APPENDIX D
Socioeconomic Analysis

MetroPlan 2045 Regional Transportation Plan

Socioeconomic Profile

Contract No.: 2021-0001
Project No.: MPD19-7314.21.400.1

Prepared by:

BURGESS & NIPLE

January 2022

Table of Contents

Table of Tables

Table of Figures

1.0   Introduction

MetroPlan (formerly Flagstaff Metropolitan Planning Organization) is updating its regional transportation plan (RTP) for a 25-year planning horizon. The 2017 Update to the RTP identified $250 Million in projects and resulted in 3 ballot initiatives being sent to voters: Prop 419 for general transportation, Prop 420 for a Lone Tree railroad overpass, and Prop 421 for transit service improvements. Two of those initiatives passed, but the transit funding was not approved by voters. As a result of these 2018 ballot box decisions, the 2022 RTP update is more focused on "how" than "what." In other words, the region is clear on the projects that need to be completed and has a commitment to voters to deliver. However, the design, relative modal emphasis of the projects, and program schedule needs further exploration in light of recent policy developments.

In addition to the passage of funding propositions in 2018, the City of Flagstaff recently declared a climate emergency and seeks to achieve carbon neutrality by 2030. MetroPlan is positioned to support this effort through the RTP. One way MetroPlan can provide support is to clearly communicate to decision makers and the public the effectiveness of various transportation design strategies in meeting mobility, accessibility, and climate action goals.

## 1.1.   Project and Socioeconomic Profile Purpose
This RTP will serve as a policy document and vet what is needed and would be accepted by the public to achieve Flagstaff climate goals. The RTP will also satisfy all federal requirements.

The Socioeconomic Profile examines historical data on population and employment and identifies trends which may affect the accessibility analysis, policy planning, and project delivery for the study area.

1.2.   Study Area
The study area includes the greater Flagstaff region, which consists of a 525 square-mile study area including the City of Flagstaff, Bellemont, Fort Valley, Kachina Village, Mountainaire, Doney Park, and the surrounding area. *Figure 1* illustrates the MetroPlan planning boundary.

Figure 1 – Study Area
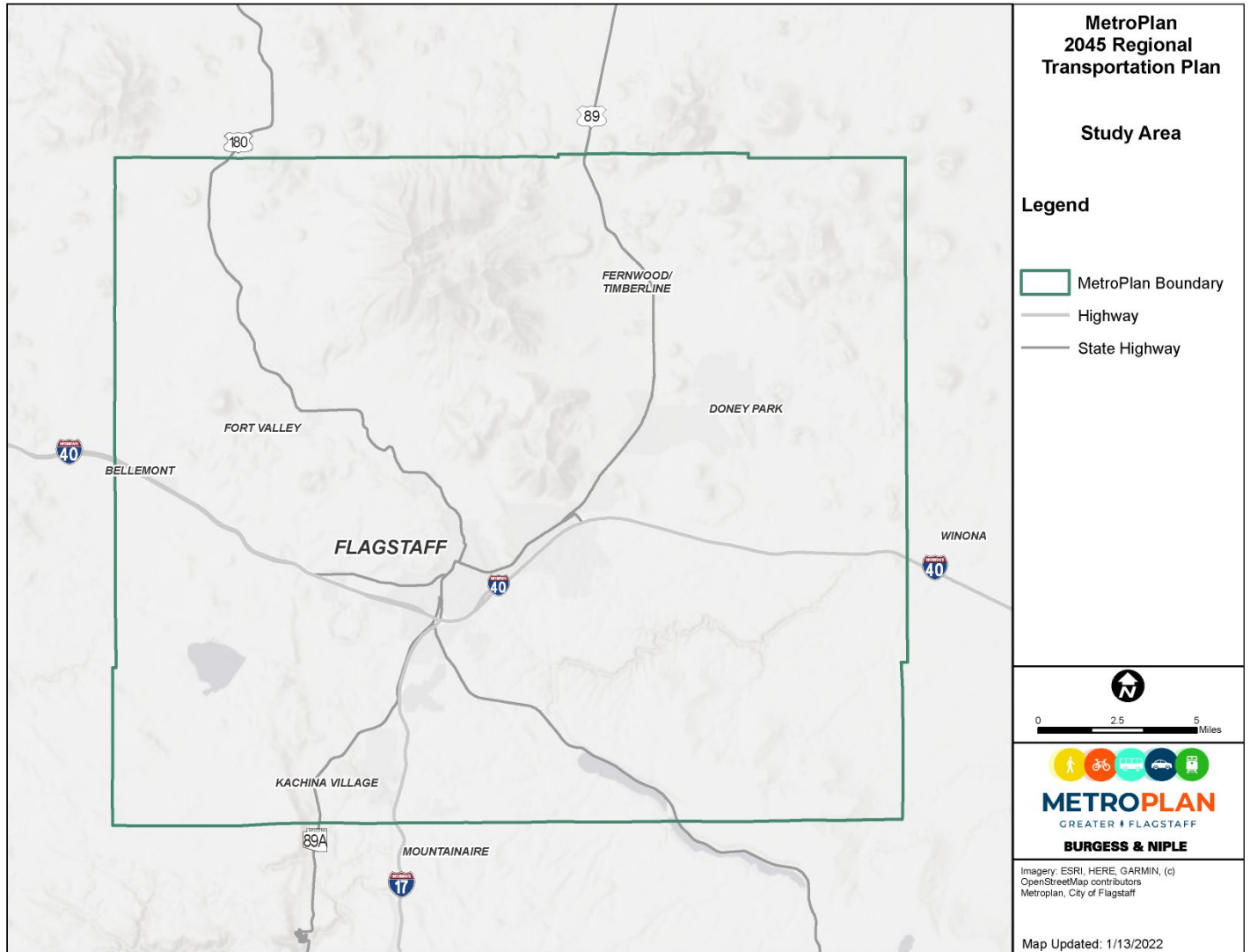
2.0　Demographics

2.1.　Socioeconomic Analysis Process

Census data at the block group level was acquired from the American Community Survey (ACS) 2019 5-year average data for block groups within the planning area. Utilizing the block group data in the planning area, the necessary attributes from ACS data tables are identified and aggregated to the selected block groups. Parcel data is utilized to distribute population within the block group area where block groups extend outside of the planning area. Due to the inconsistent dispersion of population within larger and more rural block groups, the use of parcel data allows for areas of denser population to be identified and accounted for versus area of lower population. Once the information is saved to the block group data, it can be displayed geographically, and analysis completed based on the attribute field. Unless otherwise specified, the data presented is for the MetroPlan planning area.

2.2.　Population

According to 2019 5-year average ACS data, there were approximately 93,000 people living in the region. displays population density in the MetroPlan region per ACS B01001 Sex by Age. Notably, there are large areas with very low population density (particularly the Coconino National Forest).

Figure 2 – Population Density
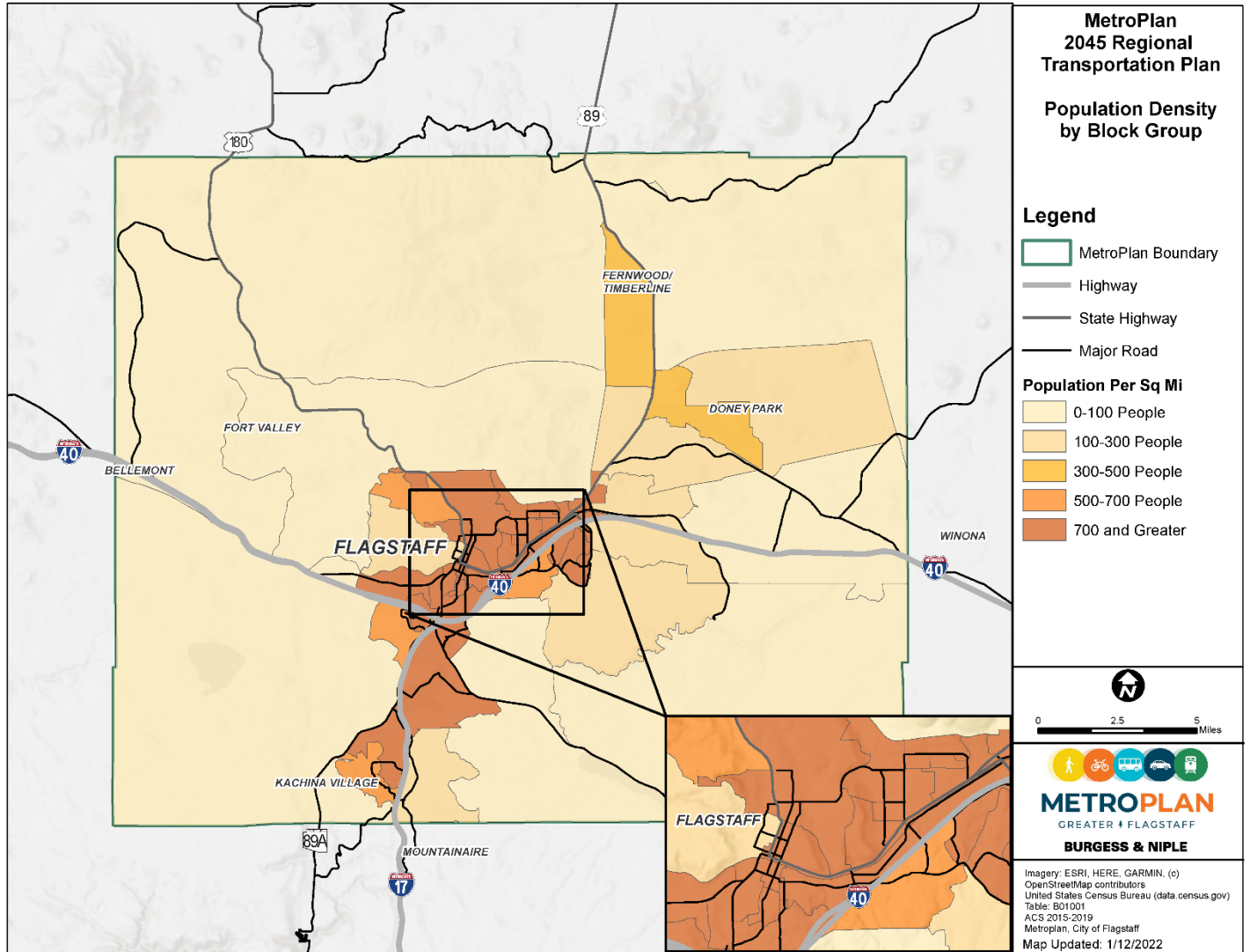
Nearly two-thirds (67 percent) of residents within the MetroPlan study area identify as "White Alone", and 18 percent identify as Hispanic or Latino per ACS B03002 Hispanic or Latino Origin by Race and B02001 Race. The remaining 15 percent of residents identify as a race or ethnicity other than White, Hispanic, or Latino. More than 80 percent of residents speak "only English" and less than 0.1 percent speak Spanish with "English not at all" per ACS B16004 Age by Language Spoken at Home by Ability to Speak English for the Population 5 Years and Over. Greater concentrations of population with limited English proficiency are near Kachina Village, Northern Arizona University (NAU), and the eastern edges of the city of Flagstaff.

The population split between male and female is nearly even, at 49.9 percent male and 50.1 percent female per ACS B01001 Sex by Age. The greatest disparity is in the 20 to 34 age range, where 53 percent are male and 47 percent are female. In all other age blocks, the divide is much less significant. Approximately 60 percent of the population falls in the 20 to 64 age range, and 10 percent of the population is over the age of 65.

Over 20 percent of households have one of more persons with a disability per ACS B22010 Receipt of Food Stamps/SNAP in the Past 12 Months by Disability Status for Households.

The average household income within the city of Flagstaff ranges from $13,000 to $119,000 per ACS B19013 Median Household Income in the Past 12 Months (in 2019 Inflation-Adjusted Dollars). Households with income at or below poverty level are disparate based on marital status and male or female head of house per ACS B17010 Poverty Status in The Past 12 Months of Families By Family Type By Presence of Related Children Under 18 Years By Age of Related Children. On average, 18 percent of married couples with children are living in poverty. Five percent of male heads of house with children are living in poverty, while the number is 33 percent for female heads of house with children.

Group quarters account for 10 percent of households within the MetroPlan study area, higher than the national average of 3 percent per B25004 Vacancy Status. This is likely due to the presence of student housing in and around Northern Arizona University (NAU), which is counted as part of group housing. Vacant homes account 6 percent of total households in the study area, with 62 percent of those vacant due to seasonal, recreational, or occasional use.

Of the households surveyed, 22 percent reported not having an internet subscription, with 41 percent of those households reporting income under $20,000 per ACS B28001 Types of Computers in Household. Nine percent of surveyed households reported not having a computer or a smartphone.

Commuting information was not available on a Census block level but was available for Coconino County. Approximately 80 percent of residents drive a car, truck, or van to work, with 12 percent carpooling in some capacity per ACS B25044 Tenure by Vehicles Available. Twelve percent walk or bike to work, and approximately 2 percent take public transportation. Three percent of workers reported having no vehicle available in their household. Approximately 5 percent of residents worked from home; this does not reflect the change in the workforce due to COVID-19 since March 2020. The average travel time to work in 2019 was between 18 to 19 minutes, and only 5 percent of workers reported a commute time of more than an hour.

Figure 3 through *Figure 11* illustrate the comparison of the study area averages to regional averages for various attributes based on the ACS tables discussed above.
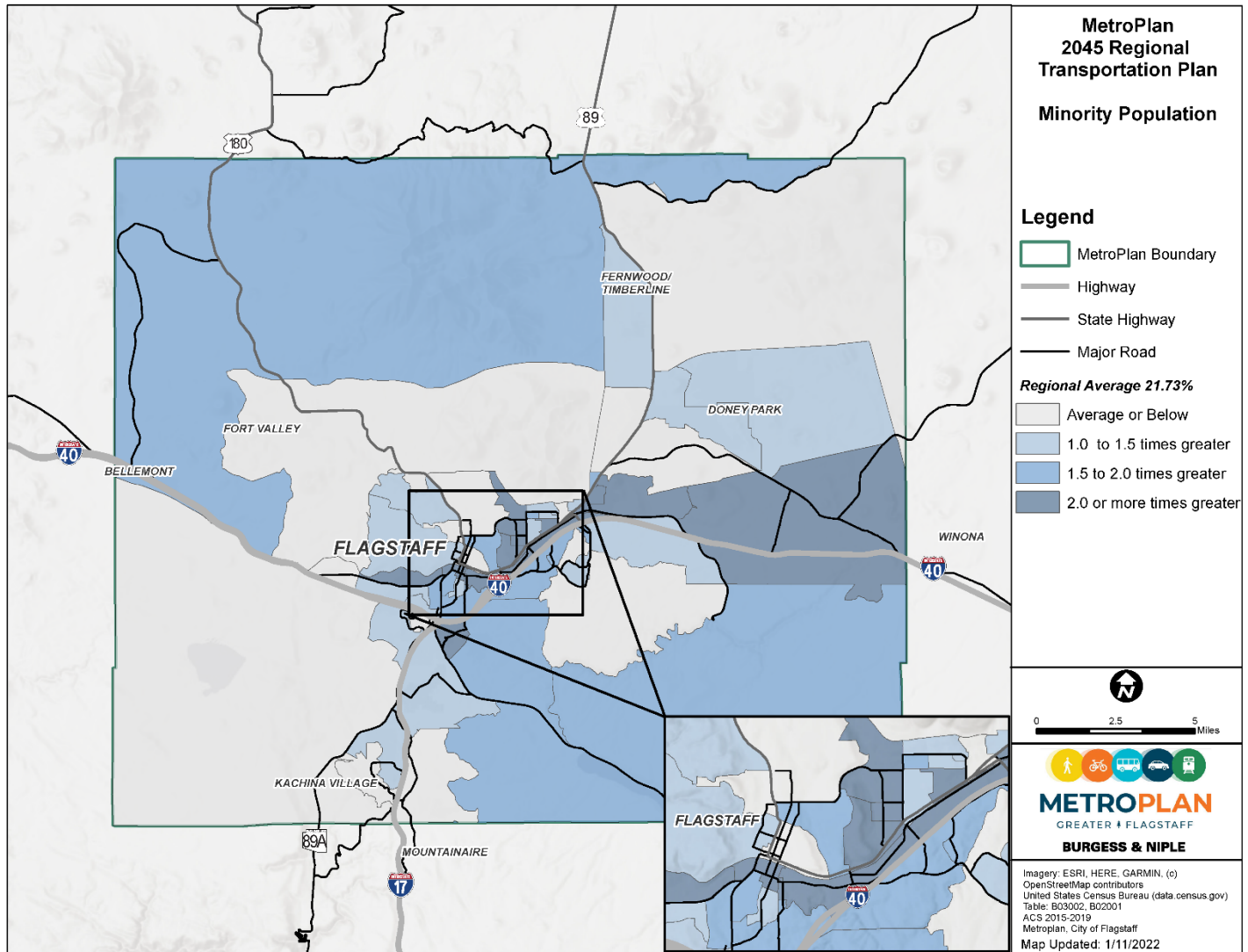
Figure 3 – Minority Population

Figure 4 – Limited English Proficiency
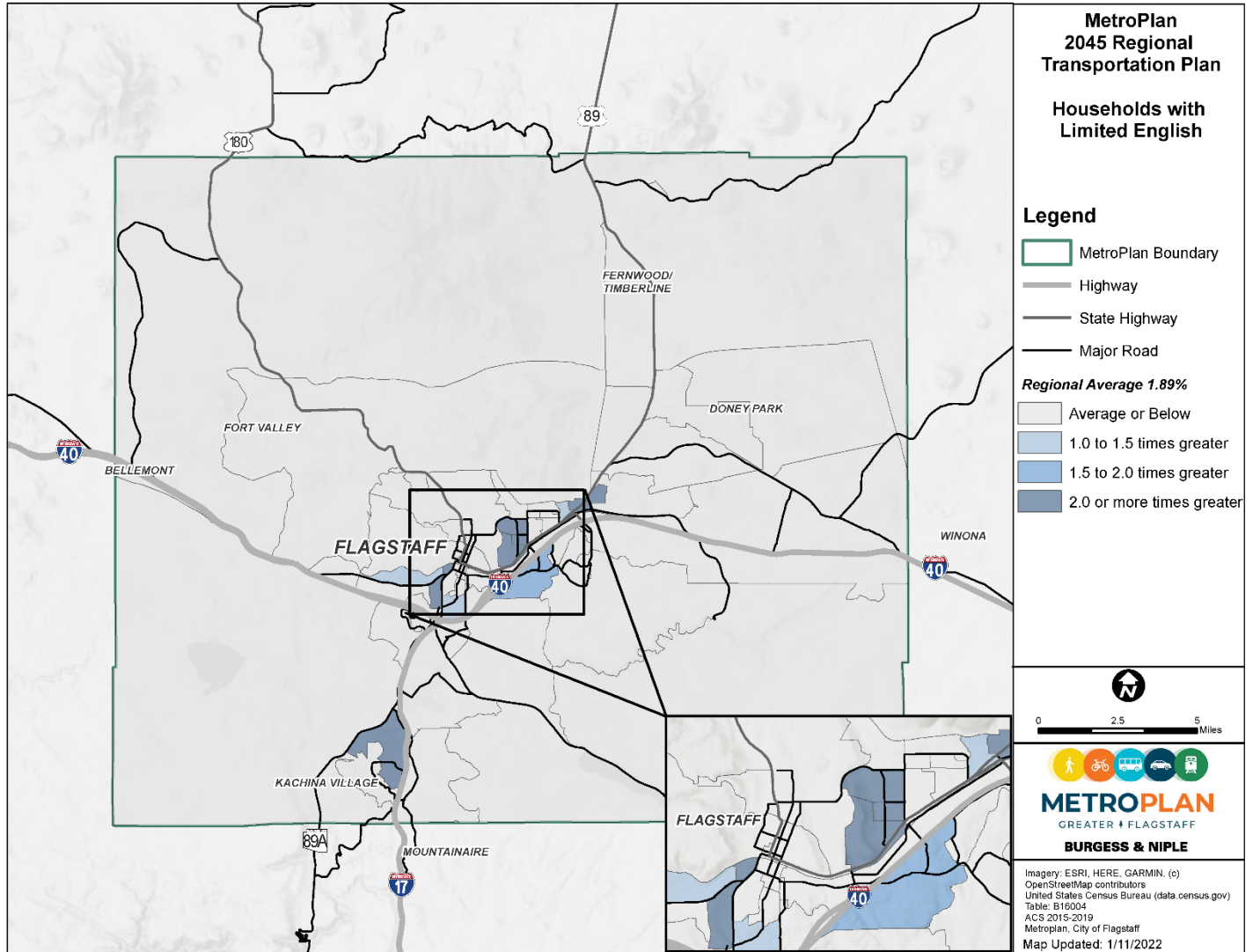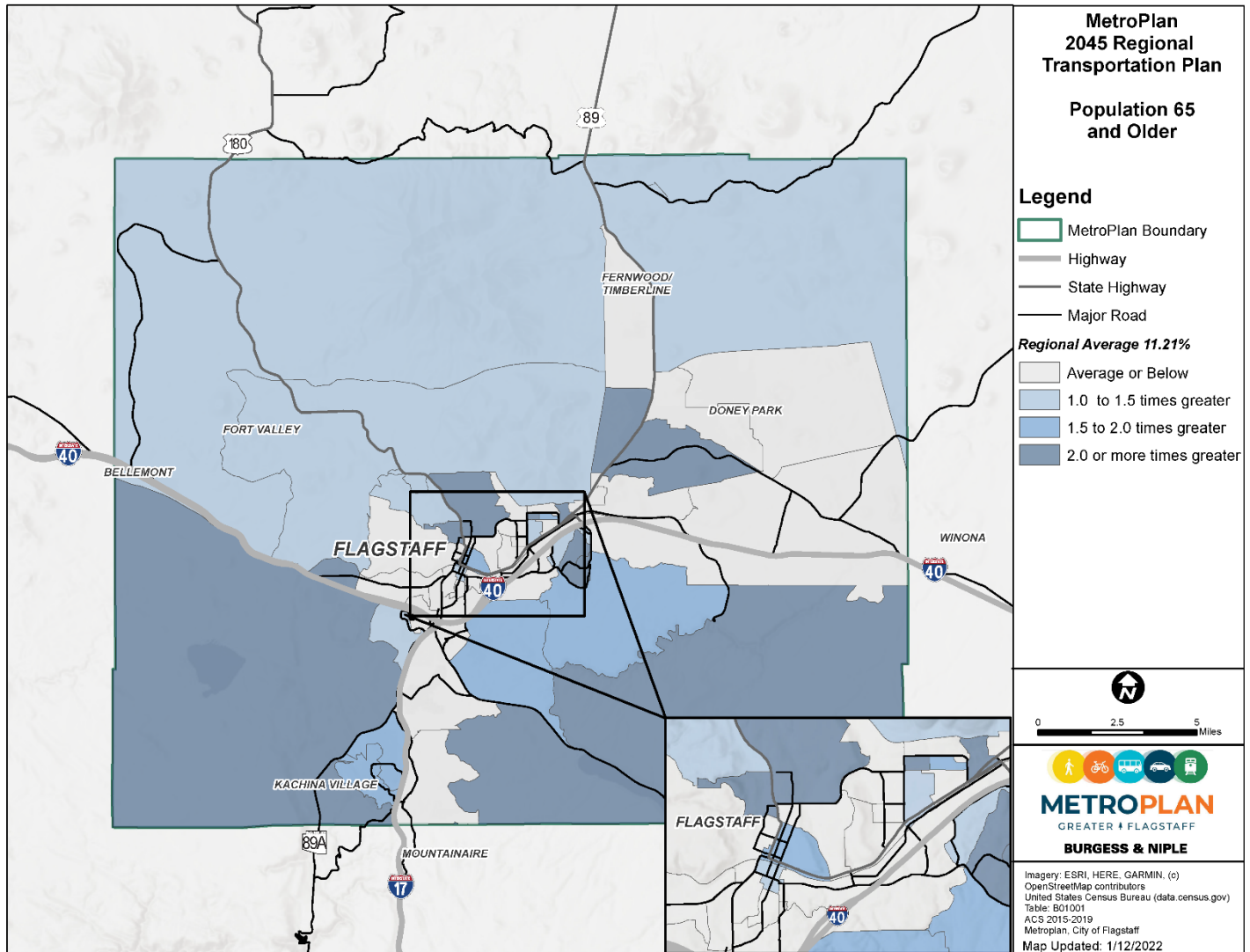
Figure 5 – Population 65 and Older
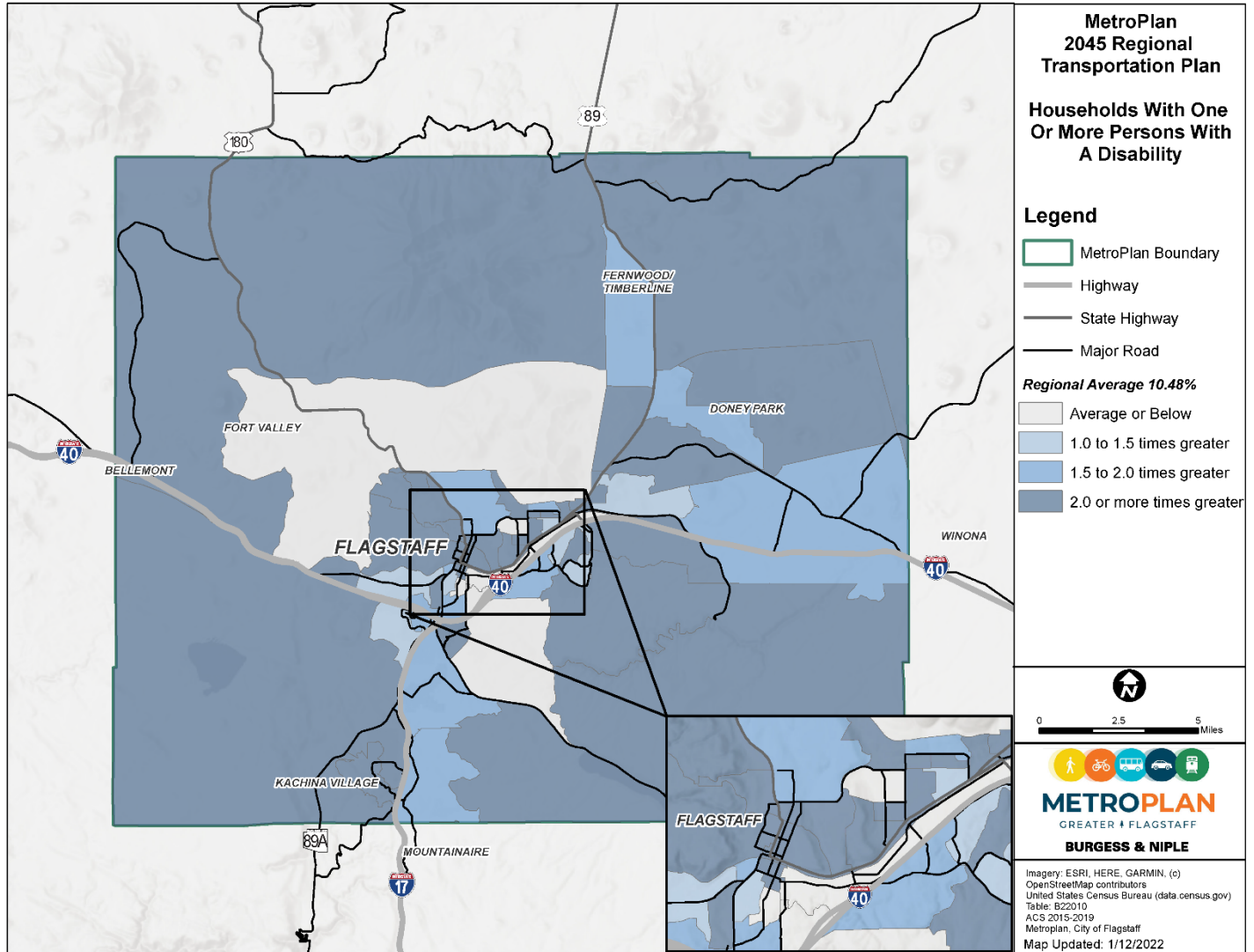
Figure 6 – Disability Status

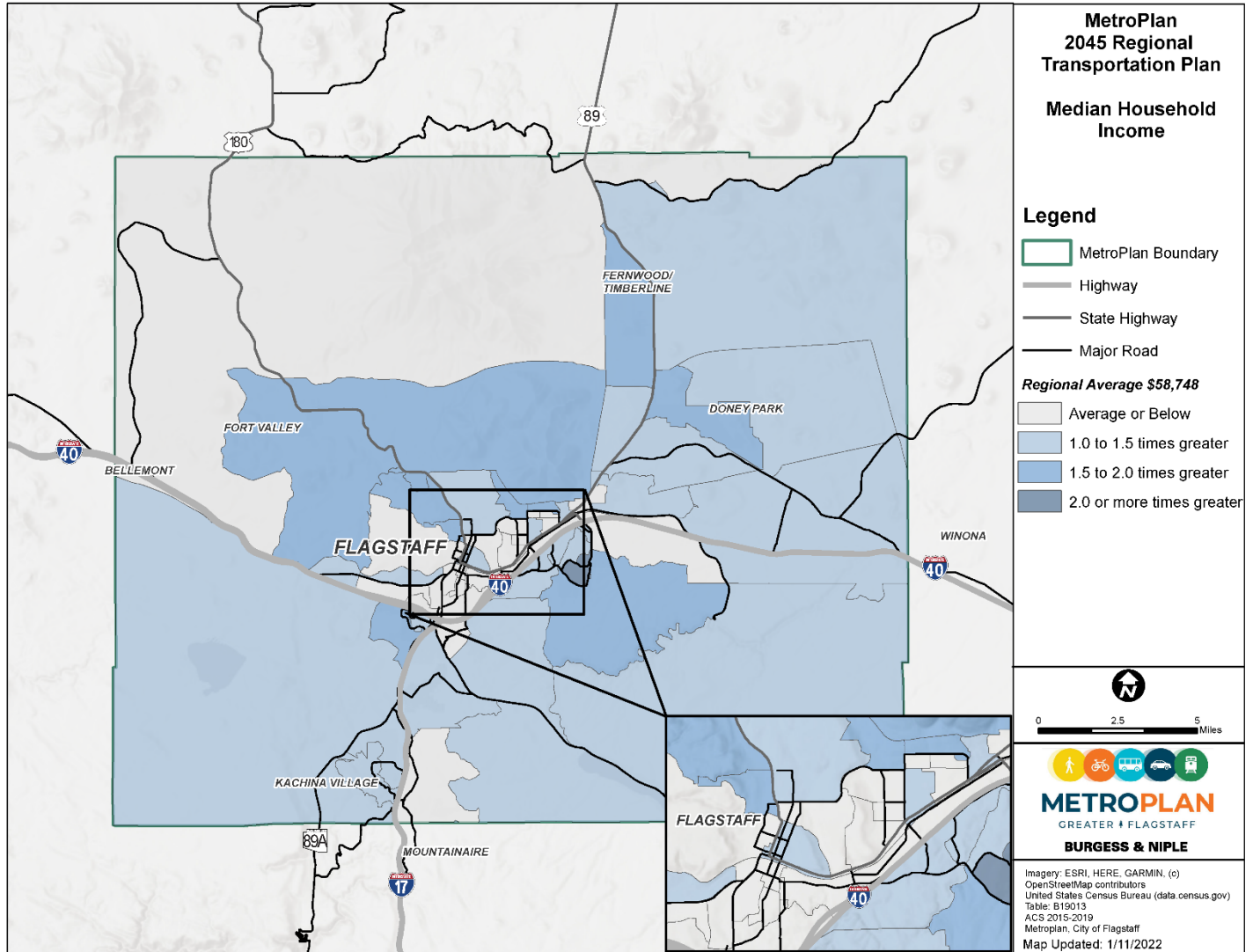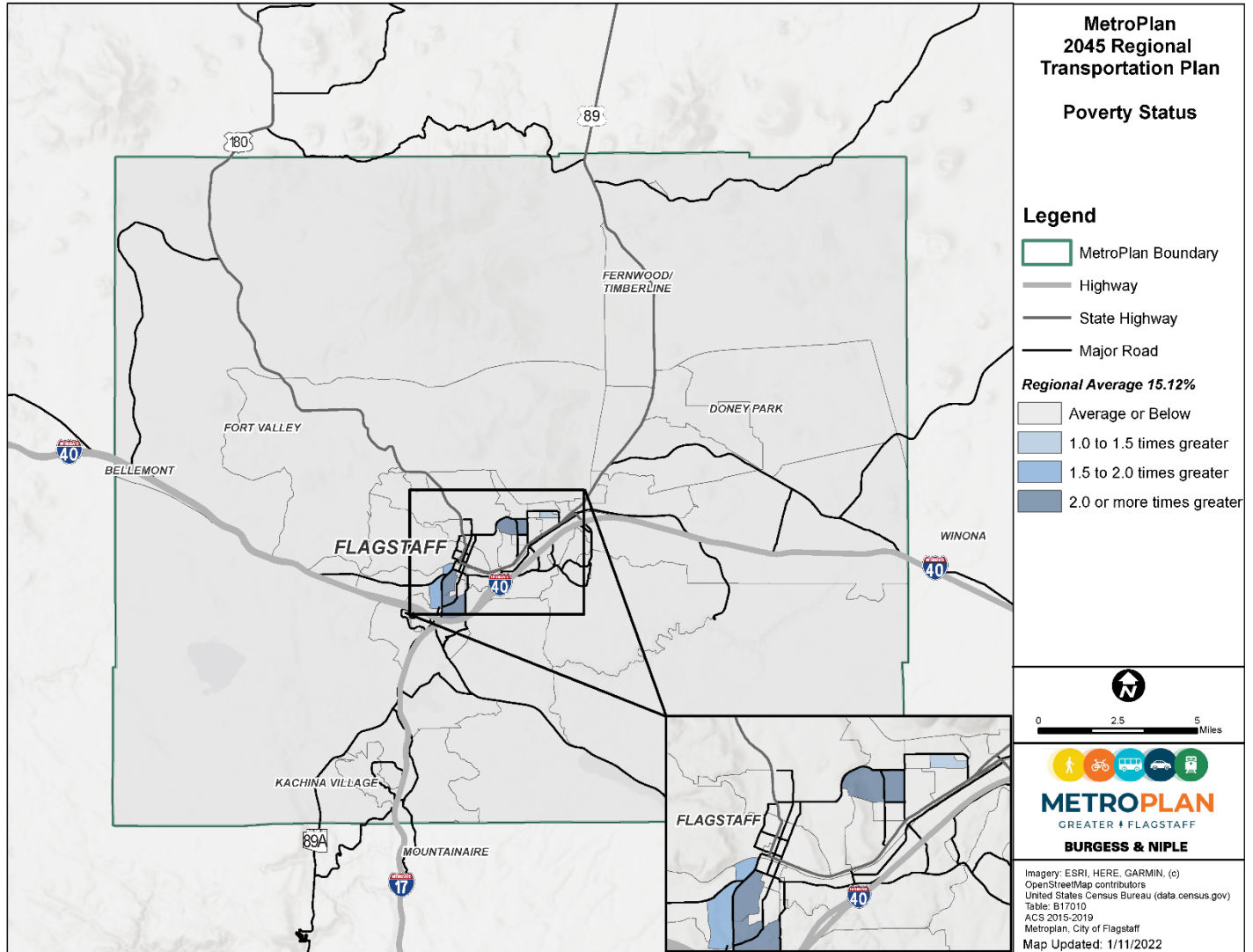**Figure 7 – Median Household Income**

Figure 8 – Poverty Status
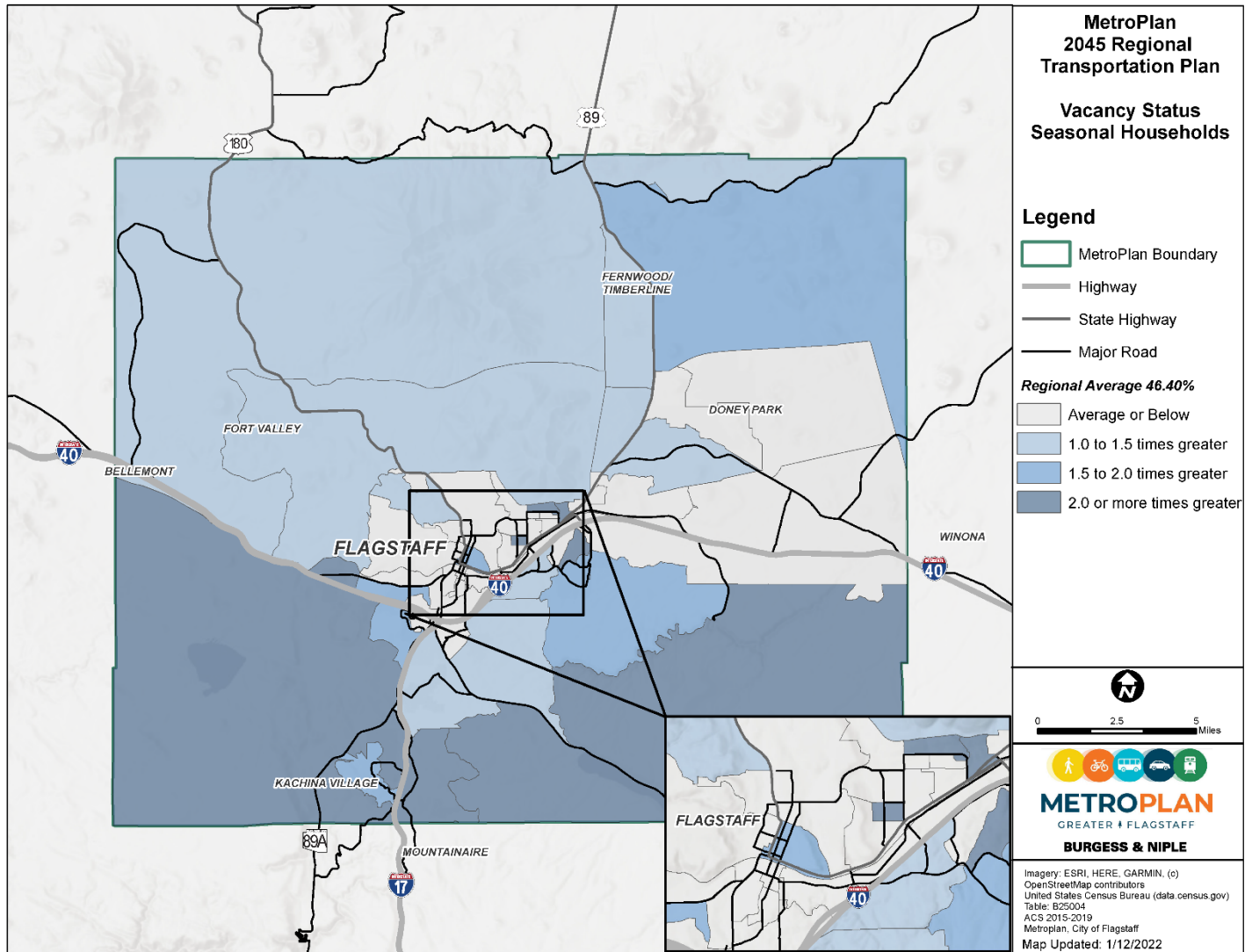
Figure 9 – Vacancy Status

Figure 10 – Computer Access
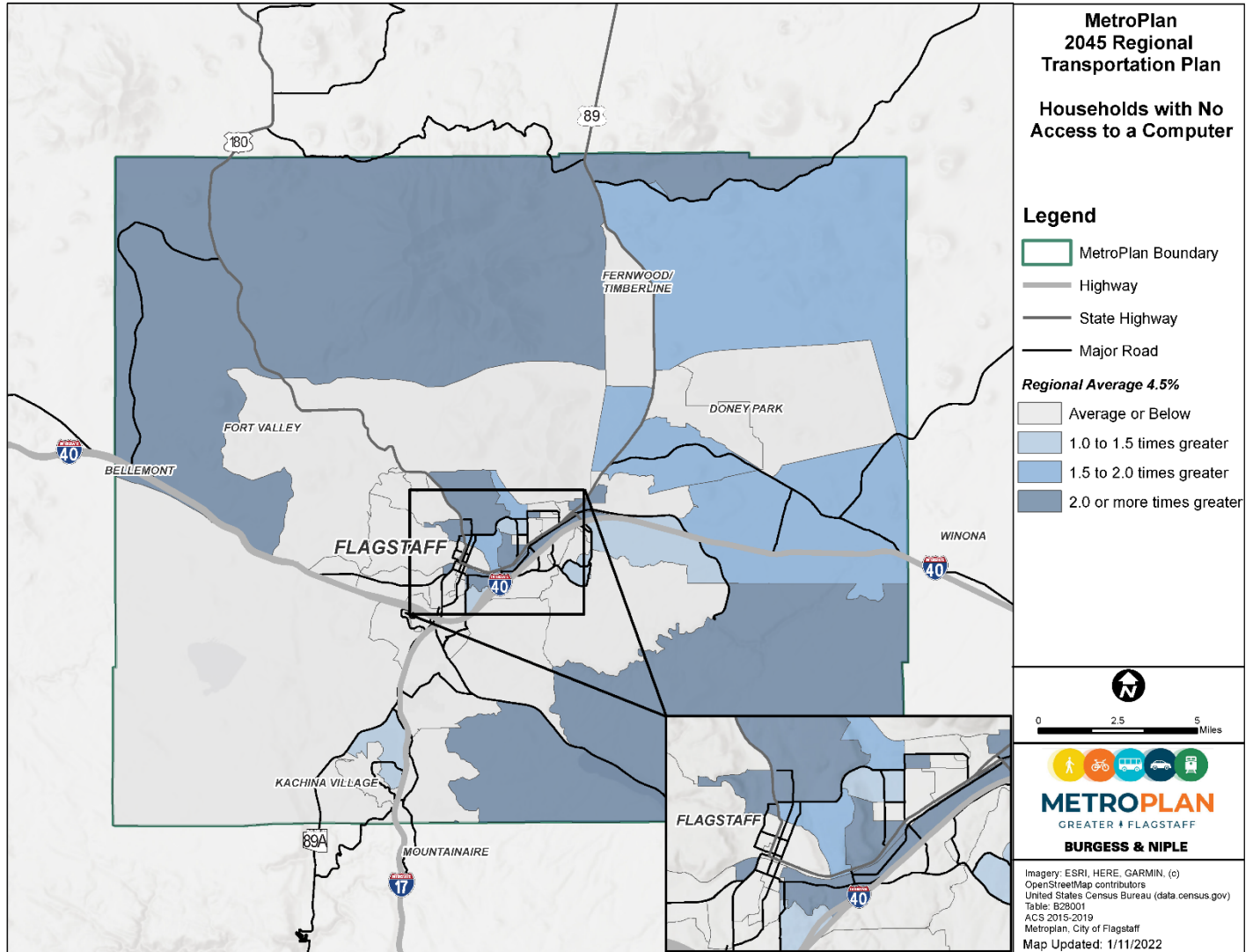
Figure 11 – Vehicle Access
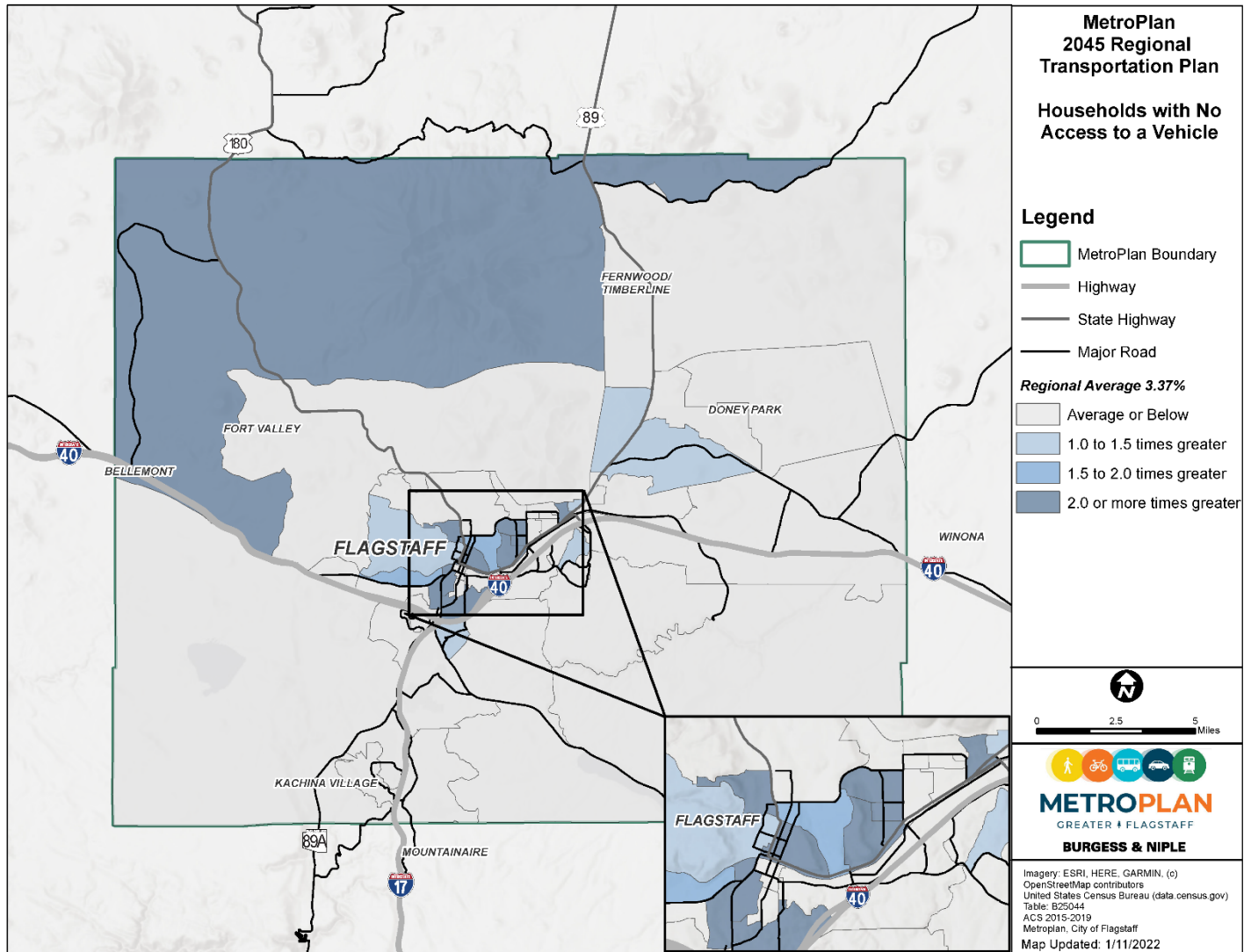
2.3. Employment

Employment information by industry for the study area is presented in *Table 1*.

Table 1 – Employment by Industry	
Industry	**% of Employment**
Agriculture, forestry, fishing and hunting, and mining	1.3%
Construction	5.2%
Manufacturing	6.4%
Wholesale trade	0.8%
Retail trade	10.8%
Transportation and warehousing, utilities	4.7%
Information	1.0%
Finance and insurance, and real estate and rental and leasing	3.7%
Profession, scientific, and management, and administrative and waste management services	7.9%
Educational services, and health care and social assistance	28.1%
Arts, entertainment, and recreation, and accommodation and food service	20.0%
Other services, except public administration	4.2%
Public administration	5.8%
Source: ACS 5-year average ACS DP03 Selected Economic Characteristics	

Figure 12 displays employment density in the MetroPlan region per ACS B23025 Employment Status for the Population 16 Years and Over. Employment is concentrated in the City of Flagstaff and south along I-17.

Figure 12 – Employment Density
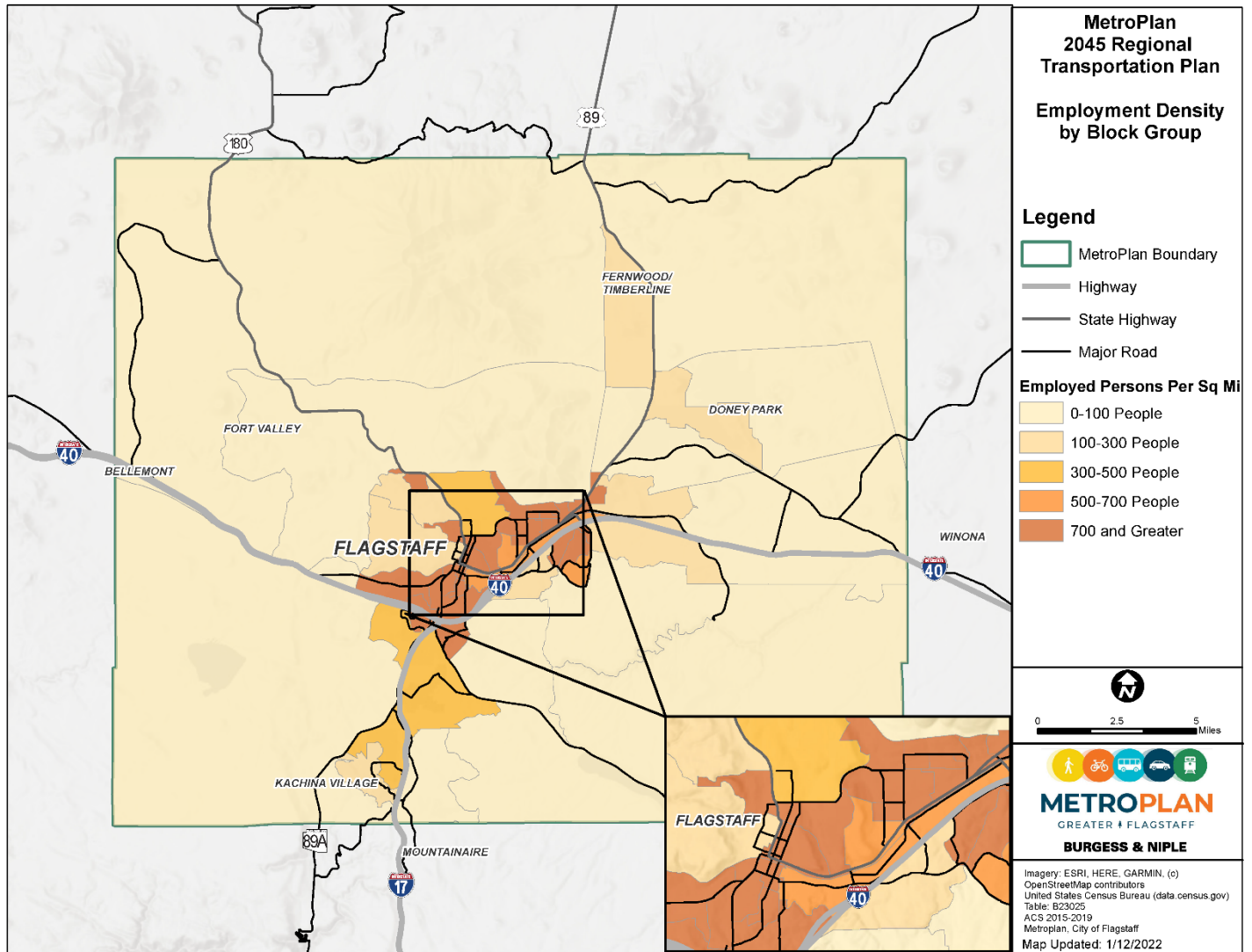
3.0   Temporal Trends

Temporal trends were reviewed to provide additional context to the socioeconomic review. This allows changes in population characteristics over time to be considered as part of project programming and scenario development.

Table 2 lists the population change in the study area from 2000 to 2019 ACS B01001 Sex by Age. The total change in population has been relatively low, with slight shifts in distribution by age. The largest percentage increase is among the over 65 population, with the largest percentage decrease in people 35 to 64. This trend may correlate to more residents "aging in place" in Flagstaff, with fewer new residents/families moving into the area.

Table 2 – Population						
	2000	**% of 2000 Total Population**	**2010**	**% of 2010 Total Population**	**2019**	**% of 2019 Total Population**
Total	92,101	100.0%	92,575	100.0%	93,428	100.0%
Under 5	6,163	6.7%	5,798	6.3%	4,611	4.9%
5 – 19	20,394	22.1%	20,452	22.1%	23,283	24.9%
20 – 24	11,126	12.1%	12,701	13.7%	13,791	14.8%
25 – 34	12,999	14.1%	13,153	14.2%	13,184	14.1%
35 – 64	35,142	38.2%	33,633	36.3%	28,809	30.8%
65+	6,277	6.8%	6,838	7.4%	9,750	10.4%
Source: ACS 5-year average; ACS B01001 Sex by Age						

Nationally, the increase in population over 65 in the last decade can be attributed to the "Baby Boomer" generation. The youngest of the Baby Boomers will reach retirement age in this next decade.

Table 3 lists the changes in poverty status between 2010 and 2019 ACS B17010 Poverty Status in The Past 12 Months of Families by Family Type by Presence of Related Children Under 18 Years by Age of Related Children. Poverty is reduced overall and across all subdivisions reported. The average median household income increased over the course of the decade, from $52,882 in 2010 to $67,508 in 2019, outpacing the average yearly inflation rate of 1.78 percent. Median household income ranged from $13,333 to $119,375 in 2019. Despite increases in income, public surveys associated with other recent studies in the area denoted affordable housing is a priority for residents. Housing prices have increased substantially nationally; in Flagstaff, the typical home value increased from $255,000 in 2011 to $552,000 in 2021 (per Zillow information). Increases in housing prices are outpacing increases in income, thus making some aspects of living in Flagstaff less affordable despite increased income.

The full effect of COVID-19 on both household income and poverty status has not been compiled at the time of this report.

Table 3 – Poverty Status				
	2010	**% of 2010 Total Population**	**2019**	**% of 2019 Total Population**
Total	20,745	22.4%	17,902	19.2%
Married Couple Family	15,340	16.6%	13,789	14.8%
With related children under 18 years	6,602	7.1%	5,608	6.0%
Male Householder, no spouse present	1,688	1.8%	1,310	1.4%
With related children under 18 years	1,084	1.2%	709	0.8%
Female Householder, no spouse present	3,717	4.0%	2,803	3.0%
With related children under 18 years	2,376	2.6%	1,693	1.8%
Civilian noninstitutionalized population *Source: ACS 5-year average; ACS B17010 Poverty Status in The Past 12 Months of Families by Family Type by Presence of Related Children Under 18 Years by Age of Related Children*				

Table 4 lists the changes in identified racial or ethnic status between 2010 and 2019 per ACS B03002 Hispanic or Latino Origin by Race. There has been an increase in minority populations.

Table 4 – Race or Ethnicity				
	2010	**% of 2010 Total Population**	**2019**	**% of 2019 Total Population**
White	62,354	67.4%	62,627	67.0%
Black or African American	1,131	1.2%	1,310	1.4%
American Indian and Alaska Native	10,119	10.9%	7,049	7.5%
Asian	1,674	1.8%	2,411	2.6%
Native Hawaiian and Other Pacific Islander	106	0.1%	189	0.2%
Hispanic or Latino	15,034	16.2%	16,508	17.7%
Some other race alone	207	0.2%	109	0.1%
More than one race*	3,900	4.2%	6,450	6.9%
Source: ACS 5-year average; ACS B03002 Hispanic or Latino Origin by Race *More than one race may include people who identify as Hispanic or Latino and another race*				

Table 5 lists the changes in disability status between 2012 and 2019 per ACS S1810 Disability Characteristics. There is an increase in disability status across each age group, but particularly those 65 and older. The information in **Table 5** is presented per person whereas the disability status displayed in **Figure 6** is per household due to two different data sets being referenced. The data set utilized in **Figure 6** (ACS B22010 Receipt of Food Stamps/Snap in the Past 12 Months by Disability Status for Households) is available at the block group level and allowed for better spatial presentation of the data. The data set utilized in **Table 5** (ACS S1810 Disability Characteristics) is only available at the census tract level but allowed for a granular review of disability status by age group.

Table 5 – Disability Status				
	2012	**% of 2012 Population Subset***	**2019**	**% of 2019 Population Subset***
Total	7,000	7.9%	9,408	10.1%
Under 5	16	0.3%	35	0.8%
5 – 17	317	2.3%	619	4.8%
18 – 64	4,727	7.6%	5,633	8.5%
65+	1,940	29.9%	3,121	31.9%
Civilian noninstitutionalized population *Source: ACS 5-year average; ACS S1810 Disability Characteristics*				

4.0   Accessibility

The ability of residents to receive support services, such as childcare, healthcare, and continuing education opportunities is considered accessibility. Accessibility may be hindered by various factors, such as distance, lack of a personal vehicle, poverty, or disability, creating a vulnerable population. *Figure 13* and *Figure 14* illustrate locations within the study area where poverty, disability, and lack of personal vehicle are higher than the County averages. The information presented in this paper will be used to inform an equity and accessibility analysis.

A few general trends have emerged within the study area and are summarized below:

- Block groups with higher averages of disabled population and population over 65 overlap in many instances, which aligns with the proportion of disabled people over 65.
- The area around NAU has a higher proportion of people with no personal vehicles; this may be somewhat driven by the student population living near campus.
- The Grandview Homes and Sunnyside neighborhoods have a higher minority population, limited English proficiency, lower median household income, and fewer to no household vehicles than the rest of the city of Flagstaff and the study area.
- Doney Park has multiple accessibility factors; however, they are largely linked to an older population. Residents appear to have adequate automobile access, though use of other modes may be more restricted due to factors such as distance to the urban center.

Considerations:

- The population over 65 may be retired, and some older persons may no longer drive. While daily commuting may be unnecessary, access to medical care, groceries, and other services is essential.
- NAU students living near campus may use active transportation or transit for a higher proportion of their trips.
- Areas with very low population density and traditionally underserved populations (e.g. the National Forest area) would likely require different accommodations than urban populations. These areas typically had less technological connectivity (computers/internet).
- Sunnyside, Mobile Haven, and Grandview Homes may experience higher risk of accessibility issues.
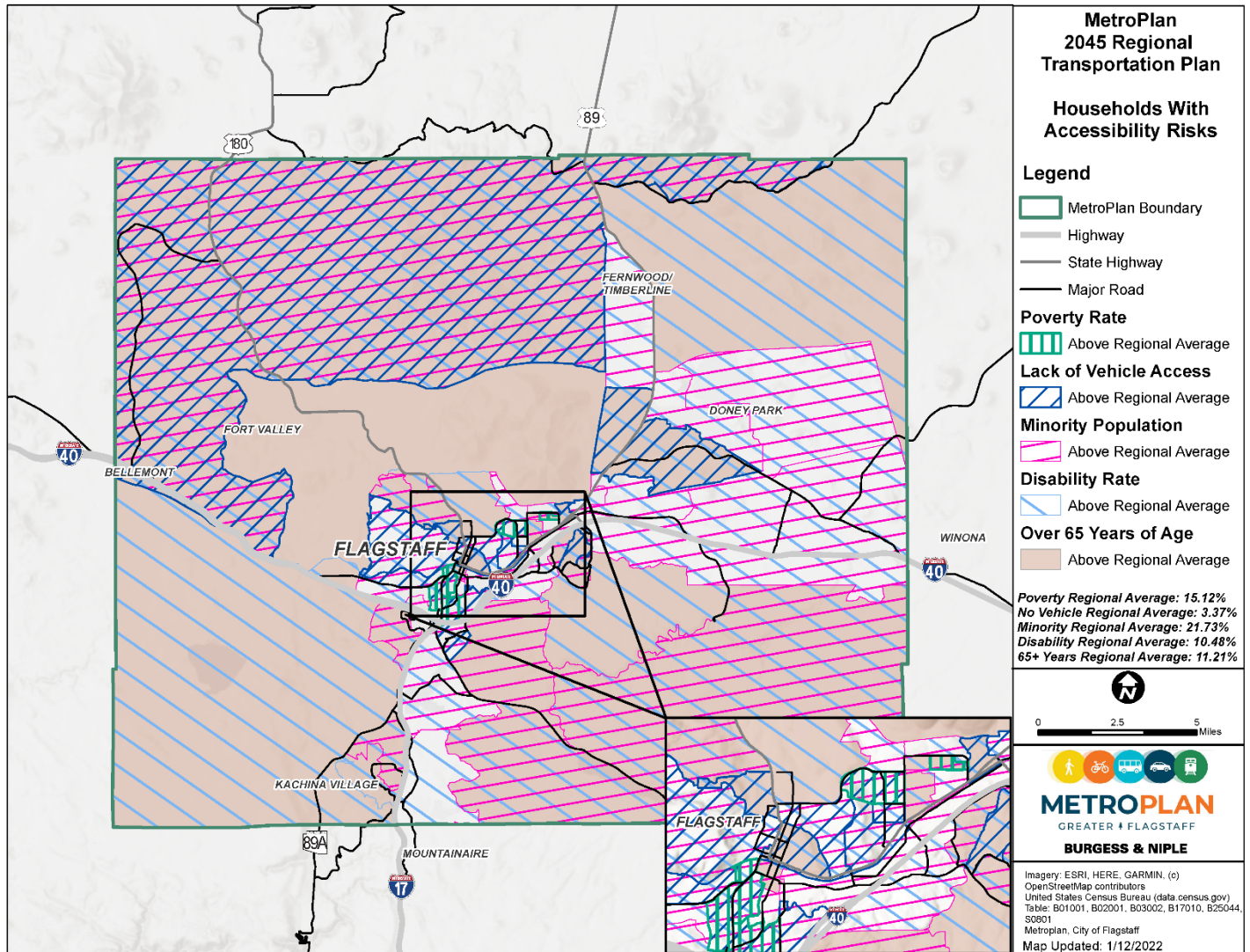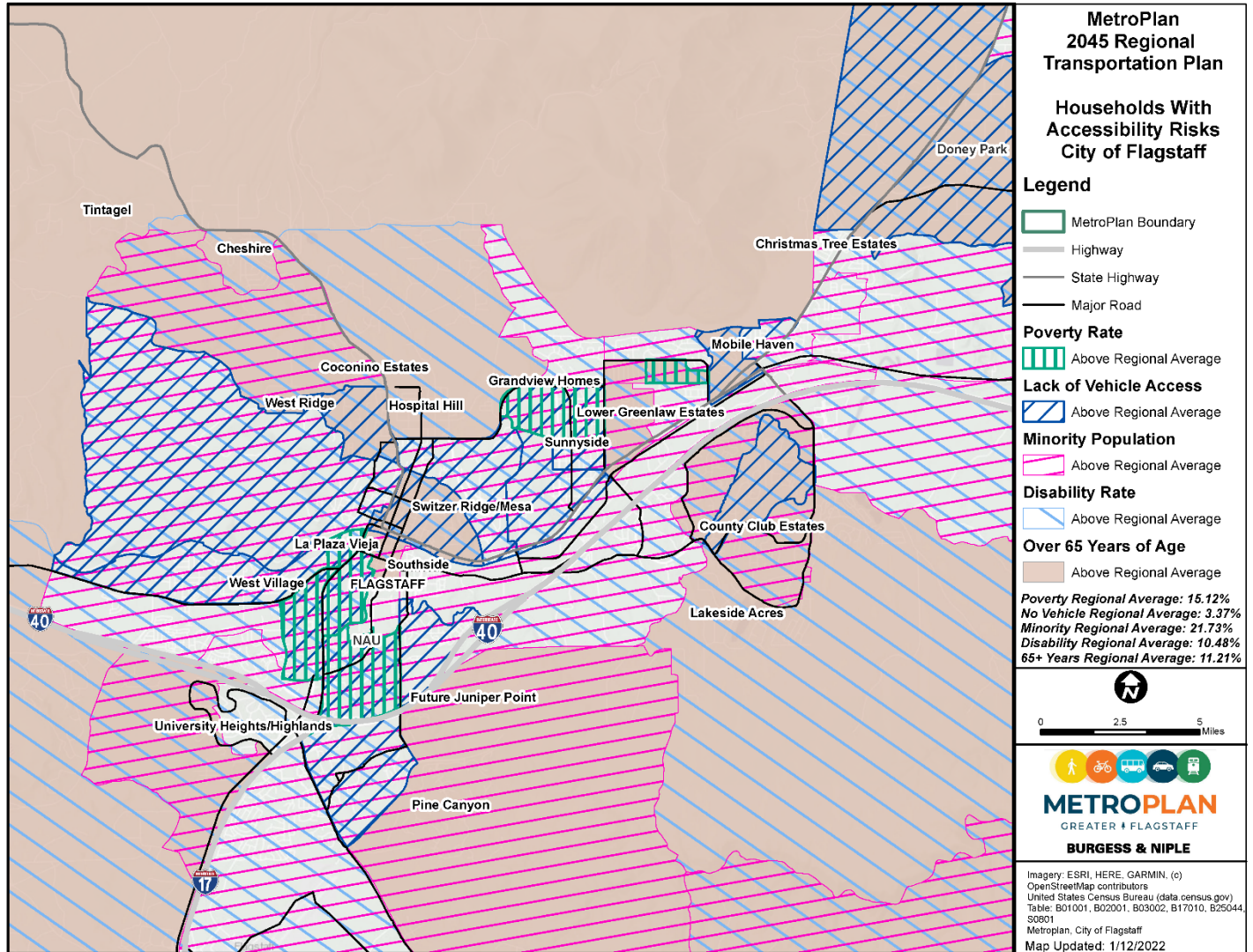
Figure 13 – Households with Accessibility Risks

Figure 14 – Households with Accessibility Risks (City of Flagstaff)

5.0   Next Steps

The socioeconomic review will inform scenario development and an equity and accessibility analysis. Based on the socioeconomic analysis and trend review, the neighborhoods of Sunnyside, Mobile Haven, and Grandview Homes could be considered for accessibility review. They could be contrasted with other Flagstaff-area neighborhoods. Considerations for an increasing aging population and their needs could be considered.