# **Appendix F:**

# **ENVIRONMENTAL JUSTICE OVERVIEW**

# Mountain Parkway to I-75 Corridor Study

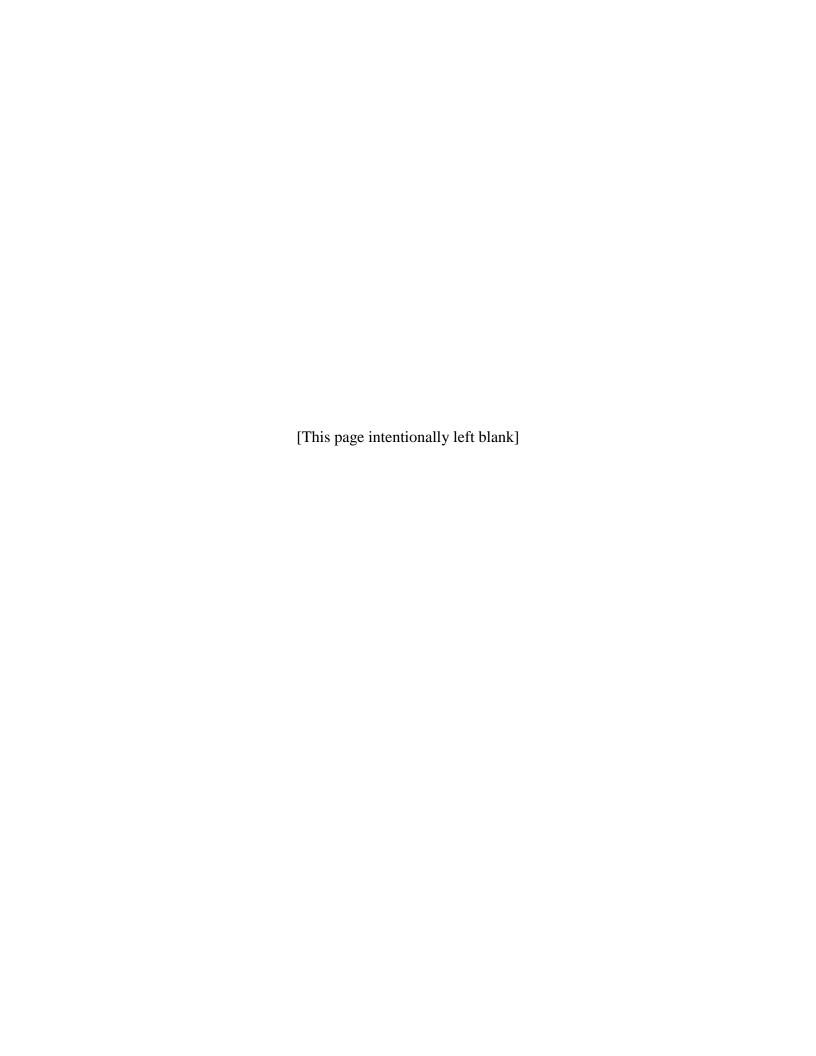
# ENVIRONMENTAL JUSTICE REVIEW

**April, 2014** 

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

**Prepared by** 





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APPENDIX A: Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies

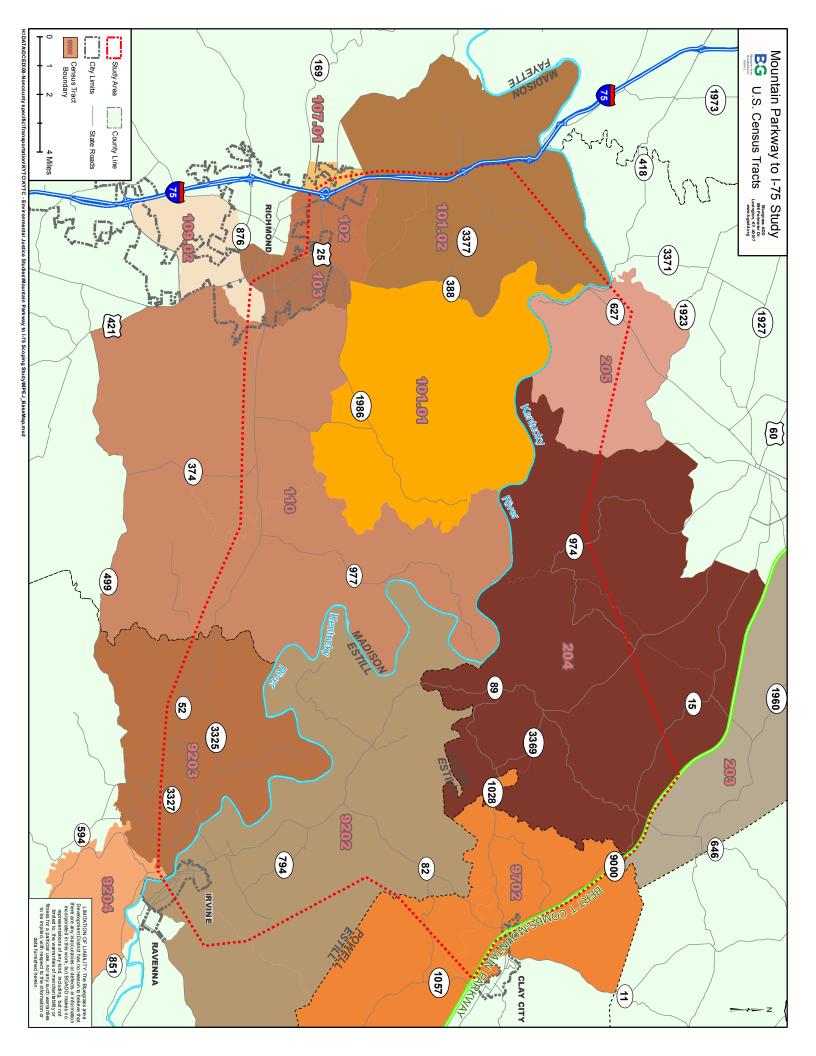
# 1.0 Introduction

This report presents a review of the socioeconomic characteristics in the study area (indicated in map on next page) for the Mountain Parkway to I-75 Corridor Study located partially within four counties (Powell, Estill, Clark, and Madison) which are located within the Bluegrass Area Development District (BGADD). Data from the U.S. Census Bureau 2012 American Community Survey (ACS) has been utilized for the analysis of the study area. Please see the ACS website for more information, data limitations, and an explanation of the methodology used to obtain the data (<a href="https://www.census.gov/acs/www/">https://www.census.gov/acs/www/</a>). This report is intended to be used as a first look study into the socioeconomic characteristics that exist within the study area. If, at a later time specific projects and project locations are identified, a more in-depth analysis of the socioeconomic characteristics may be warranted.

The information and results are intended to assist the Kentucky Transportation Cabinet in making informed and prudent transportation decisions in the study 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..."

This report outlines 2012 ACS 5-year estimates (ACS) for the study area using tables and maps. Statistics are provided on minority, low-income, elderly, and disabled populations for the census tracts within the study area.



## 2.0 What is Environmental Justice?

The U.S. EPA Office of Environmental Justice (EJ) defines EJ as: "The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies."

While exact thresholds or benchmarks have not been established, and there is no further guidance on what "elevated" percentages of disadvantaged populations means, for the purpose of this study "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.

#### 2.1 Definitions

USDOT Order 5610.2 on EJ, issued in the April 15, 1997 Federal Register, defines what constitutes low-income and minority population.

**Low-Income** is defined as a person whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines.

**Minority** is defined as a person who is: (1) Black (a person having origins in any 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).

**Low-Income Population** is defined as any readily identifiable group of low income persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed DOT program, policy or activity.

**Minority Population** is defined as any readily identifiable group of minority persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed DOT program, policy or activity.

**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 Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes.

# 3.0 Methodology

Data for this study was collected by using the method outlined by the KYTC document "Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies," located in Appendix A.

The primary source of data for this report was assembled from the American Community Survey 2012 Five Year Estimate tables B03002 (minorities), B17021 (poverty status), C23023 (disabled status) and S0101 (over 60 status) via the Fact Finder 2 website (factfider2.census.gov) and GIS data provided by KYTC.

A method developed by the Ohio Department of Transportation (ODOT)<sup>1</sup> to identify target populations is applied in the data analysis. This report uses the population percentages for BGADD as the reference threshold for identifying target populations. The ADD percentages were selected for the reference threshold because the study overlaps a large land area over four counties. The ADD level data most likely provides a better picture of the overall population characteristics of the fourteen Census tracts in the study area as opposed to the national or state percentages.

In reviewing each census 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% above the threshold to 25% below the threshold and the thresholds are shown in each category with a table that indicates the block groups that exceed 25% above the threshold.

# 4.0 Census Data Analysis

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

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<sup>&</sup>lt;sup>1</sup> Ohio Transportation EJ Guidance, Ohio Department of Transportation, August 2002, Pages 10-11.

people, with an optimum size of 1,500 people.

# 5.0 Study Findings

This Environmental Justice and Community Impact Report is to be used as a component of a corridor study currently being conducted by the Kentucky Transportation Cabinet Division of Planning for improving connectivity between the Mountain Parkway near the Clark and Powell County line and I-75 to the west in Madison County. This report is intended to identify areas of concern that may be affected by potential projects proposed by the study and to meet federal requirements regarding consideration of environmental issues as defined in the National Environmental Policy Act (NEPA). The purpose of the study is to evaluate options to improve traffic flow, connectivity, and safety between I-75 and the Mountain Parkway.

According to the ACS, there are fourteen (14) census tracts (CT) that encompass the population of the study area.

The conclusion is that nine (9) of the fourteen (14) census tracts within the study area have elevated percentages of target populations. Two census tracts have one target populations each: CT 102 and CT 205. Five census tracts have two target populations each: CT 107.01, CT 204, CT 9203, CT 9204, and CT 9702. Two census tracts have three target populations each: CT 103 and CT 9202. 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.

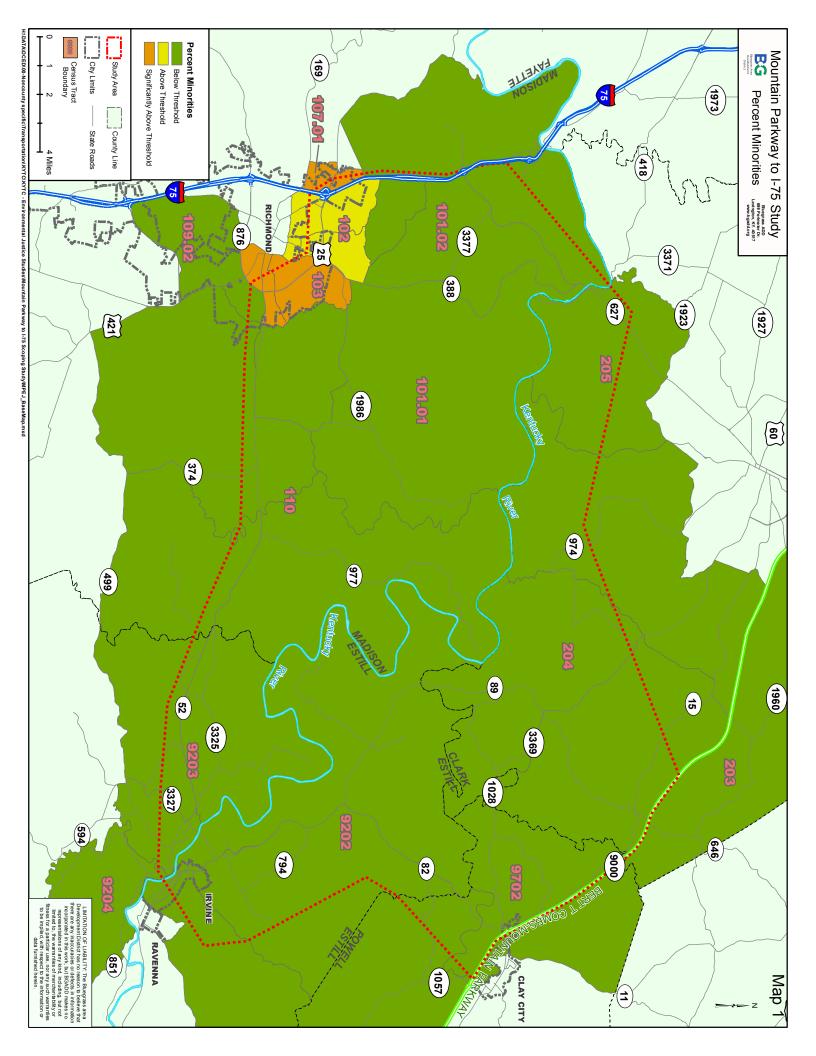
# 6.0 Population by Persons of Minority Origin

See Map 1 for reference

The total minority population for BGADD is 13%. This is the established reference threshold for this category (see below). This percentage is slightly under the state (13.7%) and significantly below the U.S. (36.3%). For the study area two census tracts (CT 103 and CT 107.01) were identified as having populations significantly above the threshold established for minority origin which should be considered for further analysis prior to commencement of any future projects:

### Reference Thresholds and Analysis Range

<u>Analysis range</u>	Percent Minority
Significantly Above Threshold	> 16.2%
Just Above Threshold	13.1 – 16.1%%
Reference Threshold (ADD Percentage)	13%
Just Below Threshold	9.8 - 12.9%
Significantly Below Threshold	< 9.7%



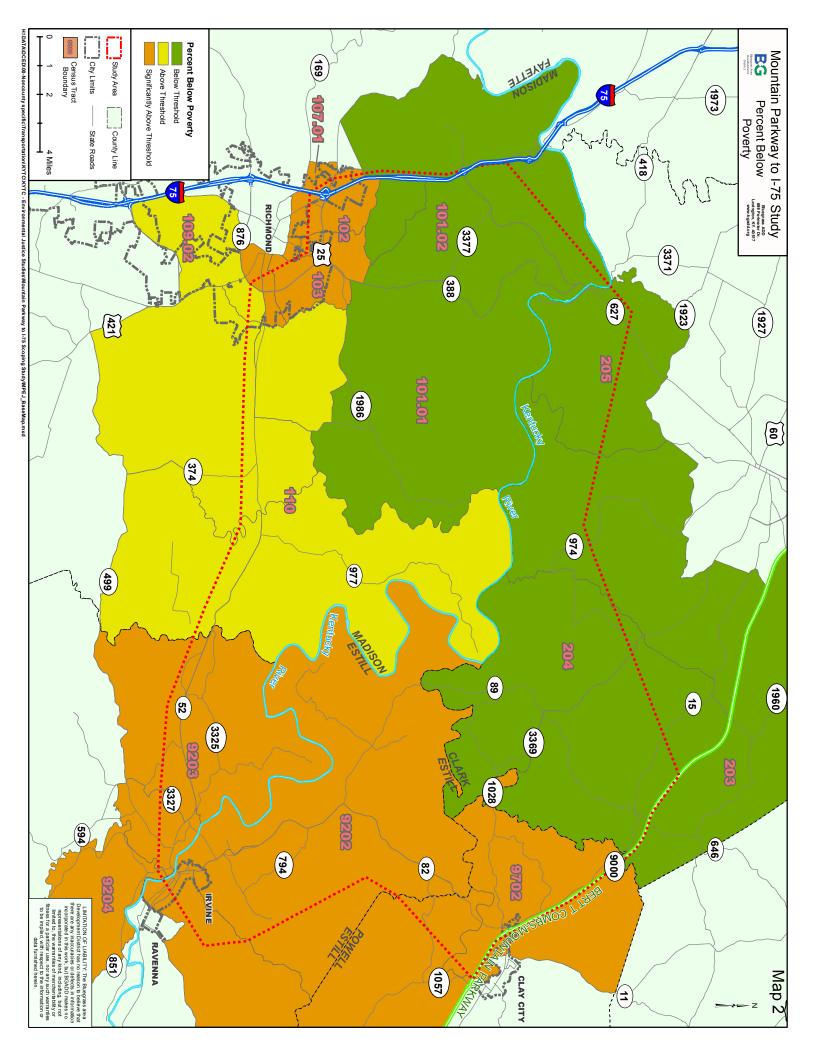
# 7.0 Population by Below Poverty Status

See Map 2 for reference

The total below poverty population for BGADD is 17.9%. This is the established reference threshold for this category (see below). This percentage is under the state (18.6%) and equal to the U.S. (14.9%). For the study area seven (7) census tracts (CT 102, CT 103, CT 107.01, CT 9202, CT 9203, CT 9204, and CT 9702) were identified as having populations significantly above the threshold established for below poverty status which should be considered for further analysis prior to commencement of any future projects:

## Reference Thresholds and Analysis Range

<u>Analysis range</u>	Percent BelowPoverty
Significantly Above Threshold	> 22.3%
Just Above Threshold	18 – 22.2%
Reference Threshold (ADD Percentage)	17.9%
Just Below Threshold	13.5 – 17.8%
Significantly Below Threshold	< 13.4%



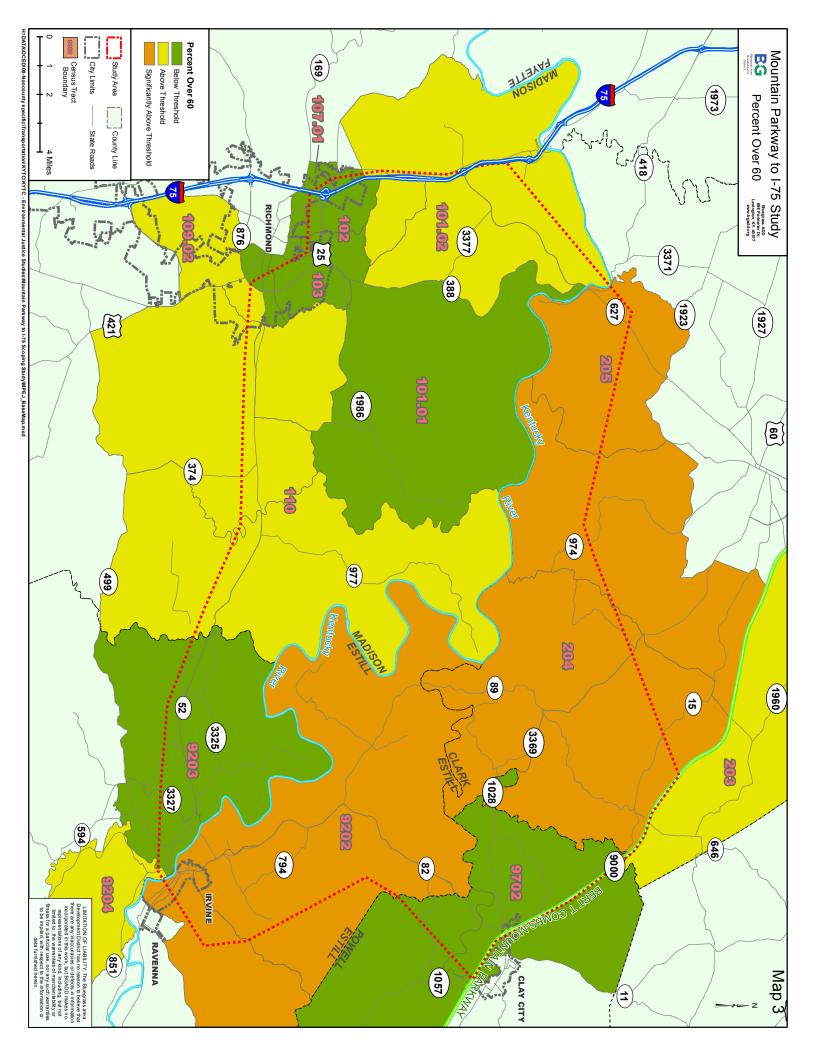
# 8.0 Population by Person 60 and Over

See Map 3 for reference

The total population of those over 60 years of age for BGADD is 17.7%. This is the established reference threshold (see below) for this category. This percentage is above the state percent (19.2%) and the U.S. (18.6%). For the study area three census tracts (CT 204, CT 205, and CT 9202) were identified as having populations significantly above the threshold established for persons 60 and over which should be considered for further analysis prior to commencement of any future projects:

### Reference Thresholds and Analysis Range

<u>Analysis range</u>	Percent 60 and Over
Significantly Above Threshold	> 22.1%
Just Above Threshold	17.8 – 22%
Reference Threshold (ADD Percentage)	17.7%
Just Below Threshold	13.4 – 17.6%
Significantly Below Threshold	< 13.3%



# 9.0 Population by Disability Status

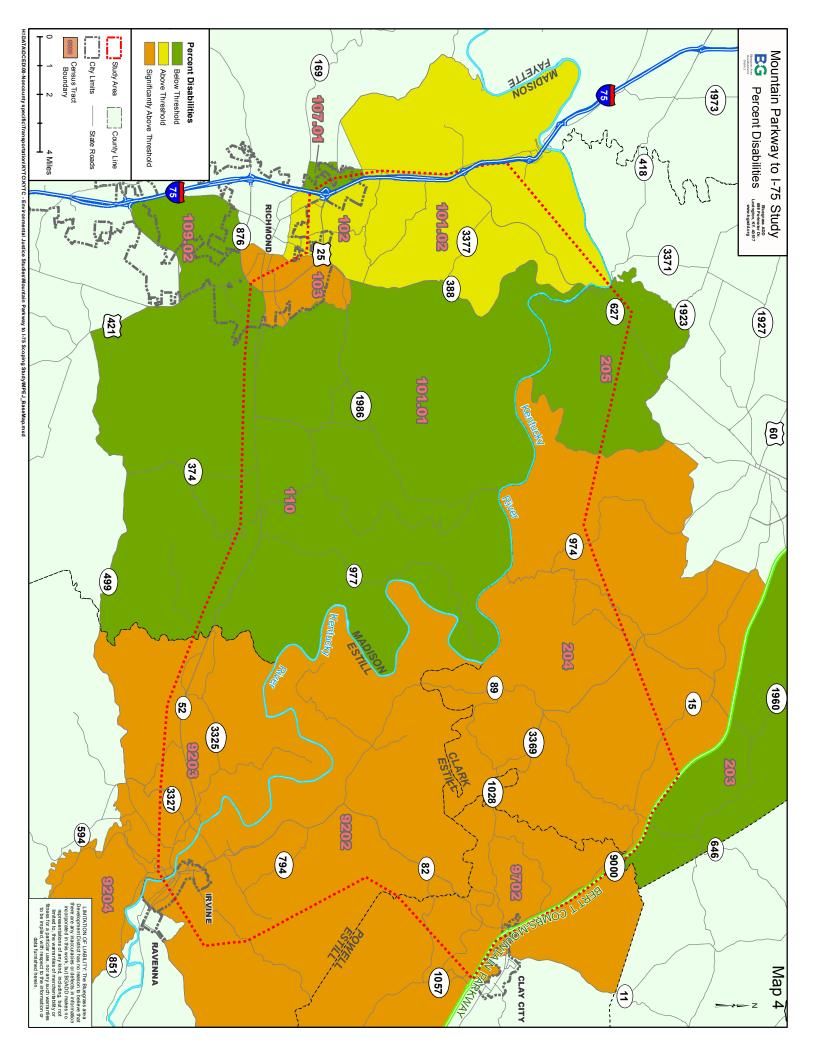
See Map 4 for reference

The total population claiming disability status in BGADD is 13%. This is the established reference threshold (see below) for this category. This percentage is just above the state percent (15.4%) and above the U.S. (10.1%). For the study area six census tracts (CT 103, CT 204, CT 9202, CT 9203, CT 9204, and CT 9702) were identified as having populations significantly above the threshold established for disability status which should be considered for further analysis prior to commencement of any future projects:

### Reference Thresholds and Analysis Range

<u>Analysis range</u>	Percent Disabilities
Significantly Above Threshold	> 16.2%
Just Above Threshold	13.1 – 16.1%%
Reference Threshold (ADD Percentage)	13%
Just Below Threshold	9.8 – 12.9%
Significantly Below Threshold	< 9.7%

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#### Appendix A

# 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:

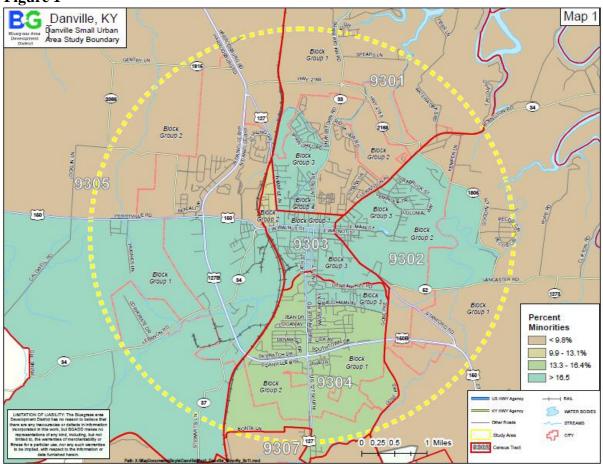
- Percentages of a population reach 25% greater than the county threshold
- Percentages of a population reach 50% or more of the affected community
- More than one EJ group is present

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.

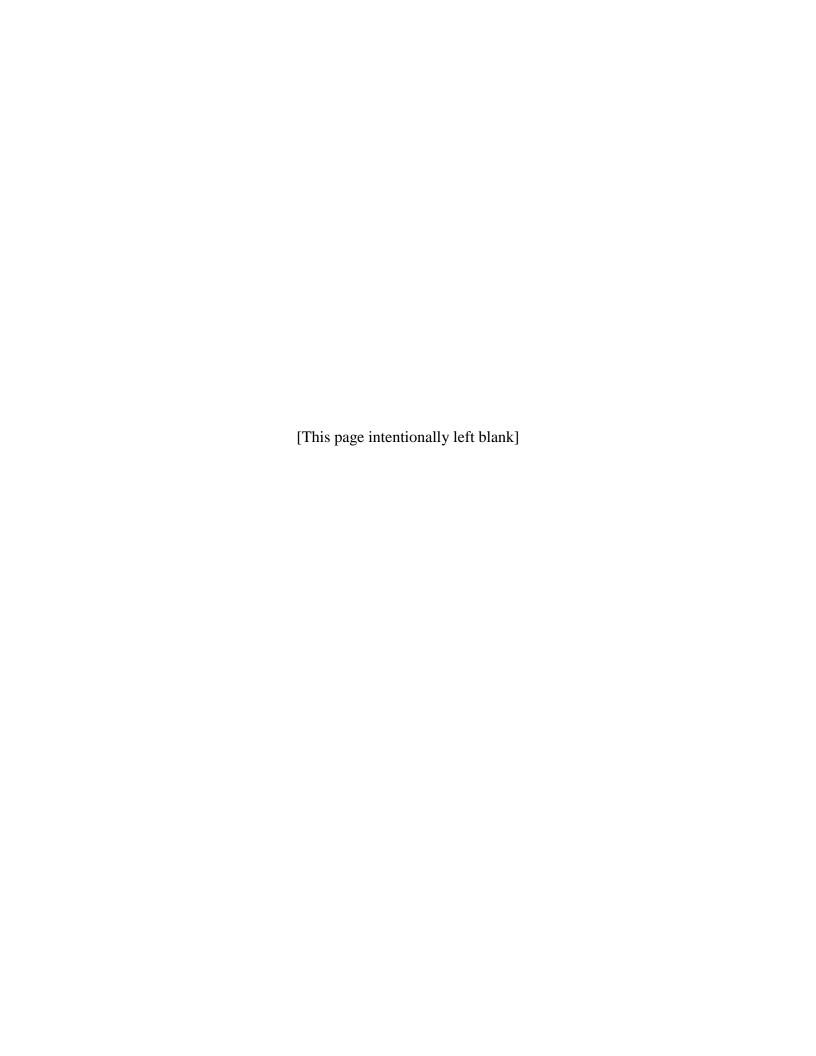
#### **Additional Information**

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:
  - o Access to services, employment or transportation.
  - o Displacement of persons, businesses, farms, or non-profit organizations.
  - o Disruption of community cohesion or vitality.
  - o 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.







This document was prepared in cooperation with the Kentucky Transportation Cabinet, 2014