

APPENDIX D:

Socioeconomic Study

Barren River Area Development District

Smiths Grove Planning Study Warren County

Socioeconomic Report

FINAL

September 2022

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

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



Prepared by
Barren River Area Development District



Contents

| | |
|--|-----------|
| Introduction | 3 |
| What is Environmental Justice? | 4 |
| Methodology | 5 |
| Study Findings | 8 |
| Population by Persons of Racial Minority Origin | 8 |
| Population by Persons Age 65 Years and Older | 10 |
| Population by Persons Below Poverty Level | 12 |
| Population by Disability Status | 14 |
| Population by Persons with Limited English Proficiency | 16 |
| Conclusion | 18 |
| Appendix: Methodology from KYTC | 20 |

Introduction

This report presents an overview of the findings for selected socioeconomic characteristics in the Smiths Grove Planning Study. Purpose of the study is to find ways to help improve traffic flow through the Smiths Grove area. The study will focus on the city of Smiths Grove and the communities surrounding the city, which includes segments of KY 101, KY 68, and I65 in Warren County.

The information in this report outlines 2016-2020 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, counties 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 planning study area is composed of the following Census Tract (CT) Block Groups (BG):

- Warren County Census Tract 116, Block Group 1
- Warren County Census Tract 116, Block Group 2
- Warren County Census Tract 116, Block Group 4
- Warren County Census Tract 116, Block Group 5

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 populations 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.

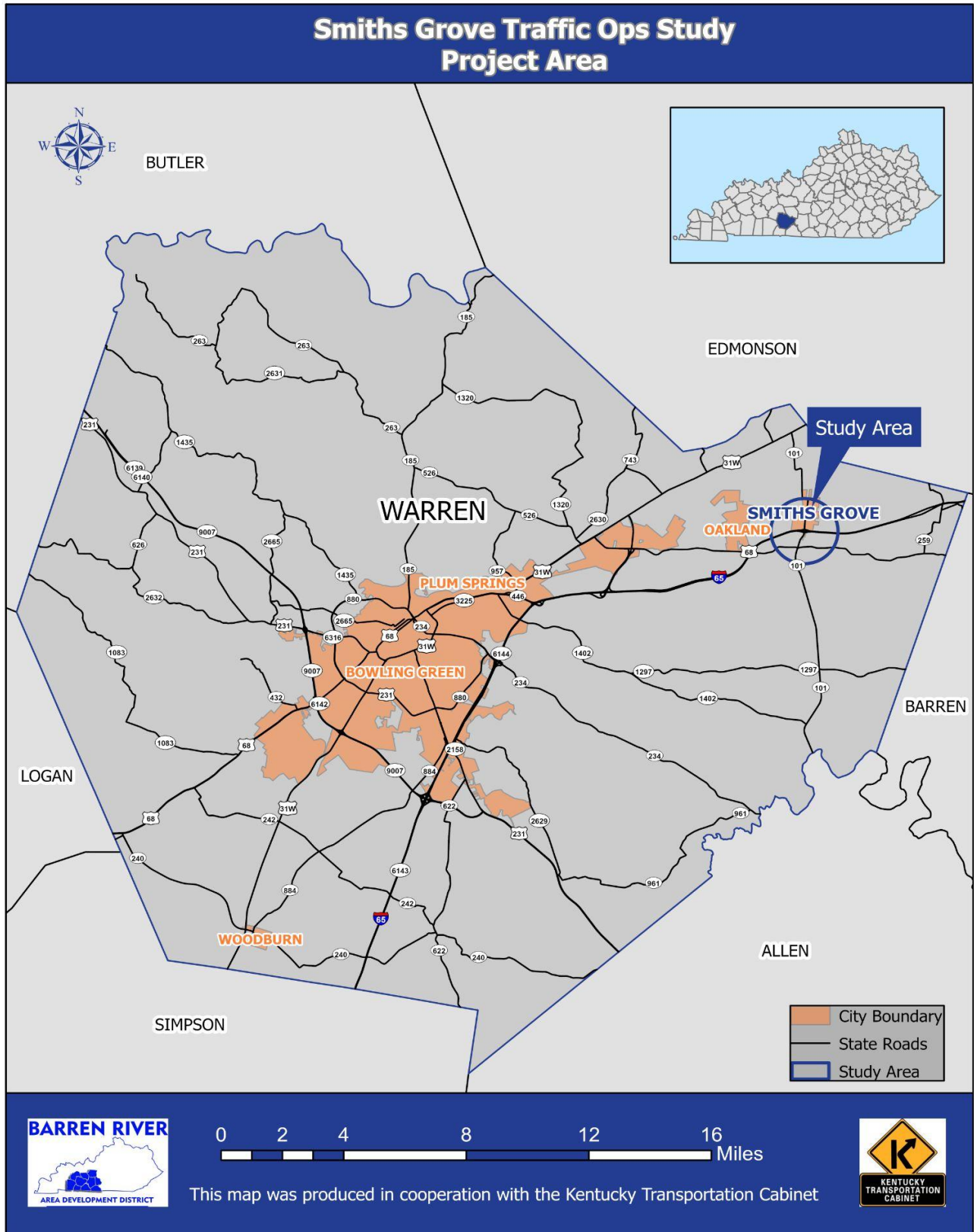
The primary source of data for this report is the 2016-2020 U.S. Census Bureau American Community Survey including tables:

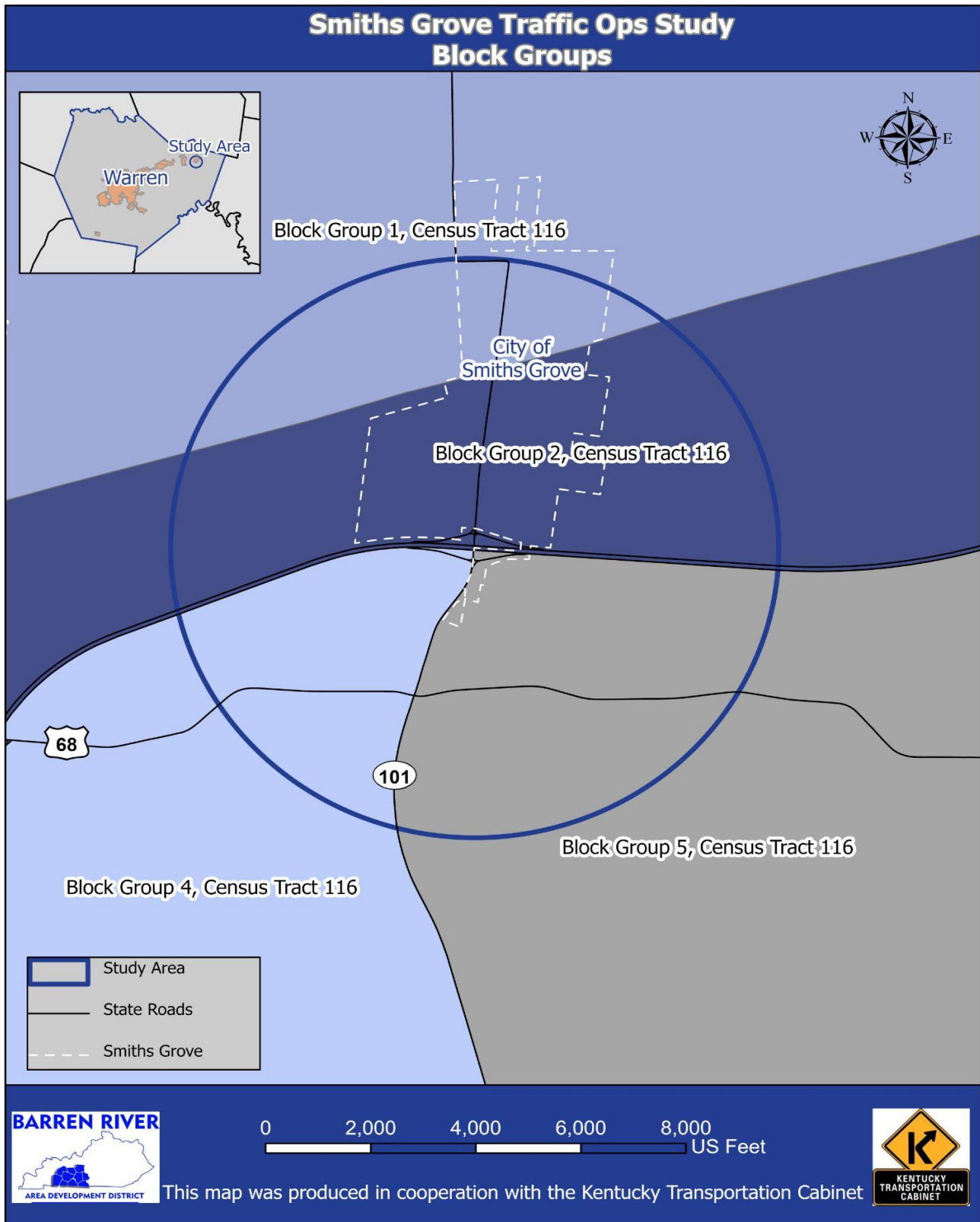
- B01001 - Sex by Age
- B03002 - Hispanic or Latino Origin by Race
- B16004 - Age by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over
- B17021 - Poverty Status of Individuals in the Past 12 Months by Living Arrangement
- C21007 - Age by Veteran Status by Poverty 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, counties, state, and nation. The project area is in one Area Development District: Barren River Area Development District. This report uses the population percentages for Warren County and the Barren River Development District as the reference threshold for identifying target populations. The numbers for the counties were selected as the reference threshold. 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 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.

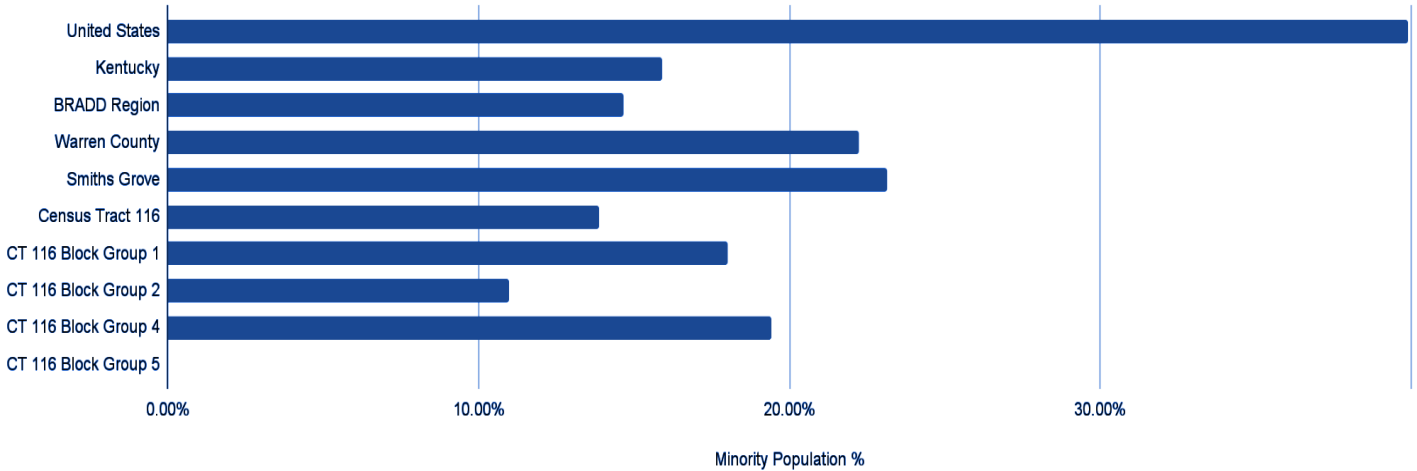




Study Findings

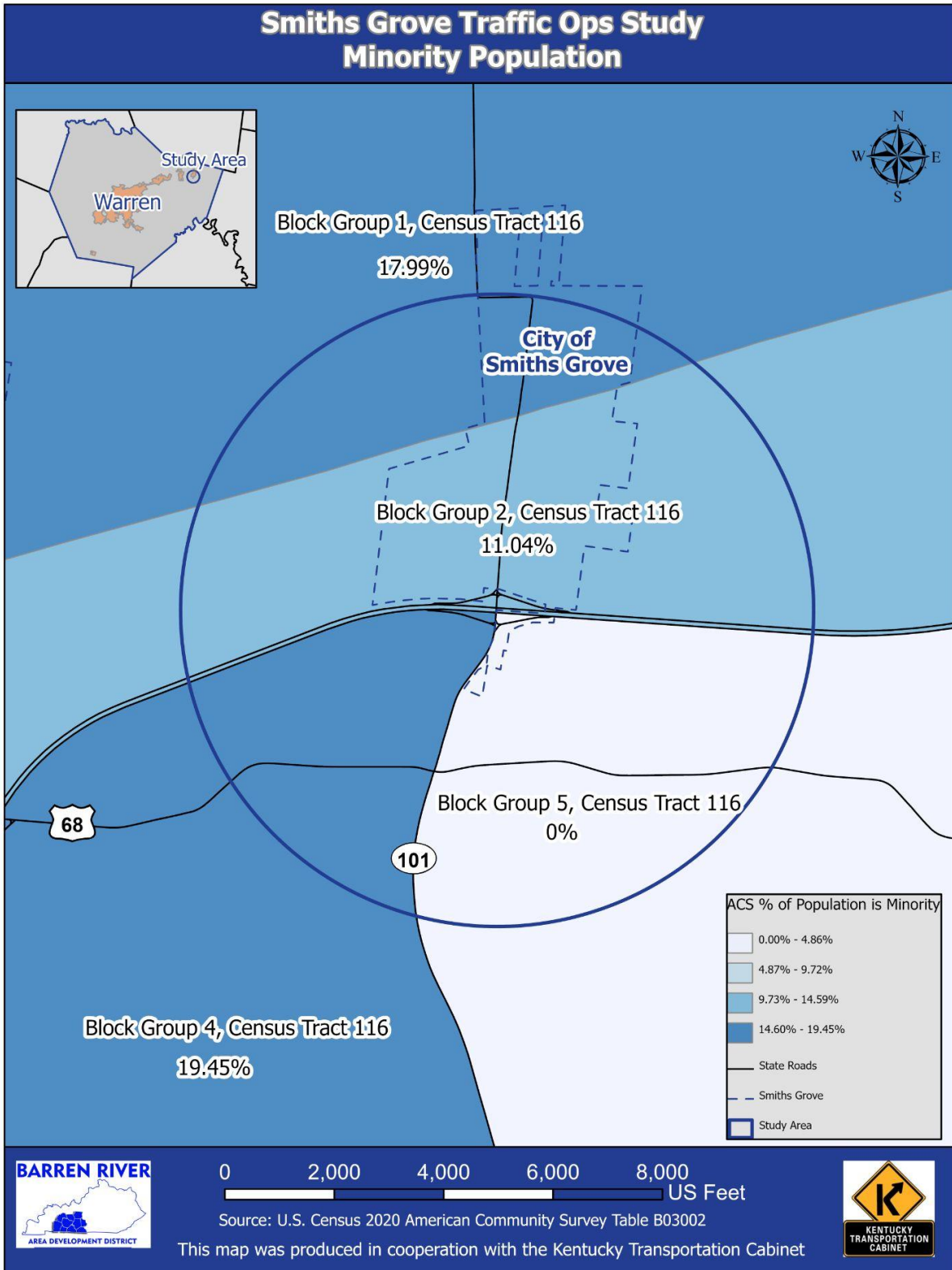
Population by Persons of Racial Minority Origin

Percentage of Minority Population



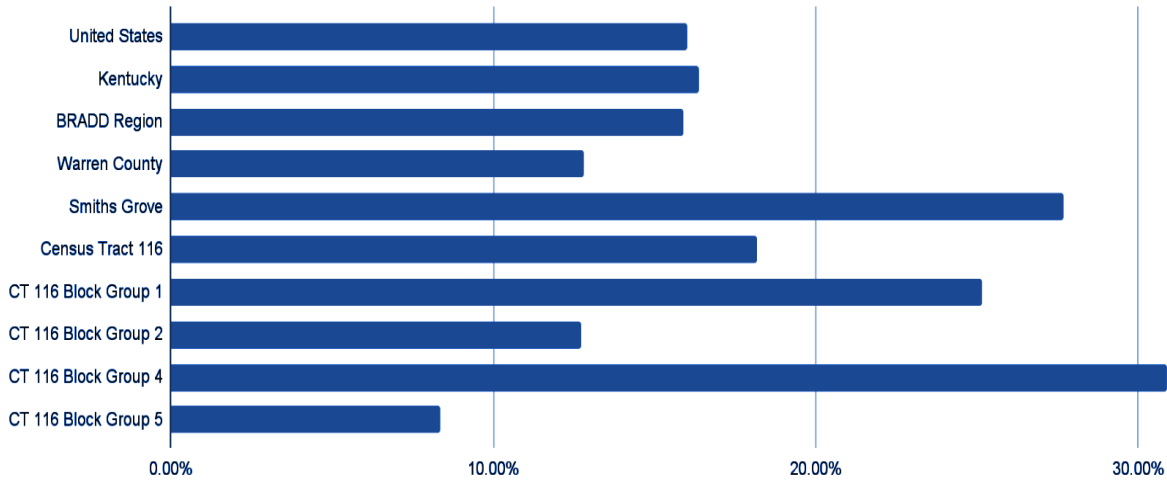
Racial minorities in the United States make up 39.91% of the population, but in Kentucky that percentage drops significantly to just 15.92%. The BRADD region’s population of racial minorities has a slightly lower percentage compared to Kentucky with the percentage being 15%. Warren County has a higher percentage of racial minorities compared to the BRADD region and Kentucky with the percentage of 22.24% but is still below the United States’ percentage. Smiths Grove 23.13% has a greater percentage of racial minorities compared to the State and is slightly higher than Warren county’s. In the project area, Census Tract has a minority population of 13.89%, with Block Group (BG) 1 at 18%, BG 2 at 11%, BG 4 at 19.44%, and BG 5 at 0%. Census Tract 116 has a racial minority population lower than the national and state average but Block Group 1 and Block Group 4 contains a higher percentage than the state of Kentucky.

| | Total Populatoin | Minority Population | Minority Population % |
|---|------------------|---------------------|-----------------------|
| United States | 326,569,308 | 130,317,933 | 39.91% |
| Kentucky | 4,461,952 | 710,214 | 15.92% |
| BRADD Region | 302,859 | 44,447 | 15% |
| Warren County | 130,836 | 29,093 | 22.24% |
| Smiths Grove | 683 | 158 | 23.13% |
| Census Tract 116 | 5,327 | 740 | 13.89% |
| CT 116 Block Group 1 | 867 | 156 | 18.00% |
| CT 116 Block Group 2 | 942 | 104 | 11% |
| CT 116 Block Group 4 | 1,013 | 197 | 19.44% |
| CT 116 Block Group 5 | 1,172 | 0 | 0% |
| Source: US Census Bureau, 2016-2020 American Survey 5-Year Estimates B03002 | | | |



Population by Persons Age 65 Years and Older

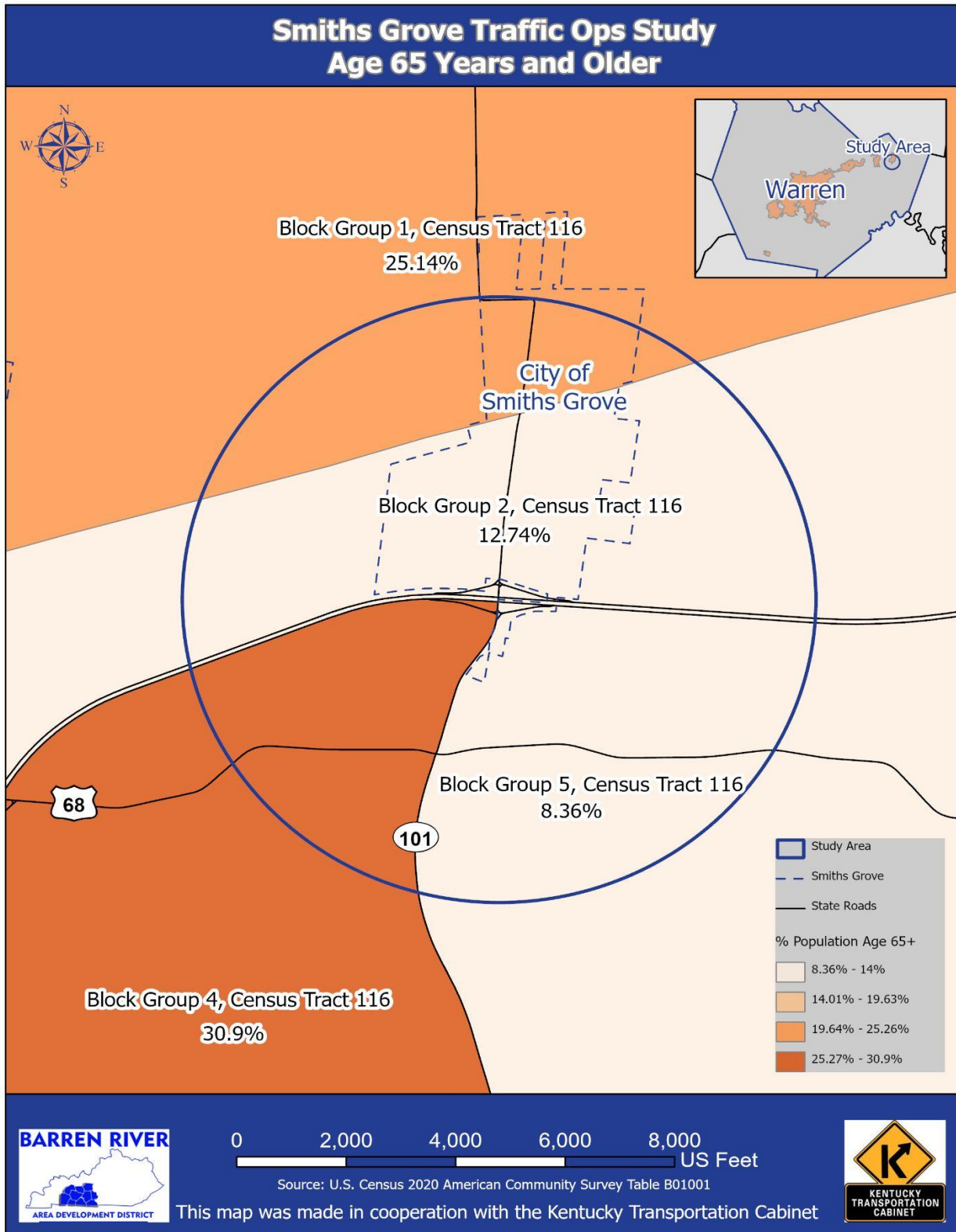
Percentage of Population Age 65 And Over



Smiths Grove, Census Tract 116, Block Group 1, and Block Group 4 each have a higher percentage of elderly persons when compared to the other block groups in the study area, the State and the Nation. Warren County has a lower percentage of elderly population compared to both the state and nation. Block Group 4 has an almost double the percentage of elderly population compared to the United States(16.03%) with a percentage of 30.89% . Census Tract 116 Block Group 2 and Block 5 also have lower percentages compared to the rest of the Census tract and compared to the state and nation.

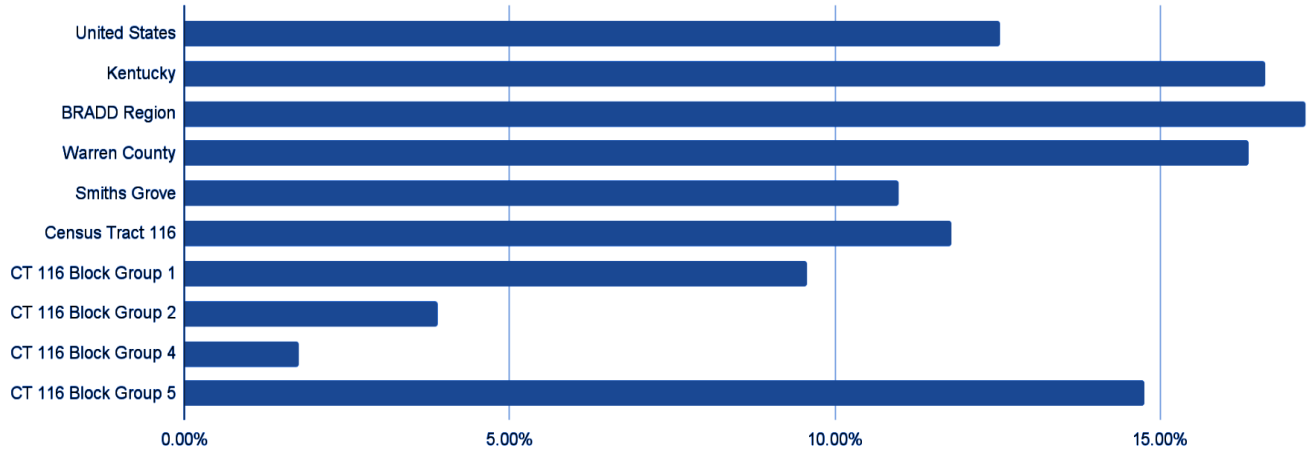
| | Total Populaton | Population Age 65 And Over | Population Age 65 And Over |
|----------------------|-----------------|----------------------------|----------------------------|
| United States | 326,569,308 | 52,362,817 | 16.03% |
| Kentucky | 4,461,952 | 729,928 | 16.36% |
| BRADD Region | 302,859 | 48,105 | 15.88% |
| Warren County | 130,836 | 16,761 | 12.81% |
| Smiths Grove | 683 | 189 | 27.67% |
| Census Tract 116 | 5,327 | 969 | 18.19% |
| CT 116 Block Group 1 | 867 | 218 | 25.14% |
| CT 116 Block Group 2 | 942 | 120 | 12.73% |
| CT 116 Block Group 4 | 1,013 | 313 | 30.89% |
| CT 116 Block Group 5 | 1,172 | 98 | 8.36% |

Source: US Census Bureau, 2016-2020 American Survey 5-Year Estimates B01001



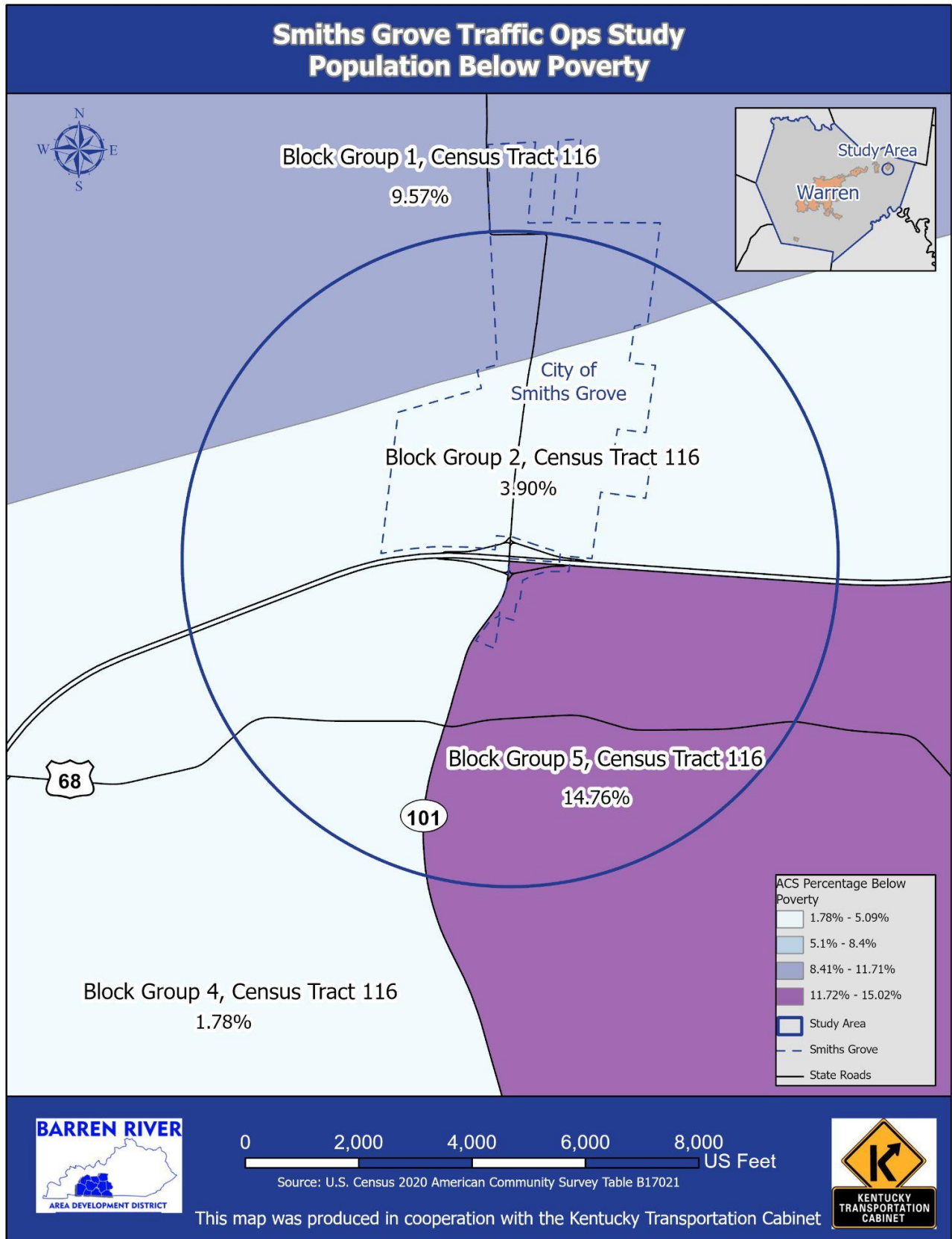
Population by Persons Below Poverty Level

Percentage of Population Below Poverty



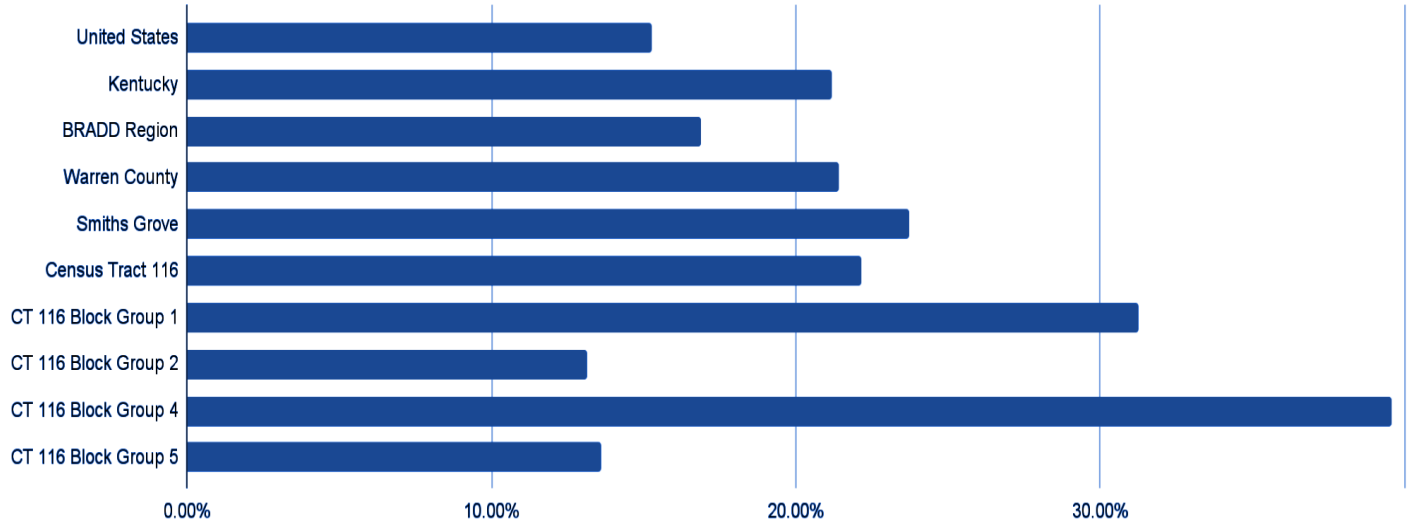
The percentage of persons living below the poverty level in Kentucky (16.61%) is higher than that of the United States (12.84%). Warren County (16.37%) has a percentage that is higher than the United States. Smiths Grove (10.98%) percentage of persons living below poverty is lower than the United States and of the state of Kentucky. In the project area Census Tract 116, CT Block Group 1, Block Group 2, and Block Group 4 have lower percentages of persons below the poverty level. CT 116 Block Group 5 (14.76%) has a percentage of persons below the poverty level that surpass the rest of the Census Tract and of the United States.

| | Total Population | Population Below Poverty | Population Below Poverty% |
|---|------------------|--------------------------|---------------------------|
| United States | 326,569,308 | 40,910,326 | 12.53% |
| Kentucky | 4,461,952 | 717,895 | 16.61% |
| BRADD Region | 302,859 | 52,214 | 17.24% |
| Warren County | 130,836 | 21,424 | 16.37% |
| Smiths Grove | 683 | 75 | 10.98% |
| Census Tract 116 | 5,327 | 628 | 11.80% |
| CT 116 Block Group 1 | 867 | 83 | 9.57% |
| CT 116 Block Group 2 | 942 | 37 | 3.90% |
| CT 116 Block Group 4 | 1,013 | 18 | 1.77% |
| CT 116 Block Group 5 | 1,172 | 173 | 14.76% |
| Source: US Census Bureau, 2016-2020 American Survey 5-Year Estimates B17021 | | | |



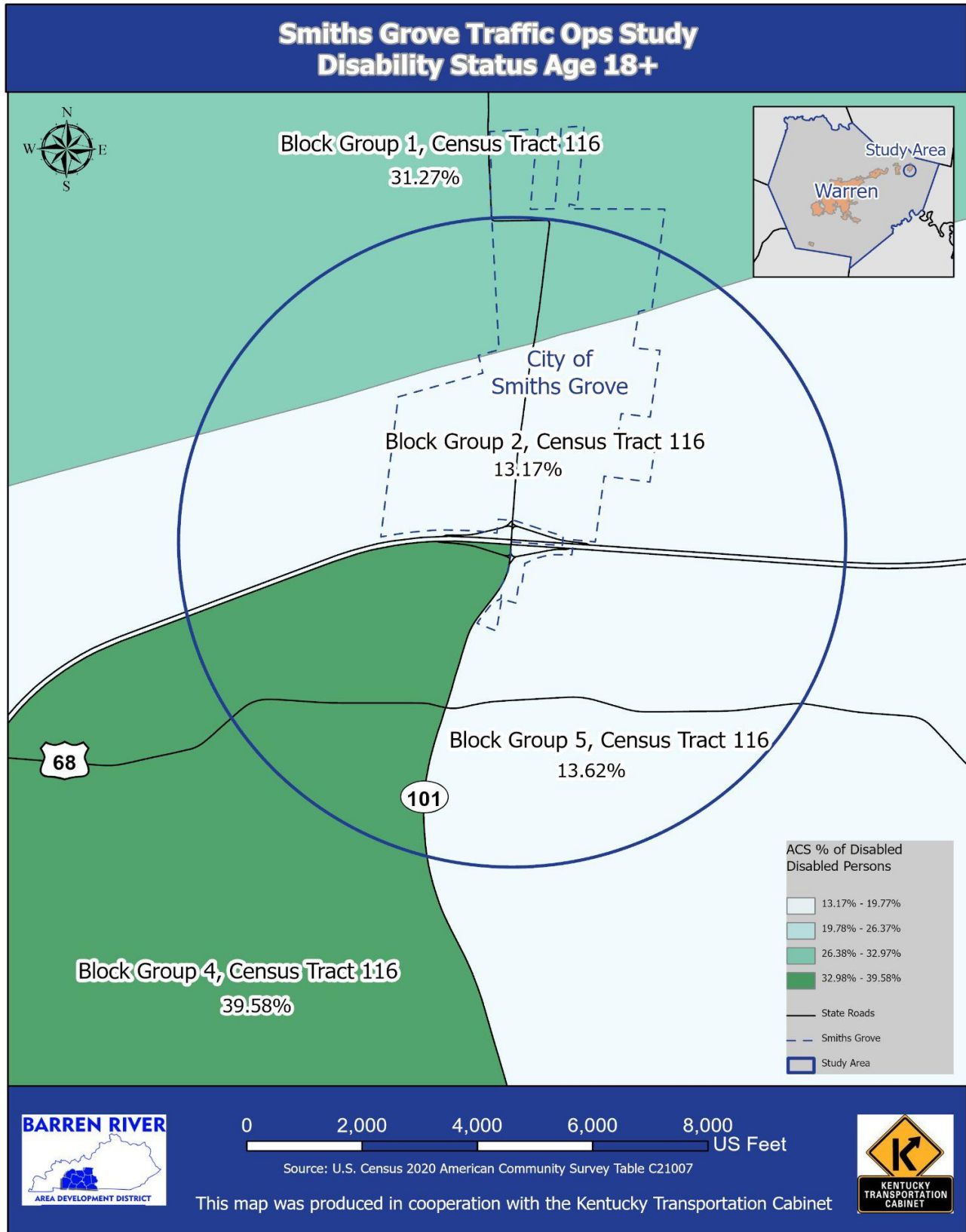
Population by Disability Status

Percentage of Disabled Population 18 Years and Older



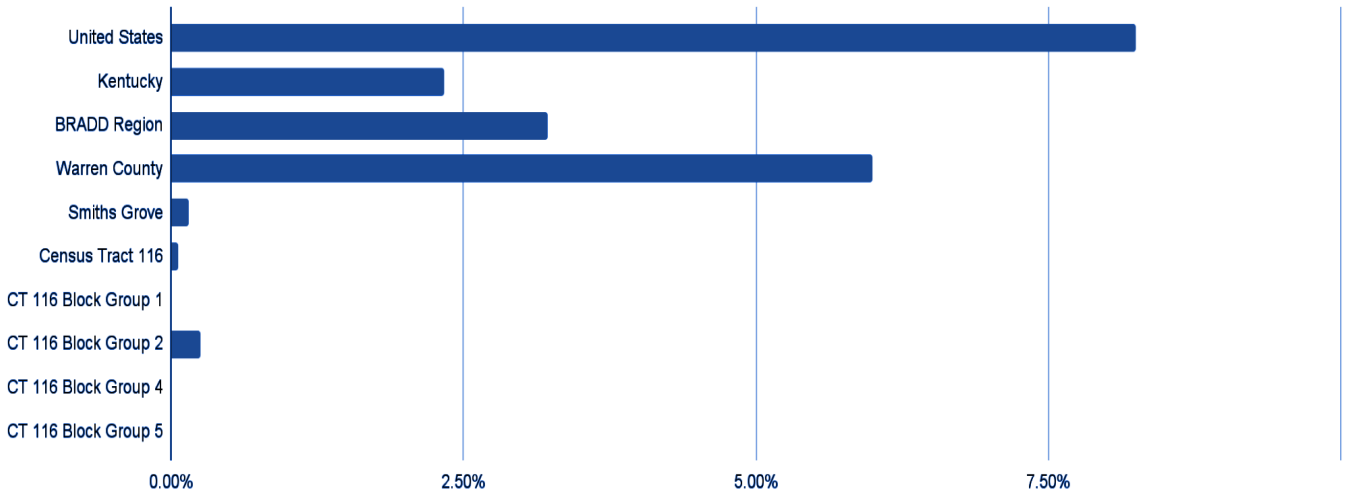
Kentucky had 21.19% percent of its population age 18 years and older with some type of disability. This is higher than the national percentage (15.25%). Data shows that the disability status in the project area ranges from 13.62% to 39.57%. The population of persons over 18 years with a disability in Warren County (21.40%) is higher than that of the Nation and the percentage is slightly higher than the state of Kentucky. Smiths Grove (23.71%) and Census Tract 116 (22.16%) data is higher than both Kentucky and the United States. CT 116 Block Group 2 (13.16%) and Block Group 5 (13.62%) have percentages of its population aged 18 years and older to have a disability that are below the United States (15.25%).

| | Total Populaton 18 years and older | Disabled Population 18 years and Older | Disabled Population % |
|--|------------------------------------|--|-----------------------|
| United States | 245,684,915 | 37,478,333 | 15.25% |
| Kentucky | 3,330,918 | 705,961 | 21.19% |
| BRADD Region | 225,799 | 48,330 | 16.86% |
| Warren County | 94,063 | 15,864 | 21.40% |
| Smiths Grove | 582 | 138 | 23.71% |
| Census Tract 116 | 4,183 | 927 | 22.16% |
| CT 116 Block Group 1 | 726 | 227 | 31.26% |
| CT 116 Block Group 2 | 638 | 84 | 13.16% |
| CT 116 Block Group 4 | 897 | 355 | 39.57% |
| CT 116 Block Group 5 | 778 | 106 | 13.62% |
| Source: US Census Bureau, 2016-2020 American Survey 5-Year Estimates CS21007 | | | |



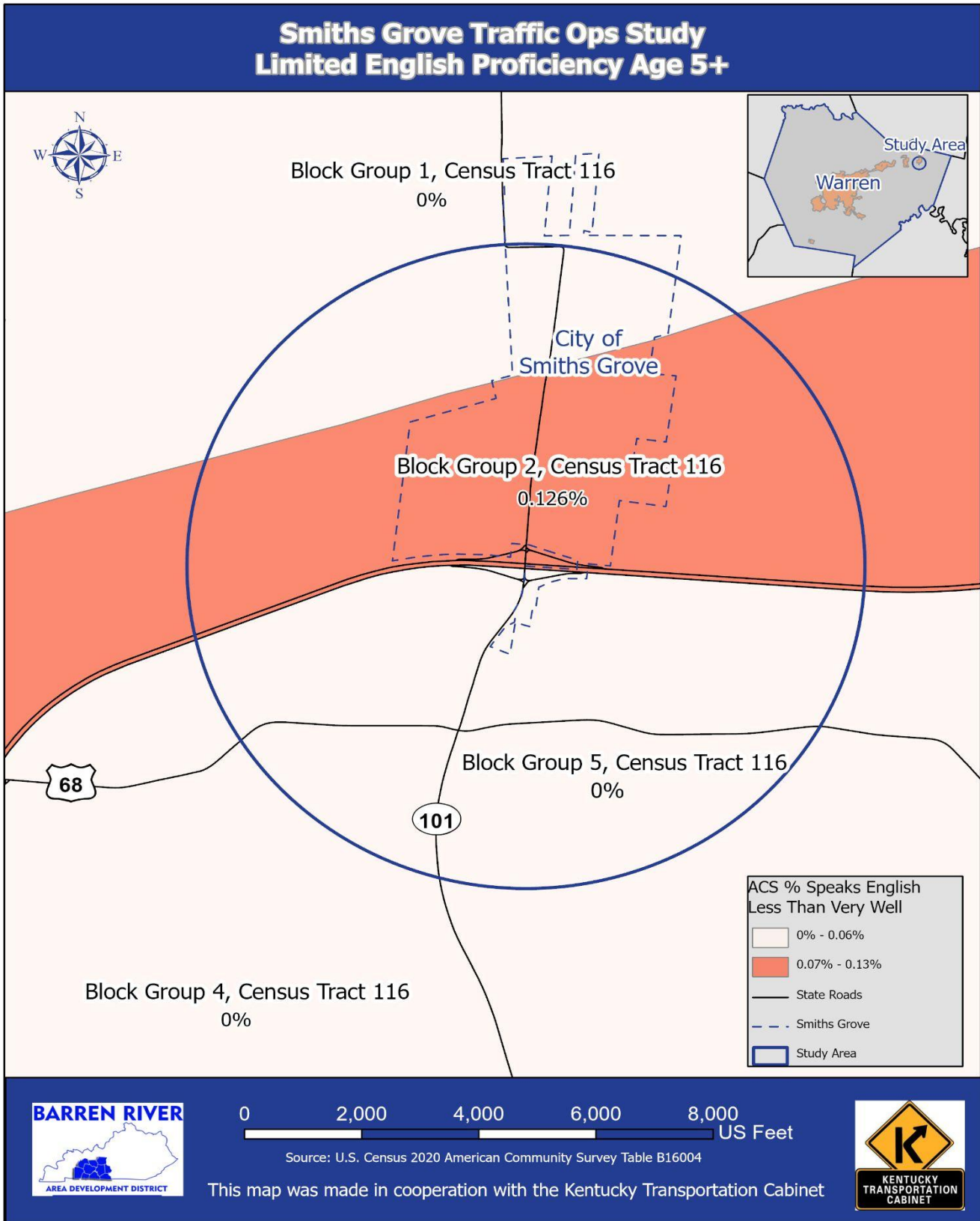
Population by Persons with Limited English Proficiency

Population with Limited English Proficiency Age 5 Years and Older



Persons with Limited English Proficiency (LEP) in the United States make up 8.25% of the population, but in Kentucky that percentage decreases to just 2.34%. Warren County has an increased percentage of LEP persons of 6% compared to Kentucky but is still below the national percentage. Of the project area Smiths Grove (0.15%) and CT Block Group 2 (0.25%) have populations that are less than 1% with the rest of the project area lacking any LEP populations. Census Tract 116 (0.06%) has a decreased percentage compared to the entirety of Warren County (6%).

| | Total Populaton of Ages 5 Years and Older | LEP Age 5 Years and Older | LEP Age 5 Years and Older (%) |
|---|---|---------------------------|-------------------------------|
| United States | 306,919,116 | 25,312,024 | 8.25% |
| Kentucky | 4,188,377 | 97,819 | 2.34% |
| BRADD Region | 286,250 | 9,206 | 3.22% |
| Warren County | 122,366 | 7,388 | 6.00% |
| Smiths Grove | 668 | 1 | 0.15% |
| Census Tract 116 | 5,020 | 3 | 0.06% |
| CT 116 Block Group 1 | 30 | 0 | 0% |
| CT 116 Block Group 2 | 793 | 2 | 0.25% |
| CT 116 Block Group 4 | 993 | 0 | 0% |
| CT 116 Block Group 5 | 1,104 | 0 | 0% |
| Source: US Census Bureau, 2016-2020 American Survey 5-Year Estimates B16004 | | | |



Conclusion

Population by Persons of Racial Minority Origin-

Warren County's Percentage: Greater than the BRADD region and Kentucky's percentages. Below the United States percentage of persons of racial minority origin.

Smiths Grove Percentage: Slightly greater than Warren County's by almost 1%. Below the United States percentage of persons of racial minority origin.

Census Tract 116 Percentage: Lower than the Smiths Grove project area. Below the United States percentage of persons of racial minority origin.

Population by Persons Age 65 Years and Older-

Smiths Grove, Census Tract 116, CT 116 Block Group 1 and CT 116 Block Group 4 Percentages: Greater than the county, region, state and national percentages.

CT 116 Block Group 2 and CT 116 Block Group 5 Percentages: Lower than the county, region, state and national percentages.

Population by Persons Below Poverty Level-

BRADD Region Percentage: Greater than the state and national percentages.

Warren County Percentage: Lower than the region's percentages and slightly lower the state's percentages. Greater than the national percentage.

Smiths Grove, Census Tract 116, CT 116 Block Group 1, CT 116 Block Group 2, and CT Block Group 4 Percentages: Lower than Warren County, BRADD, state, and national percentages.

CT 116 Block Group 5 Percentage: Greater than the national percentage.

Population by Disability Status-

BRADD Region Percentage: Greater than the national percentage but lower than the states percentage.

Warren County Percentage: Greater than the Region, State and national percentages.

Smiths Grove, Census Tract 116, CT 116 Block Group 1, and CT 116 Block Group 4 Percentages: Greater than the county, region, state, and national percentages.

CT 116 Block Group 2 and CT Block Group 5 Percentages: Lower than the county, region, state and national percentages.

Persons with Limited English Proficiency-

BRADD, Smiths Grove, Census Tract 116, CT 116 Block Group 1, CT 116 Block Group 2, CT 116 Block Group 4, CT 116 Block Group 5 Percentages: Lower than the State's and Nation's percentages.

Warren County Percentages: Greater than the BRADD region's and State's percentages but still below the Nation's percentages.

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
METHODOLOGY FOR ASSESSING
UNDERSERVED POPULATIONS INCLUDING ENVIRONMENTAL JUSTICE,
TITLE VI, AGE AND DISABILITY IN PLANNING STUDIES
Updated May 2022

Cover Page

Title: Insert specific study type/area

Subtitle: Socioeconomic Study

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 communities with potential environmental justice impacts are determined by locating populations of minority, low-income, elderly, disabled, and limited English proficiency 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