



## CHAPTER 5. ENVIRONMENTAL JUSTICE

### INTRODUCTION

**Environmental Justice (EJ) is a process that ensures that the minority and low-income populations are not excluded from policy-setting or decision-making processes with regards to transportation and are also not negatively impacted by environmental burdens.**

The framework for the approach to environmental justice is found in Title VI of the 1964 Civil Rights Act. The Executive Order 12898, 'Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations' was signed on February 11, 1994. The Presidential memorandum accompanying EO 12898 identified Title VI of the Civil Rights Act of 1964 as one of several federal laws that should be applied 'to prevent minority communities and low-income communities from being subject to disproportionately high and adverse environmental effects.' According to the U.S. Department of Justice, '...the core tenet of environmental justice – that development and urban renewal benefitting a community as a whole not be unjustifiably purchased through the disproportionate allocation of its adverse environmental and health burdens on the community's minority – flows directly from the underlying principle of Title VI itself'.

The Executive Order identifies minority populations as belonging to any of the following groups:

- » Black - a person having origins from any of the black racial groups of Africa.
- » Hispanic or Latino - a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- » Asian-American - a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.
- » American Indian and Alaskan Native - a person having origins from any of the original people of North America, South America (including Central America) and who maintain cultural identification through tribal affiliation or community recognition: or
- » Native Hawaiian and Other Pacific Islander - people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- » Minority population means any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed DOT program, policy of activity.

The Executive Order defines low-income populations as those whose household incomes are at or below the U.S. Department of Health and Human Services poverty guidelines. There are three fundamental environmental justice principles:

- 1 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.
- 2 To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- 3 To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

## NWARPC ACTIVITIES

NWARPC's activities with regard to Environmental Justice are described in detail in two documents: The Public Participation Plan (PPP) and the Limited English Proficiency Plan (LEP).

The mobility needs of minority populations are identified through engagement efforts, data collection, and analysis of available Census data, public comment, and other available sources. The policy and guidance for public engagement is established in the NWARPC Public Participation Plan. NWARPC's policy for public engagement includes activities and outreach efforts such as soliciting the opinions of those under-served by existing transportation systems, including but not limited to, the transportation disadvantaged, minorities, elderly, low-income households, and people with disabilities. Also, NWARPC is committed to periodically reviewing adopted public comment processes to determine their effectiveness in assuring that the process provides full and open access to all, through surveys, public meetings, open houses, public notices, website posting, emails and public comments.

Data analyses using GIS and the Northwest Arkansas Travel Demand Model are key techniques used to identify and target underrepresented populations. NWARPC utilizes data for planning products and can identify other population groups by sex, age, persons per square mile, and persons over the age of 65, disabled population, zero car households, employment density and other population characteristics as needed.

The NWARPC's efforts in reaching people who have not been traditionally participating in the transportation process include translation and publication of all the public participation notices, surveys or announcements in Spanish on both the [nwarpc.org](http://nwarpc.org) website and the printed local media. NWARPC held public input meetings in public/community locations that were handicap accessible and accessible through public transit and pedestrian/bike facilities, such as public libraries or community centers. Online meetings were also made available to the general public due to Covid-19 pandemic restrictions.

The following measures were used to identify EJ populations in relation to transportation projects:

- Gathering and analyzing the 2010 Census Bureau's data, as well as the most recent ACS five-year estimates to depict the concentration and distribution of the minority and low-income populations across the MPA.
- Overlaying the 2045 MTP future road network with the population distribution estimates from the ACS to help determine where resources should be directed and recognize if environmental justice communities are adversely impacted or denied the benefits of the anticipated projects.
- Creating GIS maps and analysis of potential transit routes and stops that the two transit agencies in the region are planning in order to identify where minority and low-income population are concentrated in relation to these future routes.
- Coordinating with the communities that adopted the Northwest Arkansas Regional Bike and Pedestrian Master Plan and the Connect Northwest Arkansas 10-year Transit Development Plan in the development of pertinent data

and maps to identify areas of planned trails and transit routes that are accessible to minority and low-income populations.

### Minorities Distribution

Maps 5.1 - 5.6 in this chapter display locations of higher concentration of populations considered to be minority ethnicities in Benton and Washington Counties, and the MPA portion in McDonald County, MO. These include the percent of African-American, Asian-American, Pacific Islands population, Hispanic population and Native American population.

#### Benton County

Higher concentrations of minorities in Benton County can be found west of I-49, east of Lowell and Rogers, in Springdale; south of Bentonville, the eastern part of Centerton and west of US 59 and in the western part of the county.

#### Washington County

The highest distribution of minorities in Washington County can be found in the cities of Springdale and Fayetteville. The tracts east of Springdale have the highest concentration of minority population in the two-county region.

#### McDonald County

In the McDonald County portion of the MPA, the minority population concentration is represented in the western tracts, mainly the city of Pineville, MO.

### Analysis

An analysis of whether transportation projects either underserved or unduly impacted minority groups was performed by overlaying the developed list of financially constrained projects over a map depicting concentrations of minority groups. It was determined that the minority populations were neither underserved nor disproportionately impacted by adverse impacts.

### Low-income Distribution

The distribution of low-income population is also represented in Map 5.7. The highest percentages of low-income tracts are in the cities of Fayetteville, Johnson, Springdale, Siloam Springs and Pineville, MO; an area east of Springdale; and in northeastern Rogers. Other high percentages of low-income population are in the northwestern part of Benton County and the southwestern part of Washington County.

Projects such as the Northwest Arkansas Razorback Regional Greenway have completed a thorough Environmental Justice Analysis to ensure that minorities or low-income populations have not been adversely impacted by the project. The Razorback Regional Greenway is a multi-use shared-use trail that passes through an area of Springdale where low income and minority population residents live. The EJ analysis completed for this project provided the recommendations, analysis, and decision-making for the trail location of the Razorback Regional Greenway through this area, discussed the populations affected by the route and alignment, defined the impacts and benefits of the Greenway to these populations, and addressed other issues that have been resolved by the project sponsor and design team. The complete *Environmental Justice Analysis Northwest Arkansas Razorback Regional Greenway* document can be found at the [following link](#).

Transportation plans such as *Connect Northwest Arkansas – a 10-year Transit Development Plan* developed and adopted in 2020 identified both transit potential and need and ensured that while *Connect NWA* would work towards improving transit for everyone in the region, the region needs to take measures to maintain and improve connectivity for the most vulnerable populations of the region. This transit need is characterized by identifying areas with greater portions of the population who are low-income, minorities, elderly, disabled, and others and may face challenges related to transportation.

The transit need analysis in this plan assessed the study area's demographic characteristics to understand where people who are more likely to be dependent on public transportation are located throughout the region. Two subsets

of the study area population were defined in order to generate a better understanding of the region's transit needs: Transit-Dependent Population and Target Transit Rider Population (TTRP). These subsets create a measure of the

regional population who are more likely to rely on transit in comparison to the rest of the community. Transit-Dependent Population and TTRP measures are critical to the transit planning process because they show where in the study area transit service accessibility is important for everyday mobility.

### Transit-Dependent Population

The Transit-Dependent Population from the *Connect NWA* analysis results were determined based on a formula which quantifies the number of people in a community who are most likely to depend heavily on transit as their primary mode of transportation. Accordingly, Transit-Dependent Population measured captive riders (i.e., those whose mobility is almost entirely dependent on public transportation), therefore quantifying regional transit demand. The Transit-Dependent Population formula used in this analysis incorporates characteristics related to the legal ability (i.e., too young to drive) and access to a personal vehicle. The study used a three-step formula derived from the U.S. Department of Transportation (USDOT) to locate larger concentrations of driving-age citizens with limited to no access to personal automobiles. The analysis used information from the census block group level and the 2017 American Community Survey (ACS). The ACS data provides detailed demographic information applicable to Transit-Dependent Population calculations not attainable from the decennial census. The following displays the USDOT formula step by step:

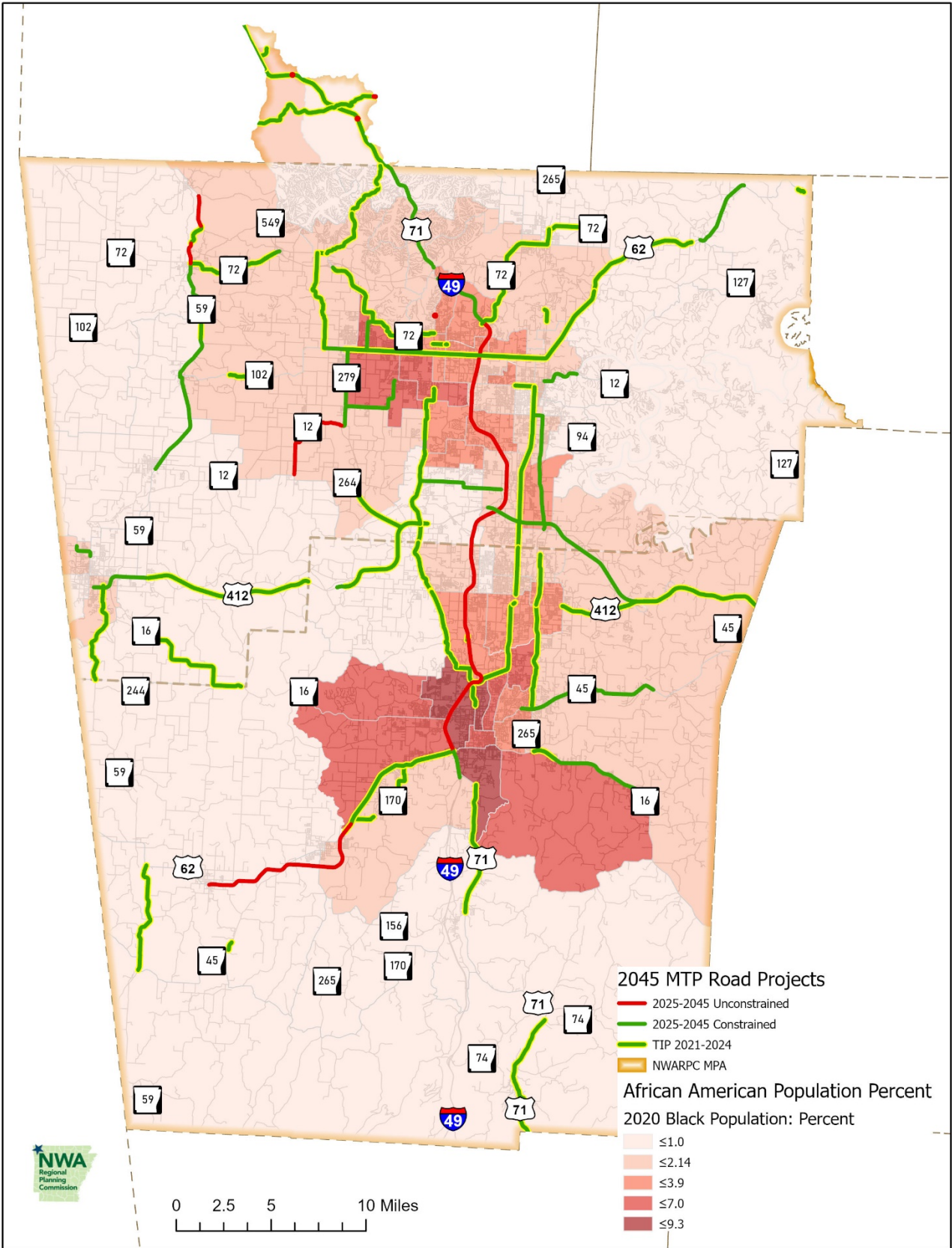
- 1. Household Drivers = (Population Aged 18 and Over) - (Persons Living in Group Quarters)**
- 2. Transit-Dependent Household Population = (Household Drivers) - (Vehicles Available)**
- 3. Transit-Dependent Population = (Transit-Dependent Household Population) + (Population Aged 17 or Under) + (Non-Institutionalized Population Living in Group Quarters)**

**Step 1** of the formula identifies the number of people living in households who are legally eligible to drive based on their age. Population in Group Quarters is subtracted in this part because group quarters are not considered households. It is important to note that even though 16-and 17-year-olds may be legally eligible to drive, they are less likely to have regular access to a personal vehicle to accommodate most of their transportation needs. The ACS also does not provide data sets with breaking points at the age of 16.

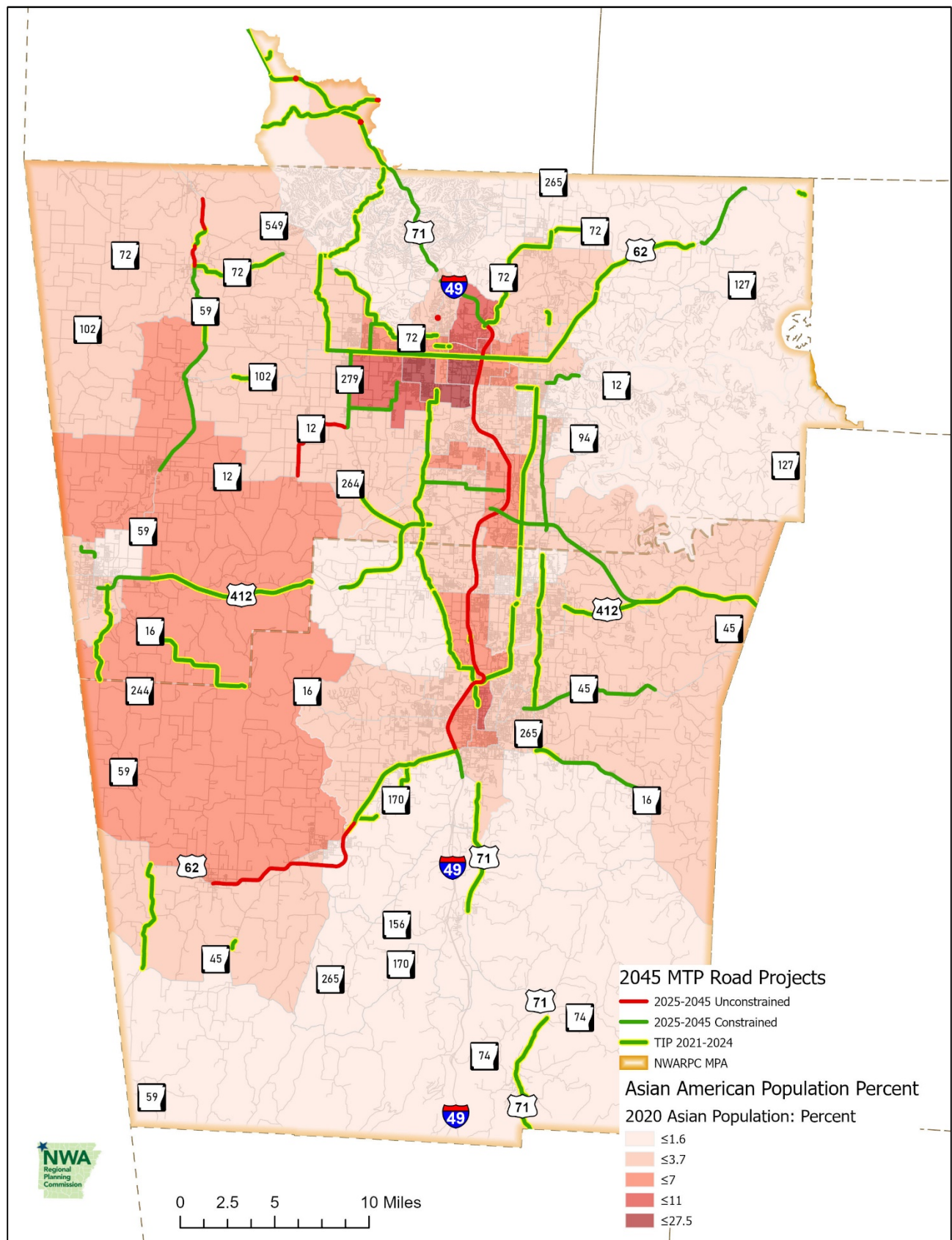
**Step 2** of the formula uses the results from **Step 1** to identify the number of eligible drivers who do not have a personal vehicle available to them. This group of people will be more likely to rely on transit.

**Step 3** of the formula determines the final Transit-Dependent Population by adding the results of **Step 2** to the population who is legally too young to drive or have regular access to a vehicle, as well as the population living in non-institutionalized group quarters. While people living in institutionalized group quarters are not able to drive for legal or health reasons, people living in non-institutionalized group quarters may be eligible to drive but are less likely to do so. It should be noted that the 2017 ACS data on group quarters does not distinguish between institutionalized and noninstitutionalized, so these figures were estimated using the group quarters data from the 2010 decennial census based on proportions per block group. The combination of the three demographic groups that make up **Step 3** of the formula identifies the total number of people that are either unable to drive or highly unlikely to drive, making them more dependent on transit. For the full analysis of Transit Dependent Household Population, see [Chapter 2 in the \*Connect NWA\* document](#).



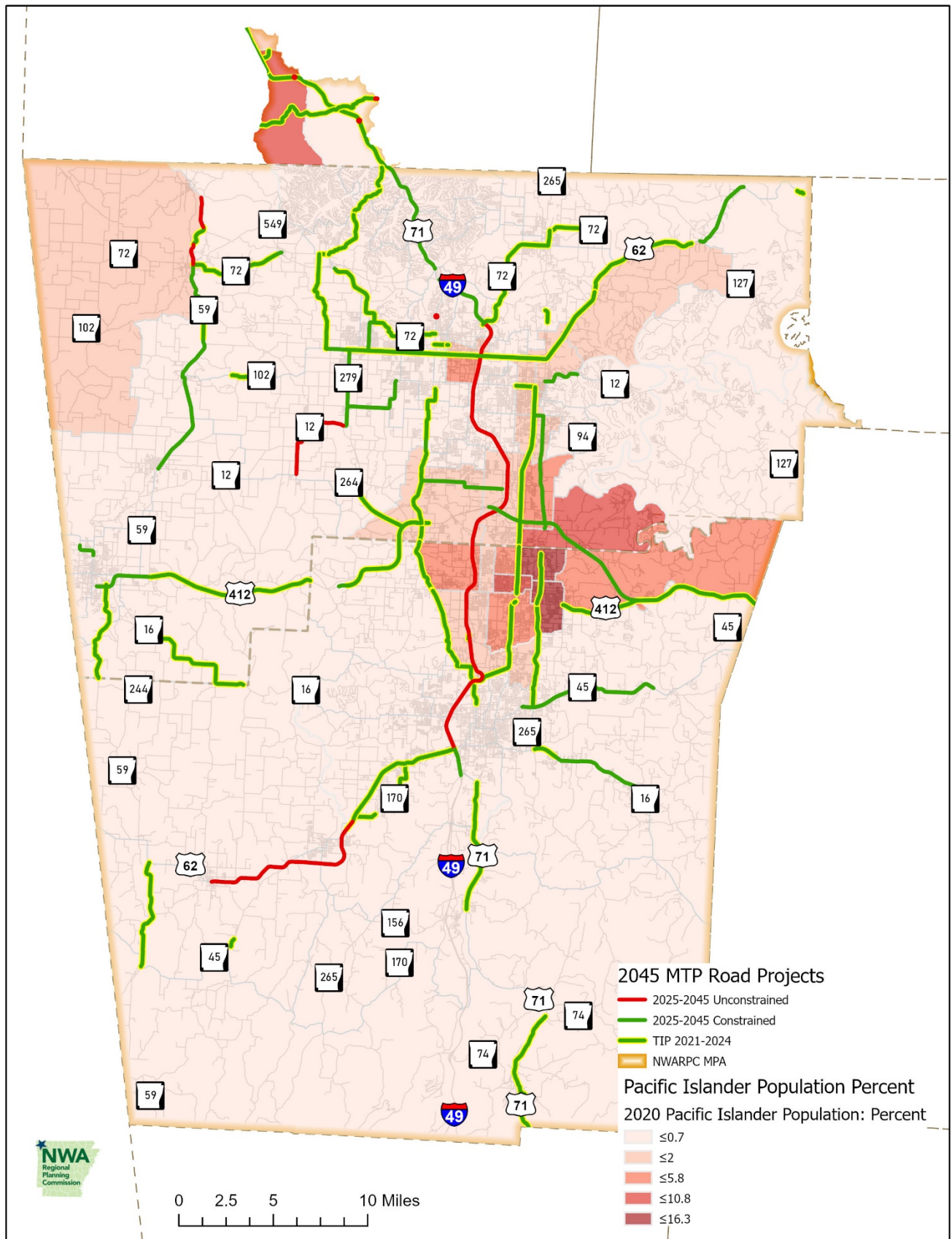


MAP 5.1 - African American Population – 2045 Road Improvement Projects

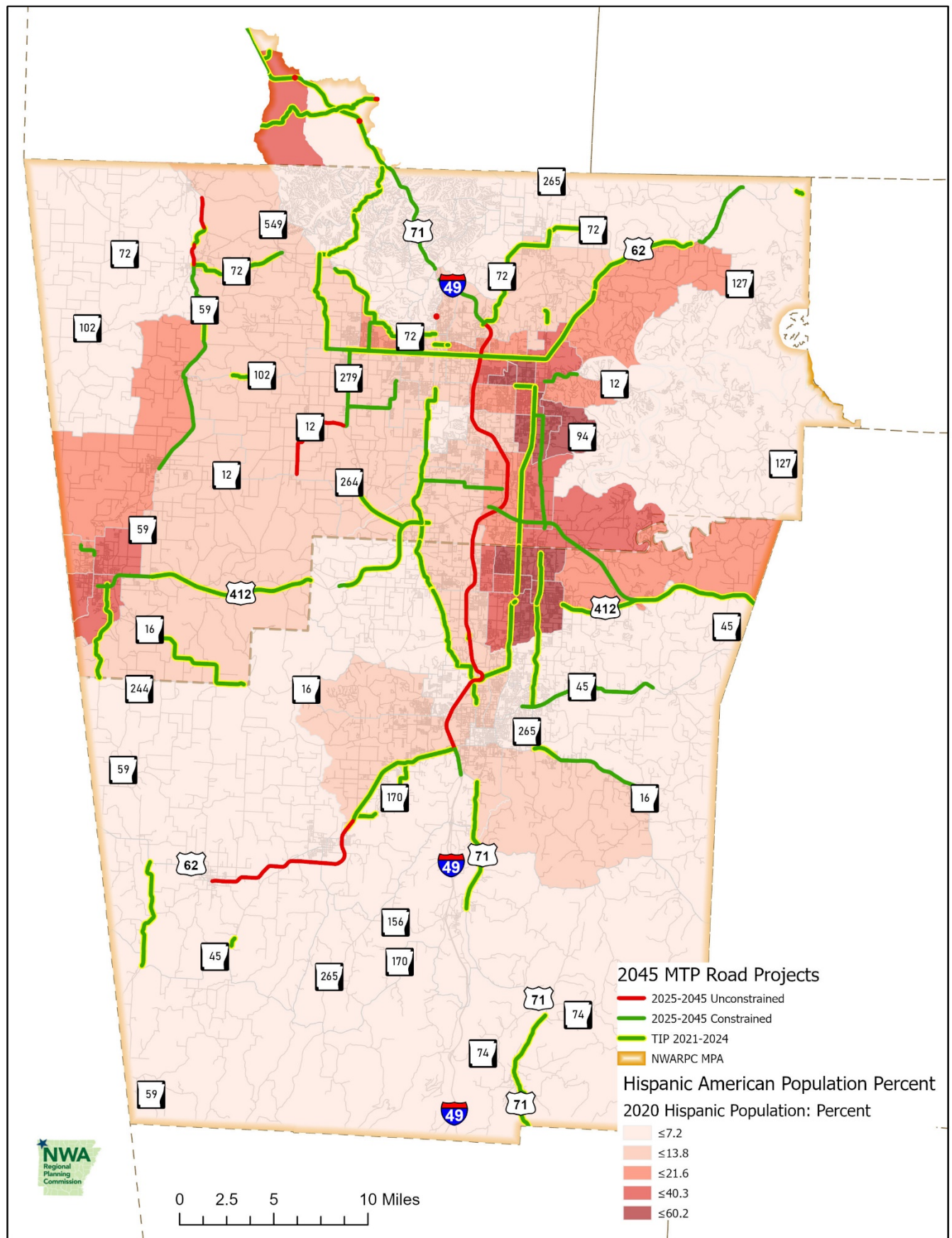


MAP 5.2 - Asian American Population – 2045 Road Improvement Projects



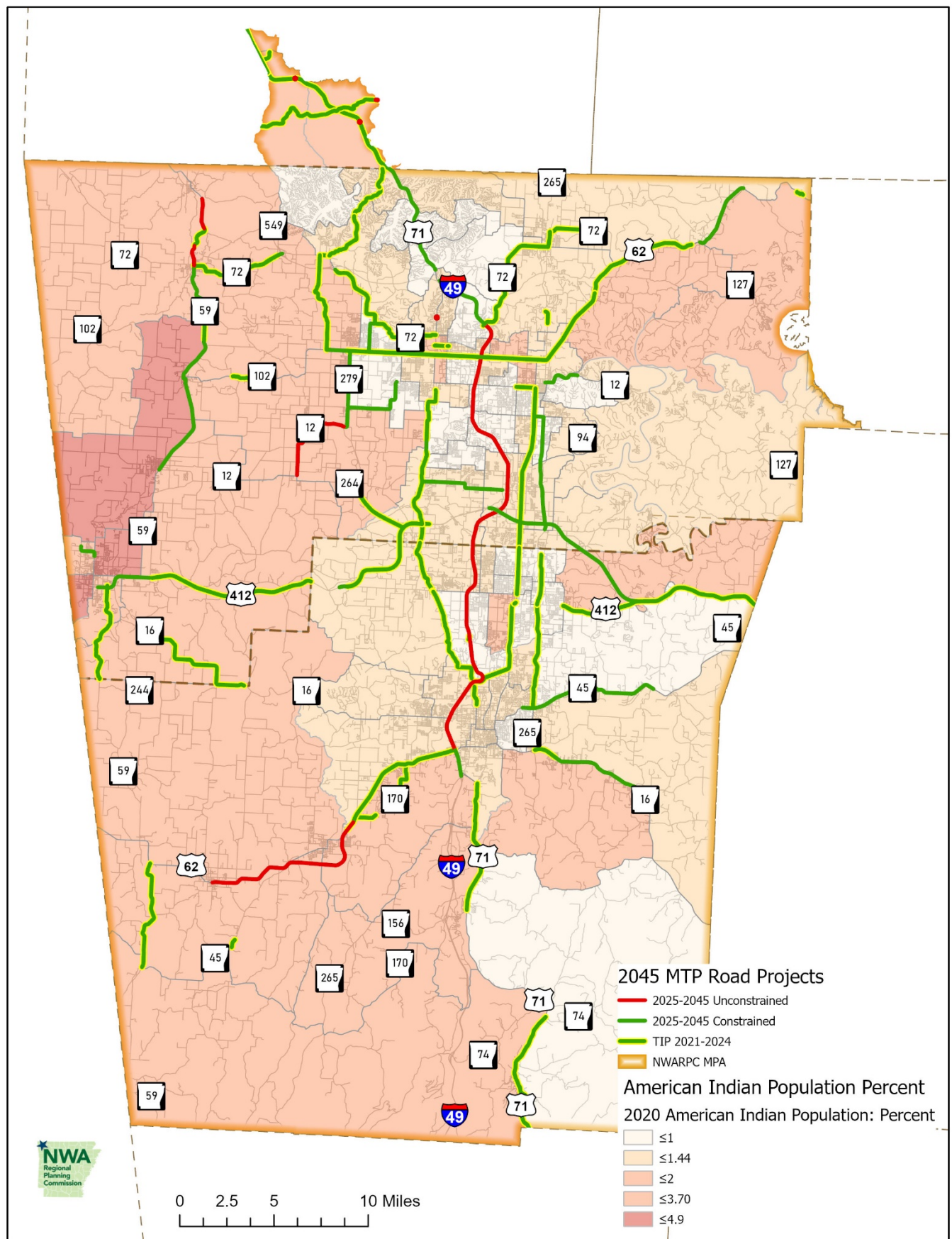


Map 5.3 - Pacific Islander Population – 2045 Road Improvement Projects

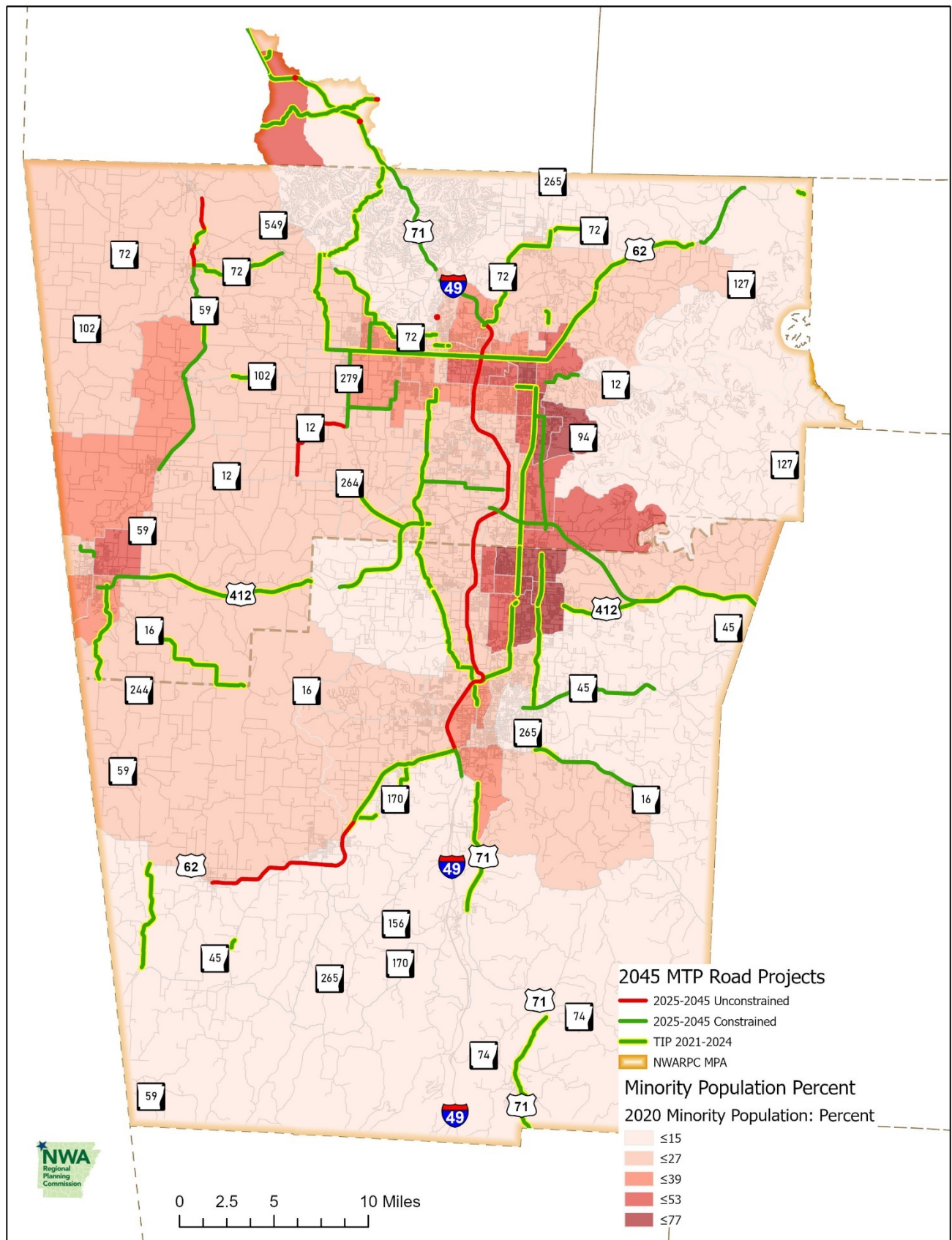


### Map 5. 4 - Hispanic Population – 2045 Road Improvement Projects



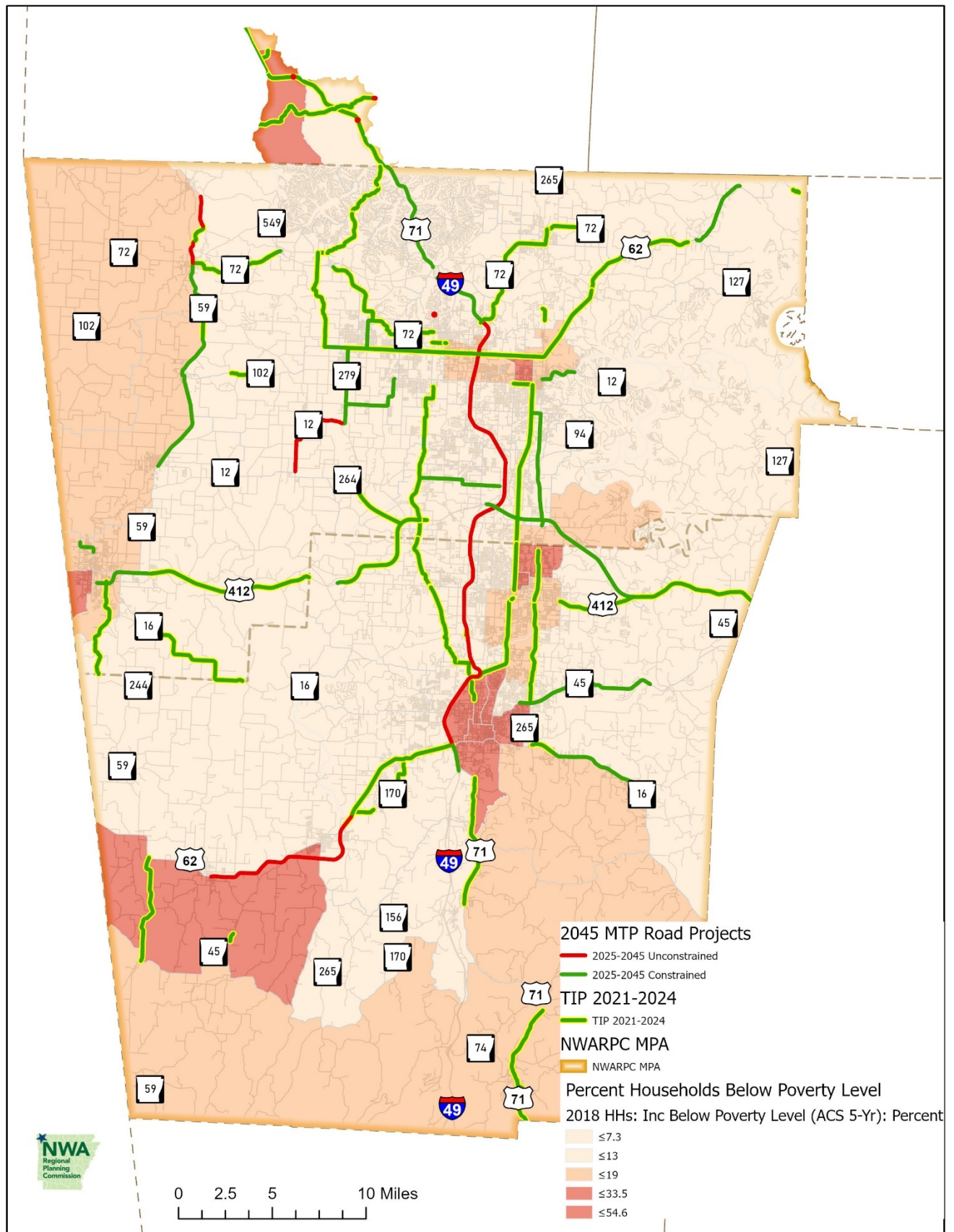


### Map 5.5 - Native American Population – 2045 Road Improvement Projects



Map 5.6 - Minority Population – 2045 Road Improvement Projects





Map 5.7 - Population Below Poverty Level – 2045 Road Improvement Projects