# KY 52 Corridor Study Boyle and Garrard Counties

# Socioeconomic Study

## **FINAL**

# April 2021

## Prepared for

Kentucky Transportation Cabinet (KYTC) – Division of Planning



## Prepared By

Bluegrass Area Development District



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 in the KY 52 Corridor Study. The purpose of this study is to provide improved access to Danville from Lancaster and vice versa. Currently, the primary route between the two cities has known issues regarding safety, such as: poor horizontal and vertical alignments, narrow roadways, lack of shoulders and poor sight distance.

The information in this report outlines 2015-2019 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 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 both Boyle and Garrard Counties and was defined by KYTC as the KY-52 corridor. There are five Block Groups in this study area, however, of those, only four have residential populations within the study are. These four will be the focus of this study.

#### 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.

#### **Definitions**

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

Census Tract (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.

**Block Group (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.

## 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 2015-2019 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 Socio-Economic percentages by population for the Bluegrass Area Development District (BGADD) as the reference threshold for identifying target populations. Though Federal, State and County measures will be included for a more thorough approach to the data, the Bluegrass ADD region will serve as the sole comparative threshold for this study due to the regionality of the corridor. Maps included will provide the average of the BGADD regions socio-economic data as a median threshold for easier comparison of block group data.

The full list of block groups with populations in the study area are as follows:

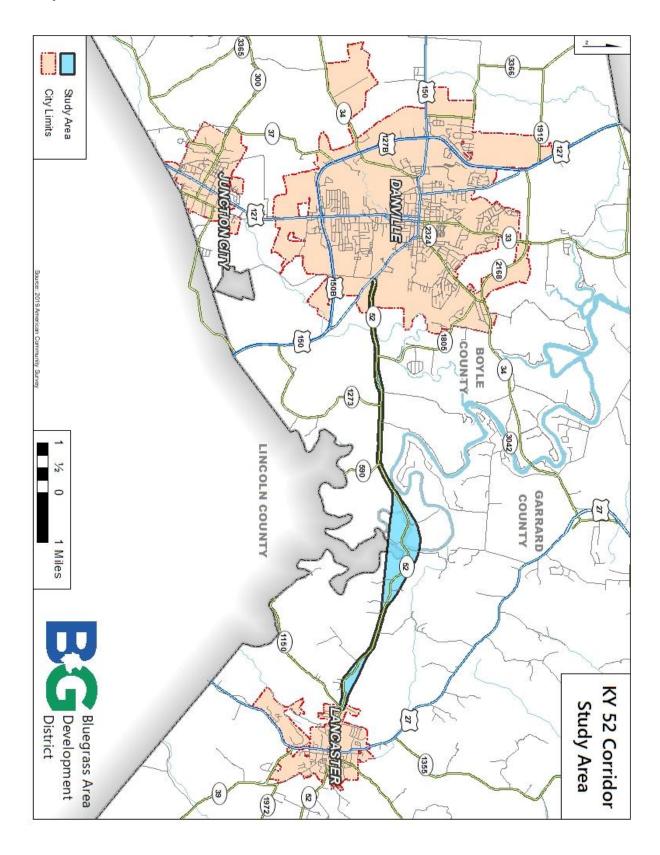
Boyle County, Kentucky	Garrard County, Kentucky
Block Group 1; Census Tract 9302 (1-9302)	Block Group 4; Census Tract 9702 (4-9702)
Block Group 2; Census Tract 9302 (2-9302)	Block Group 3; Census Tract 9703 (3-9703)

Throughout this document, block groups will be referred to by their block group number followed by their census tract number for easier identification and succinctness. These abbreviations are listed above in the table in parenthesis.

Block Group 2; Census Tract 9303 was also identified as being in the study area, however the small portion of this block group that fell under the study area did not have any residential populations and has been left out of the study analysis to avoid data misinterpretation.

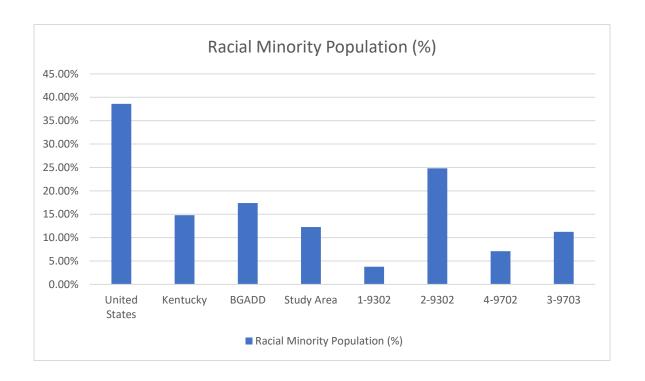
The methodologies used in this planning document are appropriate for identifying areas of concern in small urban areas and potential project corridors. However, during future phases of project development, a more detailed and robust analysis would be required for the National Environmental Policy Act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

# **Study Area**



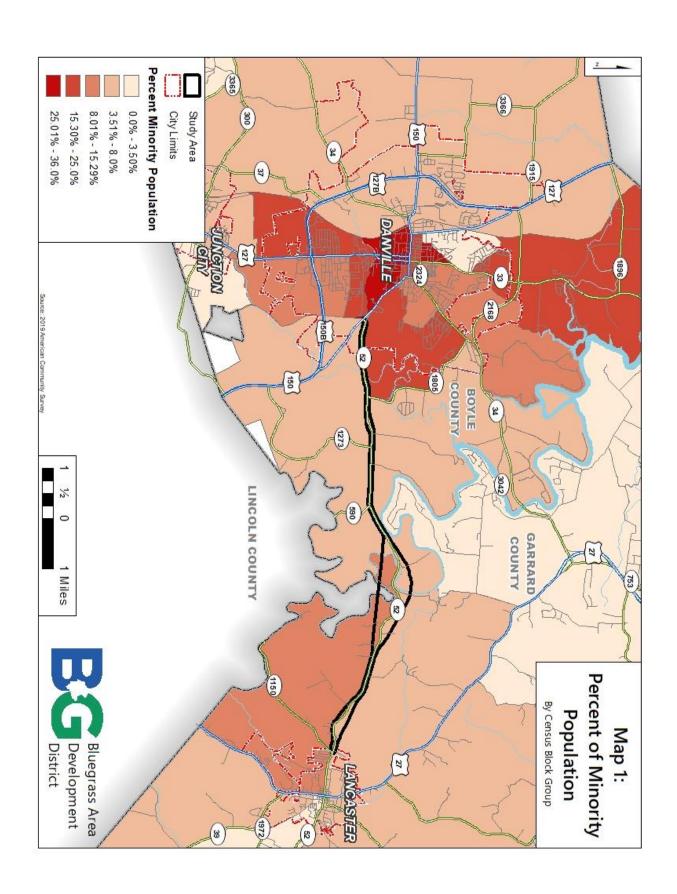
**Study Findings** 

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

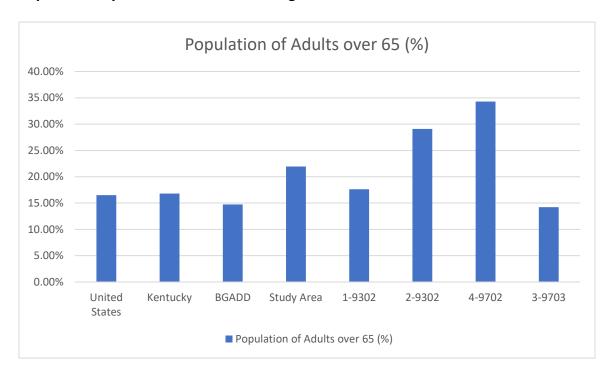


The Study Area overall displays lower percentage of racial minorities, at 12.27%, than that of the Bluegrass ADD, at 15.29%. Block Group 2, Census Tract 9302 is the only block group in the study which is higher than the BGADD percentage at 24.81%. These block groups are represented in both the chart and maps below.

	Total	Minority	Minority
	Population	Population	Population (%)
United States	328,239,523	130,967,570	39.90%
Kentucky	4,467,673	705,004	15.90%
Bluegrass ADD	820,275	125,450	15.29%
Study Area	5835	716	12.27%
<b>Boyle County</b>	29,972	3,743	12.49%
1-9302	1720	65	3.78%
2-9302	1616	401	24.81%
<b>Garrard County</b>	17,445	710	4.07%
4-9702	761	54	7.10%
3-9703	1738	196	11.28%

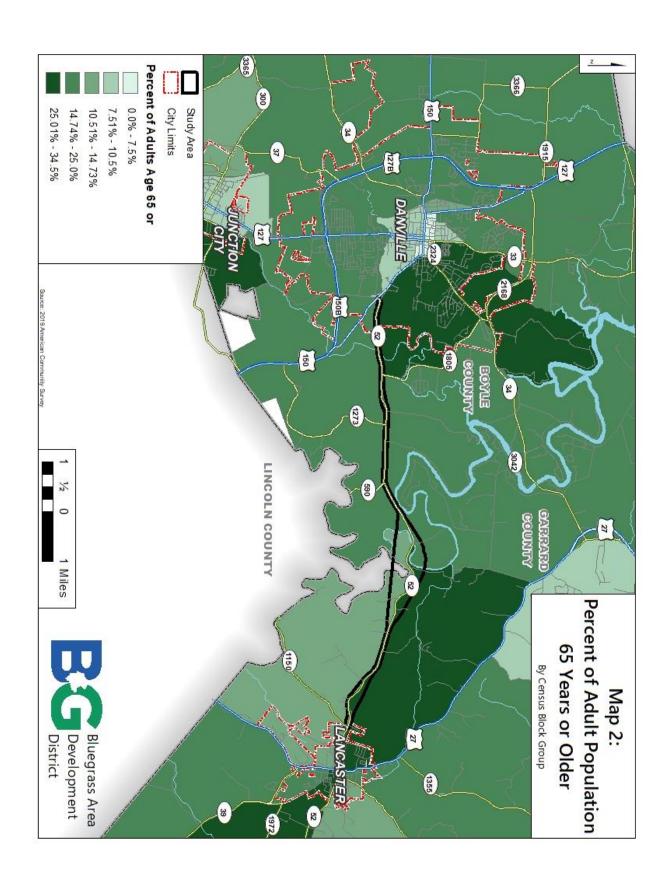


## Populations by Adults over 65 Years of Age

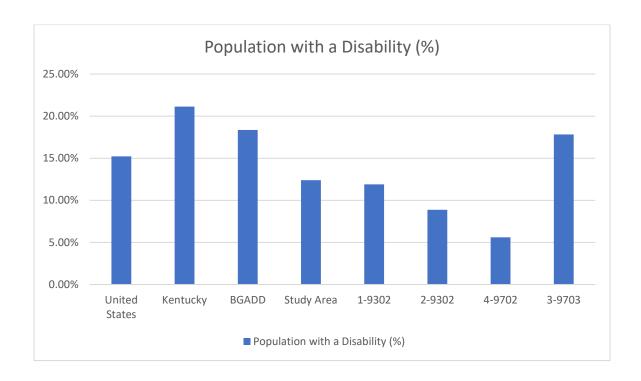


The Study Area overall displays a higher percentage of Adults over 65 years old, at 21.95%, than that of the Bluegrass ADD, at 14.73%. Three of the four block groups in the study are also above the percentage of the BGADD, at 17.62%, 29.08% and 34.30%, with Block Group 3, Census Tract 9703 being the only block group lower at 14.21%.

	Total	Over than 65	Older than 65
	Population	Population	Population (%)
United States	328,239,523	54,074,028	16.50%
Kentucky	4,467,673	754,599	16.80%
Bluegrass ADD	820,275	120,836	14.73%
Study Area	5835	1,281	21.95%
<b>Boyle County</b>	29,972	4,555	21.69%
1-9302	1720	303	17.62%
2-9302	1616	470	29.08%
<b>Garrard County</b>	17,445	3,121	23.23%
4-9702	761	261	34.30%
3-9703	1738	247	14.21%

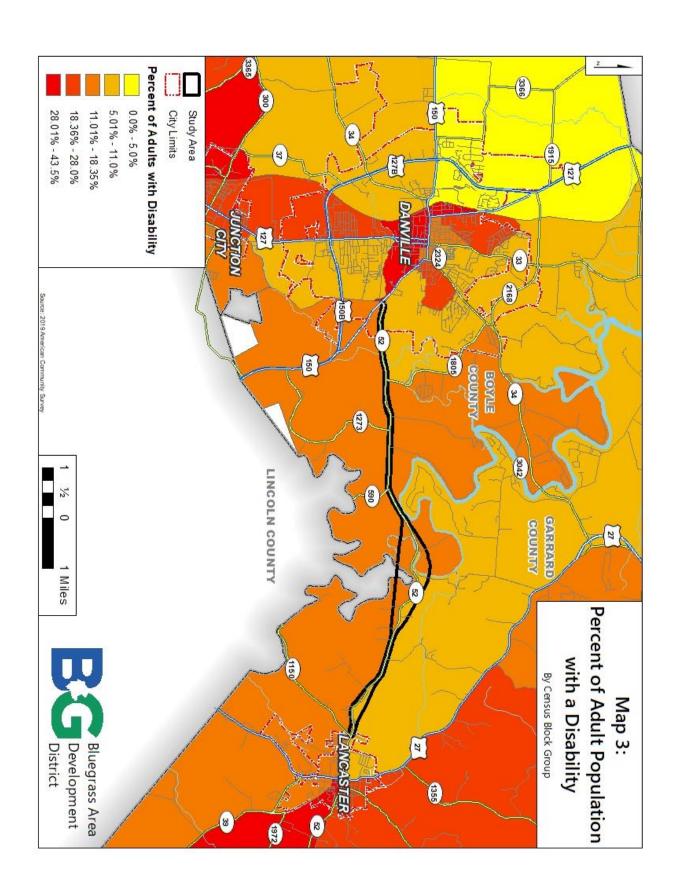


## Populations by Adults with a Disability

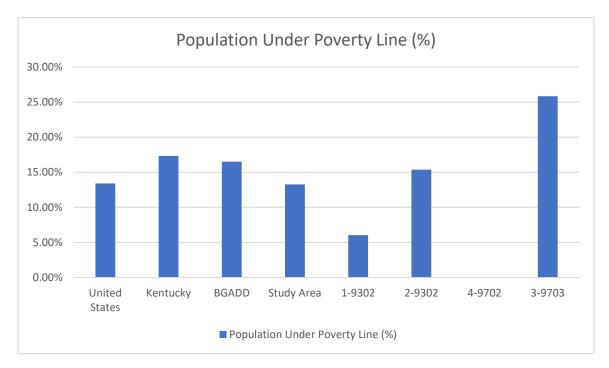


The Study Area displays a lower percentage of adult individuals with a disability, at 12.39%, than that of the Bluegrass ADD, at 18.35%. Although both Garrard and Boyle counties have higher percentages of disabled adults, no block group is higher than the BGADD percentage. These block groups are represented in both the chart and maps below.

	Total Adult	Disabled Adult	Disabled
	Population	Population	Population (%)
United States	243,737,458	37,116,141	15.23%
Kentucky	3,316,415	700,834	21.13%
Bluegrass ADD	612,532	112,419	18.35%
Study Area	2,994	371	12.39%
<b>Boyle County</b>	20,998	4,555	21.69%
1-9302	924	110	11.90%
2-9302	744	66	8.87%
<b>Garrard County</b>	13,436	3,121	23.23%
4-9702	339	19	5.60%
3-9703	987	176	17.83%

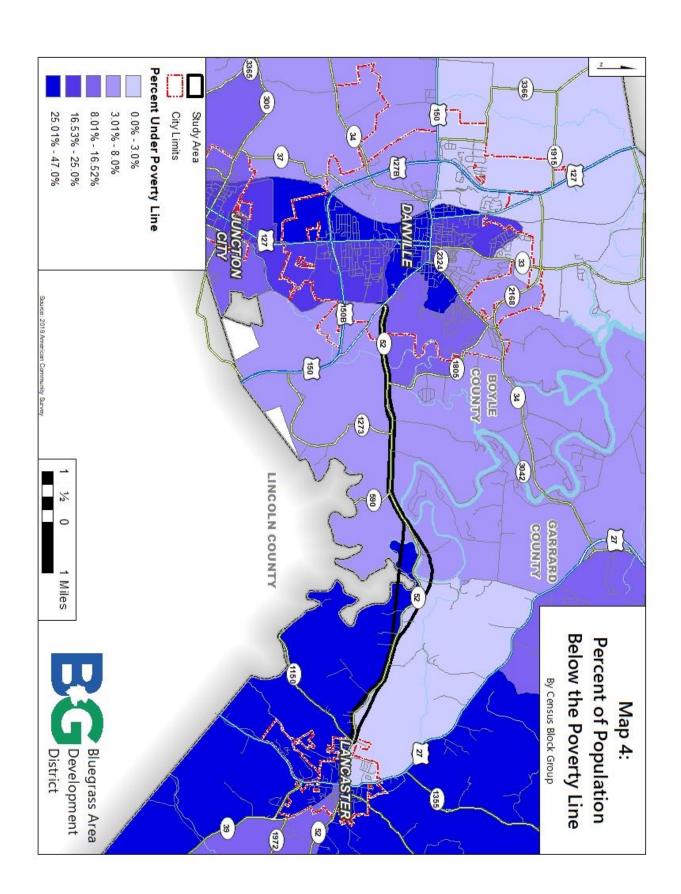


#### **Populations Under the Poverty Line**

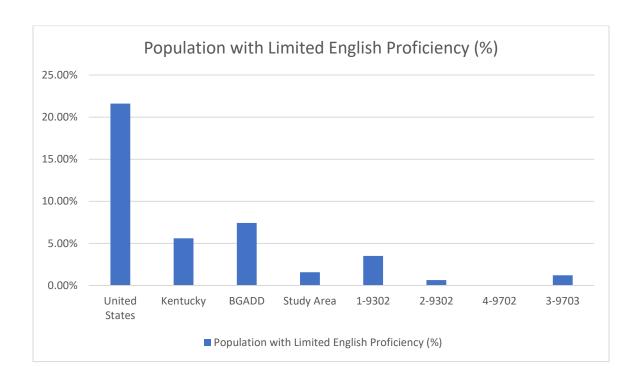


The Study Area overall displays a lower percentage of residents under the poverty line, at 13.28%, than that of the Bluegrass ADD, at 16.52%, however, when compared to the individual block groups, there is a greater variation. The lowest percentage of persons under the poverty line in the study area was in Block Group 4, Census Tract 9702 in Garrard County with 0.0%, while the highest percentage was in Block Group 3, Census Tract 9703 at 25.84%, also in Garrard County. These block groups are represented in both the chart and maps below.

	Total		
	Population (with	Under the Poverty Line	Under the Poverty Line
	determined	Population	Population (%)
	poverty status)		
United States	316,715,051	42,510,843	13.42%
Kentucky	4,309,501	747,010	17.33%
Bluegrass ADD	787,728	130,172	16.52%
Study Area	5835	775	13.28%
<b>Boyle County</b>	26,294	3,801	12.68%
1-9302	1720	104	6.05%
2-9302	1509	232	15.37%
<b>Garrard County</b>	17,244	2,712	15.55%
4-9702	658	0	0.0%
3-9703	1699	439	25.84%

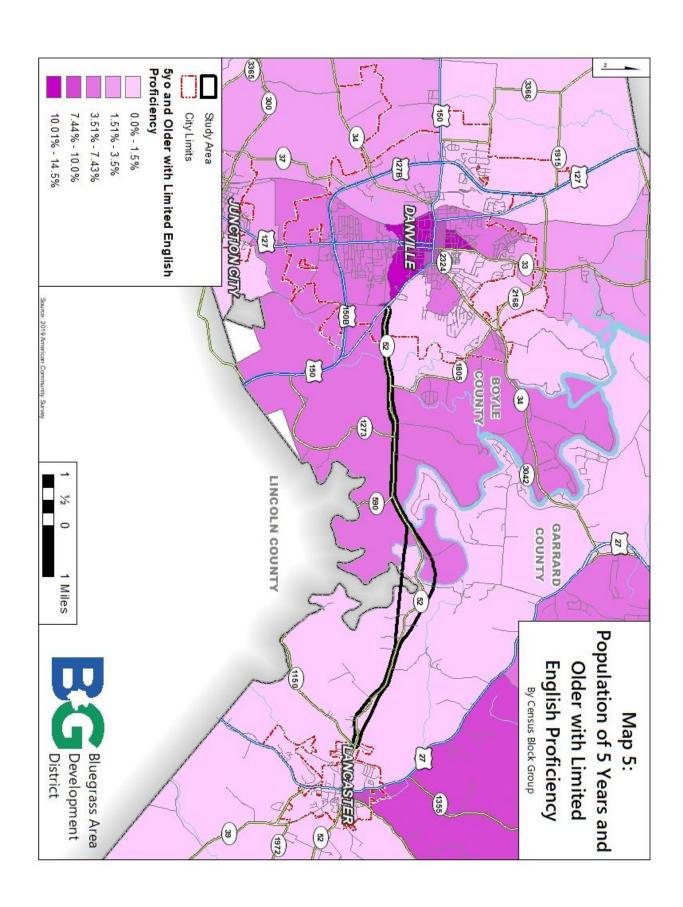


## Populations by Persons over 5 Years of Age with Limited English Proficiency



The Study Area overall displays a much lower percentage of persons over 5 years old with limited English proficiency, at 1.57%, than that of the Bluegrass ADD at 7.43%. No block group in the study area surpassed the BGADD percentage. These block groups are represented in both the chart and maps below.

	Total Population	Limited English	Limited English
	Over 5 Years Old	Proficiency Population	Proficiency Population (%)
<b>United States</b>	308,834,688	66,708,293	21.60%
Kentucky	4,194,543	234,894	5.60%
Bluegrass ADD	770,693	57,252	7.43%
Study Area	5,476	86	1.57%
<b>Boyle County</b>	28,466	1,024	3.60%
1-9302	1,624	57	3.51%
2-9302	1,547	10	0.65%
<b>Garrard County</b>	16,456	481	2.92%
4-9702	751	0	0.0%
3-9703	1,554	19	1.22%



#### **Conclusion**

Minority populations for the study area (12.27%) were less than that of the Bluegrass Region (15.29%). Block Group 2, Census Tract 9302, located in Boyle County, passed the threshold at 24.81%. This is notable as it not only surpasses the regional percentage but is over double that of the study area.

Population of persons age 65 and older in the study area (21.95%) are higher in the study area than in the Bluegrass Region (14.73%). Three-fourths of the block groups were also higher than the study threshold. These three block groups were also higher than State and National averages.

Population of persons with a disability in the study area (12.39%) were lower than that of the regional (18.35%) and no block groups in the study area surpassed the threshold.

Populations of persons living under the poverty line were lesser in the study region (13.28%) than the identified threshold (16.52%). Located in Garrard County, Block Group 4, Census Tract 9703, surpassed the threshold at 25.84%. This is significant as it was nearly double that of the study area percentage and was higher than other percentages from the County, State and National levels.

Persons over 5 years of age with LEP were lower in the study area (1.57%) than in the Bluegrass Region (7.43%). No block group identified in the study area exceeded the threshold.

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: November 2019

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

#### **Cover Page**

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Date: Author:

#### **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 (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:

- The county percentage
- Kentucky percentage

- Block groups within reasonable proximity of the study area
- United States
- ADD Region

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