 (7.30)	59 (2.55)
CTBG 105001, Vanderburgh County, IN	1,786	*	194 (10.86)
CTBG 105002, Vanderburgh County, IN	665	*	76 (12.46)
CTBG 105003, Vanderburgh County, IN	1,596	*	77 (4.82)
CTBG 105004, Vanderburgh County, IN	1,100	*	55 (5.00)
CTBG 105005, Vanderburgh County, IN	1,417	*	58 (4.12)
CTBG 105006, Vanderburgh County, IN	1,062	*	92 (8.66)
CTBG 106001, Vanderburgh County, IN	924	*	*
CTBG 106002, Vanderburgh County, IN	996	59 (5.92)	108 (10.84)
CTBG 107001, Vanderburgh County, IN	1,384	*	74 (5.35)
CTBG 107002, Vanderburgh County, IN	1,186	58 (4.89)	*
CTBG 107003, Vanderburgh County, IN	2,537	244 (9.62)	65 (2.56)

Table A-4. U.S. Census Demographic Data for the EMPO TDM Area Community of Comparison

EMPO TDM AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS [1](%)
CTBG 107004, Vanderburgh County, IN	2,666	464 (17.40)	211 (7.91)
CTBG 107005, Vanderburgh County, IN	972	*	122 (12.55)
CTBG 301001, Warrick County, IN	924	*	78 (8.44)
CTBG 301002, Warrick County, IN	754	*	130 (17.50)
CTBG 301003, Warrick County, IN	968	*	92 (9.69)
CTBG 301004, Warrick County, IN	922	*	121 (13.12)
CTBG 302001, Warrick County, IN	775	*	55 (7.17)
CTBG 302002, Warrick County, IN	761	*	65 (8.62)
CTBG 302003, Warrick County, IN	608	*	*
CTBG 302004, Warrick County, IN	1,191	*	75 (6.30)
CTBG 303001, Warrick County, IN	3,505	260 (7.42)	80 (2.31)
CTBG 303002, Warrick County, IN	1,509	*	107 (7.20)
CTBG 304001, Warrick County, IN	1,377	*	247 (18.26)
CTBG 304002, Warrick County, IN	646	145 (22.45)	178 (27.55)
CTBG 304003, Warrick County, IN	663	*	232 (34.99)
CTBG 305001, Warrick County, IN	2,417	107 (4.43)	120 (5.07)
CTBG 305002, Warrick County, IN	1,515	73 (4.82)	86 (5.90)
CTBG 305003, Warrick County, IN	2,296	66 (2.87)	99 (4.73)
CTBG 305004, Warrick County, IN	1,160	67 (5.78)	52 (4.48)
CTBG 306001, Warrick County, IN	929	76 (8.18)	123 (13.95)
CTBG 306002, Warrick County, IN	1,449	*	311 (21.46)
CTBG 306003, Warrick County, IN	1,591	255 (16.03)	315 (19.80)
CTBG 306004, Warrick County, IN	315	*	*
CTBG 306005, Warrick County, IN	711	54 (7.59)	54 (8.54)
CTBG 306006, Warrick County, IN	504	*	*
CTBG 306007, Warrick County, IN	851	*	305 (35.84)
CTBG 307021, Warrick County, IN	2,947	486 (16.49)	*
CTBG 307022, Warrick County, IN	2,765	349 (12.62)	*
CTBG 307023, Warrick County, IN	918	*	194 (24.28)
CTBG 307024, Warrick County, IN	776	*	74 (9.54)
CTBG 307031, Warrick County, IN	535	*	59 (11.03)
CTBG 307032, Warrick County, IN	898	86 (9.58)	*
CTBG 307033, Warrick County, IN	2,514	96 (3.82)	659 (26.60)
CTBG 307034, Warrick County, IN	1,799	221 (12.28)	276 (15.34)
CTBG 307041, Warrick County, IN	2,382	282 (11.84)	434 (18.42)
CTBG 307042, Warrick County, IN	2,295	248 (10.81)	53 (2.31)

Table A-4. U.S. Census Demographic Data for the EMPO TDM Area Community of Comparison

EMPO TDM AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS [1](%)
CTBG 307051, Warrick County, IN	1,243	*	261 (21.32)
CTBG 307052, Warrick County, IN	1,726	155 (8.98)	*
CTBG 307053, Warrick County, IN	2,758	116 (4.21)	*
CTBG 307054, Warrick County, IN	1,937	187 (9.65)	117 (6.04)
CTBG 308001, Warrick County, IN	940	189 (20.11)	201 (24.57)
CTBG 308002, Warrick County, IN	2,229	153 (6.86)	235 (10.54)
CTBG 308003, Warrick County, IN	1,274	*	*
CTBG 308004, Warrick County, IN	953	80 (8.39)	144 (15.11)
CTBG 308005, Warrick County, IN	1,765	97 (5.50)	114 (6.46)
CTBG 201001, Henderson County, KY	1,646	396 (24.06)	575 (34.93)
CTBG 202001, Henderson County, KY	1,591	285 (17.91)	548 (34.44)
CTBG 203001, Henderson County, KY	1,933	709 (36.68)	653 (33.92)
CTBG 204001, Henderson County, KY	1,563	437 (27.96)	600 (38.39)
CTBG 204002, Henderson County, KY	877	350 (39.91)	288 (32.84)
CTBG 205001, Henderson County, KY	1,194	110 (9.21)	342 (28.64)
CTBG 205002, Henderson County, KY	1,258	327 (25.99)	248 (19.71)
CTBG 206011, Henderson County, KY	1,105	328 (29.68)	99 (8.96)
CTBG 206012, Henderson County, KY	800	88 (11.00)	186 (31.58)
CTBG 206013, Henderson County, KY	1,951	77 (3.95)	310 (16.56)
CTBG 206014, Henderson County, KY	1,510	110 (7.28)	204 (13.62)
CTBG 206015, Henderson County, KY	1,387	89 (6.42)	*
CTBG 206021, Henderson County, KY	2,686	275 (10.24)	480 (17.87)
CTBG 206022, Henderson County, KY	2,796	910 (32.55)	816 (38.84)
CTBG 207011, Henderson County, KY	466	*	*
CTBG 207012, Henderson County, KY	2,428	190 (7.83)	290 (11.94)
CTBG 207013, Henderson County, KY	1,334	*	*
CTBG 207014, Henderson County, KY	747	*	419 (56.09)
CTBG 207021, Henderson County, KY	905	*	*
CTBG 207022, Henderson County, KY	1,795	218 (12.14)	222 (12.37)
CTBG 207023, Henderson County, KY	1,600	*	219 (13.69)
CTBG 207024, Henderson County, KY	2,613	128 (4.90)	172 (6.58)
CTBG 208001, Henderson County, KY	1,513	211 (13.95)	219 (14.47)
CTBG 208002, Henderson County, KY	732	99 (13.52)	211 (28.83)
CTBG 208003, Henderson County, KY	1,616	*	125 (7.74)
CTBG 208004, Henderson County, KY	900	*	149 (16.56)
CTBG 209001, Henderson County, KY	1,673	90 (5.38)	172 (10.28)

Table A-4. U.S. Census Demographic Data for the EMPO TDM Area Community of Comparison

EMPO TDM AREA AND CTBGS	TOTAL POPULATION	MINORITIES[1](%)	LOW-INCOME PERSONS [1](%)
CTBG 209002, Henderson County, KY	575	*	89 (15.48)
CTBG 209003, Henderson County, KY	1,286	120 (9.33)	278 (21.65)
CTBG 209004, Henderson County, KY	1,104	*	*
CTBG 209005, Henderson County, KY	1,711	314 (18.35)	413 (24.14)
CTBG 209006, Henderson County, KY	1,101	*	176 (15.99)

Source: DOC 2016

Note: 1. Totals less than 50 persons are not shown due to U.S. Census Bureau privacy guidance.

CTBG = Census Tract Block Group.

Orange Box – Affected Community with EJ Populations ≥ 50%

Yellow Box – Affected Community with EJ Populations ≥ 25% of the COC