

GREEN RIVER AREA DEVELOPMENT DISTRICT

US 41 Traffic and Access Management Study

Socioeconomic Study April 2015

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



Prepared by Green River 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 US 41 Traffic and Access Management Study Area. The objective of the study is to analyze existing traffic conditions and identify and evaluate improvements to the US 41 corridor between the US 60 interchange and the intersection with Wolf Hills Road in Henderson.

The information in this report outlines 2009-2013 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, county, city, 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 project study area is located in Henderson County on the US 41 corridor between the US 60 interchange and the intersection with Wolf Hills Road in Henderson. According to the 2010 census, the county has a total area of 466 square miles (1,207 km2), of which 437 square miles (1,132 km2) (or 93.6%) is land and 30 square miles (78 km2) (or 6.4%) is water. The county was formed in 1798 and named for Colonel Richard Henderson who originally purchased 17,000,000 acres (69,000 km2) of land from the Cherokee Indians that would eventually become part of the county. If the 120 counties in Kentucky, it is the twenty-fourth largest. Henderson County is located at the confluence of the Green and Ohio rivers. The county's northern border with Indiana is formed by the Ohio River. The county seat is Henderson. Henderson County is part of the Evansville, IN-KY Metropolitan Statistical Area. According to the 2009-2013 ACS, Henderson County has a population of 46,250 persons and the City of Henderson has a population of 28,757 persons.

Henderson County is composed of 32 census tracts. The planning study area is composed of the following Census Tract Block Groups (BG):

- Census Tract 201, BG 1
- Census Tract 206.1, BG 1
- Census Tract 206.1, BG 2
- Census Tract 206.1, BG 3
- Census Tract 206.1, BG 4
- Census Tract 206.1, BG 5
- Census Tract 207.1, BG 2
- Census Tract 207.1, BG 3

A map of the planning study area in relation to the CTs is displayed in Appendix A.

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.

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 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 2009-2013 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
- C23023 Sex by Disability Status by Full-time work status in the past 12 months for the population 16 to 64 Years

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 (See Appendix C) in this report include the total number and percentages for minorities, elderly, low-income, LEP, and disabled population levels for the census tract, city, county, state, and nation. This report uses the population percentages for Henderson County as the reference threshold for identifying target populations. The county numbers were selected as the reference threshold because the project is completely within the county limits. The county numbers most likely provide a better snapshot of the overall population characteristics of the one census tract in the study area as opposed to the United States or state percentages.

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 NEPA documentation when assessing the potential for adverse and disproportionate impacts to poverty status, and minority populations.

Study Findings

Population by Persons of Racial Minority Origin

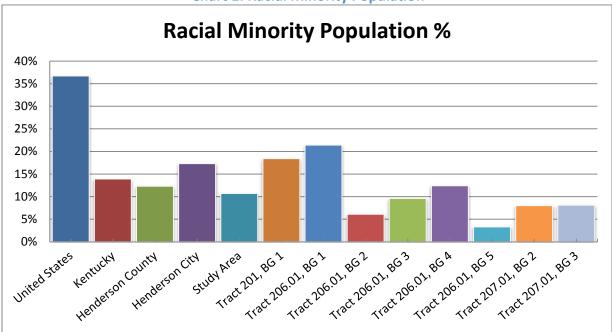


Chart 1: Racial Minority Population

Racial minorities in the United States make up 36.7% of the population, but in Kentucky that percentage drops significantly to just 13.9%. Henderson County displays a lower percentage of racial minorities than that of the state with 12.3% being reported as racial minorities by the 2009-2013 American Community Survey. Block Group (BG) 1 of Census Tract (CT) 201 has a minority population accounting for 18.4% of the CT's population which is above the percentage for the county.

Population by Persons of Hispanic or Latino Origin

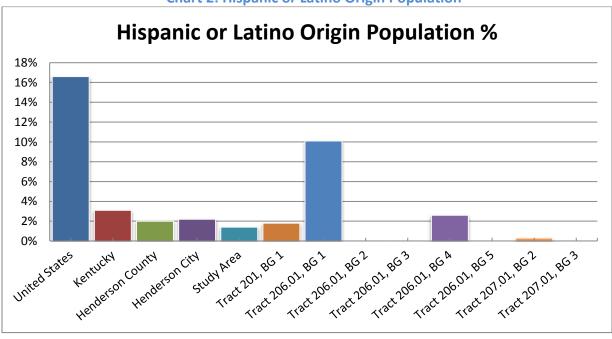


Chart 2: Hispanic or Latino Origin Population

Persons of Hispanic or Latino origin are an ethnic minority group growing at a rapid rate nationwide. In the United States this group represents 16.6% of the total population. In Kentucky only 3.1% of the population was reported as being of Hispanic or Latino origin on the 2009-2013 ACS. Henderson County has a lower representation of Hispanic or Latino individuals than that of the state with 2% of the county's population indicating they belong to this ethnic minority. The 2009-2013 ACS reported that BG 1 of CT 206.01 consists of 10.1% and BG 4 of CT 206.01 with 2.6%.

Population by Persons Age 65 Years and Older

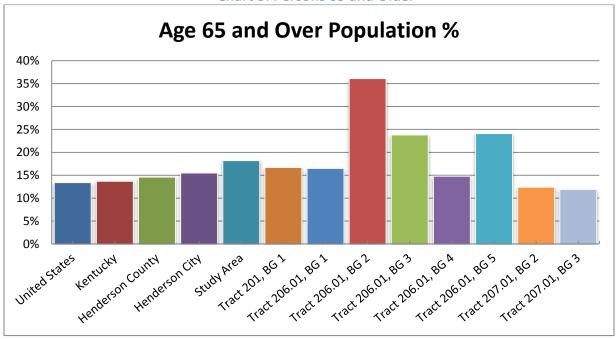


Chart 3: Persons 65 and Older

Henderson County has a higher percentage (14.6%) of *Persons Age 65 Years and Older* than both the state (13.7%) and the U.S. (13.4%). BG 2, 3 and 5 of CT 206.01 in the study area have elevated percentages of elderly persons. BG 2 reports 36.1% of persons being 65 years or older. BG 3 and B 5 of CT 206.01 reported 23.8% and 24.1% respectively.

Population by Persons below Poverty Level

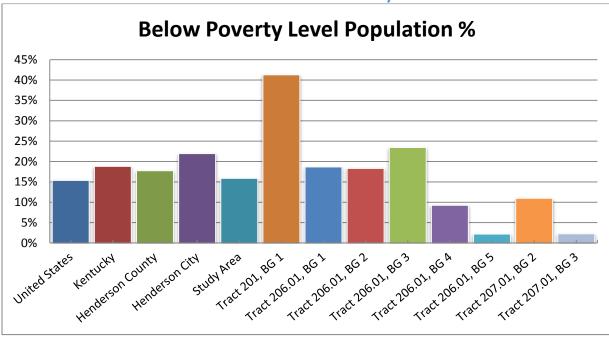


Chart 4: Persons below Poverty Level

The percentage of persons living below the poverty level in Kentucky (18.8%) is higher than that of the United States (15.4%). Henderson County has a notably higher percentage than the nation at 17.7%. BG 1 of CT 201 has higher levels of poverty than does the county, state, and U.S with 41.30% of persons living below the poverty level. BG 3 of 206.01 reports 23.4% population living below the poverty level.

Disabled Population 16 to 64 years

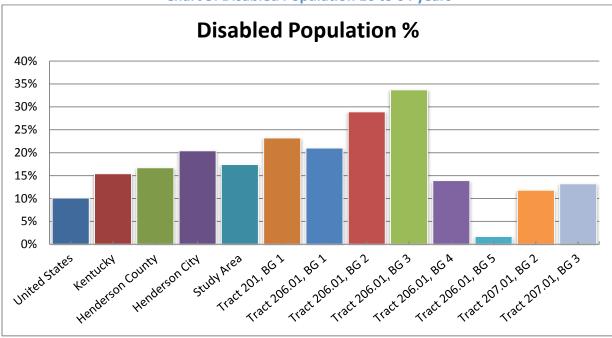


Chart 5: Disabled Population 16 to 64 years

According to 2009-2013 American Community Survey numbers, Kentucky had 15.4% percent of its civilian non-institutionalized population age 16-64 with some type of disability. This is higher than the national percentage (10.1%). Henderson County also reports a higher percentage of disabled persons (15.4%) than does the state and nation. 2009-2013 ACS data shows BG 1 of CT 201 with 23.2%. CT 206.01 contains three Block Groups that have a high percentage of disabled persons that is reported as having a disability with BG 1 being 21%, BG 2 as 28.9% and BG 3 reporting 33.7%.

Population by Persons with Limited English Proficiency

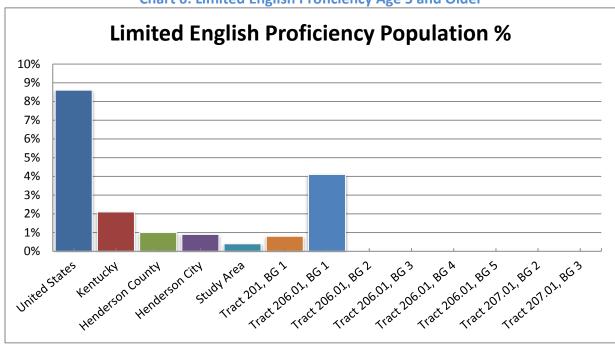


Chart 6: Limited English Proficiency Age 5 and Older

Persons with Limited English Proficiency (LEP) in the United States make up 8.6% of the population, but in Kentucky that percentage decreases to just 2.1%. Henderson County has an even lower percentage of persons with LEP than that of the state and United States with 1.0% being reported by the 2009-2013 American Community Survey. Block Group (BG) 1 of Census Tract (CT) 206.01 displays 4.1% persons with limited English proficiency.

Conclusion

Analysis of Block Group 1 of Census Tract 201 shows racial minorities (18.4%), disabled population (23.2%), and below poverty level (41.3%) located in this area relative to the county and state. It should be noted that small concentrations of minorities, population below poverty level and disabled persons do exist in this block group.

Block Group 1 of Census Tract 206.01 shows minorities (21.4%), Hispanic or Latino origin (10.1%), persons with limited English proficiency (4.1%) or persons disabled (21%). All are higher than the county and state percentages.

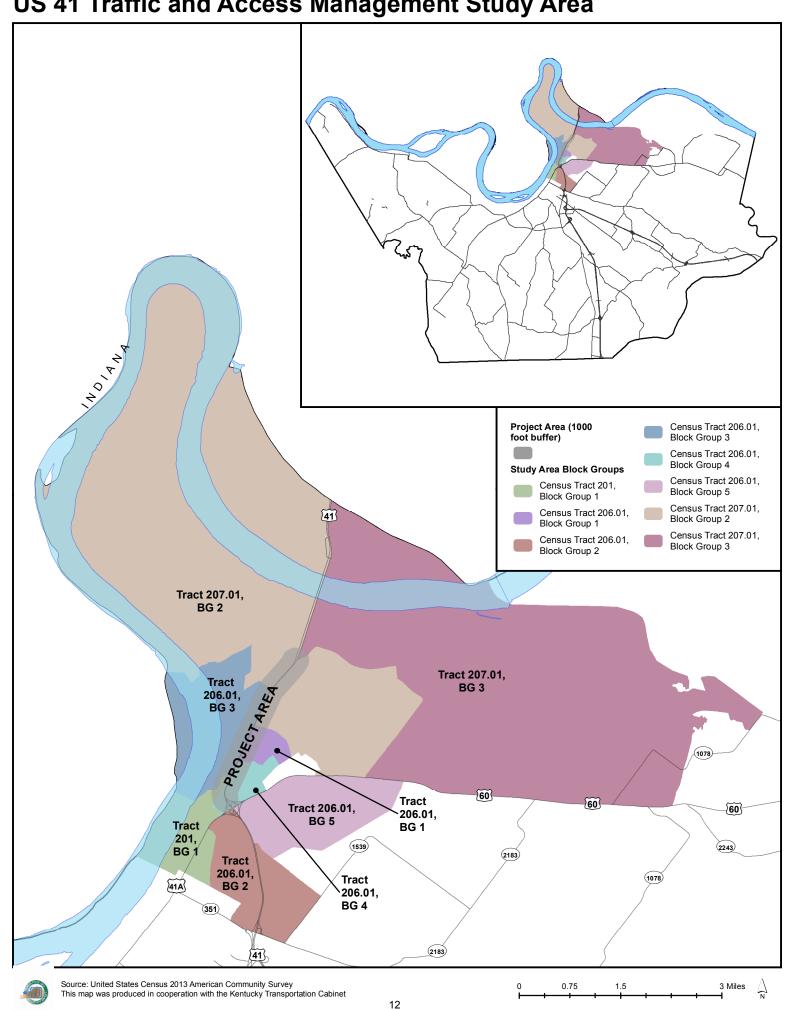
Block Group 3 of Census Tract 206.01 shows person 65 and over (23.8%), disabled persons (33.7%), and population below poverty level (23.4%) located in this area relative to the county, state and nation.

Block Group 4 of Census Tract 206.01 shows Hispanic or Latino origin (2.6%) relative to the county percentages.

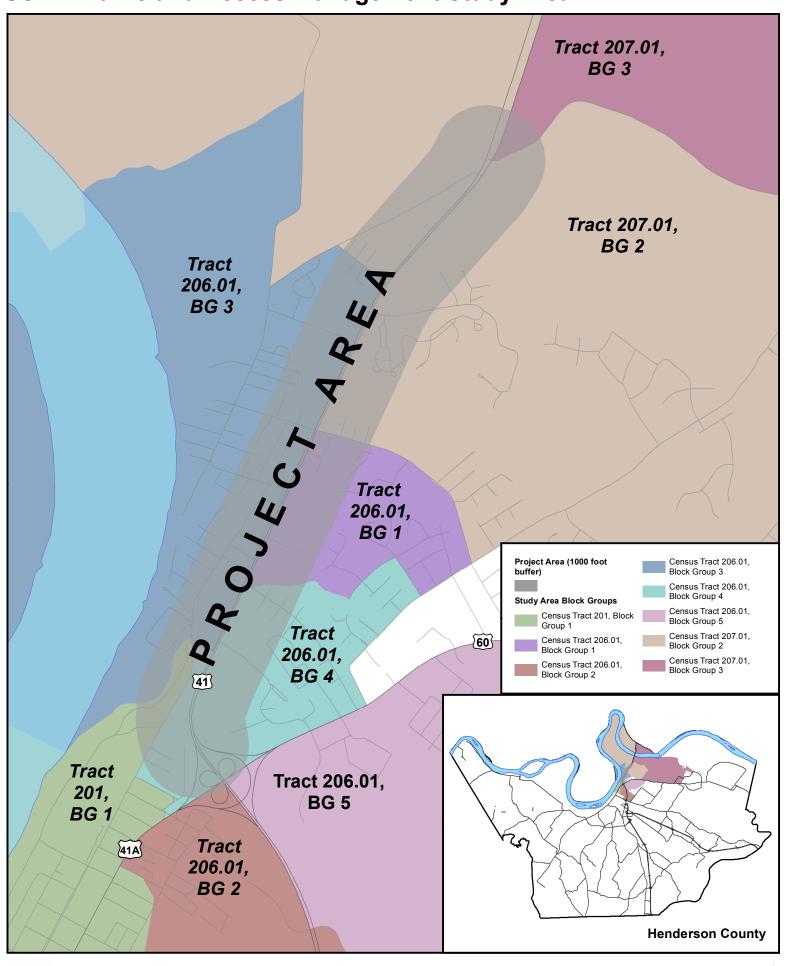
During future phases of project development a more detailed and robust analysis would be required for the NEPA documentation when assessing the potential for adverse and disproportionate impacts to poverty status, and minority populations.

Appendices

US 41 Traffic and Access Management Study Area



US 41 Traffic and Access Management Study Area





0 0.15 0.3 0.6 Miles

Appendix B: Methodology from KYTC

Updated: September 2014

Methodology for Assessing Underserved Populations including Environmental Justice, Title VI, Age and Disability considerations in conjunction with KYTC Planning Studies

Cover Page

Title: Insert specific study type/area Subtitle: Socioeconomic Study

Date: Author:

Analysis

Environmental Justice (EJ) 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. EJ 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

(AC) with potential EJ 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

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

Sample Analysis:

The percentage of persons living below the poverty level in Kentucky (18.60%) is significantly higher than that of the United States (14.90%). Poverty levels in Metcalfe County are slightly lower than that of the state with 16.10% of Metcalfe County residents living below the poverty level. CT 9601 has greater levels of poverty than does the county, state and U.S. with 17.90% of persons living below the poverty level. CT 9603 however has a lower level of poverty than Metcalfe County as a whole and the state, with 13.40% of residents living below the poverty.

****The following disclaimer should be included in the document in the Socioeconomic Study methodologies Section:****

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.

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. The consultant will summarize the information provided by the ADD in the final report. The full Socioeconomic analysis should be placed in an Appendix for reference as necessary.

Maps should be included with the analysis 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 and appropriate range dependent on the relevant data being studied.

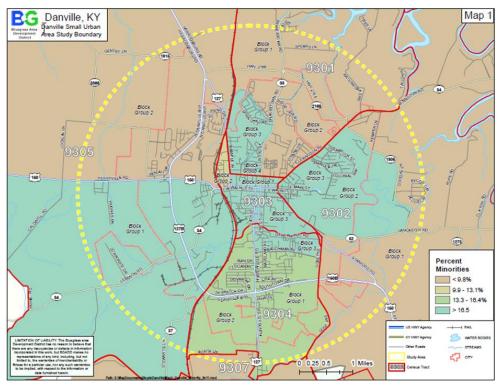


Figure 1

Additional Information

The below information may be beneficial to note for future reference

- Changes due to new residential developments in the area
- 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.

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.
- 1 page summary facing the adjacent related map is a functional, readily relatable format.
- At this stage there is no proposed alignment, therefore we can make no assumptions regarding adverse impacts or mitigation efforts to any populations. We can only identify potential locations of Affected Communities.

Applicable Laws, Acts and Executive Orders

Civil Rights Act of 1964, Title VI (42 USC 2000d et seq.) -This title declares it to be the policy of the United States that discrimination on the grounds of race, color, or national origin shall not occur in connection with programs and activities receiving federal financial assistance, and authorizes and directs the appropriate federal departments and agencies to take action to carry out this policy. The Presidential Memorandum accompanying Executive Order 12898 states that in accordance with this title, each federal agency should ensure that all programs or activities receiving federal financial assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin.

Age Discrimination Act of 1975 - 42 U.S.C. 6101, provides: No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

Rehabilitation Act of 1973, Section 504 - 42 U.S.C. 794, et seq., provides: No qualified handicapped person shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, be subjected to discrimination under any program or activity that receives or benefits from Federal financial assistance.

Americans With Disabilities Act of 1990 - 42 U.S.C. 12131, et seq., provides: No qualified individual with a disability shall, by reason of such disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination by a department, agency, special purpose district, or other instrumentality of a State or local government.

Executive Order #12898 - (Environmental Justice) directs federal agencies to develop strategies to address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations.

Executive Order #13166 - (Limited-English-Proficiency) directs federal agencies to evaluate services provided and implement a system that ensures that Limited English Proficiency persons are able to meaningfully access the services provided consistent with and without unduly burdening the fundamental mission of each federal agency.

Appendix C: U.S. Census Data Tables for Study Area and Maps

Statistics for Racial and Ethnic Minorities

	Total Population	Minority Population	Minority (%)
United States	311,536,594	114,486,242	36.7%
Kentucky	4,361,333	608,141	13.9%
Henderson County	46,303	5,699	12.3%
Henderson City	28,785	4,990	17.3%
Study Area	13,103	1,402	10.7%
Tract 201, BG 1	1,901	350	18.4%
Tract 206.01, BG 1	1,012	217	21.4%
Tract 206.01, BG 2	840	51	6.1%
Tract 206.01, BG 3	1,884	181	9.6%
Tract 206.01, BG 4	1,762	219	12.4%
Tract 206.01, BG 5	1,549	51	3.3%
Tract 207.01, BG 2	2,652	212	8.0%
Tract 207.01, BG 3	1,503	121	8.1%

	Black or African American Alone (%)	American Indian and Alaska Native Alone (%)	Asian Alone (%)	Native Hawaiian and other Pacific Islander alone (%)	Some other race alone (%)	Two or more races (%)	Hispanic or Latino Origin (%)*
United States	12.2%	0.7%	4.8%	0.2%	0.2%	2.1%	16.6%
Kentucky	7.7%	0.2%	1.2%	0.0%	0.1%	1.6%	3.1%
Henderson County	7.5%	0.3%	0.3%	0.0%	0.3%	1.9%	2.0%
Henderson City	11.3%	0.5%	0.4%	0.0%	0.5%	2.5%	2.2%
Study Area	6.7%	0.9%	0.6%	0.0%	0.4%	0.6%	1.4%
Tract 201, BG 1	13.4%	0.4%	0.0%	0.0%	2.8%	0.0%	1.8%
Tract 206.01, BG 1	3.8%	0.0%	3.0%	0.0%	0.0%	4.6%	10.1%
Tract 206.01, BG 2	4.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Tract 206.01, BG 3	4.1%	4.7%	0.0%	0.0%	0.0%	0.8%	0.0%
Tract 206.01, BG 4	8.7%	0.0%	0.0%	0.0%	0.0%	1.1%	2.6%
Tract 206.01, BG 5	0.8%	0.3%	2.2%	0.0%	0.0%	0.0%	0.0%
Tract 207.01, BG 2	6.9%	0.3%	0.4%	0.0%	0.0%	0.0%	0.3%
Tract 207.01, BG 3	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: US Census Bureau, 2009-2013 American Community Survey - Table: BO3002

^{*}Hispanic or Latino Origin represents ethnicity data rather than racial. These figures have been kept out of the calculation for total minority as they could result in duplication of individuals also reporting as a racial group listed in this table.

Statistics for Age, Poverty, Disabled, and Limited English Proficiency Populations

	Total	Persons 65 and Over (%)
United States	311,536,594	13.4%
Kentucky	4,361,333	13.7%
Henderson County	46,303	14.6%
Henderson City	28,785	15.5%
Study Area	13,103	18.2%
Tract 201, BG 1	1,901	16.7%
Tract 206.01, BG 1	1,012	16.5%
Tract 206.01, BG 2	840	36.1%
Tract 206.01, BG 3	1,884	23.8%
Tract 206.01, BG 4	1,762	14.8%
Tract 206.01, BG 5	1,549	24.1%
Tract 207.01, BG 2	2,652	12.4%
Tract 207.01, BG 3	1,503	11.9%

Source: US Census Bureau,

2009-2013 American Community Survey - Table: BO1001

	Total	Population Below Poverty Level (%)
United States	303,692,076	15.4%
Kentucky	4,230,912	18.8%
Henderson County	45,268	17.7%
Henderson City	27,752	22.0%
Study Area	12,807	15.9%
Tract 201, BG 1	1,899	41.3%
Tract 206.01, BG 1	1,012	18.7%
Tract 206.01, BG 2	628	18.3%
Tract 206.01, BG 3	1,804	23.4%
Tract 206.01, BG 4	1,760	9.3%
Tract 206.01, BG 5	1,549	2.2%
Tract 207.01, BG 2	2,652	11.0%
Tract 207.01, BG 3	1,503	2.3%

Source: US Census Bureau,

2009-2013 American Community Survey - Table: B17021

	Total Civilian Non- institutionalized Population (Age 16-64)	Disabled Civilian Non- institutionalized Population (%) (Age 16-64)
United States	204,340,912	10.1%
Kentucky	2,856,232	15.4%
Henderson County	29,814	16.7%
Henderson City	27,870	20.4%
Study Area	8,230	17.4%
Tract 201, BG 1	1,089	23.2%
Tract 206.01, BG 1	672	21.0%
Tract 206.01, BG 2	461	28.9%
Tract 206.01, BG 3	1,173	33.7%
Tract 206.01, BG 4	1,168	13.9%
Tract 206.01, BG 5	958	1.7%
Tract 207.01, BG 2	1,757	11.8%
Tract 207.01, BG 3	952	13.2%

Source: US Census Bureau,

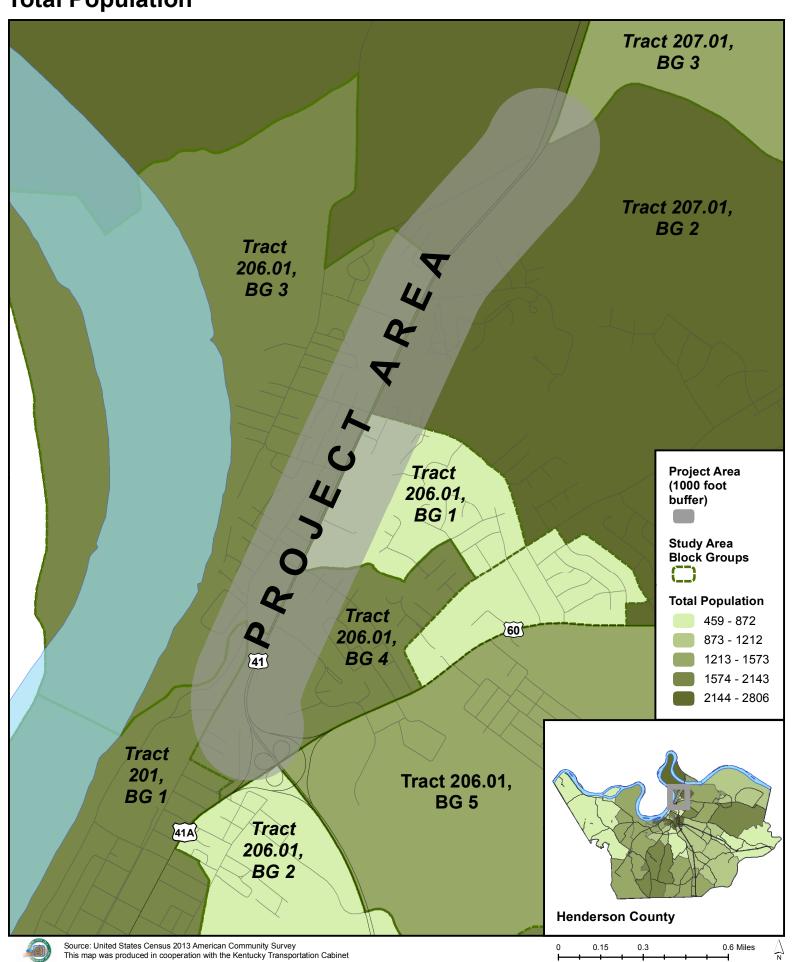
2009-2013 American Community Survey - Table: C23023

	Total Population for Whom English Language Proficiency is Determined (Age 5+)	Population with Limited English Proficiency (%) (Age 5+)
United States	291,484,482	8.6%
Kentucky	4,082,467	2.1%
Henderson County	43,266	1.0%
Henderson City	26,820	0.9%
Study Area	12,324	0.4%
Tract 201, BG 1	1,636	0.8%
Tract 206.01, BG 1	981	4.1%
Tract 206.01, BG 2	801	0.0%
Tract 206.01, BG 3	1,827	0.0%
Tract 206.01, BG 4	1,671	0.0%
Tract 206.01, BG 5	1,468	0.0%
Tract 207.01, BG 2	2,487	0.0%
Tract 207.01, BG 3	1,453	0.0%

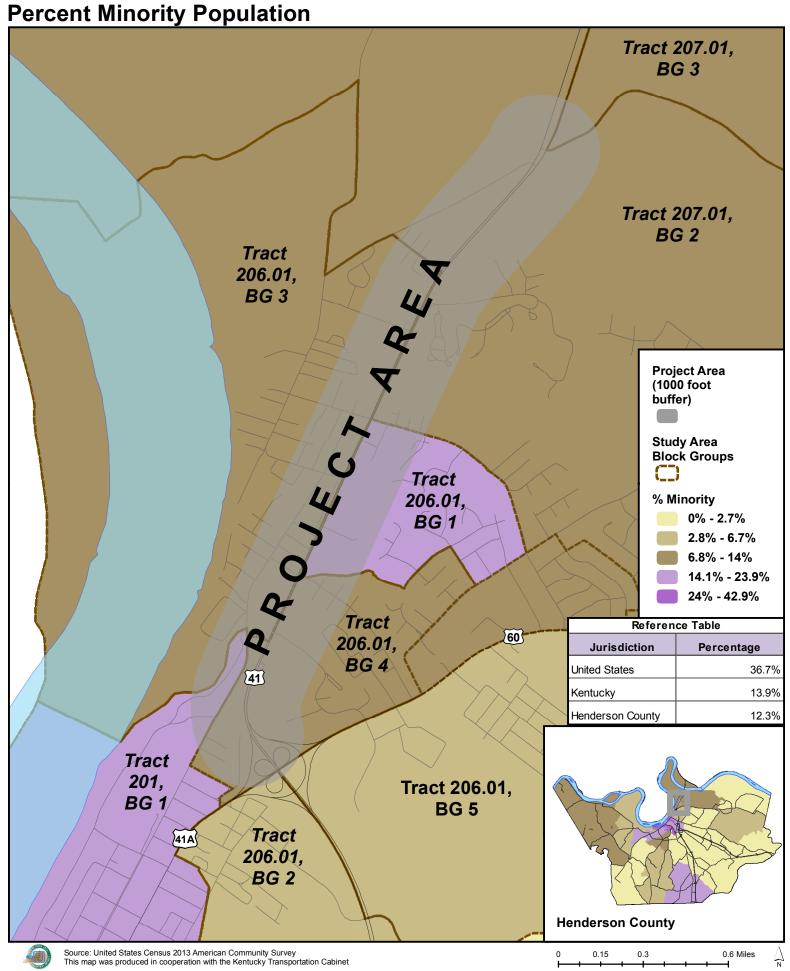
Source: US Census Bureau,

2009-2013 American Community Survey - Table: B16004

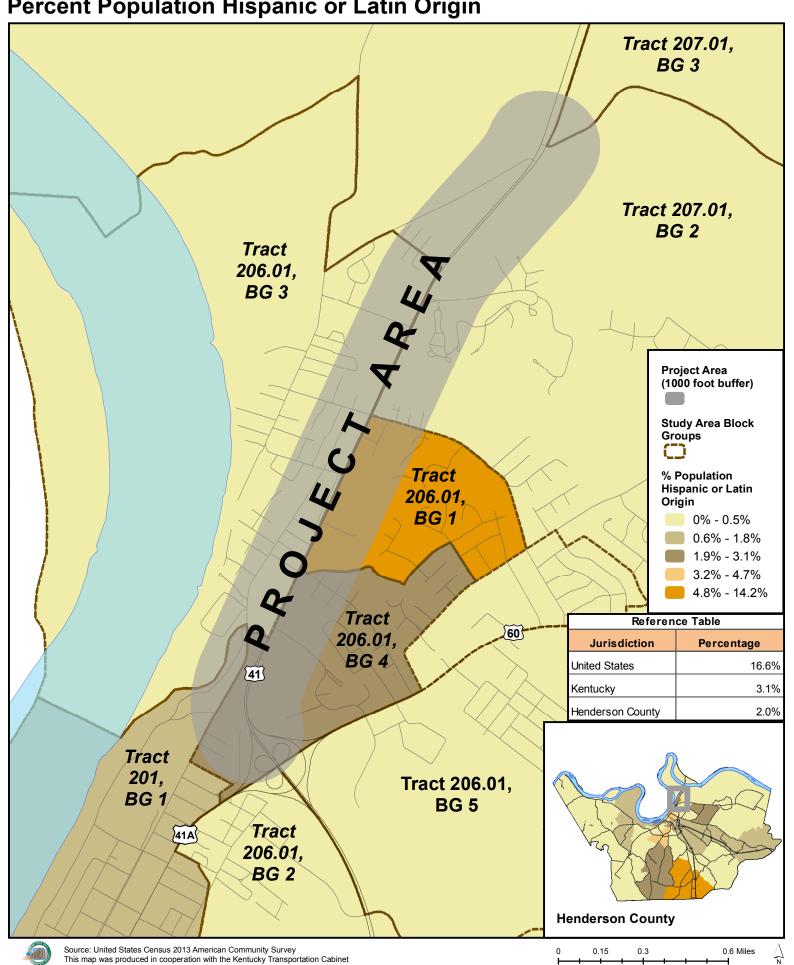
US 41 Traffic and Access Management Study Area Total Population



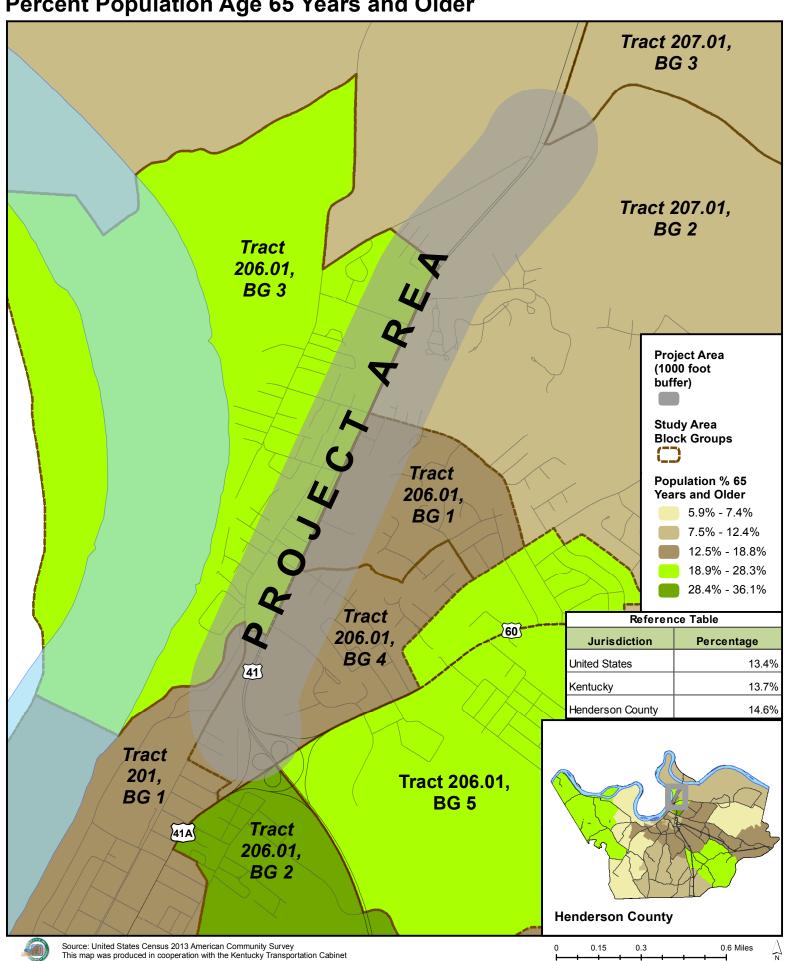
US 41 Traffic and Access Management Study Area



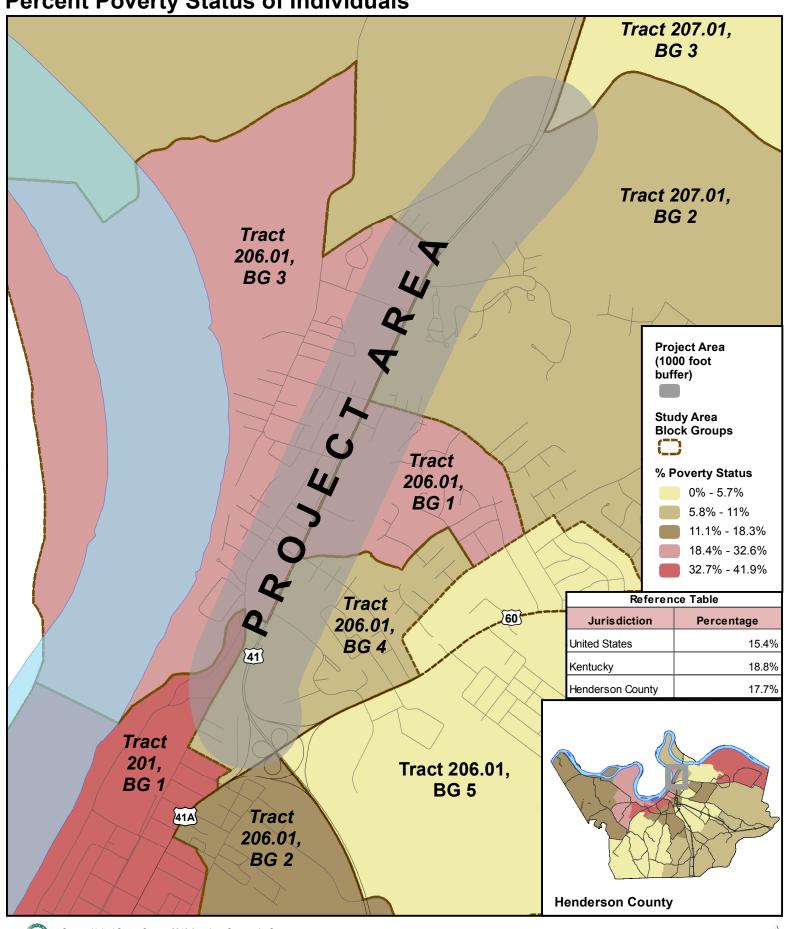
US 41 Traffic and Access Management Study Area Percent Population Hispanic or Latin Origin



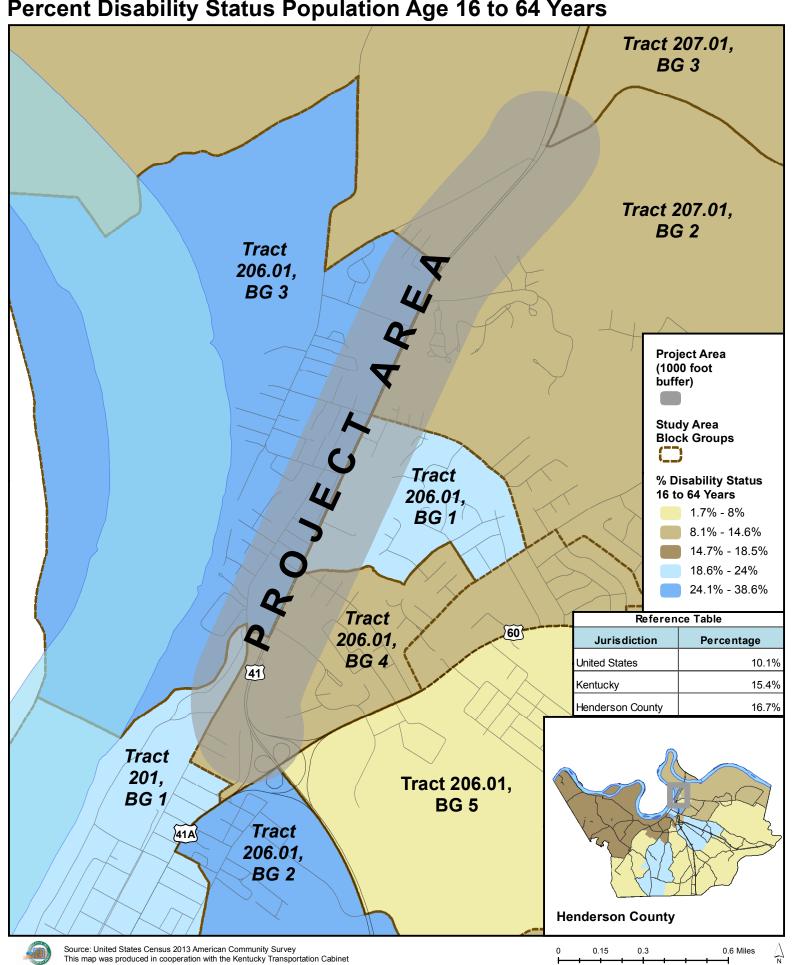
US 41 Traffic and Access Management Study Area Percent Population Age 65 Years and Older



US 41 Traffic and Access Management Study Area Percent Poverty Status of Individuals



US 41 Traffic and Access Management Study Area Percent Disability Status Population Age 16 to 64 Years



US 41 Traffic and Access Management Study Area Percent Speak English "Less than Very Well" Population Age 5 Years and Older

