



## SECTION 2. COMMUNITY PROFILE

This section discusses the geography and environment, community facts, population and demographics, land use and development, and critical facilities in Pike County.

### 2.1 Geography and Environment

Pike County is located in the far northeast corner of Pennsylvania (see Figure 2-1). The Delaware River serves as its entire border with New York State to the northeast and with New Jersey to the southeast. Lake Wallenpaupack and Wayne County make up the northwestern border, while Monroe County is at the southwestern border. With its 547 square miles, the county ranks forty-second out of the sixty-seven Commonwealth counties in terms of land mass.

Approximately 34.5 percent of Pike County is publicly owned. Included in this figure are close to 91,000 acres owned by the Commonwealth of Pennsylvania and over 17,000 acres owned by the Federal Government in the Delaware Water Gap National Recreation Area and a small amount (approximately 9 acres) in the Upper Delaware Scenic and Recreational River Corridor, all located within Pike County. These Federal properties are located along the Delaware River and are managed by the U.S. Department of Interior's National Park Service.

The County's location along the Upper Delaware River Corridor and the location of the Lackawaxen River, a major Delaware tributary which flows through the northern part of the County in Lackawaxen Township, both play a significant role in the Pike County's Hazard Mitigation planning efforts. Additionally, the County's strategic location near to the metropolitan centers in nearby New York and New Jersey also impact the human-made and societal hazards affecting the County. With the exception of the Delaware River, all of Pike County's major watersheds have designated use classification of "high quality" or "exceptional value". Pike County's watersheds are depicted in Figure 2-2.

The County's streams, ponds and wetlands should be protected against pollution from point sources and runoff while our floodplains, wetlands, and hydric soils should be protected from encroachment. The loss of topsoil should be minimized, possibly through the retention and establishment of native trees and other vegetation. Native vegetation can control erosion, shade surface waters, control stormwater flow, create windbreaks, provide animal habitat, and provide visual amenities. New development and growing water demands put pressure on existing water quantity and quality, increasing the risk of groundwater contamination and the threat of soil erosion, sedimentation and storm water runoff. Achieving a balance between growth and development and protecting the County's resources will be a continuing challenge (Pike County 2022).

### 2.2 Community Facts

Pike County formed in 1814 when it separated from Wayne County. The County was named for Zebulon Montgomery Pike, who discovered Pike's Peak. He also was a General killed in the war of 1812. By the Act of April 1, 1836, a portion of Pike County was cut off to form part of Monroe County; otherwise, its boundaries remain as they were



established by the Act of 1814. At the time it was formed, it included 5 townships. Today it contains 13 municipalities: Blooming Grove Township, Delaware Township, Dingman Township, Greene Township, Lackawaxen Township, Lehman Township, Matamoras Borough, Milford Borough, Milford Township, Palmyra Township, Porter Township, Shohola Township, and Westfall Township. The County Seat is Milford Borough.

The County's proximity to New York City and location along the Delaware River historically made it an important area for transportation of commodities and resources, particularly timber and stone. Today, recreation is the main industry in the County. With its many lakes, rivers, streams, state game and forest lands and the Delaware Water Gap National Recreation Area, it is estimated that the population of the county often doubles at times during the months from April to October. Hunting, fishing, biking, hiking, nature watching, and canoeing are the major recreational attractions to the area.

The largest recreation resource in Pike County is Lake Wallenpaupack which was created in 1926 when Pennsylvania Power and Light Company built a hydroelectric plant and dam on the Lackawaxen River. The Delaware River, Lackawaxen River and the large tracts of public land are also major eco-tourism attractions. Major employers in Pike County include school districts, government, and retailers.



Figure 2-1. Base Map of Pike County, PA

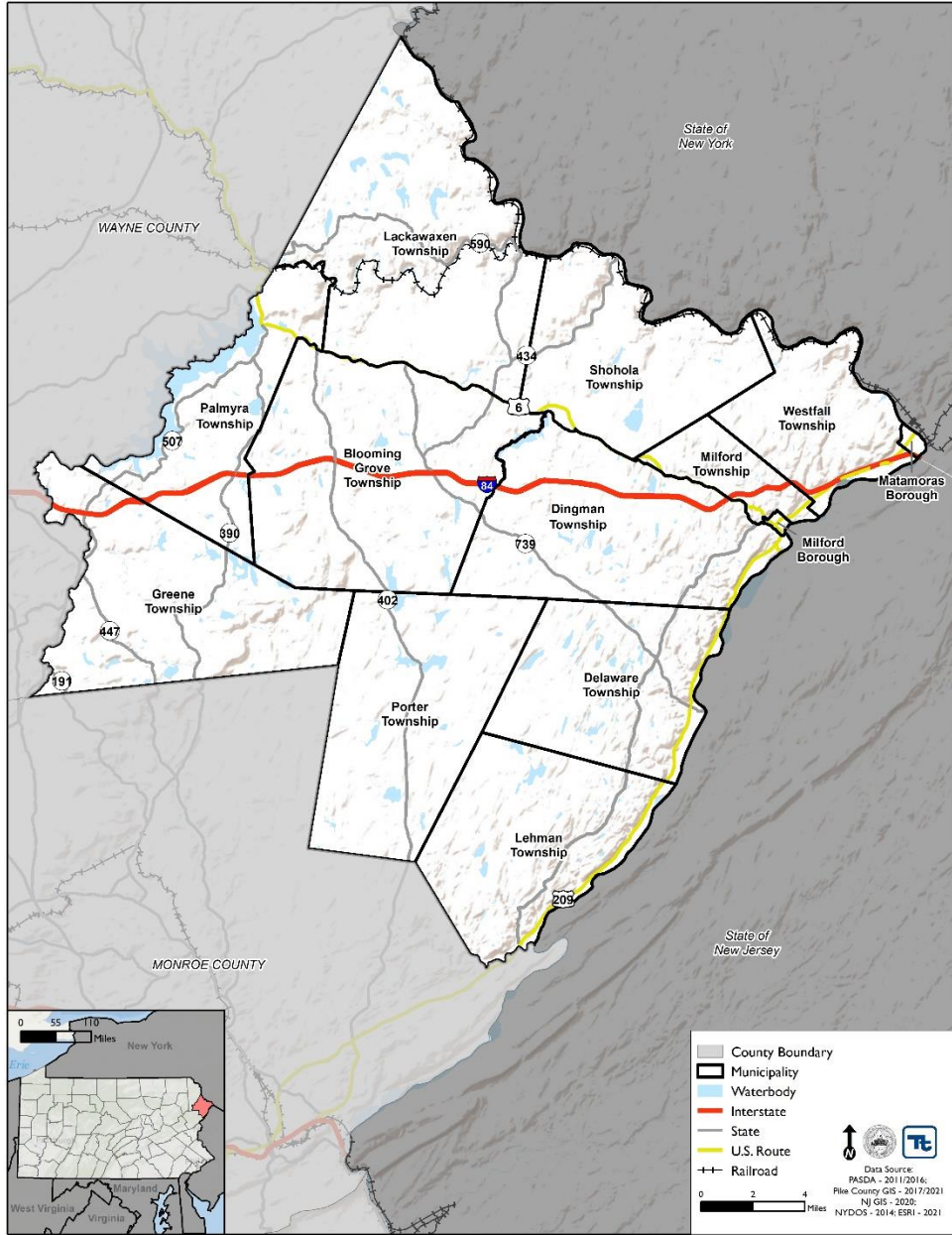
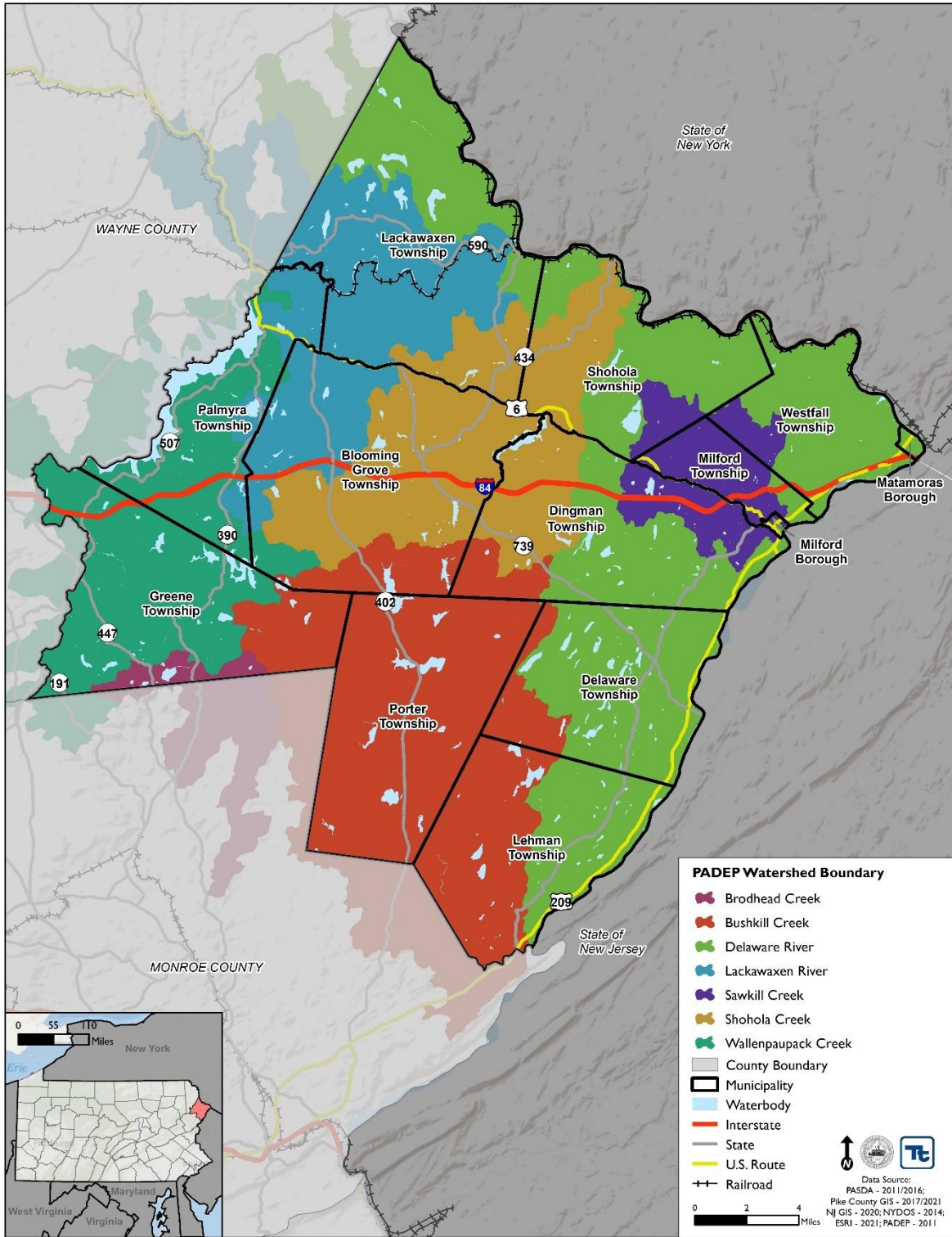




Figure 2-2. Major Watersheds in Pike County





## 2.3 Population and Demographics

Population and demographic data provide baseline information about residents. Changes in demographics or population may be used to identify higher-risk populations. Maintaining up-to-date data on demographics will allow Pike County to better assess magnitudes of hazards and develop more specific mitigation plans. According to the 2010 U.S. Census, Pike County had a population of 57,369, which represented a 23.9 percent increase from the 2000 U.S. Census population of 46,302. According to the 2015-2019 American Community Survey, Pike County had a population of 55,453 which represented a 3.3 percent decrease from the population in 2010. According to the 2020 U.S. Census population, Pike County had a total population of 58,535, a 2.0 percent increase from the 2010 Census. Table 2-1 presents the population statistics for Pike County based on the 2000 and 2010 U.S. Census, and 2015-2019 ACS estimates (the most current available) data. It should be noted that the 2020 U.S. Census data was not available at the time this section was developed. Therefore, the figures were created using the 2015-2019 ACS estimates. Table 2-2 provides details regarding demographics for Pike County.

Table 2-1. Pike County Population Statistics

Jurisdiction	2000 Census	2010 Census	2015-2019 ACS Estimates	2020 Census*	Population Change 2010-2020 (%)
Blooming Grove (Twp)	3,621	4,819	4,645	5,415	12.4%
Delaware (Twp)	6,319	7,396	7,063	7,453	0.8%
Dingman (Twp)	8,788	11,926	11,619	12,490	4.7%
Greene (Twp)	3,149	3,956	3,825	3,452	-12.7%
Lackawaxen (Twp)	4,154	4,994	5,020	5,072	1.6%
Lehman (Twp)	7,515	10,663	10,183	10,843	1.7%
Matamoras (Boro)	2,312	2,469	2,336	2,362	-4.3%
Milford (Boro)	1,104	1,021	1,172	1,103	8.0%
Milford (Twp)	1,292	1,530	1,329	1,523	-0.5%
Palmyra (Twp)	3,145	3,312	3,215	3,206	-3.2%
Porter (Twp)	385	485	400	550	13.4%
Shohola (Twp)	2,088	2,475	2,133	2,528	2.1%
Westfall (Twp)	2,430	2,323	2,513	2,537	9.2%
<b>Pike County</b>	<b>46,302</b>	<b>57,369</b>	<b>55,453</b>	<b>58,535</b>	<b>2.0%</b>

Source: (U.S. Census Bureau 2001), (U.S. Census Bureau 2003), U.S. Census Bureau 2020

\*2020 U.S. Census was not available during the planning process.

Table 2-2. Demographics

Demographics	2000 Census	2010 Census	2015-2019 ACS Est.	2020 Census
Total Population	46,302	57,369	55,453	58,535
Male	23,197	28,686	28,148	N/A
Female	23,105	28,683	27,305	N/A
Median age (years)	35.7	43.7	48.2	N/A
Under 5 years	3,241	2,823	1,894	N/A
18 years and over	33,523	44,011	45,421	N/A
65 years and over	5,001	9,303	12,152	N/A
Household population	17,433	22,190	22,119	N/A
Group quarters population	392	478	493	N/A



Source: U.S. Census Bureau 2021, *General Population and Housing Characteristics, Pike County*

Note: The 2020 Census data was not available during the planning process; therefore, the table does not include all 2020 Census statistics.

As shown in the tables above, Pike County's 2010 Census population was 57,369 and in 2019 was 55,453. Based on the 2010 data, the population density of Pike County is 105.3 persons per square mile, which is considerably lower than the Pennsylvania statewide average of 284 persons per square mile (U.S. Census 2010). Most of the municipalities in Pike County have population densities above the statewide average. However, many municipalities in the county have low population density. Dispersing information, instructions, and resources during a disaster response effort to residents in low-density areas is more difficult than in more densely populated areas because individuals are not centralized.

While low-density areas may provide challenges to disseminating hazard mitigation information, a low population density also means that hazards will not affect as many people. For example, diseases may not spread as quickly because citizens are in contact with less people. Similarly, fires are less likely to spread to other structures because of the large distances between them. The magnitude of an event is typically smaller in a less-populated area because each event affects fewer people and properties.

The Disaster Mitigation Act of 2000 (DMA 2000) requires that HMPs consider socially vulnerable populations. These populations can be more susceptible to hazard events based on several factors, including their physical and financial ability to react to or respond during a hazard and the location and construction quality of their housing. For the purposes of this study, vulnerable populations shall include (1) the elderly and younger populations (persons aged 65 and over; persons aged 5 and younger) and (2) those living in low-income households.

Approximately 21.9 percent of the county's total population is aged 65 and older (U.S. Census, 2019). Older residents may have access and functional needs. For example, many may be unable to drive; therefore, special evacuation plans may be necessary. They may also have hearing or vision impairments that could make receiving emergency instructions difficult. Additionally, 3.4 percent of the county's total population is under the age of 5 years (U.S. Census 2019). Both older and younger populations have higher risks for contracting certain diseases. The county's combined population under 5 years of age and over 65 years represent approximately 25.3 percent of its total population.

Figure 2-4 and Figure 2-5 illustrate the distribution of these populations for Pike County.



Figure 2-3. Pike County 2019 Population Distribution

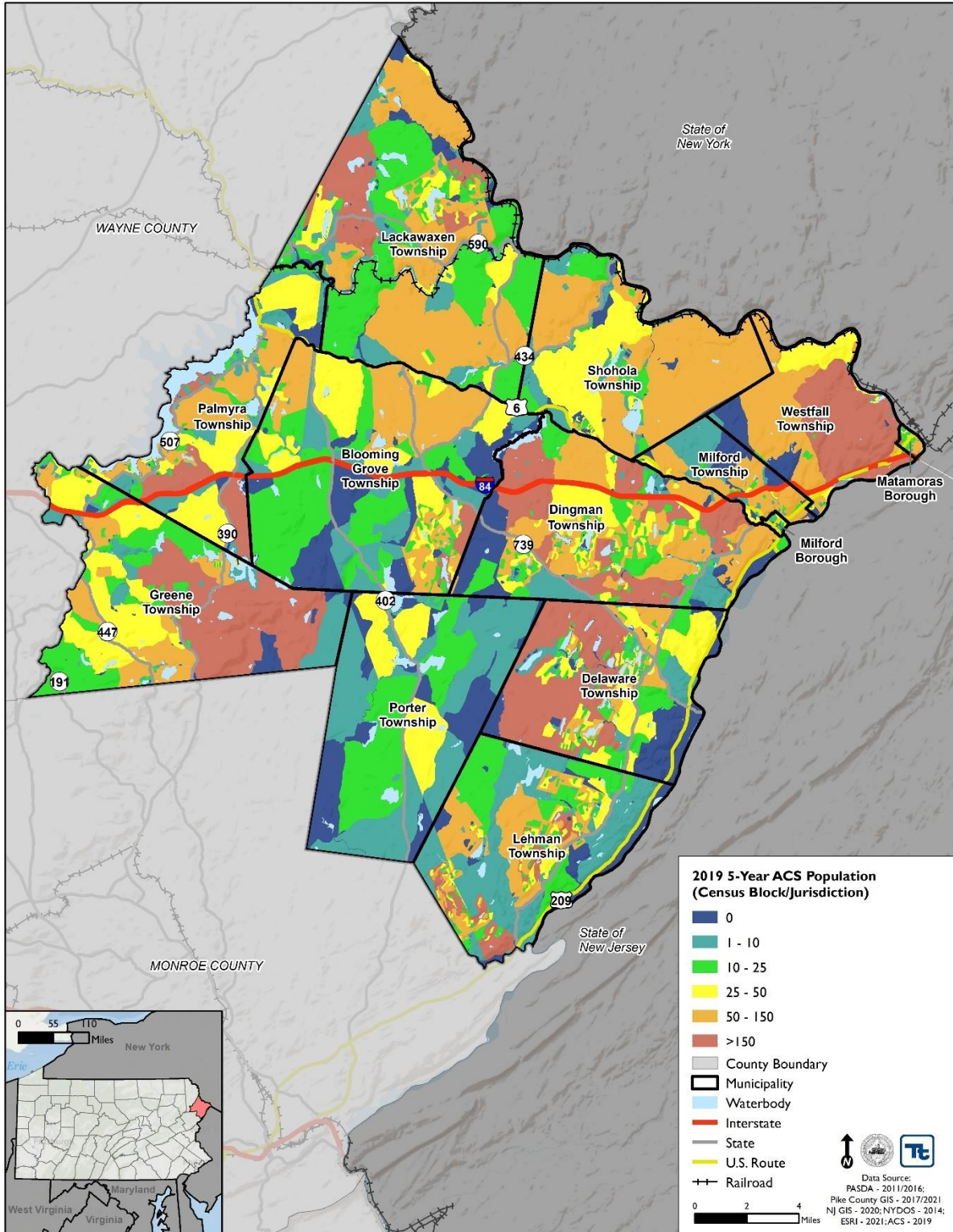




Figure 2-4. Pike County 2019 Population Over 65 Years

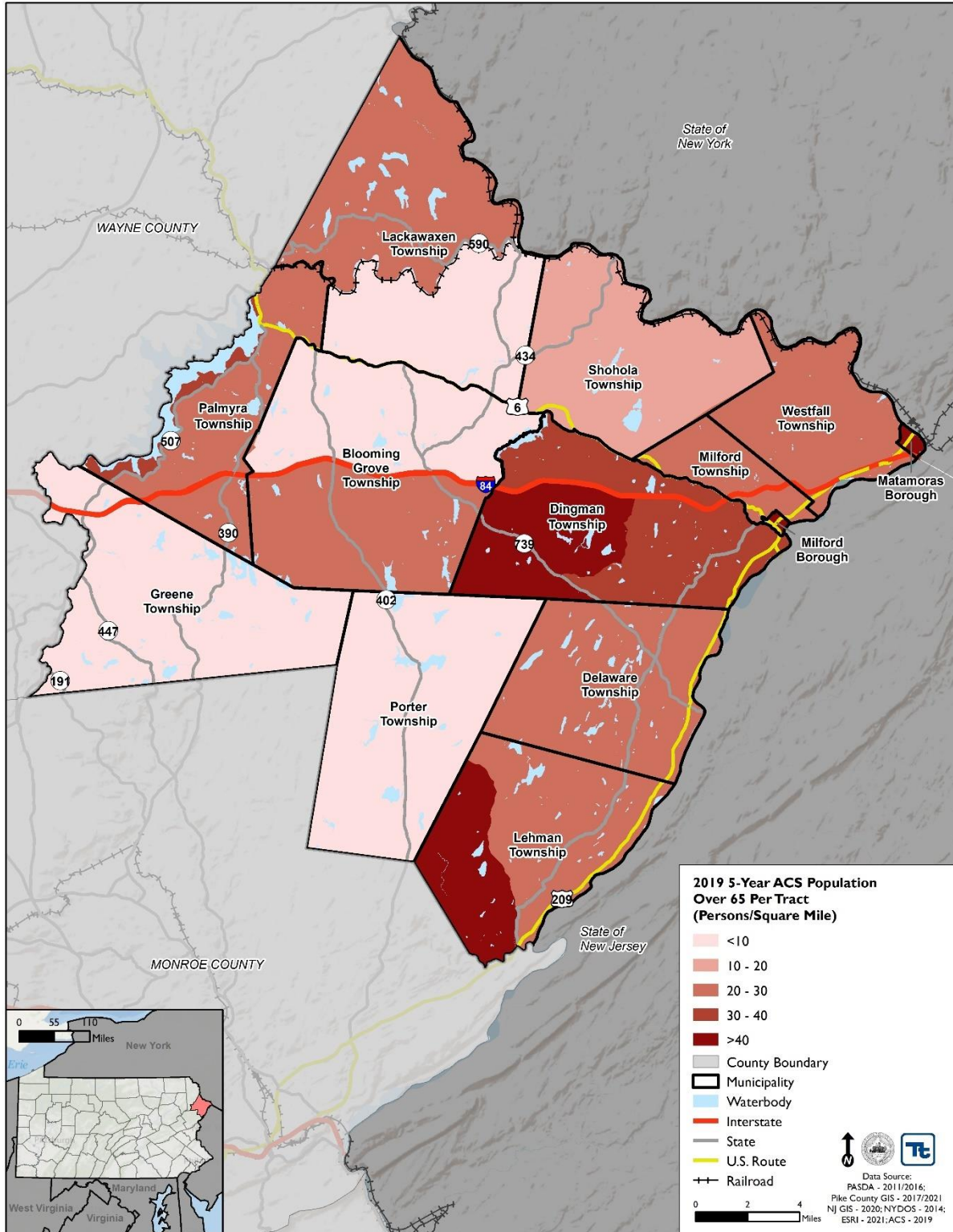
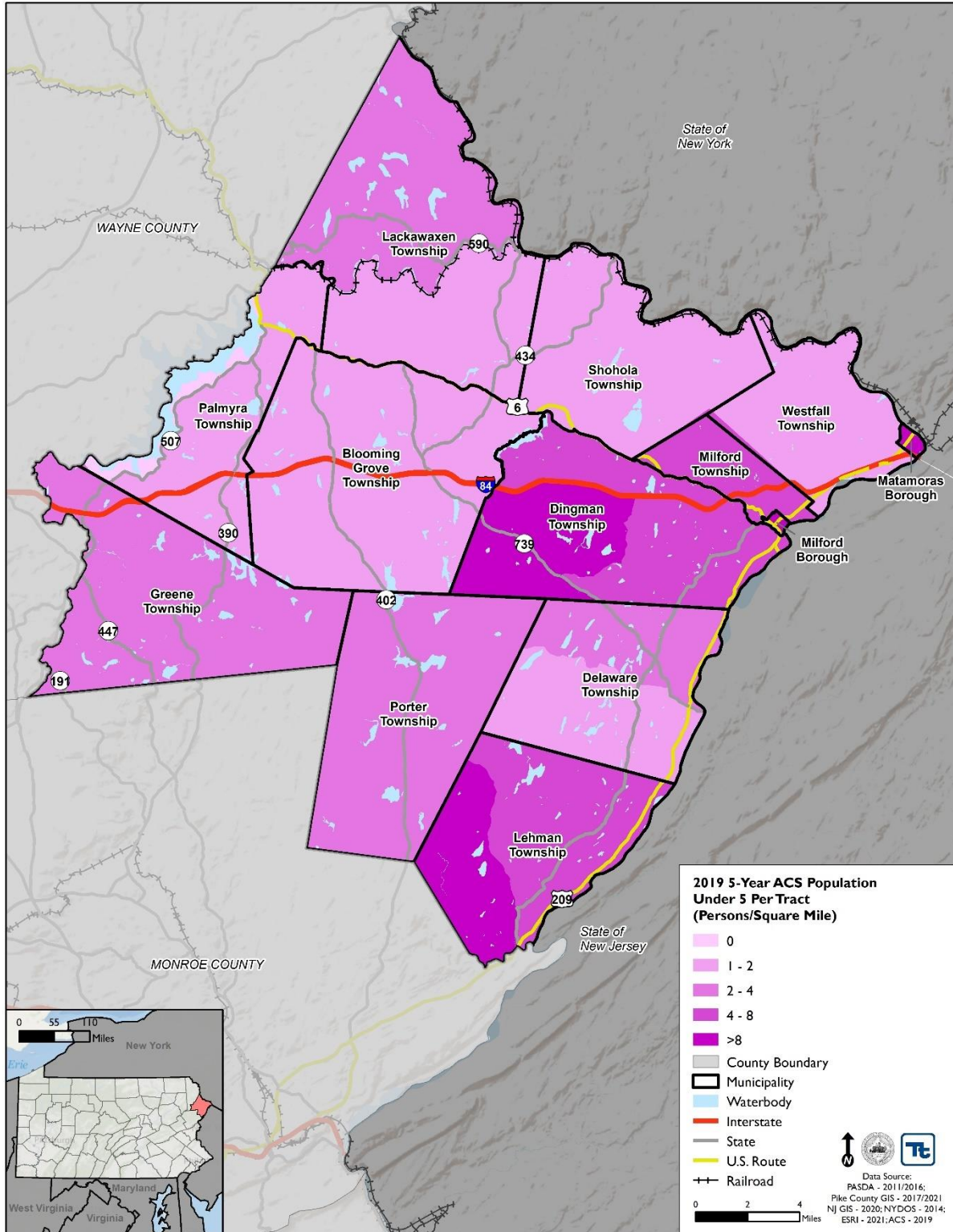




Figure 2-5. Pike County 2019 Population Under 5 Years





Only 493 people in Pike County live in group quarters. The term “group quarters” refers to people living in communal settings, which can include inmates in a prison, students in a dorm, or elderly or mentally disabled individuals living in group care homes. Residents living in group quarters are often special needs populations. It is important to ensure that each group quarter facility has its own emergency plan to account for the unique needs of its residents during a hazard event.

Table 2-3 provides population estimates and projections for each municipality in Pike County and for the county as a whole. The population of the entire county is estimated to be 54,257 by the year 2040, which represents a net population decrease of 3,112 people (5.4 percent) in a 30-year period. It should be noted that changes in population or demographics may be used to identify higher-risk populations. Maintaining up-to-date data on demographics will allow Pike County to better assess magnitudes of hazards and develop more specific mitigation plans and strategies.

Table 2-3. Pike County Population Projections by Municipality

Jurisdiction	2010 Census	2015-2019 ACS Estimates	Population Change 2010-2019 (%)	2030 Projection	2040 Projection	Projected Population Change 2010-2040 (%)
Blooming Grove (Twp)	4,819	4,645	-3.6%	-	-	-
Delaware (Twp)	7,396	7,063	-4.5%	-	-	-
Dingman (Twp)	11,926	11,619	-2.6%	-	-	-
Greene (Twp)	3,956	3,825	-3.3%	-	-	-
Lackawaxen (Twp)	4,994	5,020	0.5%	-	-	-
Lehman (Twp)	10,663	10,183	-4.5%	-	-	-
Matamoras (Boro)	2,469	2,336	-5.4%	-	-	-
Milford (Boro)	1,021	1,172	1.5%	-	-	-
Milford (Twp)	1,530	1,329	-13.1%	-	-	-
Palmyra (Twp)	3,312	3,215	-2.9%	-	-	-
Porter (Twp)	485	400	-17.5%	-	-	-
Shohola (Twp)	2,475	2,133	-13.8%	-	-	-
Westfall (Twp)	2,323	2,513	8.2%	-	-	-
<b>Pike County</b>	<b>57,369</b>	<b>55,453</b>	<b>-3.3%</b>	<b>55,783</b>	<b>54,257</b>	<b>-5.4%</b>

Source: The Center for Rural Pennsylvania, 2014; U.S. Census 2019

Note: Population projections at the municipal level were not available for Pike County.

According to the 2015-2019 American Community Survey, 11.2 percent of the county’s population speaks a language other than English, with 2.2 percent of the population speaking English less than “very well.” While currently a low percentage, future hazard mitigation strategies should consider addressing language barriers to ensure that all residents can receive emergency instructions. Table 2-4 summarizes race and ethnicity population information for Pike County.



Table 2-4. Race and Ethnicity

Race and Ethnicity	2010	% of Population	2019 ACS	% of Population
One race	56,160	97.9%	54,123	97.6%
White	50,856	88.6%	49,074	88.5%
Black or African American	3,322	5.8%	3,526	6.4%
American Indian and Alaska Native	176	.31%	58	0.1%
Asian	597	1.0%	661	1.2%
Native Hawaiian and Other Pacific Islander	16	.03%	38	0.1%
Some other race	1,193	2.1%	766	1.4%
Two or more races	1,209	2.1%	1,330	2.4%
Foreign born	3,594	6.3%	4,549	8.2%
Speak a language other than English	5,392	9.4%	6,206	11.6%
Hispanic or Latino	5,173	9.0%	6,052	10.9%

Source: U.S. Census Bureau 2010, General Population and Housing Characteristics, Pike County; U.S. Census Bureau 2019; U.S. Census Bureau 2020

Pike County contains 38,940 housing units (U.S. Census 2019). These properties may be vulnerable to various natural hazards, particularly those located in defined hazard areas. Damage to residential properties is not only costly to repair or rebuild but devastating to the displaced residents.

According to the U.S. Census, approximately 40.2 percent of the county’s housing units are considered vacant. A majority of these vacant units are vacation homes and cabins and not occupied year-round. Because vacant properties are not inhabited year-round or may not be adequately maintained, many are structurally deficient and at risk of collapse.

Approximately 16.8 percent of the county’s population live in rented homes. Because renters are more transient than homeowners, communicating with renters may be more difficult than communicating with homeowners. Similarly, communications with tourists would be harder during an emergency event. Communication strategies should be developed to ensure that these populations receive proper notifications. Table 2-5 summarizes characteristics of the residential properties in Pike County.

Table 2-5. Housing Characteristics

Housing Characteristics	2015-2019 ACS
Total housing units	38,940
Owner-occupied housing units	18,411
Renter-occupied housing units	3,708
Vacant housing units	16,821
Average household size	2.59
Housing units with a mortgage	11,777
Housing units (owned) without a mortgage	6,634

Source: U.S. Census Bureau 2019

In 2019 (the most current data available), the median household income in the County was \$65,928, which was higher than the Commonwealth of Pennsylvania’s estimated median household income (\$61,744). The County’s 2019



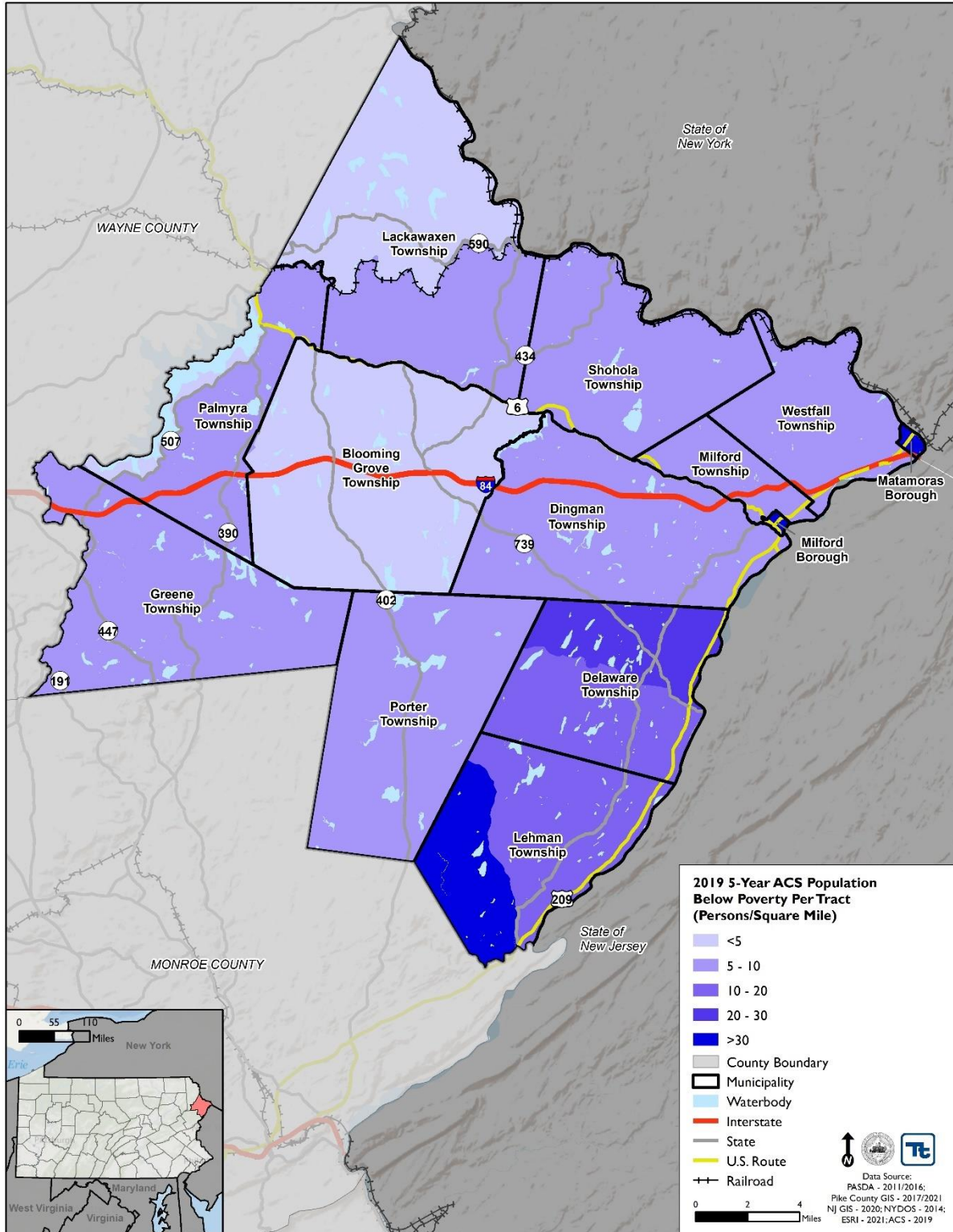
estimated per capita income of \$34,589 was higher than the Commonwealth’s 2019 estimated per capita income of \$34,352. Approximately 9.5 percent of residents in Pike County were below poverty level in 2019. Emergency responders may have difficulty connecting with individuals within this economic bracket for several reasons, including less access to the Internet within these communities. Additionally, some low-income families and individuals may not own vehicles, and therefore could be a more vulnerable population during an evacuation. Table 2-6 summarizes economic characteristics of Pike County’s population and population distribution of residents with incomes below the poverty level.

Table 2-6. Economic Characteristics

Economic Characteristics	2019 Data
Median household income in 2019	\$65,928
Median family income in 2019	\$80,167
Per capita income in 2019	\$34,589
Below poverty level	9.5%



Figure 2-6. Pike County Population Below the Poverty Level





## 2.4 Land Use and Development

Pike County’s existing land use patterns are greatly influenced and shaped by surrounding natural features such as mountains, valleys, and waterways. These features have largely determined locations of transportation corridors and development activities. Referring to Table 2-7, over 77-percent of the County’s land cover is identified as agriculture, barren, forest, or rangeland. Urban land use makes up 10.5-percent, water makes up 3.3-percent, and wetlands account for 8.5-percent. Figure 2-7 illustrates the land use land cover in Pike County.

Table 2-7. Land Use Land Cover Distribution in Pike County

Land Use Category	2016 Land Use Land Cover Source		2019 Land Use Land Cover Source	
	Acreage	Percent of County	Acreage	Percent of County
Agriculture	3,478	1.0%	4,328	1.2%
Barren	471	0.1%	408	0.1%
Forest	278,174	76.6%	274,218	75.5%
Rangeland	5,089	1.4%	3,228	0.9%
Urban	33,653	9.3%	37,983	10.5%
Water	12,318	3.4%	11,857	3.3%
Wetland	29,809	8.2%	30,972	8.5%
<b>Pike County (Total)</b>	<b>362,992</b>	<b>100.0%</b>	<b>362,995</b>	<b>100.0%</b>

Source: USGS 2019

Notes:

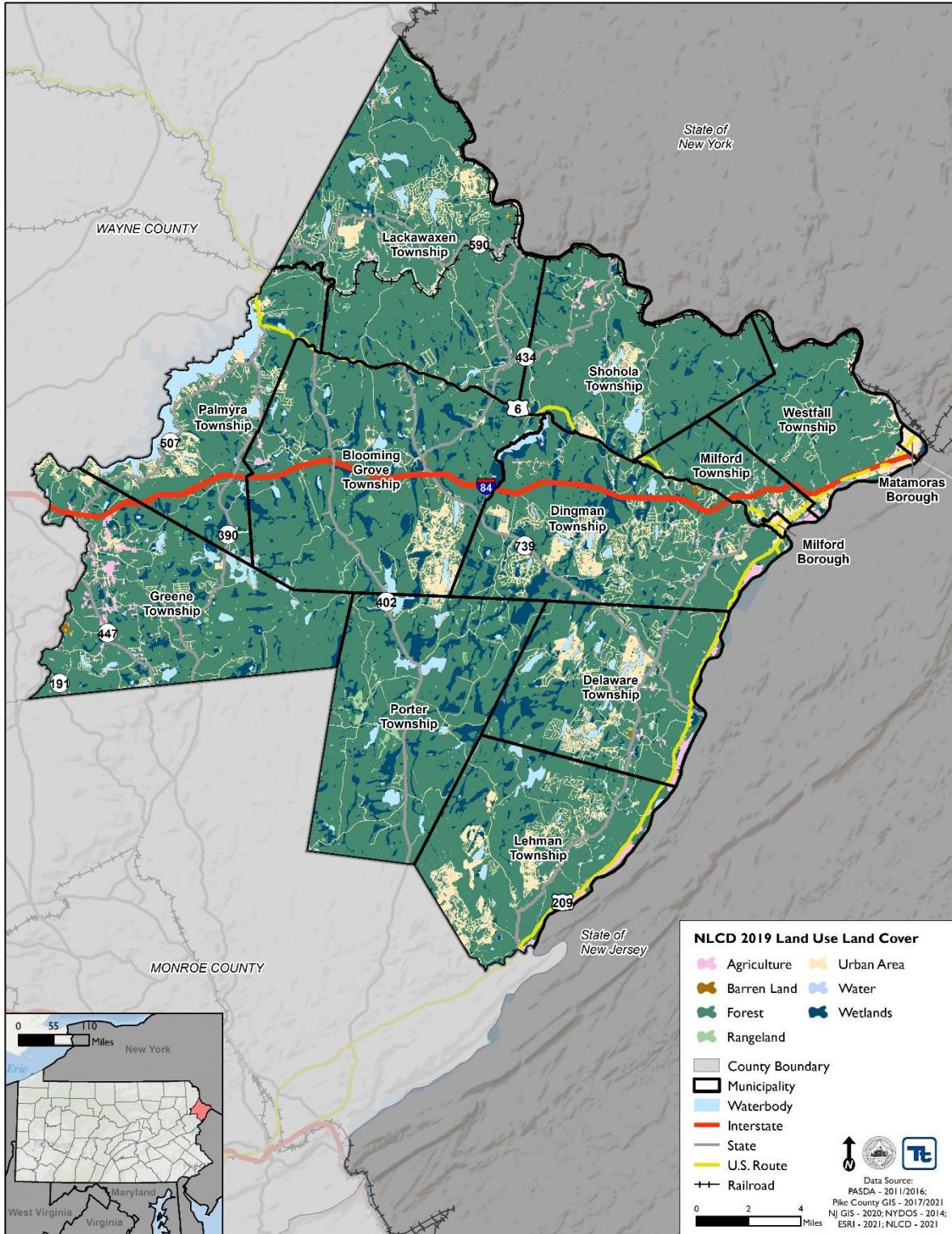
- Agriculture - Cropland or pastureland in either a vegetated or non-vegetated state used for the production of food and fiber. Note that forest plantations are considered as forests or woodlands regardless of the use of the wood products.
- Barren - Land comprised of natural occurrences of soils, sand, or rocks where less than 10% of the area is vegetated.
- Forest - Tree-covered land where the tree-cover density is greater than 10%. Note that cleared forest land (i.e., clear-cut logging) will be mapped according to current cover (e.g., disturbed or transitional, shrubland/grassland).
- Rangeland - Comprised of areas where the potential natural vegetation is predominantly grasses, grass like plants, forbs, or shrubs and where natural herbivory was an important influence in its precivilization state.
- Urban - Areas of intensive use with much of the land covered with structures (e.g., high density residential, commercial, industrial, transportation, mining, confined livestock operations), or less intensive uses where the land cover matrix includes both vegetation and structures (e.g., low density residential, recreational facilities, cemeteries, etc.), including any land functionally attached to the urban or built-up activity.
- Water - Areas persistently covered with water, such as streams, canals, lakes, reservoirs, bays, or oceans.
- Wetland - Lands where water saturation is the determining factor in soil characteristics, vegetation types, and animal communities. Wetlands are comprised of water and vegetated cover.

Transportation systems within Pike County include highway and rail facilities. The County’s highway system is formed around approximately 35 miles of Interstate Route 84. This road runs east to west across the center of the County. Access to I-84 is limited to six interchanges.

The County has become a commuter-shed for metropolitan New York and New Jersey via I-84, Routes 206 and 15, I-80, and mass transit which provide acceptable yet long commutes (Pike County Office of Community Planning, 2006). Most of the County’s state routes are in need of repair and/or maintenance and were not designed to handle the increase in traffic volume being generated by the expanded population.



Figure 2-7. Pike County Land Use and Land Cover





## 2.5 Data Sources and Limitations

The County Profile section of this HMP was developed with information from the following sources:

1. Pike County Comprehensive Plan (Pike County 2006)
2. Pennsylvania Department of Environmental Protection Population Projections Report (PA DEP n.d.)
3. U.S. Census Bureau. 2010
4. U.S. Census Bureau. 2019. 2015-2019 American Community Survey 5-Year Estimates Pike County.
5. U.S. Census Bureau. 2021. 2020 DEC Redistricting Data
6. Pike County Planning Division. 2021.
7. United States Department of Agriculture. 2020. 2017 Census of Agriculture: Pike County, Pennsylvania County Profile.

Data sources used to develop the HMP, in general, are listed in Section 1.4 and Appendix A. Data sources used to perform geographic information system (GIS) analysis for the risk assessment are listed in Section 4.1. These sources were key in understanding the current demographic makeup of the communities as well as in framing the foundation of the HMP. The sources listed provided the underlying context of the HMP and allowed the Planning Team to understand critical vulnerabilities in the county. Throughout the course of the planning process, the Steering Committee continually sought additional data sources to augment the information included in the HMP. The Steering Committee made multiple requests for existing jurisdictional documents (e.g., jurisdictional hazard mitigation plans and other relevant information). Despite multiple requests for municipal documents, the response was somewhat limited.