

APPENDIX F – SOCIOECONOMIC STUDY

US 68X and US 231X Study Warren County

Socioeconomic Study

DRAFT

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Prepared for
Kentucky Transportation Cabinet (KYTC) – Division of Planning



Prepared by
Kentucky River Area Development District

BARREN RIVER



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Introduction

This report presents an overview of the findings for selected socioeconomic characteristics in the US 68X and US 231X Study. The purpose of this study is to evaluate operational and safety improvements at the Russellville Road (US 68X) intersections with Morgantown Road (US 231X) and University Boulevard (junction and disjunction of US 68X and US 231X) in Warren County. The study will also investigate and evaluate options to widen the railroad underpass on Russellville Road to better accommodate bicycle and pedestrian activities.

The information in this report outlines 2012-2016 American Community Survey (ACS) statistics in and near the project area using tables, charts, and maps. The data presented in this document is intended to highlight areas of concern that will require additional analysis should any project be advanced to future phases. Statistics are provided for minority, elderly, poverty status, limited English proficiency (LEP), and disabled populations for the nation, state, region, county and block groups located within the project area.

This information is intended to aid the Kentucky Transportation Cabinet (KYTC) in making informed and prudent transportation decisions in the project area, especially with regard to the requirements of *Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Poverty status, Populations* (signed February 11, 1994). Executive Order 12898 states:

“...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 policies, and activities on minority populations and poverty status, populations...”

The project study area is located in Warren County near the Western Kentucky University campus which is located in the Bowling Green – Warren County Metropolitan Planning Organization. Warren County is located in the south central part of the state of Kentucky and covers a land area of 548 square miles of which 542 square miles is land and 6.0 square miles is water. According to the 2012-2016 ACS, Warren County has a population of 121,066 persons and the City of Bowling Green has a population of 62,824 persons. The county seat is Bowling Green, and it serves as the major economic center for the county.

Warren County is composed of 24 census tracts. The planning study area is composed of the following Census Tract Block Groups (BG):

- Census Tract 103, Block Group 3
- Census Tract 104, Block Group 1
- Census Tract 109, Block Group 4
- Census Tract 109, Block Group 5
- Census Tract 110.01, Block Group 2

What is Environmental Justice?

The U.S. Department of Transportation (DOT) outlines three primary Environmental Justice Concepts as:

1. To avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority populations and poverty status, populations.
2. To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
3. To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority population and poverty status, populations.

The U.S. DOT order defines minority as:

1. Black (a person having origins in any of the black racial groups of Africa);
2. Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
3. Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or
4. American Indian and Alaskan Native (a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).

A minority population is “any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant geographically dispersed/transient persons...”

Low-income, is defined in U.S. DOT Order (5610.2) as “a person whose median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines.” A low-income, population is “any readily identifiable group of low-income, persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons...”

A disproportionately high and adverse effect on a minority or low-income population means an adverse effect that:

1. Is predominately borne by a minority population and/or low-income population or
2. 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.

Elderly and disabled populations (also used in this analysis) are not specifically recognized under the definition of an Environmental Justice community. However, the U.S. DOT specifically encourages the early examination of potential population of the elderly, children, disabled, and other populations protected by the Title VI of the Civil Rights Act of 1964 and related nondiscrimination statuses.

Limited English proficiency (LEP) is a term used in the United States that refers to a person who is not fluent in the English language, often because it is not their native language. Both LEP and English-language learner (ELL) are terms used by the Office for Civil Rights, a sub-agency of the U.S. Department of Education.

Methodology

The data was collected using the method outlined by the KYTC document “Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies”. The demographics of the affected area should be defined using U.S. Census Bureau data and the percentages for minorities, poverty status, elderly, LEP, and disabled populations should be compared to the Census tracts and block groups, the county as a whole, the entire state and the United States.

The primary source of data for this report is the 2011-2015 US Census Bureau American Community Survey including tables:

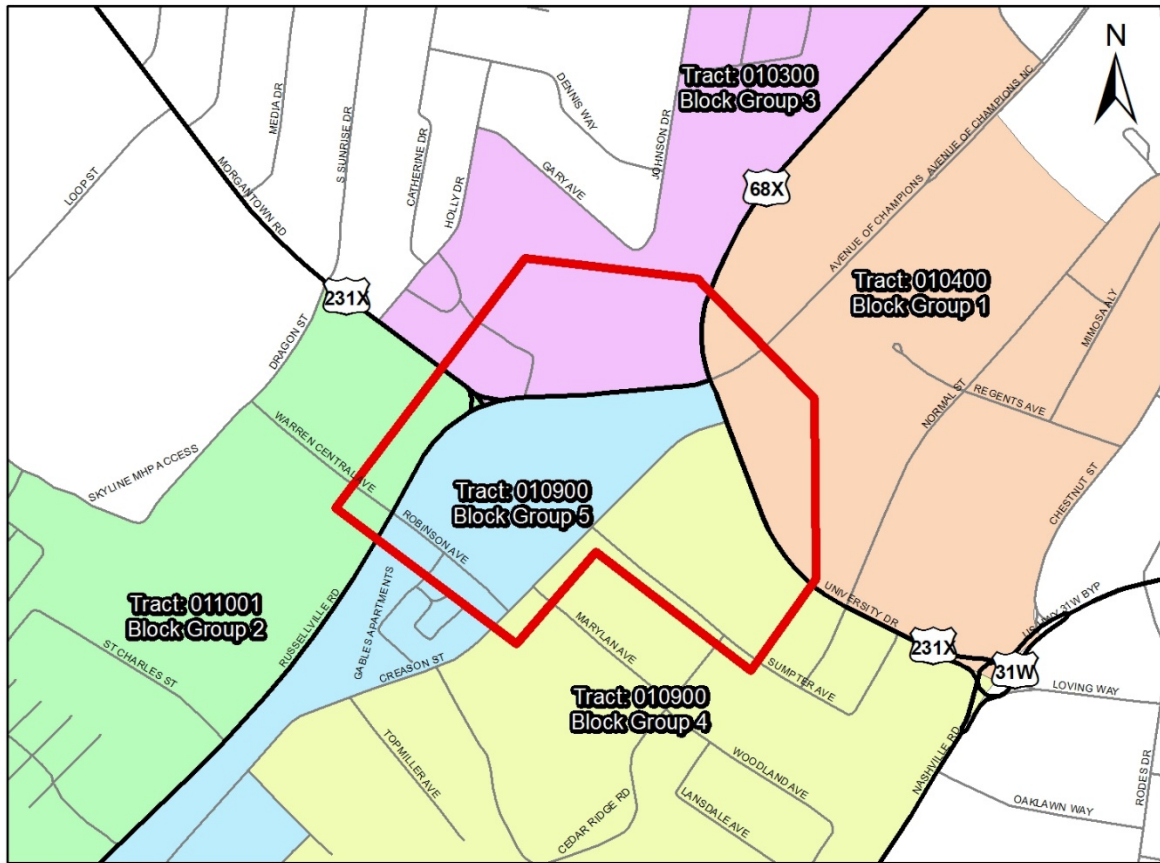
- B01001 - Sex by Age
- B03002 - Hispanic or Latino Origin by Race
- B16004 - Age by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over
- B17021 - Poverty Status of Individuals in the Past 12 Months by Living Arrangement
- C21007 - Age by Veteran Status by Poverty Status in the Past 12 Months by Disability Status

The data presented in this document is intended to highlight areas of concern that will require additional analysis should any project be advanced to future phases.

The Census tables in this report include the total number and percentages for minorities, elderly, low-income, LEP, and disabled population levels for the census tract block groups, county, region, state, and nation. This report uses the population percentages for Warren County as the reference threshold for identifying target populations. The county numbers were selected as the reference threshold because the project is completely within the county limits. The county numbers most likely provide a better snapshot of the overall population characteristics in the study area as opposed to the United States or state percentages.

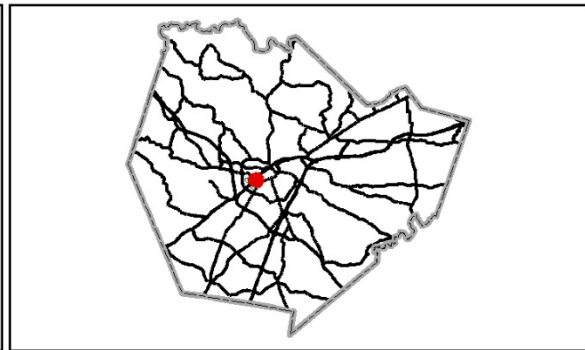
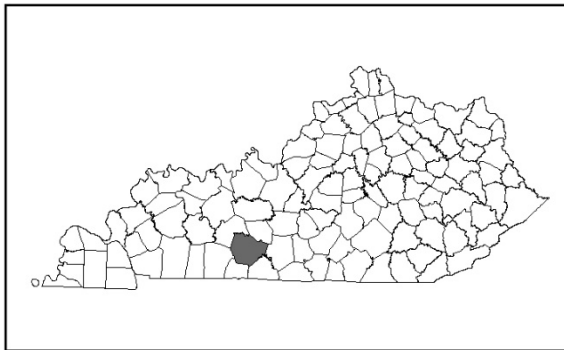
The methodologies used in this planning document are appropriate for identifying areas of concern in small urban areas and potential project corridors. However, during future phases of project development a more detailed and robust analysis would be required for the NEPA documentation when assessing the potential for adverse and disproportionate impacts to poverty status, and minority populations.

Census Block Group Boundaries in Project Area US 68X and US 231X Scoping Study



Legend

- Project Area
- State Highways
- Interstate
- US Highways
- Local Roads



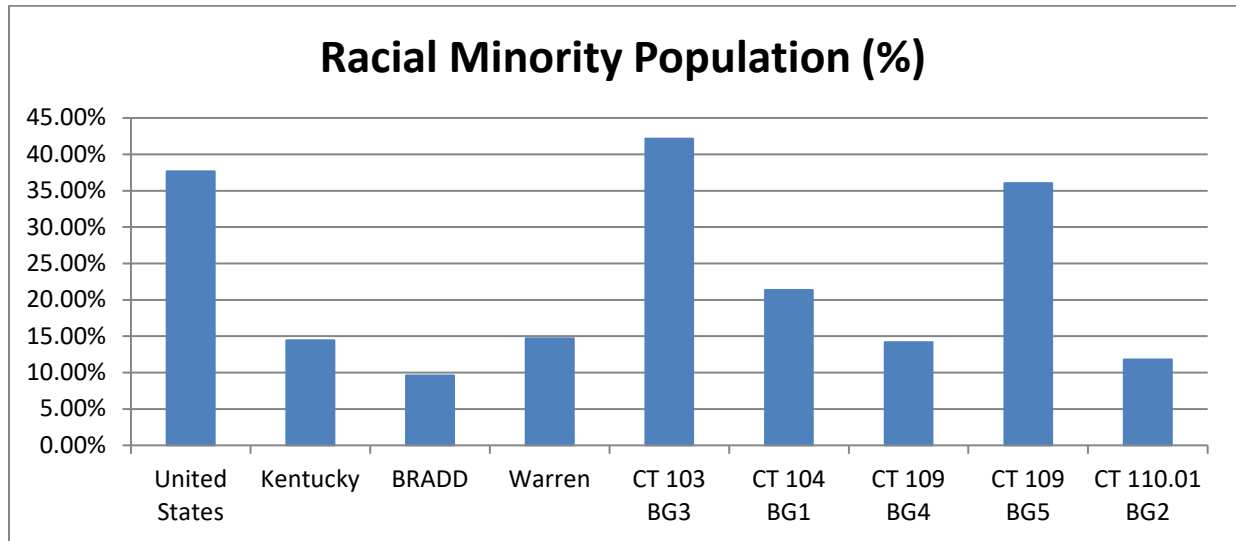
BARREN RIVER



Copyright 2018, Barren River Area Development District (BRADD). This map is created for general planning purposes ONLY. This map is not legally recorded, surveyed, or intended to be used for purposes other than generalized planning. Nor does it show all aspects or features of this particular area which may have changed over the years.

Study Findings

Population by Persons of Racial Minority Origin

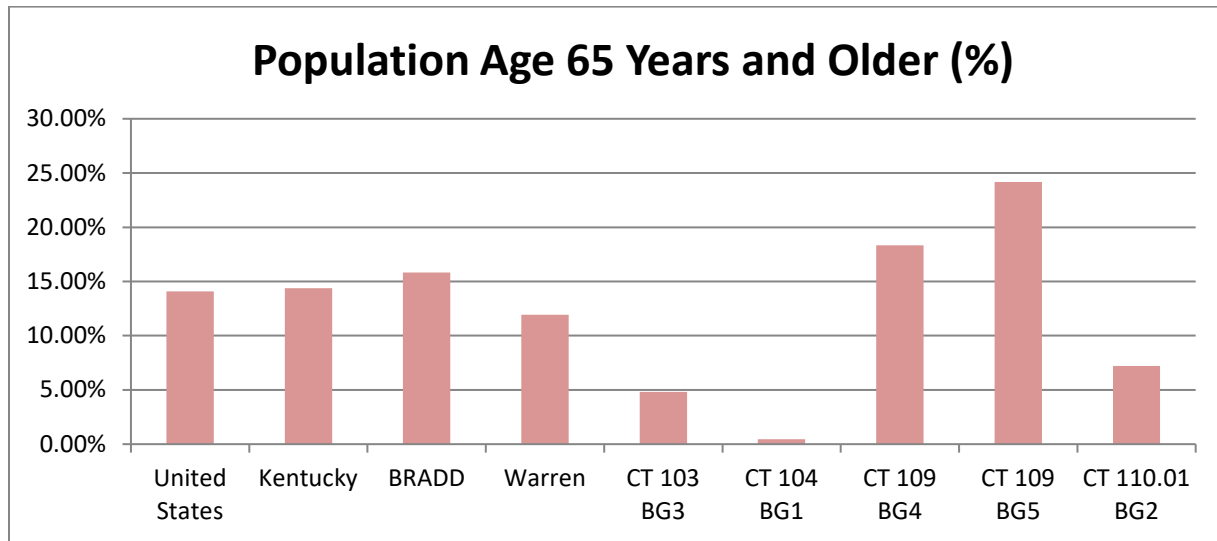


Racial minorities in the United States make up 37.68% of the population, but in Kentucky that percentage drops significantly to just 14.45%. The BRADD Region displays a lower percentage of racial minorities than that of the state with 9.62%, however Warren County is slightly higher than the state average at 14.71%. Block Group (BG) 3 of Census Tract (CT) 103 and Block Group (BG) 5 of Census Tract (CT) 109 has a minority population well above the percentage for the county and state.

	Total Population	Minority Population	Minority Population (%)
United States	316,515,021	119,256,743	37.68%
Kentucky	4,397,353	635,199	14.45%
BRADD	299,024	28,228	9.62%
Warren County	121,066	17,809	14.71%
Census Tract 103 Block Group 3	930	392	42.15%
Census Tract 104 Block Group 1	3929	839	21.35%
Census Tract 109 Block Group 4	1,058	150	14.18%
Census Tract 109 Block Group 5	638	230	36.05%
Census Tract 110.01 Block Group 2	1,533	181	11.81%

Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates Table B03002

Population by Persons Age 65 Years and Older

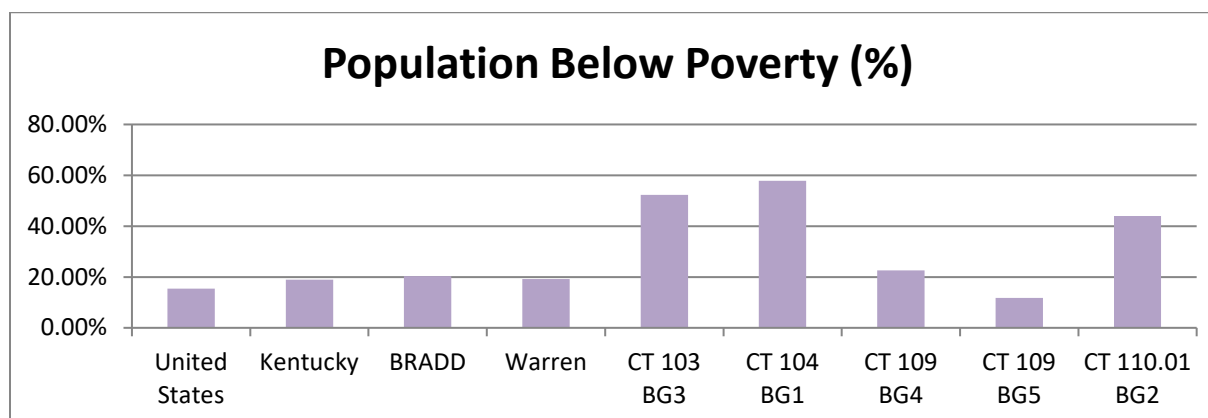


Warren County has a lower percentage (11.94%) of *Persons Age 65 Years and Older* than both the state (14.39%) and the U.S. (14.10%). Block Group (BG) 4 and 5 of Census Tract (CT) 109 has a noticeably higher percentage (18.33% and 24.19%) of elderly persons when compared to the other block group in the study area. Block Group (BG) 1 of Census Tract (CT) 104 has a considerably lower percentage of elderly persons.

	Total Population	Population Age 65 Years and Older	Population Age 65 Years and Older (%)
United States	316,515,021	44,615,477	14.10%
Kentucky	4,397,353	632,975	14.39%
BRADD	275,232	43,582	15.83%
Warren County	121,066	14,451	11.94%
Census Tract 103 Block Group 3	853	41	4.81%
Census Tract 104 Block Group 1	3,929	18	0.46%
Census Tract 109 Block Group 4	1,015	186	18.33%
Census Tract 109 Block Group 5	616	149	24.19%
Census Tract 110.01 Block Group 2	1,441	104	7.22%

Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates Table B01001

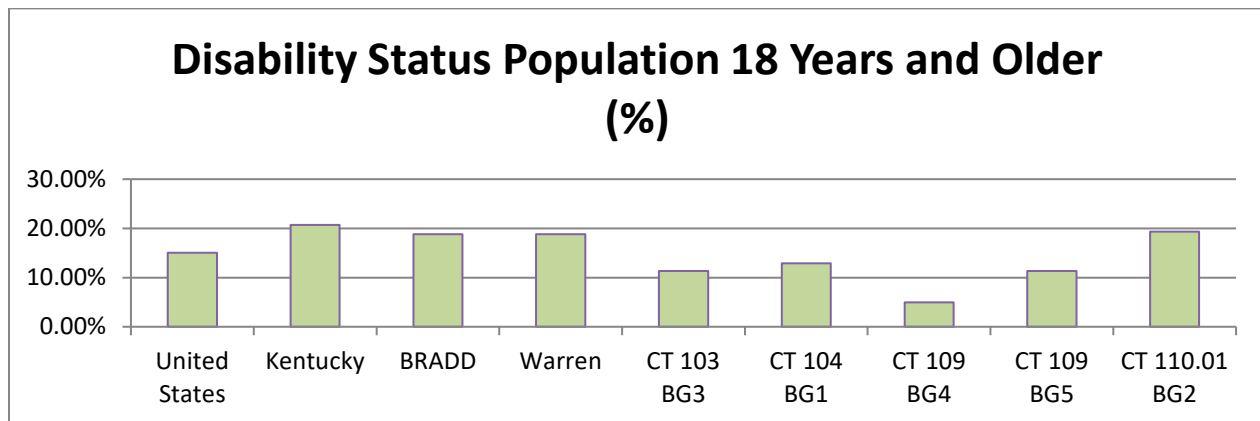
Population by Persons below Poverty Level



The percentage of persons living below the poverty level in Kentucky (18.90%) is higher than that of the United States (15.47%). The Region and Warren County has a higher percentage than that of the nation and state with 20.32% and 19.21%, respectively. Block Group (BG) 3 of Census Tract (CT) 103 (52.30%), Block Group 1 of Census Tract 104 (57.84%) and Block Group (BG) 2 of Census Tract (CT) 110.01 (43.95%) have a poverty level well above the percentage for the United States, state, and county.

	Total Population	Population Below Poverty	Population Below Poverty (%)
United States	308,619,550	47,749,043	15.47%
Kentucky	4,263,217	805,841	18.90%
BRADD	283,022	57,502	20.32%
Warren County	113,699	21,838	19.21%
Census Tract 103 Block Group 3	912	477	52.30%
Census Tract 104 Block Group 1	204	118	57.84%
Census Tract 109 Block Group 4	1058	239	22.59%
Census Tract 109 Block Group 5	589	69	11.71%
Census Tract 110.01 Block Group 2	1504	661	43.95%
Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates Table B17021			

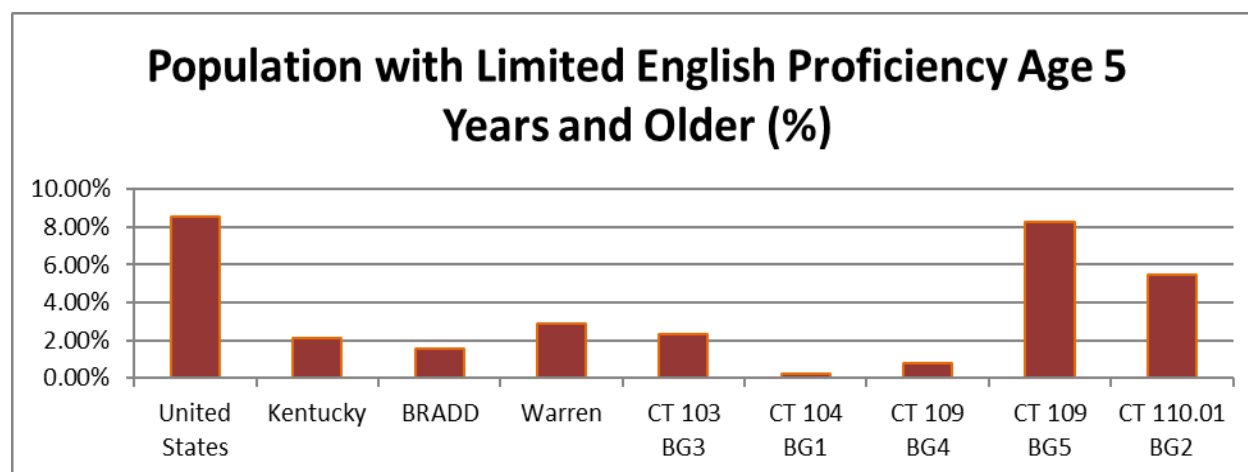
Population by Disability Status



According to 2012-2016 American Community Survey numbers, Kentucky had 20.73% percent of its population age 18 years and older with some type of disability. This is higher than the national percentage (15.08%). Data shows Block Group (BG) 2 of Census Tract (CT) 110.01 with 19.37% of disabled persons which is still below the percentage for the United States and county.

	Total Population Age 16-64 Years	Disability Status Population Age 16-64	Disability Status Population 18 Years and Older
United States	235,378,737	35,484,493	15.08%
Kentucky	3,260,338	675,930	20.73%
BRADD	174,566	32,880	18.84%
Warren County	72,891	13,711	18.81%
Census Tract 103 Block Group 3	706	80	11.33%
Census Tract 104 Block Group 1	186	24	12.90%
Census Tract 109 Block Group 4	702	35	4.99%
Census Tract 109 Block Group 5	336	38	11.31%
Census Tract 110.01 Block Group 2	1,105	214	19.37%
Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates Table C21007			

Population by Persons with Limited English Proficiency



Persons with Limited English Proficiency (LEP) in the United States make up 8.57% of the population, but in Kentucky that percentage decreases to just 2.12%. The BRADD Region has an even lower percentage of persons with LEP than that of the state and United States with 1.52% being reported. Warren County has a slightly higher percentage than that of the state at 2.85%. Block Group (BG) 5 of Census Tract (CT) 109 and Block Group (BG) of Census Tract (CT) 110.01 are the two areas with limited English proficiency in the study area.

	Total Population Age 5 Years and Older	Population with Limited English Proficiency Age 5 Years and Older	Population with Limited English Proficiency Age 5 Years and Older (%)
United States	296,603,003	25,410,756	8.57%
Kentucky	4,120,902	87,159	2.12%
BRADD	275,738	4,198	1.52%
Warren County	113,375	3,234	2.85%
Census Tract 103 Block Group 3	853	20	2.34%
Census Tract 104 Block Group 1	3929	8	0.20%
Census Tract 109 Block Group 4	1015	8	0.79%
Census Tract 109 Block Group 5	616	51	8.28%
Census Tract 110.01 Block Group 2	1441	79	5.48%

Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates Table B16004

Conclusion

Minority populations (42.15%) in Block Group 3 Census Tract 103 and (36.05%) In Block Group 5 of Census Tract 109 are double that of the region and county (9.62% and 14.71%).

Persons age 65 and older (18.33%) in Block Group 4 Census Tract 109 and (24.19%) in Block Group 5 Census Tract 109 are more than the county, region, state and nation.

The populations below the poverty level in three of the five Block Groups in the study area are considerably higher than that of the county, region, state and nation.

Block Group 4 Census Tract 109 persons with a disability (4.99%) is considerably lower than that of the remaining four Block Groups, county, region, state and nation.

Block Group (BG) 5 of Census Tract (CT) 109 and Block Group (BG) of Census Tract (CT) 110.01 are the two areas with a slightly higher limited English proficiency in the study area, county, region, and state. The two Block Groups are still lower than nation.

During future phases of project development a more detailed and robust analysis would be required for the NEPA documentation when assessing the potential for adverse and disproportionate impacts to those with disabilities, poverty status, and minority populations.

Appendix: Methodology from KYTC

Updated: September 2014

Methodology for Assessing Underserved Populations including Environmental Justice, Title VI, Age and Disability considerations in conjunction with KYTC Planning Studies

Cover Page

Title: Insert specific study type/area

Subtitle: Socioeconomic Study

Date:

Author:

Analysis

Environmental Justice (EJ) refers to the fair treatment of all people regardless of race, color, national origin or income. Specifically, agencies must demonstrate meaningful involvement with the above stated groups with respect to development, implementation and enforcement of environmental laws, regulations and policies. EJ analysis is undertaken for any study that may result in impacts on a minority and/or low income population that has a federal nexus (funding or approval).

The methodologies used in this planning document are appropriate for identifying possible areas of concern in small urban areas and potential project corridors. However, during future phases of project development a more detailed and robust analysis would be required for the NEPA documentation when assessing the potential for adverse and disproportionate impacts to low-income and minority populations.

Additionally KYTC works to identify potential populations of the Elderly, Disabled, Limited English Proficiency and Limited Transportation Options that may be impacted in or near the Affected Community (AC) should highway improvements take place in the future.

Examples of these studies include, but are not limited to:

- Corridor Studies
- Traffic Studies
- Small Urban Area Studies
- Feasibility Studies
- Interchange Justification Studies
- Interchange Modification Reports

(AC) with potential EJ impacts are determined by locating populations of minority, low-income, disabled or elderly and calculating their percentage in the area relative to a reference community of comparison (COC).

Communities of comparison:

- The county percentage
- Kentucky percentage
- Block groups within reasonable proximity of the study area

The demographics of the study area should be defined using block group data accessed via the American Community Survey 5 year data. KYTC will work in conjunction with the State Data Center to provide pertinent spatial data on a yearly basis for the following, as the update schedule allows:

- Minority
- Low-income
- Elderly (65+)
- Disabled populations
- Limited English Proficiency