

2021-2024 ADAMS COUNTY MPO TIP ENVIRONMENTAL JUSTICE ANALYSIS

INTRODUCTION

The public involvement efforts for the Department of Transportation are guided by several federal mandates to ensure nondiscrimination in federally funded activities. These mandates are designed so that planning and public involvement activities are conducted equitably and in consideration of all citizens, regardless of race, nationality, sex, age, ability, language spoken, or economic status. These mandates include:

- **Title VI of the Civil Rights Act of 1964** - Title VI of the Civil Rights Act states that "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any program or activity receiving federal financial assistance." PennDOT and its partners are committed to providing open and inclusive access to the transportation decision-making process for all persons, regardless of race, color or national origin.
- **Executive Order on Environmental Justice (Executive Order 12898 February 11, 1994)** - Environmental Justice is 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. PennDOT and its partners are committed to providing opportunities for full and fair participation by minority and low- income communities in the transportation decision-making process.
- **Americans with Disabilities Act (ADA)** - The Americans with Disabilities Act of 1990 stipulates involving persons with disabilities in the development and improvement of services. Sites of public involvement activities as well as the information presented must be accessible to persons with disabilities. PennDOT and its partners are committed to providing full access to public involvement programs and information for persons with disabilities. All public meetings are held in ADA-accessible locations. With advance notice, special provisions can be made for hearing-impaired or visually-impaired participants.
- **Executive Order on Limited English Proficiency** - Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency," was signed on August 11, 2000. Recipients of federal funding "are required to take reasonable steps to ensure meaningful access to programs and activities by LEP person." PennDOT and its partners will make special arrangements for the provision of interpretative services upon request.

FHWA recently introduced the Environmental Justice Core Elements Methodology to ensure an MPO/RPO can meaningfully assess the benefits and burdens of plans and programs. PennDOT and the Adams County MPO are committed to following the Core Elements approach, which includes:

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

By integrating the Core Elements into the planning process, as supported by FHWA, federal agencies are better equipped to carry out the investment strategy and project selection. The EJ process should be comprehensive and continuous with each task informing and cycling back to influence the next step.

IDENTIFYING MINORITY AND LOW-INCOME POPULATIONS

In development of the 2021-2024 Transportation Improvement Program (TIP), the Adams County MPO conducted an Environmental Justice Benefits and Burdens analysis. A distributive geographic analysis was conducted to identify the locations and concentrations of minority, low-income and other Traditionally Underserved Populations (TUP).

The identification of these populations is essential to establishing effective strategies for engaging them in the transportation planning process. When meaningful opportunities for interaction are established, the transportation planning process can effectively draw upon the perspectives of communities to identify existing transportation needs, localized deficiencies, and the demand for transportation services. Mapping of these populations not only provides a baseline for assessing impacts of the transportation investment program, but also aids in the development of an effective public involvement program.

Minority population is defined as any readily identifiable group of Black, Hispanic, Asian American, American Indian, and Alaskan Native who live in geographic proximity and who would be similarly affected by a proposed FHWA program, policy, or activity. Low-income population is defined as any readily identifiable group of persons at or below the Department of Health and Human Services poverty guidelines who live in a geographic proximity who would be similarly affected by a proposed FHWA program, policy, or activity

As shown in **Table 1**, based on the 2013-2017 American Community Survey (ACS) data, minority persons in Adams County are nearly 11 percent of the total population. The number of persons in poverty is nearly 9 percent of the total county population.

Table 1: Profile of Low-Income and Minority Populations, 2017

Demographic Indicator	Adams County	
	Regional Population	Regional Percentage
Total	101,589	
White, Non-Hispanic	90,912	89.49%
Minority	10,677	10.51%
Black or African American, Non-Hispanic	1,399	1.38%
American Indian and Alaska Native, Non-Hispanic	32	0.03%
Asian alone, Non-Hispanic	717	0.71%
Native Hawaiian and Other Pacific Islander, Non-Hispanic	-	-
Some other race, Non-Hispanic	42	0.04%
Two or more races, Non-Hispanic	1,596	1.57%
Hispanic	6,891	6.78%
Low-Income Households	3,027	7.91%
Low-Income Population	8,548	8.78%
Other Potentially Disadvantaged Populations		
Limited English Proficiency (LEP)	2,685	2.78%
Persons with a Disability	13,376	13.33%
Female Head of Household with Child	2,029	5.23%
Elderly (65 years or older)	18,883	18.59%
Carless Households	1,595	4.11%

Source: 2013-2017 ACS 5-Year Estimates

Table 2 identifies the total population by race and low-income category. Based on those numbers, **Figure 1** highlights the poverty rate for each racial/ethnic group. The White, Non-Hispanic category has the highest population and most individuals that are low-income, however, the overall poverty percentage is only about 7 percent, which is lower than the county average of 9 percent. In contrast, nearly 27 percent of the Hispanic population and nearly 40% of the “Some Other Race” category is considered low-income.

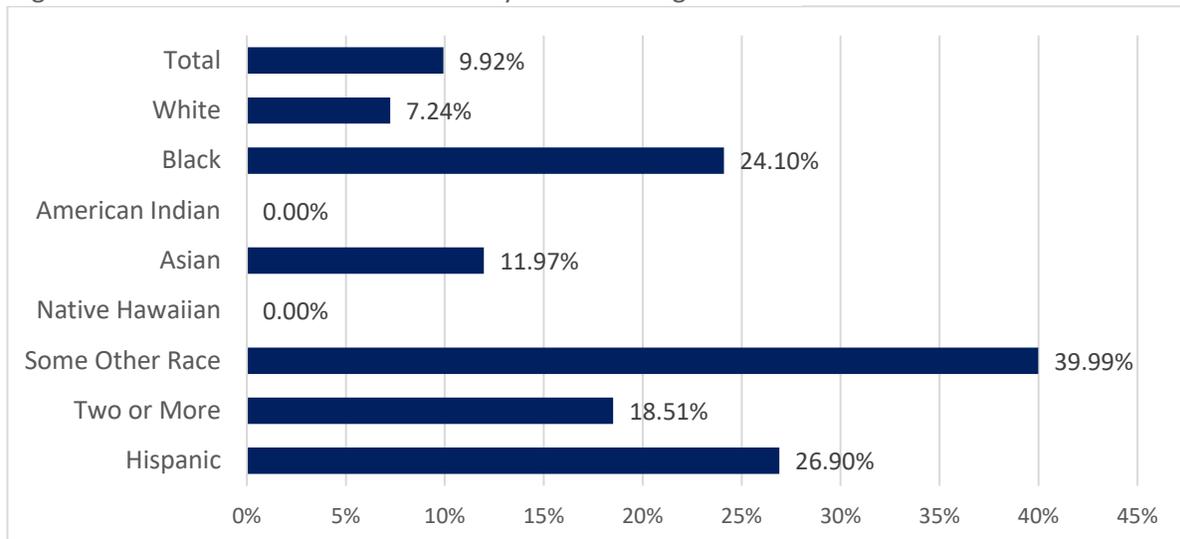
Figure 2 shows the concentrations of minority populations by Census “block groups” based on 2013-2017 ACS data. **Figure 3** shows the concentrations of households below the poverty threshold by Census block groups, also based on 2013-2017 ACS data.

Table 2: Population Tabulations by Racial/Ethnic Groups and Poverty Categories

White	Total:	90,142
	Low-Income	6,530
	% Low-income	7.24%
Black	Total:	1,336
	Low-Income	322
	% Low-income	24.10%
American Indian	Total:	46
	Low-Income	0
	% Low-income	0.00%
Asian	Total:	618
	Low-Income	74
	% Low-income	11.97%
Native Hawaiian	Total:	0
	Low-Income	0
	% Low-income	0.00%
Some Other Race	Total:	3,066
	Low-Income	1,226
	% Low-income	39.99%
Two or More	Total:	2,139
	Low-Income	396
	% Low-income	18.51%
Hispanic	Total:	6,550
	Low-Income	1,762
	% Low-income	26.90%
Total Population		103,897
Total Poverty		10,310

Source: 2013-2017 ACS 5-Year Estimates

Figure 1: Cross Tabulation of Poverty Rate among

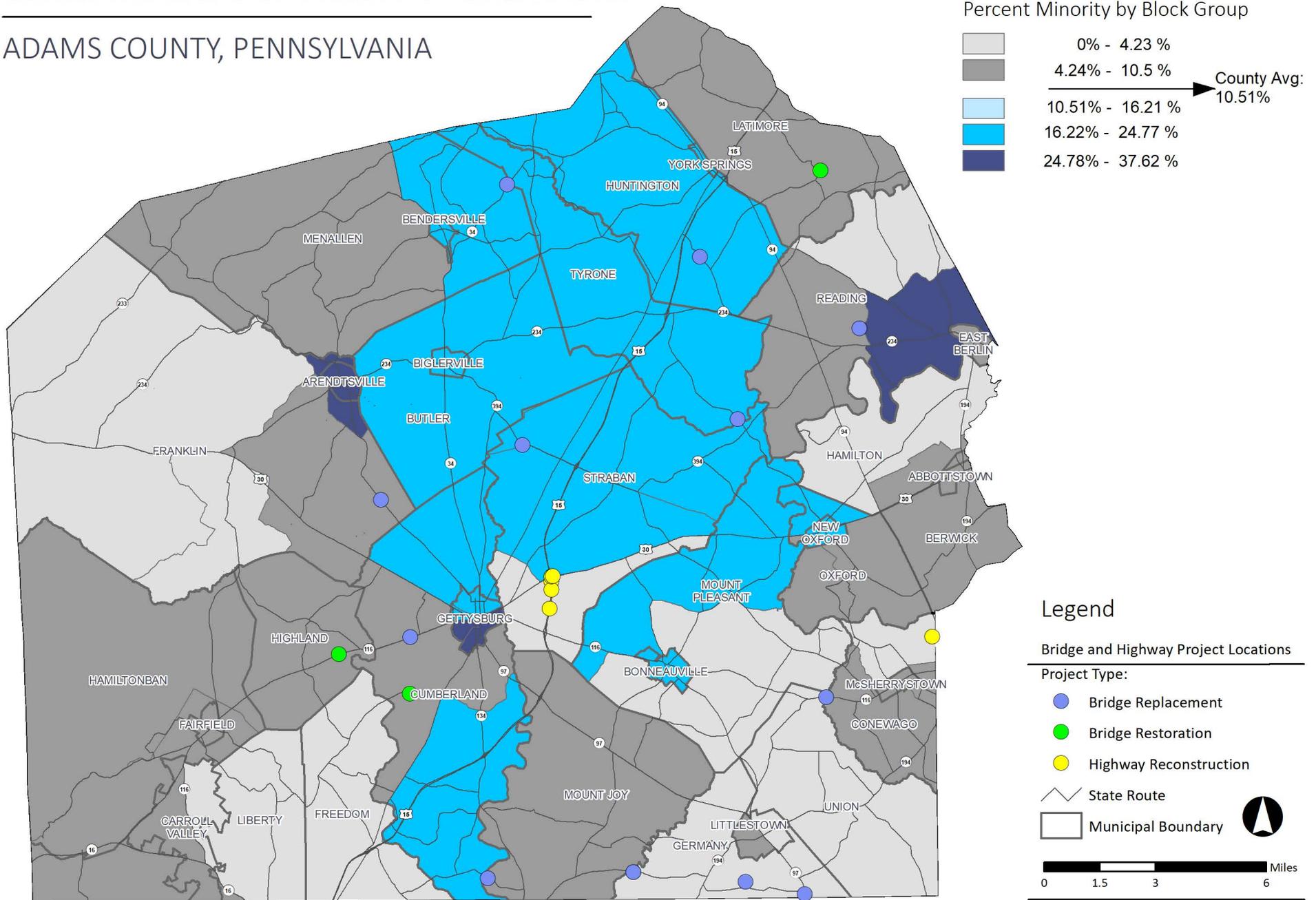


Source: 2013-2017 ACS 5-Year Estimates

2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

CONCENTRATIONS OF MINORITY POPULATIONS

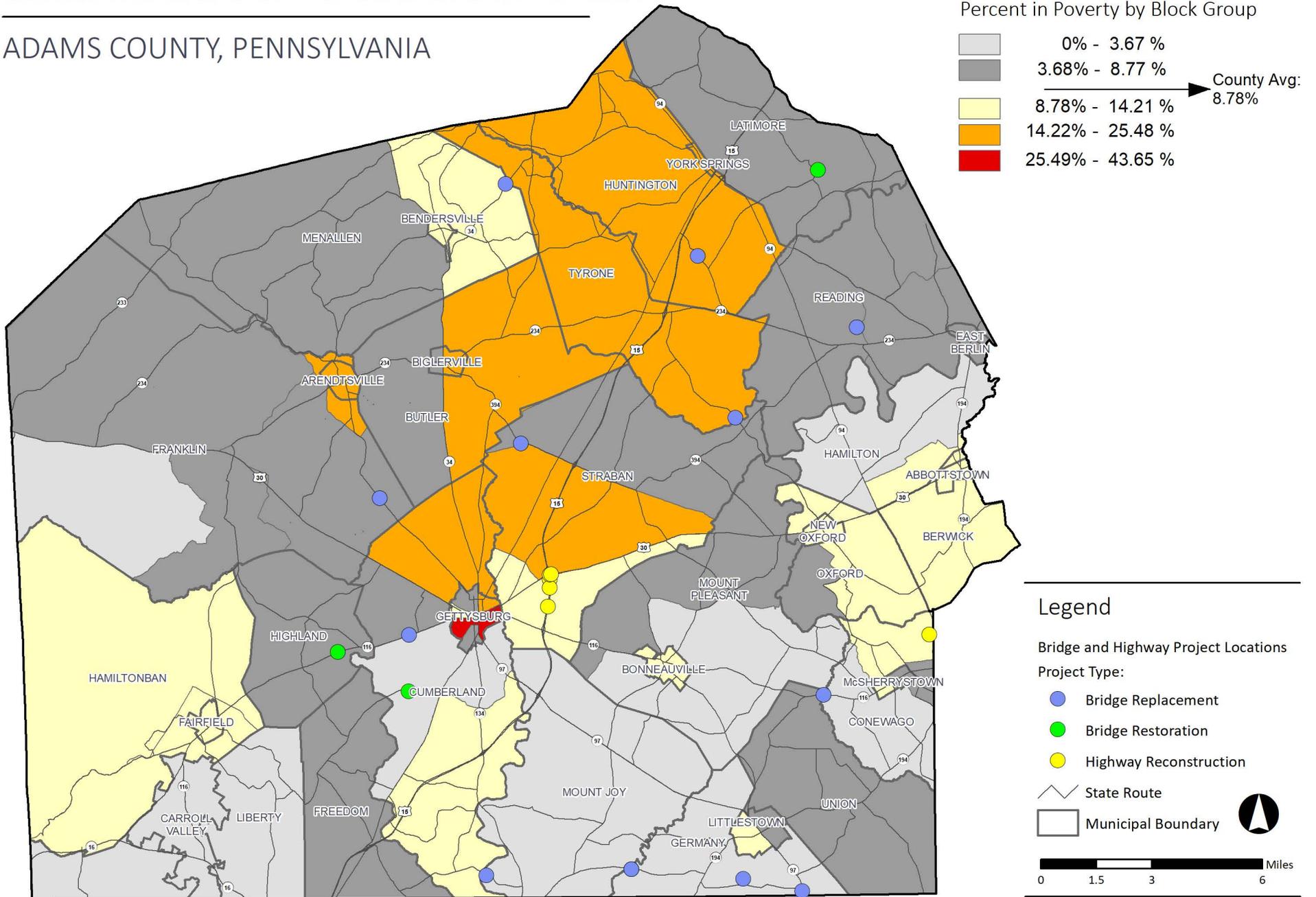
ADAMS COUNTY, PENNSYLVANIA



2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

CONCENTRATIONS OF POPULATIONS IN POVERTY

ADAMS COUNTY, PENNSYLVANIA



CONDITION ASSESSMENT

In order to meaningfully analyze benefits and adverse effects of the transportation program, the MPO has examined the existing conditions of transportation assets throughout the region and safety performance measures among the minority and low-income populations. These data assessments allow the MPO to track changes in crashes, poor condition bridges, and poor pavement mileage in the region and identify safety gaps and distribution disparities between minority and low-income populations.

Tables 3 and 4 provide the number and percentage of bridges by condition and by the concentration of minority and low-income population. Adams County currently has 43 bridges in poor condition. Of those bridges, 17 (or 40%) are located within block groups that exceed the minority average for the county of 10.51%. Within the County, 15 (35%) of the poor condition bridges are within block groups that exceed the poverty average for the county of 8.78%. Based on the available conditions data, there is not a disproportionate number of poor-conditioned bridges in areas with higher concentrations of minority or low-income populations.

Table 3: Distribution of Poor Condition Bridges by Minority Population Intervals

<i>Population/Asset</i>	Percent Minority Population Intervals					<i>Total</i>
	0% - 4.23%	4.24% - 10.5%	10.51% - 16.21%	16.22% - 24.77%	24.78% - 37.62%	
Poor Condition Bridge Count	10	16	7	10	0	43
Percentage	23.3%	37.2%	16.3%	23.3%	0.0%	100%
Total Population	24,057	41,819	16,042	14,595	5,076	101,589
Total Population (in %)	23.7%	41.2%	15.8%	14.4%	5.0%	100%
Minority Population	616	3,181	2,098	3,119	1,663	10,677
Minority Population (in %)	5.8%	29.8%	19.6%	29.2%	15.6%	11%

Source: 2013-2017 ACS 5-Year Estimates, PennDOT

Table 4: Distribution of Poor Condition Bridges by Poverty Population Intervals

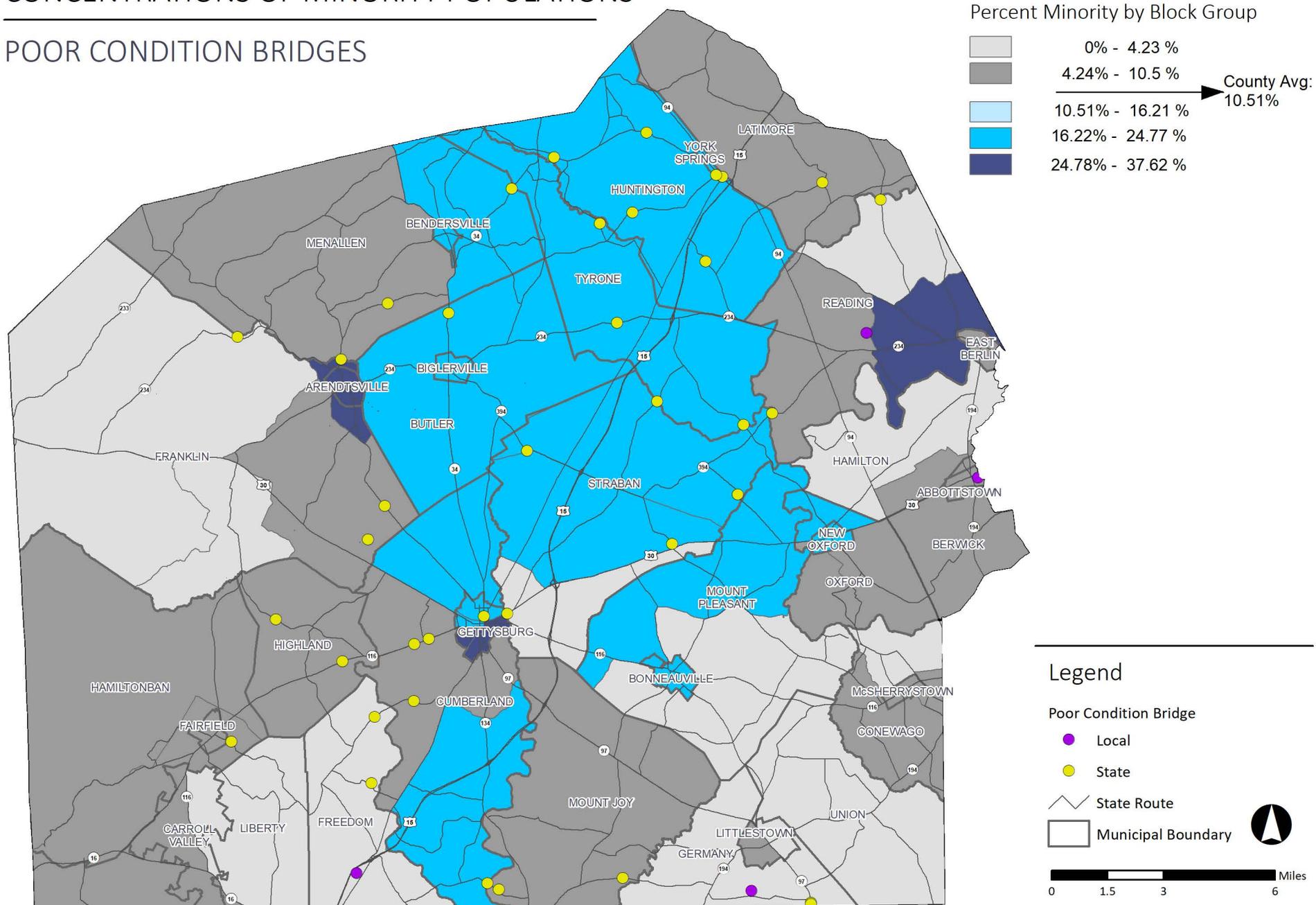
<i>Population/Asset</i>	Percent Below Poverty Population Intervals					<i>Total</i>
	0% - 3.67%	3.68% - 8.77%	8.78% - 14.21%	14.22% - 25.48%	25.49% - 43.65%	
Poor Condition Bridge Count	7	21	5	10	0	43
Percentage	16.3%	48.8%	11.6%	23.3%	0.0%	100%
Total Population	20,449	38,466	26,572	13,865	2,237	101,589
Total Population (in %)	20.1%	37.9%	26.2%	13.6%	2.2%	100%
Below Poverty Population	1,173	2,587	1,741	1,986	1,061	8,548
Below Poverty Population (in %)	13.7%	30.3%	20.4%	23.2%	12.4%	8%

Source: 2013-2017 ACS 5-Year Estimates, PennDOT

2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

CONCENTRATIONS OF MINORITY POPULATIONS

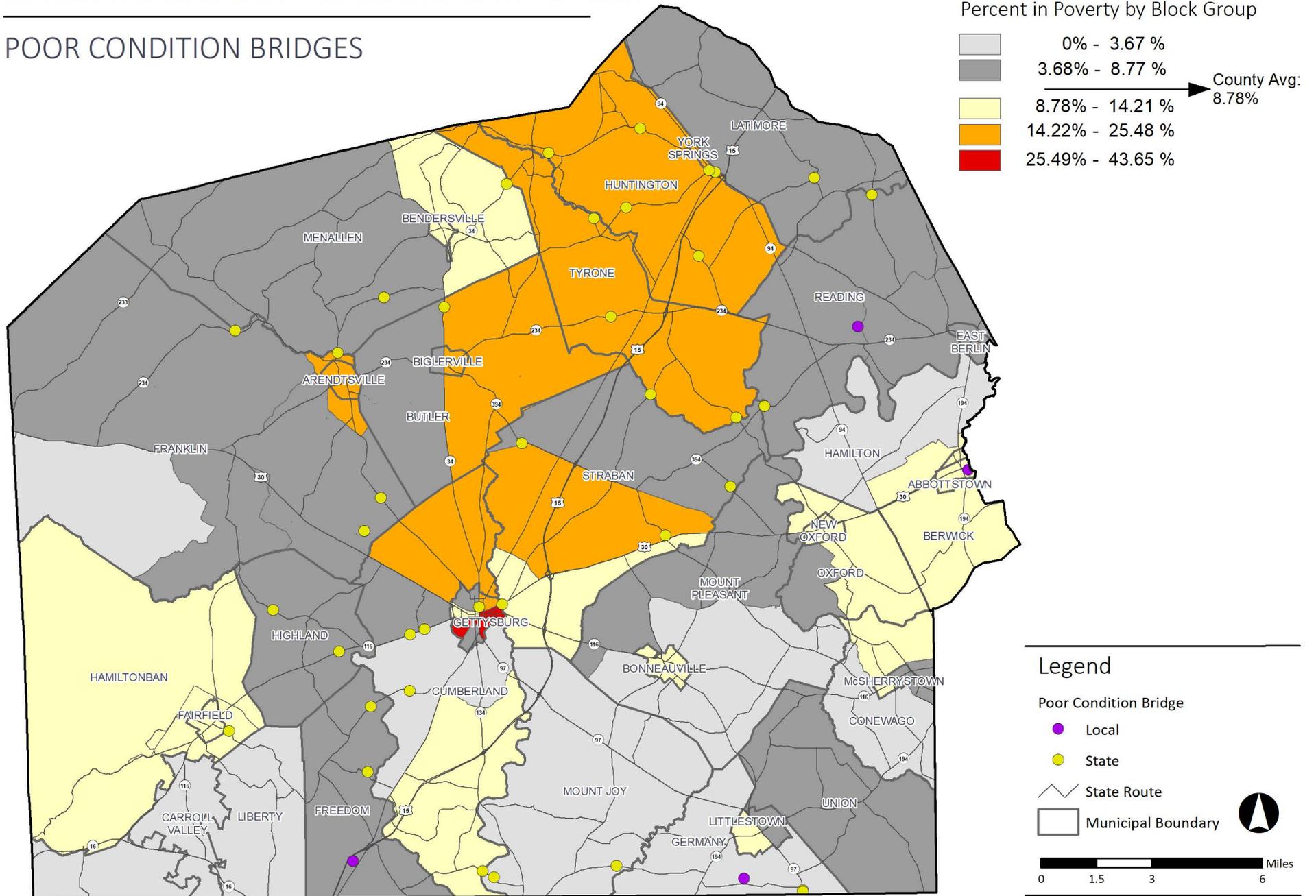
POOR CONDITION BRIDGES



2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

CONCENTRATIONS OF POPULATIONS IN POVERTY

POOR CONDITION BRIDGES



Tables 5 and 6 show the number and percentage of bicycle and pedestrian-related crashes in Adams County from 2013-2017. Of the total crashes, 47 percent of crashes occur in high minority block groups while 54 percent of crashes occur in high poverty block groups. This information shows that there is not a disproportionate number of bicycle and pedestrian-related crashes occurring in block groups with a higher population of low-income and minority populations.

Table 5: Distribution of Bicycle & Pedestrian related crashes by Minority Population Intervals

<i>Population/Asset</i>	Percent Minority Population Intervals					<i>Total</i>
	0% - 4.23%	4.24% - 10.5%	10.51% - 16.21%	16.22% - 24.77%	24.78% - 37.62%	
Bike-Pedestrian Crash Count	18	29	19	10	13	89
Percentage	20.2%	32.6%	21.3%	11.2%	14.6%	100%
Total Population	24,057	41,819	16,042	14,595	5,076	101,589
Total Population (in %)	23.7%	41.2%	15.8%	14.4%	5.0%	100%
Minority Population	616	3,181	2,098	3,119	1,663	10,677
Minority Population (in %)	5.8%	29.8%	19.6%	29.2%	15.6%	11%

Source: 2013-2017 ACS 5-Year Estimates, PennDOT

Table 6: Distribution of Bicycle & Pedestrian related crashes by Poverty Population Intervals

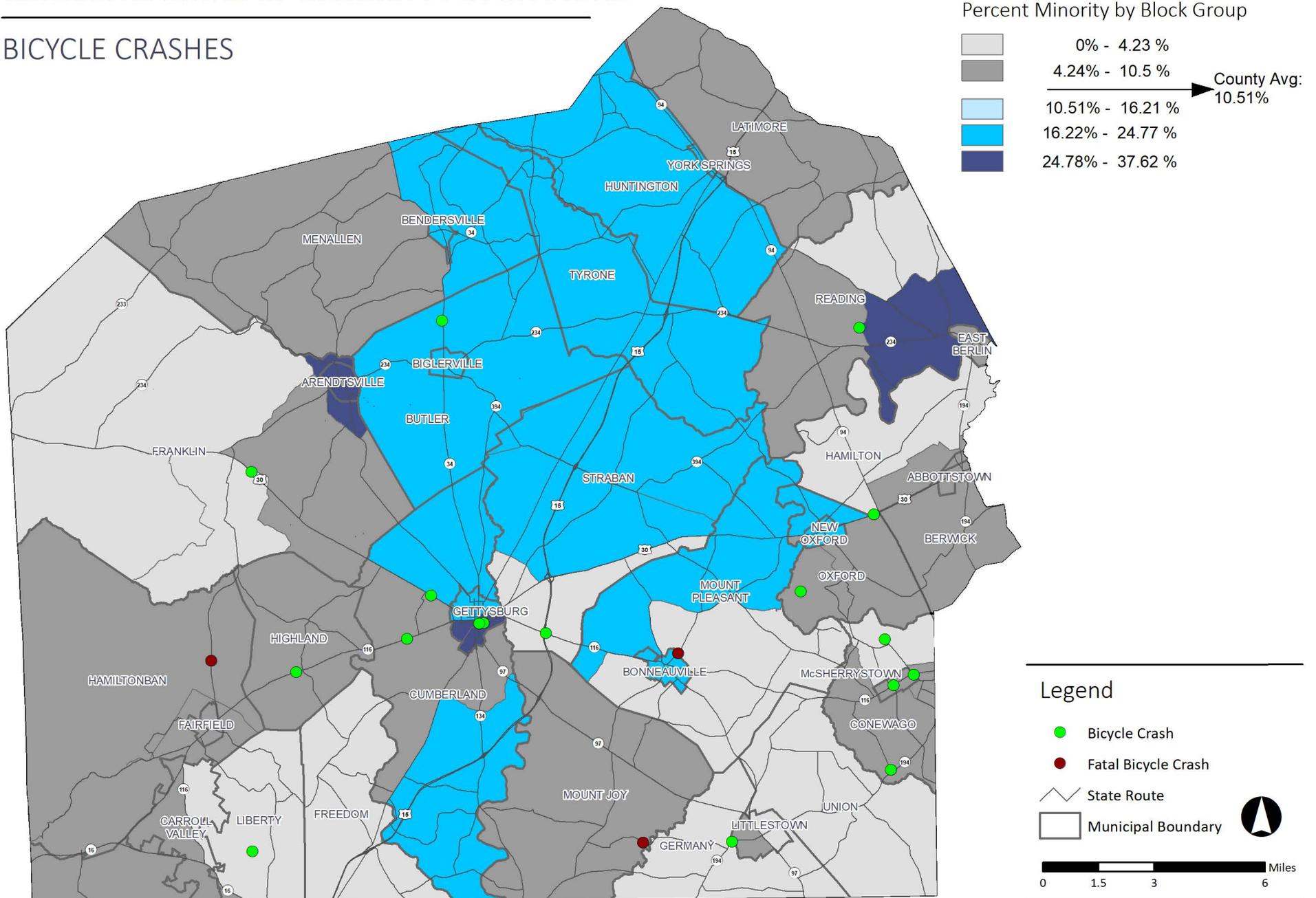
<i>Population/Asset</i>	Percent Below Poverty Population Intervals					<i>Total</i>
	0% - 3.67%	3.68% - 8.77%	8.78% - 14.21%	14.22% - 25.48%	25.49% - 43.65%	
Bike-Pedestrian Crash Count	14	27	27	8	13	89
Percentage	15.7%	30.3%	30.3%	9.0%	14.6%	100%
Total Population	20,449	38,466	26,572	13,865	2,237	101,589
Total Population (in %)	20.1%	37.9%	26.2%	13.6%	2.2%	100%
Below Poverty Population	1,173	2,587	1,741	1,986	1,061	8,548
Below Poverty Population (in %)	13.7%	30.3%	20.4%	23.2%	12.4%	8%

Source: 2013-2017 ACS 5-Year Estimates, PennDOT

2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

CONCENTRATIONS OF MINORITY POPULATIONS

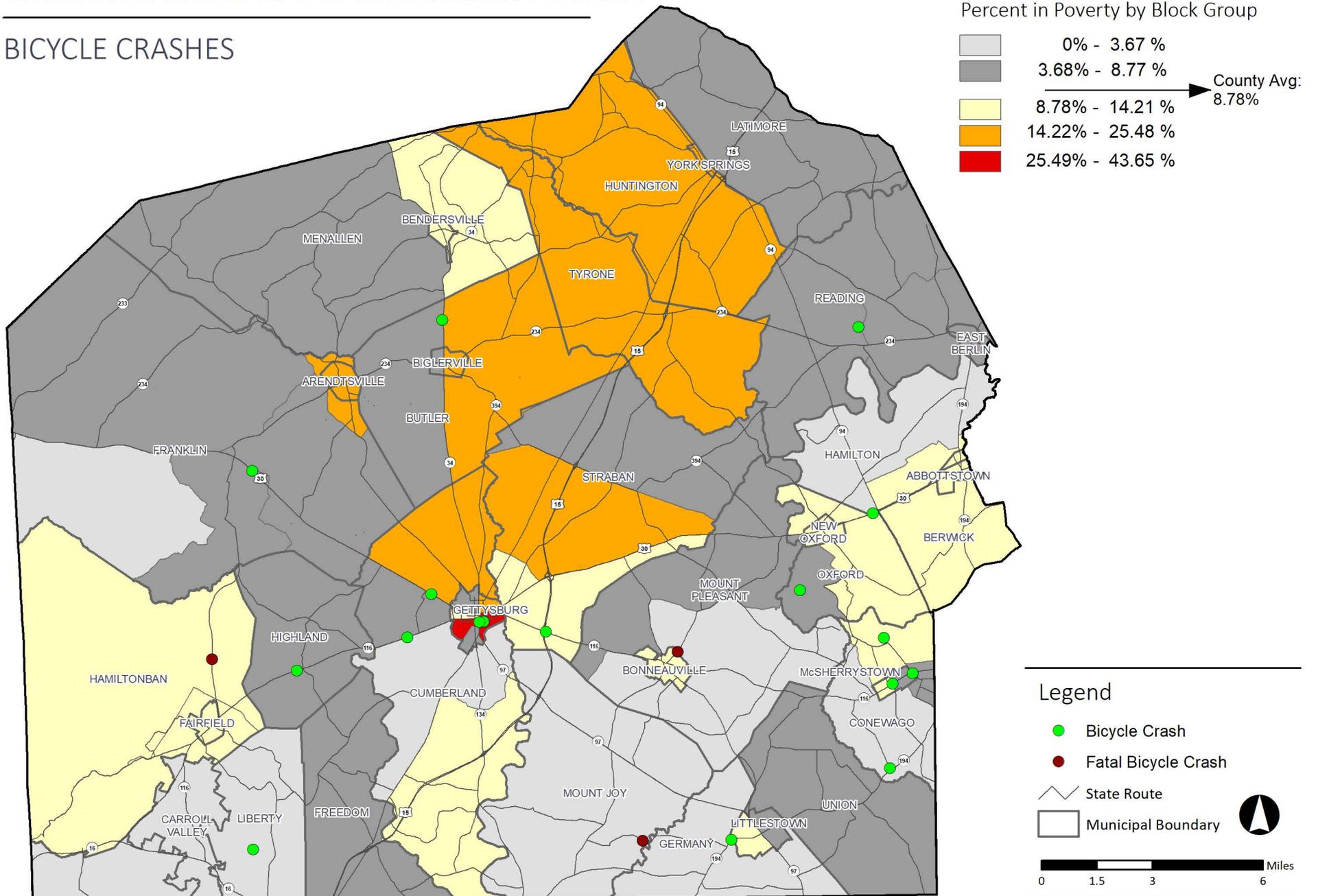
BICYCLE CRASHES



2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

CONCENTRATIONS OF POPULATIONS IN POVERTY

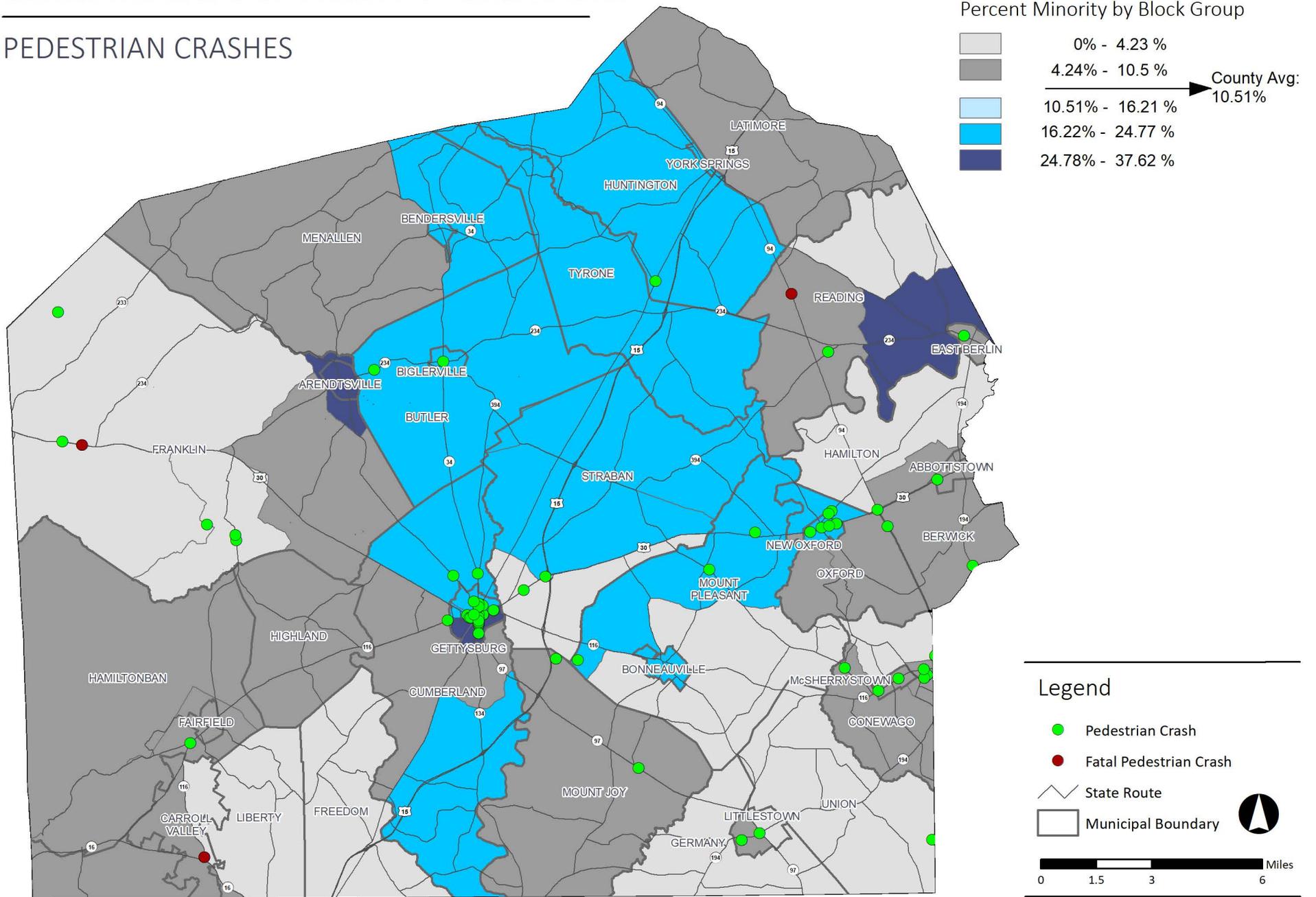
BICYCLE CRASHES



2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

CONCENTRATIONS OF MINORITY POPULATIONS

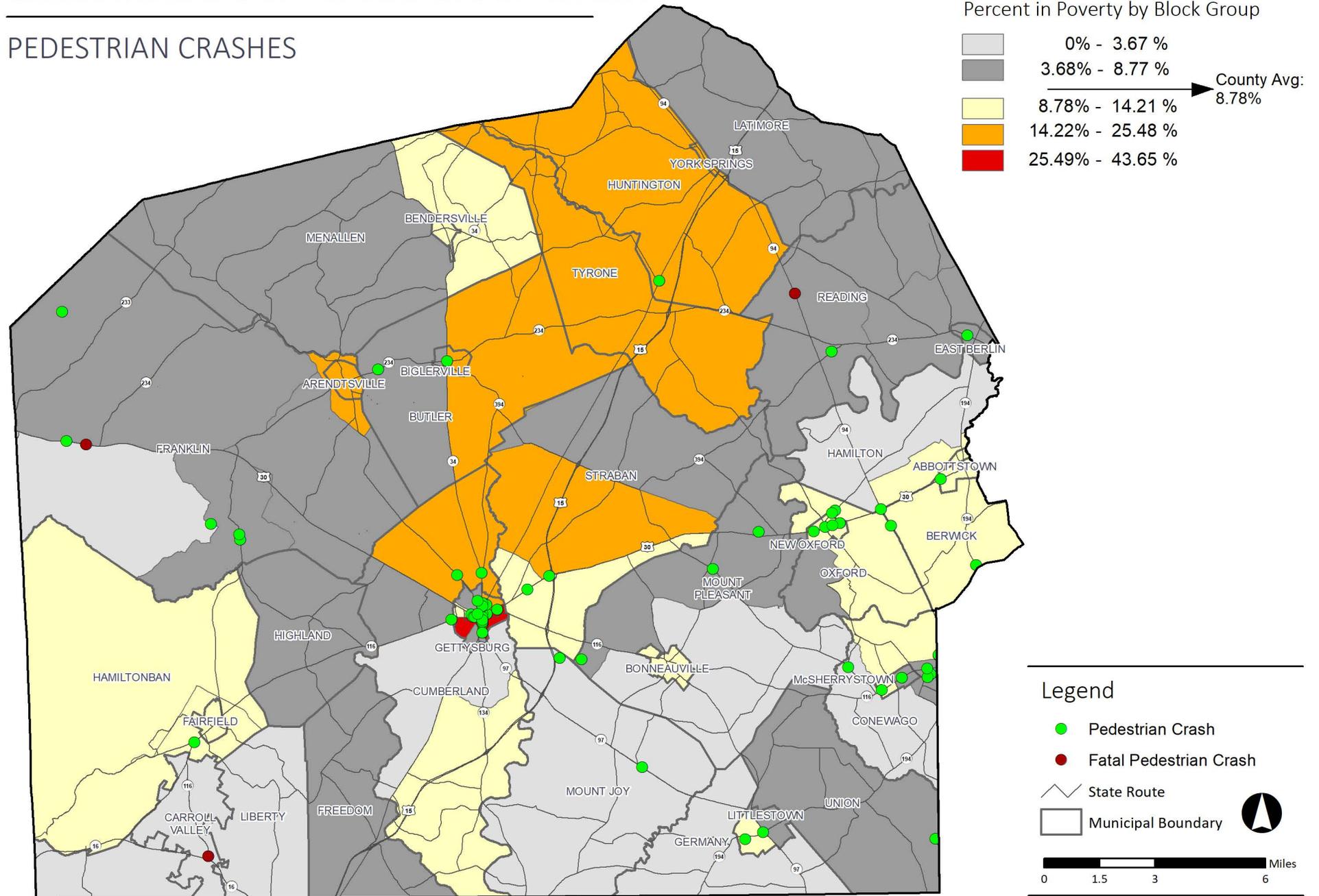
PEDESTRIAN CRASHES



2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

CONCENTRATIONS OF POPULATIONS IN POVERTY

PEDESTRIAN CRASHES



Tables 7 through 10 identify the number and percentage of roadways with poor or excellent International Roughness Index (IRI) within minority and low-income populations block group intervals. The data indicates that both poor and excellent pavement conditions are distributed relatively evenly among minority and low-income populations block groups.

Table 7: Distribution of Poor Pavement by Minority Population Intervals

<i>Population/Asset</i>	Percent Minority Population Intervals					<i>Total</i>
	0% - 4.23%	4.24% - 10.5%	10.51% - 16.21%	16.22% - 24.77%	24.78% - 37.62%	
Poor Pavement Mileage	21.13	27.90	12.38	16.64	2.14	80.19
Percentage	26.3%	34.8%	15.4%	20.8%	2.7%	100%
Total Population	24,057	41,819	16,042	14,595	5,076	101,589
Total Population (in %)	23.7%	41.2%	15.8%	14.4%	5.0%	100%
Minority Population	616	3,181	2,098	3,119	1,663	10,677
Minority Population (in %)	5.8%	29.8%	19.6%	29.2%	15.6%	11%

Source: 2013-2017 ACS 5-Year Estimates, PennDOT

Table 8: Distribution of Poor Pavement by Poverty Population Intervals

<i>Population/Asset</i>	Percent Below Poverty Population Intervals					<i>Total</i>
	0% - 3.67%	3.68% - 8.77%	8.78% - 14.21%	14.22% - 25.48%	25.49% - 43.65%	
Poor Pavement Mileage	18.82	24.33	19.82	17.20	0.02	80.19
Percentage	23.5%	30.3%	24.7%	21.4%	0.0%	100%
Total Population	20,449	38,466	26,572	13,865	2,237	101,589
Total Population (in %)	20.1%	37.9%	26.2%	13.6%	2.2%	100%
Below Poverty Population	1,173	2,587	1,741	1,986	1,061	8,548
Below Poverty Population (in %)	13.7%	30.3%	20.4%	23.2%	12.4%	8%

Source: 2013-2017 ACS 5-Year Estimates, PennDOT

Table 9: Distribution of Excellent Pavement by Minority Population Intervals

<i>Population/Asset</i>	Percent Minority Population Intervals					<i>Total</i>
	0% - 4.23%	4.24% - 10.5%	10.51% - 16.21%	16.22% - 24.77%	24.78% - 37.62%	
Excellent Pavement Mileage	41.66	54.31	34.60	29.09	4.25	163.91
Percentage	25.4%	33.1%	21.1%	17.7%	2.6%	100%
Total Population	24,057	41,819	16,042	14,595	5,076	101,589
Total Population (in %)	23.7%	41.2%	15.8%	14.4%	5.0%	100%
Minority Population	616	3,181	2,098	3,119	1,663	10,677
Minority Population (in %)	5.8%	29.8%	19.6%	29.2%	15.6%	11%

Source: 2013-2017 ACS 5-Year Estimates, PennDOT

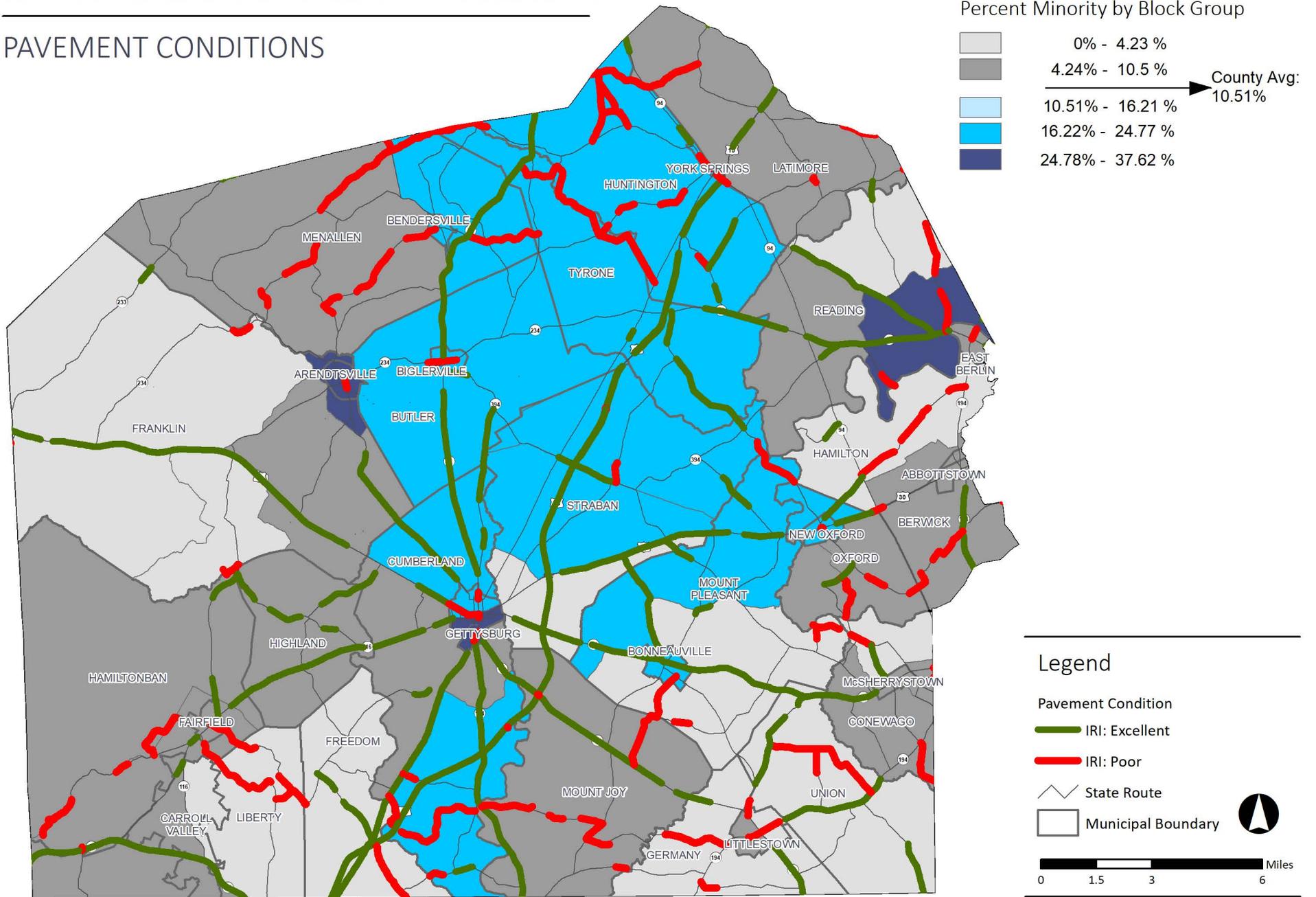
Table 10: Distribution of Excellent Pavement by Poverty Population Intervals

<i>Population/Asset</i>	Percent Below Poverty Population Intervals					<i>Total</i>
	0% - 3.67%	3.68% - 8.77%	8.78% - 14.21%	14.22% - 25.48%	25.49% - 43.65%	
Excellent Pavement Mileage	33.25	66.17	32.31	32.18	0.00	163.91
Percentage	20.3%	40.4%	19.7%	19.6%	0.0%	100%
Total Population	20,449	38,466	26,572	13,865	2,237	101,589
Total Population (in %)	20.1%	37.9%	26.2%	13.6%	2.2%	100%
Below Poverty Population	1,173	2,587	1,741	1,986	1,061	8,548
Below Poverty Population (in %)	13.7%	30.3%	20.4%	23.2%	12.4%	8%

Source: 2013-2017 ACS 5-Year Estimates, PennDOT

2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

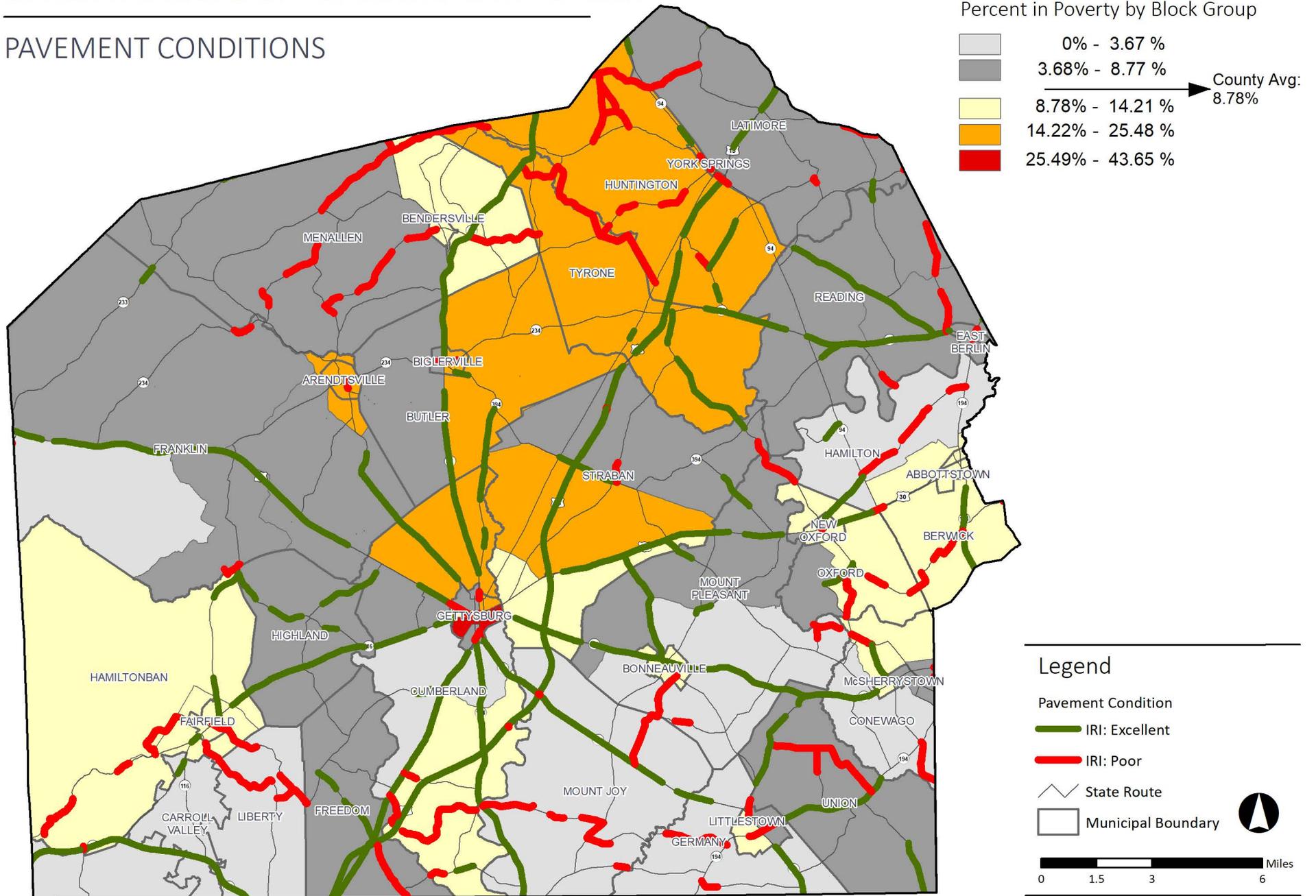
CONCENTRATIONS OF MINORITY POPULATIONS PAVEMENT CONDITIONS



2021 - 2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

CONCENTRATIONS OF POPULATIONS IN POVERTY

PAVEMENT CONDITIONS



BENEFITS & BURDENS: 2021-2024 TRANSPORTATION IMPROVEMENT PROGRAM

The Adams County MPO reviewed transportation projects located in areas that were determined to be “high minority” or “high in-poverty.” “High minority”, for the purpose of this analysis, refers to Census block groups that have a concentration of minority persons that is greater than or equal to the county average of 10.72 percent. “High in-poverty” refers to Census block groups that have a concentration of low-income persons that is greater than or equal to the county average of 8.78 percent.

When evaluating the potential benefit or burden of a project, it should be noted that each type of project has a unique set of impacts and will affect individual populations differently. For example, maintenance projects tend to cause the least amount of impact on the population since they typically involve highway resurfacing or repaving work on existing roadways. Although these projects can cause delayed travel time and transit service, traffic detours, and work zone noise and debris, the projects are typically shorter in duration and result in improvements to the functionality of the roadway network by providing smoother driving surfaces and new roadway markings. While most bridge projects are identified as either a rehabilitation or replacement, both types of projects can lend itself to significant traffic detours, traffic delay, and noise. However, the benefits of these types of improvements result in safer bridge structures, improved roadway conditions and updated signage.

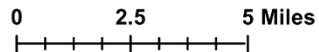
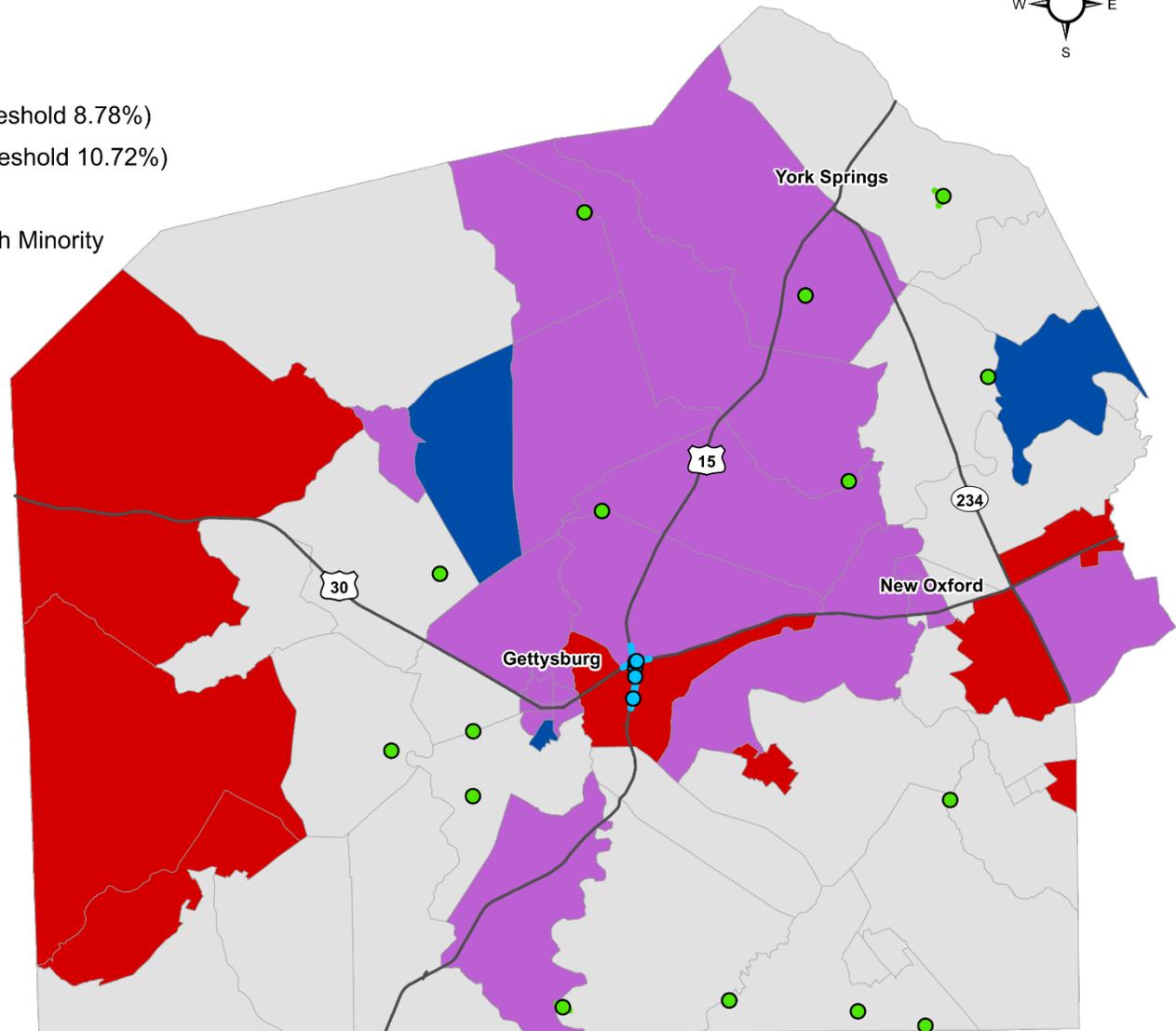
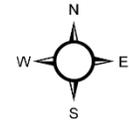
Capacity projects, which can involve the addition of new lanes to existing roadways, new roadways to the existing network, or at times the realignment of intersections or interchanges, in an effort to provide for more traffic mobility. Special attention needs to be made when planning capacity projects, especially to low-income and minority populations. Not only can these projects result in right-of-way acquisitions to account for the additional capacity, but also construction impacts are normally more severe due to longer construction periods, travel pattern shifts, and delayed travel times among others. The consequences of the completion of capacity projects can involve the loss of property, increased traffic volumes, and decreased air quality, while other benefits can include improved transit service time, decreased travel delay, and safer roadway conditions which will result in improved quality of life for all residents and users of the roadway system.

Of the locatable 18 projects on the Adams County TIP, the number of projects in minority or low-income areas is equal to the number of projects locates in non-minority and non-low-income areas. Seven projects are located in both high minority and high poverty block groups, one project is located in a high poverty block group, and one project is located in a high minority block group. **Figure 4** illustrates the geographic proximity between different 2021-2024 TIP projects and high minority and high in poverty areas.

2021-2024 TIP Project Locations and Census Block Groups that Exceed the Regional Threshold for Minority and Low-Income Populations

- Bridge
- Highway/General

- Poverty Only (Regional Threshold 8.78%)
- Minority Only (Regional Threshold 10.72%)
- Both Poverty and Minority
- Neither High Poverty or High Minority



Source: 2014-2018 American Community Survey 5-Year Estimates