

**KY 49 from KY 84 to KY 52**  
**Marion County Item No. 4-8707**

**Environmental Justice and  
Community Impact Report**



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## **1.0 Introduction**

The following document is an assessment of the community demographics and characteristics related to the defined project study area of KY 49 from St. Mary's Road (KY 84) to Loretto (KY 52) in Marion County. This project is listed as Item Number 4-8707.00 in the Kentucky Six-Year Highway Plan FY 2012-2018 and is currently in the Planning phase.

The resources used to compile the data contained herein are the U.S. Census Bureau, Kentucky State Data Center, local elected officials, community leaders, and field observations of the study area. The information and results are intended to assist the Kentucky Transportation Cabinet in making informed and prudent decisions in the study area, particularly as it pertains to the requirements of Executive Order 12898<sup>1</sup>, to ensure equal environmental protection to all groups potentially impacted by both short and long-term improvement strategies for this section of KY 49.

This report includes data tables comparing the populations of the census divisions directly in and around the study area at the county, state, and national levels. Statistics are provided for minority, elderly, and low-income populations for census tracts, block groups, and census blocks except where not available. For ease of analysis, maps are included that highlight areas of interest at the block group and census block level.

## **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 socio-economic group should bear a disproportionate share of the negative environmental consequences

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<sup>1</sup> Executive Order 12898 signed on February 11, 1994 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...”

resulting from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies.”

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.

## 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.

EO12898 and USDOT Order 5610.2 do not address consideration of the elderly population. However, the U.S. DOT encourages the study of these populations in EJ discussions and in accordance with EJ, Title VI of the Civil Rights Act of 1964 and the Kentucky Transportation Cabinet’s advocacy of inclusive public involvement and equal treatment of all persons this study includes statistics for persons age 65 and over that are within the study and comparison areas.

### 3.0 Methodology

For this study, data was collected by using the method outlined by the Kentucky Transportation Cabinet document, “Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies.” (See Appendix B.)

The primary sources of data used in the compilation of this report were the U.S. Census Bureau’s 2010 Census, the U.S. Census Bureau’s 2007-2011 ACS, Kentucky State Data Center, local elected officials, community leaders, and field observations. Statistics were compiled to present a detailed analysis of the community conditions for the project study area.

### 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 people, with an optimum size of 1,500 people.
- **Census Block (CB)** – An area bounded on all sides by visible and/or invisible features shown on a map prepared by the Census Bureau. A CB is the smallest geographic entity for which the Census Bureau tabulates decennial census data.

The census data tables include percentages for minority, elderly, and low-income populations in the United States, Kentucky, Marion County, Census Tracts, Block Groups, and Census Blocks located in and around the study area, except where not available. This data was separated into similar geographical census units to obtain accurate measures of demographic data.

## 5.0 Study Findings

This Environmental Justice and Community Impact Report is to be used as a component of a programming study currently being conducted by the Kentucky Transportation Cabinet Division of Planning for the identification of short and long-term improvement strategies for the defined section of KY 49. This study is intended to help define the location and purpose of the project and meet federal requirements regarding consideration of environmental issues as defined in the National Environmental Policy Act (NEPA).

According to the 2010 Census, there are three (3) Census Tracts and four (4) Block Groups that encompass the population of the defined study area. These are listed below. (See Map 10.1 for geographic location.)

Marion County Total Population	19,820
Study Area Total Populations	10,276
Census Tract 970200	4,463
Block Group 1	591
Block Group 2	690
Block Group 3	1,526
Block Group 4	1,656
Census Tract 970300	2,765
Block Group 1	2,765
Census Tract 970400	3,048
Block Group 1	1,621
Block Group 2	1,427

## 6.0 Study Findings / Population by Persons of Minority Origin

As described in the census data, the “White Alone” population percentage for the state of Kentucky and Marion County is 87.8% and 88.1%, respectively, which is much higher than the national percentage of 72.4%. The total minority population percentage for the state has been calculated and found to be 12.2%. The minority percentage for Marion County is comparable to this value at 11.9%, while the percentage for the study area is slightly higher at 15.3%.

An analysis of block groups in the area reveals that BG 4 in CT 970200 (14.6%) and BG 1 in CT 970300 (14.3%) have a concentration of minority populations that are higher than both the state and national average, but lower than the county average. Census Tract 970200 BG 2 (26%) and BG 3 (24.7%) have concentrations of minority populations that far exceed national, state and county averages. However, as is evident from Map 10.4, CT 970200 BG 2 and BG 3 lie outside of the programming study area of interest. All other BG's have minority concentrations that are well below the national, state and county averages.

Data at the census block level provides further explanation. In relation to the area(s) that would be affected by or are close enough to the defined area in the programming study, four census blocks stand out: CT 970200 BG 4 CB 4008 (19.6%); and CT 970300 BG 1 CB 1037 (55.3%), CB 1055 (35.6%), and CB 1057 (31.7%). These blocks all had populations that were high enough to warrant concern. There were a few more blocks that had high concentrations of minorities in the study area, but the total population of these blocks, however, are all under 15 persons.

In accordance with the USDOT definition of *Minority*, all races were included in the minority concentration analysis. It is worth noting, though, that of the total minority population in Marion County, 14.5% are of Two or More Races and 67.7% are Black or African American. For the defined study area, 1.5% are of Two or More Races and 69.7% are Black or African American. All of the other races have very low concentrations at the county, census tract, and block group levels. Therefore, the areas indicated are highly representative of the Two or More Races and Black or African American populations in the study area. Also worth mentioning is the fact that Hispanic or Latino Origin persons may be of any race. When analyzed separately, though, these individuals were found to make up 15.2% of the total population in the defined study area.

\*It must be noted that there are two BG's (1 and 2) in CT 970200 that were not included in the analysis of this report. BG's 1 and 2 are located in the city limits of Lebanon and therefore have a more dense population than the other BG's in the study area. It was felt that these two BG's (whose population characteristics were different from the rest of the study area because of increased density) did not represent the study area accurately and were feared to become an outlier in the data. However, all of their data has been included in the report.

Maps 10.4 and 10.5 display the minority concentrations geographically.

## **7.0 Study Findings / Population by Persons 65 and Over**

As described in the census data, the population percentage of Persons 65 and Over are very consistent at the national and state levels – 13.0% and 13.3%, respectively. The county level is consistent with the national and state average at 13.0%.

When comparing block groups in the area, four groups have percentages equal to or above the Marion County value of 13.0%: CT 970200 BG 1 (29.1%); BG 2 (24.6%); BG 3 (13.3%); CT 970400 BG 1 (15.9%). Of the BG's that are directly impacted by the study scope, all are below the Marion County and/or the State levels with the exception of CT 970400 BG 1 which is just slightly over at 15.9% (not necessarily enough to warrant special consideration).

Upon further analysis, six census blocks have high percentages of minority populations and have greater than 20 total people: CT 970200 BG 4 CB 4002 (28.6), CB 4006 (23.7%), and CB 4008 (19.6%); CT 970300 BG 1 CB 1041 (16.7%) and CB 1064 (20.6%); and CT 970400 BG 2 CB 2007 (31.70%). There were five blocks in the study area that had high concentrations of persons over 65; however, the total populations of these blocks are all under 20 persons.

Maps 10.6 and 10.7 display the 65 and over concentrations geographically.

## **8.0 Study Findings / Population by Persons Below Poverty Level**

As described in the 2011 American Community Survey of the U.S. Census Bureau data, the percentage of persons below the poverty level in Kentucky is 18.1% and in Marion County 17.4% – both well above the national level of 14.3%.

As illustrated in Map 10.8 and the Census Data table in Appendix C, all three CT's have concentrations of impoverished persons at or below the state and county level(s). CT's 970200 and 970400 have levels that are above the national average but only by a maximum of 3.1%.

2010 Census and/or 2011 ACS data at the census block group and block level were not available for analysis.

Map 10.8 displays the concentration of persons below the poverty level geographically.



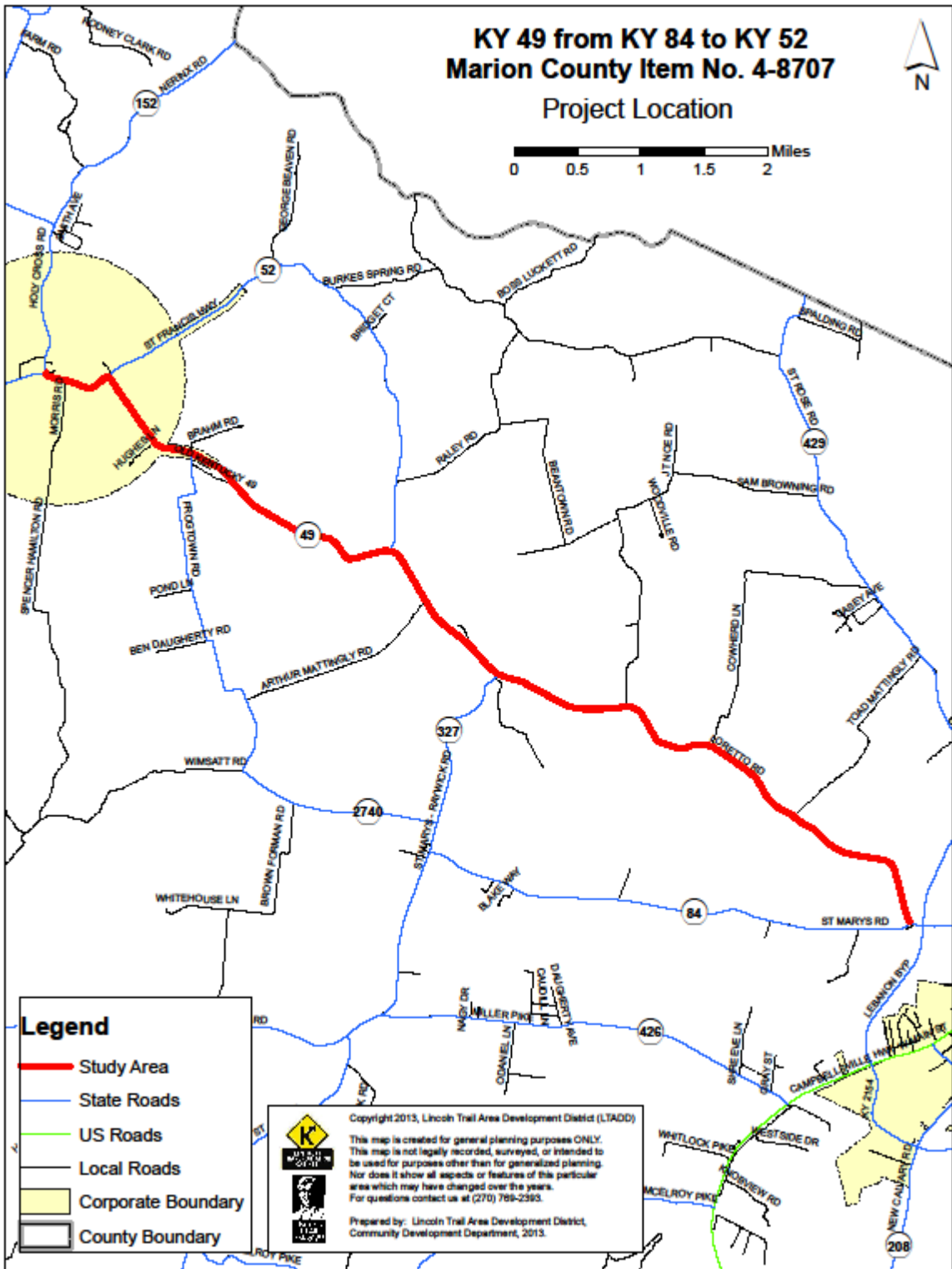
## **9.0 Conclusion**

After a comprehensive analysis of the KY 49 study area, there were a total of four census blocks (identified in the *Study Findings Section 6*) that have potential concerns with regards to minority concentrations. As mentioned in the *Study Findings Section 7*, there are six census blocks that have higher than average populations of 65 and over and might warrant special consideration. There was not enough data available for income level to make a determination if any impoverished concentrations of the populations will be affected by the study area. From the *Study Findings* section (and map), you can tell that poverty levels at the census track area all at or below the state and county levels. All other areas that had elevated percentages have been described in the *Study Findings* sections of this report and can be deduced from the respective maps.

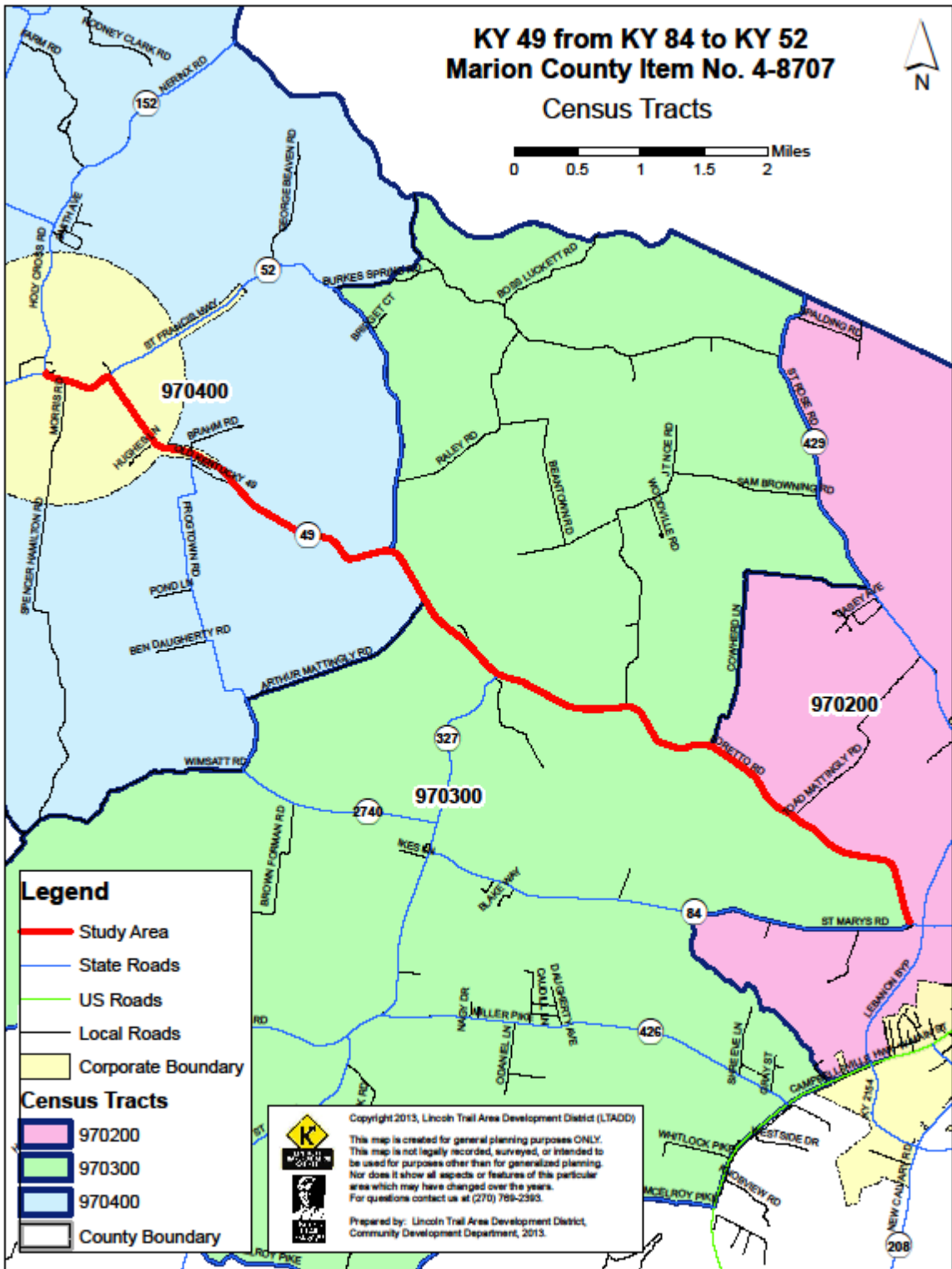
Local official, stakeholder, and public meetings did not reveal information contrary to the findings of this report. Environmental Justice impacts are unlikely with the proposed project, but, KYTC should continue to assess the likelihood of impacts as any improvement projects move forward along this corridor.

## **10.0 Study Area Maps**

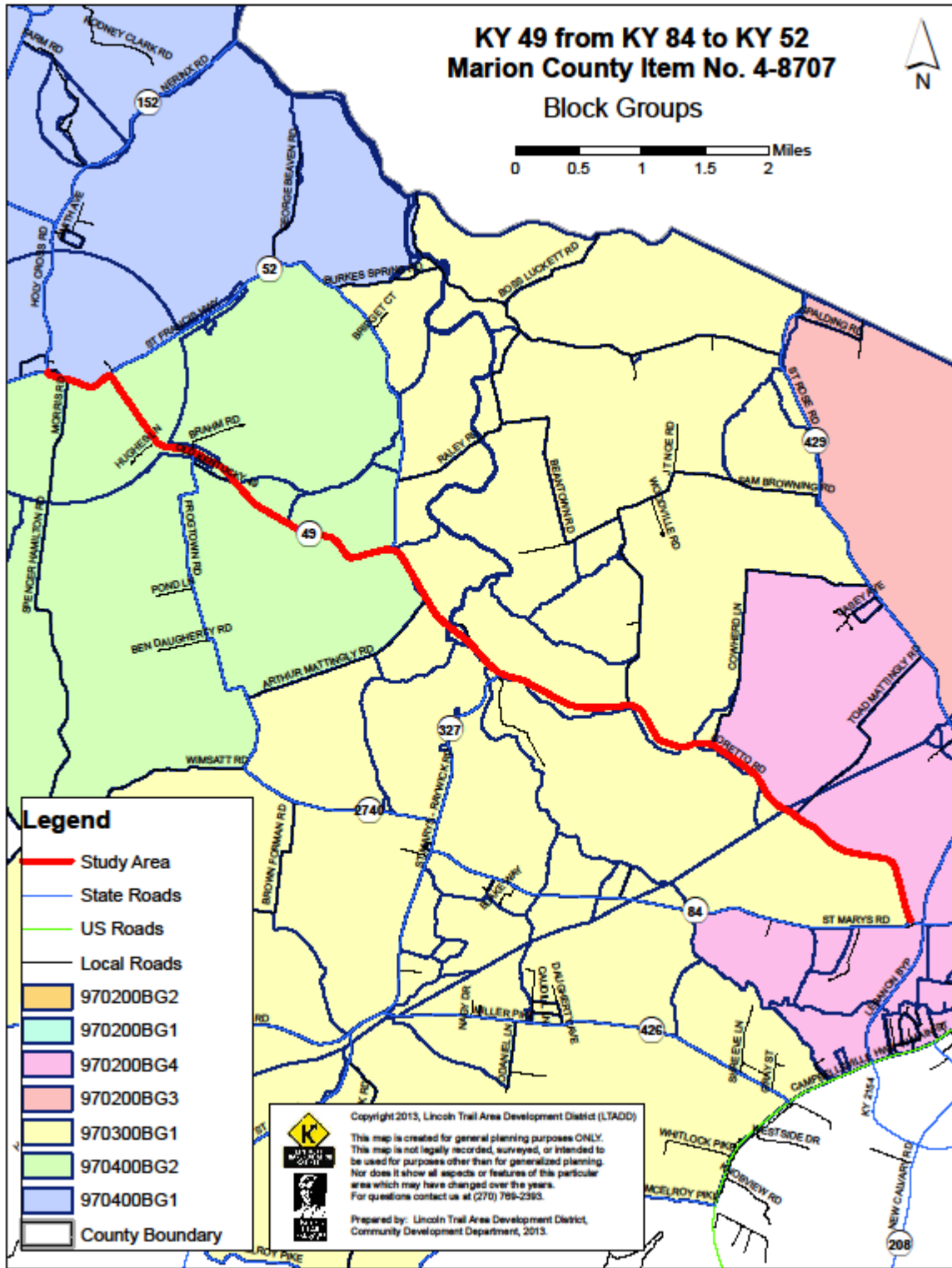
See below



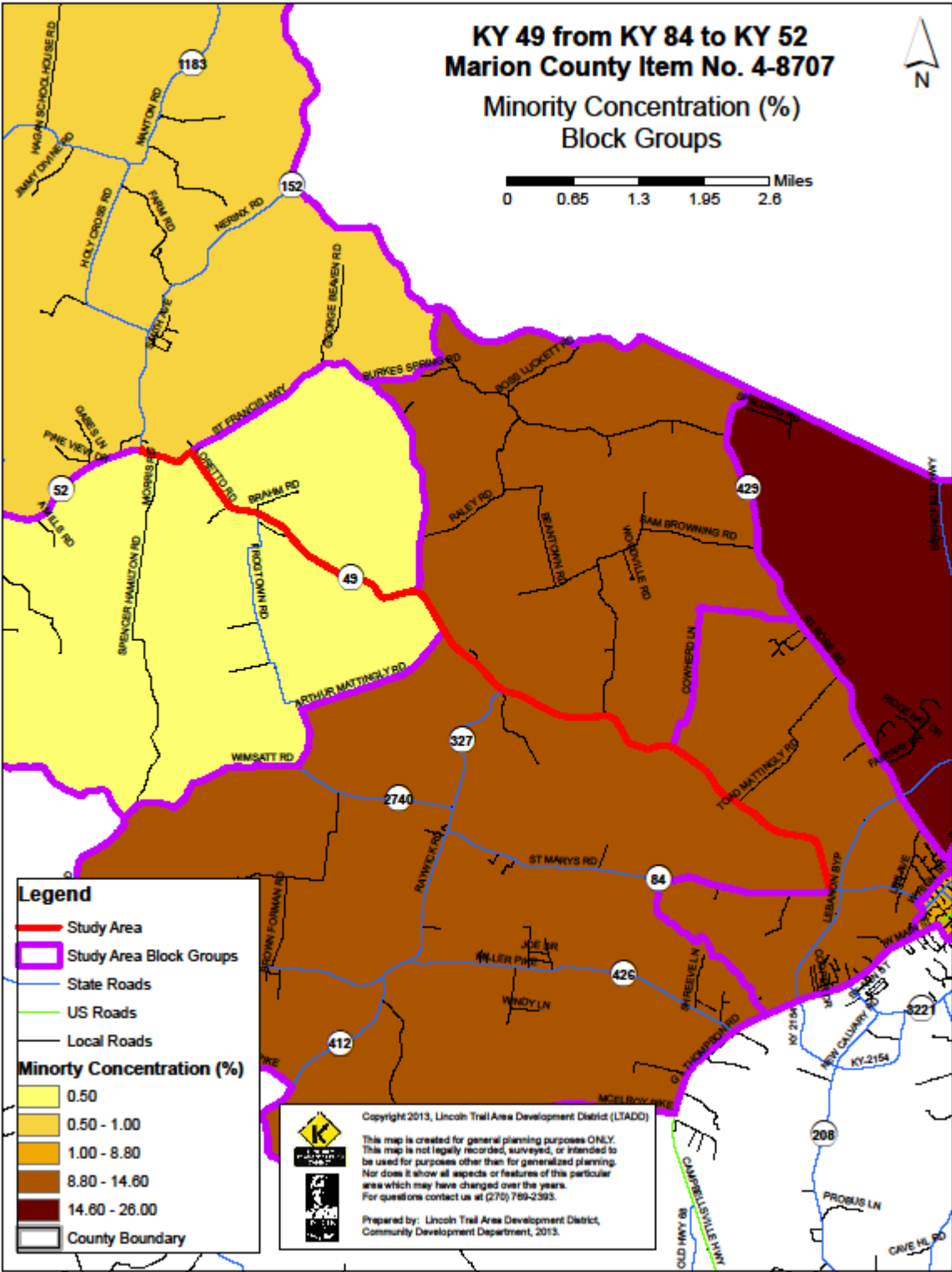
Map 10.1



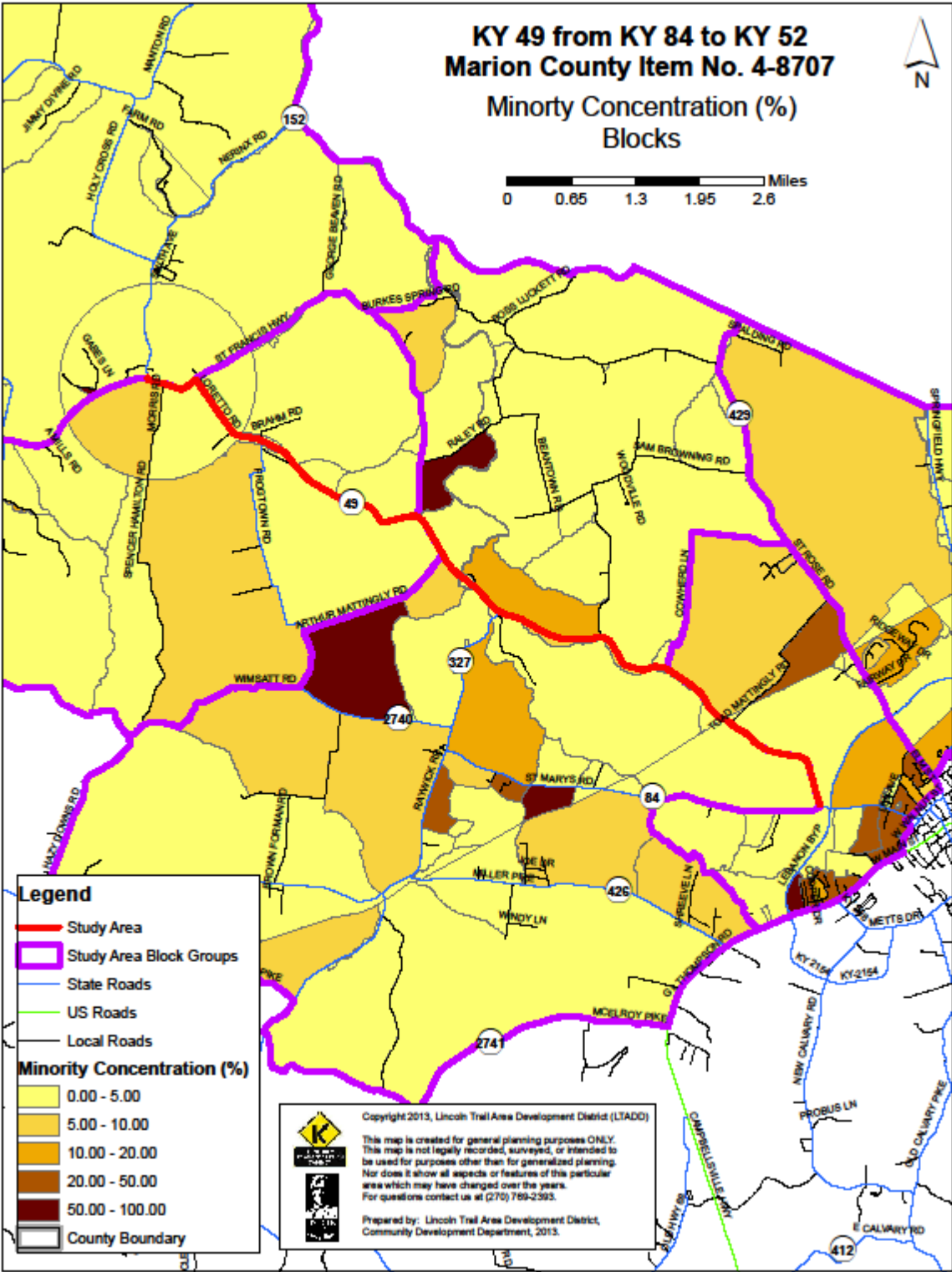
Map 10.2



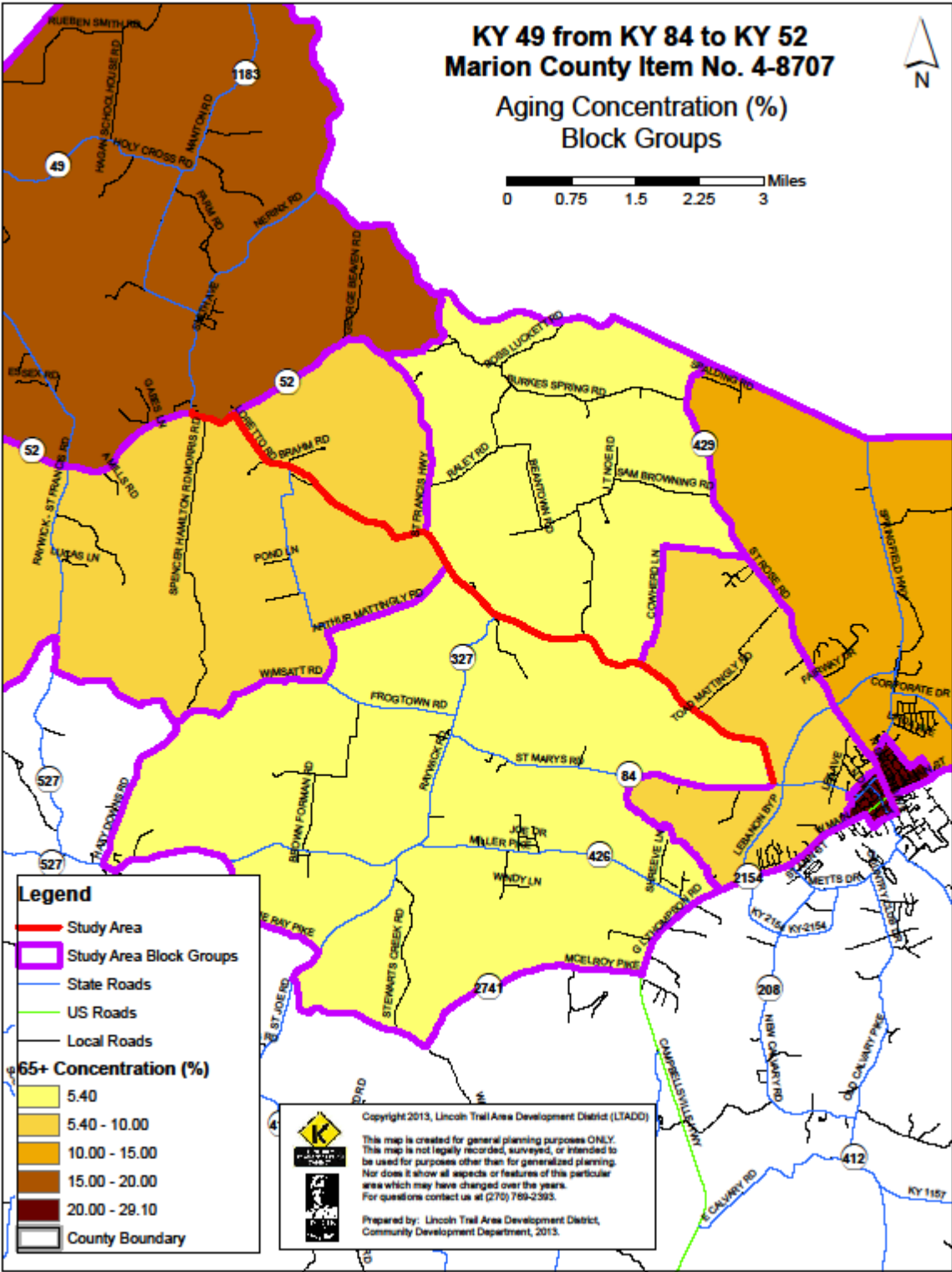
Map 10.3



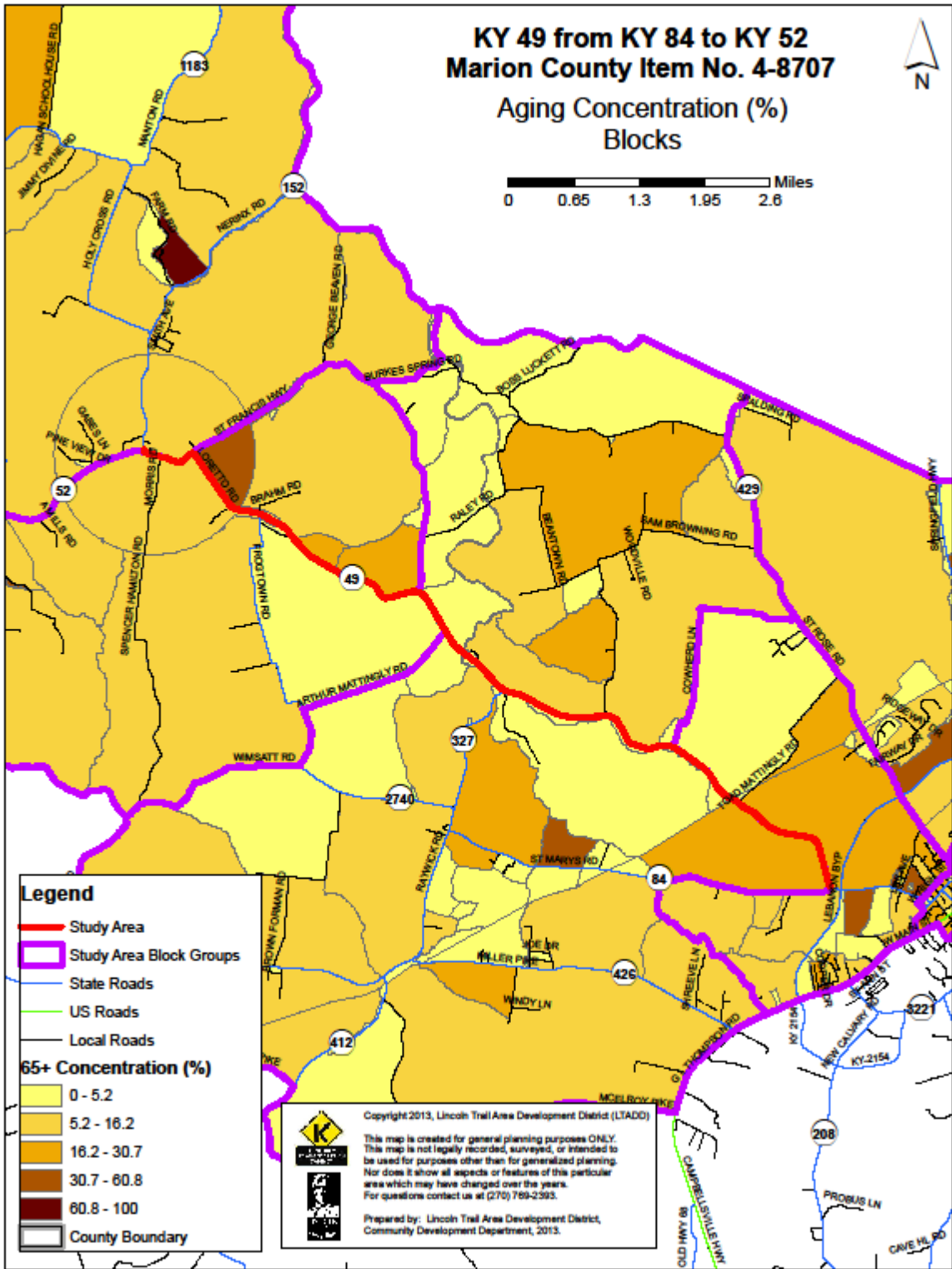
Map 10.4



Map 10.5

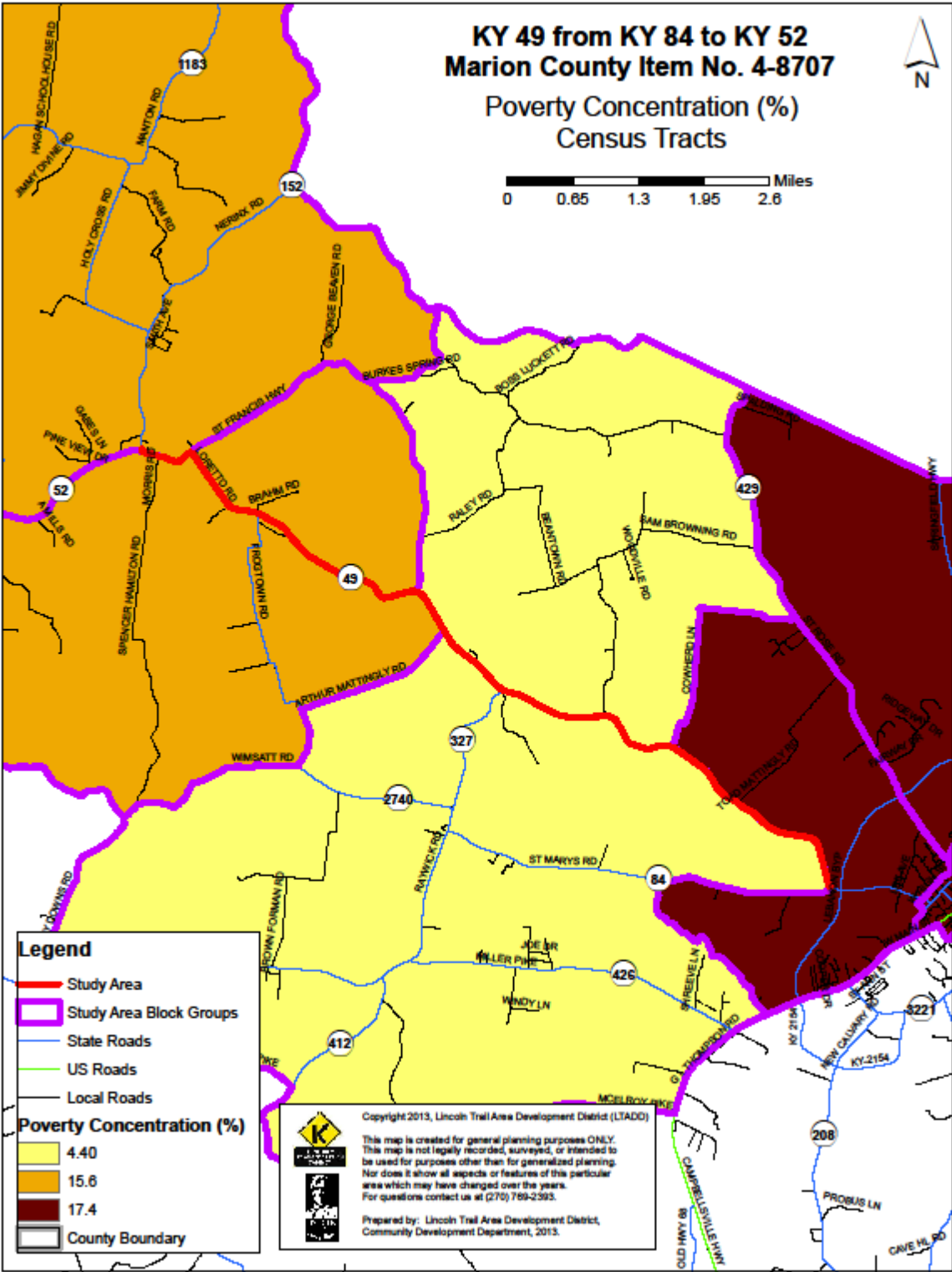


Map 10.6



Map 10.7





Map 10.8

## **Appendix A: Planning Study Contact List**

Honorable John Mattingly  
Marion Co. Judge Executive  
223 N. Spalding Ave., Room 201  
Lebanon, KY 40033  
270.692.3451

Mr. Terry Rakes  
Marion Co. PVA  
223 N. Spalding Ave. Room 102  
Lebanon, KY 40033  
270.692.3401

Mr. Robert G. Miles  
Mayor of Loretto  
P.O. Box 45  
Loretto, KY 40037  
270.865.4422

Mr. Gary Crenshaw  
Mayor of Lebanon  
P.O. Box 840  
Lebanon, KY 40033  
270.692.6272

Mr. Robert Thompson, Director  
Public Works  
P.O. Box 840  
Lebanon, KY 40033  
270.692.4934

Mrs. Nikki Wheatley  
City Clerk  
P.O. Box 840  
Lebanon, KY 40033  
270.692.6272

Mr. Thomas W. Lee  
Marion Co. Road Supervisor  
1035 Highway 208  
Lebanon, KY 40033  
270.692.4181

Mrs. Joann Hamilton  
City Clerk  
P.O. Box 45  
Loretto, KY 40037  
270.865.4422

# Methodology for Assessing Potential Environmental Justice Concerns for KYTC Planning Studies

Updated: February 1, 2002

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.

Methodology for Assessing Potential Environmental Justice Concerns  
for KYTC Planning Studies

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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: Census Data Tables

	Total	White Alone	White Alone	Black or African American alone	Black or African American alone	American Indian and Alaska Native alone	American Indian and Alaska Native alone	Asian alone	Asian alone	Native Hawaiian and other Pacific Islander alone	Native Hawaiian and other Pacific Islander alone
<b>United States</b>	308,745,538	223,553,265	72.4%	38,929,319	12.6%	2,932,248	0.9%	14,674,252	4.8%	540,013	0.2%
<b>Kentucky</b>	4,339,367	3,809,537	87.8%	337,520	7.8%	10,120	0.2%	48,930	1.1%	2,501	0.1%
<b>Marion Co.</b>	19,820	17,454	88.1%	1,604	8.1%	30	0.2%	116	0.6%	5	0.0%
<b>Tract 970200</b>	4,463	3390	76.0%	768	17.2%	8	0.2%	36	0.8%	0	0.0%
<b>Block Group 1</b>	591	398	67.3%	129	21.8%	2	0.3%	14	2.4%	0	0.0%
<b>Block Group 2</b>	690	498	84.3%	139	23.5%	0	0.0%	4	0.7%	0	0.0%
<b>Block Group 3</b>	1,526	1191	78.0%	249	16.3%	4	0.3%	12	0.8%	0	0.0%
<b>Block Group 4</b>	1,656	1303	78.7%	251	15.2%	2	0.1%	6	0.4%	0	0.0%
<b>Tract 970300</b>	2,765	2331	84.3%	311	11.2%	5	0.2%	11	0.4%	0	0.0%
<b>Block Group 1</b>	2,765	2331	84.3%	311	11.2%	5	0.2%	11	0.4%	0	0.0%
<b>Tract 970400</b>	3,048	2980	97.77%	19	0.62%	3	0.10%	9	0.30%	0	0.00%
<b>Block Group 1</b>	1,621	1599	98.6%	2	0.1%	0	0.0%	4	0.2%	0	0.0%
<b>Block Group 2</b>	1,427	1381	96.78%	17	1.19%	3	0.21%	5	0.35%	0	0.00%

	Some other race alone	Some other race alone	Two or more races	Two or more races	Hispanic or Latino Origin	Hispanic or Latino Origin	Persons 65 and Over	Persons 65 and Over	Persons Below Poverty Level	Persons Below Poverty Level
<b>United States</b>	19,107,368	6.2%	9,009,073	2.9%	50,477,594	16.3%	40,267,984	13.0%	44,150,612	14.3%
<b>Kentucky</b>	55,551	1.3%	75,208	1.7%	132,836	3.1%	578,227	13.3%	785,424	18.1%
<b>Marion Co.</b>	268	1.4%	343	1.7%	482	2.4%	2,580	13.0%	3,449	17.4%
<b>Tract 970200</b>	6	0.1%	104	2.3%	144	3.2%	709	15.9%	776	17.4%
<b>Block Group 1</b>	2	0.3%	12	2.0%	34	5.8%	172	29.1%		0.0%
<b>Block Group 2</b>	3	0.5%	23	3.9%	16	2.7%	170	24.6%		0.0%
<b>Block Group 3</b>	0	0.0%	39	2.6%	31	2.0%	203	13.3%		0.0%
<b>Block Group 4</b>	1	0.1%	30	1.8%	63	3.8%	164	9.9%		0.0%
<b>Tract 970300</b>	4	0.1%	34	1.2%	69	2.5%	149	5.4%	122	4.4%
<b>Block Group 1</b>	4	0.1%	34	1.2%	69	2.5%	149	5.4%		0.0%
<b>Tract 970400</b>	0	0.00%	17	0.56%	20	0.66%	385	12.63%	475	15.6%
<b>Block Group 1</b>	0	0.0%	4	0.2%	12	0.7%	258	15.9%		0.0%
<b>Block Group 2</b>	0	0.00%	13	0.91%	8	0.56%	127	8.90%		0.00%