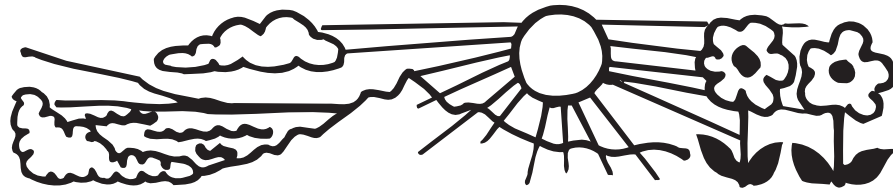


## **APPENDIX C**

### **ENVIRONMENTAL JUSTICE REPORT**

# Northwest Harrodsburg Bypass



ENVIRONMENTAL



JUSTICE  
COMMUNITY  
IMPACT  
REPORT

*Mercer County*

Six Year Highway Plan FY 2006 - 2012  
Item Number 7-8344.00

October, 2007

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APPENDIX B: CENSUS DATA TABLES

## 1.0 Introduction

The following document is an assessment of the community demographics and characteristics related to the defined project study area that includes the northern half of the western side of Harrodsburg, beginning at KY 152 in the south and extending north and then east to US 127, a distance of about 3.0 miles. The study area ends at the existing US 127/US 127 Bypass intersection. The study area is approximately 1.4 miles wide and about 3.6 square miles in size.

The project is listed as item number 7-8344.00 in the Kentucky Six-Year Highway Plan 2006-2012.

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 of the Northwest Harrodsburg vicinity.

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 or 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 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 and adverse effect that:

---

1 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..."

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 A.)

The primary sources of data used in the compilation of this report were the U.S. Census Bureau's 2000 Census, 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 Northwest Harrodsburg Bypass Scoping Study.

#### 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, Mercer 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 proposed North West Harrodsburg Bypass. 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 2000 Census, there are two (2) Census Tracts and four (4) Block Groups that encompass the population of the defined study area. These are listed below. (See Map 1 for geographic location.)

Mercer County Total Population	20,817
Study Area Total Populations	7,177
Census Tract 9602	5,725
Block Group 1	2,206
Block Group 3	1,288
Block Group 4	1,620
Total population of Block Groups 1, 3 and 4	5,114
Census Tract 9603	3,261
Block Group 2	2,063
Total population of Block Group 2	2,063
Total population of study area	7,177

## 6.0 Population by Persons of Minority Origin

Chart 1 indicates that the black percentage of the total Mercer County population is 3.69 percent, which is lower than the Kentucky percentage of 7.32. Chart 2 shows that Tract 9602 has a Black percentage of 6.76 and Tract 9604 has a Black percentage of 4.37.

Chart 1 indicates that the Hispanic percentage of Mercer County population is 1.27 percent, which is lower than the Kentucky percentage of 1.48. Chart 2 shows that Tract 9602 has a Hispanic percentage of 1.38. Block Groups 1 and 3 have Hispanic percentages of 1.27 and 1.78 respectively. Members of the project study team and Advisory Committee indicated that there are no particular concentrations of Black and Hispanic residents in the study. A mobile home park in Block Group 1, Tract 9602 may be an area of concentration.

Chart 1 indicates that the Asian percentage of the total Mercer County population is 0.47. Chart 2 shows that Tract 9602 has an Asian percentage of 0.70. Block Groups 1 and 4 have Asian percentages of 1.18 and 0.49 respectively. No areas of particular concerns are evident.

Chart 1 indicates that the Indian percentage of the total Mercer County population is 0.21, the same as the Kentucky percentage. Chart 2 shows that Tract 9602 has an Indian percentage of 0.10. Block Group 3 is 0.23 percent. Tract 9603 has an Indian percentage of 0.25. Block Group 2 is 0.15 percent. No areas of particular concentration are evident.

The percentage of minorities is located on Map 2.

## 7.0 Population by Poverty Level

Chart 3 indicates that 12.97 percent of the population of Mercer County is below the poverty level, less than the Kentucky percentage of 15.37.

In the project study area, Chart 4 indicates that Tract 9602 has a total population at 14.93 percent below the poverty level. In particular, Block Group 3 is at 29.48 percent below the poverty level.

As portions of Block Group 3 are outside of the study area, it is likely that many of the below the poverty level population reside in this area as it is adjacent to Block Group 2 that is above 15 percent.

Map 3 indicates the percentage of poverty in census block groups.

### **8.0 Population by Person 65 and Over**

As described in the census data, in Chart 5, the population percentage of persons 65 and over are very consistent at the national, state and county levels – 12.43, 12.49 and 14.59 respectively. The only variation is the Mercer County 14.59 percentage is approximately 2 percent above the average. The population by persons 65 and over in Tract 9602 and Tract 9603 is 12.28 percent and 14.14 percent respectively, below the county percentage of 14.59.

These percentages are noted on Map 4.

### **9.0 Conclusion**

After a comprehensive analysis of the Harrodsburg study area, there appear to be several areas of interest at the Block Group and Census Block level in regard to race, age, and income level. These areas have been described in the *Study Findings* sections of this report and can be deduced from the respective maps.

In an effort to validate the accuracy of the maps created by the Bluegrass ADD GIS staff, local officials and community members were asked to review them and provide any relevant information to this report. Based on their comments, it has been concluded that the maps are representative of the locations of interest in the study area and that individuals in those areas could stand to benefit from projects that improve transportation options in Harrodsburg and Mercer County.

It is evident from the data that there are several locations that need to be monitored and taken into consideration when planning for a specific project. Bluegrass ADD staff will continue to monitor those locations, as well as the surrounding study area for demographic and / or socioeconomic changes that may occur throughout the development of a project or program.

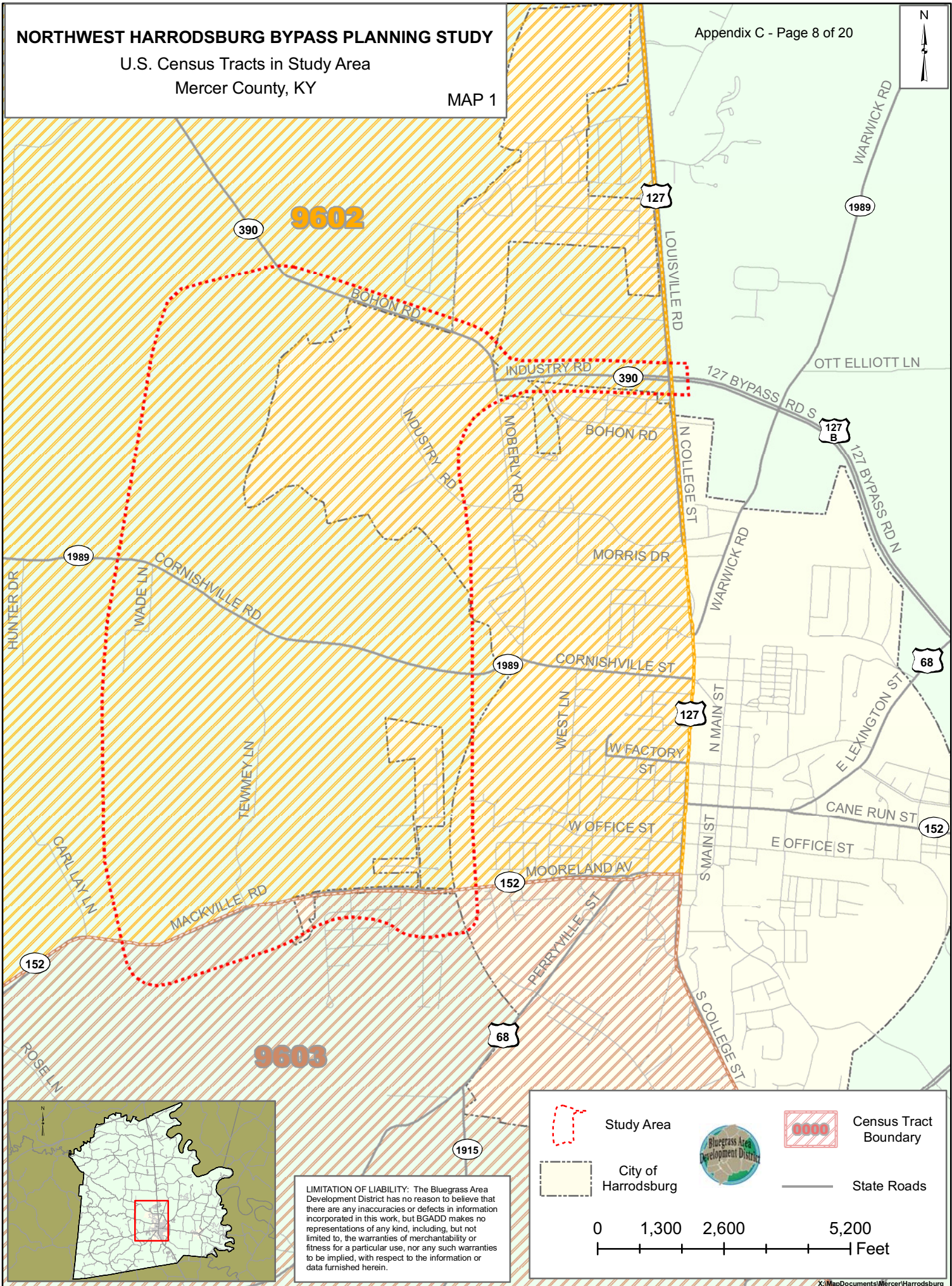


# NORTHWEST HARRODSBURG BYPASS PLANNING STUDY

U.S. Census Tracts in Study Area  
Mercer County, KY

MAP 1

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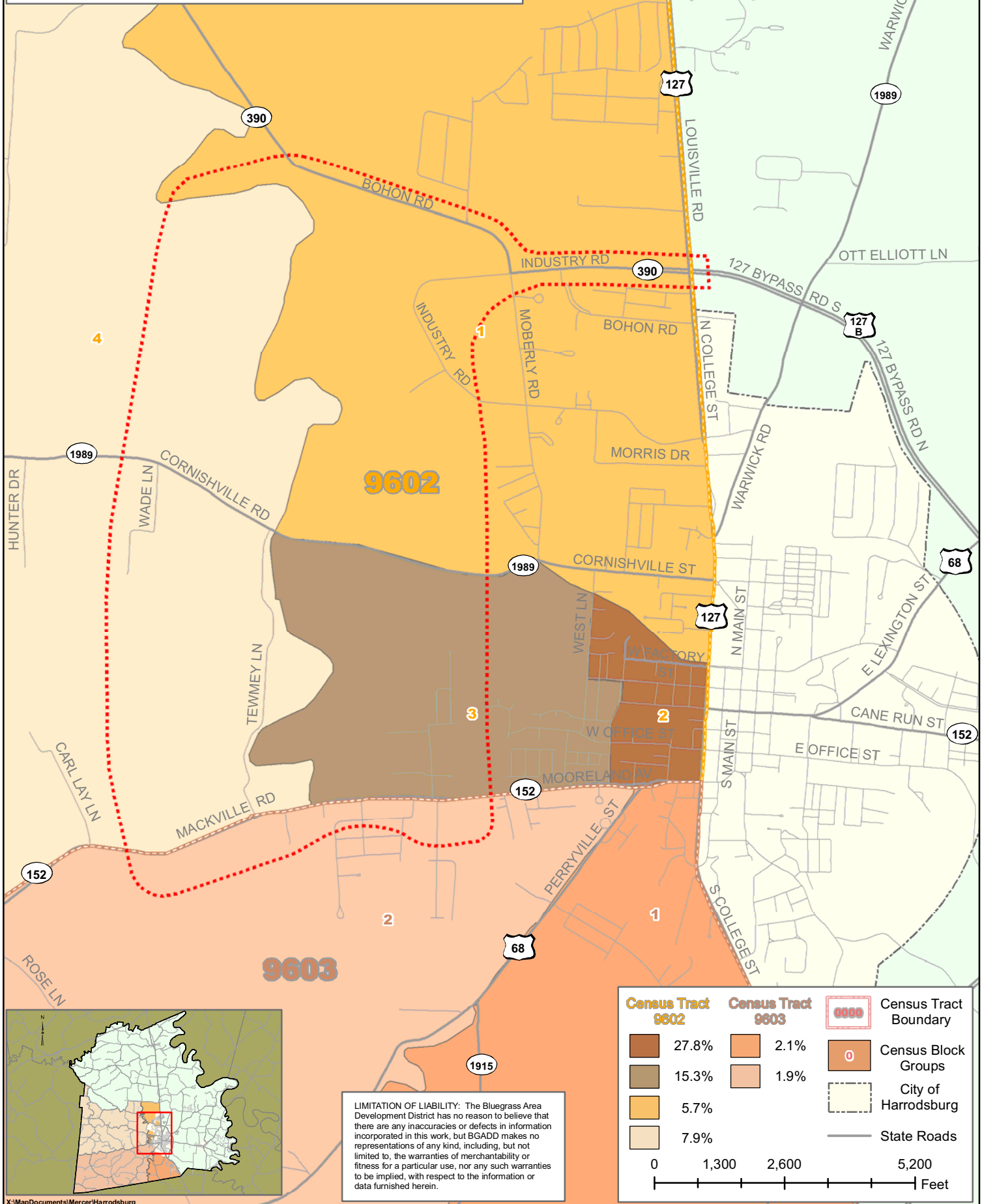




# NORTHWEST HARRODSBURG BYPASS PLANNING STUDY

Percentage of Minorities in Census Block Groups  
Mercer County, KY

MAP 2

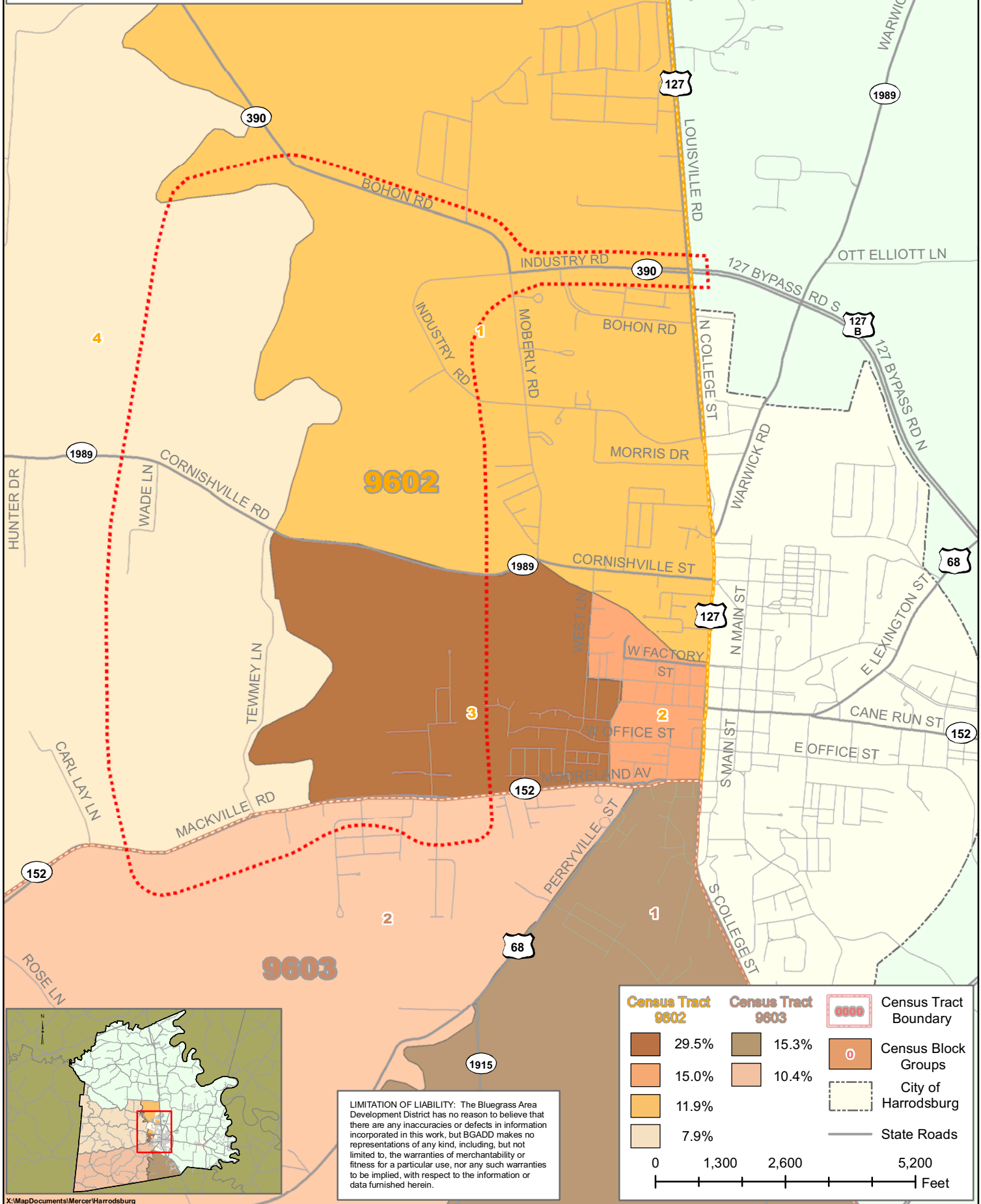


# NORTHWEST HARRODSBURG BYPASS PLANNING STUDY

Percentage of Poverty in Census Block Groups  
Mercer County, KY

MAP 3

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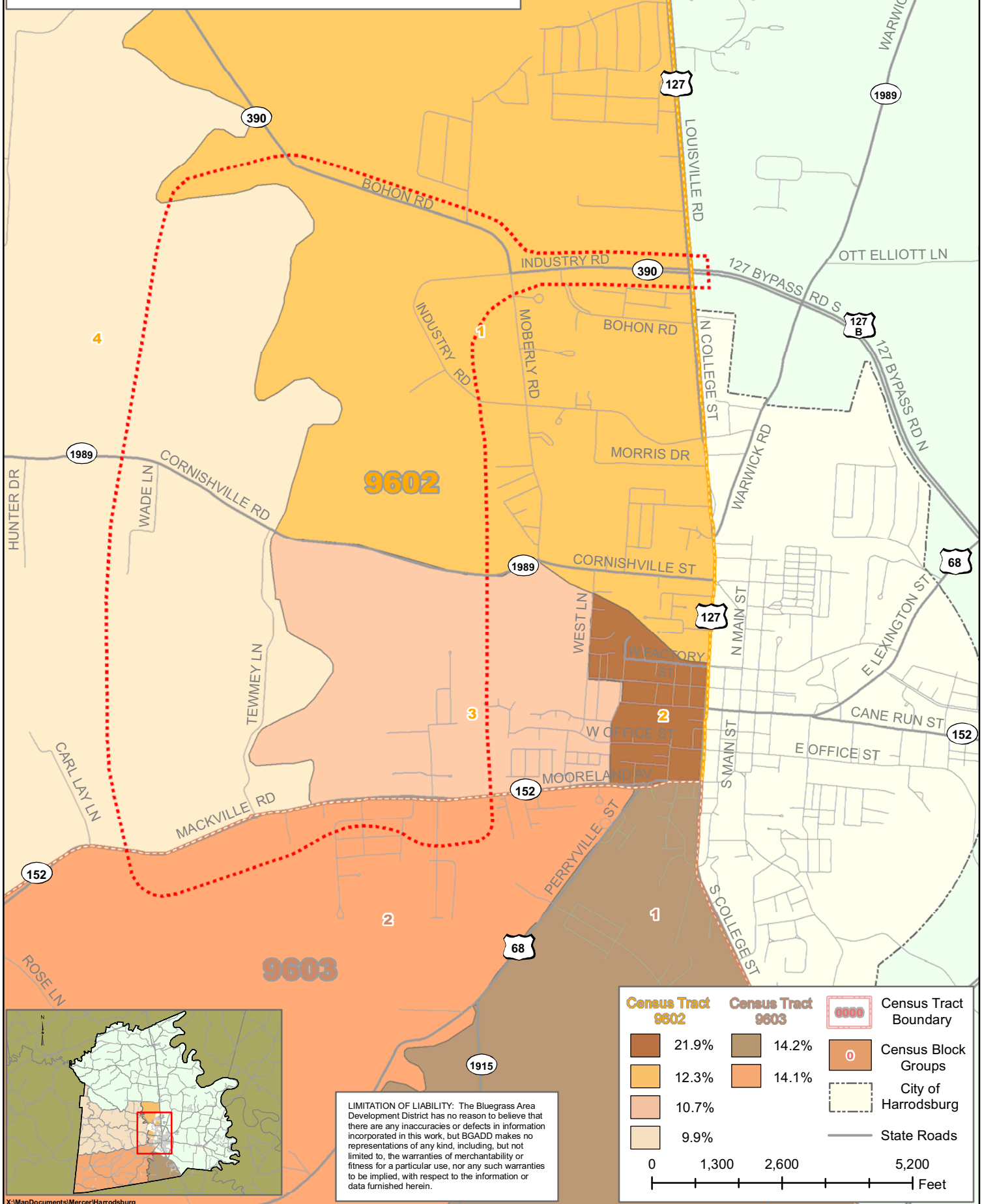


# NORTHWEST HARRODSBURG BYPASS PLANNING STUDY

Percentage of Population Age Over 65  
in Census Block Groups  
Mercer County, KY

MAP 4

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## **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  
Page 2

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.

Chart 1

## POPULATION BY RACE COMPARISON CHART

	White	% of Population	Black	% of Population	Hispanic <sup>1</sup>	% of Population	Asian	% of Population	American Indian	% of Population	Other	% of Population	Total Population
Kentucky	3,640,899	90.08	295,994	7.32	59,939	1.48	29,744	0.74	8,616	0.21	66,516	1.65	4,041,769
Mercer Co.	19,568	94.00	769	3.69	265	1.27	97	0.47	44	0.21	339	1.63	20,817
Tract 9601	3,990	97.96	22	0.54	27	0.66	12	0.29	8	0.20	41	1.0	4,073
Tract 9602	5,212	91.04	387	6.76	79	1.38	40	0.70	6	0.10	80	1.39	5,725
Tract 9603	3,095	94.91	104	3.19	30	0.92	14	0.42	8	0.25	40	1.23	3,261
Tract 9604	4,148	92.06	197	4.37	100	2.22	30	0.67	5	0.11	126	2.79	4,506
Tract 9605	3,123	96.03	59	1.8	29	0.89	1	0.03	17	0.52	52	1.59	3,252

<sup>1</sup>Population of Hispanic Origin is included as White.

The above chart indicates Census data for the Commonwealth of Kentucky, Mercer County, and the census tracts adjacent to the proposed study corridor.

Chart 2

POPULATION BY RACE COMPARISON CHART FOR CENSUS  
TRACT BLOCK GROUPS IN PROJECT AREA

Census Tract	Block Group	White	% of Population	Black	% of Population	Hispanic <sup>1</sup>	% of Population	Hispanic	% of Population	Asian	% of Population	American Indian	% of Population	Other	% of Population	Total Population
Tract 9602	All	5,212	91.04	387	6.76	79	1.38	40	0.70	6	0.10	80	1.39			5,725
	1	2,081	94.33	77	3.49	28	1.27	26	1.18	3	0.14	19	0.89			2,206
	3	1,091	84.70	149	11.57	23	1.78	6	0.46	3	0.23	39	3.02			1,288
	4	1,591	98.20	14	0.86	5	0.31	8	0.49	0	0.0	7	0.43			1,620
Tract 9603	All	3,095	94.91	104	3.19	30	0.92	14	0.42	8	0.25	40	1.22			3,261
	2	2,019	97.87	27	1.31	12	0.58	2	0.09	3	0.15	12	0.58			2,063

<sup>1</sup>Population of Hispanic Origin is included as White.

Chart 3

### POPULATION BY POVERTY LEVEL COMPARISON CHART FOR MERCER COUNTY

	Population Below Poverty Level	Percent of Population	Age 0-17	% of Total Population	Age 18-64	% of Total Population	Age 65-Over	% of Total Population
United States	33,899,812	12.05	11,746,258	4.17	18,865,180	6.70	3,287,774	1.17
Kentucky	621,096	15.37	203,547	5.03	350,072	8.66	67,477	1.67
Mercer County	2,699	12.97	884	4.25	1433	6.88	352	1.69
Tract 9601	422	10.36	162	3.98	227	5.57	33	0.81
Tract 9602	855	14.93	244	4.26	493	8.61	118	2.06
Tract 9603	398	10.99	119	3.29	249	6.88	30	0.82
Tract 9604	761	16.89	305	6.77	374	8.30	82	1.81
Tract 9605	233	7.16	54	1.66	132	4.06	47	1.45

Source: 2000 US Census (Sample Data)

Chart 4

### POPULATION BY POVERTY LEVEL IN PROJECT AREA BY CENSUS TRACT BLOCK GROUPS FOR MERCER COUNTY

Mercer County	Block Group	Population Below Poverty Level	Percent of Population	Age 0-17	% of Total Population	Age 18-64	% of Total Population	Age 65-Over	% of Total Population
Tract 9602	All	855	14.93	244	4.26	493	8.61	118	2.06
Tract 9602	1	256	11.87	51	2.36	139	6.44	66	3.06
Tract 9602	3	378	29.48	113	8.81	234	18.25	31	2.41
Tract 9602	4	130	7.86	53	3.20	77	4.65	0	0.0
Tract 9603	All	398	10.99	119	3.29	249	6.88	30	0.82
Tract 9603	2	213	10.41	55	2.69	128	6.25	30	1.46

Source: 2000 US Census (Sample Data)



Chart 5

## AGE GROUP COMPARISON CHART FOR MERCER COUNTY AND PROJECT AREA BY CENSUS TRACTS

	Age 0-17	% of Total Population	Age 18-64	% of Total Population	Age 65-Over	% of Total Population	Total
United States	72,293,812	25.69	174,136,341	61.88	34,991,753	12.43	281,421,906
Kentucky	994,818	24.61	2,542,158	62.90	504,793	12.49	4,041,769
Mercer County	5,080	24.40	12,700	61.00	3,037	14.59	20,817
Tract 9602	1,567	27.37	3,455	60.35	703	12.28	5,725
Tract 9603	768	23.55	2,032	62.31	461	14.14	3,261

Source: 2000 US Census

Chart 6

## AGE GROUP COMPARISON CHART FOR PROJECT AREA BY CENSUS TRACT BLOCK GROUPS

	0-17	% of Total Population	18-64	% of Total Population	65-Over	% of Total Population	Total
Tract 9601	1,038	25.48	2,614	64.18	421	10.37	4,073
Tract 9604	1,002	22.23	2,528	56.10	976	21.67	4,506

Source: 2000 US Census

Chart 7

## AGE GROUP COMPARISON CHART FOR CENSUS TRACT BLOCK GROUP ADJACENT TO PROJECT AREA IN MERCER COUNTY

Census Tract	Block Group	Age 0-17	% of Total Population	Age 18-64	% of Total Population	Age 65-Over	% of Total Population	Total
Tract 9602	All	1,567	27.37	3,455	60.35	703	12.28	5,725
	1	581	26.33	1,353	61.33	272	12.33	2,206
	2	133	21.76	349	57.11	134	21.93	611
	3	402	31.21	748	58.07	138	10.71	1,288
	4	451	27.83	1010	62.34	159	9.81	1,620
Tract 9603	All	768	23.55	2,032	62.31	461	14.14	3,261
	1	284	23.71	744	62.10	170	14.19	1,198
	2	484	23.46	1288	62.43	291	14.10	2,063

Source: 2000 US Census

Chart 8

## AGE GROUP COMPARISON CHART FOR MERCER COUNTY AND PROJECT AREA BY CENSUS TRACT BLOCK GROUPS

Census Tract	Block Group	Age 0-17	% of Total Population	Age 18-64	% of Total Population	Age 65-Over	% of Total Population	Total
Mercer Co.	All	5,080	24.40	12,700	61.00	3,037	14.59	20,817
Tract 9602	All	1,567	27.37	3,455	60.35	703	12.28	5,725
	1	581	26.33	1,353	61.33	272	12.33	2,206
	2	133	21.76	349	57.11	134	21.93	611
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	4	451	27.83	1010	62.34	159	9.81	1,620
Tract 9603	All	768	23.55	2,032	62.31	461	14.14	3,261
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	2	484	23.46	1288	62.43	291	14.10	2,063

Source: 2000 US Census

Chart 9

### AGE GROUP COMPARISON CHART FOR CENSUS TRACT BLOCK GROUPS ADJACENT TO PROJECT AREA

	0-17	% of Total Population	18-64	% of Total Population	65-Over	% of Total Population	Total
Tract 9601	1,038	25.48	2,614	64.18	421	10.37	4,073
Tract 9604	1,002	22.23	2,528	56.10	976	21.67	4,506

Source: 2000 US Census

Chart 10

### AGE GROUP COMPARISON CHART FOR MERCER COUNTY AND PROJECT AREA BY CENSUS TRACT BLOCK GROUPS

Census Tract	Block Group	Age 0-17	% of Total Population	Age 18-64	% of Total Population	Age 65-Over	% of Total Population	Total
United States	All	72,293,812	25.69	174,136,341	61.88	34,991,753	12.43	281,421,906
Kentucky	All	994,818	24.61	2,542,158	62.90	504,793	12.49	4,041,769
Mercer Co.	All	5,080	24.40	12,700	61.00	3,037	14.59	20,817
Tract 9602	All	1,567	27.37	3,455	60.35	703	12.28	5,725
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	2	133	21.76	349	57.11	134	21.93	611
	3	402	31.21	748	58.07	138	10.71	1,288
	4	451	27.83	1010	62.34	159	9.81	1,620
Tract 9603	All	768	23.55	2,032	62.31	461	14.14	3,261
	1	284	23.71	744	62.10	170	14.19	1,198
	2	484	23.46	1288	62.43	291	14.10	2,063

Source: 2000 US Census

Chart 11

### AGE GROUP COMPARISON CHART FOR CENSUS TRACT BLOCK GROUPS ADJACENT TO PROJECT AREA IN MERCER COUNTY

	Age 0-17	% of Total Population	Age 18-64	% of Total Population	Age 65-Over	% of Total Population	Total
Tract 9601	1,038	25.48	2,614	64.18	421	10.37	4,073
Tract 9604	1,002	22.23	2,528	56.10	976	21.67	4,506

Source: 2000 US Census

