

Appendix VI: Environmental Justice Analysis

September 2023



Report on Environmental Justice

September 2023

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Nepali

यो फाराम अनुरोध गरिएमा वैकल्पिक ढाँचाहरूमा उपलब्ध छन्। अनुरोध गरेमा बिना शुल्क SPC ले अनुवादन र दोभाषे सेवा उपलब्ध गराउछ। थप जानकारीको लागि SPC (412) 391-5590 मा फोन गर्नुहोस्।

Gujarati

આ દસ્તાવેજ વિનંતી પર વૈકલ્પિક ડ્રોમેટ્સમાં ઉપલબ્ધ હોય છે. SPC કોઈપણ શુલ્ક લીધા વિના વિનંતી પર અનુવાદ અને અર્થઘટન સેવાઓ પૂરી પાડશે. વધુ માહિતી માટે કૃપા કરી (412) 391-5590 પર SPCને કોલ કરો.

Oriya

ଏହି ଡକ୍ୟୁମେଣ୍ଟର ଅନୁରୋଧରେ ବୈକଳ୍ପିକ ଫର୍ମାଟରେ ଉପଲବ୍ଧ। କୌଣସି ଚାର୍ଜ ଛଡ଼ା ଏସପିସି ଅନୁବାଦ ଏବଂ ବ୍ୟାଖ୍ୟା ସେବା ପ୍ରଦାନ କରିବ। ଦୟାକରି ଅଧିକ ସୂଚନା ପାଇଁ ଏସପିସି (412) 391-5590 ରେ କଲ୍ କରନ୍ତୁ।

Punjabi:

ਇਹ ਦਸਤਾਵੇਜ਼ ਬੇਨਤੀ ਕਰਨ 'ਤੇ ਵਿਕਲਪਕ ਰੂਪਾਂ ਵਿੱਚ ਉਪਲਬਧ ਹੈ। SPC ਬਿਨਾਂ ਕਿਸੇ ਖਰਚ 'ਤੇ ਬੇਨਤੀ 'ਤੇ ਅਨੁਵਾਦ ਅਤੇ ਦੁਬਾਰਾ ਸੇਵਾਵਾਂ ਪ੍ਰਦਾਨ ਕਰੇਗਾ। ਵਧੇਰੇ ਜਾਣਕਾਰੀ ਲਈ ਕਿਰਪਾ ਕਰਕੇ SPC ਨੂੰ (412) 391-5590 'ਤੇ ਕਾਲ ਕਰੋ।

Sinhalese

ඉල්ලීම මත මෙම ලේඛනය විකල්ප ආකෘතිවලින් ලබාගත හැකිය. SPC විසින් කිසිදු ගාස්තුවක් අය කිරීමකින් තොරව භාෂා පරිවර්තන හා භාෂණ පරිවර්තන සේවාවන් සපයනු ඇත. කරුණාකර වැඩි දුර විස්තර සඳහා (412) 391-5590 ඔස්සේ SPC අමතන්න.

Marathi

हा दस्तऐवज विनंतीनुसार पर्यायी स्वरूपांमध्ये उपलब्ध आहे. विनंतीनुसार SPC भाषांतर आणि अर्थविवरण सेवा विनामूल्य प्रदान करेल. अधिक माहितीसाठी कृपया SPC ला (412) 391-5590 येथे कॉल करा.

Bengali

অনুরোধ জানালে এই ডকুমেন্টটি অন্যান্য ফরম্যাটেও পাওয়া যায়। অনুরোধ জানালে SPC কোনও চার্জ ছাড়াই অনুবাদ এবং ব্যাখ্যা করার পরিষেবা প্রদান করবে। আরও তথ্যের জন্য অনুগ্রহ করে (412) 391-5590 নম্বরে SPC কে ফোন করুন।

Hindi

यह दस्तावेज़ अनुरोध पर वैकल्पिक फॉरमेट में उपलब्ध है। एस पी सी (SPC) अनुवाद और व्याख्या सेवाएं अनुरोध पर बिना शुल्क उपलब्ध कराएगी। कृपया अधिक जानकारी के लिए (412) 391-5590 पर एस पी सी (SPC) को कॉल करें।

Sindhi

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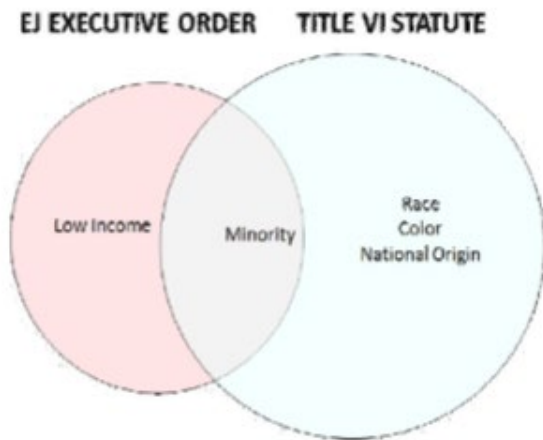
The Southwestern Pennsylvania Commission (SPC) hereby gives public notice that it is the policy of the Commission to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related statutes and regulations in all programs and activities. Title VI and other related statutes require that no person in the United States of America shall, on the grounds of race, color, sex, national origin, age, or disability, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which SPC receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice by SPC under Title VI has a right to file a formal complaint with the Commission. Any such complaint must be in writing and filed with SPC's Title VI Coordinator within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discrimination Complaint Form, please see our website at: www.spcregion.org or call 412-391-5590.

Background

As the federally designated regional Metropolitan Planning Organization, the Southwestern Pennsylvania Commission (SPC) works consistently to ensure that **all** southwestern Pennsylvania residents are involved and invested in the regional transportation planning process. A large part of this mission involves adhering to the principles of Environmental Justice (EJ). The U.S. Environmental Protection Agency's Office of Environmental Justice defines EJ as:

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. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

The federal definition of Environmental Justice is shaped by both Title VI of the Civil Rights Act of 1964 and Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations. Although the nondiscrimination principles of Executive Order 12989 and the Title VI statute intersect, they are two separate mandates and each has unique requirements.



Title VI prohibits discrimination in federal programs on the basis of race, color, national origin. Subsequent laws¹ include gender, disability (physical and mental), and age in Title VI protections. Executive Order 12898 directs these protections by requiring federal agencies to conduct EJ analyses of their policies, programs, and activities to ensure that no adverse human health and/or environmental impacts would be disproportionately borne by minority and low-income populations. SPC utilizes this federal guidance to determine and define “communities of concern” in the SPC region. A table outlining these populations can be found on the following page.

¹ 1 Title IX of the Education Amendments, 1972; Section 504 of the Rehabilitation Act of 1973; The Americans with Disabilities Act (ADA) of 1990; The Age Discrimination Act of 1975

Population	Title VI	EJ	LEP	ADA	Community of Concern
Racial Minority	X	X			X
Ethnic Minority	X	X			X
Household in Poverty		X			X
Limited English-Speaking			X		X
Person with Disability				X	X
Older (65+) person					X
Household without access to vehicle					X
Household without internet connection					X

In the context of transportation, effective and equitable decision-making depends on understanding and properly addressing the unique needs of different socioeconomic groups. U.S. Department of Transportation (USDOT) Order 5610.2(a), Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, identifies three fundamental principles of EJ that guide USDOT actions:

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

Approach

Environmental Justice Directives mandate that EJ programs have both a participatory and a data-driven analysis component. This report summarizes multiple activities and analyses that have been conducted in accordance with EJ Directives in developing the southwestern Pennsylvania Region’s 2050 Long-Range Plan (LRP).

As part of the 2050 LRP development process, SPC re-identified low income, minority, and other potentially disadvantaged populations through updating regional demographic profiles with the most currently available census data. SPC strived to engage these populations through public participation initiatives throughout the planning process, which will be discussed at length.

Furthermore, the updated regional demographic profiles were used as part of the larger LRP project selection and prioritization criteria – projects that fell within an Environmental Justice area (any census block which exceeded the regional average for low income and/or minority

populations), were assessed for any specific benefits and/or burdens that could impact project priority.

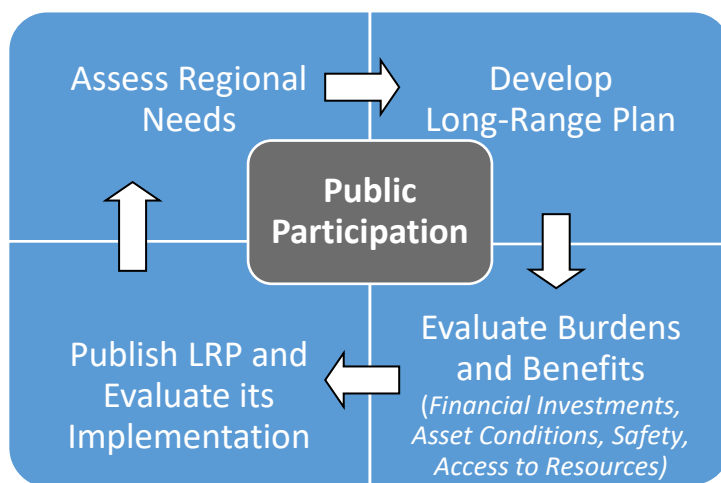
After re-assessing the condition of regional infrastructure and working with planning partners and the public to identify needs, SPC developed the draft LRP. Draft LRP projects were further evaluated for burdens and benefits to low income, minority, and other potentially disadvantaged populations, which included an analysis of financial investment, access to transportation infrastructure, pedestrian and bicycle safety, and pavement and bridge conditions. No potential disproportionate and adverse impacts were identified.

Sources

SPC uses the most recent data from the Census and/or the American Community Survey (ACS) to identify and locate low income, minority, and other communities of concern within the southwestern Pennsylvania region. The equity analysis (*Demographics and Burdens and Benefits*) component of this report utilizes the 2017 – 2021 ACS 5-Year Estimates, the most recent as of Spring 2023. Data is used to analyze any changes in the region's demographic profile, map low income and minority populations, and study the potential benefits or burdens of projects on the LRTP to these populations. An analysis of roadway and bridge asset condition and financial investments relative to low income and minority populations is also used to mitigate any potentially disproportionately negative effects of the LRP.

The Public Participation Process

SPC ensures that low income, minority, and potentially disadvantaged populations are correctly identified and subsequently engaged in each step of the transportation planning process. This allows SPC and its planning partners to appropriately weigh the effects of individual projects on the populations they serve. Input from the public and relevant organizations is incorporated at each stage of the LRP development process, from the assessment of regional needs to the production of the final plan report.



To foster community engagement in a region as large as Southwestern Pennsylvania, SPC develops and maintains an outreach program designed to bring information to the community, rather than expecting residents to come to SPC. Public meetings for project-level improvements are held in the locality affected by proposed actions either in person or virtually. Public meetings for regional planning and programming efforts, such as the Long Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP) are also held in person throughout the region in addition to virtually to accommodate all public needs.

Public Participation Panels

To encourage public participation, SPC has established working groups in each county, called Public Participation Panels (PPP). Panel membership is designed to be reflective of the social and economic character of the county population. Community leaders, representatives of social service agencies, and area residents are represented on each PPP in order to promote broad public awareness of participation opportunities.

To communicate with as many of the region's residents as possible, SPC has cultivated relationships with regional planning partners, local service organizations, faith-based groups, cultural groups, and other relevant persons and organizations. These relationships permit SPC to continually expand its outreach and to strive to enable all area residents to actively participate in the transportation planning process.

Public Meetings

Public Participation Panel meetings and the public meetings that immediately follow each PPP meeting typically include an interactive workshop in which area residents are encouraged to discuss transportation plans and programs with SPC staff, county representatives, local transit service providers and PennDOT District staff. They also include an informational session on transportation planning and provide an opportunity for the public to submit their formal comments.

SPC's outreach program ensures that meetings are held in diverse neighborhoods and communities, from urban centers to rural areas. All in-person public meetings are held in centralized locations which are ADA accessible and, whenever possible, are served by fixed-route public transportation. Public meetings are also held virtually as requested by local leaders. Information on public transportation options is included in meeting announcements, as well as SPC's CommuteInfo website.

SPC's meeting notification database is updated regularly to ensure that all relevant service providers, community groups, and others are involved in the public outreach process. Involving these groups increases interest and participation in these public meetings and promotes collaboration and information sharing at other community events. Meeting notices are also published in regional newspapers and minority media.

To make public documents readily available, SPC maintains a document review network that includes regional libraries, ten-member county planning offices, and the office of the City of Pittsburgh Department of Mobility and Infrastructure.

Providing Accessible Information

In 2021, SPC adopted an updated Public Participation Plan for the region. This plan provides guidance on SPC's increased use of web-based technology to enhance the public involvement process.

In addition to information distributed via email newsletters or public meetings, SPC maintains a Public Participation Portal on its website. The Portal's purpose is to create an easy-to-access tool for the public to review information regarding regional projects and programs. It also provides a forum for open dialogue between the public and SPC staff and planning partners, where parties can submit comments and ideas, ask questions, and provide feedback on the public participation process. Members of the public can also submit email comments to comments@spcregion.org.

SPC's website, which was updated in the beginning of 2020, is continually expanding to enhance our ability to disseminate information and collect public input efficiently. The public can review documents and utilize direct links to submit input. For non-native English speakers, illustrative graphics and information on obtaining translated documents and interpretation services are available. SPC also uses social media channels such as Facebook, Twitter, LinkedIn, Instagram, and YouTube to reach a wider audience. SPC has also curated a social media toolkit for the ten-counties and the City of Pittsburgh that they can use to promote the PPP meetings.

Reaching Communities of Concern

Environmental Justice Populations are federally defined as being minority and/or low income; however, other demographic groups may be underserved in the transportation planning process. Older adults, people with disabilities, households with no vehicle or internet access, and non-English speakers also face challenges when attempting to engage with and receive equitable benefits from transportation systems. Because the FHWA Order on Environmental Justice encourages MPOs to identify and address the transportation needs of *any* groups who have been traditionally underserved by the transportation planning process, SPC included mapping for all of the groups denoted above in the LTRP equity analysis.

Efforts to engage these populations occur throughout the planning process. SPC asks the chairpersons of each of the ten PPPs to help identify ways in which public information sharing, public meeting attendance, and participant diversity could be enhanced in their counties. Furthermore, SPC continues to work with the Allegheny County Task Force on Disabilities, regional health and human service providers, and community service agencies to inform their clients on opportunities to participate and provide input.

SPC also works with the City of Pittsburgh's "Welcoming Pittsburgh" initiative—a consortium of local individuals creating a grassroots, comprehensive program to make Pittsburgh welcoming to immigrants. To serve all residents equitably, SPC publishes essential information in all of the region's most spoken languages, including English, Spanish, Italian, Traditional Chinese, and in Indic languages upon request. Materials are available in other languages and formats upon request.

Conducting the Equity Analysis

While the public participation component of Environmental Justice is continuous, the Environmental Justice (equity) analysis of the LRP is conducted prior to the approval of the fiscally constrained project list in order to ensure that the implementation of the TIP will not have any “disproportionately high and adverse” effects on minority and low-income population.

FHWA and USDOT EJ Orders state that:

A disproportionately adverse effect is one that (1) is predominately borne by a minority population and/or a low income population; or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population. Figure 1, found in Appendix A – Report on Environmental Justice Mapping, illustrates the spatial distribution of Environmental Justice Census Block Groups in southwestern Pennsylvania.

The equity analysis conducted by SPC also maps the locations of other traditionally underserved populations that are defined in the Title VI of the Civil Rights Act and subsequent nondiscrimination laws, as referenced on page 1-2 – older adults, those with disabilities, and those with limited English proficiency. Areas that have high concentrations of households with no access to a vehicle and/or the internet are mapped to determine where non-roadway related improvements, programs and strategies might be of benefit.

To identify how the burdens and benefits of transportation improvements are distributed, an updated demographic profile of the SPC region was utilized, and a series of analyses were completed using GIS. The section which follows summarizes the steps used to complete these analyses.

Demographic Profile

American Community Survey (ACS) 2017-2021 Five-Year Estimates were used to create the demographic profile of the SPC region. All analyses use USDOT definitions of minority and low-income populations, which can be found in Appendix B of this document.

Minority and Low-Income Populations

According to the 2017-2021 ACS, 15.05% of residents in the SPC region identify as minorities² and 11.42% of household incomes are living below the poverty level (low income).³

² For the purposes of this report, Total Minority Population is the difference between the Total Population and the Majority Population, where the Majority Population is “white persons of one race only, not Hispanic or Latino”

³ As per USDOT definitions; Source: 2017-2021 American Community Survey 5-Year Estimates

Figure 1 highlights block groups wherein the percent of minority residents and/or households below the poverty level exceeds the regional average. These are considered Environmental Justice Block Groups. These block groups include 71.7% of the region's households in poverty and 74.2% of the region's minority population.

Figures 1.1 and 1.2 illustrate a gradient scale of minority populations and low income households respectively, which provides additional perspective on the levels of need across the region. They also depict a dot density analysis, which permits a better understanding of the spread of low income households and minority populations across the region.

In the SPC region, minority populations are found most frequently in older urban communities, sometimes overlapping with low income populations. However, there is also a significant distribution of low-income populations across the periphery of the region, specifically in rural communities. Understanding the multifaceted nature of these populations is important in developing a meaningful transportation investment plan.

Other Traditionally Underserved Populations

The FHWA Order on Environmental Justice encourages MPOs to identify and address the transportation needs of any individuals or groups who have been or have the potential to be underserved by the transportation planning process. SPC included mapping for three additional population groups in its equity analysis: older adults, people with disabilities, and persons with limited English proficiency (LEP). These are groups assured fair and equitable consideration in the transportation planning and programming process under Title VI assurances, policies, and program objectives. SPC also identified households without vehicles and households without access to the internet as part of its benefits and burdens analysis.⁴

Older adults are defined by the ACS as persons aged 65 and older. As of the most recent ACS, there are 515,249 older adults in the SPC region, representing 20% of the region's total population. As illustrated in Figure 2, older adults were found to be widely distributed throughout the region, with concentrations in both the region's older urban centers and its peripheral rural communities.

The ACS uses six basic disability types in their definition of a person with a disability. These include visual, hearing, cognitive, ambulatory, self-care, and independent living disability types. According to the 2021 ACS, 14.9% of the region's adult, non-institutionalized population has a disability. As depicted in Figure 3, this population is spread throughout the region.⁵

The ACS measures populations with limited English proficiency by whether a person who speaks English as their second language can speak it "less than very well". The large majority of persons in the SPC region speak English as their first language. According to the 2020 ACS, about 1.5% of

⁴ Population definitions are drawn from the ACS; Source: American Community Survey 2021 Subject Definitions

⁵ ACS Disability Data is only available at the census tract level – which is used in this analysis

the regional population self-identified as speaking English “less than very well”. As illustrated in Figure 4, this population is widely spread throughout the region.

As telecommuting for school and work becomes more widespread, SPC identified homes without access to the internet in our region. According to the 2020 ACS, 130,612 households in the region reported having no internet access. This represents about 11.9% of the region's population. As illustrated in Figure 5, this population is concentrated in the rural area, around the boundaries of the region.

Finally, according to the ACS 10% of the households in the region have no available vehicle at home. As depicted in Figure 6, this population is also widely spread throughout the region.

Population Change

According to the 2017-2021 ACS estimates, the SPC region's total population has decreased by 2,236 since the 2010 Decennial Census. County populations have risen as much as 22,768 in Allegheny County, while Westmoreland County has decreased by 10,062. While the majority population has declined by more than 72,000, the minority population has increased by more than 68,000 residents. Table 1 summarizes estimates of the population change in the region since the 2010 Census.

Table 1 Population Change in SPC Region								
County	2010 Census				2017 - 2021 ACS 5 Year Estimates			
	Total Population	Majority Population	Minority Population	Percent Minority Population	Total Population	Majority Population	Minority Population	Percent Minority Population
Allegheny	1,223,348	986,212	237,136	19.38%	1,246,116	964,740	281,376	22.58%
Armstrong	68,941	67,326	1,615	2.34%	65,967	63,675	2,292	3.47%
Beaver	170,539	154,196	16,343	9.58%	168,260	148,795	19,465	11.57%
Butler	183,862	176,259	7,603	4.14%	192,561	180,801	11,760	6.11%
Fayette	136,606	126,888	9,718	7.11%	129,443	117,573	11,870	9.17%
Greene	38,686	36,409	2,277	5.89%	36,248	33,418	2,830	7.81%
Indiana	88,880	83,864	5,016	5.64%	83,620	77,683	5,937	7.10%
Lawrence	91,108	84,872	6,236	6.84%	86,311	78,411	7,900	9.15%
Washington	207,820	194,171	13,649	6.57%	209,090	190,470	18,620	8.91%
Westmoreland	365,169	346,111	19,058	5.22%	355,107	330,055	25,052	7.05%
SPC Region	2,574,959	2,256,308	318,651	12.37%	2,572,723	2,185,621	387,102	15.05%

Table 2 displays the number of households below the poverty level as of the most recent ACS estimates. Despite a loss of population, the number of households in the region continues to grow. The number of households in poverty also decreases by over 11,000. While indicative of a positive trend for the region, SPC's planning process will continue to monitor population change and conduct public outreach to ensure that all of the region's populations have equal access to resources.

Table 2			
Change in Households Below the Poverty Level in SPC Region			
	2010 Census	2017 - 2021 ACS 5 Year Estimates	Difference
Total Households in Region	1,075,052	1,098,455	23,403
Households in Poverty	136,769	125,448	-11,321
% of Total Households	12.70%	11.42%	-1.28%

Benefits and Burdens

To conduct equitable transportation planning and programming, an assessment of the potential benefits or burdens to different populations is undertaken. Transportation projects can produce benefits by increasing access to resources, improving health and mobility, as well as enhancing safety. However, when applied unfairly they can burden communities who are not afforded the same level of investment. For example, mid-century projects that increased mobility in one community often cut other communities off from central business districts. Increased investment in one part of a region could result in other areas being neglected. A benefits and burdens analysis is conducted to make sure that the benefits of SPC's Long-Range Transportation Program will be shared equally across the region, and that the burdens created by new projects are not borne by one population over any other.

Current Conditions

A conditions analysis was completed to understand the impact of transportation programming on low income and minority communities, and to ensure that areas of need were being appropriately targeted. Using GIS, bridge conditions and road conditions (2023 PennDOT data) were compared to low income and minority population intervals. An overview of public transit stop locations (2022 PAAC data and 2022 SPC in-house data) and an analysis of pedestrian and bicyclist safety relative to low income and minority populations was also conducted.

In these analyses, Census Block Groups wherein the percent of minorities and/or households below the poverty level exceeds the regional average percentage are classified as EJ Block Groups (see Figure 1).

Table 3 outlines bridge conditions in relation to low income and minority communities

Table 3 Southwestern Pennsylvania 2050 Long Range Plan Bridge Condition in Relation to Environmental Justice Block Groups					
Asset Condition	Total in Region	Total in EJ Minority Block Groups	% in EJ Minority Block Groups	Total in EJ Low Income Block Groups	% in EJ Low Income Block Groups
State Owned All Bridges	5290	613	11.6%	1746	33.0%
State Owned "Poor" Bridges	569	64	11.2%	206	36.2%
Local Owned All Bridges	4708	552	11.7%	1493	31.7%
Local "Poor" Bridges	396	73	18.4%	164	41.4%
Region Total Bridges	9998	1165	11.7%	3239	32.4%
Region "Poor" Bridges	965	137	14.2%	370	38.3%

The analysis shows that 11.7% of total regional bridges are located in census blocks with greater than the regional average of minority population, and that 14.2% of the total poor bridges in the region are in these census blocks.

It also shows that 32.4% of all state- and locally-owned bridges are located in census blocks with greater than the regional average of low-income households, and that 38.3% of total structurally deficient or "poor" bridges in the region are in these census blocks.

Table 4 depicts state road conditions in relation to low income and minority communities:

Table 4 Southwestern Pennsylvania 2050 Long Range Plan State Road Condition in Relation to Environmental Justice Block Groups					
Road Condition (IRI Quality Rating)	Total Mileage	Total in EJ Minority Block Groups	% in EJ Minority Block Groups	Total in EJ Low Income Block Groups	% in EJ Low Income Block Groups
Excellent	1854	202	10.9%	703	37.9%
Good	2284	415	18.2%	927	40.6%
Fair	1804	332	18.4%	760	42.1%
Poor	2808	261	9.3%	1195	42.6%
Other	1156	539	46.6%	597	51.6%
Total	9906	1749	17.7%	4182	42.2%

The analysis shows that 17.7% of the region's state roads are located within census blocks with greater than the regional average of minority population and 9.3% of the regional state poor roadway is located in these census blocks.

Similarly, 42.2% of the region's state roads are located within census blocks with greater than the regional average of low-income households, and 42.6% of the regional state poor roadway is located in these census blocks.

Table 5 outlines public transit stops relative to low income and minority communities:

Table 5 Southwestern Pennsylvania 2050 Long Range Plan Public Transit Stops in Relation to Environmental Justice Block Groups		
Classification	Port Authority of Allegheny County (PAAC) Stops	Non PAAC Stops
Total Stops in Region	6796	1614
Stops in EJ Minority Block Groups	4331	579
<i>% in EJ Minority Block Groups</i>	<i>63.7%</i>	<i>35.9%</i>
Stops in EJ Low Income Block Groups	3585	915
<i>% in EJ Low Income Block Groups</i>	<i>52.8%</i>	<i>56.7%</i>
Stops in High Disability Tracts	3593	1074
<i>% in High Disability Tracts</i>	<i>52.9%</i>	<i>66.5%</i>
Stops in Zero Vehicle Tracts	3914	839
<i>% in Zero Vehicle Tracts</i>	<i>57.6%</i>	<i>52.0%</i>

The analysis shows that a significant number of public transit stops are located in census blocks or tracts with greater than the regional average of minority and disabled populations and low-income and zero vehicle households. This is likely highly correlated with the high density of both transit stops and the aforementioned populations located in Allegheny County, and does not mean that transit needs on the periphery of the region are being met to the greatest ability. SPC works continuously with the Port Authority of Allegheny County and other transit providers and public organizations to identify areas of need.

Table 6 uses 2017-2021 PennDOT crash data to detail bicycle and pedestrian crashes relative to low income and minority communities:

Table 6 Southwestern Pennsylvania 2050 Long Range Plan Pedestrian and Bicycle Crashes in Relation to Environmental Justice Block Groups				
Crash Classification	Low Income Block Groups	Minority Block Groups	Low Income and Minority Block Groups	Regional Total
Pedestrian Crashes	1203	1401	905	2334
<i>Percent of Pedestrian Crashes</i>	<i>51.5%</i>	<i>60.0%</i>	<i>38.8%</i>	<i>100%</i>
Bicycle Crashes	238	240	154	461
<i>Percent of Bicycle Crashes</i>	<i>51.6%</i>	<i>52.06%</i>	<i>33.41%</i>	<i>100%</i>
Total Crashes	1441	1641	1059	2795
<i>Percent of Total Crashes</i>	<i>51.6%</i>	<i>58.7%</i>	<i>37.9%</i>	<i>100%</i>

The analysis shows that at least half of all regional bicycle and pedestrian crashes are located in census blocks or tracts with greater than the regional average of minority or low income populations. While this is likely at least partially correlated with the high density of pedestrians and bicyclists in low income and minority communities in the city center, it does not mean that the significance of these numbers should be overlooked. SPC continuously works with our planning partners, PennDOT, FHWA and other stakeholders to identify projects that will improve pedestrian and cyclist safety across the region. Environmental Justice is a metric of scoring the SPC TA Set-Aside and SMART programs, which specifically address pedestrian and bicycle safety and connectivity.

In the following equity analysis, Table 7 outlines the LRTP total investment amount and the percent that is directed towards low-income and minority populations. This investment aligns with the needs assessment above based on condition data in the region. SPC and its planning partners consistently monitor condition data when making decisions about where best to apply transportation programming and investment in the region.

Equity Analysis

The equity analysis portion of SPC’s Environmental Justice plan assesses the potential benefits and burdens that projects programmed on the 2050 Long Range Transportation Plan will have on low-income, minority, and other communities of concern. The primary analysis, illustrated in Figure 8, compares all of the 310 mappable transportation projects on the LRP to locations of minority and low-income populations in the region. This analysis is broken down to focus more on minority and low-income environmental justice communities in Figure 8.1 and Figure 8.2 respectively. These projects are grouped based on their investment categories: bridge preservation and reconstruction projects, roadway preservation and reconstruction projects, safety and efficiency/operations projects, slide correction projects, and new capacity and other (storm water management, study, congestion reduction, etc.) projects.

In addition to location specific improvements, the LRP contains a significant number of non-mappable projects, most notably the purchase of public transportation vehicles and capital maintenance to transit facilities. Also included in the LRP are bridge and roadway repair line items in which projects are defined at a later date. These line items act as contingencies for situations such as emergency repairs due to flooding, landslides or other unforeseen circumstances that may arise. These investments are not included in the EJ analysis because their locations are currently unspecified. Projects such as bus replacements and interstate highway improvements benefit the region as a whole and are expected to provide improved access and mobility to and within key employment centers including downtown Pittsburgh, as well as communities throughout the region.

As noted in Table 7, approximately 387,102 of the region's residents are classified as a minority; 74.2% of those persons reside in a Census Block Group that exceeds the regional average percentage (15.05%) of minority population. Similarly, there are 125,448 households in the region that are classified as being below the poverty level; 71.7% of which are within Census Block Groups that exceed the regional average percentage (11.42%) for households below the poverty level.

Table 7 Southwestern Pennsylvania 2050 Long Range Plan Investments in Relation to EJ Communities							
Community Type	Regional Total	*EJ Census Block Group Total	% Represented in EJ Block Groups	**# of Projects	% of Projects	***Total Investment (\$9,698,300,000)	% of Total Investment
Low-Income Households	125,448	89,915	71.7%	219	66.8%	\$4,036,192,500	41.6%
Minority Populations	387,102	287,411	74.2%	172	52.4%	\$3,412,583,400	35.2%
* The EJ Census Block totals represent 8.1% of the total households in the region and 11.1% of the total regional population (all races) **328 mappable projects found in the 2023 LRTP ***Total Investment is all mappable highway and bridge projects, not total amount invested in the TIP							

The majority of the projects on the 2050 Long Range Plan are essential maintenance and reconstruction projects. These and other projects were conscientiously chosen based on impacts to communities, specifically those with concentrated levels of low income households, minority populations, or other communities of concern. Based on the detailed project selection process and the above analysis, there is anticipated to be no unfair allocation of burdens or benefits to communities of concern via the implementation of the 2050 Long Range Plan.

Summary

Throughout the LRTP development process, SPC conducted outreach to area residents of all backgrounds and across diverse communities. Members of the public were invited to participate in the planning and development process, through submitting ideas and concerns, providing feedback on the existing TIP and LRTP, and developing values for the future of the region and its transportation network. Outreach to traditionally underserved populations, including those populations mapped in this report, was conducted. Vital documents associated with the LRTP planning process were made available in the predominant non-English languages of the region. Translations to additional language and alternate format documents were also available upon request. SPC continues to incorporate new guidance and methods of analyses into its Environmental Justice review process.

Environmental Justice is central to the vision of SPC's Long-Range Transportation Plan, *Smart Moves for a Changing Region*, which is to provide a "world-class, safe, well maintained and connected multimodal transportation system that provides mobility for all, empowers resilient and sustainable communities, and supports a globally competitive economy." Through its public participation panels, detailed project selection process, and discretionary funding programs, SPC strives to meet the tenets of Environmental Justice and serve as an inclusive planning organization.

An analysis of the impacts of the projects identified in the 2050 Long Range Plan demonstrates that benefits of the programmed LRTP projects and total investment of resources are equitable to populations who are traditionally or have the potential to be disadvantaged in the planning process. Furthermore, no population groups were found to be disproportionately or adversely affected by the implementation of the 2050 Long Range Plan.

The Environmental Justice process is ongoing, and SPC continues to conduct outreach, coordinate with relevant partners and stakeholders including FHWA and PennDOT to expand areas of analysis, and garner public input to have a growing level of public involvement in the transportation planning and development process. SPC also continues to look for ways to incorporate Justice 40 initiatives to our upcoming programs.

All materials contained in this report are available in electronic format on SPC's website: www.spcregion.org, as is an extensive library of maps and data.

Appendix A - List of Figures

- Figure 1. Low-Income and Minority Populations by Census Block Group
 - 1.1. Low-Income Population by Census Block Group, gradient map
 - 1.2. Minority Population by Census Block Group, gradient map
- Figure 2. Population Age 65 Years and Older by Census Block Group
- Figure 3. Population with a Disability by Census Tract
- Figure 4. Population Speaking English Less Than Very Well by Census Block Group
- Figure 5. Households with No Internet Access by Census Block Group
- Figure 6. Households with No Available Vehicle by Census Block Group
- Figure 7. All Mappable 2023 – 2026 TIP Projects with Environmental Justice Areas
- Figure 8. All Mappable LRTP Projects with Environmental Justice Areas
 - 8.1 Mappable TIP Projects with Low Income Population by Census Block Group, gradient map
 - 8.2 Mappable TIP Projects with Minority Population by Census Block Group, gradient map

Online Mapping:

Additional layers and mapping for these analyses at the following link: <https://bit.ly/3ygpSzl>

State and Local Bridge Conditions with Low Income and Minority Population

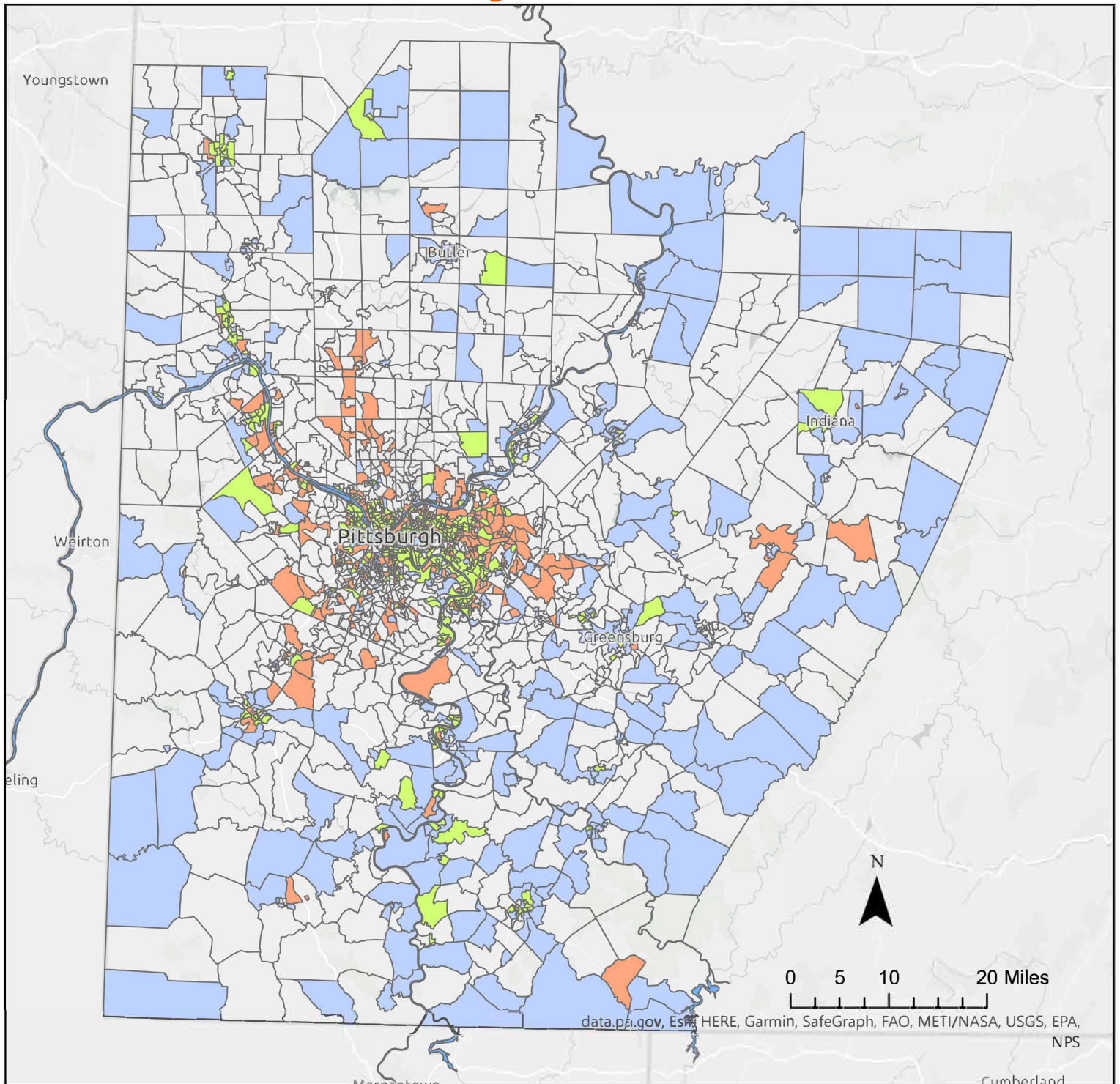
Road Conditions with Low Income and Minority Population

Transit Stops with Low Income and Minority Population

Transit Stops with Population with a Disability and Population with No Available Vehicle by Census Tract

Pedestrian and Bicycle Crashes with Low Income and Minority Populations

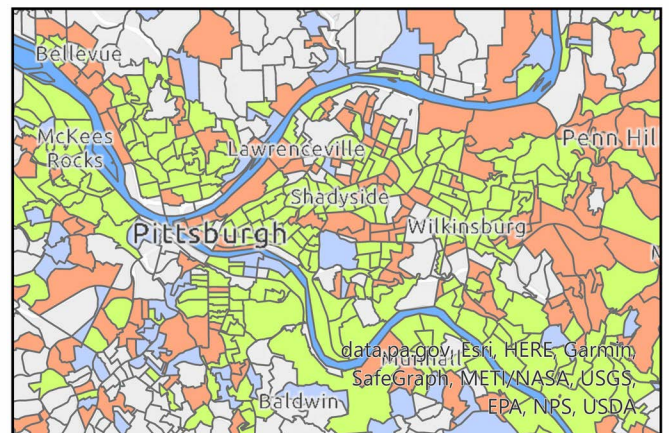
Low-Income Households and Minority Populations Above Regional Threshold



- Minority Communities**
Where the percentage minority population exceeds the regional average of 15.05%

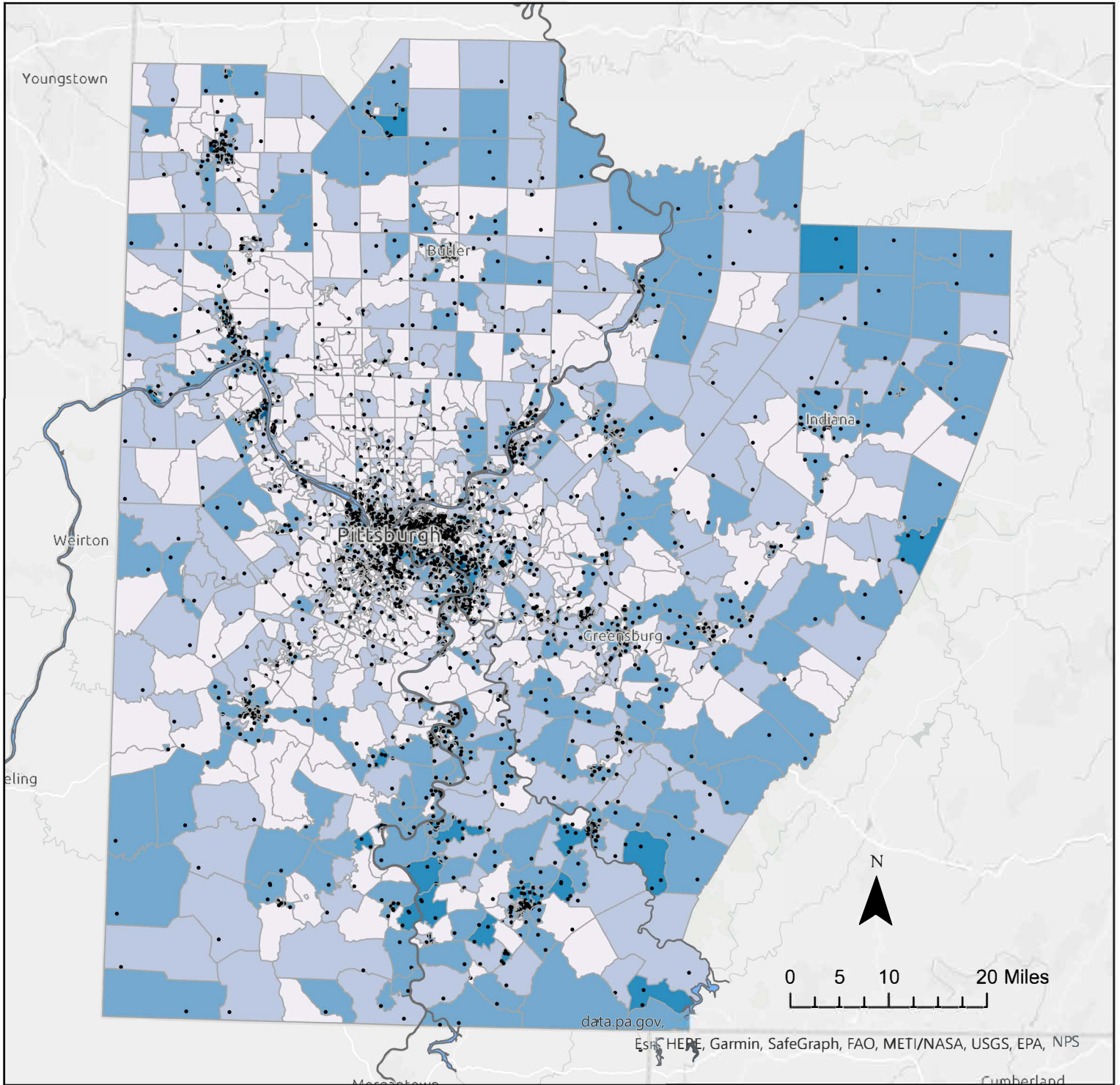
- Low-Income Communities**
Where the percentage of households below the poverty level exceeds the regional average of 11.42%

- Both Low-Income and Minority Communities**



Source: 2017-2021 American Community Survey (ACS) 5- Year Estimates by Census Block Group

Low-Income Population

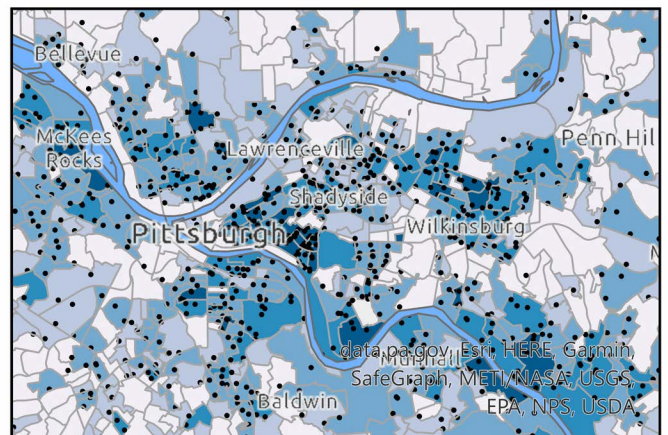


Low Income Population: The percentage of households below the poverty level in each census block group, with a regional average of 11.42%

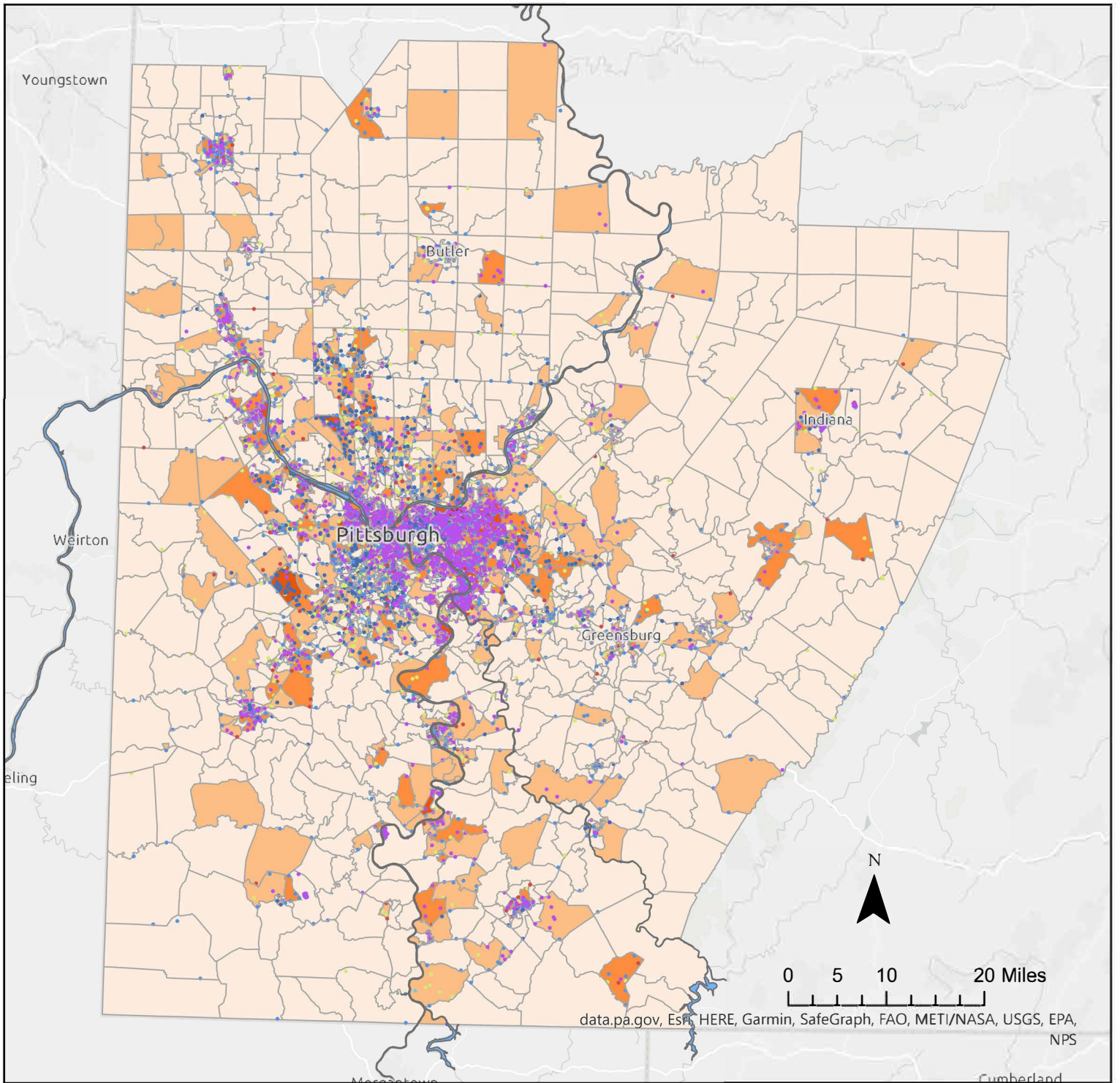
Percent Below Poverty Level:

- ≤6.2%
- ≤11.42%
- ≤25%
- ≤45%
- ≤77%

• 1 Dot = 50 households below poverty level



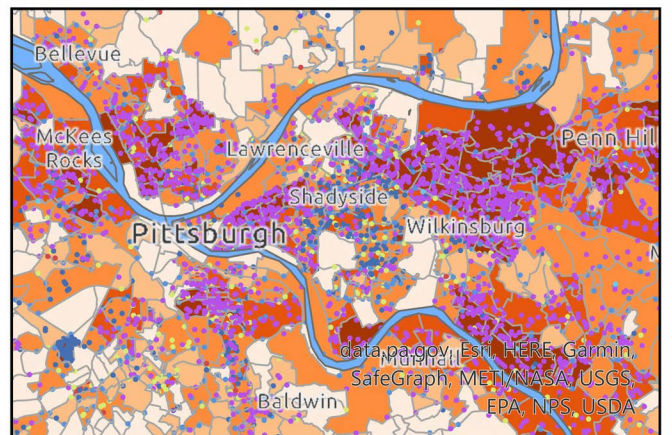
Minority Population



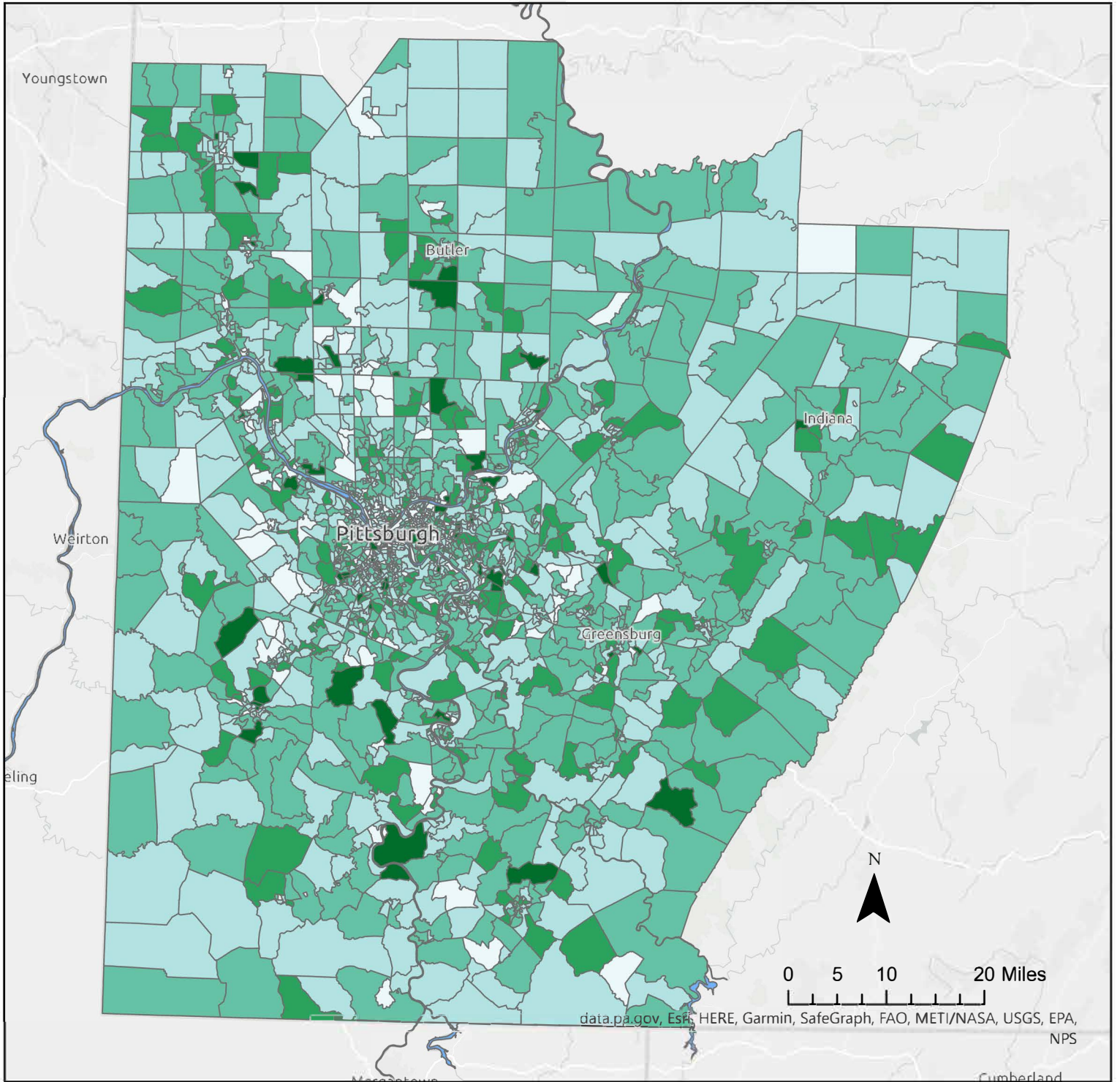
Minority Population

The percentage of people who identify as a minority in each census block group, with a regional average of 15.05%

- | | | |
|--|---------|--|
| | ≤7.5% | 1 Dot = 50 People |
| | ≤15.05% | • Black or African American |
| | ≤35% | • American Indian and Alaska Native |
| | ≤60% | • Asian |
| | ≤100% | • Native Hawaiian and Other Pacific Islander |
| | | • Hispanic or Latino: |
| | | • Other |
| | | • Two or more races |



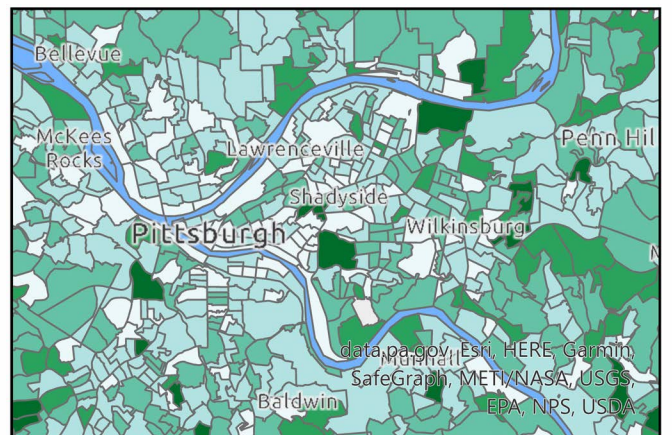
Population Age 65 or Older



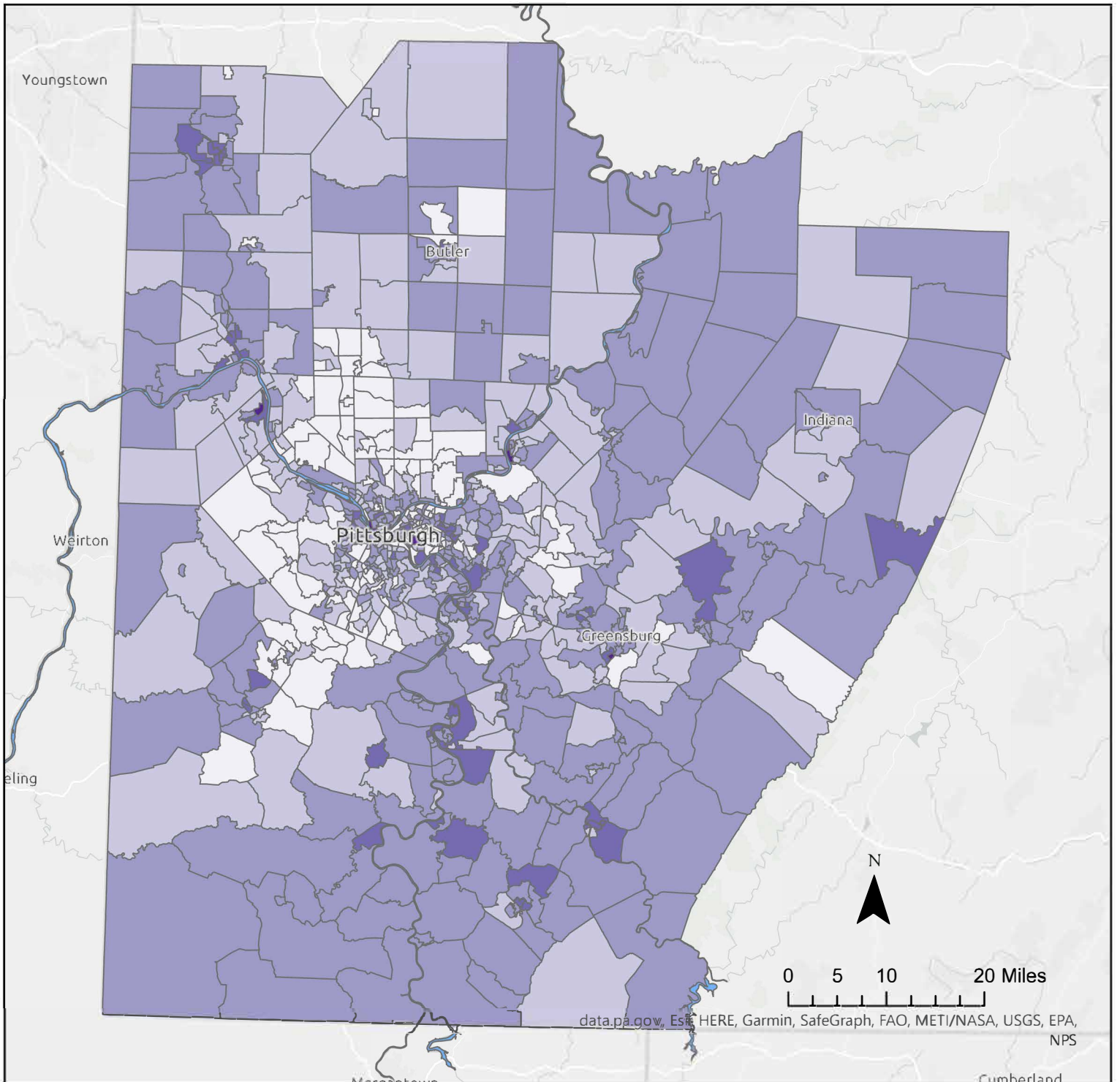
Population Age 65 and Older

The percentage of people who are age 65 and older in each census block group, with a regional average of 20%

- ≤10%
- ≤20%
- ≤30%
- ≤40%
- ≤75%



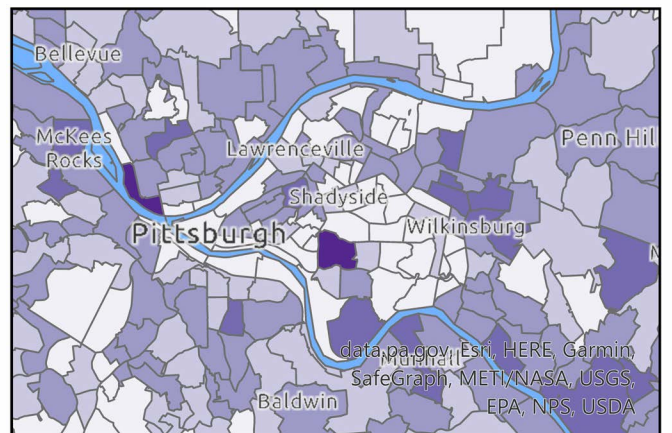
Population with Disabilities



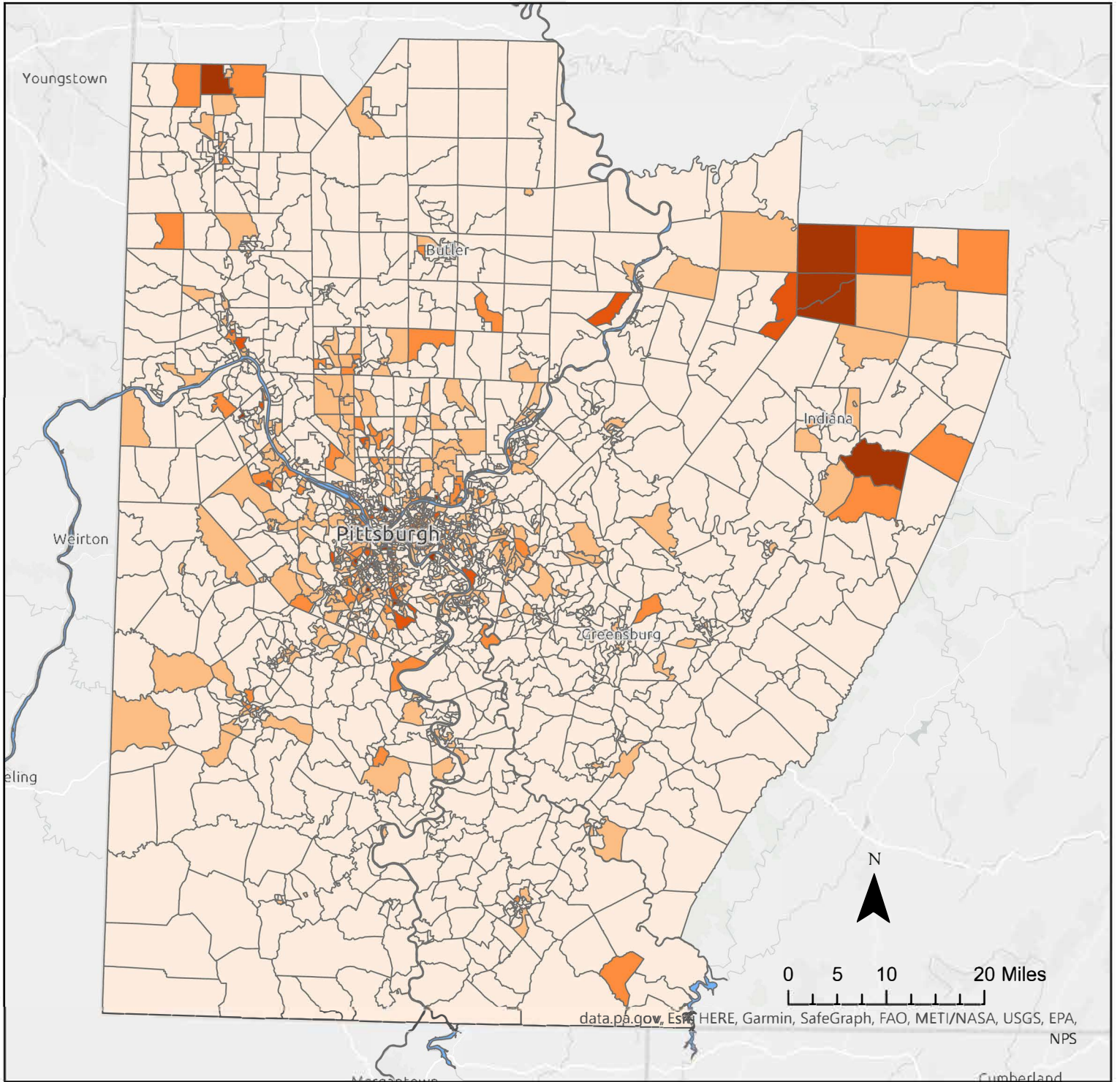
Population with Disabilities

The percentage of people with disabilities in each census tract, with a regional average of 14.9%

- ≤10%
- ≤14.9%
- ≤25%
- ≤40%
- ≤65.1%



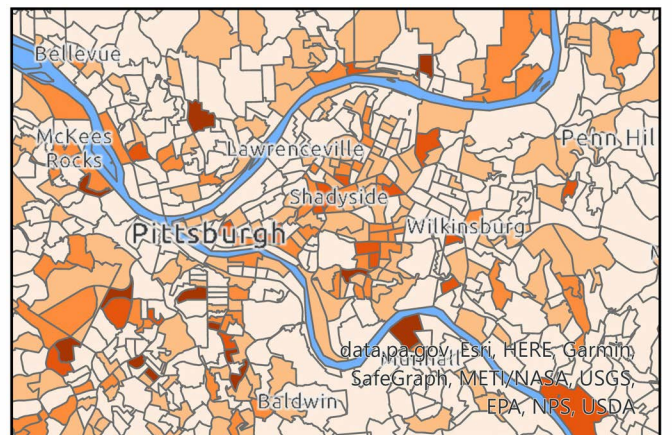
Population Speaking English "Less Than Very Well"



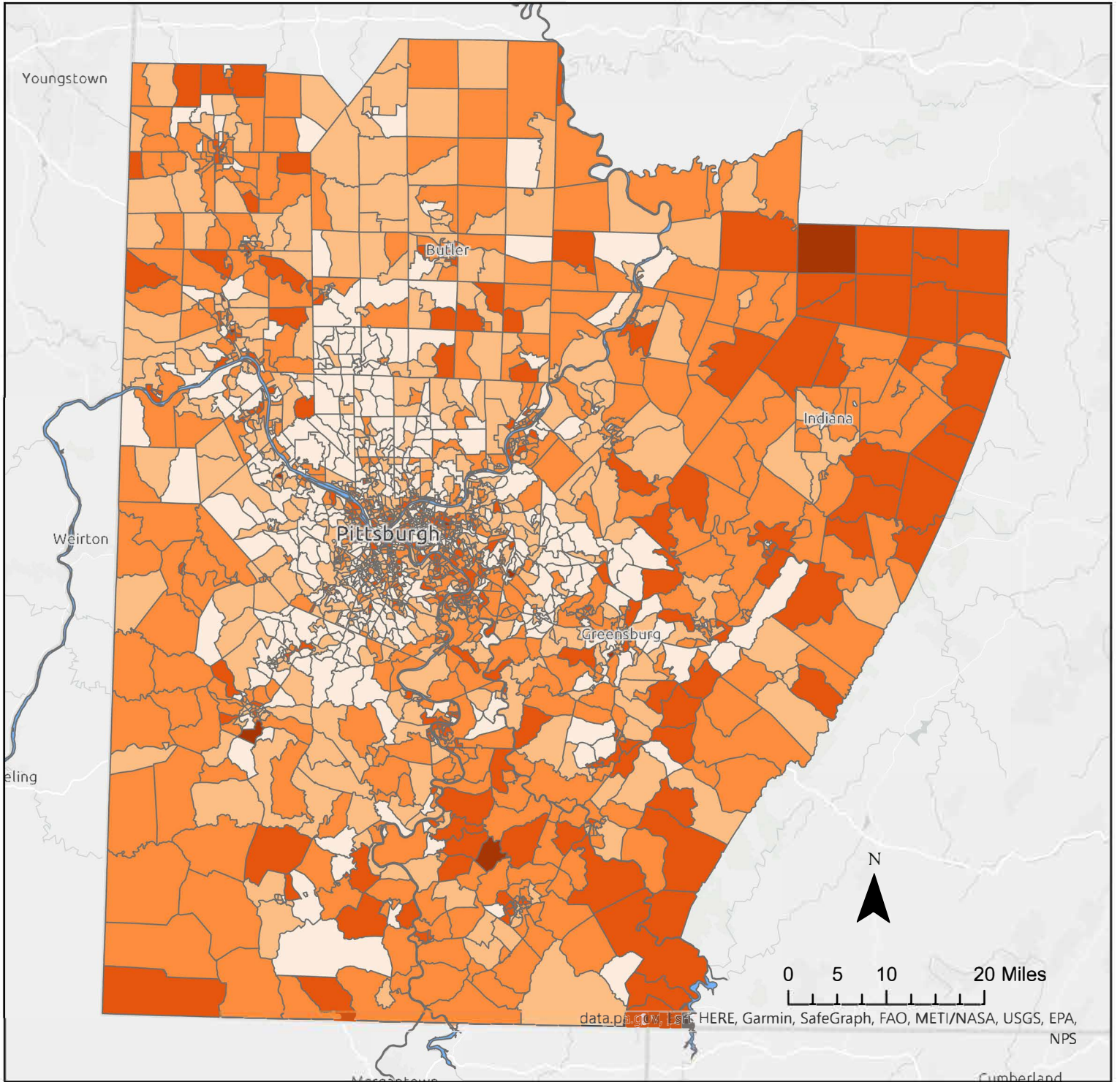
Population with Limited English Proficiency

The percentage of the population speaking English "less than very well" in each census tract, with a regional average of 1.5%

- ≤1.5%
- ≤5%
- ≤10%
- ≤15%
- ≤36%



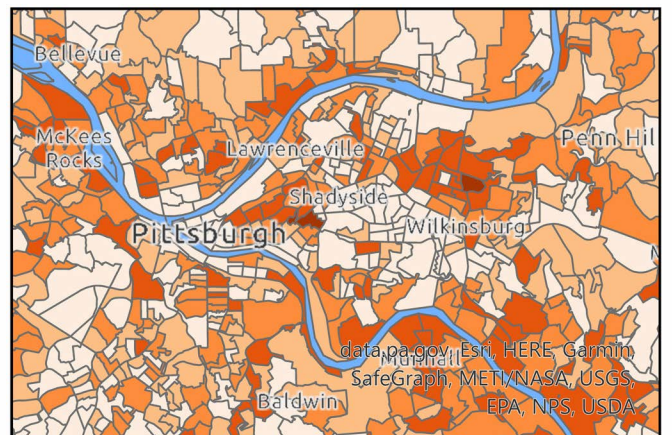
Households With No Internet Access



Households without Internet Access

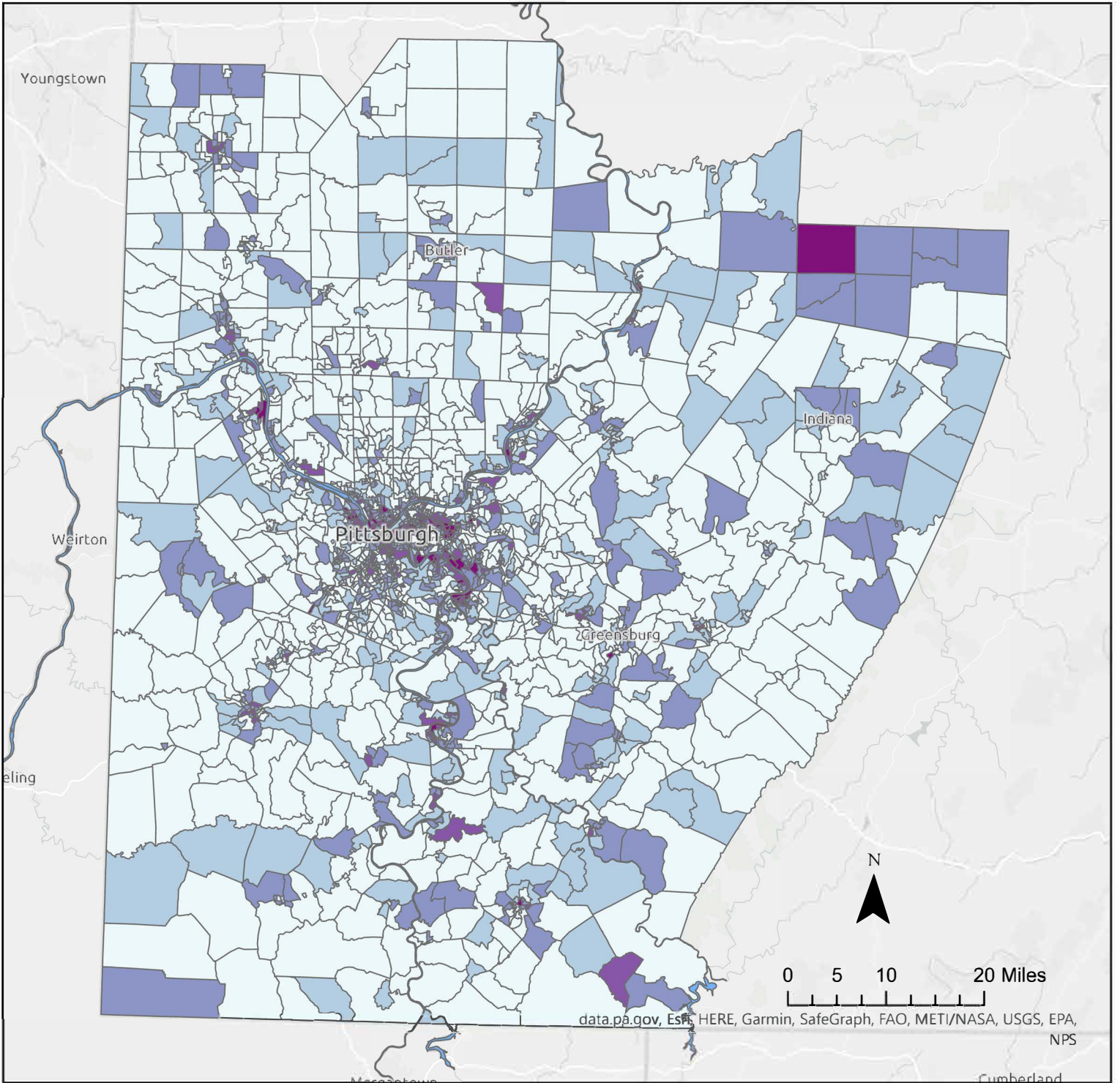
The percent of households with no Internet at home in each census tract, with a regional average of 11.9%

- ≤6%
- ≤11.9%
- ≤22%
- ≤44%
- ≤100%





Households With No Available Vehicle



Households with No Available Vehicle

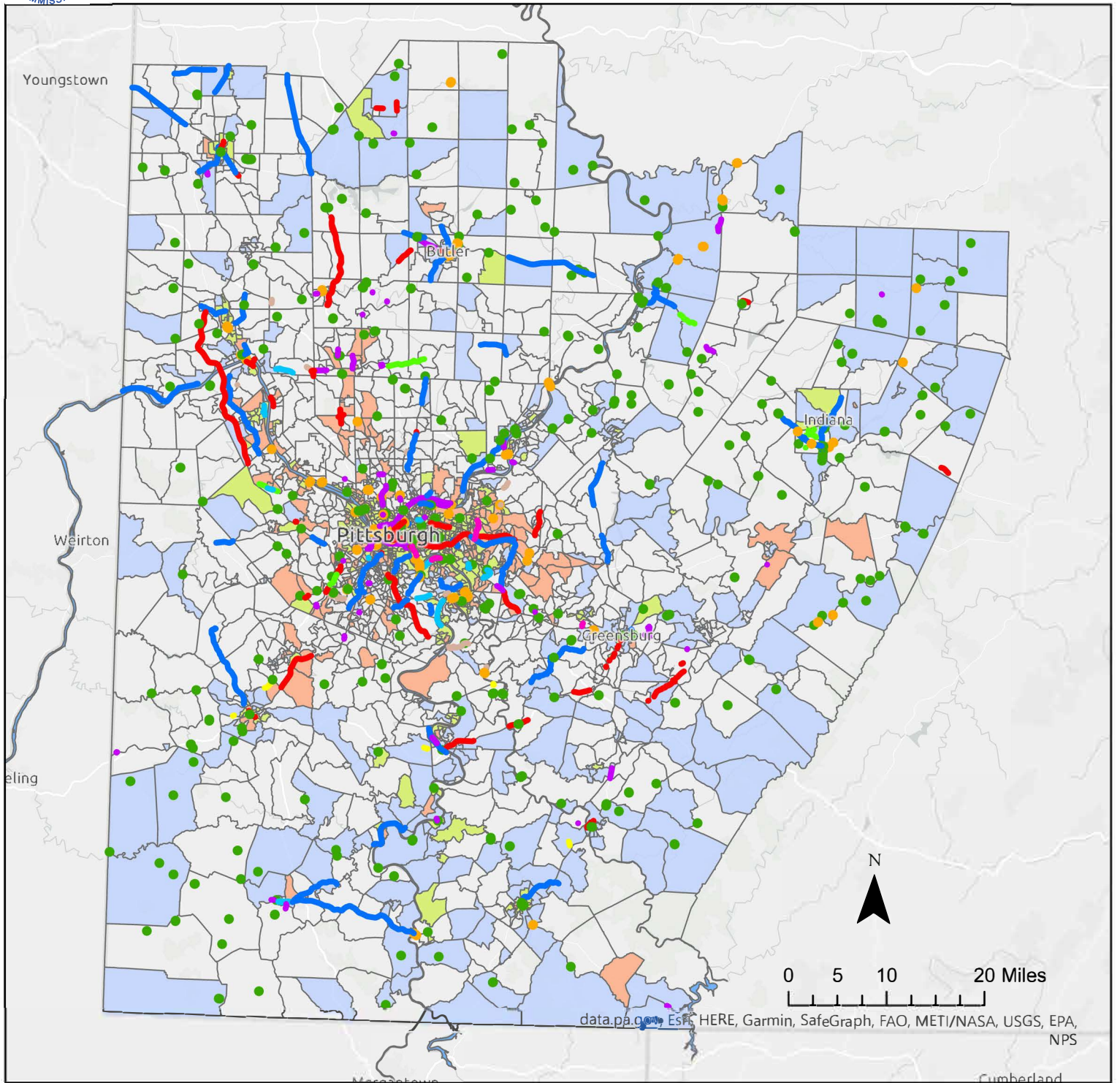
The percent of households with no available vehicle at home in each census tract, with a regional average of 10%

- ≤5%
- ≤10%
- ≤25%
- ≤45%
- ≤100%



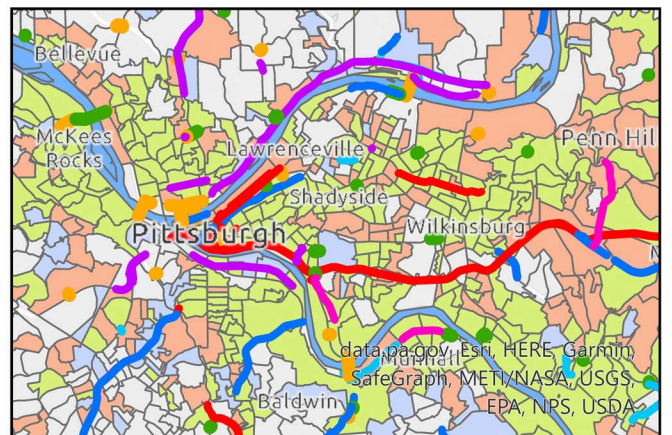


Mappable 2023 - 2026 TIP Projects with Environmental Justice Areas



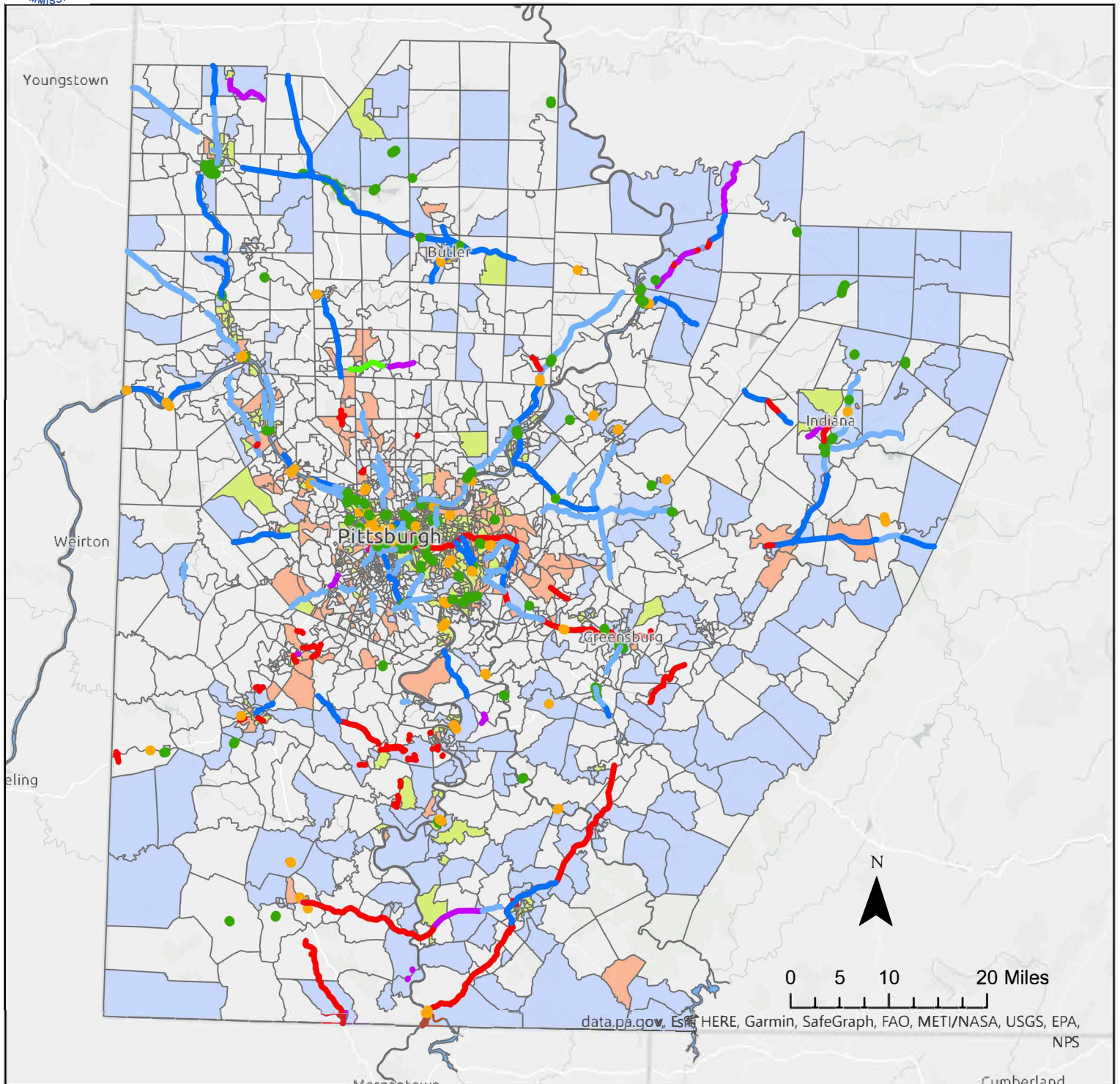
TIP Projects (as of April 2023)

- Bridge Preservation
- Bridge Reconstruction/Replacement
- Efficiency / Operations
- New Capacity
- Other: Design/Env
- Ped/Bike
- Roadway Preservation
- Roadway Reconstruction
- Safety
- Slides Correction
- Study

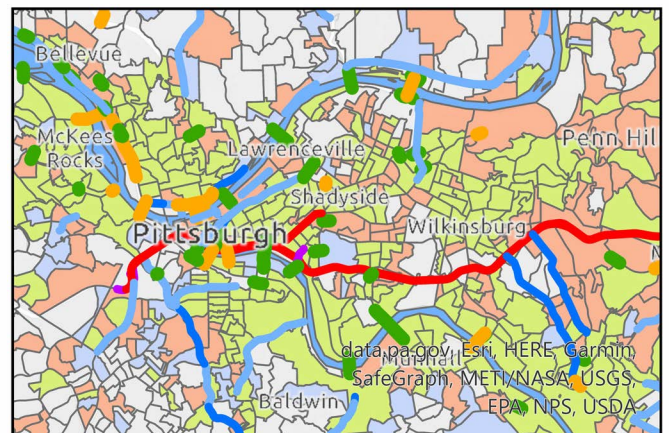


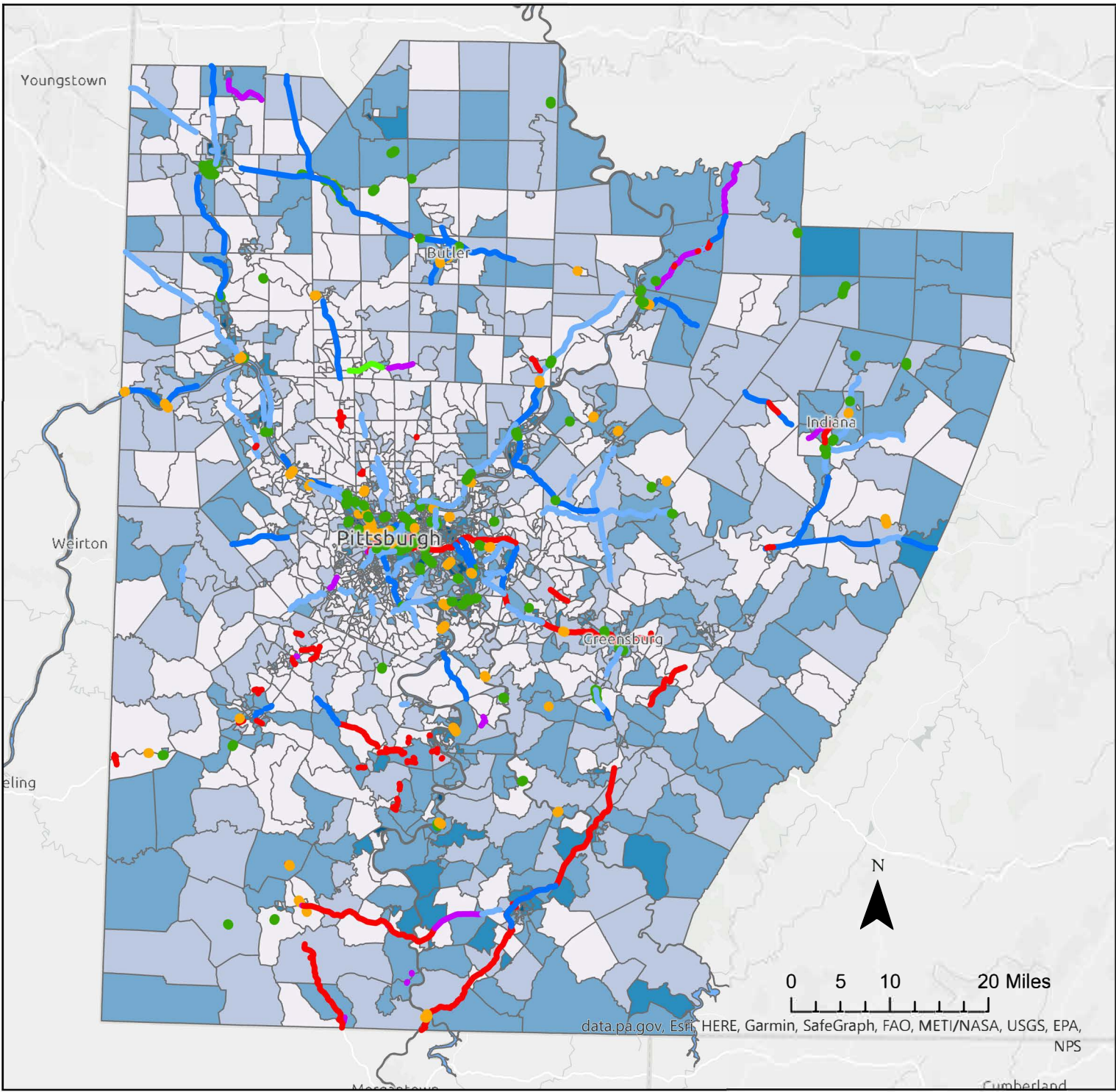
Source: 2017-2021 American Community Survey (ACS) 5- Year Estimates by Census Block Group

Mappable 2050 LRTP Projects with Environmental Justice Areas



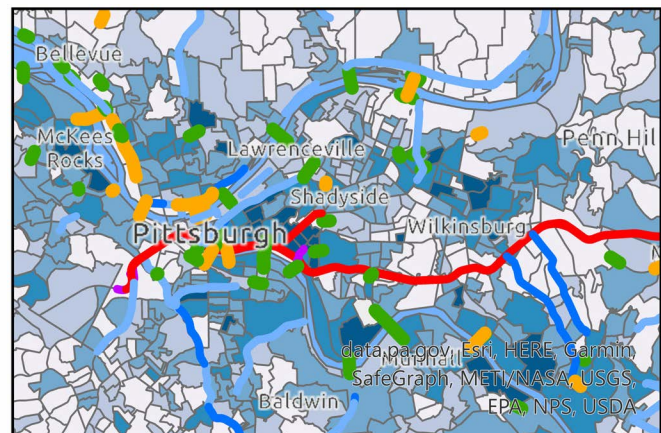
- Bridge Preservation
- Bridge Rehab/ Reconstruction
- Efficiency & Operations
- New Capacity
- Roadway Preservation
- Roadway Reconstruction
- Safety

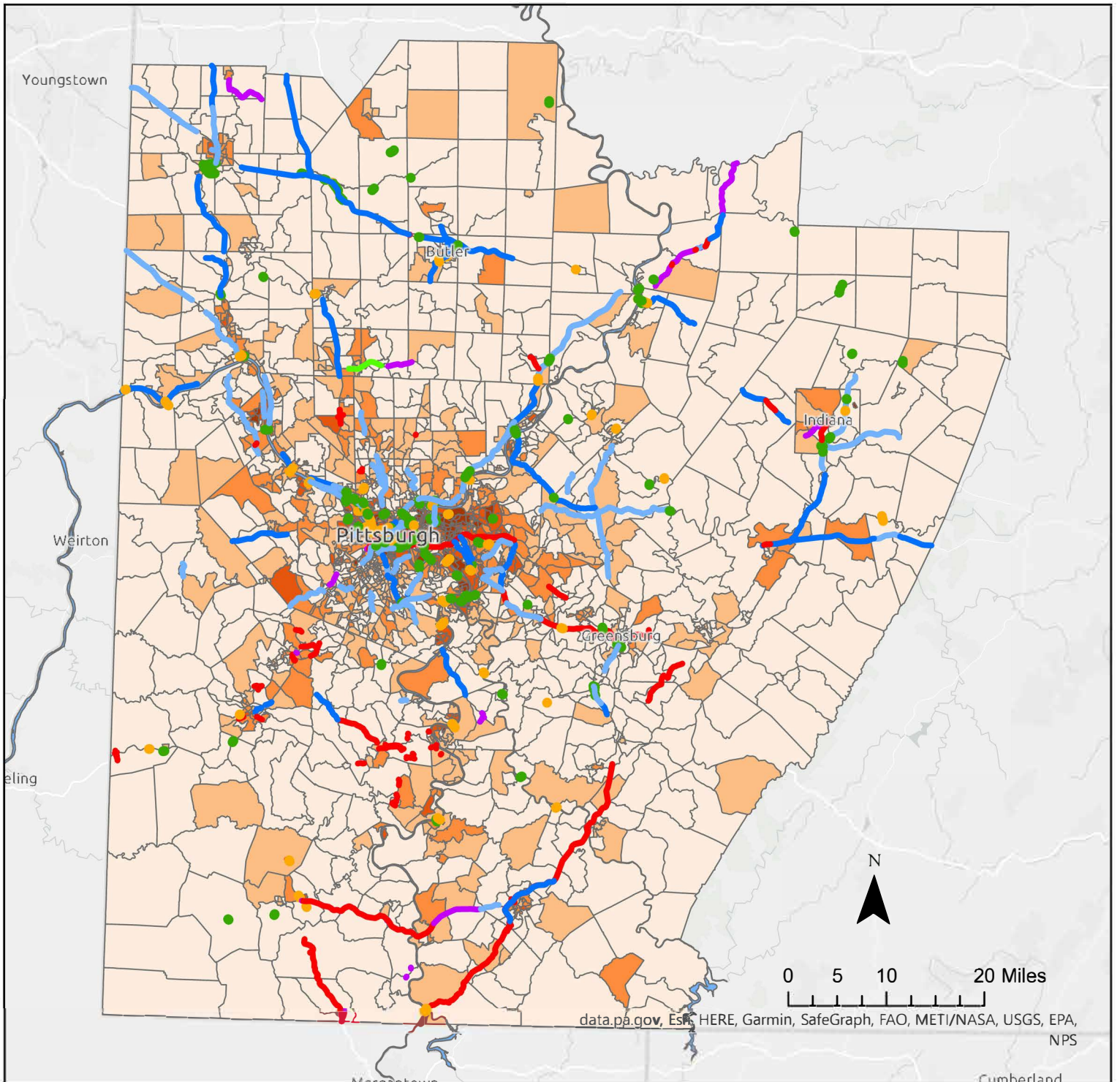




Low Income Population: The percentage of households below the poverty level in each census block group, with a regional average of 11.42%

- | | |
|--|---|
| <ul style="list-style-type: none"> ≤6.2% ≤11.42% ≤25% ≤45% ≤77% | <p>Investment</p> <ul style="list-style-type: none"> Bridge Preservation Bridge Rehab/ Reconstruction Efficiency & Operations New Capacity Roadway Preservation Roadway Reconstruction Safety |
|--|---|





Minority Population

The percentage of people who identify as a minority in each census block group, with a regional average of 15.05%

