

2021-2024 Draft Lackawanna/Luzerne 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 Lackawanna/Luzerne 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, state and local 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 Lackawanna/Luzerne 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 Lackawanna/Luzerne MPO are just over 15 percent of the total population. The number of persons in poverty is also just over 15 percent of the total regional population.

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

Demographic Indicator	Lackawanna/Luzerne MPO	
	Regional Population	Regional Percentage
Total	530,182	
White, Non-Hispanic	450,338	84.94%
Minority	79,844	15.06%
Black or African American, Non-Hispanic	16,657	3.14%
American Indian and Alaska Native, Non-Hispanic	534	0.10%
Asian alone, Non-Hispanic	9,060	1.71%
Native Hawaiian and Other Pacific Islander, Non-Hispanic	91	0.02%
Some other race, Non-Hispanic	305	0.06%
Two or more races, Non-Hispanic	6,833	1.29%
Hispanic	46,364	8.74%
Low-Income Households	31,513	14.72%
Low-Income Population	77,956	15.28%
Other Potentially Disadvantaged Populations		
Limited English Proficiency (LEP)	21,681	4.31%
Persons with a Disability	80,561	15.54%
Female Head of Household with Child	14,700	6.86%
Elderly (65 years or older)	101,063	19.06%
Carless Households	22,266	10.40%

Source: 2013-2017 ACS 5-Year Estimates

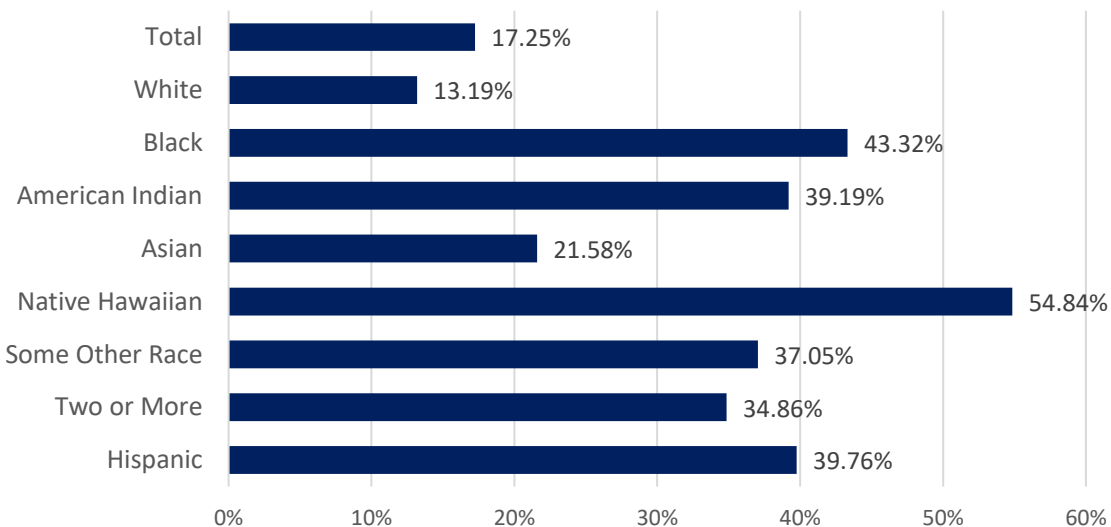
Table 2 identifies the total population by race and low-income category. Based on those numbers, **Figure 1** highlights the poverty rate for each racial/ethnic group. The White, Non-Hispanic category has the highest population in the region and most individuals that are low-income, however, the overall poverty percentage is only 13 percent, which is lower than the regional average of 15 percent. In contrast, nearly 55 percent of the Native Hawaiian population and about 43 percent of the Black 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 regional average by Census block groups, also based on 2013-2017 ACS data.

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

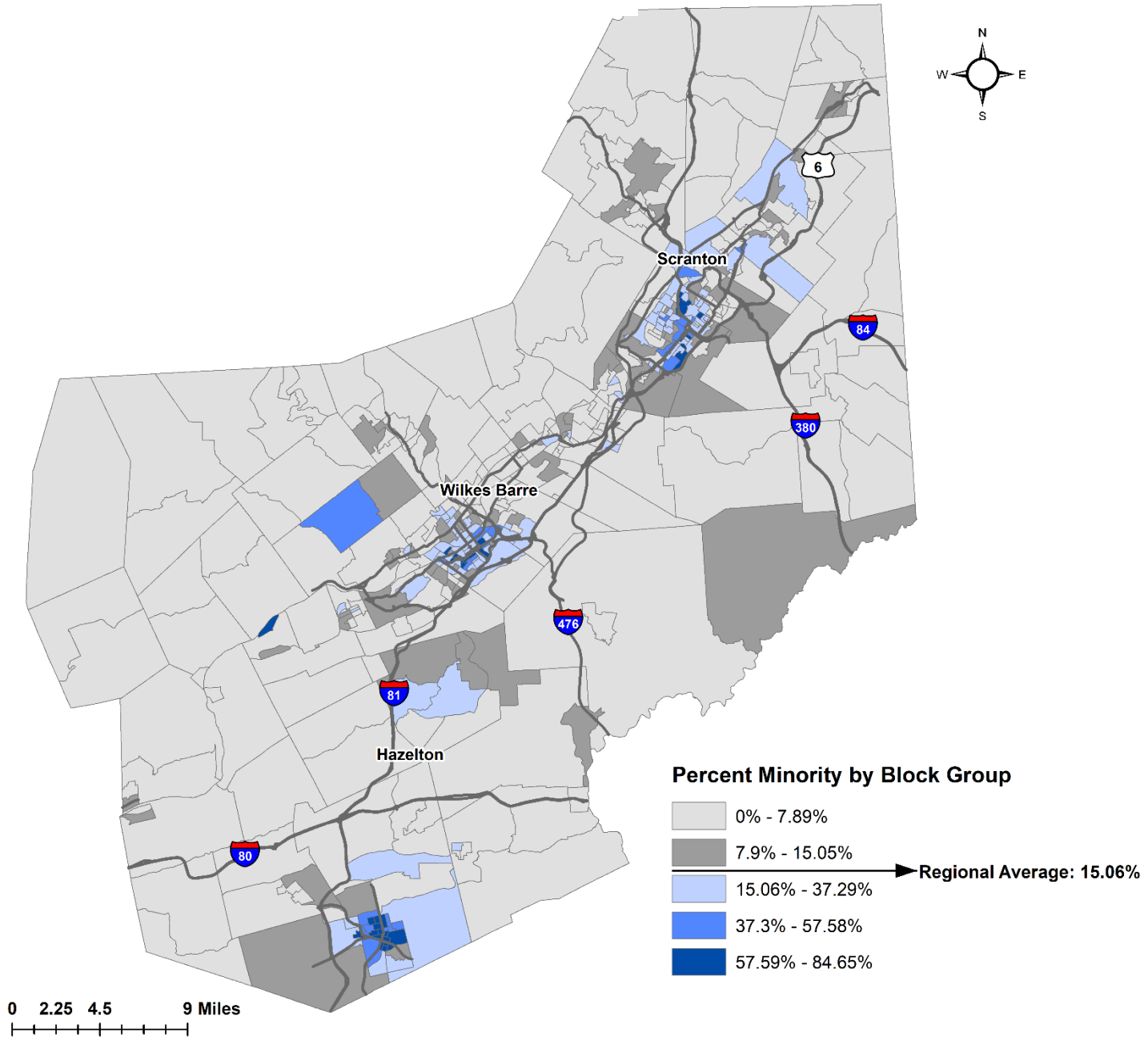
		Lackawanna/Luzerne MPO	Lackawanna County	Luzerne County
White	Total:	463,190	188,174	275,016
	Low-Income	61,100	26,646	34,454
	% Low-income	13.19%	14.16%	12.53%
Black	Total:	16,682	5,362	11,320
	Low-Income	7,226	2,063	5,163
	% Low-income	43.32%	38.47%	45.61%
American Indian	Total:	860	169	691
	Low-Income	337	64	273
	% Low-income	39.19%	37.87%	39.51%
Asian	Total:	8,994	5,306	3,688
	Low-Income	1,941	1,261	680
	% Low-income	21.58%	23.77%	18.44%
Native Hawaiian	Total:	93	18	75
	Low-Income	51	0	51
	% Low-income	54.84%	0.00%	68.00%
Some Other Race	Total:	11,432	1,249	10,183
	Low-Income	4,235	209	4,026
	% Low-income	37.05%	16.73%	39.54%
Two or More	Total:	8,796	3,378	5,418
	Low-Income	3,066	1,176	1,890
	% Low-income	34.86%	34.81%	34.88%
Hispanic	Total:	44,578	13,470	31,108
	Low-Income	17,723	6,205	11,518
	% Low-income	39.76%	46.07%	37.03%
Total Population		554,625	217,126	337,499
Total Poverty		95,679	37,624	58,055

Figure 1: Cross Tabulation of Poverty Rate among Racial/Ethnic Groups in Lackawanna/Luzerne MPO



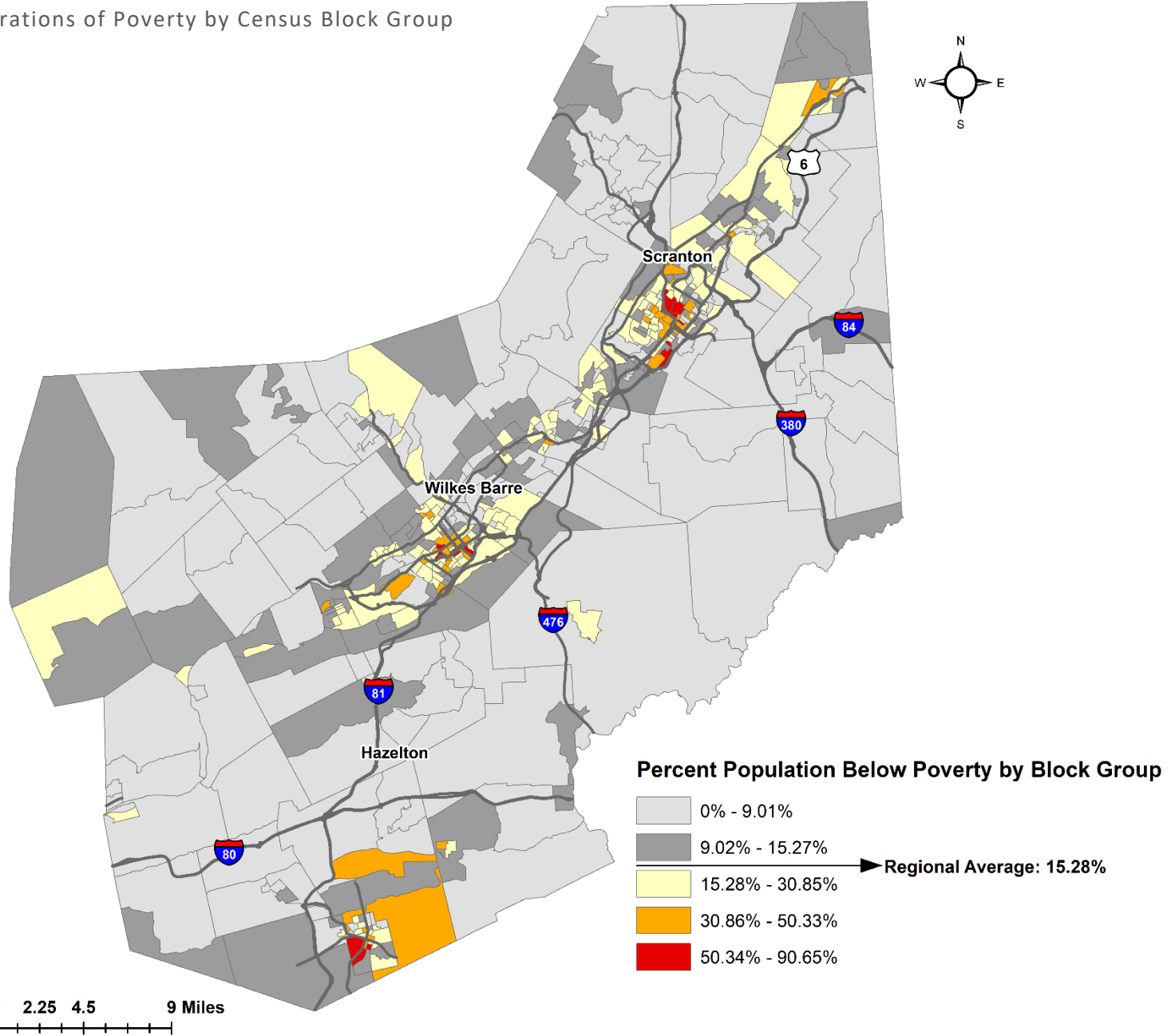
Source: 2013-2017 ACS 5-Year Estimates

Figure 2: Concentrations of Minority Populations by Census Block Groups



Source: 2013-2017 American Community Survey 5-Year Estimates

Figure 3: Concentrations of Poverty by Census Block Group



Source: 2013-2017 American Community Survey 5-Year Estimates

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. Lackawanna/Luzerne MPO currently has 335 bridges in poor condition. Of those bridges, only 36 (or 11 percent) are located within block groups that exceed the minority average for the MPO of 15.06 percent. Similarly, 18 percent of the poor condition bridges are within block groups that exceed the poverty average for the region of 15.28 percent. Based on the available conditions data, there are a far less number 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					Total
	0% - 7.89%	7.9% - 15.05%	15.06% - 37.29%	37.3% - 57.58%	57.59% - 84.65%	
Poor Condition Bridge Count	228	71	11	15	10	335
Percentage	68.1%	21.2%	3.3%	4.5%	3.0%	100%
Total Population	269,981	105,628	92,231	27,075	35,267	530,182
Total Population (in %)	50.9%	19.9%	17.4%	5.1%	6.7%	100%
Minority Population	7,986	11,573	23,298	12,814	24,173	79,844
Minority Population (in %)	10.0%	14.5%	29.2%	16.0%	30.3%	15%

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					Total
	0% - 9.01%	9.02% - 15.27%	15.28% - 30.85%	30.86% - 50.33%	50.34% - 90.65%	
Poor Condition Bridge Count	175	101	35	20	4	335
Percentage	52.2%	30.1%	10.4%	6.0%	1.2%	100%
Total Population	214,930	124,611	134,985	47,096	8,560	530,182
Total Population (in %)	40.5%	23.5%	25.5%	8.9%	1.6%	100%
Below Poverty Population	25,607	14,199	20,483	6,866	10,801	77,956
Below Poverty Population (in %)	32.8%	18.2%	26.3%	8.8%	13.9%	15%

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

Tables 5 and 6 show the number and percentage of bicycle and pedestrian-related crashes in Lackawanna/Luzerne MPO from 2013-2017. Of the total crashes, 60 percent of crashes occur in high minority block groups while 61 percent of crashes occur in high poverty block groups. This information shows that there is a disproportionate number of bicycle and pedestrian-related crashes occurring in block groups with a higher population of low-income and minority populations. This may be expected as the high minority and low-income populations are located in the urbanized areas where non-motorized transportation is more prevalent.

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

<i>Population/Asset</i>	Percent Minority Population Intervals					<i>Total</i>
	0% - 7.89%	7.9% - 15.05%	15.06% -37.29%	37.3% - 57.58%	57.59% - 84.65%	
Bike-Pedestrian Crash Count	230	215	178	254	215	1,092
Percentage	21.1%	19.7%	16.3%	23.3%	19.7%	100%
Total Population	269,981	105,628	92,231	27,075	35,267	530,182
Total Population (in %)	50.9%	19.9%	17.4%	5.1%	6.7%	100%
Minority Population	7,986	11,573	23,298	12,814	24,173	79,844
Minority Population (in %)	10.0%	14.5%	29.2%	16.0%	30.3%	15%

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% - 9.01%	9.02% - 15.27%	15.28% - 30.85%	30.86% - 50.33%	50.34% -90.65%	
Bike-Pedestrian Crash Count	167	287	225	331	82	1,092
Percentage	15.3%	26.3%	20.6%	30.3%	7.5%	100%
Total Population	214,930	124,611	134,985	47,096	8,560	530,182
Total Population (in %)	40.5%	23.5%	25.5%	8.9%	1.6%	100%
Below Poverty Population	25,607	14,199	20,483	6,866	10,801	77,956
Below Poverty Population (in %)	32.8%	18.2%	26.3%	8.8%	13.9%	15%

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

Tables 7 through 10 identify the number and percentage of roadways with poor or excellent International Roughness Index (IRI) within minority and low-income population block group intervals. This information shows that there is not a disproportionate amount of poor condition pavement in block groups with a higher population of low-income and minority populations. The data does show small mileage numbers for excellent condition pavement in areas with high minority population. This could mean that a majority of roadways in these areas are identified as Good or Fair condition.

Table 7: Distribution of Poor Pavement by Minority Population Intervals

<i>Population/Asset</i>	Percent Minority Population Intervals					<i>Total</i>
	0% - 4.31%	4.32% - 11.34%	11.35% - 19.18%	19.19% - 29.88%	29.89% - 69.18%	
Poor Pavement Mileage	46.13	24.06	10.82	4.00	1.83	86.84
Percentage	53.1%	27.7%	12.5%	4.6%	2.1%	100%
Total Population	49,559	45,972	31,150	17,964	8,358	153,003
Total Population (in %)	32.4%	30.0%	20.4%	11.7%	5.5%	100%
Minority Population	887	3,511	4,849	4,404	3,720	17,371
Minority Population (in %)	5.1%	20.2%	27.9%	25.4%	21.4%	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% - 4.62%	4.63% - 10.38%	10.39% - -18.4%	18.41% - -39.86%	39.87% - 80.69%	
Poor Pavement Mileage	18.02	41.97	17.92	7.86	1.07	86.84
Percentage	20.8%	48.3%	20.6%	9.1%	1.2%	100%
Total Population	32,969	61,672	36,479	19,404	2,479	153,003
Total Population (in %)	21.5%	40.3%	23.8%	12.7%	1.6%	100%
Below Poverty Population	4,113	3,632	3,774	1,955	2,169	15,643
Below Poverty Population (in %)	26.3%	23.2%	24.1%	12.5%	13.9%	10%

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% - 7.89%	7.9% - 15.05%	15.06% - 37.29%	37.3% - 57.58%	57.59% - 84.65%	
Poor Pavement Mileage	191.00	54.42	8.42	7.34	4.72	265.90
Percentage	71.8%	20.5%	3.2%	2.8%	1.8%	100%
Total Population	269,981	105,628	92,231	27,075	35,267	530,182
Total Population (in %)	50.9%	19.9%	17.4%	5.1%	6.7%	100%
Minority Population	7,986	11,573	23,298	12,814	24,173	79,844
Minority Population (in %)	10.0%	14.5%	29.2%	16.0%	30.3%	15%

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% - 9.01%	9.02% - 15.27%	15.28% - 30.85%	30.86% - 50.33%	50.34% - 90.65%	
Poor Pavement Mileage	156.70	78.29	18.65	10.01	2.25	265.90
Percentage	58.9%	29.4%	7.0%	3.8%	0.8%	100%
Total Population	214,930	124,611	134,985	47,096	8,560	530,182
Total Population (in %)	40.5%	23.5%	25.5%	8.9%	1.6%	100%
Below Poverty Population	25,607	14,199	20,483	6,866	10,801	77,956
Below Poverty Population (in %)	32.8%	18.2%	26.3%	8.8%	13.9%	15%

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

BENEFITS & BURDENS: 2021-2024 TRANSPORTATION IMPROVEMENT PROGRAM

The Lackawanna/Luzerne 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 region average of 15.06 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 region average of 15.28 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 394 projects on the Lackawanna/Luzerne MPO TIP, the number of projects in minority or low-income areas is lower than the number of projects located in non-minority and non-low-income areas. 52 projects are located in both high minority and high poverty block groups, 64 projects are located in a high poverty block group, and 26 projects are 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.

Lackawanna/Luzerne MPO 2021-2024 TIP Environmental Justice Analysis

Figure 4: 2021-2024 TIP Project Locations and Census Block Groups that Exceed the Regional Average Percentage of Minority and Low-Income Populations

