

## **APPENDICES**



**APPENDIX A: EXAMPLES OF DEFINITIONS AND  
THRESHOLDS OF MINORITY AND LOW-INCOME AREAS  
USED BY OTHER AGENCIES**



## EXAMPLES OF DEFINITIONS AND THRESHOLDS OF MINORITY AND LOW-INCOME AREAS USED BY OTHER AGENCIES

Minority areas have been defined by the **Mid-Ohio Regional Planning Commission (MORPC)** and some other agencies as those in which the percent minority population for a census tract exceeds the average percent minority for the metropolitan area as a whole. Similarly, low-income areas have been defined as those in which the percent of population in poverty exceeds the regional average.

In preparing an update to its Statewide Transportation Plan, the **Georgia DOT** used a cutoff of one standard deviation above the mean percent minority population or population in poverty.

The **Southern California Association of Governments** describes the income level of communities by quintile, so that impacts can be compared for the lowest 20 percent of incomes with other income groups.

The **Maryland DOT** compares the percent minority or low-income in a census tract or block to the study area as a whole. Tracts or blocks with a "meaningfully greater" percentage are flagged. ("Meaningfully greater" is defined and documented on a study-by-study basis.) Additional data sources are recommended for more detailed investigation.

The **Atlanta Regional Commission** defines EJ communities at the census tract level using the following criteria: 1) those with 20 percent or more of population aged 60 years and older; 2) those with 20 percent or more of the population in the lowest income category (less than \$20,000 per year), 3) those with nonwhite population of 50 percent or more; and 4) those areas with 20 percent or more of households without autos.

The **Punta Gorda, FL MPO** defines an environmental justice community as meeting one of three categories: 1) areas consisting of 20 percent or greater minority composition; 2) areas in which 20 percent or more of households have an annual income below \$10,000; or 3) areas that have a concentration of single family housing structures valued under \$25,000.

The **City of Tucson, Arizona** used a statistical technique known as "V-scores" to develop population "stress factors" based on 31 socioeconomic and demographic variables. The stress factors were then mapped ([www.ci.tucson.az.us/planning/](http://www.ci.tucson.az.us/planning/)). This approach was taken to address concerns that simply mapping income or race does not fully represent where people are suffering from poverty or disadvantaged conditions. The Pima Association of Governments is planning to enhance this approach using factor analysis, once 2000 Census data become available.

The **Metropolitan Transportation Commission (MTC)** in Oakland, CA found that selecting target zones based on a minority concentration that exceeds the regional average resulted in selecting half of the zones as "minority." Based on discussions with stakeholders, the MTC agreed to use a minority population of 70 percent or more as indicative of a "meaningfully greater" concentration of minority residents, and this threshold was used to define minority "communities of concern." To identify low-income areas, MTC selected a threshold of 200 percent of the federally defined poverty level to reflect the relatively high cost of living in the Bay Area. Low income "communities of concern" were defined as those zones where at least 30 percent of the total population was below the low-income threshold.

SOURCE: *Technical Methods to Support Analysis of Environmental Justice Issues*. National Cooperative Highway Research Program, Project 8-36 (11), April 2002, pp. 4-15



## **APPENDIX B: 2000 U.S. CENSUS DATASETS USED**



## 2000 U.S. CENSUS DATASETS USED

U.S. Census Bureau 2000, SF-3
P7. HISPANIC OR LATINO BY RACE
P89. POVERTY STATUS IN 1999 BY AGE BY HOUSEHOLD TYPE
P88. RATIO OF INCOME IN 1999 TO POVERTY LEVEL
H44. TENURE BY VEHICLES AVAILABLE
P20. HOUSEHOLD LANGUAGE BY LINGUISTIC ISOLATION
P8. SEX BY AGE
PCT31. SEX BY AGE BY GO-OUTSIDE-HOME DISABILITY BY EMPLOYMENT STATUS FOR THE CIVILIAN NON-INSTITUTIONALIZED POPULATION 16 YEARS AND OVER



## **APPENDIX C: SAMPLE ENVIRONMENTAL JUSTICE CHARACTERISTIC MAPS**

**C1: INCOME BELOW TWO TIMES THE POVERTY LEVEL COMPARED TO  
SAMPLE THRESHOLD (STATE AVERAGE) FOR SAMPLE PROJECT AREA**

**C2: INCOME BELOW THE POVERTY LEVEL COMPARED TO SAMPLE  
THRESHOLD (STATE AVERAGE) FOR SAMPLE PROJECT AREA**

**C3: PERCENT MINORITY POPULATION COMPARED TO SAMPLE THRESHOLD  
(STATE AVERAGE) FOR SAMPLE PROJECT AREA**

**C4: INCOME BELOW TWO TIMES THE POVERTY LEVEL COMPARED TO  
SAMPLE THRESHOLD (STATE AVERAGE)**

**C5: INCOME BELOW THE POVERTY LEVEL COMPARED TO SAMPLE  
THRESHOLD (STATE AVERAGE)**

**C6: PERCENT MINORITY POPULATION COMPARED TO SAMPLE THRESHOLD  
(STATE AVERAGE)**

**C7: PERCENT POPULATION AGE 65 AND OLDER**

**C8: PERCENT HOUSEHOLDS LINGUISTICALLY ISOLATED**

**C9: PERCENT OCCUPIED HOUSING UNITS WITH NO VEHICLE AVAILABLE**









**C10: PERCENT PERSONS WITH GO-OUTSIDE-THE-HOME DISABILITIES**

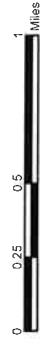
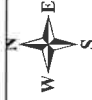


# Income Below Two Times the Poverty Level Compared to Sample Threshold (State Average)

**NOTES:**

1. Poverty level is determined by the U. S. Census Bureau according to income and family size.
2. This map does not indicate the presence of Environmental Justice communities. The National Guidance for Conducting Environmental Justice Analysis defines an EJ Community as satisfying a given minority and/or income threshold AND being disproportionately and adversely affected by a project, program or activity. The Guidance recommends thresholds for minority populations and poverty.
3. The sample threshold for this map is the state average of percent persons in households with income below two times the poverty level. According to the 2000 Census, this figure is 29.6%.

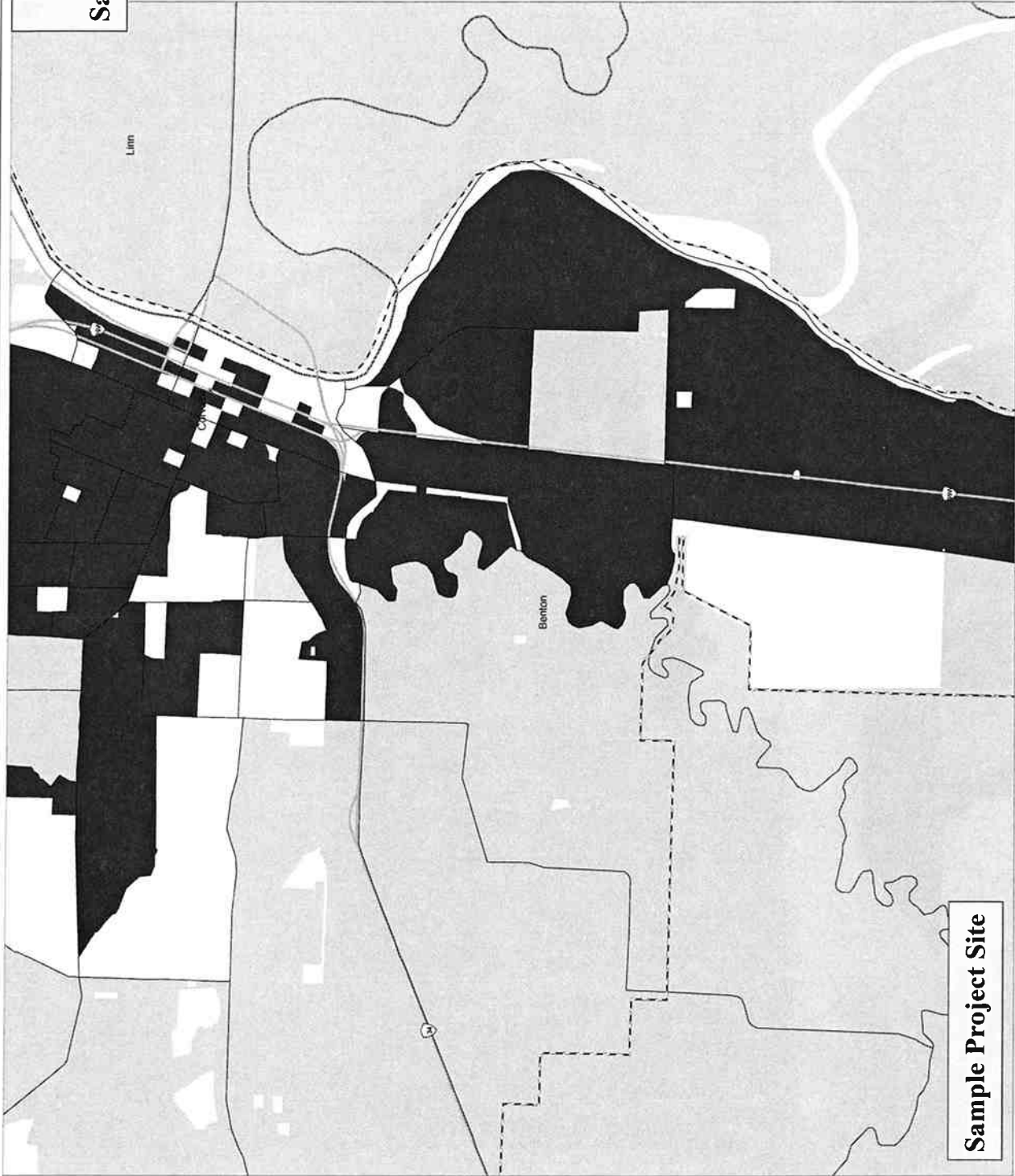
	County Seat
	County Boundary
	Metropolitan Planning Organization Boundary
	Census Block Group Boundary
	Highway
	In Block Group at or Above State Average
	Census Blocks with Population = 0
	In Block Group Below State Average



**Environmental Justice Mapping**  
September 2004



Data Source: U.S. Census Bureau 2000, SF-3, P-88  
Oregon Geospatial Data Clearinghouse: ODOT GIS Unit

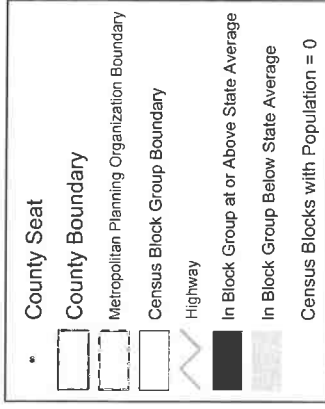


**Sample Project Site**

# Income Below the Poverty Level Compared to Sample Threshold (State Average)

**NOTES:**

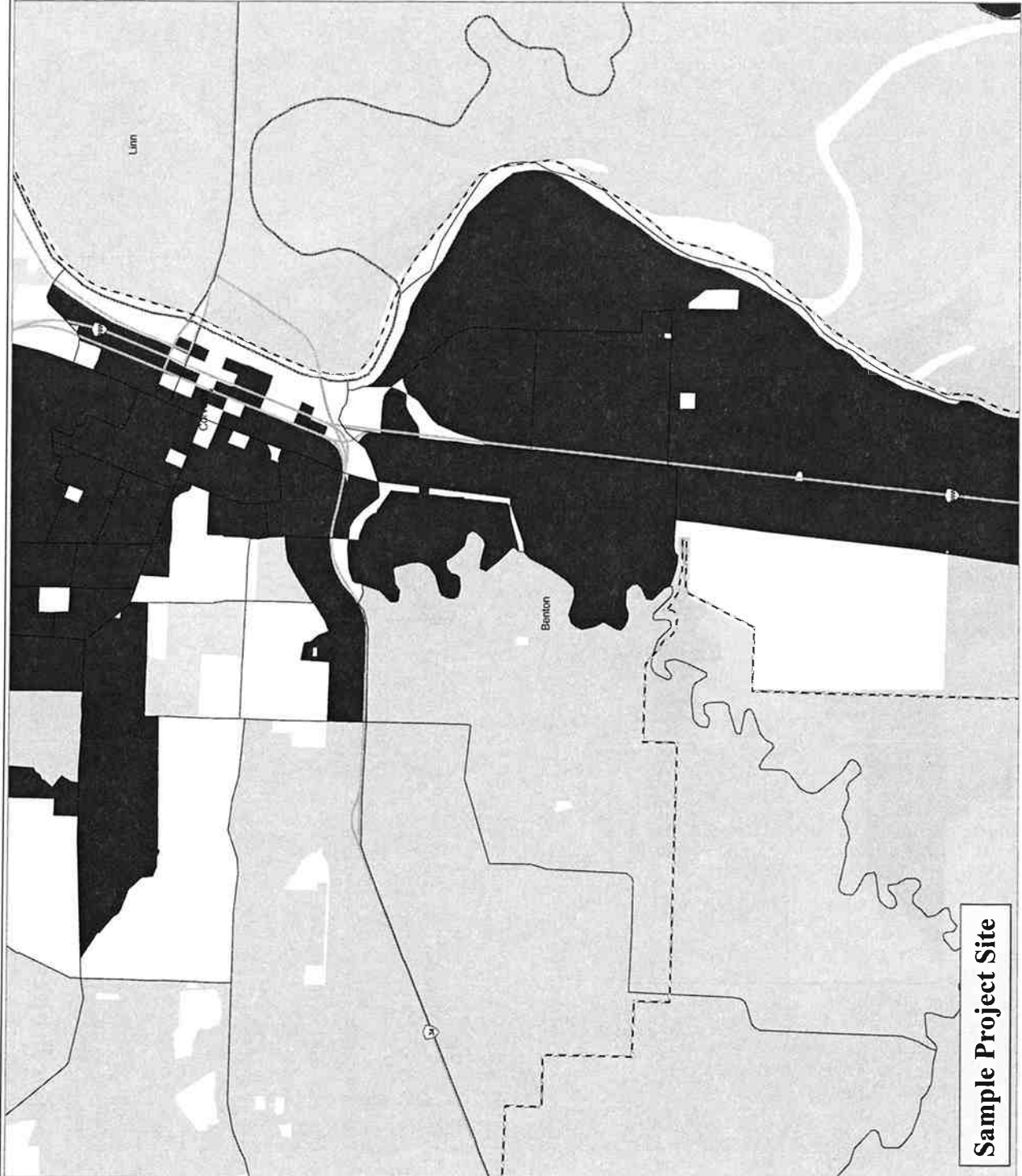
1. Poverty level is determined by the U. S. Census Bureau according to income and family size.
2. This map does not indicate the presence of Environmental Justice communities. The National Guidance for Conducting Environmental Justice Analysis defines an EJ Community as satisfying a given minority and/or income threshold AND being disproportionately and adversely affected by a project, program or activity. The Guidance recommends thresholds for minority populations and poverty.
3. The sample threshold for this map is the state average of percent persons in households with income below the poverty level. According to the 2000 Census, this figure is 11.6%.



**Environmental Justice Mapping  
September 2004**



Data Source: U.S. Census Bureau 2000, SF-3, P-88;  
Oregon Geospatial Data Clearinghouse; ODOT GIS Unit

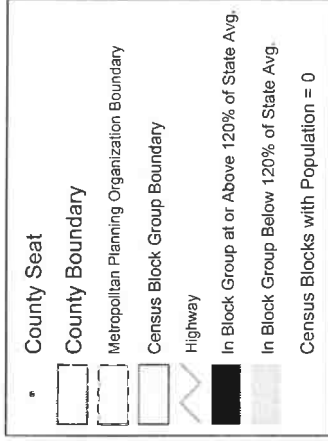


**Sample Project Site**

# Percent Minority Population Compared to Sample Threshold (State Average)

**NOTES:**

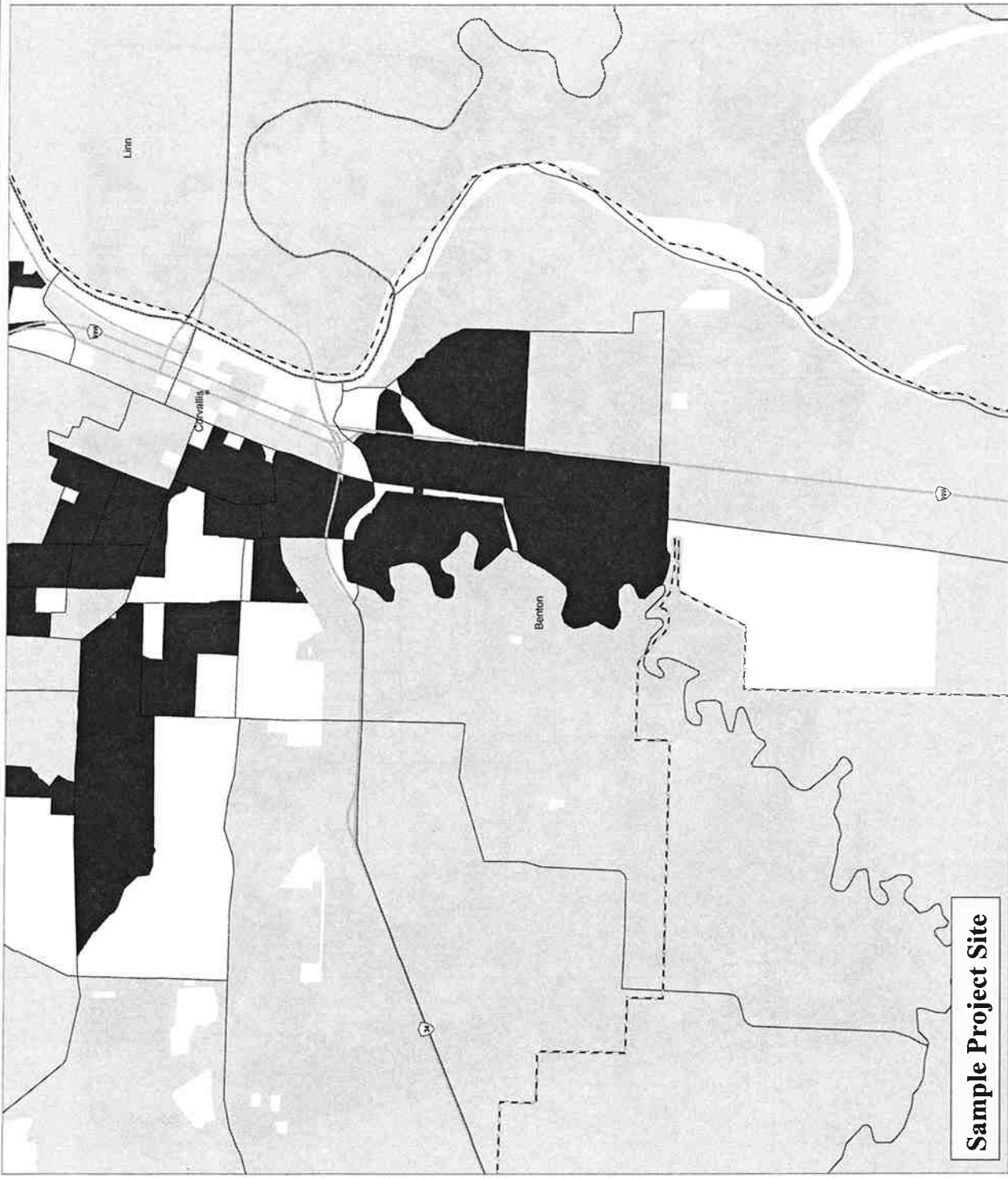
1. This map does not indicate the presence of Environmental Justice communities. The National Guidance for Conducting Environmental Justice Analysis defines an EJ Community as satisfying a given minority and/or income threshold AND being disproportionately and adversely affected by a project, program or activity. The Guidance recommends thresholds for minority populations and poverty.
2. The sample threshold for this map is 120% of the state average of percent minority population. According to the 2000 Census, this figure is 19.6%.



**Environmental Justice Mapping**  
September 2004



Data Source: U.S. Census Bureau 2000 SF-3, P-08;  
Oregon Geospatial Data Clearinghouse, ODOT GIS Unit

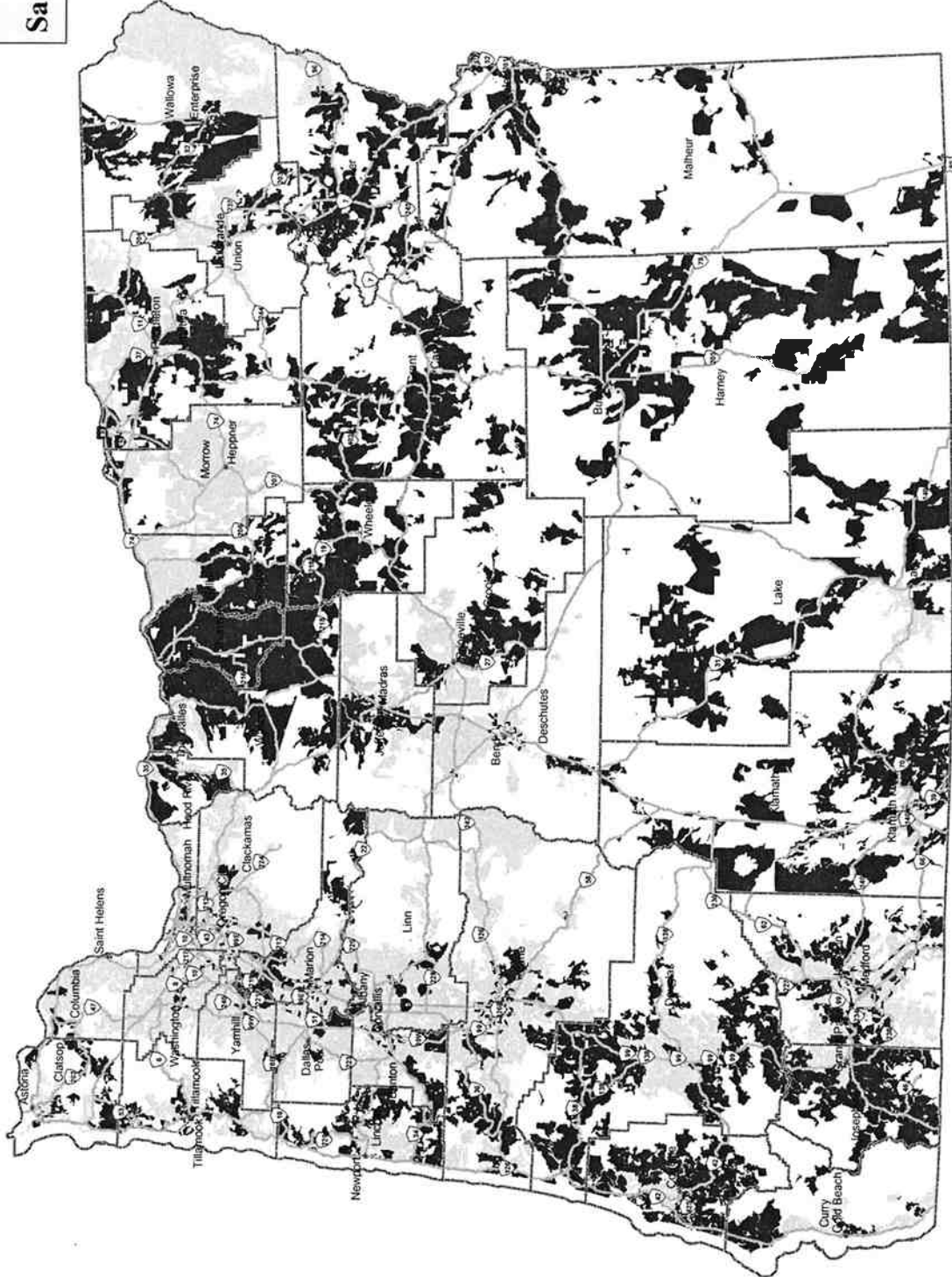


**Sample Project Site**

# Income Below Two Times the Poverty Level Compared to Sample Threshold (State Average)

**NOTES:**

1. Poverty level is determined by the U. S. Census Bureau according to income and family size.
2. This map does not indicate the presence of Environmental Justice communities. The National Guidance for Conducting Environmental Justice Analysis defines an EJ Community as satisfying a given minority and/or income threshold AND being disproportionately and adversely affected by a project, program or activity. The Guidance recommends thresholds for minority populations and poverty.
3. The sample threshold for this map is the state average of percent persons in households with income below two times the poverty level. According to the 2000 Census, this figure is 29.6%.



- County Seat
- County Boundary
- Metropolitan Planning Organization Boundary
- Highway
- In Block Group at or Above State Average
- In Block Group Below State Average
- Census Blocks with Population = 0



**Environmental Justice Mapping**  
September 2004

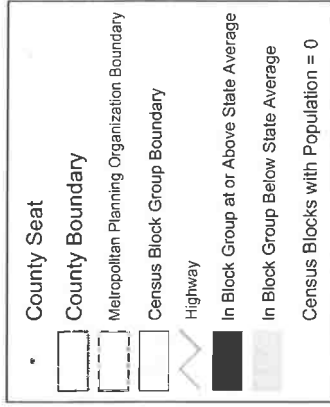
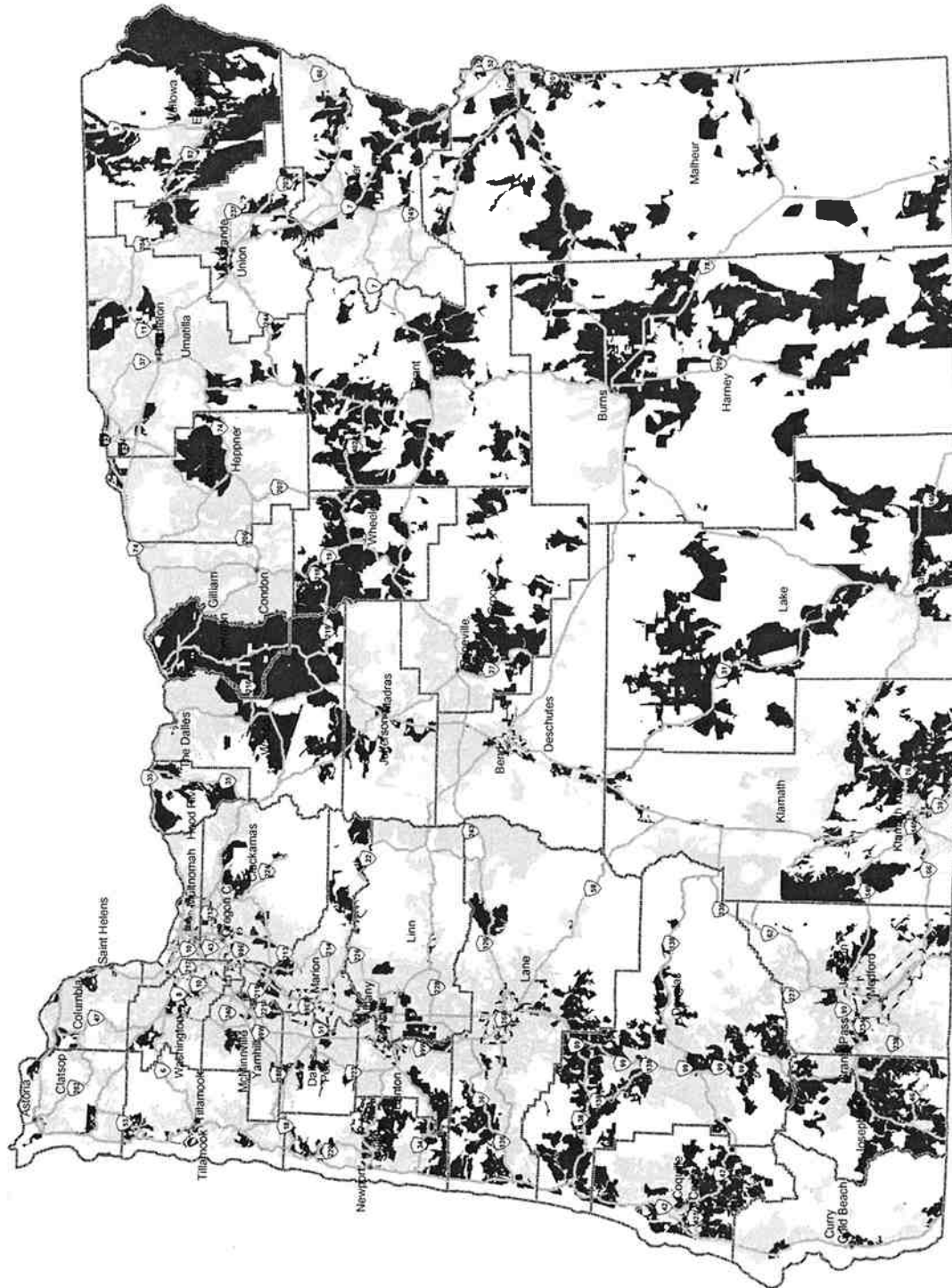


Data Source: U.S. Census Bureau 2000, SF-3, P-88;  
Oregon Geospatial Data Clearinghouse; ODOT GIS Unit

# Income Below the Poverty Level Compared to Sample Threshold (State Average)

**NOTES:**

1. Poverty level is determined by the U. S. Census Bureau according to income and family size.
2. This map does not indicate the presence of Environmental Justice communities. The National Guidance for Conducting Environmental Justice Analysis defines an EJ Community as satisfying a given minority and/or income threshold AND being disproportionately and adversely affected by a project, program or activity. The Guidance recommends thresholds for minority populations and poverty.
3. The sample threshold for this map is the state average of percent persons in households with income below the poverty level. According to the 2000 Census, this figure is 11.6%.



**Environmental Justice Mapping**  
**September 2004**



Data Source: U. S. Census Bureau 2000, SF-3, P-88,  
 Oregon Geospatial Data Clearinghouse: ODOT GIS Unit









# Percent Persons with Go-Outside-the-Home Disabilities\*

**NOTES:**

1. This socioeconomic characteristic is not a requirement under the National Guidance for Conducting Environmental Justice Analysis. This data is provided only as an optional tool to assist in analysis.
2. The grouping method displayed for this dataset uses the "natural breaks" option in ArcView. This is only a sample display method as there are many options of creating grouping categories.
3. \*The dataset for Percent Persons Age 16+ (civilian non-institutionalized) with Go-Outside-Home Disability is based on Census Tracts. The state average for this figure is 6.6%.

•	County Seat
□	County Boundary
—	Metropolitan Planning Organization Boundary
—	Highway
Census Blocks with Population = 0	
Percent Go-Outside-Home Disability	
■	0.0 - 4.2
■	4.3 - 6.5
■	6.6 - 9.4
■	9.5 - 14.3
■	14.4 and above



**Environmental Justice Mapping  
September 2004**

