

KY 32 Corridor Study

Item No. 9-8812

Nicholas County

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Socioeconomic Study

October 1, 2024

Prepared for

Kentucky Transportation Cabinet (KYTC) – Division of Planning



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This document was prepared in cooperation with the Kentucky Transportation Cabinet.

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## **Introduction**

This report presents an overview of the findings for selected socioeconomic characteristics for the KY 32 Corridor Study, Nicholas County. The purpose of this study is to analyze existing conditions and proposed future traffic to identify options for addressing geometric deficiencies and improving safety along KY 32. Additional tasks include refining the study goals and objectives, providing cost estimates for improvement options, quantifying benefits of build scenarios, conducting stakeholder involvement activities, and delivering a technical report.

The information in this report outlines 2022: 5-Year Estimates 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 Group 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 regarding 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 in Nicholas County along the KY 32 Corridor and was defined by KYTC. There are five Block Group in this study area.

## **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 as a person having origins in any of the black racial groups of Africa.
2. Hispanic as a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
3. Asian American as 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 as 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.

## Definitions

The U.S. Census Bureau defines geographical units as:

**Block Group as BG** – A statistical subdivision of a CT. A BG consists of all tabulation blocks whose numbers begin with the same digit in a CT. BGs generally contain between 300 and 3,000 people, with an optimum size of 1,500 people.

**Census Tract as CT** – A small, relatively permanent statistical subdivision of a county or statistically equivalent entity delineated for data presentation purposes by a local group of census data users or the geographic staff of a regional census center in accordance with Census Bureau guidelines. CTs generally contain between 1,000 and 8,000 people. CT boundaries are delineated with the intention of being stable over many decades, so they generally follow relatively permanent visible features. They may also follow governmental unit boundaries and other invisible features in some instances; the boundary of a state or county is always a census tract boundary.

## 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 Group, the Commonwealth of Kentucky, and the United States.

The primary source of data for this report is the US Census 2022 American Community Survey 5 Year Data Table including tables:

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

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 nation, state, region, and block group/census tracts. This report uses the Socio-Economic percentages by population for the Commonwealth of Kentucky as the reference threshold for identifying target populations. Though the United States and the Bluegrass Area Development District measures will be included for a more thorough approach to the data, Kentucky will serve as the sole comparative threshold for this study.

Three Block Group and Census Tracts were included in the study area.

The full list of Block Group in the study area is as follows:

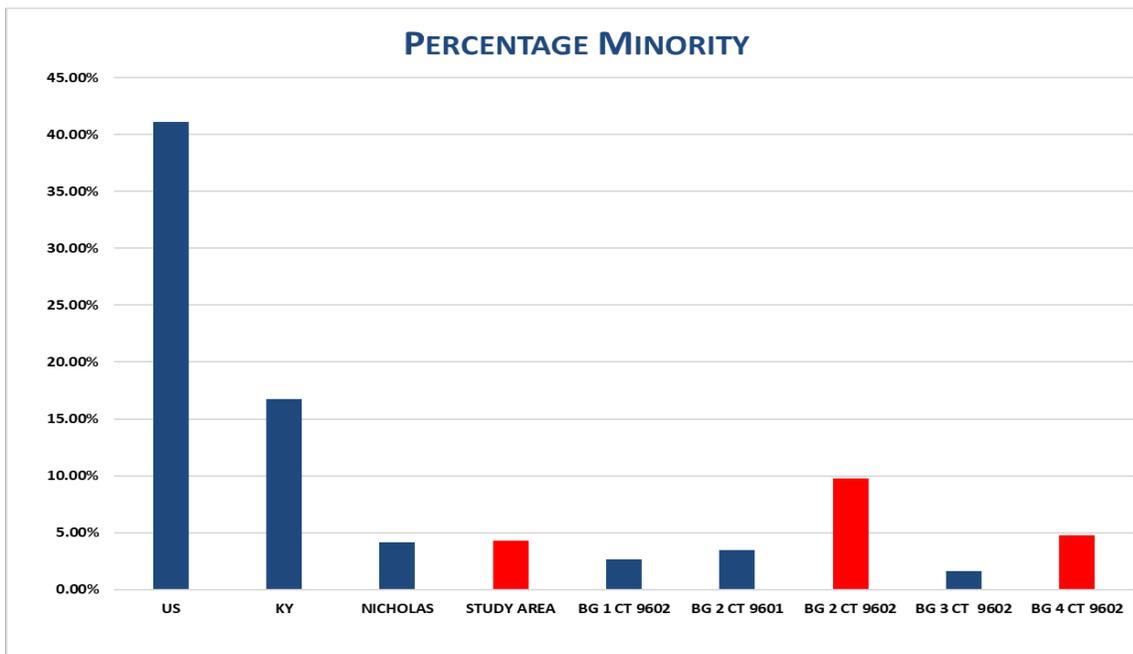
<b>Nicholas County, Kentucky</b>		
<b>Block Group</b>	<b>Census Tract</b>	<b>Abbreviation</b>
1	9602	BG 1 CT 9602
2	9601	BG 2 CT 9601
2	9602	BG 2 CT 9602
3	9602	BG 3 CT 9602
4	9602	BG 4 CT 9602

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 National Environmental Policy Act (NEPA) documentation when assessing the potential for adverse and disproportionate impacts to those with disabilities, poverty status, and minority populations.



### Populations by Persons of Racial Minority Origin

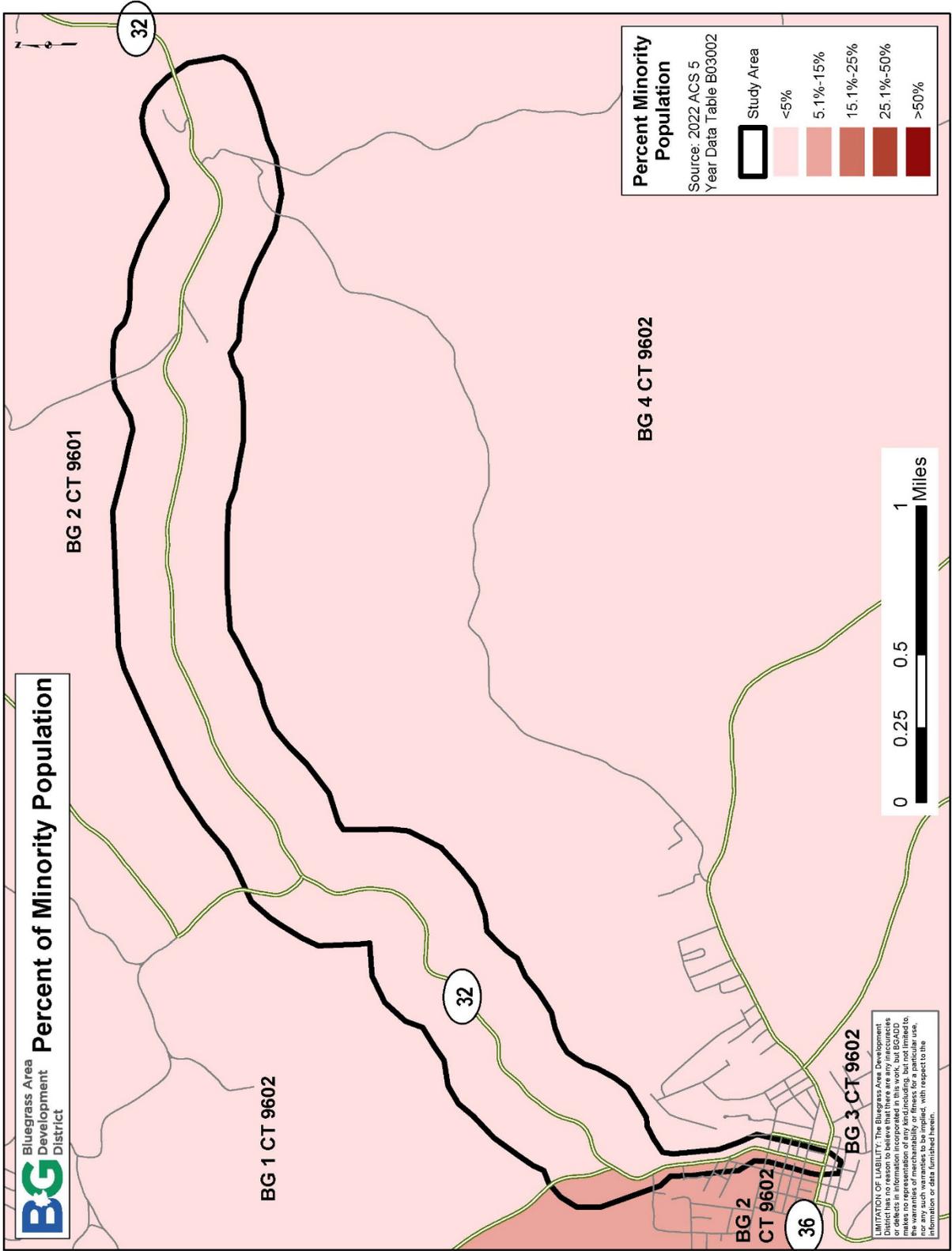
The Study Area overall displays a much lower percentage of racial minorities, at **4.69%**, than that of the United States at 41.14 %, and Kentucky at 16.75 % but a higher percentage than Nicholas County at 4.18 %. At **9.76 %** BG 2 CT 9602 had a much higher percentage than Nicholas County. BG 4 CT 9602 has a higher percentage than the county at **4.79%**. It is noteworthy that the census shows a total of 318 people of racial minority origin living in Nicholas County with all but one living in the study area. The United States, Kentucky, Nicholas County, the study area, and Block Group Census Tracts are represented in the chart, table, and map below. Those with higher percentages than the county are called out in red.



Source: US Census 2022 ACS 5 Year Data Table B03002

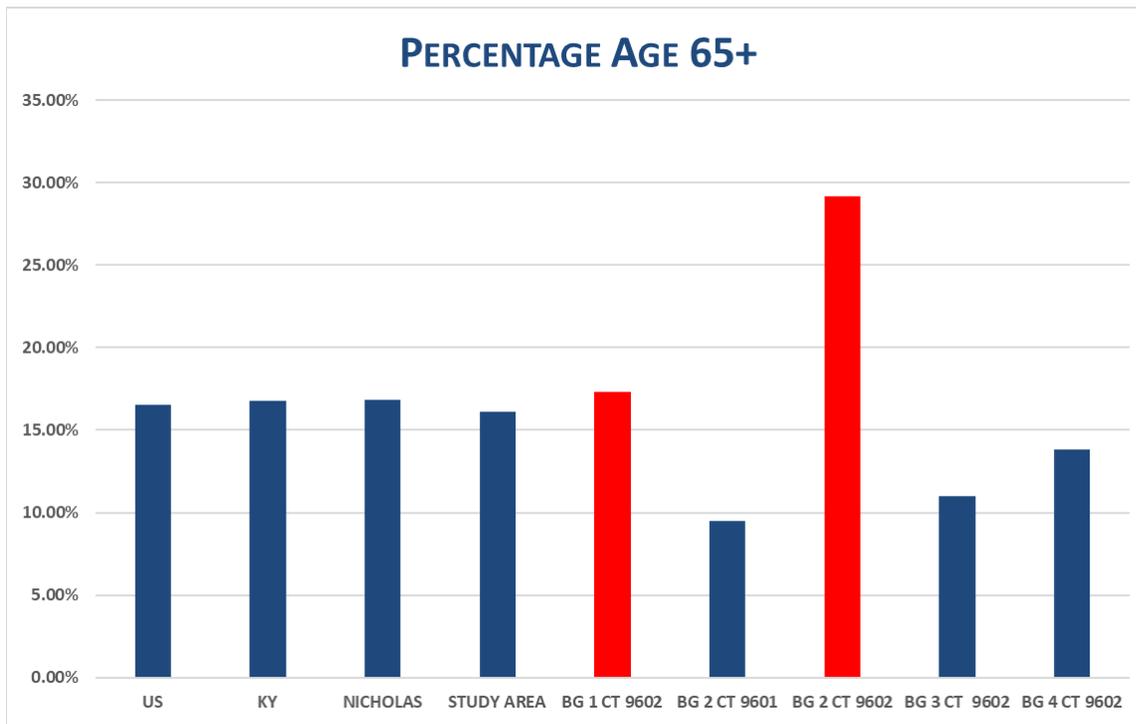
LOCATION	TOTAL	MINORITY POPULATION	% MINORITY
US	331,097,593	136,211,129	41.14%
KY	4,502,935	754,278	16.75%
NICHOLAS	7,613	318	4.18%
STUDY AREA	6,756	317	4.69%
BG 1 CT 9602	1,046	28	2.68%
BG 2 CT 9601	1,189	41	3.45%
BG 2 CT 9602	1,291	126	9.76%
BG 3 CT 9602	1,038	17	1.64%
BG 4 CT 9602	2,192	105	4.79%

Source: US Census 2022 ACS 5 Year Data Table B03002 - Hispanic or Latino Origin by Race



## Populations of Adult Over 65 years of Age

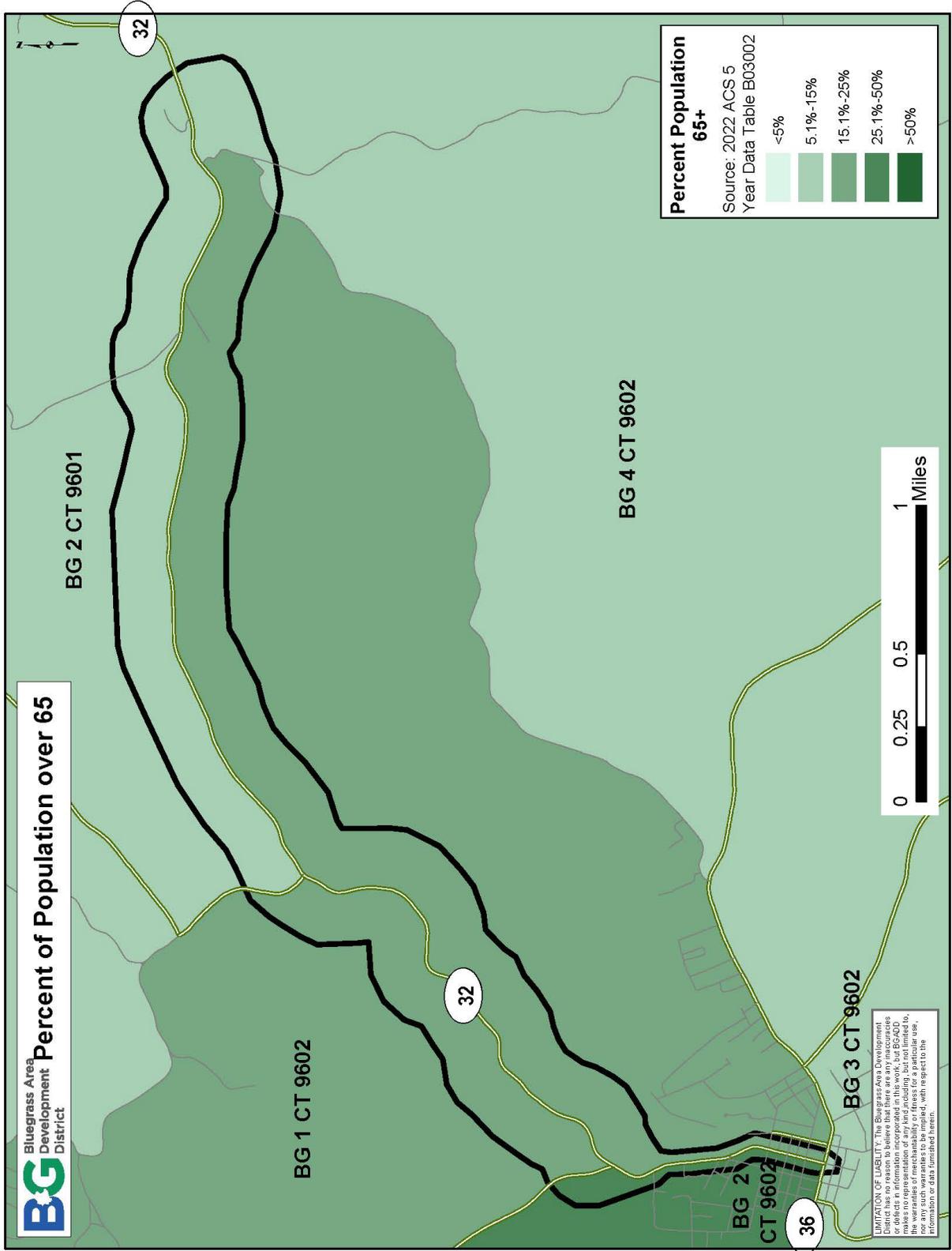
The Study Area overall displays a lower percentage of adults over 65 years old, at 16.10%, than that of the United States at 16.53%, and Kentucky at 16.80%. Nicholas County and has a slightly higher percentage than the state at 16.85%. Two of the five Block Group Census Tracts did have a higher percentage of adults over 65 than the county. BG 2 CT 9602 has **29.20 %** and BG 1 CT 9602 has **17.30%**. The United States, Kentucky, Nicholas County, the study area, and Block Group Census Tracts are represented in the chart, table, and map below. Those with higher percentages than the county are called out in red.



Source: US Census 2022 ACS 5 Year Data Table B01001

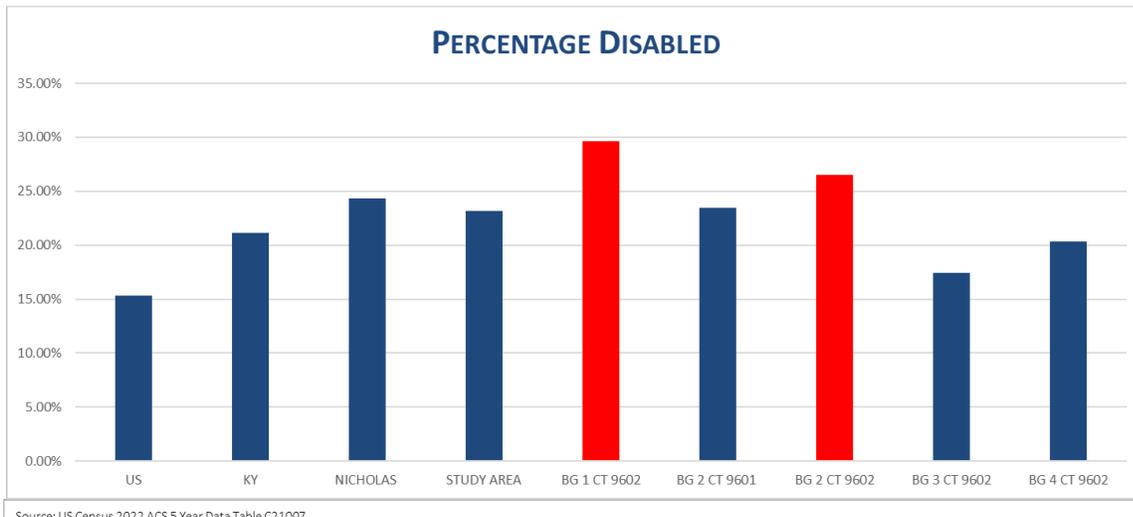
LOCATION	TOTAL POPULATION	TOTAL BOTH SEXES 65+	% 65+
US	331,097,593	54,737,648	16.53%
KY	4,502,935	756,439	16.80%
NICHOLAS	7,613	1,283	16.85%
STUDY AREA	6,756	1,088	16.10%
BG 1 CT 9602	1,046	181	17.30%
BG 2 CT 9601	1,189	113	9.50%
BG 2 CT 9602	1,291	377	29.20%
BG 3 CT 9602	1038	114	10.98%
BG 4 CT 9602	2,192	303	13.82%

Source: US Census 2022 ACS 5 Year Data Table B01001



## Populations by Adults with a Disability

The Study Area has a higher percentage of adult individuals with a disability, at 23.16%, than that of the United States at 15.36%, and Kentucky at 21.14%. BG 1 CT 9602 at **29.60%** and BG 2 CT 9602 at **26.52%** both had a higher percentage of adults with disability than Nicholas County at 24.34%. The United States, Kentucky, Nicholas County, the study area, and Block Group Census Tracts are represented in the chart, table, and map below. Those with higher percentages than the county are called out in red.



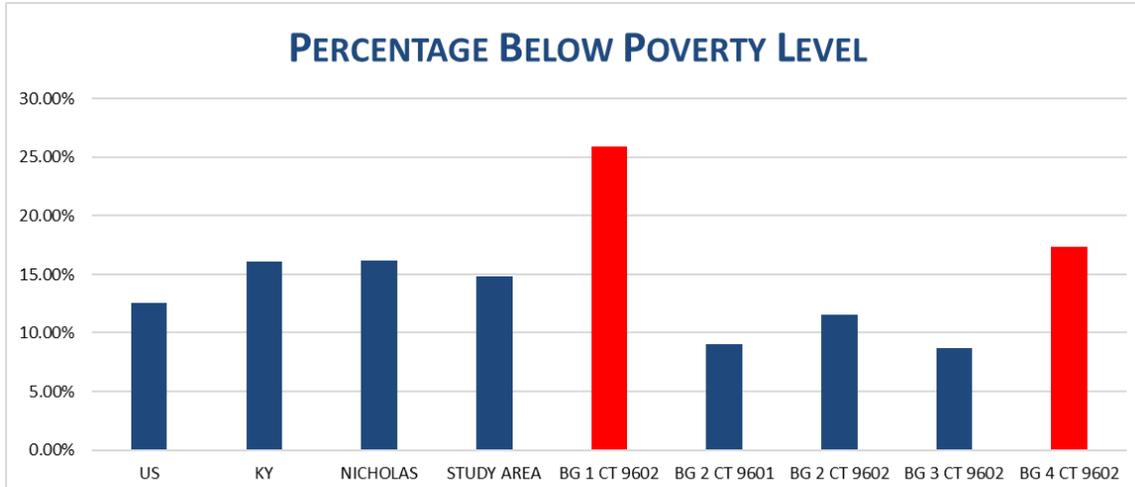
LOCATION	TOTAL POPULATION 18+	DISABLED	% DISABLED
US	250,304,257	38,455,173	15.36%
KY	3,375,071	713,449	21.14%
NICHOLAS	5,694	1,386	24.34%
STUDY AREA	4,991	1,156	23.16%
BG 1 CT 9602	777	230	29.60%
BG 2 CT 9601	852	200	23.47%
BG 2 CT 9602	1033	274	26.52%
BG 3 CT 9602	751	131	17.44%
BG 4 CT 9602	1,578	321	20.34%

Source: US Census 2022 ACS 5 Year Data Table C21007



## Populations Under the Poverty Line

The Study Area overall displays a higher percentage of residents under the poverty line, at 14.83%, than that of the United States at 12.53%, but lower than Kentucky at 16.12%. Nicholas County has 16.18% of its population under the poverty line. BG 1 CT 9602 at **25.91%** and BG 4 CT 9602 at **17.38%** have higher percentages than Nicholas County. The United States, Kentucky, Nicholas County, the study area, and Block Group Census Tracts are represented in the chart, table, and map below. Those with higher percentages than the county are called out in red.



Source: US Census 2022 ACS 5 Year Data Table B17021

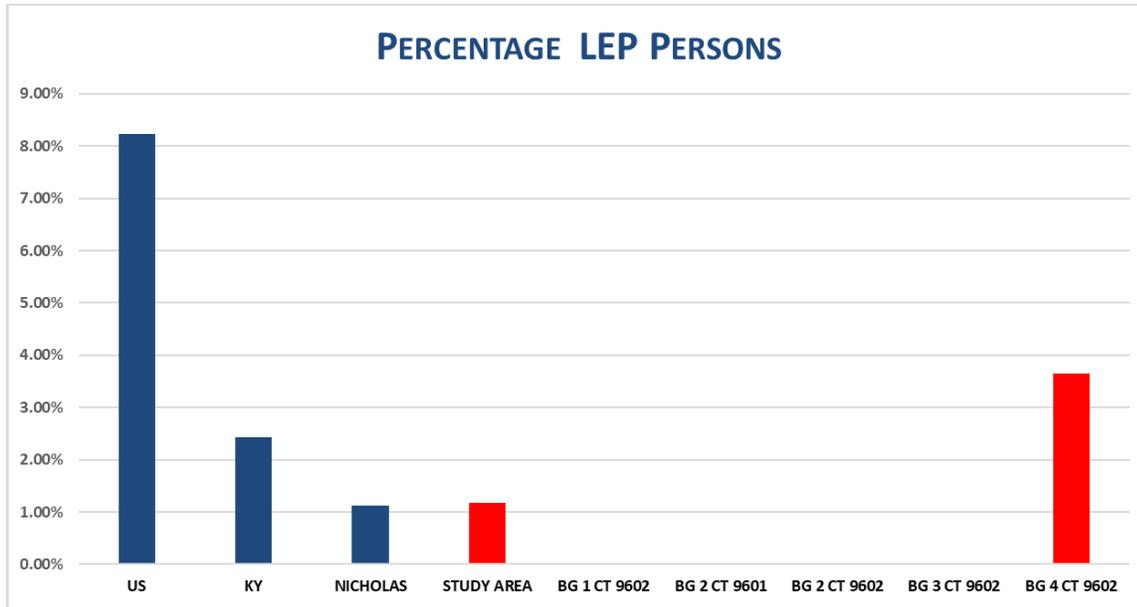
LOCATION	TOTAL	BELOW POVERTY LEVEL	% POVERTY
US	323,275,448	40,521,584	12.53%
KY	4,372,749	704,758	16.12%
NICHOLAS	7,507	1,215	16.18%
STUDY AREA	6,650	986	14.83%
BG 1 CT 9602	1,046	271	25.91%
BG 2 CT 9601	1,189	107	9.00%
BG 2 CT 9602	1,185	137	11.56%
BG 3 CT 9602	1,038	90	8.67%
BG 4 CT 9602	2,192	381	17.38%

Source: US Census 2022 ACS 5 Year Data Table B17021



## Populations by Persons over 5 Years of Age with Limited English Proficiency

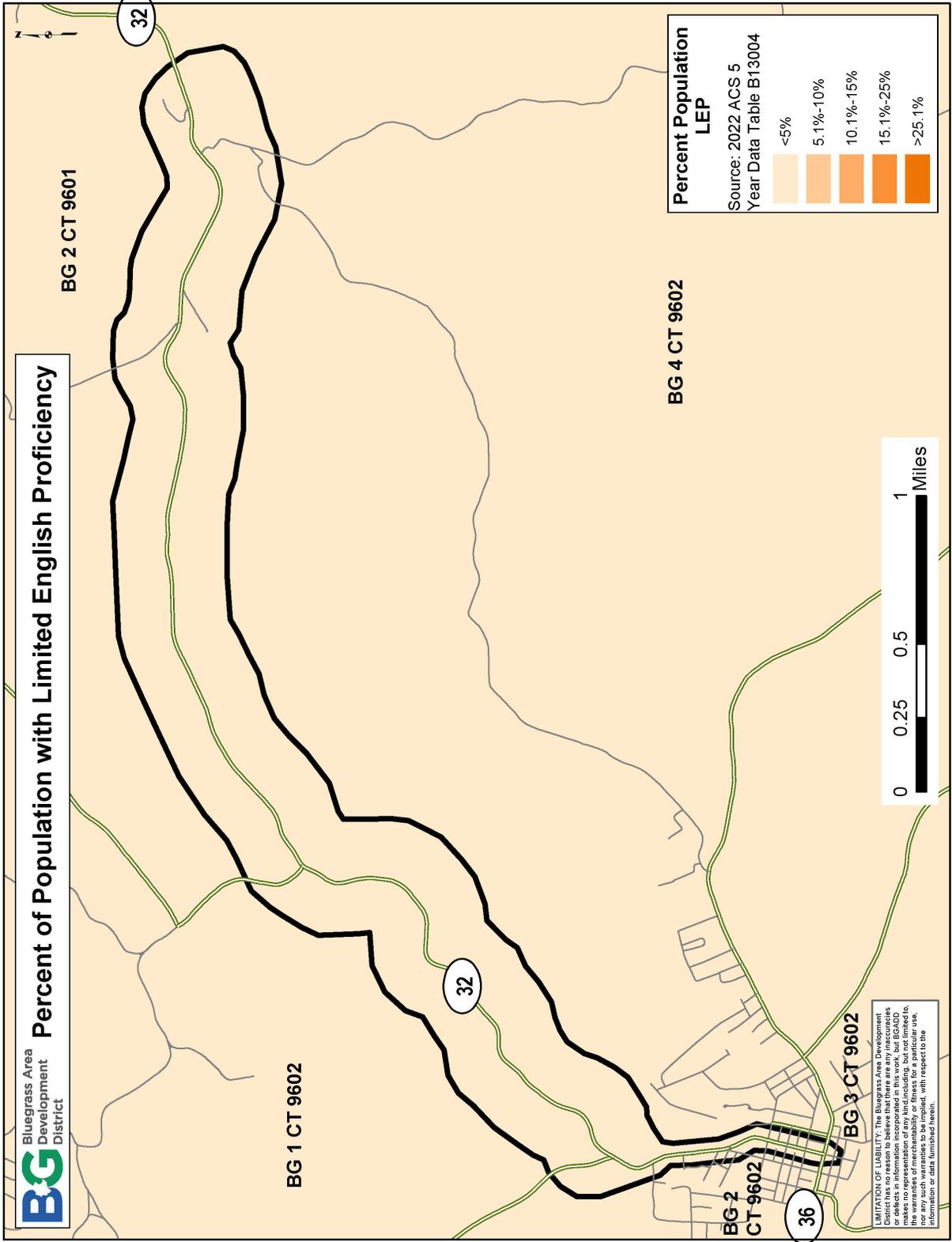
The Study Area overall displays a lower percentage of persons over 5 years old with Limited English Proficiency, at 1.18%, than that of the United States at 8.24%, and Kentucky at 2.24%. Nicholas County has 1.13% of the population over age 5 with limited English proficiency. All the LEP individuals in the study area are residents of BG 4 CT 9602 **3.65%** which accounts for 75 of the 81 LEP residents in Nicholas County. The United States, Kentucky, Nicholas County, the study area, and Block Group Census Tracts are represented in the chart, table and map below. Those with higher percentages than the county are called out in red.



Source: US Census 2022 ACS 5 Year Data Table B16004

LOCATION	TOTAL POPULATION >5	TOTAL LEP PERSONS	% LEP PERSONS
US	312,092,668	25,704,846	8.24%
KY	4,236,382	102,685	2.42%
NICHOLAS	7,173	81	1.13%
STUDY AREA	6,348	75	1.18%
BG 1 CT 9602	953	0	0.00%
BG 2 CT 9601	1,123	0	0.00%
BG 2 CT 9602	1,249	0	0.00%
BG 3 CT 9602	966	0	0.00%
BG 4 CT 9602	2,057	75	3.65%

Source: US Census 2022 ACS 5 Year Data Table B16004



## **Conclusion**

### **Populations by Persons of Racial Minority Origin**

The study area (4.69%), BG 2 CT 9602 (9.76%), and BG 4 CT 9602 (4.79%) each have a higher percentage than Nicholas County at 4.18 %. However, all areas fall well below numbers for the nation and state.

### **Populations of Adult Over 65 years of Age**

Two of the five Block Group Census Tracts; BG 2 CT 9602 (29.20%), and BG 1 CT 9602 (17.30%) fall above all jurisdictions included in this study. The Study Area has lower percentage of adults over 65 years old, at 16.10%, than that of the United States at 16.53%, when compared Nicholas County (16.85%).

### **Populations by Adults with a Disability**

This demographic is the most noteworthy of all included in this study. Except for BG 3 CT 9602 (17.44%) more than one out of five adults in Nicholas County, the study area and all other Block Group Census Tracts are disabled.

### **Populations Under the Poverty Line**

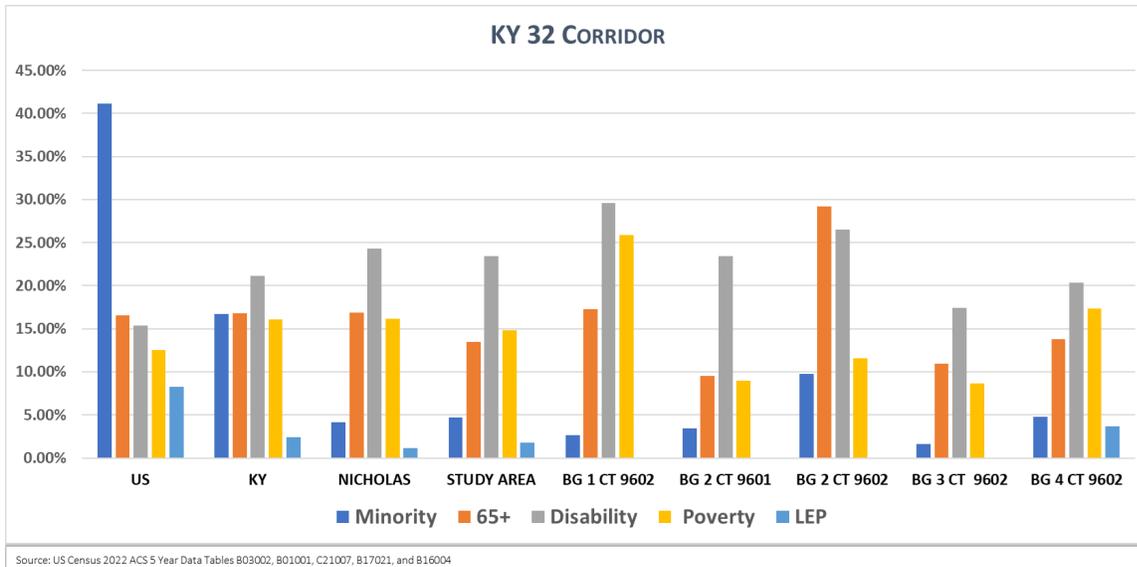
Two of the Block Group Census Tracts BG 1 CT 9602 (25.91%) and BG 4 CT 9602 (17.38%) have higher percentages than Nicholas County (16.18%), the United States and Kentucky.

### **Populations by Persons over 5 Years of Age with Limited English Proficiency**

All the LEP individuals in the study area are residents of BG 4 CT 9602 (3.65%) which accounts for 75 of the 81 LEP residents in Nicholas County.

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 and poverty status.

The chart and table below provide a synopsis of this entire study with the higher than Nicholas County's called out in red in the table.



LOCATION	POPULATION	MINORITY	65+	DISABILTY	POVERTY	LEP
US	331,097,593	41.14%	16.53%	15.36%	12.53%	8.24%
KY	4,502,935	16.75%	16.80%	21.14%	16.12%	2.42%
NICHOLAS	7,613	4.18%	16.85%	24.34%	16.18%	1.13%
STUDY AREA	6,756	<b>4.69%</b>	16.10%	23.16%	14.83%	<b>1.81%</b>
BG 1 CT 9602	1,046	2.68%	<b>17.30%</b>	<b>29.60%</b>	<b>25.91%</b>	0.00%
BG 2 CT 9601	1,189	3.45%	9.50%	23.47%	9.00%	0.00%
BG 2 CT 9602	1,291	<b>9.76%</b>	<b>29.20%</b>	<b>26.52%</b>	11.56%	0.00%
BG 3 CT 9602	1,038	1.64%	10.98%	17.44%	8.67%	0.00%
BG 4 CT 9602	2,192	<b>4.79%</b>	13.82%	20.34%	<b>17.38%</b>	<b>3.65%</b>

Source: US Census 2022 ACS 5 Year Data Tables B03002, B01001, C21007, B17021, and B16004

## Appendix: Methodology from KYTC

Updated: November 2019

## **METHODOLOGY FOR ASSESSING UNDERSERVED POPULATIONS INCLUDING ENVIRONMENTAL JUSTICE, TITLE VI, AGE AND DISABILITY IN PLANNING STUDIES**

### **Analysis**

Environmental Justice 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. Environmental Justice analysis is undertaken for any study that may result in impacts on a minority and/or low-income population that has a federal nexus at funding or approval).

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

Affected Community with potential environmental justice 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:

- United States
- Kentucky percentage
- ADD Region
- Block Group 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
- Disabled populations
- Limited English Proficiency