

CHAPTER 13 – ENVIRONMENTAL JUSTICE ANALYSIS

13.1 Overview

Environmental justice addresses fairness of federal actions in regards to disadvantaged persons, particularly low-income and racial minority populations. Environmental justice became an active part of federally-funded planning activities with Executive Order 12898, issued in 1994, that required federal agencies to examine the potential for their programs, policies and activities to have negative impacts on minority and low-income populations. The environmental justice executive order is based on Title VI of the Civil Rights Act of 1964, which required recipients of federal aid to certify and ensure nondiscrimination.

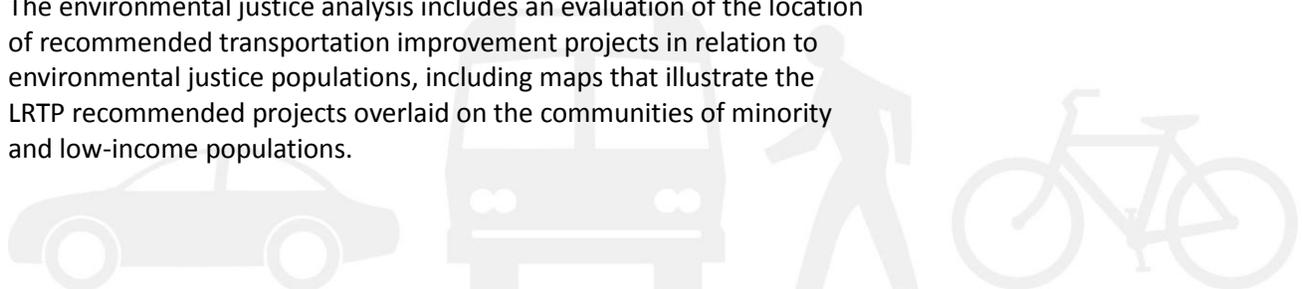
The Federal Highway Administration (FHWA) recognizes three fundamental environmental justice principles:

- 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.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

FHWA guidance directs Metropolitan Planning Organizations (MPOs) to produce analyses that ensure their Long Range Transportation Plan (LRTP) is compliant with Title VI and environmental justice. To address these concerns, this section of the report documents the allocation of improvement projects in regards to environmental justice populations in the Morgantown Monongalia MPO (MMMPO) study area.

Assessment Methodology

The environmental justice analysis includes an evaluation of the location of recommended transportation improvement projects in relation to environmental justice populations, including maps that illustrate the LRTP recommended projects overlaid on the communities of minority and low-income populations.



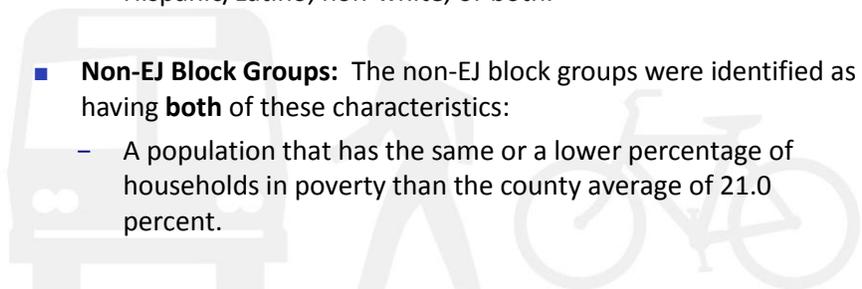
Environmental justice populations were identified in Monongalia County through review of 2010 Census block group data. Block group level data offers the most detailed (i.e., smallest Census geography) level of income data. There are 100 Census block groups in Monongalia County.

The most recent American Community Survey (ACS) 5-Year Estimate (2007-2011) data was joined to TIGER block group shapefiles for Monongalia County. Geographic Information System (GIS) procedures were implemented to analyze and present the data. The following Census information was included for identifying environmental justice populations:

- **Race:** This data includes a block group-by-block group summary of the number of white, black/African American, American Indian, Asian, Hawaiian or Pacific Islander, or multi-racial residents.
- **Hispanic or Latino:** This data is a separate category from racial background, as residents are classified as either Latino or non-Latino in addition to their racial background. For instance, a census respondent can identify themselves as Hispanic/Latino and White.
- **Poverty Status:** This data is determined based on the federal government's definition of poverty. It is derived from the total family income in relationship to the poverty threshold appropriate for that person's family size and age composition.

Based on these three variables, census block groups were classified as either an environmental justice (EJ) block group or a non-environmental justice (non-EJ) block group.

- **EJ Block Groups:** The EJ block groups are characterized as Census block groups with a population that has **either**:
 - A higher percentage of households in poverty than the county average of 21.0 percent.
 - A higher percentage of minority residents than the county average of 10.2 percent. For the purposes of this analysis, minority status was defined as persons that were Hispanic/Latino, non-white, or both.
- **Non-EJ Block Groups:** The non-EJ block groups were identified as having **both** of these characteristics:
 - A population that has the same or a lower percentage of households in poverty than the county average of 21.0 percent.



- A population that has the same or a lower percentage of minority residents than the county average of 10.2 percent.

Figure 13-1 illustrates the census block groups in Monongalia County and highlighted are those block groups that have a higher than average minority population, higher than average populations below the poverty income level, or both.

The recommended Tier 1 improvement projects were overlaid with the EJ data. Overlaying projects on the EJ data allows comparison of the relative level of transportation investment by EJ and non-EJ population.

The locations of recommended Tier 1 projects (as documented in Chapter 9 – Projects and Strategies) were analyzed in relation to the EJ status of the populations in the areas the improvements directly serve. This analysis was completed to evaluate the relative equity in the distribution of transportation improvement investments. The goal is to be able to observe, through the comparison of the projects and the EJ data, a mix of improvement projects in areas defined as EJ block groups and areas defined as not being EJ block groups.

This analysis documents the level of planned transportation investment in the area's EJ and non-EJ communities. An investment in a community may be either beneficial to or negatively impact that community. For example bus service to a community can be a transportation benefit to the community while the fumes from the bus may be viewed as being a negative. Similarly building a new road may be viewed as a positive investment in the community's infrastructure while at the same time the impact to the neighborhood housing stock or pedestrian connectivity is a negative impact.

Figure 13-2 documents the block groups, their relative EJ status and the improvements included in the Tier 1 (fundable elements) of the recommended plan. The EJ assessment only included the Tier 1 projects in the evaluation. In the EJ assessment spatial analysis, each project was assigned an EJ status such that it was either:

- Located within an EJ defined block groups (EJ project).
- Located outside an EJ defined groups (non-EJ project).
- Located partially inside and outside an EJ defined group.

Analysis Results

Table 13-1 provides a summary of each identified improvement project, its EJ status, and its associated cost estimate. Table 13-2 provides a

summary of block groups in Monongalia County, providing the number of persons living in EJ and non-EJ block groups, and the relative level of planned transportation investment within EJ and non-EJ block groups. Due to the fact that four of the approved Tier 1 projects were region-wide based, and did not have a defined geography. Those investments were separated out in the table. The percentage of transportation investment within and outside the EJ block groups was then calculated. Based upon those percentages, the region-wide investments were added back into the LRTP fundable total.

Table 13-1. LRTP Tier 1 Projects – EJ Status and Cost

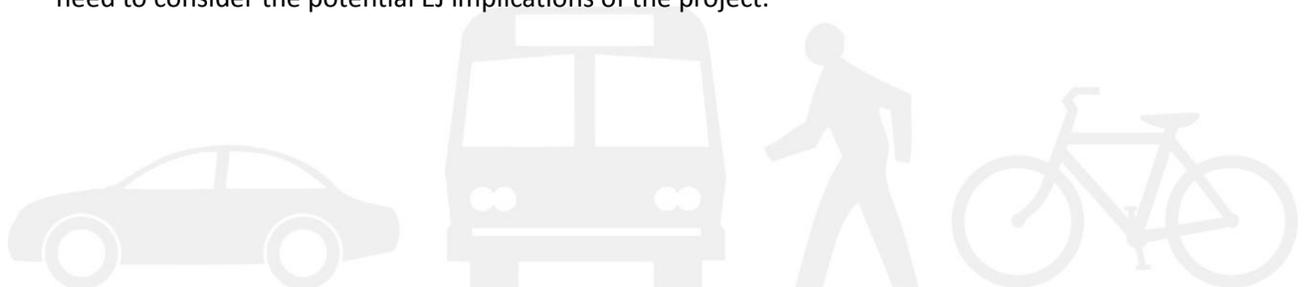
Project #	Project / Corridor	Planning Level Cost Estimate
6	New Bridge over Monongahela River and Roadway Connection to I-79	\$45,000,000
7	Van Voorhis Road Improvements	\$10,000,000
8	Beechurst Avenue Improvements	\$7,000,000
13	West Run Road Improvements - Eastern Section (Scenario 2)	\$3,000,000
26	North Side Connector Bus Rapid Transit	\$1,000,000
28	White Park / Caperton Trail Connection	\$50,000
Within EJ Defined Block Groups Subtotal		\$66,050,000
11	West Run Improvements - Western Section	\$12,000,000
Outside EJ Defined Block Groups Subtotal		\$12,000,000
18	Greenbag Road Improvements	\$15,000,000
27	Grant Avenue Bicycle / Pedestrian Connector	\$900,000
38	Intersection Capacity and Safety Improvement Program	\$31,000,000
Partially within EJ Defined Block Groups Subtotal		\$46,900,000
2	Americans with Disabilities Act (ADA) Connectivity Initiative*	\$2,000,000
40	Regional Bikeway Plan Implementation Program*	\$5,000,000
43	School Route Improvements (K-8)*	\$2,000,000
45	Downtown Morgantown Signalization and Street Changes*	\$2,000,000
Region-Wide Undefined Subtotal		\$11,000,000
LRTP Fiscally Constrained Total		\$135,950,000
*Note: Project list includes projects defined as Region-wide.		

Project Level Analysis – Project level analysis of the LRTP’s Tier 1 projects was divided into two types of projects - operational enhancement of existing facilities and transit improvements and the construction of new facilities in new locations.

Operational Enhancements to Existing Facilities, Transit, and Non-Motorized Improvements – The vast majority of the LRTP’s projects are operational improvements to existing facilities through spot improvements or improved transit service. The current condition of many of the streets on this list may be viewed as having a negative impact on the EJ communities because of unsafe, congested, and narrow travel lanes and the lack of safe pedestrian facilities. These unsafe facilities may be seen as dividing the communities where they are located. The MMMPO’s adoption of a Complete Streets Policy and the emphasis of this plan on increased pedestrian and cyclist accessibility, if implemented, should mitigate the potential negative impacts of improved motorized vehicle operations in these areas and ultimately show a much greater positive benefit to the communities in which they are located.

The proposed transit and non-motorized improvements in the area are designed to primarily serve EJ communities which are currently served but provided with less service than there is demand for, as documented in Chapter 4. It is not expected that the proposed increased transit service would materially affect the adjacent communities. All projects in Tier 1 specifically include provisions for transit and/or non-motorized improvements.

Construction of Roadway on New Location – The LRTP only proposed one major facility in a new location, which is construction of a new bridge over the Monongahela River and a roadway connection to I-79 (Project #6). As noted in this analysis, the proposed facility would occur within Census blocks and significant EJ communities. The final location of the proposed facility has not been determined and therefore no conclusion may be drawn about the ultimate impact of the facility on the EJ population. However, any environmental studies undertaken to implement this project will need to consider the potential EJ implications of the project.



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Figure 13-1. Census Block Groups by Environmental Justice Status

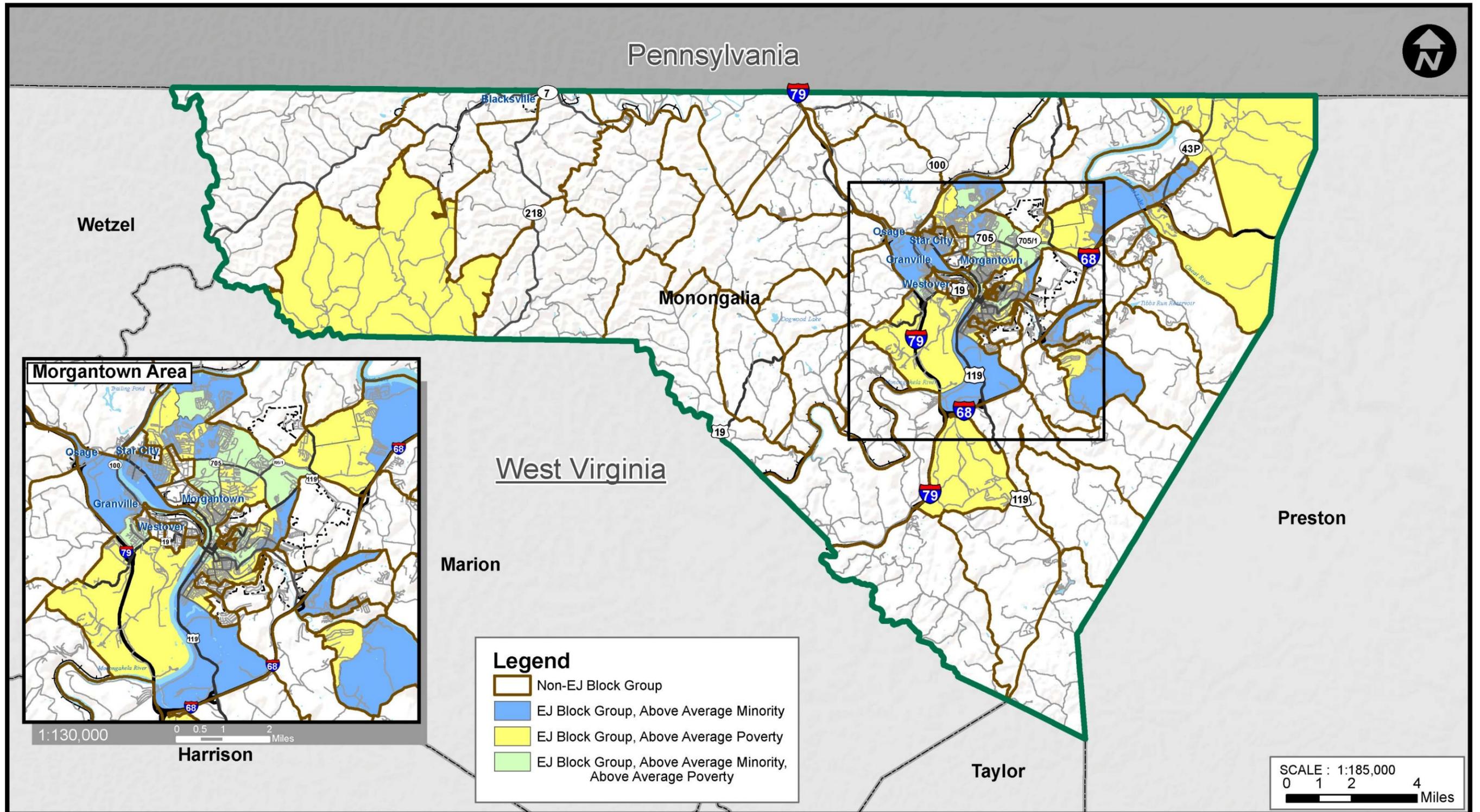


Figure 13-2. Recommended Improvement Projects Overlaid on Environmental Justice Status

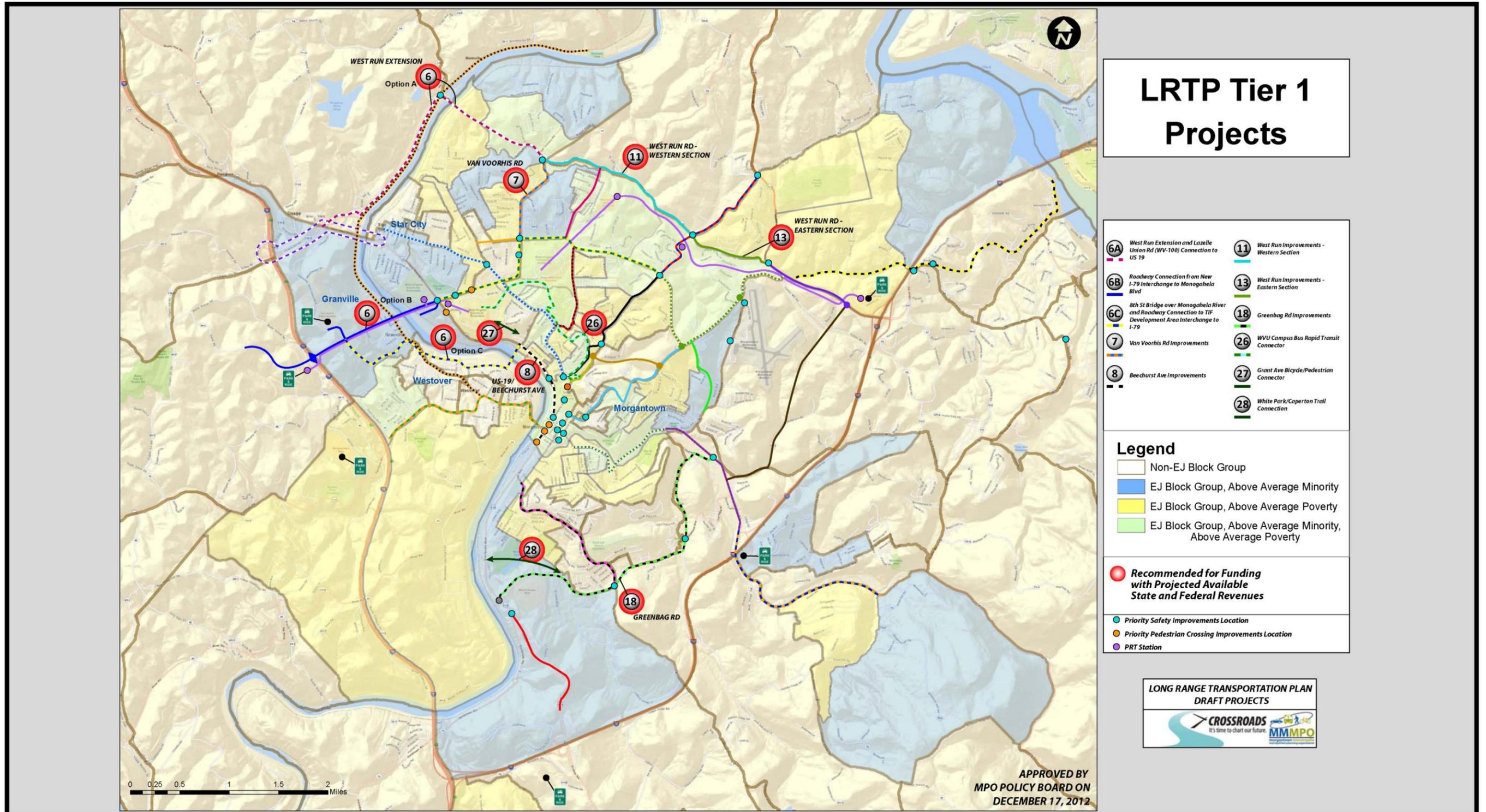


Table 13-2. Planned Transportation Investments in EJ/non-EJ Block Groups

Variables	Within EJ-Defined Block Groups	Outside EJ-Defined Block Groups	Monongalia County Total
Population	49,361	46,828	96,189
Percent of Population	51%	49%	100%
Total Improvement Project Cost Estimates	\$105,593,817.53	\$30,356,182.47	\$135,950,000
Percent of Total Costs	78%	22%	

There are approximately the same number of persons living in identified EJ and non-EJ communities, as defined by the Census block group geography and demographic variables previously described. As documented in Table 13-2, the identified EJ communities have higher levels of direct transportation investments than non-EJ communities.

Summary

Overall there is low potential for discrimination against low-income and minority populations in relation to the recommended LRTP projects. The identified low-income and minority populations in the Morgantown MMMPO study area would experience higher levels of transportation investments with the Long-Range Transportation Plan list of recommended improvement projects.

There is the potential for disproportionate adverse impacts to the EJ population in the vicinity of the proposed Monongahela River crossing alternatives. However, the environmental studies to be conducted prior to the implementation of this project should be able to successfully identify avoidance or mitigation strategies to prevent a disproportionate impact on these communities.

