# Lackawanna/Luzerne MPO 2023-2026 TIP Environmental Justice Assessment

## Introduction

The public involvement efforts for MPO/RPOs 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." MPOs 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. MPO/RPOs 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. MPO/RPOs 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." MPO/RPOs 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 efforts to:

- 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 2023-2026 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 2015-2019 American Community Survey (ACS) data, minority persons in Lackawanna/Luzerne MPO make up 17 percent of the total population. The number of persons in poverty is just lower at about 15 percent of the total regional population.

Demographic Indicator	Lackawanna	Lackawanna/Luzerne MPO			
Demographic Indicator	Regional Population	Regional Percentage			
Total	528,315				
White, Non-Hispanic	438,470	83.0%			
Minority	89,845	17.0%			
Black or African American, non-Hispanic or Latino	17,243	3.3%			
American Indian and Alaska Native, non-Hispanic or Latino	472	0.1%			
Asian alone, non-Hispanic or Latino	9,764	1.8%			
Native Hawaiian and Other Pacific Islander, non-Hispanic or Latino	139	0.0%			
Some other race, non-Hispanic or Latino	334	0.1%			
Two or more races, non-Hispanic or Latino	8,258	1.6%			
Hispanic or Latino	53,635	10.2%			
Low-Income Households	30,402	13.9%			
Low-Income Population	77,688	14.7%			
Other Potentially Disadvantaged Populations					
Limited English Proficiency (LEP)	23,026	4%			
Persons with a Disability	81,104	14.08%			
Female Head of Household with Child	14,700	2.55%			
Elderly (65 years or older)	104,995	18.23%			
Carless Households	22,534	3.91%			

Table 1: Profile of Low-Income and Minority Populations, 2019

Source: 2015-2019 ACS 5-Year Estimates

**Table 2** identifies the total population by race and low-Income category. The White, Non-Hispanic category has the highest population in the region and most individuals that are low-Income, however, the category's overall low-income percentage is 12.5 percent, which is lower than the regional average of 17 percent. In contrast, the American Indian category has one of the lowest populations in the region and highest percentage of individuals that are low-income. In relation to the region's total population, this category makes up less than 1 percent.

		Lackawanna/Luzerne	Lackawanna County	Luzerne County
		MPO	101.001	262.024
	Total:	454,922	184,991	269,931
White	Low-Income	56,849	24,837	32,012
	% Low-income	12.5%	13.4%	11.9%
	Total:	18,659	5,200	13,459
Black	Low-Income	7,603	1,679	5,924
	% Low-income	40.7%	32.3%	44.0%
	Total:	672	108	564
American Indian	Low-Income	276	34	242
	% Low-income	41.1%	31.5%	42.9%
	Total:	9,672	5,802	3,870
Asian	Low-Income	1,752	1,109	643
	% Low-income	18.1%	19.1%	16.6%
	Total:	211	40	171
Native Hawaiian	Low-Income	19	7	12
	% Low-income	9.0%	17.5%	7.0%
	Total:	13,607	1,969	11,638
Some Other Race	Low-Income	4,467	469	3,998
	% Low-income	32.8%	23.8%	34.4%
	Total:	10,690	4,584	6,106
Two or More	Low-Income	3,875	1,653	2,222
	% Low-income	36.2%	36.1%	36.4%
	Total:	51,902	15,187	36,715
Hispanic or Latino	Low-Income	19,117	6,834	12,283
origin (of any race)	% Low-income	36.8%	45.0%	33.5%
Total Population		508,433	202,694	305,739
Total Low-Income		74,841	29,788	45,053

Table 2: Population Tabulations by Racial/Ethnic Groups and Low-Income Categories

Source: 2015-2019 ACS 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.

## **Bridges**

**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 348 bridges in poor condition. Of those bridges, only 46 (or 13.2 percent) are located within CENUS block groups that exceed the minority average percentage in the MPO of 17 percent. Similarly, 16.9 percent of the poor condition bridges are within block groups that exceed the low-income average for the region of 14.7 percent. Based on the available conditions data, there are a far fewer poor-conditioned bridges in areas with higher concentrations of minority or low-Income populations.

	Ratio of Minority Population Percentage in Census Block Group (where bridge located) to Regional Average Minority Percentage							
	0.0  – 0.5 Very Low Minority %	0.5 – 1.0 Low Minority %	1.0 – 2.0 Medium Minority %	2.0 – 4.0 High Minority %	> 4.0 Very High Minority %			
Bridges	1642	406	202	78	1			
Share of Bridges	70.5%	17.4%	8.7%	3.3%	0.0%			
Poor Condition Bridges	265	37	24	21	1			
Percent Poor Condition Bridges	16.1%	9.1%	11.9%	26.9%	100%			
Share of Total Poor Condition Bridges	76.1%	10.6%	6.9%	6.0%	0.3%			

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

Source: 2015-2019 ACS 5-Year Estimates, PennDOT

	Ratio of Low-income Population Percentage in Census Block Group (where bridge located) to Regional Average Low-income Percentage							
	3.0 – 0.5 Very Low Low-income %	0.5 – 1.0 Low Low-income %	4.0 – 2.0 Medium Low-Income %	5.0 – 4.0 High Low-income %	> 4.0 Very High Low-Income %			
Bridges	1165	741	348	71	4			
Share of Bridges	50.0%	31.8%	14.9%	3.0%	0.2%			
Poor Condition Bridges	177	112	38	20	1			
Percent Poor Condition Bridges	15.2%	15.1%	10.9%	28.2%	25.0%			
Share of Total Poor Condition Bridges	50.9%	32.2%	10.9%	5.7%	0.3%			

#### Table 4: Distribution of Poor Condition Bridges by Low-Income Population Intervals

Source: 2015-2019 ACS 5-Year Estimates, PennDOT

## **All Reportable Crashes**

**Table 5** show the number and percentage of crashes in the Lackawanna/Luzerne MPO from 2015-2019. Of the total crashes, about 36 percent occur within block groups that exceed the minority average for the MPO while 64 percent of crashes occur in block groups that have a lower percentage of minority populations as compared to the MPO average. This trend is also reflected among low-income populations as shown in **Table 6**.

**Tables 7** and **8** show the distribution of bicycle and pedestrian-related crashes in this region from 2015-2019. 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 (64%) and minority (60%) populations. This may be expected as the high minority and low-income populations are located in urbanized areas where non-motorized transportation is more prevalent.

Table 5: Distrib	ution of Crashes	by Minority	Population	Intervals
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	Ratio of Minority Population Percentage in Census Block Group (where crash located) to Regional Average Minority Percentage						
	0.0 - 0.5 0.5 - 1.0 1.0 - 2.0 2.0 - 4.0 > 4.0						
	Very Low	Low	Medium	High	Very High		
	Minority %	Minority %	Minority %	Minority %	Minority %		
Reportable Crashes (2015-2019)	14599	5286	5996	4070	1101		
Share of Total Reportable Crashes (2015 - 2019)	47.0%	17.0%	19.3%	13.1%	3.5%		
Persons Involved in Reportable Crashes (2015 - 2019)	31059	11314	14706	9652	2922		
Share of Total Persons Involved in Reportable Crashes (2015-2019)	44.6%	16.2%	21.1%	13.9%	4.2%		
Crash Fatalities (2015 - 2019)	129	44	35	17	4		
Share of Total Crash Fatalities (2015-2019)	56.3%	19.2%	15.3%	7.4%	1.7%		
Crash Suspected Serious Injuries (2015 - 2019)	395	124	118	74	21		
Share of Crash Suspected Serious Injuries (2015 - 2019)	54.0%	16.9%	16.1%	10.1%	2.9%		

Source: 2015-2019 ACS 5-Year Estimates, PennDOT

#### Table 6: Distribution of Crashes by Low-Income Population Intervals

	Ratio of Low-income Population Percentage in Census Block Group (where crash locate							
	to Regional Average Low-income Percentage							
	0.0 - 0.5	0.0 - 0.5 0.5 - 1.0 1.0 - 2.0 2.0 - 4.0 > 4.0						
	Very Low	Low	Medium	High	Very High			
	Low-income %	Low-income %	Low-Income %	Low-income %	Low-Income %			
Reportable Crashes (2015-2019)	10225	8626	8065	3832	304			
Share of Total Reportable Crashes (2015 - 2019)	32.9%	27.8%	26.0%	12.3%	1.0%			
Persons Involved in Reportable Crashes (2015 - 2019)	21254	19238	18901	9446	814			
Share of Total Persons Involved in Reportable Crashes (2015-2019)	30.5%	27.6%	27.1%	13.6%	1.2%			
Crash Fatalities (2015 - 2019)	90	67	47	24	1			
Share of Total Crash Fatalities (2015-2019)	39.3%	29.3%	20.5%	10.5%	0.4%			
Crash Suspected Serious Injuries (2015 - 2019)	260	216	180	70	6			
Share of Crash Suspected Serious Injuries (2015 - 2019)	35.5%	29.5%	24.6%	9.6%	0.8%			

Source: 2015-2019 ACS 5-Year Estimates, PennDOT

	Ratio of Minority Population Percentage in Census Block Group (where crash located) to Regional Average Minority Percentage					
	0.0 - 0.5 0.5 - 1.0 1.0 - 2.0 2.0 - 4.0 > 4.0					
	Very Low	Low	Medium	High	Very High	
	Minority %	Minority %	Minority %	Minority %	Minority %	
Bicycle or Pedestrian Crashes (2015 - 2019)	294	129	301	276	63	
Share of Total Bicycle or Pedestrian Crashes (2015 - 2019)	27.7%	12.1%	28.3%	26.0%	5.9%	

#### Table 7: Distribution of Bicycle or Pedestrian Crashes by Minority Population Intervals

Source: 2015-2019 ACS 5-Year Estimates, PennDOT

Table 8: Distribution of Bicycle or Pedestrian Crashes by Low-Income Population Intervals

	Ratio of Low-income Population Percentage in Census Block Group (where crash located)				
	to Regional Average Low-income Percentage				
	0.0 - 0.5 0.5 - 1.0 1.0 - 2.0 2.0 - 4.0 >4				
	Very Low	Low	Medium	High	Very High
	Low-income %	Low-income %	Low-Income %	Low-income %	Low-Income %
Bicycle or Pedestrian Crashes (2015 - 2019)	140	240	350	309	24
Share of Total Bicycle or Pedestrian Crashes (2015 - 2019)	13.2%	22.6%	32.9%	29.1%	2.3%

Source: 2015-2019 ACS 5-Year Estimates, PennDOT

### **Pavement Condition**

**Tables 9** and **10** identify the number and percentage of roadways with poor International Roughness Index (IRI) and with poor Overall Pavement Index (OPI) within minority and low-income population block group intervals. Poor pavement condition data in the Lackawanna/Luzerne MPO region may indicate a need for increased roadway resurfacing and reconstruction. The majority of poorly rated IRI and OPI fall in block groups with lower percentages of minority and low-income populations.

	Ratio of Minority Population Percentage in Census Block Group (where road located) to Regional Average Minority Percentage					
	0.0 – 0.5 Very Low Minority %	0.5 – 1.0 Low Minority %	1.0 – 2.0 Medium Minority %	2.0 – 4.0 High Minority %	> 4.0 Very High Minority %	
Federal Aid Road Segment Miles	451.8287	172.5191	91.2421	31.9454	6.7656	
Share of Federal Aid Road Segment Miles	59.9%	22.9%	12.1%	4.2%	0.9%	
Federal Aid Road Segment Miles with Poor IRI	29.0023	10.3542	4.4564	8.8985	4.2824	
Percent of Federal Aid Road Segments with Poor IRI	6.4%	6.0%	4.9%	27.9%	63.3%	
Share of Total Federal Aid Road Segment Miles with Poor IRI	50.9%	18.2%	7.8%	15.6%	7.5%	
Federal Aid Road Segment Miles with Poor OPI	57.9101	13.3908	12.3659	5.4834	0.5907	
Percent of Federal Aid Road Segments with Poor OPI	12.8%	7.8%	13.6%	17.2%	8.7%	
Share of Total Federal Aid Road Segment Miles with Poor OPI	64.5%	14.9%	13.8%	6.1%	0.7%	

Table 9: Distribution of Roadways by Minority Population Intervals

Source: 2015-2019 ACS 5-Year Estimates, PennDOT

#### Table 10: Distribution of Federal Aid Roadways by Low-Income Population Intervals

	Ratio of Low-income Population Percentage in Census Block Group (where road located) to Regional Average Low-income Percentage						
	0.0 - 0.5 $0.5 - 1.0$ $1.0 - 2.0$ $2.0 - 4.0$ >4.0						
	Very Low	Low	Medium	High	Very High		
	Low-income %	Low-income %	Low-Income %	Low-income %	Low-Income %		
Federal Aid Road Segment Miles	353.701	277.9625	114.4223	37.6092	6.4327		
Share of Federal Aid Road Segment Miles	44.8%	35.2%	14.5%	4.8%	0.8%		
Federal Aid Road Segment Miles with Poor IRI	24.5614	13.5117	12.6662	8.9653	1.0766		
Percent of Federal Aid Road Segments with Poor IRI	6.9%	4.9%	11.1%	23.8%	16.7%		
Share of Total Federal Aid Road Segment Miles with Poor IRI	40.4%	22.2%	20.8%	14.8%	1.8%		
Federal Aid Road Segment Miles with Poor OPI	57.9101	13.3908	12.3659	5.4834	0.5907		
Percent of Federal Aid Road Segments with Poor OPI	16.4%	4.8%	10.8%	14.6%	9.2%		
Share of Total Federal Aid Road Segment Miles with Poor OPI	64.5%	14.9%	13.8%	6.1%	0.7%		

Source: 2015-2019 ACS 5-Year Estimates, PennDOT

# **BENEFITS & BURDENS OF 2023-2026 TRANSPORTATION IMPROVEMENT PROGRAM**

The Lackawanna/Luzerne MPO reviewed transportation projects located in areas that were determined to have higher than average minority and low-income levels. 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.

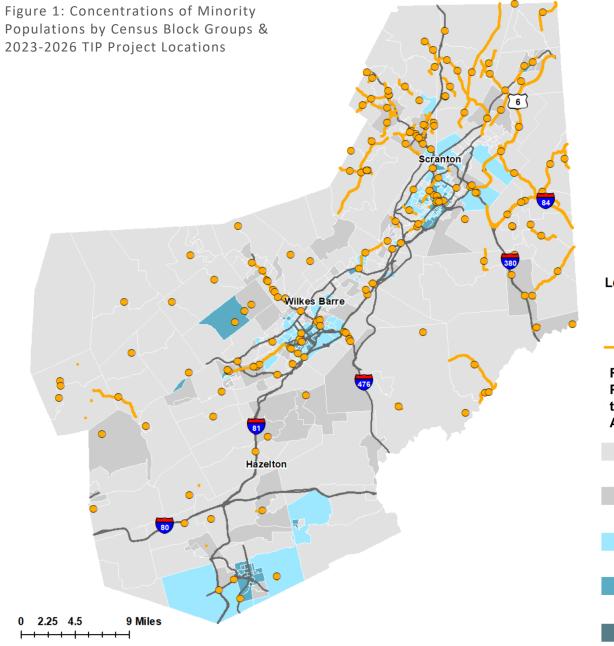
Of the locatable 139 projects on the current Lackawanna/Luzerne MPO TIP, the number of projects in minority or low-income areas is lower than the number of projects located in non-minority and non-low-income areas. **Tables 11 & 12** depict the types of projects and funding investments in each minority/income interval. **Figures 1 & 2** illustrate the geographic proximity between different 2023-2026 TIP projects and the concentrations of minority and low-income populations by Census block groups based on 2015-2019 ACS data.

		Ratio of Minority Population Percentage in Census Block Group (where project located) to Regional Average Minority Percentage								
		0.0 – 0.5 Very Low Minority %	0.5 – 1.0 Low Minority %	1.0 – 2.0 Medium Minority %	2.0 – 4.0 High Minority %	> 4.0 Very High Minority %				
Roadway	Amount of Funding	\$55,640,882.00	\$50,909,000.00	\$85,886,500.00	\$9,600,000.00	\$0.00				
Projects	Per Capita Funding	\$216.43	\$492.74	\$1,094.92	\$135.52	\$0.00				
	Number of Projects	9	4	4	2	0				
Bridge	Amount of Funding	\$174,238,315.91	\$40,544,289.32	\$20,999,561.00	\$92,911,735.04	\$0.00				
Projects	Per Capita Funding	\$677.73	\$392.42	\$267.71	\$1,311.65	\$0.00				
	Number of Projects	70	18	7	10	0				
Safety	Amount of Funding	\$14,810,125.00	\$6,738,000.00	\$2,519,000.00	\$1,516,616.00	\$0.00				
Projects	Per Capita Funding	\$57.61	\$65.22	\$32.11	\$21.41	\$0.00				
	Number of Projects	7	4	3	1	0				
All	Amount of Funding	\$244,689,322.91	\$98,191,289.32	\$109,405,061.00	\$104,028,351.04	\$0.00				
Projects	Per Capita Funding	\$951.77	\$950.37	\$1,394.74	\$1,468.58	\$0.00				
	Number of Projects	86	26	14	13	0				

#### Table 11: Distribution of Locatable Projects by Minority Population Intervals

		Ratio of Low-income Population Percentage in Census Block Group (where project located) to Regional Average Low-income Percentage				
		0.0 – 0.5 Very Low Low-income %	0.5 – 1.0 Low Low-income %	1.0 – 2.0 Medium Low-Income %	2.0 – 4.0 High Low-income %	> 4.0 Very High Low-Income %
Roadway Projects	Amount of Funding	\$95,886,200.00	\$12,041,182.00	\$50,509,000.00	\$43,600,000.00	\$0.00
	Per Capita Funding	\$588.76	\$82.55	\$345.53	\$895.13	\$0.00
	Number of Projects	7	5	4	3	0
Bridge Projects	Amount of Funding	\$53,108,382.00	\$129,460,322.92	\$127,730,203.01	\$18,395,000.75	\$0.00
	Per Capita Funding	\$326.10	\$887.51	\$873.79	\$377.66	\$0.00
	Number of Projects	43	38	18	6	0
Safety Projects	Amount of Funding	\$7,870,697.00	\$12,394,000.00	\$4,102,000.00	\$1,216,616.00	\$0.00
	Per Capita Funding	\$48.33	\$84.97	\$28.06	\$24.98	\$0.00
	Number of Projects	4	6	4	1	0
All Projects	Amount of Funding	\$156,865,279.00	\$153,895,504.92	\$182,341,203.01	\$63,211,616.75	\$0.00
	Per Capita Funding	\$963.19	\$1,055.03	\$1,247.38	\$1,297.77	\$0.00
	Number of Projects	54	49	26	10	0

#### Table 12: Distribution of Locatable Projects by Low-Income Population Intervals



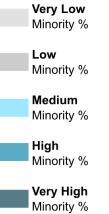


Legend

• Lackawanna/Luzerne MPO TIP Point Projects

---- Lackawanna/Luzerne MPO TIP Line Projects

Ratio of Minority Population Percentage in Census Block Group to Lackawanna/Luzerne MPO Average Minority Percentage



Source: 2015-2019 American Community Survey 5-Year Estimates

