

**US 19 Shady Spring to Beaver
(Beckley Z-Way)
Environmental Justice Analysis
Raleigh County, West Virginia**

State Project Number: X341-ZWA/Y-1.00 00

**U.S. Department of Transportation
Federal Highway Administration**



**West Virginia Department of Transportation
Division of Highways**



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The Shady Spring to Beaver Project is being proposed by the West Virginia Division of Highways (WVDOH) to widen US 19 from Shady Spring (intersection of US 19 and WV 3) to Beaver (WV 307 known as Airport Road) in Raleigh County, West Virginia. US 19 is also designated as WV 3, Ritter Drive, and Flat Top Road; this serves as the main route through the unincorporated communities of Beaver, Daniels, and Shady Spring.

The potential project encompasses the transportation corridor of US 19 and extends beyond the road due to the nature of the widening project design. The northern extent of the area is east of the Beaver Plaza (Beaver) and the southern extent is north of the Shop Right convenience store (Shady Spring). The project area is shown on Figure 1. The project area is a mixture of commercial businesses, churches, transportation corridor, and residential areas within a rural setting.

Environmental Justice

Executive Order 12898 of February 11, 1994, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, requires that the proposed project be assessed to determine whether or not it will have a disproportionately high impact on minority or low-income populations within the area (OPUSA 1994). An analysis of potential environmental justice impacts was conducted to assess if there were environmental justice populations in the project area, and if so, to determine if there would be such a disproportionate effect on them from the proposed project. There are three fundamental principles at the core of environmental justice:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- To prevent the denial of, reduction in, or significant delay in, the receipt of benefits by minority and low-income populations.

Environmental justice addresses potentially disproportionate high effects of proposed decisions on low-income populations and minority populations. The Federal Highway Administration defines “disproportionate impacts as adverse effects that are predominately borne by a minority

population and/or a low-income population. Disproportionate effects are appreciably more severe or greater in magnitude on environmental justice populations than on nonminority or non-low-income populations (FHWA 2015).

Demographic Overview

Information from the *American Community Survey* was accessed from the U.S. Census Bureau (USCB 2015) and the U.S. Environmental Protection Agency environmental justice web sites (USEPA 2015) to determine the presence of any minority or low-income populations within the project area. Population estimates from 2015 and the county profile from the West Virginia University Bureau of Business and Economic Research were also reviewed (WVU 2014a). Additionally, a windshield survey was conducted of the immediate project area to obtain a visual perspective for neighborhoods in the project area.

The population of West Virginia during the 2000 U.S. Census was 1,808,344 (USCB 2000). By 2010, the statewide population had grown to 1,852,994 (USCB 2010). Population in Raleigh County peaked in 1950 when it reached 96,273. It has been relatively stable over the past 20 years, with the most recent population estimate of 78,241 in 2014 (USCB 2014).

Population projections for the area indicate the county’s population will decline slightly over the next 15 years (WVU 2014b). As a comparison, the population of West Virginia is expected to grow by 1.4 percent to by the year 2035. Table 1 provides a demographic overview of Raleigh County, Census Tract (CT) 8.03, and CT 8.04 as they relate to the entire state.

**Table 1
Demographic Overview**

Area	Population Characteristics					Individuals Below Poverty Level		Housing	
	Total Population	White	African Amer.	Other Minority	Age 65 & Over	Total	Percent	Units	Households
Raleigh County	78,241	69,400	6,416	2,425	14,240	13,849	17.7	36,015	31,164
Census Tract 8.03	4,366	4,195	39	132	639	524	12.0	1,724	1,943
Census Tract 8.04	6,053	5,762	180	111	1,074	400	6.6	2,347	2,633
West Virginia	1,844,128	1,727,948	66,389	49,791	328,255	337,475	18.3	884,605	742,359

Methodology

The analytical methodology employs a comparative screening analysis that measures potentially impacted populations to determine if an environmental justice population would see a disproportionate impact when compared to the non-environmental justice populations. This methodology identifies a threshold for the study area and compares block group data to that threshold. If block group data exceed the threshold, the potential for disproportionate effects to occur on that block group is judged to be present. It does not address potential impacts to individual members of environmental justice populations, instead evaluating impacts to neighborhoods as a whole.

The analysis utilized currently available information from the following U.S. Census units: Raleigh County; CT 8.03, CT 8.04, CT 8.03 Block Groups (BG) 1 and 2, and CT 8.04 BG 1, 2, 3, 4, and 5. Population, race, and household data were retrieved directly from the U.S. Census Interactive Population Map. Data on poverty were retrieved from American Community Survey. Poverty statistics are not available for block groups but were calculated based on the percentage of persons within the census tract with incomes below the poverty level. The factors used for the environmental justice screening are found in Table 2.

**Table 2
Environmental Justice Screening Factors**

Area	Total Population	White Population	Minority Population	Percent Minority	Persons with Incomes Below Poverty Level	Percent Below Poverty Level
Raleigh County	78,241	69,400	8,841	11.3	13,849	17.7
CT 8.03 BG 1	987	914	73	7.4	118	12
CT 8.03 BG 2	3,379	3,281	98	2.9	405	12
CT 8.04 BG 1	1,205	1,177	28	2.3	80	6.6
CT 8.04 BG 2	1,941	1,887	54	2.8	128	6.6
CT 8.04 BG 3	964	790	174	18	64	6.6
CT 8.04 BG 4	1,134	1,112	22	1.9	75	6.6
CT 8.04 BG 5	809	796	13	1.6	53	6.6
Total Study Area (All of the Block Groups Combined)	10,419	9,957	462	4.4	923	8.9

Findings

With a minority population of 4.4 percent, the project's study area (CT 8.03 BG 1 & 2, and CT 8.04 BGs 1, 2, 3, 4, & 5) does not exceed the screening threshold of Raleigh County (11.3 percent). With a low-income population of 8.9 percent, the project's study area does not exceed

the screening threshold of Raleigh County (17.7 percent). Not only does the entire study area fall below the county thresholds for each environmental justice category, all of the individual block groups do as well. Consequently, the project is unlikely to have a disproportionate effect on environmental justice populations.

References

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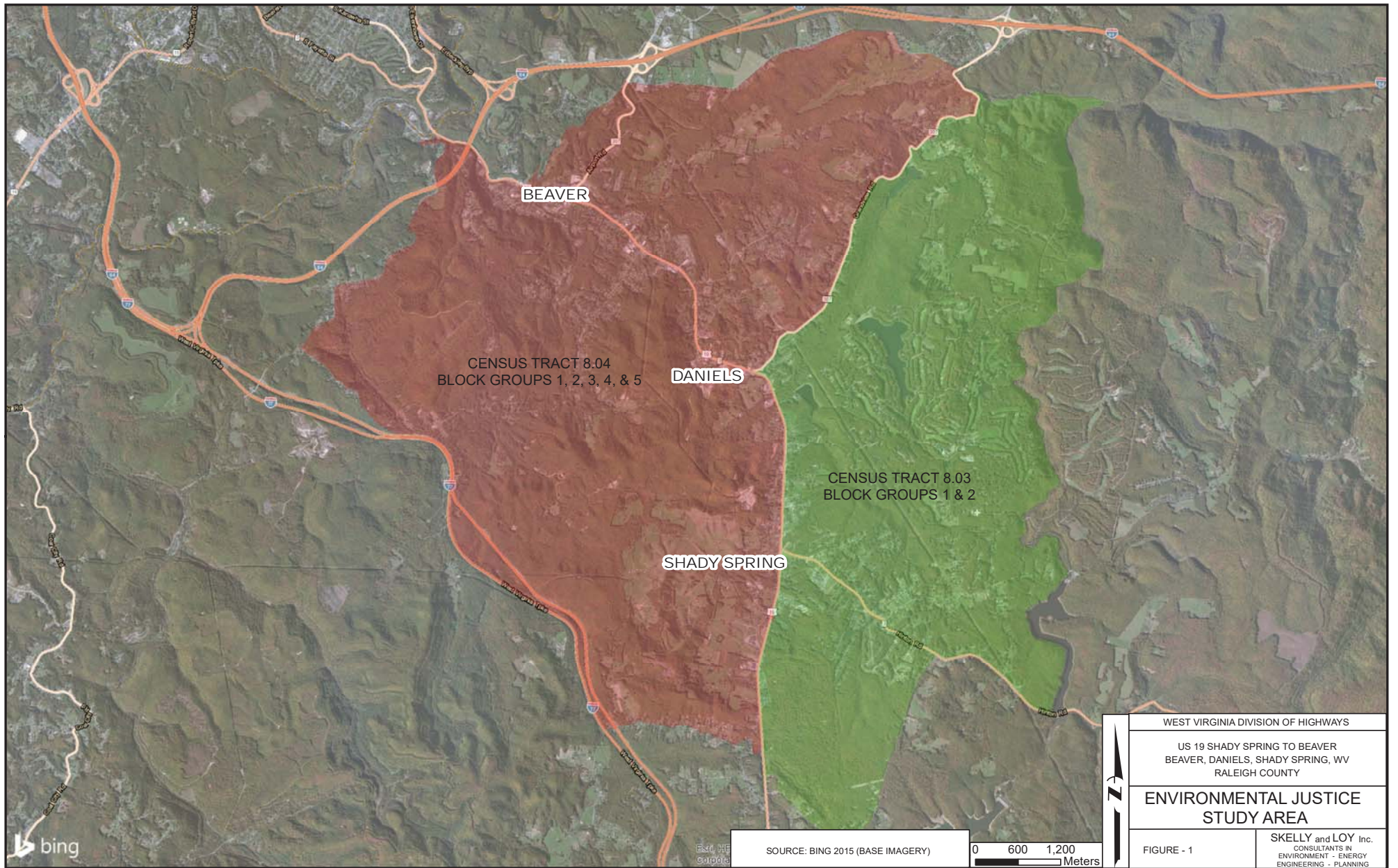
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CENSUS TRACT 8.04
BLOCK GROUPS 1, 2, 3, 4, & 5

CENSUS TRACT 8.03
BLOCK GROUPS 1 & 2

BEAVER

DANIELS

SHADY SPRING

WEST VIRGINIA DIVISION OF HIGHWAYS

US 19 SHADY SPRING TO BEAVER
BEAVER, DANIELS, SHADY SPRING, WV
RALEIGH COUNTY

**ENVIRONMENTAL JUSTICE
STUDY AREA**

FIGURE - 1

SKELLY and LOY Inc.
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ENVIRONMENT - ENERGY
ENGINEERING - PLANNING

SOURCE: BING 2015 (BASE IMAGERY)

0 600 1,200
Meters

