

Appendix D: Environmental Justice Review

**FINAL
KY 30 PLANNING STUDY
FROM KY 11 in BOONEVILLE
TO KY 15 in JACKSON**

**ENVIRONMENTAL JUSTICE REVIEW
Revised: AUGUST 2014**

Prepared for

Kentucky Transportation Cabinet (KYTC) – Division of Planning



Prepared by

Kentucky River Area Development District



TABLE OF CONTENTS

1.0 Introduction	1
2.0 What is environmental justice?	2
3.0 Methodology	3
4.0 Study findings: Populations by Persons of Minority Origin	4
5.0 Study findings: Population by Persons Age 60 Years and Older	6
6.0 Study findings: Population by Poverty Status of Individuals	8
7.0 Study findings: Population by Disability Status Age 16 to 64 Years	10
8.0 Conclusion	12

Appendices

Appendix A – Project Area with Block Group Locations

Appendix B – Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies

Appendix C – U.S. Census Data Tables for Study Area

Appendix D – Analysis Range Explanation and Methodology for Population Percentages Above or Below the Threshold

1.0 INTRODUCTION

This report presents an overview of the findings for selected socioeconomic characteristics in the KY 30 planning study area in Breathitt and Owsley County, Kentucky. The information in this report outlines Census 2010 statistics in and near the project area using tables, charts and maps. The purpose of the report is to analyze the data and identify potential populations that may be displaced or adversely impacted by the recommended improvements proposed in the planning study. Statistics are provided for minority, elderly, low-income and disabled populations for the nation, state, county, and census tracts 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 Low-Income 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 programs, policies, and activities on minority populations and low-income populations...”

The project study area is located in Breathitt County, near the city limits of Jackson, and extends west to the city of Booneville in Owsley County. Breathitt and Owsley Counties are located in the Eastern Kentucky Coal Field region of Kentucky.

Breathitt County is located in the central portion of the region and covers a land area of 492 square miles. It is bordered to the northwest by Wolfe County, the northeast by Magoffin County, to the east by Knott County, the southeast by Perry County, to the southwest by Owsley County and the west by Lee County. It is the fourth largest populated county in the eight county Kentucky River Area Development District region with a population of 13,922. Jackson is the county seat. Breathitt County is composed of seven census tracts. The planning study area is situated in Census Tract (CT) 9202, CT 9203, CT 9205 and CT 9206.

Owsley County is located in the west central portion of the region and covers a land area of 197 square miles. It is bordered to the north by Lee County, the east by Breathitt County, to the southeast by Perry County, the south by Clay County, and the west by Jackson County. It has the smallest population in the eight county Kentucky River Area Development District region with a population of 4,764. Booneville is the county seat. Owsley County is composed of two census tracts. The planning study area is situated in Census Tract (CT) 9301. A map of the planning study area in relation to the Census Tracts and Block Groups is displayed in Appendix A.

2.0 WHAT IS ENVIRONMENTAL JUSTICE?

The U.S. Department of Transportation (DOT) outlines the 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 low-income 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 populations and low-income 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 statutes.

3.0 METHODOLOGY

The data was collected using the method outlined by the KYTC document, “Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies” (See Appendix B). The demographics of the affected area should be defined using U.S. Census data and the percentages for minorities, low-income, elderly 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. If applicable under the National Environmental Policy Act (NEPA), a more detailed analysis will be required when assessing the potential for adverse and disproportionate impacts to low-income and minority populations.

The primary source of data for this report is the US Census Bureau 2010 American Community Survey 5-Year Estimates (2008-2012) provided by the Kentucky State Data Center:

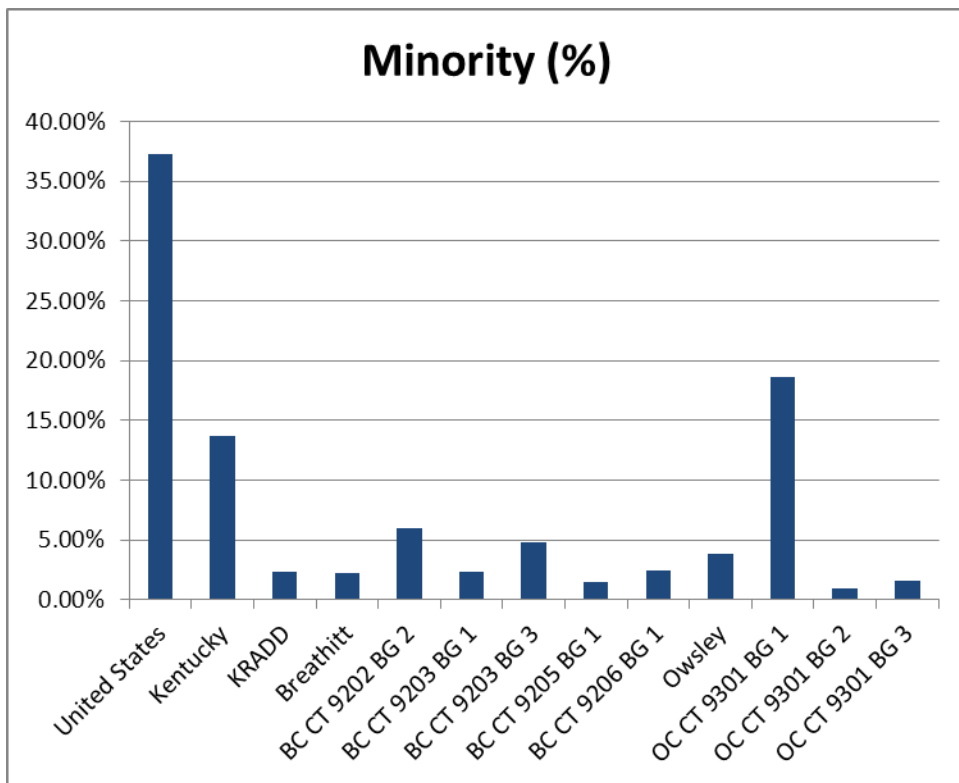
- B03002 Minorities
- B01001 Age
- B17021 Poverty Status
- C23023 Disability Status

The Census tables (See Appendix C) in this report include the total number and percentages for minorities, elderly, low-income and disabled population levels for the block group, county, state and the nation. This report uses the population percentages for the Kentucky River Area Development District as the reference threshold for identifying target populations. The region numbers were selected for the reference threshold because the project overlaps into two counties. The region numbers most likely provide a better snapshot of the overall population characteristics of the census tracts in the planning study area as opposed to the United States or state percentages.

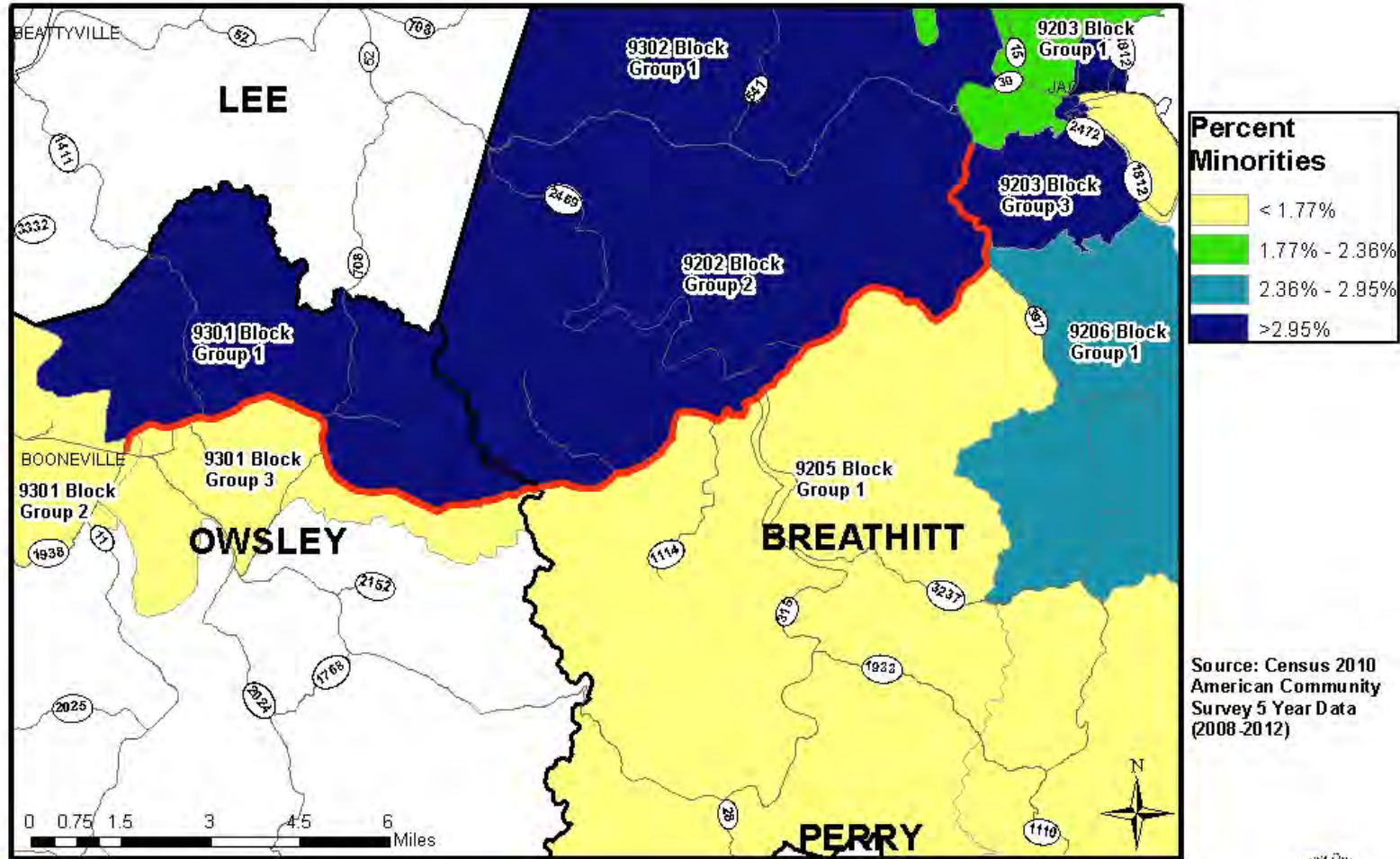
In reviewing each block group for target populations, an analysis range was determined based on the reference threshold in each of the four census categories reviewed in this report. This range was set at 25 percent above the threshold to 25 percent below the threshold (See Appendix D).

4.0 STUDY FINDINGS: POPULATION BY PERSONS OF MINORITY ORIGIN

The total percent minority population for the KRADD region is 2.36 percent. This percentage is significantly below both the state percent (13.68%) and the U.S. (37.28%). When comparing the Census Tract (CT) Block Group (BG) minority population to the reference threshold (2.36%), the data indicates BC CT 9202 BG 2 (5.94%) and BC CT 9203 BG 3 (4.83%) are both significantly above the threshold. BC CT 9205 BG 1 (1.48%), OC CT 9301 BG 2 (0.00%) and OC CT 9301 BG 3 (1.65%) are significantly below the threshold.



Percent Minorities KY 30 Planning Study

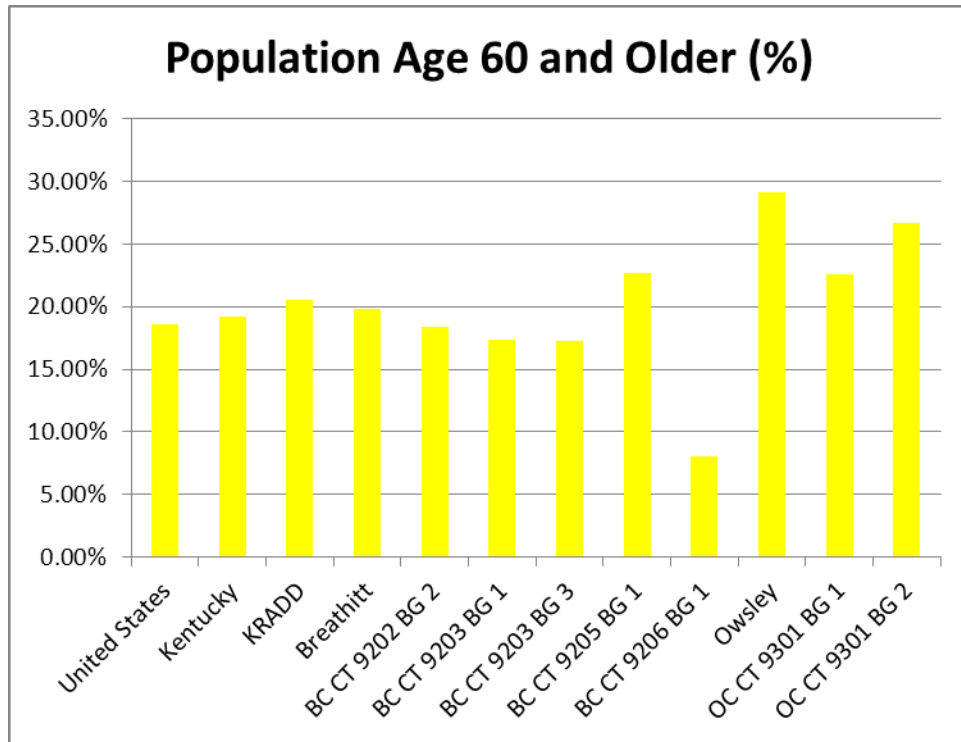


This map was produced in cooperation with the Kentucky Transportation Cabinet

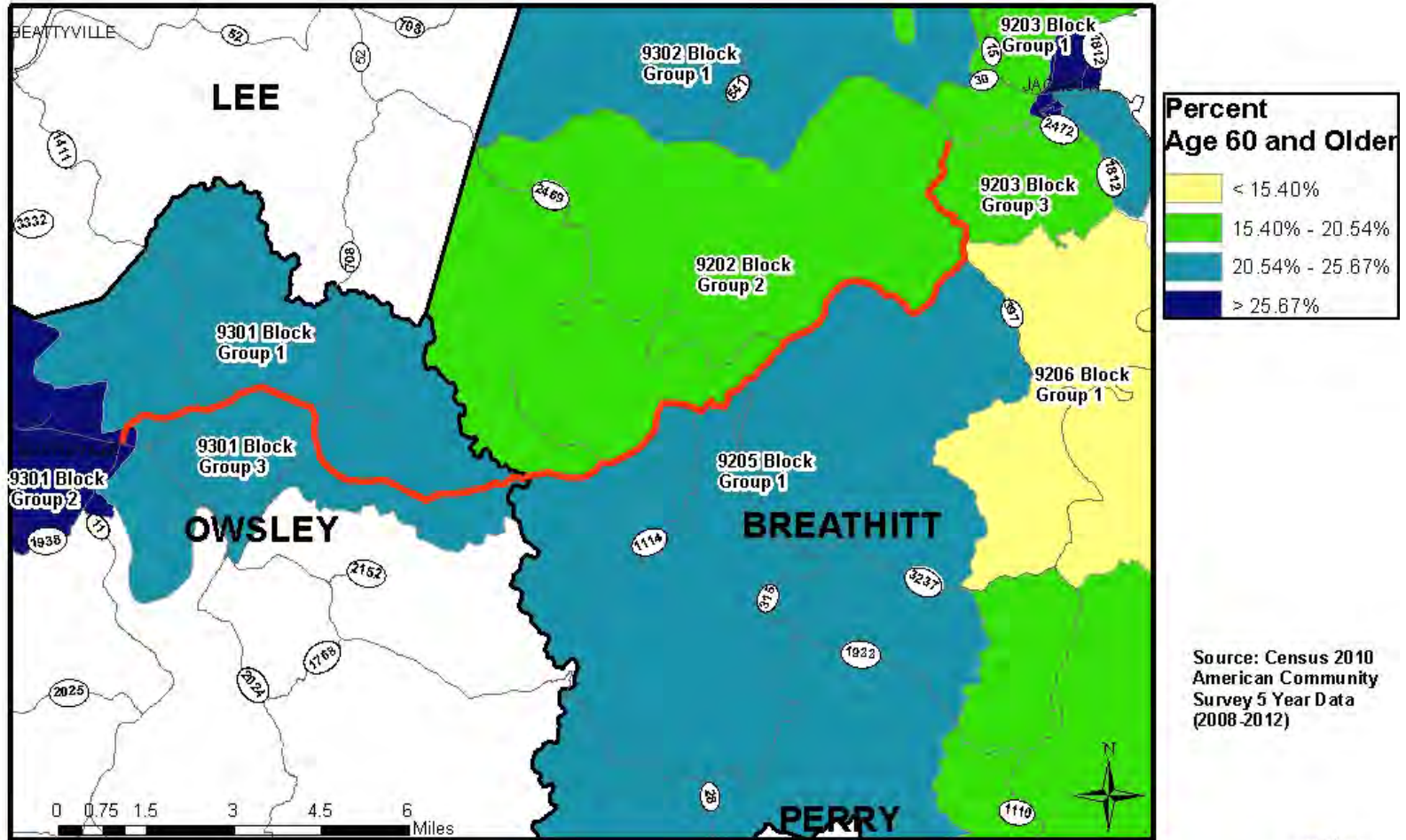


5.0 STUDY FINDING: POPULATION BY PERSONS AGE 60 YEARS AND OLDER

The percentage of persons age 60 and older in Kentucky (19.20%) is just above that of the United States (18.60%). KRADD (20.54%) is also just above that of the state and the Commonwealth. When comparing the CT BG population by persons age 60 and older to the reference threshold (20.54%), the data indicates BC CT 9206 BG 1 (8.10%) is significantly below the threshold. OC CT 9301 BG 2 is significantly above the threshold with 26.71%.



Percent Population Age 60 Years and Older KY 30 Planning Study

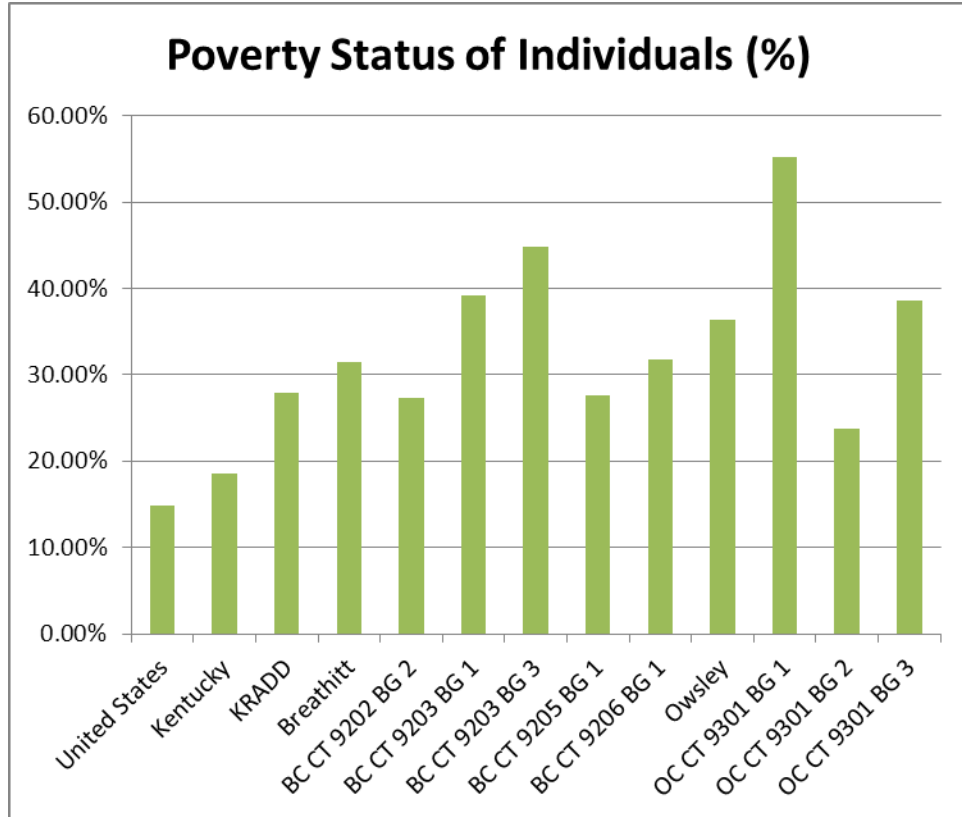


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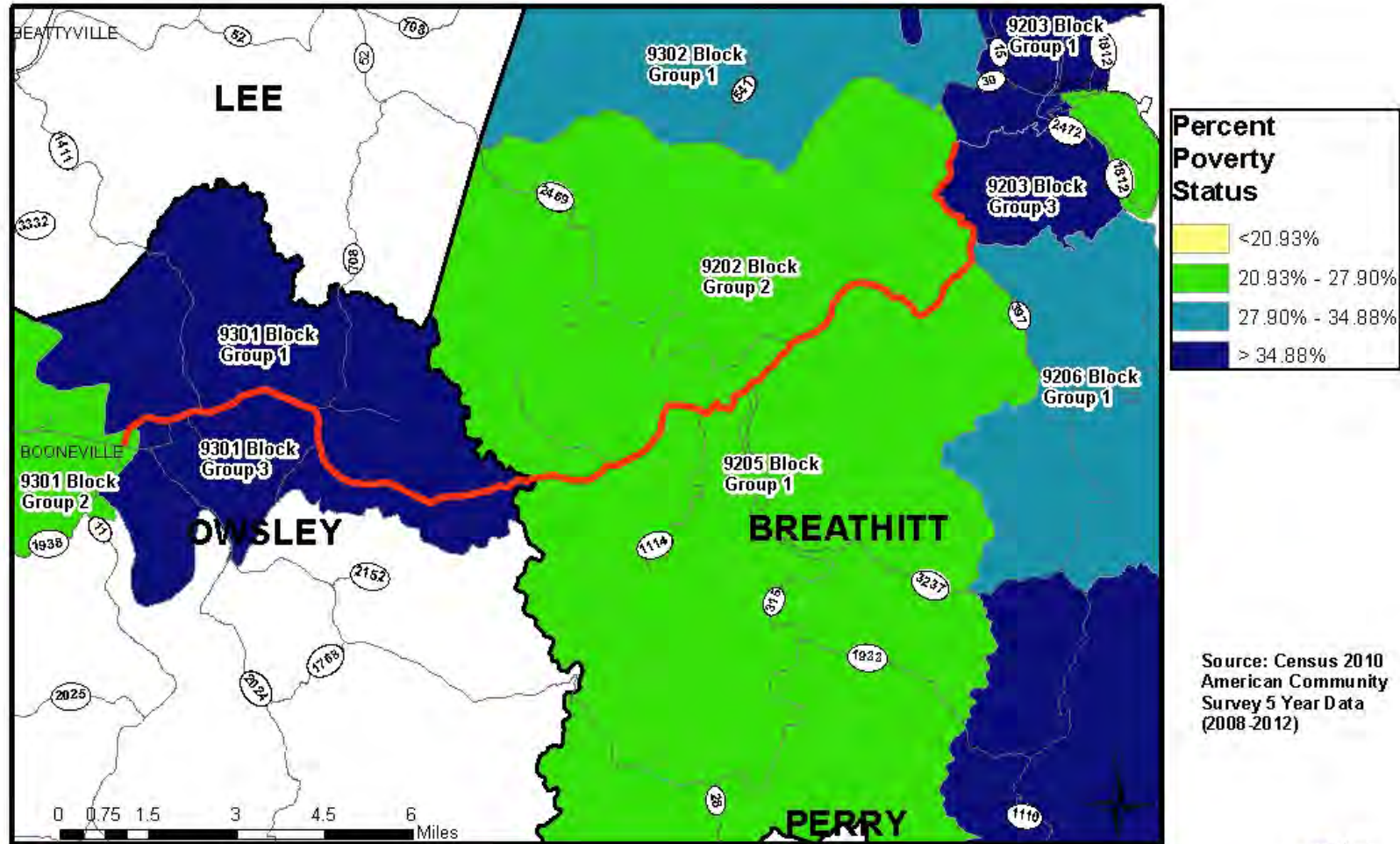


6.0 STUDY FINDINGS: POPULATION BY POVERTY STATUS OF INDIVIDUALS

KRADD has a much higher percentage (27.90%) of poverty status individuals than both the state (18.56%) and the U.S. (14.88%). When compared to the KRADD percentage (27.90%), BC CT 9203 BG 1 (39.20%), BC CT 9203 BG 3 (44.75%), OC CT 9301 BG 1 (55.27%) and OC CT 9301 BG 3 (38.52%) are significantly above the threshold.



Percent Poverty Status of Individuals KY 30 Planning Study



Source: Census 2010 American Community Survey 5 Year Data (2008-2012)

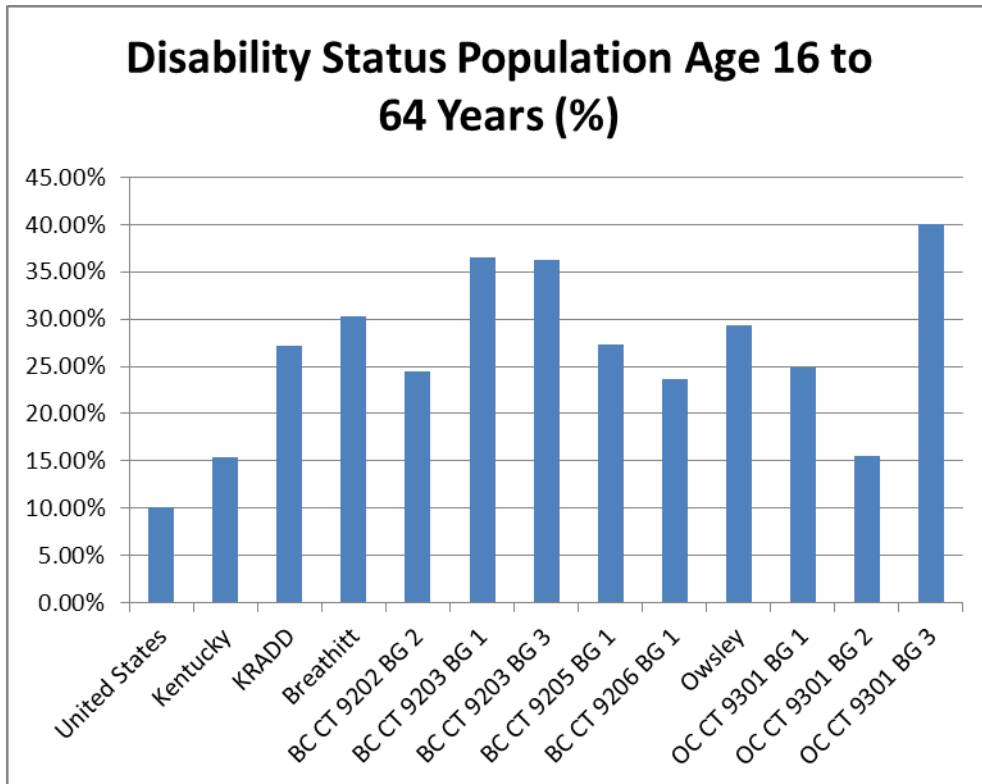


This map was produced in cooperation with the Kentucky Transportation Cabinet

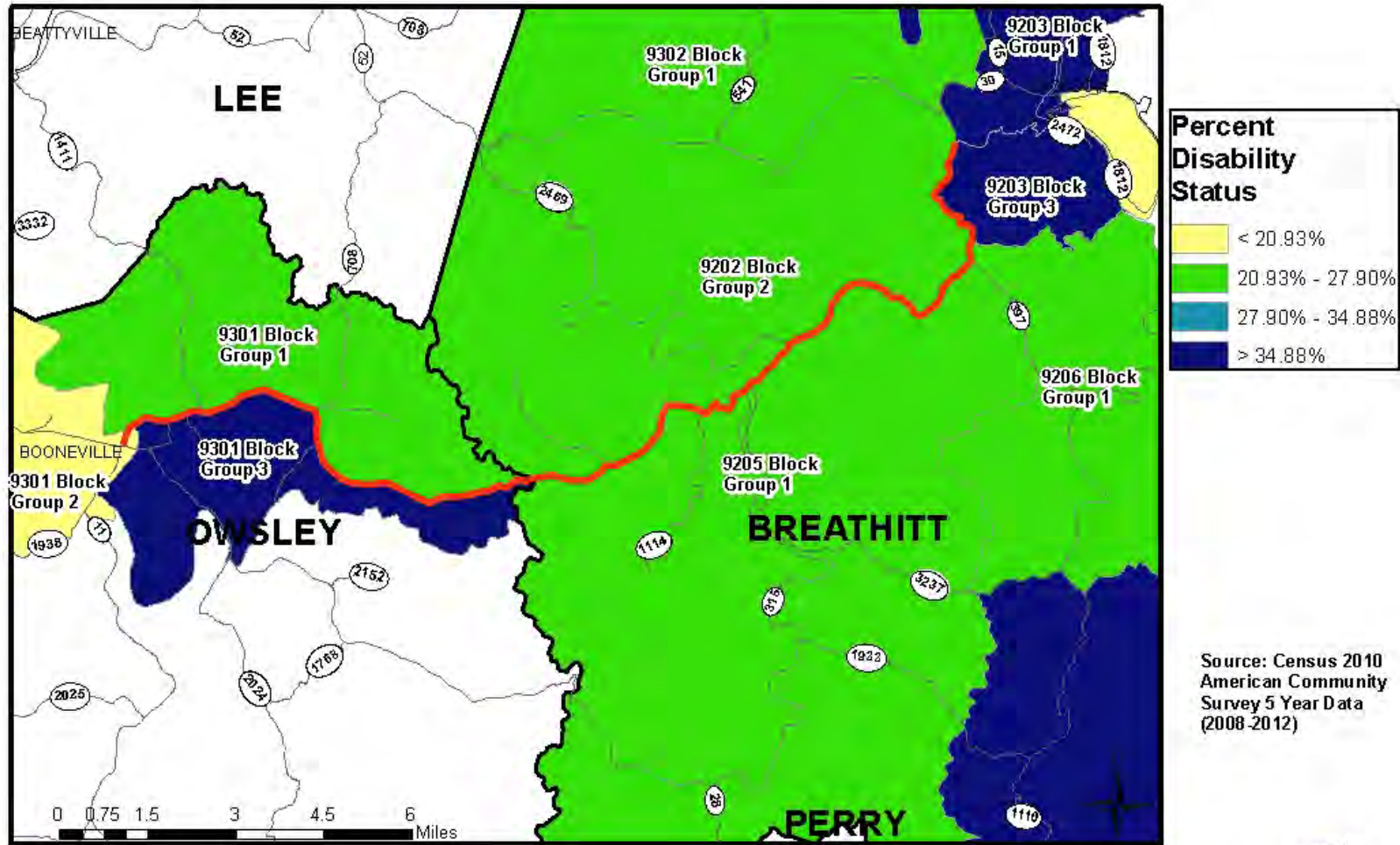


7.0 STUDY FINDING: POPULATION BY DISABILITY STATUS AGE 16 TO 64 YEARS

The percentage of the population by Disability Status Age 16 to 64 for the U.S. (10.08%) and Kentucky (15.37%) is much lower than that of KRADD (27.14%). Using the KRADD percent as the reference threshold the data indicates BC CT 9203 BG 1 (36.48%), BC CT 9203 BG 3 (36.19%) and OC CT 9301 BG 3 (40.05%) are significantly above the threshold. OC CT 9301 BG 2 is 15.49% and is significantly below KRADD's percentage of 27.14%.



Percent Disability Status Population Age 16 to 64 Years KY 30 Planning Study



This map was produced in cooperation with the Kentucky Transportation Cabinet



8.0 CONCLUSION

Based on the data obtained from the U.S. Census Bureau for race, age, income and disabled there does not appear to be a defined environmental justice community within the project area. Analysis of BC CT 9203 BG 1, BC CT 9203 BG 3, OC CT 9301 BG 1 and OC CT 9301 BG 3 show elevated percentages of poverty status of individuals. The percent of poverty status of individuals is higher than that of KRADD and considerably higher than that of Kentucky and U.S. This should be noted and taken into consideration in the recommended short-term improvements and long-term solutions of the planning study.

The percentages of minority populations in BC CT 9202 BG 2 and BC CT 9203 BG 3 are significantly higher than that of KRADD. Although there may be a high percentage, there is not necessarily a concentrated population. These areas should be noted in the future project planning and design phases and if necessary field visits, discussions with local officials and/or other sources of information should be consulted.

Impacts associated with any project will likely be mitigated by the improvements in safety, along with improved local mobility between Jackson and Booneville.

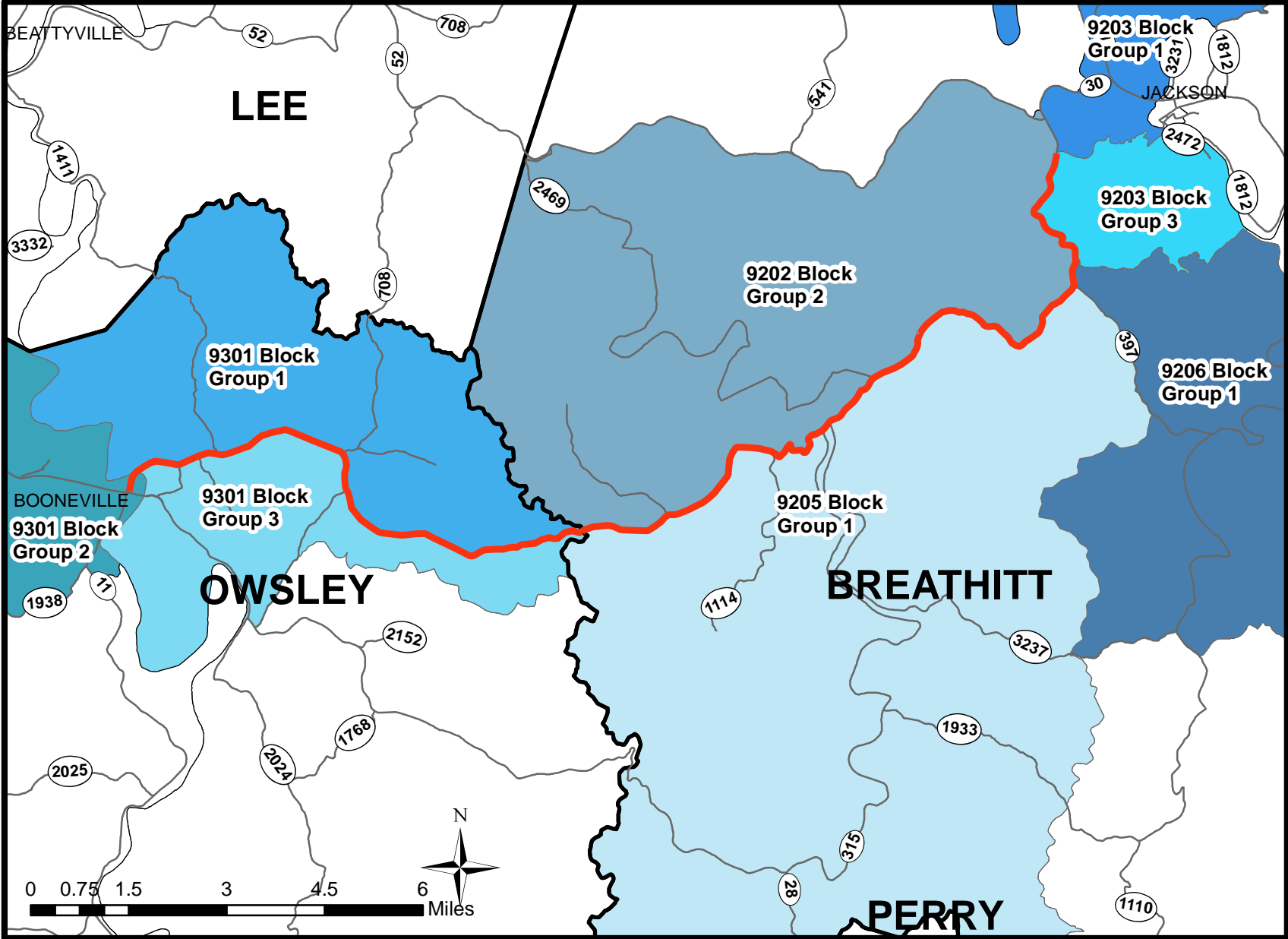
Appendices

Appendix A

Project Area with Block Group Locations

Block Group Boundaries KY 30 Planning Study

Source: Census 2010 American Community Survey 5 Year Data (2008-2012)



This map was produced in cooperation with the Kentucky Transportation Cabinet



Appendix B

Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies

Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies

Updated: March 2014

Analysis

Environmental Justice (EJ) analysis is required for any study that may result in disproportionately high adverse impact on a minority, low income, elderly or disabled population in or near the Affected Community.

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 (AC) with potential EJ impacts are determined by locating target populations of minority, low-income, disabled or elderly and calculating their percentage in the area relative to a reference community of comparison (COC). A determination may then be made if there are potential adverse impacts to the AC.

Potential communities of comparison:

- The county percentage
- Nearby block groups
- Kentucky percentage
- The United States percentage

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 for minorities, low-income, elderly, and disabled populations on a yearly basis as the update schedule allows.

Target Population concentrations are considered elevated when:

- Percentages of a population reach 25% greater than the county threshold
- Percentages of a population reach 50% or more of the affected community
- More than one EJ group is present

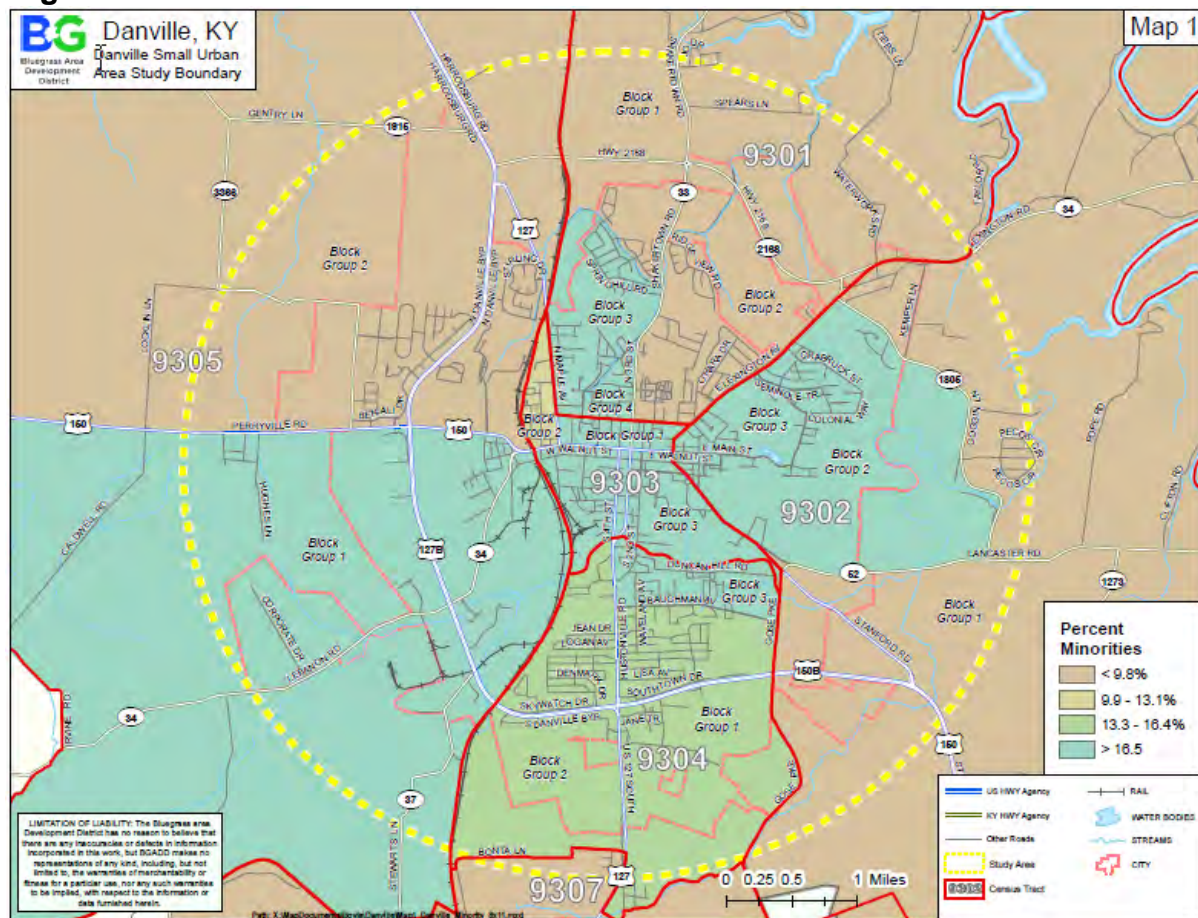
Thresholds or Census level of analysis from above, may be required pending size, sensitivity or other factors specific to given study. The selection of the appropriate unit of analysis may be a governing body's jurisdiction, a neighborhood, Census tract, or other similar unit that is to be chosen so as not to artificially dilute or inflate the affected

population. If a level of analysis other than block group is needed, it should be agreed upon at the outset.

A map or shapefile of the alternatives will be provided by the consultant or KYTC to the applicable Area Development District (ADD). KYTC, in conjunction with the consultant, will review the ADD data for quality and completeness, and the consultant will summarize the information provided by the ADD in the final report. The full EJ should be placed in an Appendix.

Maps should be included in the EJ that depict the project area in relation to the Census tracts and block groups included in the analysis. Maps similar to **Figure 1** should be symbolized utilizing study and locality specific thresholds previously noted.

Figure 1



Information and data from PVA offices, social service agencies, local health organizations, local public agencies, and community action agencies may be used to supplement the Census data where necessary or applicable.

Additional Information

In the event a study and accompanying EJ identify potentially adversely affected populations, the following information may be collected either through ADD, KYTC or consultant efforts as needed and under agreed upon terms.

- Community leaders or other contacts who may be able to represent these population groups and through which coordination efforts can be made.
- Locations of specific or identified minority, low-income, elderly, or disabled population groups within or near the project area. This may require some field review and/or discussions with knowledgeable persons to identify locations of public housing, minority communities, ethnic communities, etc., to verify Census data or identify changes that may have occurred since the last Census. Examples would be changes due to new residential developments in the area or increases in Asian and/or Hispanic populations.
- Concentrations or communities that share a common religious, cultural, ethnic, or other background, e.g., Amish communities.
- Communities or neighborhoods that exhibit a high degree of community cohesion or interaction and the ability to mobilize community actions at the start of community involvement.
- Concentrations of common employment, religious centers, and/or educational institutions with members within walking distance of facilities.
- Potential effects, both positive and negative, of the project on the affected groups as compared to the non-target groups. This may include, but not be limited to:
 - Access to services, employment or transportation.
 - Displacement of persons, businesses, farms, or non-profit organizations.
 - Disruption of community cohesion or vitality.
 - Effects to human health and/or safety.

Tips:

- Only include data that is being analyzed. For instance there is no need to define Block Groups if they are not used. Similarly, Census Tracts should only be referenced as they relate to location of Block Groups discussed.
- Choropleth maps (shaded, color gradation) should be developed based on population percentage and threshold
- 1 page summary facing the adjacent related map is a functional, readily relatable format.

Appendix C

U.S. Census Data Tables for Study Area

	Total Population	Minority Population	Minority Population (%)	Population Age 60 Years and Older	Population Age 60 Years and Older (%)
United States	309,138,711	115,234,743	37.28%	57,499,800	18.60%
Kentucky	4,340,167	593,909	13.68%	833,312	19.20%
KRADD	114,454	2,701	2.36%	23,508	20.54%
Breathitt County	13,922	307	2.21%	2,764	19.85%
Census Tract 9202 Block Group 2	942	56	5.94%	173	18.37%
Census Tract 9203 Block Group 1	1,028	24	2.33%	178	17.32%
Census Tract 9203 Block Group 3	725	35	4.83%	125	17.24%
Census Tract 9205 Block Group 1	1,622	24	1.48%	368	22.69%
Census Tract 9206 Block Group 1	852	21	2.46%	69	8.10%
Owsley County	4,764	183	3.84%	1,389	29.16%
Census Tract 9301 Block Group 1	749	140	18.69%	169	22.56%
Census Tract 9301 Block Group 2	966	0	0.00%	258	26.71%
Census Tract 9301 Block Group 3	1,093	18	1.65%	242	22.14%
Source: Kentucky State Data Center					
2008-2012 American Community Survey 5-Year Estimates					

	Population Poverty Status is Determined	Poverty Status of Individuals	Poverty Status of Individuals (%)	Population Age 16 to 64 Years	Disability Status Population Age 16 to 64 Years	Disability Status Population Age 16 to 64 Years (%)
United States	301,333,410	44,852,527	14.88%	203,138,612	20,480,999	10.08%
Kentucky	4,209,861	781,485	18.56%	2,850,449	438,077	15.37%
KRADD	111,046	30,984	27.90%	76,449	20,751	27.14%
Breathitt County	13,434	4,221	31.42%	9,362	2,838	30.31%
Census Tract 9202 Block Group 2	812	222	27.34%	674	165	24.48%
Census Tract 9203 Block Group 1	1,028	403	39.20%	603	220	36.48%
Census Tract 9203 Block Group 3	686	307	44.75%	478	173	36.19%
Census Tract 9205 Block Group 1	1,622	447	27.56%	1,139	311	27.30%
Census Tract 9206 Block Group 1	848	270	31.84%	605	143	23.64%
Owsley County	4,695	1,708	36.38%	2,945	865	29.37%
Census Tract 9301 Block Group 1	749	414	55.27%	369	92	24.93%
Census Tract 9301 Block Group 2	966	229	23.71%	723	112	15.49%
Census Tract 9301 Block Group 3	1,093	421	38.52%	794	318	40.05%
Source: Kentucky State Data Center						
2008-2012 American Community Survey 5-Year Estimates						

Appendix D

Analysis Range Explanation and Methodology for Population Percentages Above or Below the Threshold

The Kentucky River Area Development District region percentages are used as a reference threshold in each of the census data categories utilized for this report. KRADD consists of eight counties: Breathitt, Knott, Lee, Leslie, Letcher, Owsley, Perry and Wolfe. Areas that are up to 25% higher than the reference threshold are considered just above the threshold and areas that are 25% or higher are considered significantly above the threshold.

Percent Minority

<u>Analysis Range</u>	<u>Percent Minority</u>
Significantly Above Threshold	> 2.95%
Just Above Threshold	2.36% - 2.95%
REFERENCE THRESHOLD (KRADD Percentage)	2.36%
Just Below Threshold	1.77% - 2.36%
Significantly Below Threshold	< 1.77%

Percent 60 and Over

<u>Analysis Range</u>	<u>Percent 60 and Over</u>
Significantly Above Threshold	> 25.67%
Just Above Threshold	20.54% - 25.67%
REFERENCE THRESHOLD (KRADD Percentage)	20.54%
Just Below Threshold	15.40% - 20.54%
Significantly Below Threshold	< 15.40%

Percent Poverty Status

<u>Analysis Range</u>	<u>Percent Poverty Status</u>
Significantly Above Threshold	> 34.88%
Just Above Threshold	27.90% - 34.88%
REFERENCE THRESHOLD (KRADD Percentage)	27.90%
Just Below Threshold	20.93% - 27.90%
Significantly Below Threshold	< 20.93%

Percent Disability Status Age 16 to 64 Years

<u>Analysis Range</u>	<u>Percent Disability</u>
Significantly Above Threshold	> 33.93%
Just Above Threshold	27.14% - 33.93%
REFERENCE THRESHOLD (KRADD Percentage)	27.14%
Just Below Threshold	20.36% - 27.14%
Significantly Below Threshold	< 20.36%