

Appendix D

Environmental Justice Review

**KY 1286 / KY 998 PLANNING STUDY
From US 45 to US 60 in McCracken County**

ENVIRONMENTAL JUSTICE REVIEW

August 28, 2013

Prepared for

Kentucky Transportation Cabinet (KYTC) – Division of Planning



Prepared by

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1.0 INTRODUCTION

This report presents an overview of the findings for selected socioeconomic characteristics in the KY 1286 / KY 998 planning study area from US 45 to US 60 in McCracken County bordering the city limits of Paducah, Kentucky. The objective of the planning study is to identify both short-term spot improvements as well as some long-term solutions in which both approaches address traffic and safety concerns throughout the study area. The information in this report outlines Census 2010 statistics in and near the project area using tables, charts and maps. It should also be noted that Census 2000 data for Disabilities was utilized in this report due to Census 2010 data not being available until the end of 2013. 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 planning study area is located in McCracken County, near the city limits of Paducah, which is located in the Jackson Purchase region of Kentucky. McCracken County is located in the north central portion of the region and covers a land area of 251 square miles. It is bordered to the north by the Ohio River, the northeast by the Tennessee River, the south by Graves County and the east by Marshall County. It is the largest populated county in the region with a population of 65,565. Paducah is the county seat and is the major economic center and the largest urban area in the region. Paducah is located at the confluence of the Ohio and Tennessee Rivers and has a population of 25,048.

McCracken County is composed of nineteen census tracts. The planning study area is situated in Census Tract (CT) 313.01 and CT 314 (See 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.

The primary source of data for this report is the US Census Bureau American Fact Finder 2010 American Community Survey 5-Year Estimates including tables:

- B03002. Hispanic or Latino By Race
- S0101. Age and Sex
- S1701. Poverty Status in the Past 12 Months
- P041. Age by Type of Disability for the Civilian Noninstitutionalized Population 5 Years and Over with Disabilities**** (Census Data for Disabilities was not available at the county and census tract level using the 2010 Census. The data was obtained from using Census 2000 Decennial Census, Summary File 3 – Sample Data. Census 2010 disability data is expected to be available at the end of 2013).

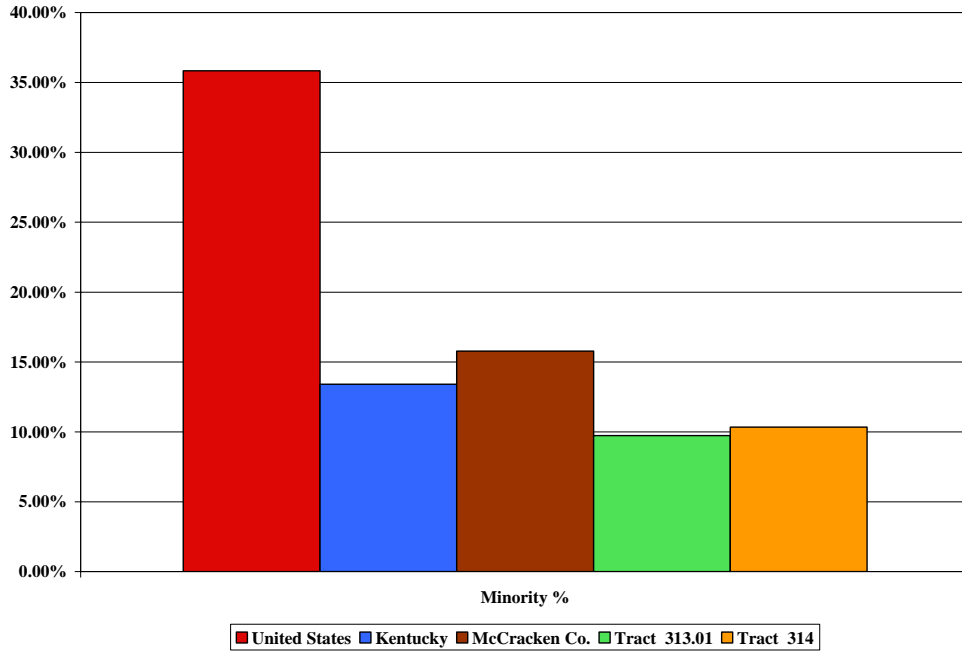
The Census tables (See Appendix C) in this report include the total number and percentages for minorities, elderly, low-income and disabled population levels for the census tract, county, state and the nation. A method developed by the Ohio Department of Transportation (ODOT)¹ to identify target populations is applied in the data analysis. This report uses the population percentages for McCracken County as the reference threshold for identifying target populations. The county numbers were selected for the reference threshold because the project overlaps into two census tracts. The county numbers most likely provide a better snapshot of the overall population characteristics of the two census tracts in the planning study area as opposed to the United States or state percentages.

In reviewing each census tract 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).

¹ Ohio Transportation EJ Guidance, Ohio Department of Transportation, August 2002, Pages 10-11.

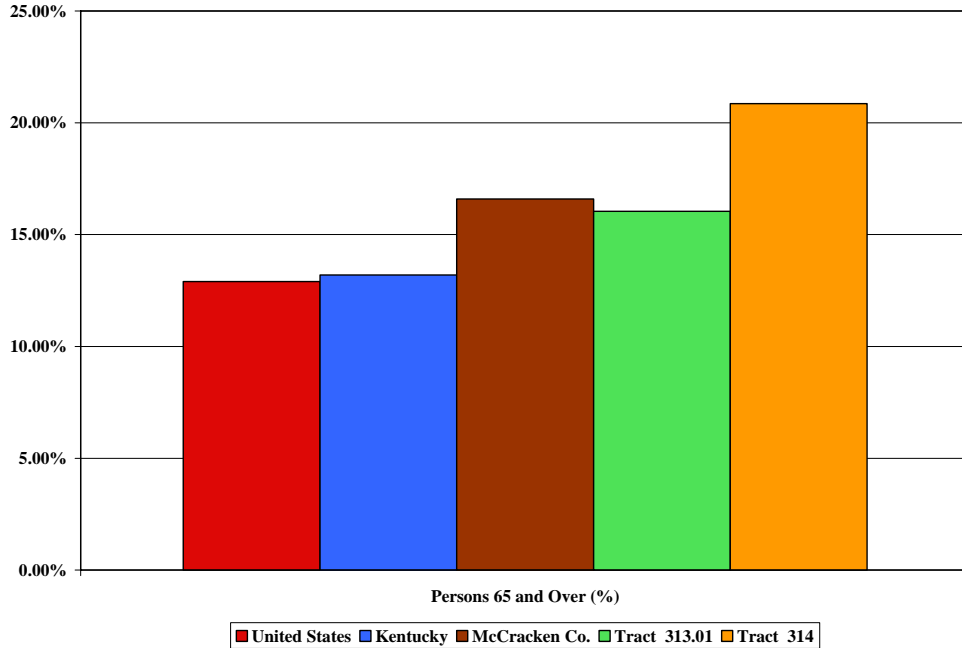
4.0 STUDY FINDINGS: POPULATION BY PERSONS OF MINORITY ORIGIN

The total percent minority population for the county is 15.78 percent. This percentage is just above the state percent (13.20%) and significantly below the U.S. (35.84%). When comparing the CT minority population to the reference threshold (15.78%), the data indicates CT 313.01 (9.73%) and CT 314 (10.33%) are both significantly below the threshold.



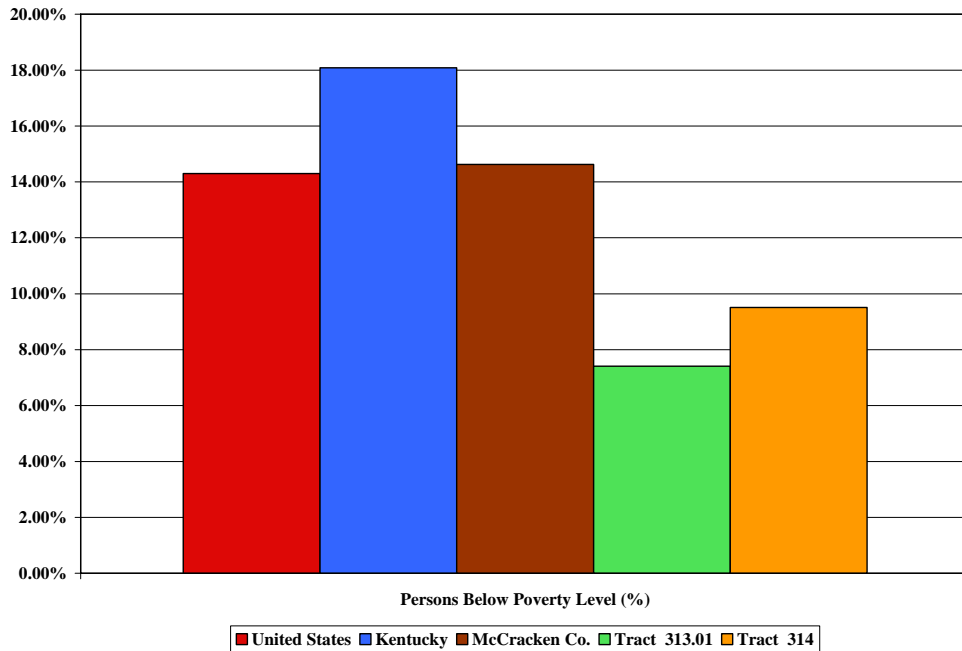
5.0 STUDY FINDING: POPULATION BY PERSONS AGE 65 YEARS AND OLDER

McCracken County has a much higher percentage (16.60%) of *Persons Age 65 Years and Older* than both the state (13.20%) and the U.S. (12.90%). This characteristic is very common with the eight counties that make up the Jackson Purchase as all eight have higher percentages than the state and nation. Both CTs in the project also have elevated percentages of elderly populations. CT 313.01 is nearly equal to the county percentage (16.04%) and CT 314 has a significantly higher percentage (20.86%).



6.0 STUDY FINDINGS: POPULATION BY PERSONS BELOW POVERTY LEVEL

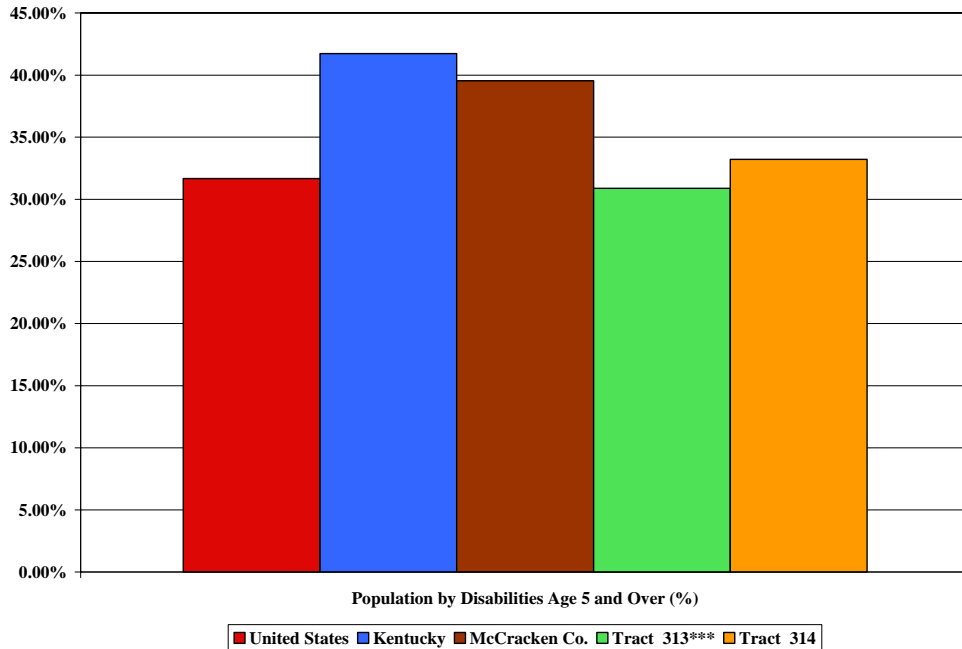
The percentage of persons living below the poverty level in Kentucky (18.08%) is significantly higher than that of the United States (14.3%). McCracken County is more similar to the U.S. than the state with 14.63 percent being significantly lower than the Commonwealth. This characteristic is even less of an issue in the project area. Both CT 313.01 (7.41%) and CT 314 (9.51%) are significantly below the threshold.



7.0 STUDY FINDING: POPULATION BY DISABILITIES AGE 5 AND OVER

At the time of this report (July-August 2013) Census 2010 data for disabled populations was not available at the state, county and census tract level. Since it is encouraged by the KYTC methodology assessment for Environmental Justice concerns, and so as not to overlook any disadvantaged populations, the Census 2000 data was utilized as a reference for this particular demographic category. Because Kentucky's population numbers have not changed significantly over the last two census counts, the Census 2000 data should give a fair assessment of current conditions. It should be noted when analyzing the census data CT 313 was sub-divided into CT 313.01 and 313.02 as a part of the 2010 Census. This will slightly skew the total numbers for this particular CT as it relates to the project area. Based on the overall characteristics of the county, if the data allowed an equal comparison, it would be expected that the percentages would be similar for Census 2000 and Census 2010.

According to Census 2000 numbers, Kentucky had 41.73 percent of its population with some type of disability. This is considerably higher than the United States which is 31.68 percent. Likewise, McCracken County is higher than the U.S., but lower than the state with 39.54 percent. Using the county percent as the reference threshold the data indicates both CT 313 (30.88%) and 314 (33.22%) are just below the reference threshold.



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 CT 313.01 and CT 314 show elevated percentages of

elderly population. The percent elderly located in CT 313.01 is nearly equal to the county, while CT 314 is 25% higher. This should be noted and taken into consideration in the recommended short-term improvements and long-term solutions of the planning study.

CT 314 is one of the larger land area CTs in the county and this elevated percentage could be dispersed throughout the area and not condensed to a particular location. These areas may or may not be considered part of the target population depending on the number of residents, location, percentage and size of the CT. Although there may be a high percentage, there is not necessarily a concentrated population. If necessary, field visits and discussions with local officials and/or other sources of information should be collected as any proposed project from this planning study moves forward into the design phase.

Impacts associated with any project will likely be mitigated by the improvements in pedestrian access and safety, along with improved traffic flow, safety and reduction in time delays during peak traffic periods.

Appendices

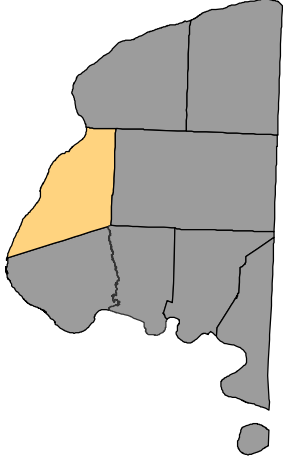
Appendix A

Project Area with Census Tract Locations

Census Tract Boundaries in Project Area

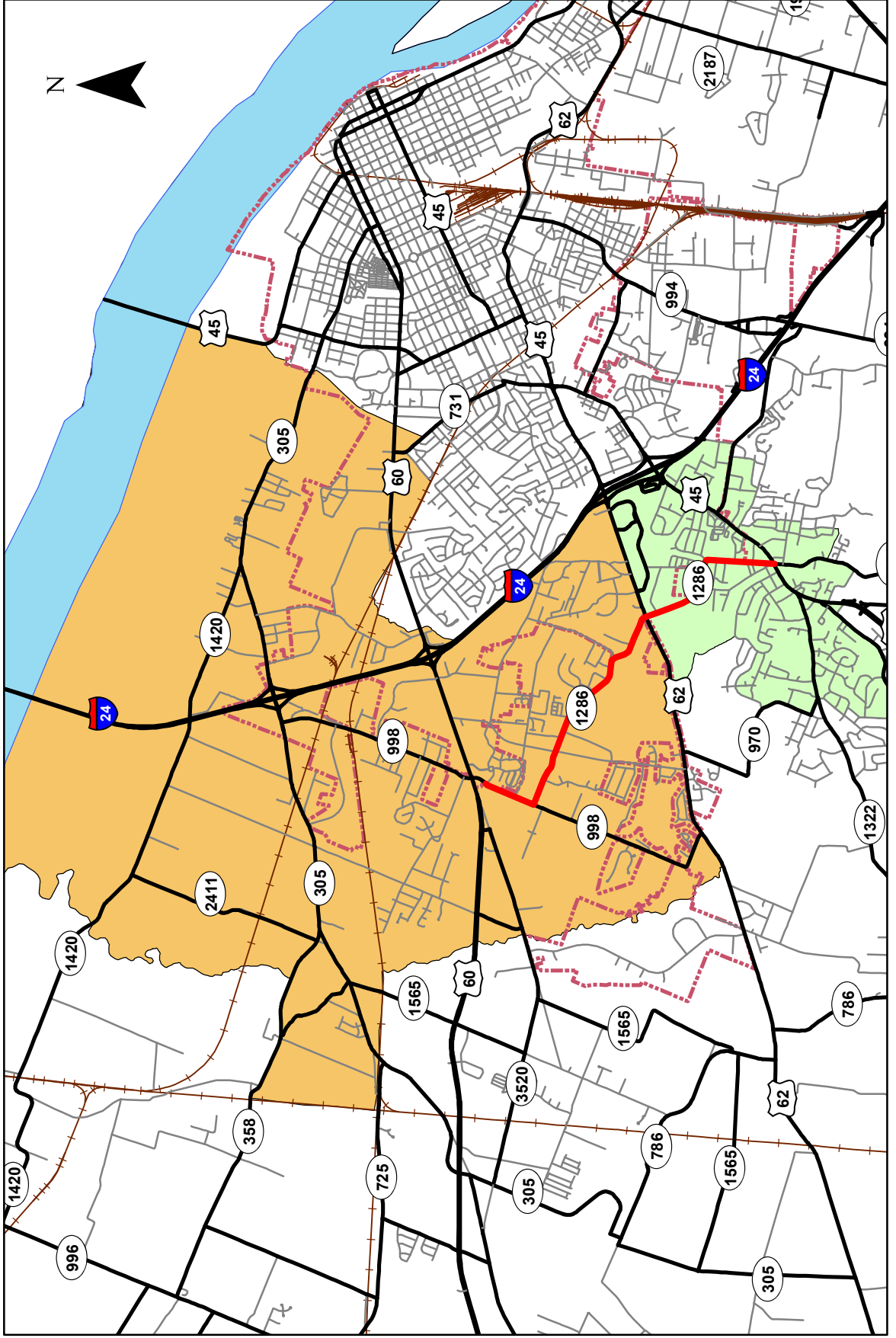
KY 1286 / KY 998 Planning Study

from US 45 to US 60



Legend

- Census Tract 313.01
- Census Tract 314
- Project Location
- Local Roads
- State Roads
- Rail Road
- Paducah



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 (EJ) Concerns for KYTC Planning Studies

Updated: May 31, 2012

Generally, Environmental Justice (EJ) studies are completed by the Area Development District (ADD). In this case the consultant will be responsible for providing a map of the alternatives which will be submitted by KYTC to the applicable ADD. The consultant will review and summarize the information provided by the ADD in the final report. However, the consultant should be prepared to provide the EJ if it is requested by KYTC.

The demographics of the affected area should be defined using U.S. Census data (Census tracts and block groups) and the percentages for minorities, low-income, elderly, or disabled populations should be compared to those for the following:

- Other nearby Census tracts and block groups,
- The county as a whole,
- The entire state, and
- The United States.

Information from PVA offices, social service agencies, local health organizations, local public agencies, and community action agencies can be used to supplement the Census data. Specifically, we are interested in obtaining the following information:

- Identification of community leaders or other contacts who may be able to represent these population groups and through which coordination efforts can be made.
- Comparison of the Census tracts and block groups encompassing the project area to other nearby Census tracts and block groups, county, state, and United States percentages.
- Locations of specific or identified minority, low-income, elderly, or disabled population groups within or near the project area. This may require some field reviews 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 are not limited to:
 1. Access to services, employment or transportation.
 2. Displacement of persons, businesses, farms, or non-profit organizations.
 3. Disruption of community cohesion or vitality.
 4. Effects to human health and/or safety.
- Possible methods to minimize or avoid impacts on the target population groups.

If percentages of these populations are elevated within the project area, it should be brought to the attention of the Division of Planning immediately so that coordination with affected populations may be conducted to determine the affected population's concerns and comments on the project. Also, with this effort, representatives of minority, elderly, low-income, or disabled populations should be identified so that, together, we can build a partnership for the region that may be incorporated into other projects. Also, we hope to build a Commonwealth-wide database of contacts. We are available to participate in any meetings with these affected populations or with their community leaders or representatives.

In identifying communities, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect. 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. A target population also exists if there is (1) more than one minority or other group present and (2) the percentages, as calculated by aggregating all minority persons, exceed that of the general population or other appropriate unit of geographic analysis.

Maps should be included that show the Census tracts and block groups included in the analysis as well as the relation of the project area to those Census tracts and block groups.

Appendix C

U.S. Census Data Tables for Study Area

	Total	Total Minority	Minority %	Black or African American alone	Black or African American alone (%)	Hispanic or Latino Origin	Hispanic or Latino Origin (%)	American Indian and Alaska Native alone	American Indian and Alaska Native alone (%)
United States	306,603,772	109,873,717	35.84%	37,449,666	12.21%	49,215,563	16.05%	2,049,094	0.67%
Kentucky	4,316,040	578,771	13.41%	332,858	7.71%	124,593	2.89%	7,491	0.17%
McCracken Co.	65,451	10,331	15.78%	6,421	9.81%	1,373	2.10%	155	0.24%
Tract 313.01	5,086	495	9.73%	220	4.33%	27	0.53%	17	0.33%
Tract 314	6,022	622	10.33%	216	3.59%	218	3.62%	9	0.15%
Total		Asian alone	Asian alone (%)	Some other race alone	Some other race alone (%)	Two or more races	Two or more races (%)	Native Hawaiian and other Pacific Islander alone	Native Hawaiian and other Pacific Islander alone (%)
United States	306,603,772	14,333,034	4.67%	654,541	0.21%	5,702,577	1.86%	469,242	0.15%
Kentucky	4,316,040	47,197	1.09%	4,462	0.10%	59,914	1.39%	2,256	0.05%
McCracken Co.	65,451	474	0.72%	64	0.10%	1,844	2.82%	0	0.00%
Tract 313.01	5,086	65	1.28%	0	0.00%	166	3.26%	0	0.00%
Tract 314	6,022	161	2.67%	0	0.00%	18	0.30%	0	0.00%

Source: US Census Bureau 2010 American FactFinder
2007-2011 American Community Survey 5-Year Estimates
Detailed Tables: B03002-Hispanic or Latino Origin by Race

	Total	Persons 65 and Over	Persons 65 and Over (%)	Population for Whom Poverty Status is Determined	Persons Below Poverty Level	Persons Below Poverty Level (%)
United States	306,603,772	39,551,885	12.90%	298,787,998	42,739,924	14.30%
Kentucky	4,316,040	569,714	13.20%	4,186,093	756,947	18.08%
McCracken Co.	65,451	10,862	16.60%	64,006	9,363	14.63%
Tract 313.01	5,086	816	16.04%	4,995	370	7.41%
Tract 314	6,022	1,256	20.86%	5,898	561	9.51%
Source: US Census Bureau 2010 American FactFinder						
2007-2011 American Community Survey 5-Year Estimates						
Detailed Tables: S0101-Age and Sex, S1701 Poverty Status in the Past 12 Months						
	Population for Whom Disability Status is Determined	Population by Disabilities Age 5 and Over	Population by Disabilities Age 5 and Over (%)			
United States	281,421,906	89,142,962	31.68%			
Kentucky	4,041,769	1,686,789	41.73%			
McCracken Co.	65,514	25,906	39.54%			
Tract 313***	9,987	3,084	30.88%			
Tract 314	5,794	1,925	33.22%			
Source: US Census Bureau American FactFinder Decennial Census						
Census 2000 Summary File 3 - Sample Data						
Detailed Tables: P041: Age by Types of Disability for the Civilian Noninstitutionalized Population 5 Years and Over with Dis						
CT313*** In 2010 this CT was divided into CT 313.01 & 313.02						

Appendix D

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

The McCracken County percentages are used as a reference threshold in each of the census data categories utilized for this report. 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	> 19.73%
Just Above Threshold	15.78% - 19.73%
REFERENCE THRESHOLD (County Percentage)	15.78%
Just Below Threshold	11.83% - 15.78%
Significantly Below Threshold	< 11.83%

Percent 65 and Older

<u>Analysis Range</u>	<u>Percent 65 and Older</u>
Significantly Above Threshold	> 20.75%
Just Above Threshold	16.60% - 20.75%
REFERENCE THRESHOLD (County Percentage)	16.60%
Just Below Threshold	12.45% - 16.60%
Significantly Below Threshold	< 12.45%

Percent Below Poverty

<u>Analysis Range</u>	<u>Percent Below Povert</u>
Significantly Above Threshold	> 18.29%
Just Above Threshold	14.63% - 18.29%
REFERENCE THRESHOLD (County Percentage)	14.63%
Just Below Threshold	10.97% - 14.63%
Significantly Below Threshold	< 10.97%

Percent Disabilities Age 5 and Over

<u>Analysis Range</u>	<u>Percent Below Povert</u>
Significantly Above Threshold	> 49.43%
Just Above Threshold	39.54% - 49.43%
REFERENCE THRESHOLD (County Percentage)	39.54%
Just Below Threshold	29.65% - 39.54%
Significantly Below Threshold	< 29.65%