

2023-2026 TIP Environmental Justice Benefits and Burdens Analysis

Presidential Executive Order 12898 on Environmental Justice (EJ) focuses federal attention on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities. Within the transportation field, environmental justice is guided by three core principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority 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.

In 2019, the South Central Pennsylvania MPO EJ Process Development Study was released. The Unified Environmental Justice Process and Methodology Guide was the result of an inter-regional collaborative process by MPOs in PennDOT District 8, PennDOT Central Office, the Federal Highway Administration, and the Federal Transit Administration.

A key portion of the new methodology is the definition of Low-Income and Minority Populations.

- Low-Income – The FHWA and USDOT EJ Orders define a “low-income” individual as a person whose median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines.
- Minority Populations – The FHWA and USDOT EJ Orders define a “minority” individual as a person who is:
 - (1) Black
 - (2) Hispanic or Latino
 - (3) Asian American
 - (4) American Indian and Alaskan Native
 - (5) Native Hawaiian and Other Pacific Islander

The core methods outlined in the guide are:

- Identify Environmental Justice Populations
- Assess Conditions and Identify Needs
- Evaluate Benefits and Burdens of Program
- Identify and Address Disproportionately High and Adverse Impacts

This report summarizes the activities, analyses, and outcomes that were completed as a part

of the SEDA-COG MPO 2023 Transportation Program development process in compliance with Environmental Justice policies.

Identify Environmental Justice Populations

In response to the identified EJ policies, a distributive geographic analysis was conducted to identify the locations and concentrations of minority and low-income populations. The demographic profile describes the social composition of the SEDA-COG MPO region and illustrates how demographic patterns vary spatially.

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 draw upon the perspectives of communities to identify existing transportation needs, localized deficiencies, and 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.

MPOs are expected to:

- Avoid the use of thresholds. The use of thresholds can cause some populations to be unaccounted for in the analysis because they are not of a certain size in comparison to the region.
- When mapping, use more disaggregated Census geographies (e.g., block groups). The more aggregated the geographic level of the analysis, the higher the probability that pockets of low-income and minority populations will be missed.
- Consider geographically dispersed or transient persons. USDOT guidance directs funding recipients to consider all people present in an area, not just the residents. Non-resident persons who travel through or to an area and belong to minority or low-income populations should be considered.
- Verify data and be aware of limitations. Much of the data used in the process are estimates and may have significant margins of error.
- Engage representatives and leaders of minority or low-income populations. MPOs should conduct outreach to leaders of minority or low-income populations to verify data and gain a deeper understanding of the culture and diversity of the area.

The American Community Survey (ACS) provides information on the characteristics of the population – and is not meant to count the population. ACS data are sample data and different samples would yield different estimates of the actual population value. Approximately 1 in 38 U.S. households per year receives an invitation to participate in the ACS. The margin of error is a measure of the possible variation of the estimate around the population value. ACS estimates carry larger margins of error than decennial Census sample estimates. This is especially true for small areas and population groups. Due to the small population located within certain Census tracts in the SEDA-COG MPO region, margin of error must be considered when considering the population represented by the data.

Table 1 provides a summary of the U.S. Census ACS 2015-2019 5-Year Estimates data at the

county and MPO levels. The regional average of minority populations is 7.34%. This is an increase from the 2011-2015 ACS dataset of 7.02%. The regional average for population for whom poverty status is determined has remained consistent from previous years at ~13%.

Table 1: Profile of Traditionally Underserved Populations in the SEDA-COG MPO Region	SEDA-COG MPO Region									
	Clinton County	Columbia County	Juniata County	Mifflin County	Montour County	North-umberland County	Snyder County	Union County	Total Population	Regional Threshold (Average Concentration)
Total Population	38,915	65,715	24,624	46,276	18,259	91,761	40,483	45,111	371,144	
Minority Population¹	1,880	4,462	742	1,429	1,582	6,897	1,990	7,147	26,129	7.34%
Senior Population²	7,121	12,443	4,896	9,787	3,768	19,142	7,419	7,996	72,572	19.6%
Total Population for whom Poverty Status is Determined	37,185	61,000	24,326	45,537	17,546	87,589	38,125	36,023	347,331	
Low-Income Population³	5,777	9,150	2,637	6,127	1,836	11,552	3,983	4,258	45,320	13.05%
Total Population Age 5 or Older	36,838	62,775	23,208	43,417	17,207	87,029	38,314	43,026	351,814	
Limited English Proficiency Population⁴	613	559	941	1,159	301	1,256	902	1,174	6,905	1.96%
Total Civilian Non-Institutionalized Population	38,358	64,957	24,386	45,674	17,584	87,881	40,150	39,694	358,684	
Disabled Population⁵	6,368	9,037	3,327	7,288	2,423	14,574	4,842	5,216	53,075	14.8%
Total Households	14,690	26,372	9,372	19,043	7,404	39,075	14,794	14,533	145,283	
Zero Vehicle Households⁶	1,450	1,721	729	2,118	1,016	4,141	1,043	1,290	13,508	9.3%

Female Head of Household with own Children⁷	474	990	184	793	348	1,513	497	494	5,293	3.64%
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Source: U.S. Census Bureau, American Community Survey (ACS), 2015-2019 5-Year Estimates

Notes:

¹ Minority Population: Table DP05, ACS Demographic and Housing Estimates, - RACE- Calculated as "Total Population" minus "One race - White".

² Senior Population: Table DP05, ACS Demographic and Housing Estimates, SEX AND AGE - Value given as "Total Population: 65 years and over".

³ Low-Income Population: Table S1701, Poverty Status in the Past 12 Months - Value given as "Population for whom poverty status is determined: Below poverty level".

⁴ Limited English Proficiency Population: Table S1601, Language Spoken At Home - Value given as "Population 5 years and over: Language other than English: Speak English less than 'very well'".

⁵ Disabled Population: Table S1810, Disability Characteristics - Value given as "Total civilian non-Institutionalized population: With a disability".

⁶ Zero Vehicle Households: Table B08201, Household Size by Vehicles Available - Value given as "Total Households: No vehicle available".

⁷ Female Head of Household with Children: Table DP02, Selected Social Characteristics in the United States, Households by Type - Value given as "Family households: Female householder, no husband present family: With own children under 18 years".

For the statewide 2023 Transportation Improvement Program (TIP) environmental justice analysis, basic data and maps were developed by the Williamsport Area Transportation Study (WATS) MPO. All the data were refreshed, and the ACS-specific data were updated to the 2015-2019 estimates. The following statement explains the methodology used in the identification of minority and low-income populations from the Statewide Environmental Justice Analysis Methodology 2023-2026 Pennsylvania Transportation Improvement Program:

“The process followed for the 2021-2024 program update classified low income and minority population percentages based on natural breaks of the percentages of those populations present within the block groups of each county in Pennsylvania. The result of this was to create a custom classification of symbol intervals for each county. The presence of 67 different interval scales would lead to conducting 67 separate analyses downstream in the workflow.

Instead, WATS staff found that when Census block groups were classified into intervals based on the ratio of census block group minority/low income percentage to county or region overall minority/low income percentage (i.e. a ratio of “1” indicates a census block group has the same minority or low income percentage as the county average) that they were able to produce a uniform scale usable across all counties or regions in the state. One side effect of this approach is that it resulted in some counties not having all intervals. However, it gives us a uniform and easily communicated and understood way of classifying the relative concentrations of low income and minority populations across the state of Pennsylvania.

As an example, based on the procedure described above, WATS staff defined interval “1” as being all Census block groups with a minority population percentage less than half the countywide or regional minority population percentage. The result is that any counties or regions with no Census block groups that fit that criterion do not have that interval. By standardizing the intervals across the state, we are able to make apples-to-apples comparisons between counties and regions and also the ability to scale the analysis up to larger geographic scales (or down to smaller scales) which gives us a stronger analytical product.”

Figures 1 and 2 show the ratios of low income or minority population percentage in a Census block group to the MPO region low income or minority population percentage. As evidenced by the low-income map specifically, low-income populations are more densely represented in the northcentral portion of the region, as well as central Juniata County. The minority map similarly shows a high representation in the northcentral portion of the region but brings in some additional areas of Columbia, Montour, and southern Northumberland counties. It is important to note that two of the Census block groups in the northeastern portion of Union County are home to federal prisons.

Figure 1: Concentrations of Low Income Population

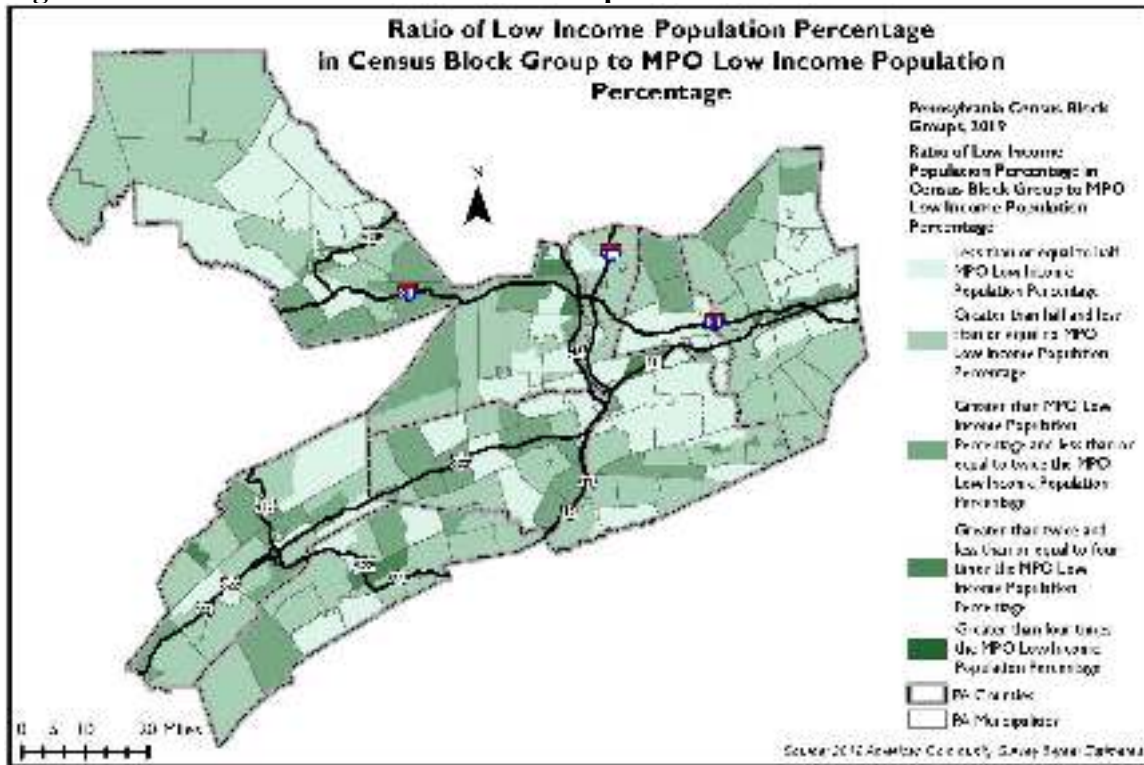
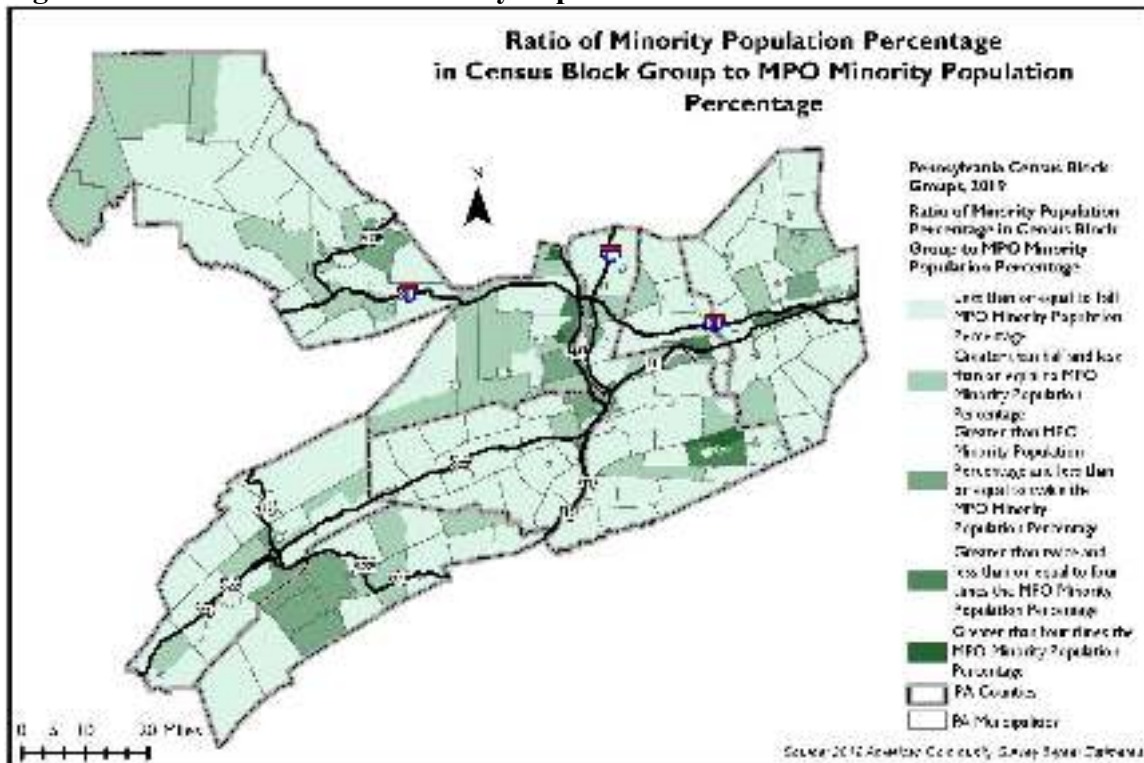


Figure 2: Concentrations of Minority Population



Figures 3 and 4 show dot density mapping of low income and minority populations by census block group.

Figure 3: Dot Density Concentrations of Low Income Population

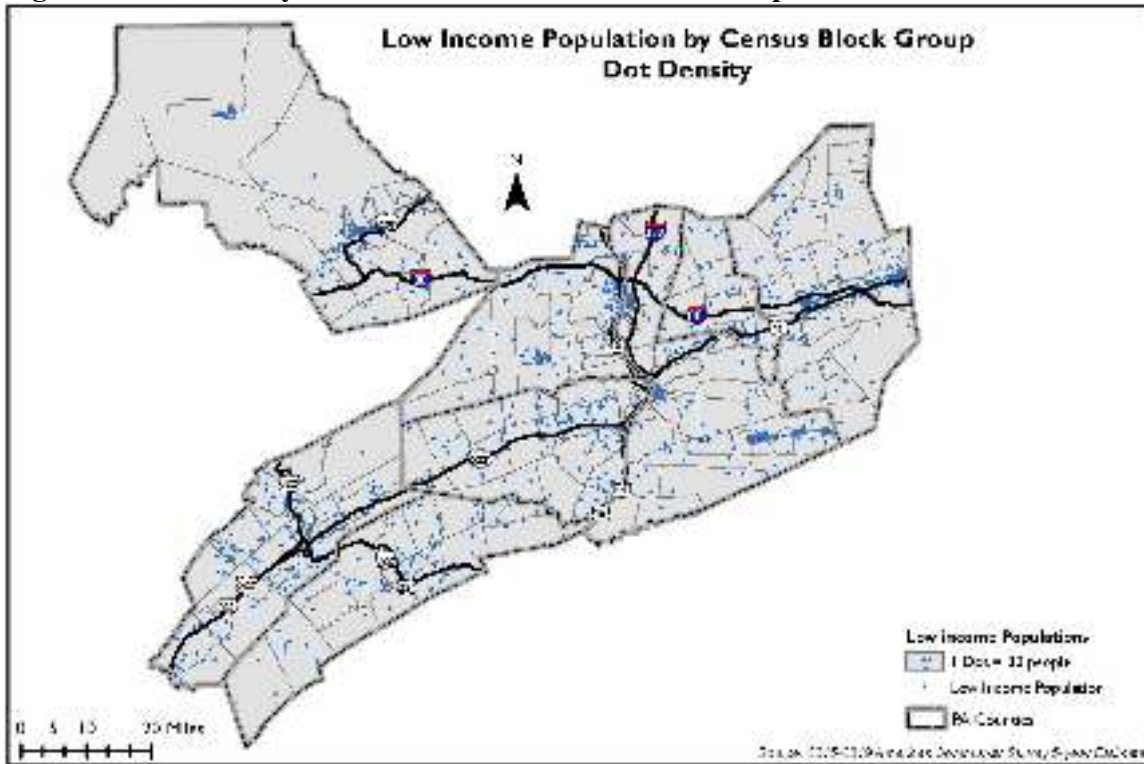
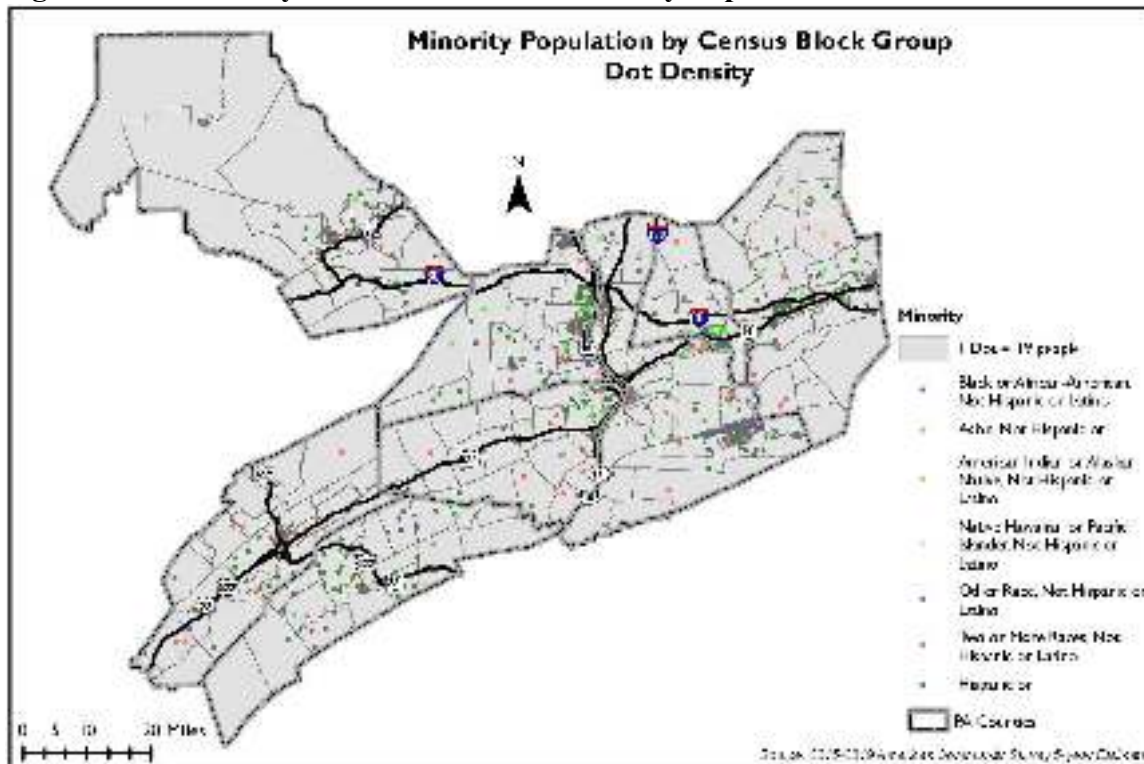


Figure 4: Dot Density Concentrations of Minority Population



Tables 2 and 3 show the breakdown of low income and minority population totals across the block groups within these intervals throughout the SEDA-COG MPO region. The intervals referenced (1 through 5) are the same intervals shown on Figures 1 and 2 by the green gradient of color [lighter green equals interval 1; darkest green equals interval 5].

Table 2: Low Income Population by Interval			
Low Income Population Interval	Low Income Population	Total Population	Percent Low Income
1	4,042	102,058	3.96%
2	11,389	117,211	9.72%
3	15,487	89,521	17.30%
4	12,600	35,478	35.51%
5	1,802	3,063	58.83%
Total	45,320	347,331	13.05%

Table 3: Minority Population by Interval			
Minority Population Interval	Minority Population	Total Population	Percent Minority
1	3,153	192,795	1.64%
2	4,125	77,201	5.34%
3	5,039	48,871	10.31%
4	8,412	40,293	20.88%
5	6,515	11,984	54.36%
Total	27,244	371,144	7.34%

Assess Conditions and Identify Needs

Safety Conditions: Figures 5 and 6 highlight the bicycle and pedestrian fatalities in the region. The fatalities appear to be evenly dispersed throughout the region.

Figure 5: Concentrations of Low Income Population with Bicycle and Pedestrian Fatalities

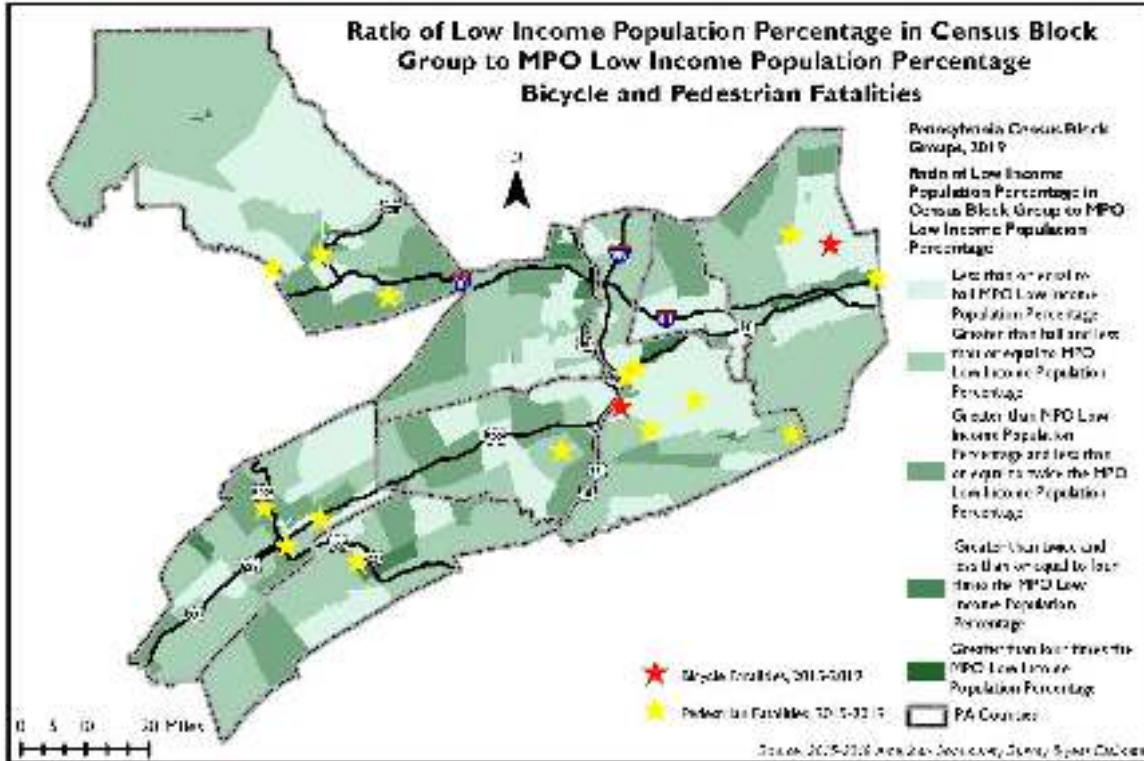
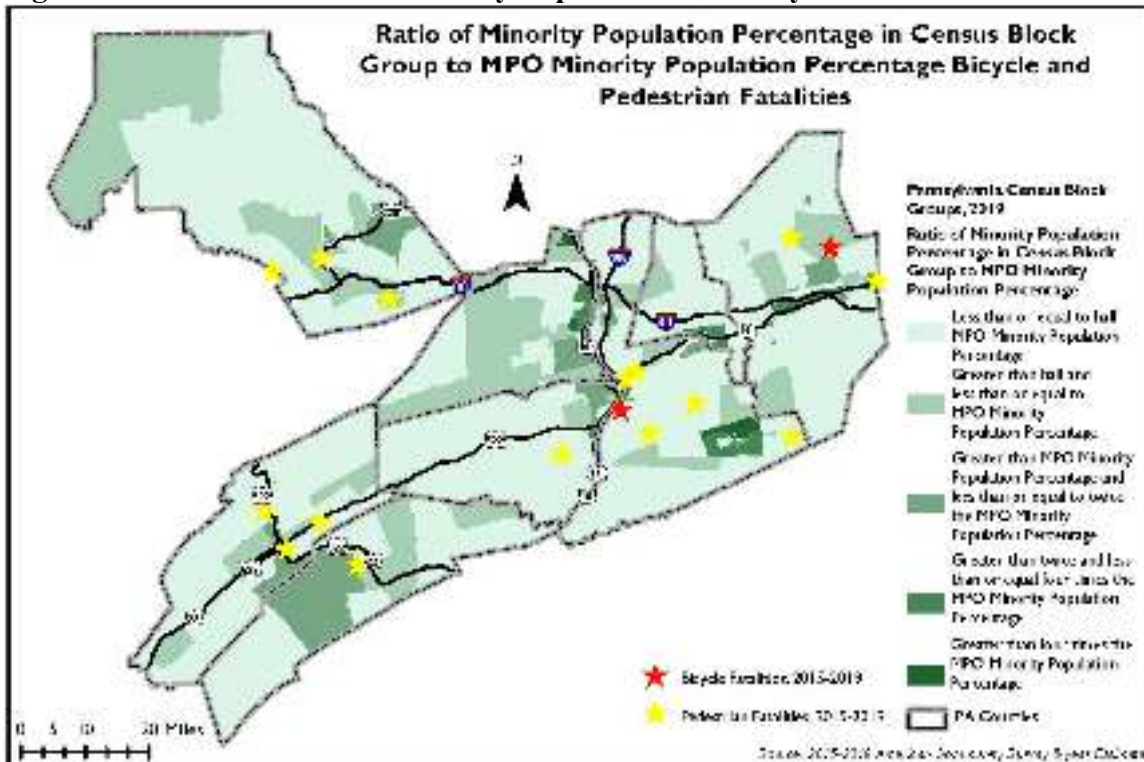


Figure 6: Concentrations of Minority Population with Bicycle and Pedestrian Fatalities



Tables 4 and 5 show bicycle and pedestrian crash data by interval in the SEDA-COG MPO region. The same color gradient applies to these tables as was discussed above in the Identification of EJ Populations section. These charts do include a column for horse and buggy crashes as well. This is particularly important to the MPO region, as there is a large Amish and Plain Sect population.

Table 4: Low Income Bicycle and Pedestrian Crash Data							
Low Income Population Interval	Low Income Population	Total Population	Percent Low Income	People on Bicycles Involved in Crashes (2015 - 2019)	Pedestrians Involved in Crashes (2015 - 2019)	Total Persons Using Nonmotorized Modes Involved in Crashes (2015 - 2019)	Horse and Buggy Crashes (2015 - 2019)
1	4,042	102,058	3.96%	23	85	147	11
2	11,389	117,211	9.72%	34	75	177	22
3	15,487	89,521	17.30%	30	96	175	15
4	12,600	35,478	35.51%	18	79	110	2
5	1,802	3,063	58.83%	0	19	21	0
Total	45,320	347,331	13.05%	105	354	630	50

Table 5: Minority Bicycle and Pedestrian Crash Data							
Minority Population Interval	Minority Population	Total Population	Percent Minority	People on Bicycles Involved in Crashes (2015 - 2019)	Pedestrians Involved in Crashes (2015 - 2019)	Total Persons Using Nonmotorized Modes Involved in Crashes (2015 - 2019)	Horse and Buggy Crashes (2015 - 2019)
1	3,153	192,795	1.64%	44	145	293	36
2	4,125	77,201	5.34%	34	85	163	13
3	5,039	48,871	10.31%	16	57	89	3
4	8,412	40,293	20.88%	5	62	74	0
5	6,515	11,984	54.36%	1	8	11	0
Total	27,244	371,144	7.34%	100	357	630	52

Tables 6 and 7 show general crash data by interval in the SEDA-COG MPO region. Most of the crashes fall in the first interval of minority and low-income populations.

Table 6: Low Income Crash Data							
Low Income Population Interval	Low Income Population	Total Population	Percent Low Income	Total Reportable Crashes (2015 - 2019)	Persons Involved in Reportable Crashes (2015 - 2019)	Crash Fatalities (2015 - 2019)	Crash Suspected Serious Injuries (2015 - 2019)
1	4,042	102,058	3.96%	6,408	13,580	85	286
2	11,389	117,211	9.72%	6,720	13,451	90	344
3	15,487	89,521	17.30%	5,523	12,091	79	241
4	12,600	35,478	35.51%	1,961	4,681	11	69
5	1,802	3,063	58.83%	210	486	1	6
Total	45,320	347,331	13.05%	20,822	44,289	266	946

Table 7: Minority Crash Data							
Minority Population Interval	Minority Population	Total Population	Percent Minority	Total Reportable Crashes (2015 - 2019)	Persons Involved in Reportable Crashes (2015 - 2019)	Crash Fatalities (2015 - 2019)	Crash Suspected Serious Injuries (2015 - 2019)
1	3,153	192,795	1.64%	11,194	23,240	161	577
2	4,125	77,201	5.34%	4,914	10,690	75	188
3	5,039	48,871	10.31%	2,314	5,078	18	87
4	8,412	40,293	20.88%	1,889	4,198	11	61
5	6,515	11,984	54.36%	295	686	3	20
Total	27,244	371,144	7.34%	20,606	43,892	268	933

Bridge Conditions: Figures 7 and 8 show the poor bridge condition by deck area for the region. Most of the poor condition bridges are under 3,000 square feet.

Figure 7: Concentrations of Low Income Populations with Poor Bridges

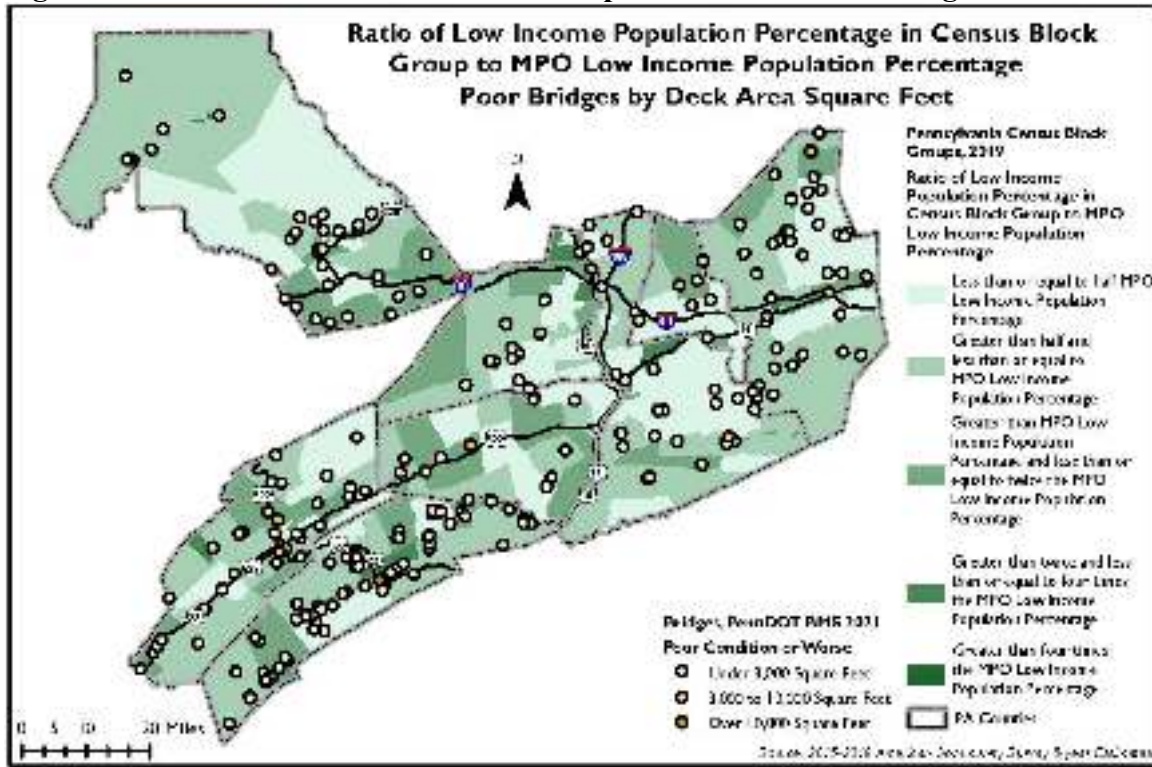
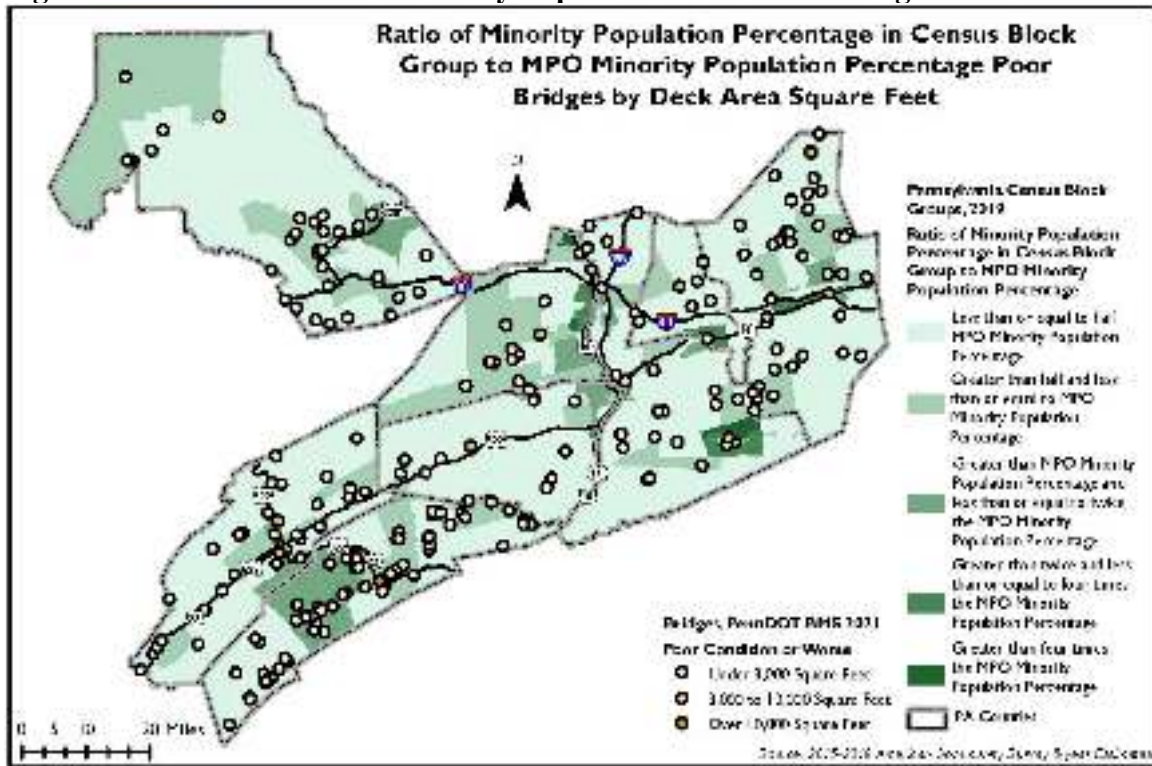


Figure 8: Concentrations of Minority Populations with Poor Bridges



Tables 8 and 9 highlight the bridge conditions by interval in the SEDA-COG MPO region.

Table 8: Low Income Bridge Condition						
Low Income Population Interval	Low Income Population	Total Population	Percent Low Income	Bridges in Poor Condition or Worse	Bridges in Fair Condition or Better	Total Bridges
1	4,042	102,058	3.96%	65	1,199	1,264
2	11,389	117,211	9.72%	132	1,550	1,682
3	15,487	89,521	17.30%	60	903	963
4	12,600	35,478	35.51%	11	165	176
5	1,802	3,063	58.83%	0	4	4
Total	45,320	347,331	13.05%	268	3,821	4,089

Table 9: Minority Bridge Condition						
Minority Population Interval	Minority Population	Total Population	Percent Minority	Bridges in Poor Condition or Worse	Bridges in Fair Condition or Better	Total Bridges
1	3,153	192,795	1.64%	151	2,410	2,561
2	4,125	77,201	5.34%	75	819	894
3	5,039	48,871	10.31%	24	309	333
4	8,412	40,293	20.88%	5	149	154
5	6,515	11,984	54.36%	0	20	20
Total	27,244	371,144	7.34%	255	3,707	3,962

Pavement Conditions: Figures 9 and 10 show the fair and poor International Roughness Index (IRI) for roads in the MPO region. The Route 11 & 15 corridors (from Shamokin Dam-Northumberland) are highly traveled and see high numbers of truck traffic. Some of this situation may be alleviated with the completion of the Central Susquehanna Valley Transportation (CSVT) Project.

Figure 9: Concentration of Low Income Populations with IRI

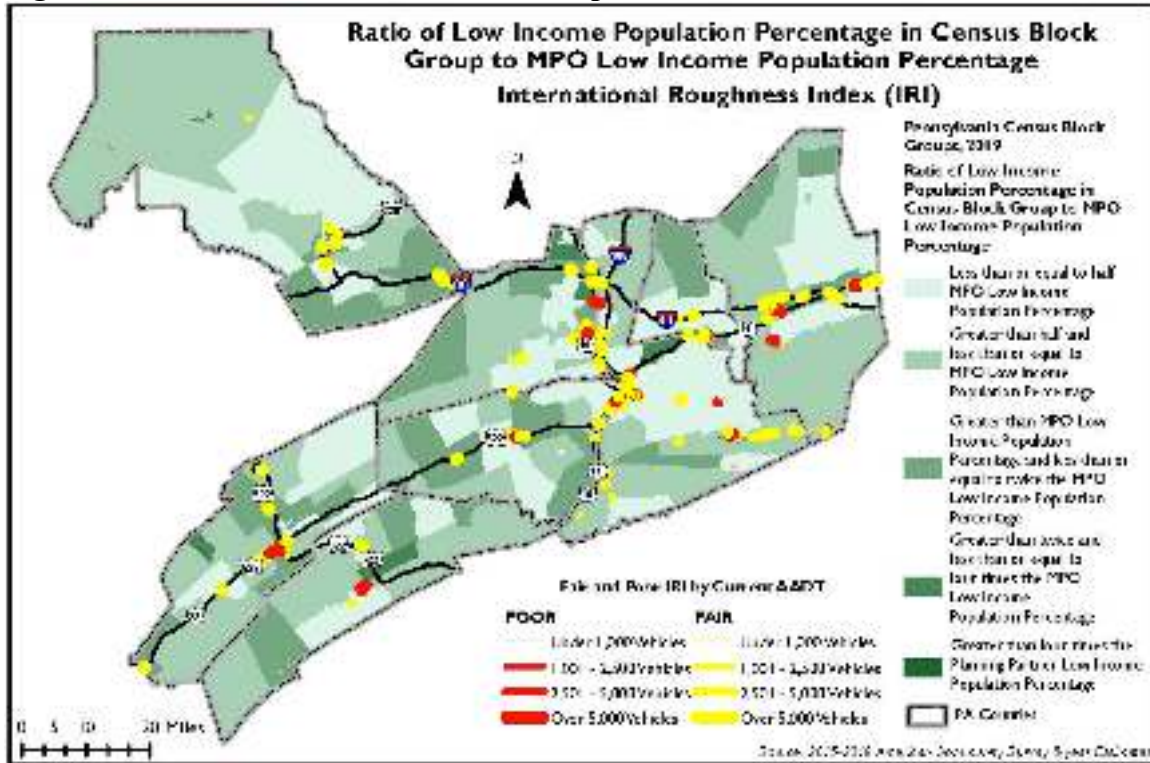
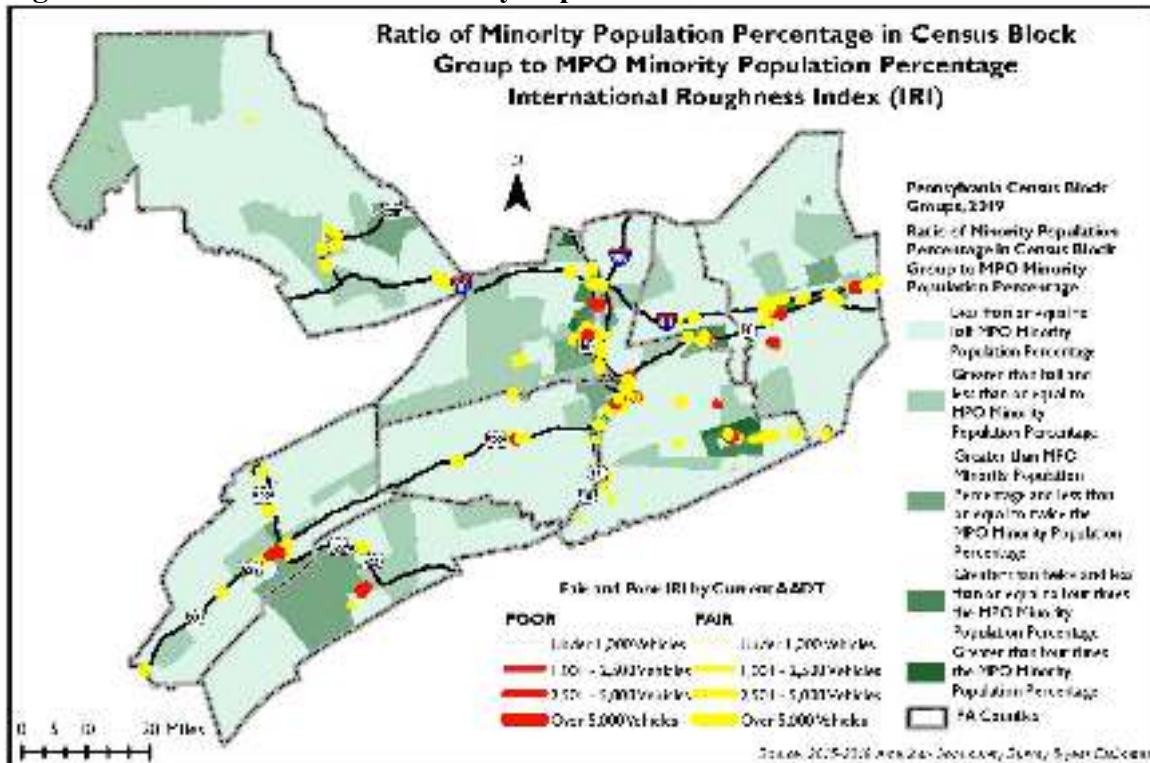


Figure 10: Concentration of Minority Populations with IRI



Tables 10 and 11 show the IRI data for minority and low-income populations.

Table 10: Low Income IRI									
Low Income Population Interval	Low Income Population	Total Population	Percent Low Income	Federal Aid Segment Miles with EXCELLENT IRI	Federal Aid Segment Miles with GOOD IRI	Federal Aid Segment Miles with FAIR IRI	Federal Aid Segment Miles with POOR IRI	Federal Aid Segment Miles with OTHER IRI	Total Federal Aid Segment Miles (IRI)
1	4,042	102,058	3.96%	224	85	18	4	1	332
2	11,389	117,211	9.72%	331	131	30	6	2	499
3	15,487	89,521	17.30%	191	85	27	7	1	311
4	12,600	35,478	35.51%	39	22	10	5	0	76
5	1,802	3,063	58.83%	1	2	1	1	0	5
Total	45,320	347,331	13.05%	787	324	85	23	3	1,223

Table 11: Minority IRI									
Minority Population Interval	Minority Population	Total Population	Percent Minority	Federal Aid Segment Miles with EXCELLENT IRI	Federal Aid Segment Miles with GOOD IRI	Federal Aid Segment Miles with FAIR IRI	Federal Aid Segment Miles with POOR IRI	Federal Aid Segment Miles with OTHER IRI	Total Federal Aid Segment Miles (IRI)
1	3,153	192,795	1.64%	489.60	175.06	47.46	6.70	1.54	720.35
2	4,125	77,201	5.34%	170.49	67.39	18.73	6.87	1.82	265.31
3	5,039	48,871	10.31%	48.13	28.99	11.66	4.68	0.00	93.46
4	8,412	40,293	20.88%	42.09	24.79	8.87	1.78	0.00	77.52
5	6,515	11,984	54.36%	9.57	6.78	1.88	1.23	0.04	19.51
Total	27,244	371,144	7.34%	759.89	303.00	88.60	21.26	3.41	1,176.14

Transit Conditions: Figures 11 and 12 show the fixed route transit facilities in the SEDA-COG MPO region. The SEDA-COG MPO region has only one fixed route transit system. It is the Lower Anthracite Transportation System (LATS). LATS has two seasonal routes to the Susquehanna Mall in the winter and Knoebels Amusement Park in the summer. LATS also has a fixed route throughout the southeast corner of Northumberland County.

Figure 11: Concentrations of Low Income Populations with Transit Providers

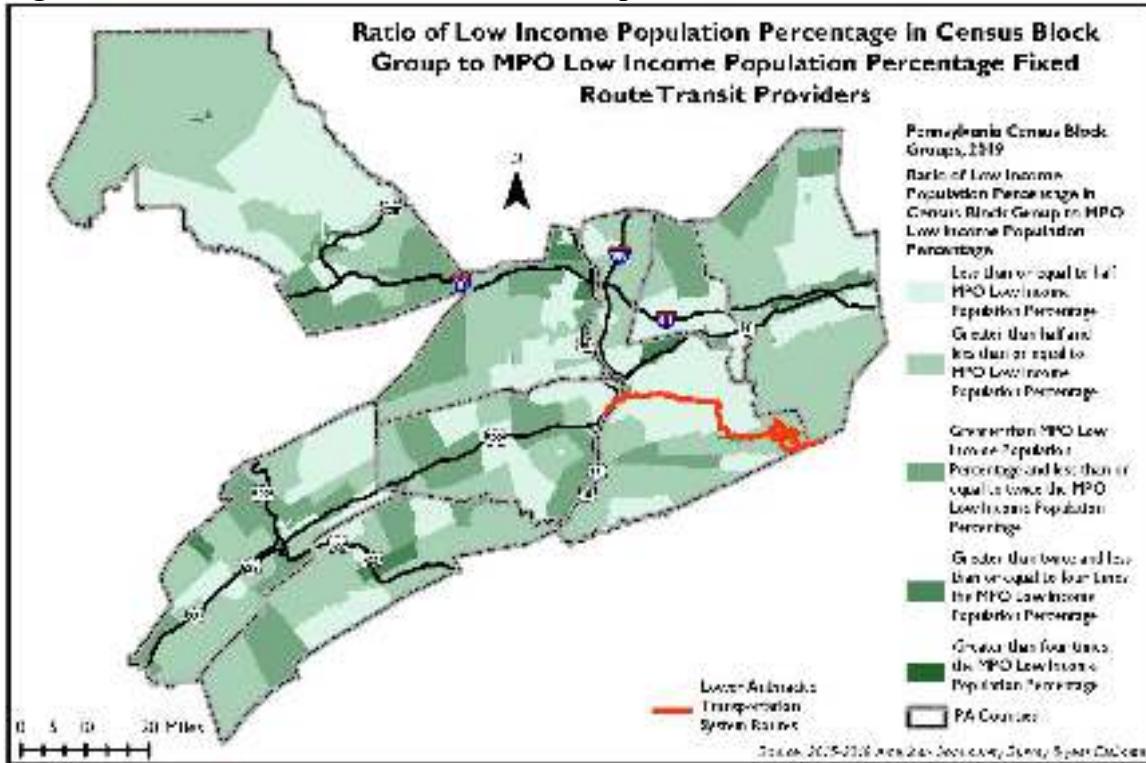
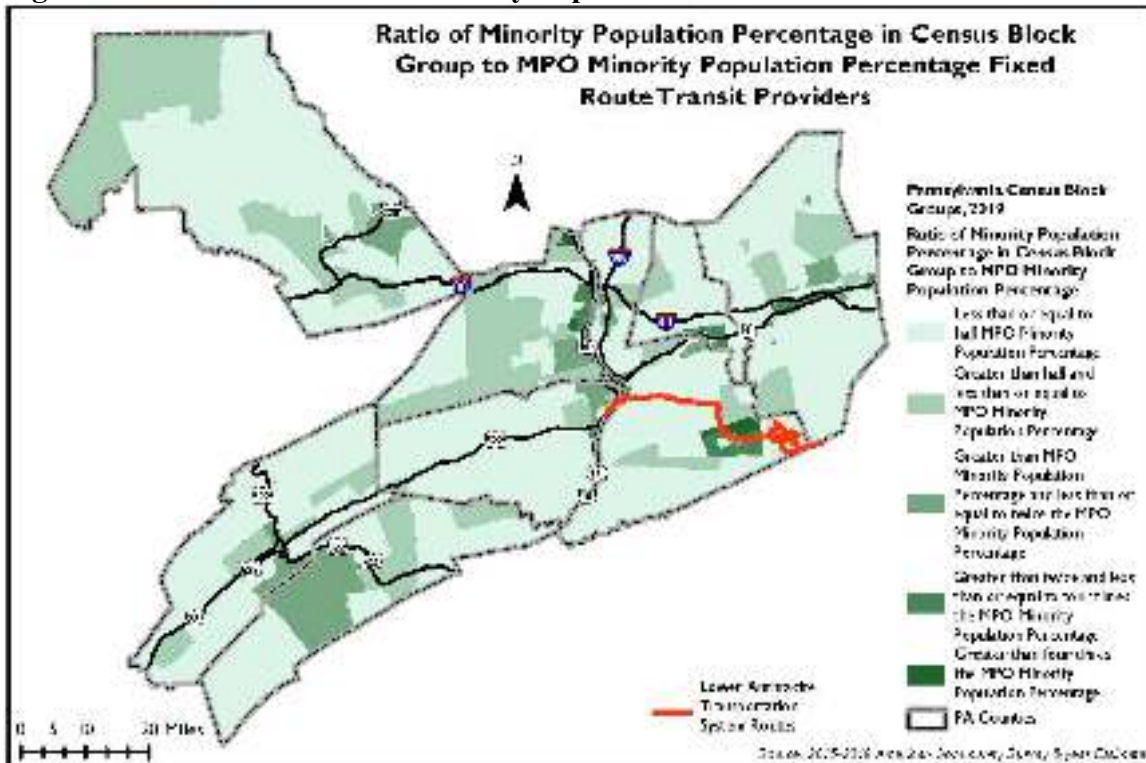


Figure 12: Concentrations of Minority Populations with Transit Providers



Evaluation of Benefits and Burdens of Program

The Benefits and Burdens Analysis provides feedback on the equity of the Transportation Improvement Program (TIP), examines the impact that it has on minority and low-income populations, and identifies any disproportionate impacts.

Benefits are the positive impacts from investment such as enhancements in transportation services/options, improved public safety, congestion relief, increased economic vitality, reduced travel times, etc. Burdens, on the other hand, are the adverse effects of investment such as pollution (noise and air), disruption of community cohesion, displacement of persons or businesses, destruction or decrease of economic vitality, adverse employment effects, decline in tax base or property values, diminished esthetics, disruption of businesses, parking/access to transit, congestion, or the denial, delay or reduction of receipt of benefits.

Per federal guidance, the evaluation of benefits and burdens for a program is to include project categorization, mapping, and a qualitative narrative.

Figure 13 and Figure 14 show the distribution of TIP projects throughout the region. The TIP projects are well distributed throughout the MPO region. The asset management projects that are located in areas with greatest minority population concentration may contribute to some short-term impacts during construction but will generally benefit those residents by improving traveling conditions and safety for all users.

Included on the TIP are five transit projects that do not lend themselves to being mapped. Those projects are as follows:

- MPMS 115130 – Upgrade server/networking (Call A Ride Service, Inc.), \$8,000**
- MPMS 115132 – Replace 5 computers (Call A Ride Service, Inc.), \$7,500**
- MPMS 115139 – Purchase 20 Tablets (Call A Ride Service, Inc.), \$6,000**
- MPMS 115140 – Replace small transit bus (Call A Ride Service, Inc.), \$1,125,000**
- MPMS 115127 – Purchase Vehicles (Geisinger Health System Foundation), \$2,050,000**

Figure 13: Concentrations of Low Income Populations with TIP Projects

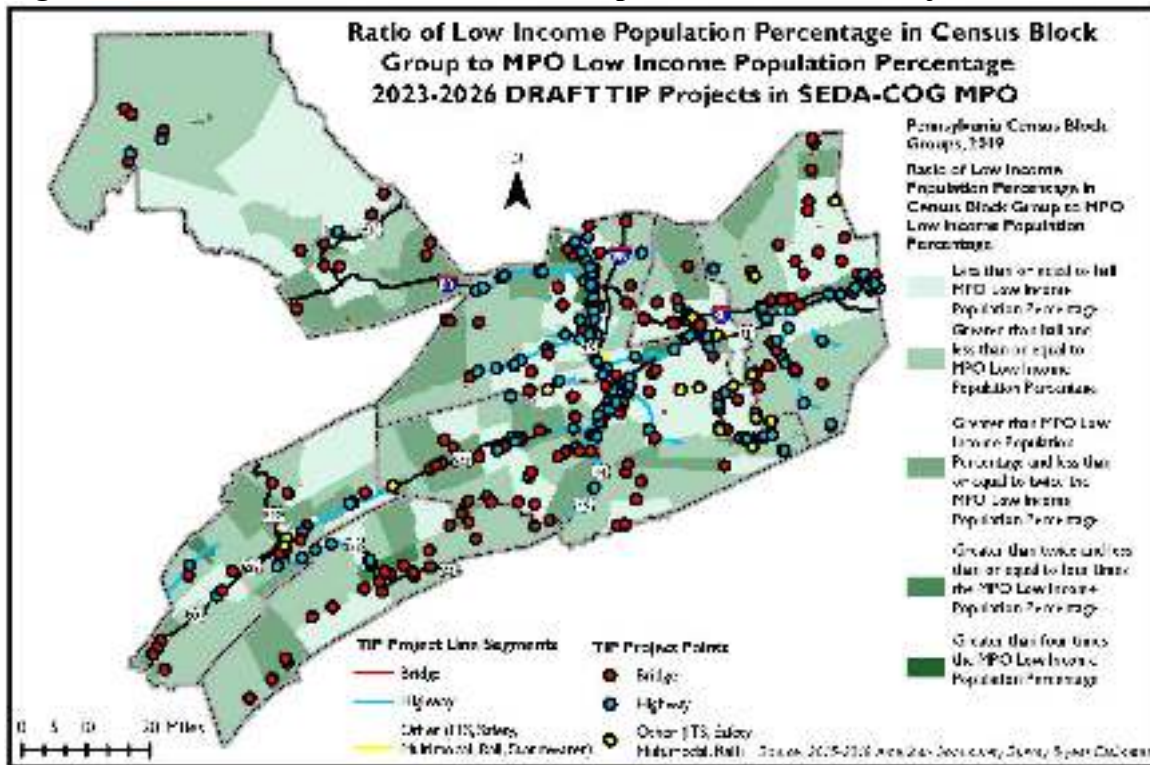


Figure 14: Concentrations of Minority Populations with TIP Projects

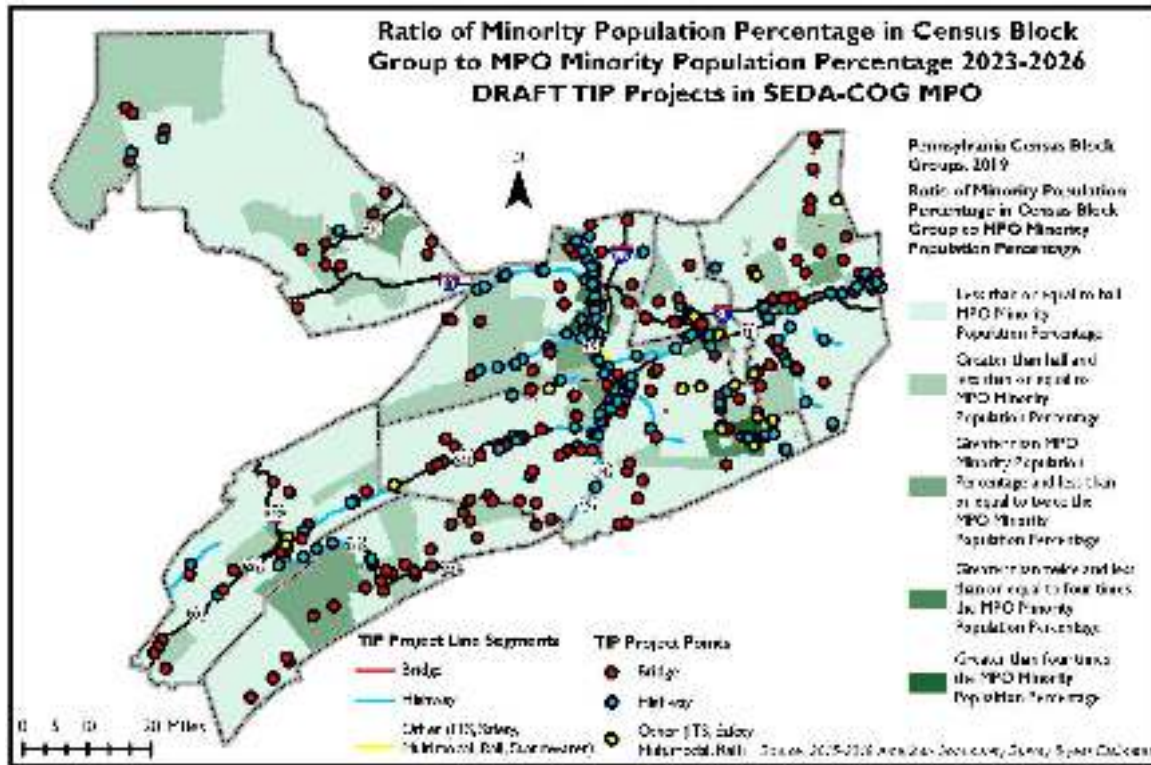


Table 12 is a categorization of all 2023 Draft TIP Projects. Each project was evaluated for proximity to low income or minority populations, as well as categorized as:

- Projects of Concern – High Potential for Adverse Impacts:
 - o New Right-of-Ways
 - o Roadway Expansion
- Lower Potential for Adverse Impacts/Potentially Beneficial:
 - o Roadway and Bridge Maintenance
- Low Potential for Adverse Impacts/Inherently Beneficial:
 - o Transit
 - o Bike/Ped
 - o Safety
 - o Studies

Table 12 also uses a gradient color scheme for low-income and minority indications. The color scheme corresponds to the mapping included on the prior pages for the project distribution.

Table 12:

Project	County	Project Title	Minority	Low Income	High/Medium/Low Impact
3763	Clinton	T-537 over Fishing Creek			Medium
3840	Clinton	Rauchtown Bridge			Medium
3850	Clinton	SR 1001 Improvements			High
69038	Clinton	Bridge over Laurel Run			Medium
85149	Clinton	SR 0880 Rauchtown Cr II			Medium
93356	Clinton	Big Fishing Creek Br #3			Medium
101535	Clinton	Bridge over Long Run			Medium
110355	Clinton	2022 Bridge Preservation			Medium
112744	Clinton	Sulphur Run BOX			Medium
113133	Clinton	SR 120 over Dry Run			Medium
114298	Clinton	SR 120 West Port Fill Sli			Medium
114972	Clinton	SR 120 Slide Restoration			Medium
117159	Clinton	SR 4001 ov Summerson Run			Medium
5375	Columbia	T-373 over Roaring Creek			Medium
5635	Columbia	SR 487 ov Tb Roaring Crk			Medium
78825	Columbia	SR 4049 over W Branch Fis			Medium
82774	Columbia	SR 1020 over Pine Creek			Medium
88034	Columbia	SR 2005 over Roaring Cree			Medium
88051	Columbia	SR 1020 over Fishing Cree			Medium
88777	Columbia	SR 4008 ov Tb Fishing Crk			Medium
88803	Columbia	SR 487 over Tributary Roa			Medium
93643	Columbia	SR 1001 over Tributary to			Medium
98396	Columbia	SR 1012 over Tributary to			Medium
98398	Columbia	SR 1013 over Stony Brook			Medium
98400	Columbia	SR 1014 over Tributary to			Medium
98483	Columbia	Catawissa Crk. to SR 2009			Medium
98506	Columbia	SR 42 to Airport Rd			Medium
98941	Columbia	SR 254 ov Tb Fishing Crk			Medium
99404	Columbia	Briar Cr Boro to Berwick			Medium
100443	Columbia	Roaring Cr to Southern Dr			Medium
103011	Columbia	SR 487 over Abandoned RR			Medium
103833	Columbia	T-557 over Little Fishing			Medium
106181	Columbia	SR 239 over Fishing Creek			Medium
107019	Columbia	Adjacent Box Beam Bridge			Medium
107105	Columbia	SR 11 to SR 339			Low
107106	Columbia	SR 11 to Frost Valley Rd			Low
107107	Columbia	Frost Valley Rd to School			Low
107111	Columbia	Reagans Alley to SR 11			Medium
107112	Columbia	SR 61 to Midvalley Rd			Low

107113	Columbia	Montour Co to White Hall			Medium
107116	Columbia	Briar Cr to SR 1025			Medium
107118	Columbia	SR 42 to Columbia Co Main			Medium
109577	Columbia	I-80 Bridge Piers Rehab			Medium
109587	Columbia	SR 339 from Smith Hollow			Medium
114157	Columbia	SR 1027 over Tributary of			Medium
114231	Columbia	SR 4016 over Black Run			Medium
116203	Columbia	Park Blvd to Luzern Co			Low
116356	Columbia	Park St to Shaffer Rd (SR			Low
116528	Columbia	Martzville to SR 1025			Low
117137	Columbia	Poor House Rd to White Ch			Medium
117139	Columbia	Gaswell Rd to Roaring Cr			Medium
117495	Columbia	T-316 over Mugser Run, C			Medium
117566	Columbia	SR 11 AND SR 225 Bridge P			Medium
117567	Columbia	SR 93 over North Branch o			Medium
117568	Columbia	SR 42 AND 93 over North B			Medium
117576	Columbia	SR 4020 over Green Creek			Medium
117577	Columbia	SR 2001 over Roaring Cree			Medium
117840	Columbia	SEDA-COG HFST			Low
4096	Juniata	Mahantango Creek Bridge			Medium
4160	Juniata	Stoney Run Bridge			Medium
4190	Juniata	Bridge over NS Railroad			Medium
69423	Juniata	2023 SEDACOG Bridge Prese			Medium
69512	Juniata	SR 0850 Little Laurel Run			Medium
85170	Juniata	SR 0850 over Trib. Tuscar			Medium
85176	Juniata	SR 0075 over Trib Tuscaro			Medium
85178	Juniata	SR 0075 over Trib Tuscaro			Medium
85183	Juniata	SR 0333 over Trib Juniata			Medium
85187	Juniata	SR 2002 over Trib. Doe Ru			Medium
85191	Juniata	SR 3002 over Locust Run			Medium
85206	Juniata	SR 3023 over Tuscarora Cr			Medium
93721	Juniata	Trib Stony Run			Medium
105566	Juniata	SR 35 Stop 35 to Sheetz A			Medium
109717	Juniata	SR 2003 over Doe Run II			Medium
112751	Juniata	Trib Cocolamus Creek BOX			Medium
112752	Juniata	Trib Stony Run BOX			Medium
113143	Juniata	SR 3008 over Trib Tuscaro			Medium
113146	Juniata	SR 3019 over Doyle Run			Medium
114302	Juniata	2024 SEDA-COG Bridge Pres			Medium
116886	Juniata	2025 SEDA-COG Bridge Pres			Medium
116889	Juniata	2027 SEDA-COG Bridge Pres			Medium
111074	Juniata	River Rd RR Warning Device			Low
4551	Mifflin	SR 1002 over Dry Creek			Medium
4582	Mifflin	Lewistown Narrows Rehab			Medium

69387	Mifflin	Long Hollow Run Bridge			Medium
72767	Mifflin	Lewistown to Co. Line Bet			Medium
81491	Mifflin	Co. Line to Belleville			Medium
85276	Mifflin	Br Long Hollow II			Medium
85290	Mifflin	SR 0522 over Jacks Creek			Medium
85299	Mifflin	Lewistown Bridge			Medium
85300	Mifflin	Lewistown Bridge II			Medium
91608	Mifflin	SR 1012 Laurel Run Br			Medium
93314	Mifflin	McVeytown Strodes Mills			Medium
93316	Mifflin	Valley St. Betterment			Medium
95971	Mifflin	T-439 ov Kishacoquillas			Medium
105922	Mifflin	SR 22 ov Branch Long Holl			Medium
110175	Mifflin	T-420 over Kish Creek			Medium
112745	Mifflin	Branch Jacks Creek BOX			Medium
112749	Mifflin	Branch Kishacaquillas Cre			Medium
113151	Mifflin	SR 2008 over Br Jacks Cre			Medium
113153	Mifflin	SR 22 over Abandoned RR			Medium
113155	Mifflin	SR 3017 over Trib Juniata			Medium
114010	Mifflin	SR 522 Betterment			Medium
114048	Mifflin	Kish Pike RR Device Insta			Low
114303	Mifflin	2025 SEDA-COG Bridge Pres			Medium
114470	Mifflin	PA 103 Slide Area			Medium
116799	Mifflin	SR 22 over Wakefield Run			Medium
116986	Mifflin	Tributary Jacks Creek BOX			Medium
117782	Mifflin	Walnut St RR Device Insta			Low
6303	Montour	T-396 over E Branch Chill			Medium
93524	Montour	SR 54 over Stony Brook			Medium
93650	Montour	SR 3007 over Tributary to			Medium
98507	Montour	SR 642 over Mauses Creek			Medium
98610	Montour	Cherry St to Byrd Ave			Medium
98991	Montour	SR 54 Wbl ov Mahoning Crk			Medium
100483	Montour	SR 54 from SR 254 to SR 3			Medium
103841	Montour	T-308 over Beaver Run Bri			Medium
103853	Montour	SR 54 Corridor Safety Imp			Low
105525	Montour	I-80 West Bound from Stum			Medium
105527	Montour	I-80 West from Klondike R			Medium
106671	Montour	T-392 over Mud Run Bridge			Medium
107128	Montour	SR 54 under Market Street			Medium
112358	Montour	I-80 ITS Camera #1 Danvil			Low
115544	Montour	1500ft W of Montour St to			Medium
115547	Montour	North'd Co to 1500ft W of			Medium
116227	Montour	Ferry St to Cherry St			Medium
116307	Montour	Northumberland Co to Bald			Low
117036	Montour	SR 2008 Bloom Road Bike L			Low

117506	Montour	T-412 over Sechler Run			Medium
6615	Northumberland	SR 4020 over Little Shamo			Medium
6667	Northumberland	SR 4018 over Unnamed Trib			Medium
6725	Northumberland	SR 901 over SEDA-COG Rail			Medium
78935	Northumberland	SR 225 over Mahantango Cr			Medium
85622	Northumberland	SR 405 ov Tb Delaware Run			Medium
85623	Northumberland	SR 147 over Tributary to			Medium
87909	Northumberland	SR 54 from Montour County			Medium
87944	Northumberland	SR 61 from Lancaster Swit			Medium
87994	Northumberland	SEDA-COG Scour Contract			Medium
88778	Northumberland	SR 54 over Shamokin Creek			Medium
88798	Northumberland	Substructure Contract			Medium
93642	Northumberland	T-802 over S Branch of Ro			Medium
97550	Northumberland	SR2024 ov SBr Roaring Crk			Medium
97593	Northumberland	SR 54 from SR 901 to Locu			Medium
97679	Northumberland	W Br Susq Rvr to Milton			Medium
97708	Northumberland	SR 54 from south of SR 90			Medium
98531	Northumberland	SR 1007 over Tributary of			Medium
98540	Northumberland	SR 4004 over Tributary N			Medium
98674	Northumberland	SR 147 to Housels Run			Medium
99006	Northumberland	SR 61 over Dark Run			Medium
99009	Northumberland	SR 61 over SR 2029 AND 90			Medium
99176	Northumberland	SR 11 from SR 147 to C St			Medium
99177	Northumberland	SR 1024 to Montour County			Medium
99391	Northumberland	Kulpmont to Lancaster Swi			Medium
102810	Northumberland	CSVT to SR 11			High
103917	Northumberland	T-696 over Plum Creek			Medium
103928	Northumberland	8th St over Shamokin Crk			Medium
109833	Northumberland	SR 147 (CSVT Gap) from E			Medium
110224	Northumberland	SR 61 from 5th St to Dark			Medium
110829	Northumberland	SR 61 - Paxinos Drainage			Low
111352	Northumberland	SVRR RRX Northumberland C			Low
111760	Northumberland	SR 44 to Lycoming Co			Medium
113177	Northumberland	T-633 over Muddy Run			Medium
113695	Northumberland	SR 4010 from Front St to			High
114101	Northumberland	Bridge Painting Off Syste			Low
114134	Northumberland	SR 1016 over Muddy Run			Medium
114142	Northumberland	SR 3003 over Mouse Creek			Medium
114158	Northumberland	SR 4012 over Deicks Run			Medium
114175	Northumberland	SR 4004 over Tributary of			Medium
115084	Northumberland	Bottle Run Rd to SR 54			Low
115507	Northumberland	Water St to SR 147			Medium
115509	Northumberland	Pine St to Montour Co			Low
115579	Northumberland	North'd SR 254 Grind AND			Medium

115583	Northumberland	Shamokin Cr to Church St			Medium
115584	Northumberland	Church St to Shikellamy A			Medium
115656	Northumberland	Epoxy Overlay BOF SEDA-CO			Medium
115821	Northumberland	SR 225 to SR 61			Low
116005	Northumberland	SR 61 to Ash St			Medium
116221	Northumberland	Warrior Run MTF			Low
116314	Northumberland	SR 45 to Old Rt 45 (T571)			Medium
116833	Northumberland	Ferry Ln to Walnut St			Medium
117570	Northumberland	SR 45 AND 1014 over West			Medium
117608	Northumberland	SR 3018 over Mahantango C			Medium
117615	Northumberland	SR 11 over W Branch Susqu			Medium
6797	Snyder	SR 3016 over Aline Creek			Medium
6860	Snyder	T-481 over Tuscarora Crk			Medium
6886	Snyder	US 522 over Tributary to			Medium
6899	Snyder	SR 522 over Beaver Creek			Medium
6902	Snyder	SR 522 over Tb Middle Crk			Medium
93648	Snyder	SR 2007 over Tributary to			Medium
98548	Snyder	SR 1011 over Tb Penn's Cr			Medium
98578	Snyder	SR 3010 over Tributary to			Medium
98885	Snyder	SR 204 to SR 11			Medium
98887	Snyder	SR 1023 to SR 1017			Medium
99120	Snyder	SR 35 ov Tb Middle Creek			Medium
99121	Snyder	SR 35 over Tb Middle Cree			Medium
99241	Snyder	SR 11 from Ulsh Road to P			Medium
104616	Snyder	SR 522 from Willow Ave to			Medium
106278	Snyder	SR 11 North Bound from Pe			Low
106279	Snyder	Penns Creek to SR 522 SB			Low
109837	Snyder	Dry Run to Union Co			Medium
113404	Snyder	Dinius Ave to Water Tower			Medium
113787	Snyder	Roosevelt Ave to SR 15/11			Medium
114097	Snyder	Epoxy Overlay BOF SEDA-CO			Medium
114143	Snyder	SR 3006 over Trib of West			Medium
114176	Snyder	SR 3016 over Tributary of			Medium
115551	Snyder	SR 11 to Union Co			Low
115553	Snyder	Brosius Hill Rd to Sunny			Medium
116339	Snyder	Old Trail Rd to App Rd			Medium
116340	Snyder	Gregor Hill Ln to Spring			Medium
116341	Snyder	Smalsh Barrick Rd to Moun			Low
116342	Snyder	Paxtonville Rd to Mill St			Medium
116343	Snyder	Penn Twp Line to Market S			Low
116538	Snyder	Front St to Market St			Medium
117579	Snyder	SR 4016 over N Branch Mid			Medium
117704	Snyder	T-487 over Tributary to P			Medium

72352	Union	T-421 over White Deer Hol			Medium
87904	Union	SR 45 from Kaiser Run Rd			Low
97551	Union	SR 1011 to North'd Co WB			Medium
97720	Union	SR 3007 to Buffalo			Medium
97746	Union	JPM Rd to Col John Kelly			Low
98735	Union	SR 192 Union County Bridg			Medium
98772	Union	SR 1003 over Tributary to			Medium
98786	Union	SR 2003 over Tributary to			Medium
98826	Union	SR 3006 over Cold Run			Medium
98828	Union	SR 3014 over Turkey Run			Medium
98903	Union	Front St to Stein Ln			Medium
99141	Union	SR 1011 over Tributary to			Medium
99253	Union	N of I-80 to White Deer Cr			Medium
99273	Union	White DeerTwp toAllenwood			Medium
99407	Union	PA44 to Lycoming Co Line			Medium
105516	Union	I-80 West Bound from Unio			Medium
108425	Union	Joe Rd to SR 1010			Medium
110231	Union	Mile Run to SR 1010 EB			Medium
110337	Union	T-357 ov N Branch of Buff			Medium
110599	Union	Ikeler St. to T-387 Hafer			Medium
110828	Union	SR 45 to Orchard Ln			Medium
113459	Union	T-319 over Penns Creek (U			Medium
113612	Union	I-80 WB from Mile Run to			Medium
113788	Union	Bull Run to Northumberlan			Medium
114379	Union	Snyder Co line to SR 304			Low
115562	Union	Winfield to Martin St			Medium
115565	Union	S. Hill Rd to Columbia Av			Medium
116133	Union	SR 15 West Branch Hwy to			Low
116344	Union	Haffer Rd to Zeigler Rd			Low
116349	Union	Hardee's Dr to Bull Run			Low
116350	Union	Johnson Mill Rd to SR 15			Low
116351	Union	SR 1008 to Deitrich Rd			Low
116352	Union	Zeigler Rd to SR 1004			Medium
116353	Union	SR 1004 to SR 1008			Medium
116354	Union	Penn St to Kaiser Run Rd			Low
117418	Union	SR 15 to Susquehanna Rive			Low
117420	Union	JPM RD to 3rd St			Medium
117901	Union	West Shore RRX, SR 1011 a			Low

The Environmental Justice Benefits and Burdens Analysis identifies where high concentrations of minority and low-income populations reside in the SEDA-COG MPO region. The analysis is accomplished through mapping and tabular summaries to indicate where these populations exceed the regional averages, and how those populations may be impacted by current transportation conditions and proposed transportation spending. Based on the distribution of current TIP funding and the analysis of asset conditions, there do not appear to be disparities in investment linked to concentrations of minority or low income populations.

Overall, minority populations within the SEDA-COG MPO region have increased (at 7.3% in the 2015-2019 ACS data) and – aside from the Census block groups influenced by incarcerated populations – are concentrated in the more densely populated cities, boroughs, and towns. Low-income populations represent a larger portion of the region (13.05%) and are concentrated in the more densely populated areas of the region, but also occur in the more secluded rural areas of each county. The locations of these populations demonstrate the need for the SEDA-COG MPO to consider alternative travel modes in these locations, as minority and low-income populations are more likely to not have access to a vehicle.

The SEDA-COG MPO will continue to evaluate changing conditions coming with the CSVT Project, as it dominates much of the funding in the TIP. In 2021, a special impact study was completed in conjunction with the Williamsport Area Transportation Study (WATS) MPO, to evaluate the impacts along the CSVT corridor. With the help of Michael Baker International, the study outlined a series of implementation steps that can be completed as the CSVT begins to open. To find out additional information on the study, please visit lyco.org/CSVT.

The SEDA-COG MPO has considered the needs of traditionally underserved populations in the development of the TIP by providing opportunities for public comment and completing this analysis to show geographically what projects are going to impact these populations. Upon examination of Table 12, there is only one project that is shown to have a high impact on a high-density area of minority populations. Through this analysis the SEDA-COG MPO was better able to highlight where areas of low-income and minority populations are located and what projects will impact them the most. This process allows better communication during the planning and construction process to mitigate the impacts.