

Access Ohio 2040

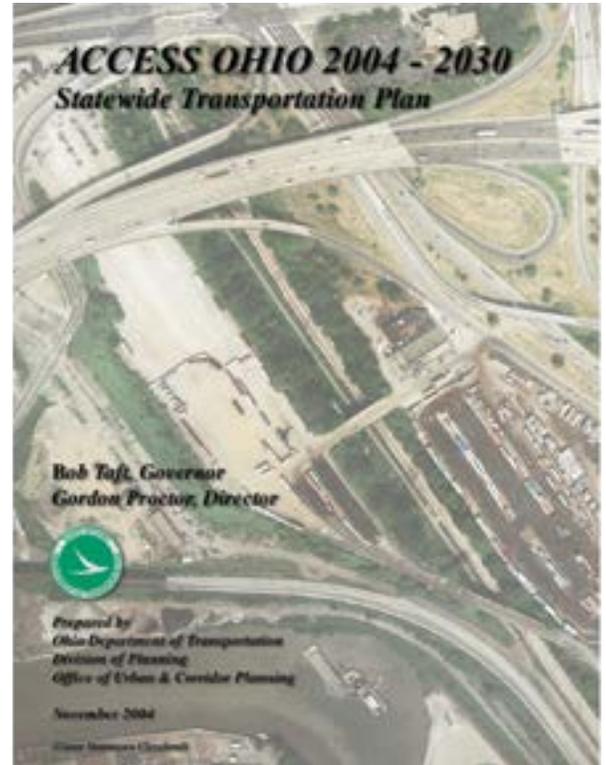


Statewide Demographic Profile

Welcome to Access Ohio 2040

What is Access Ohio 2040?

Access Ohio 2040 is an update to Ohio's current long range transportation plan, Access Ohio 2030. The Ohio Department of Transportation is currently in the process of updating the long range plan to help guide the future of transportation in the state over the next 30 years. The plan will guide, inform, and support multimodal transportation planning across the state. ODOT will solicit public input early and often into the development of Access Ohio 2040 in an effort to develop a useful plan that meets the needs of Ohio.



Why are Demographics Important?

An important part of creating a long range plan is understanding the demographics of the population that the plan will cover. Understanding demographic changes is useful in determining the change in land use and transportation demand across the state expected over the life of the plan. The following demographic breakdown of Ohio will be used in the Access Ohio 2040 planning process.



Population

As of the 2010 US Census, the population of Ohio had grown to 11,536,504, a 1.6% increase over the 2000 population. This growth is less than the 4.7% growth between 1990 and 2000. No census has ever identified a decline in Ohio's population, but the rate of growth has slowed from the 15 and 20% growth seen in the mid 20th century. Historic Ohio populations as well as the percent change in the population every 10 years can be seen in Table 1 while a map of the current county populations can be seen in Figure 1.

While the Ohio population grew from 2000 to 2010, the growth was not evenly distributed throughout the state. Aside from Franklin County which is home to Columbus, urban counties with Ohio's largest cities are shrinking in population while the neighboring suburban counties are growing. Suburban Delaware County saw a 58.4% increase in population from 2000 to 2010, the largest growth rate in the state. On the other hand, urban Cuyahoga County lost 8.2% of its population from 2000 to 2010, the largest population decline in the state. While Cuyahoga County may have seen the largest population decline in the state, it is still Ohio's largest county with 1,280,122 residents and home to the city of Cleveland. The fewest residents can be found in southeast Ohio's Vinton County with a population of 13,435 in 2010. Figure 2 shows the population change of all 88 Ohio counties from 2000 to 2010.

Year	Population	Percent Change
2010	11,536,504	1.6%
2000	11,353,150	4.7%
1990	10,847,115	0.5%
1980	10,797,630	1.4%
1970	10,652,017	9.7%
1960	9,706,397	22.1%
1950	7,946,627	15.0%
1940	6,907,612	3.9%
1930	6,646,697	15.4%
1920	5,759,394	20.8%
1910	4,767,121	14.7%

Table 1: Historic Ohio Population
Source: US Census



Age and Race

In addition to population growth, the demographics of Ohio's population continue to change. The median age of Ohioans continues to grow, up to 38.8 in 2010 compared to 36.4 in 2000 and 33.3 in 1990. A distribution of the population by age and sex can be seen in Table 2 while a map of the median age by county is seen in Figure 3. As can be seen in Figure 3, there is a cluster of counties in the eastern portion of the state with high median age. This cluster includes Noble County, which at a median age of 48.6 is the highest in the state. The lowest median age is 26.3 found in Athens County.

The racial distribution of Ohio's population is also changing. The largest growth was seen in the Hispanic population with a 63.4% increase from 2000 to 2010. The racial distribution of Ohio's population can be seen in Table 3. On average, 23% of the population of a census tract in Ohio is a minority. Figure 4 shows the census tracts in Ohio that have a minority population above the 23% average.

Age	Both sexes	Male	Female
Total population	11,536,504	5,632,156	5,904,348
Under 5 years	720,856	367,479	353,377
5 to 9 years	747,889	382,641	365,248
10 to 14 years	774,699	396,152	378,547
15 to 19 years	823,682	420,975	402,707
20 to 24 years	763,116	384,202	378,914
25 to 29 years	718,630	357,837	360,793
30 to 34 years	691,329	344,087	347,242
35 to 39 years	718,462	356,420	362,042
40 to 44 years	761,369	377,896	383,473
45 to 49 years	855,134	420,425	434,709
50 to 54 years	887,057	434,740	452,317
55 to 59 years	786,857	383,440	403,417
60 to 64 years	665,409	320,421	344,988
65 to 69 years	478,864	223,797	255,067
70 to 74 years	371,370	167,142	204,228
75 to 79 years	297,519	126,706	170,813
80 to 84 years	243,833	95,450	148,383
85 to 89 years	153,874	52,291	101,583
90 years and over	76,555	20,055	56,500

Table 2: 2010 Ohio Population by Age Group
Source: US Census

		% of Total	Change (#)	Change (%)
Race	2010	2010	2000 - 2010	2000 - 2010
A: White	9,539,437	82.7%	-106,016	-1.1%
B: Black	1,407,681	12.2%	106,374	8.2%
C: American Indian/Alaskan native	25,292	0.2%	806	3.3%
D: Asian	192,233	1.7%	59,600	44.9%
E: Pacific islander	4,066	0.0%	1,317	47.9%
F: Some other race	130,030	1.1%	41,403	46.7%
G: Two or more races	237,765	2.1%	79,880	50.6%
H: Hispanic (any race)	354,674	3.1%	137,551	63.4%
I: Total	11,536,504	100.0%	183,364	1.6%

Table 3: 2010 Population by Race
Source: Ohio Department of Development

Median Age

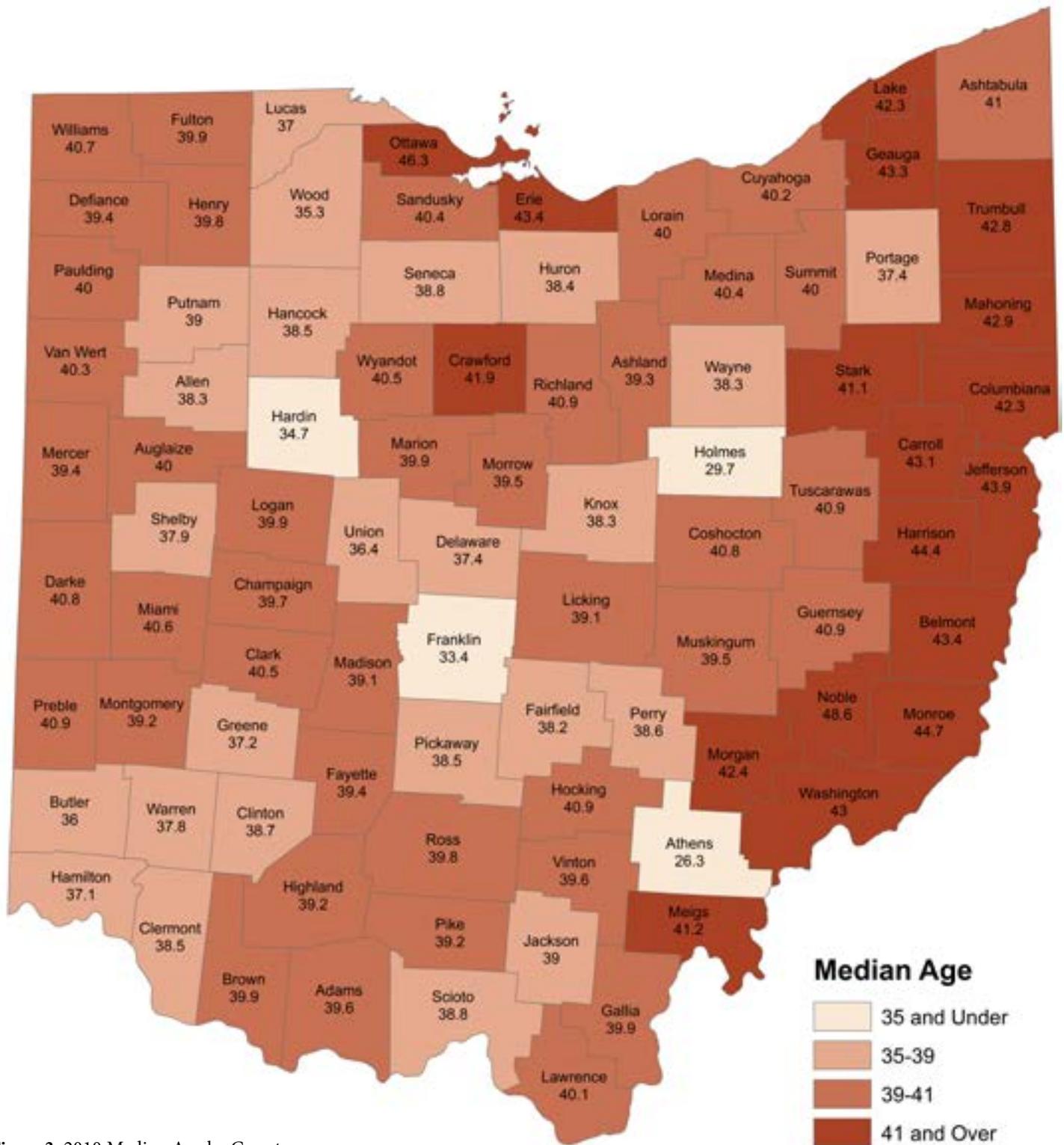


Figure 3: 2010 Median Age by County
Source: US Census

Minority Population

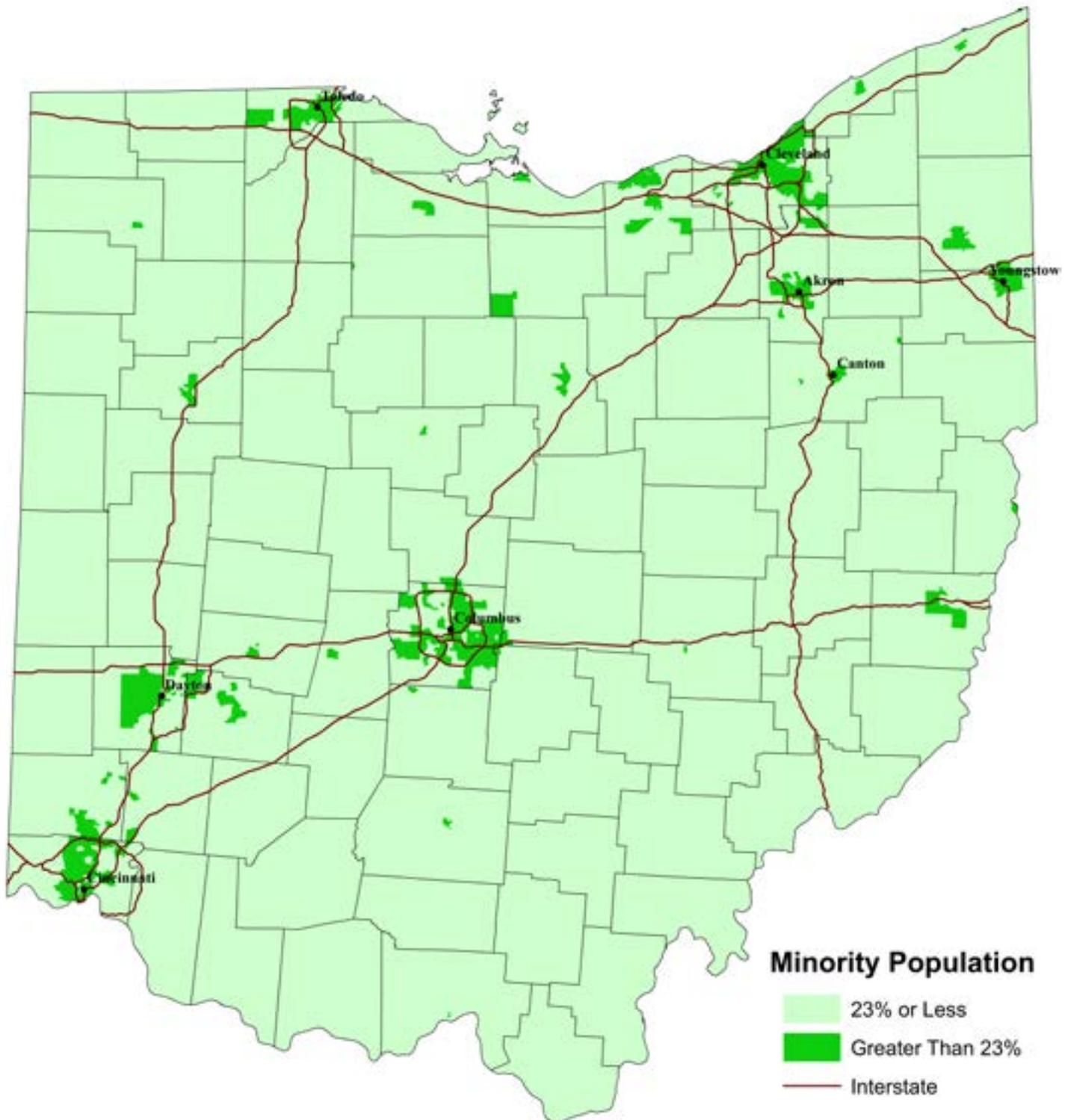


Figure 4: 2010 Minority Population by Census Tract
Source: US Census

Land Use

In addition to the state having both urban and rural areas, there also are parts of Ohio with high levels of vacant housing. However, this is neither predominantly urban nor rural but rather a mix of both throughout the state. On average, 10% of the housing units in a census tract are vacant. The largest concentrations can be found in southeast Ohio as well as the inner core of large cities. A map of vacant housing by census tract can be seen in Figure 5.

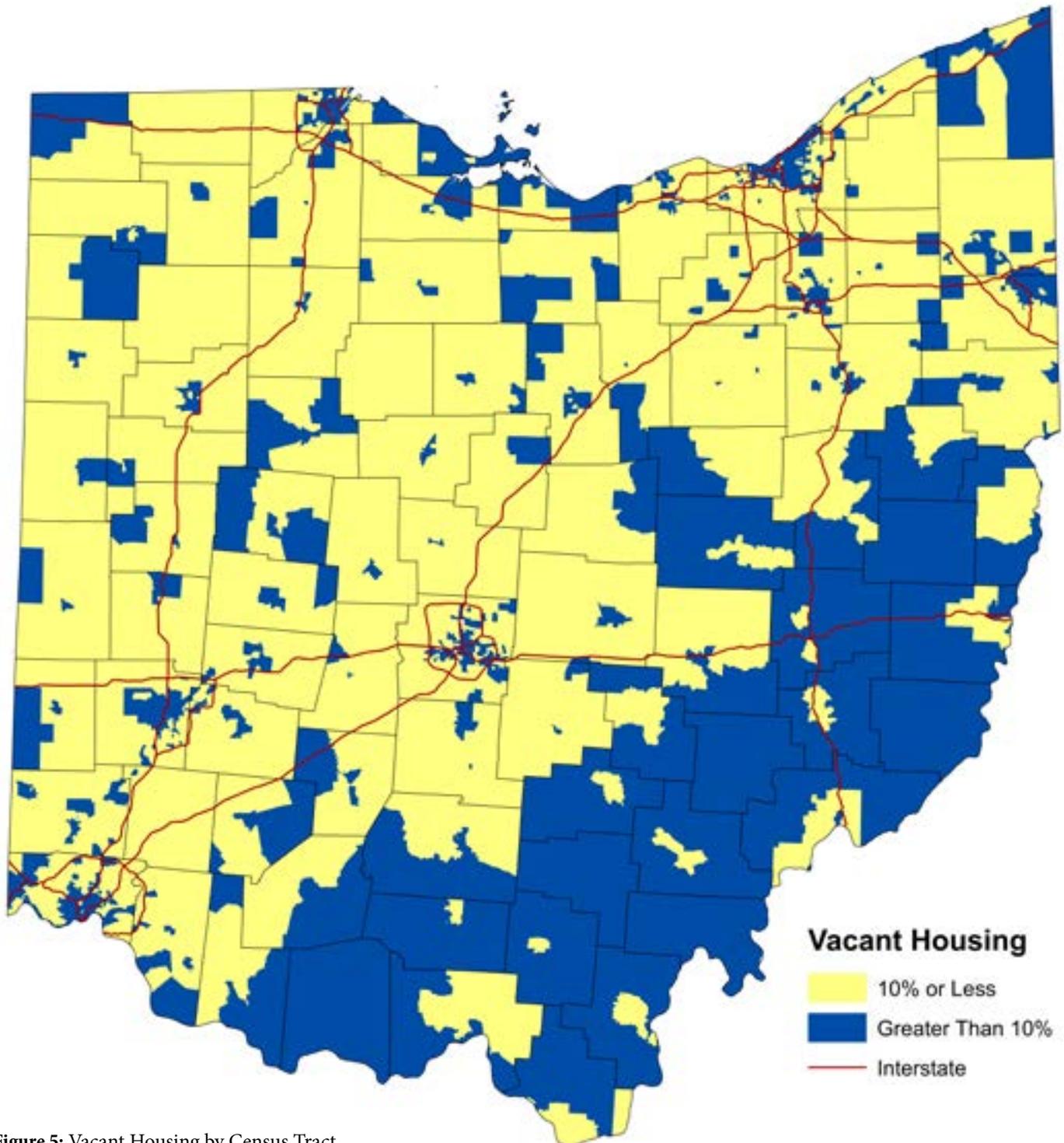


Figure 5: Vacant Housing by Census Tract
Source: US Census

Mode Choice

Travel modes and times are also important to understand in planning for the future transportation network. Data on transportation mode choice was found using data from the American Community Survey (ACS). Each year, about 3 million addresses nationwide receive an ACS survey from the US Census Bureau to fill out and return. The data used for mode choice is an estimate based on the ACS results from 2005-2009. Using ACS data, 82.9% of all trips to work are made by individuals driving alone in their car. The second highest mode choice is carpool with 8.5% of trips to work. The full breakdown can be seen in Table 4.

In addition, there were almost 8 million licensed drivers in Ohio in 2009. A breakdown of the licensed drivers by age is seen in Table 5. This large amount of licensed drivers points to a large amount of trips made by single occupancy vehicles. A map of the percentage of work trips by county that are drive alone can be found in Figure 6.

Mode	Percentage
Drove alone	82.90%
Carpooled	8.50%
Public transportation (excluding taxicab)	1.90%
Walked	2.30%
Bicycle	0.30%
Taxicab, motorcycle, or other means	0.80%
Worked at home	3.30%

Table 4: Mode Choice
Source: 2005-2009 ACS

Age	2009 Licensed Drivers
19 And Under	498,016
20-29	1,271,190
30-39	1,261,190
40-49	1,480,144
50-59	1,516,341
60-69	1,018,333
70-79	581,862
80 And Over	310,422

Table 5: Licensed Drivers
Source: Federal Highway Administration (FHWA)



Mode Choice

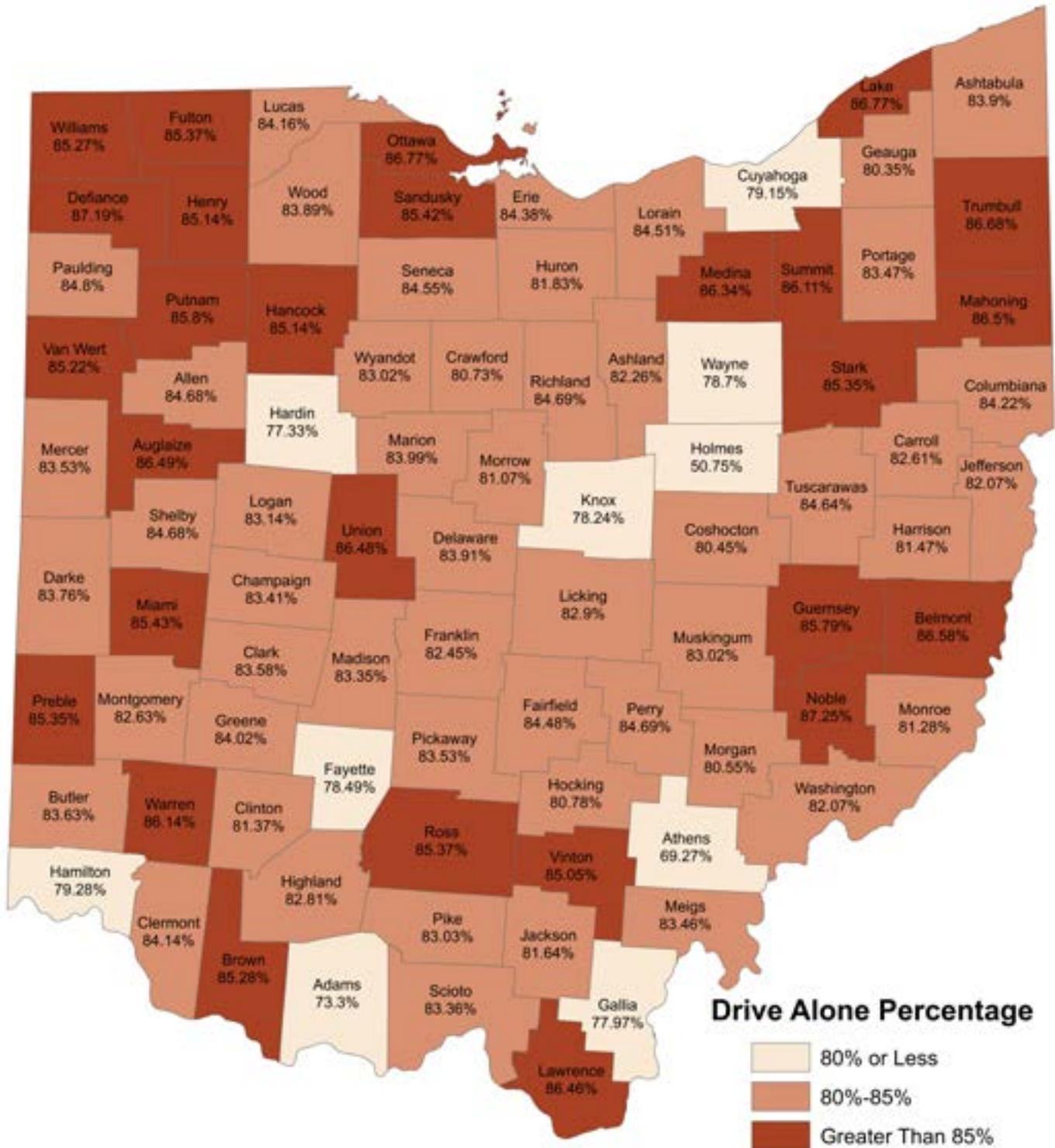


Figure 6: Percentage of Drive Alone Work Trips by County
 Source: 2005-2009 American Community Survey

Vehicle Ownership

While a majority of trips to work are made by driving alone, not all households have that option. For example, 8% of households do not own a vehicle while 33% only own 1 vehicle. A distribution of vehicle ownership from the 2005-2009 American Community Survey is seen in Table 6 while a chart showing the number of registered vehicles in the state in 2009 by type is in Table 7. A map of the percentage of no vehicle households by census block group is found in Figure 7. The average percent of no vehicle households in a block group in Ohio is 9%.

	Percentage
No vehicle available	8.0%
1 vehicle available	33.0%
2 vehicles available	38.4%
3 or more vehicles available	20.5%

Table 6: Household Vehicle Ownership
Source: 2005-2009 ACS

Type	Registered Vehicles
Automobiles	6,247,020
Busses	24,374
Trucks	4,562,655
Motorcycles	385,921
Total	11,219,970

Table 7: Registered Vehicles
Source: Federal Highway Administration (FHWA)

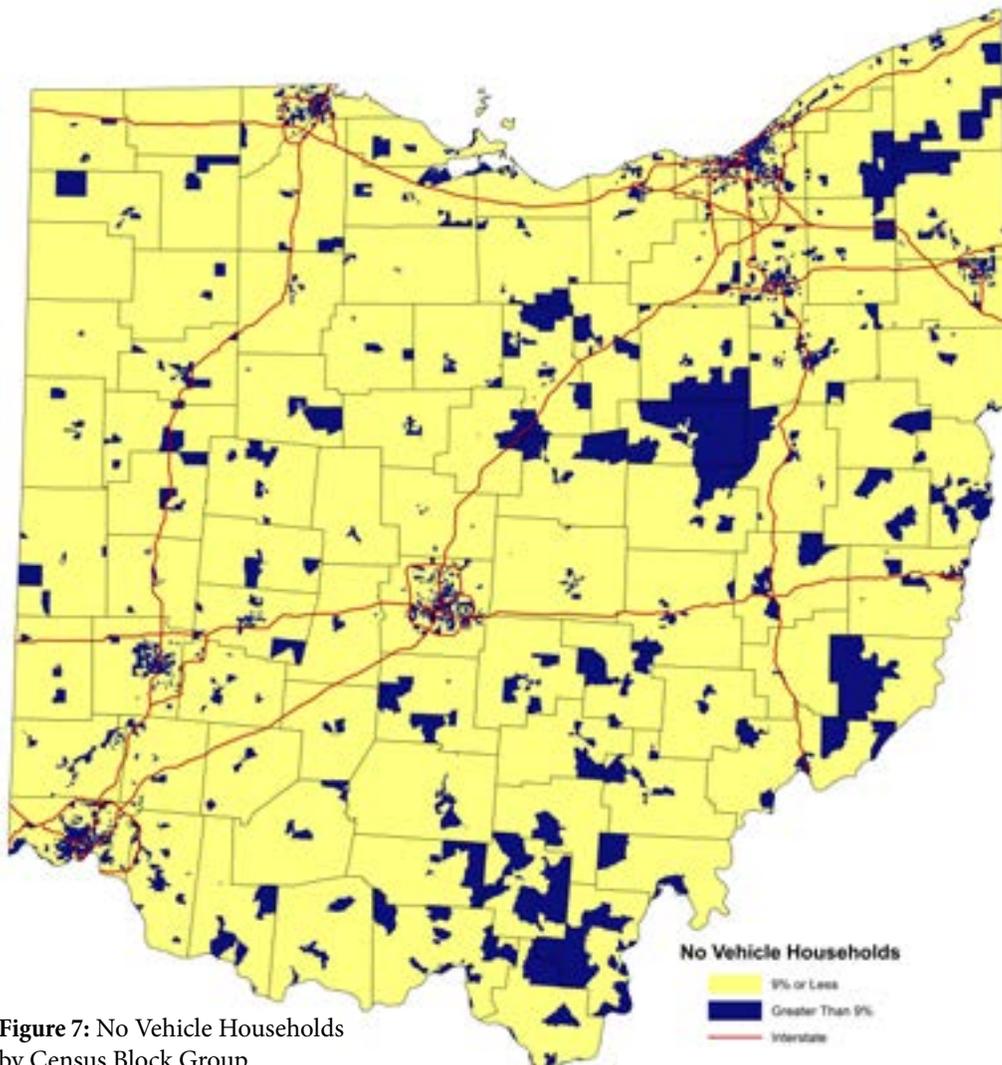


Figure 7: No Vehicle Households by Census Block Group
Source: 2005-2009 American Community Survey

Travel Time

Given that there are different modes of transportation used to travel to work, the travel times to reach work also differ significantly. While the mean time it takes an individual to travel to work is 22.6 minutes, 4.7% of trips take an hour or longer while 15.6% of trips take less than 10 minutes. The full distribution of travel times can be seen in Table 8.

Travel Time to Work	Percentage
Less than 10 minutes	15.60%
10 to 14 minutes	15.30%
15 to 19 minutes	16.50%
20 to 24 minutes	16.40%
25 to 29 minutes	7.50%
30 to 34 minutes	12.20%
35 to 44 minutes	6.10%
45 to 59 minutes	5.60%
60 or more minutes	4.70%
Mean travel time to work (minutes)	22.6

Table 8: Travel Time to Work

Source: 2005-2009 ACS



Economy

The GDP of the State of Ohio is \$471.3 billion, which ranks as the 8th largest state in the nation. Not only does Ohio have one of the largest state GDPs, but if Ohio were a country it would have the 26th largest GDP in the world according to the Ohio Department of Development. In addition to a large GDP, Ohio also exported \$41.4 billion in goods in 2010. Goods were exported to 212 countries and territories with Canada as the largest recipient. Along with exports, Ohio has 60 Fortune 1000 businesses headquartered throughout the state.

Employment in Ohio is made up of a diverse group of industries. As of 2009, the sector with the largest number of employees is government and government enterprises followed closely by health care and social assistance. The list of industries and their respective employment can be found in Table 9. In addition, a list of the largest employers in the state in 2011 can be found in Table 10.

Industry	2009 Employment
Farm employment	79,116
Forestry, fishing, and related activities	13,151
Mining	36,039
Utilities	22,967
Construction	311,646
Manufacturing	652,221
Wholesale trade	242,576
Retail trade	676,184
Transportation and warehousing	217,706
Information	97,805
Finance and insurance	319,027
Real estate and rental and leasing	236,964
Professional, scientific, and technical services	372,195
Management of companies and enterprises	111,353
Administrative and waste services	368,179
Educational services	143,244
Health care and social assistance	815,535
Arts, entertainment, and recreation	121,083
Accommodation and food services	444,272
Other services, except public administration	339,316
Government and government enterprises	841,696

Table 9: Employment by Industry
Source: US Bureau of Economic Analysis

Employer	Employees in Ohio	Headquarters	Sector
Wal-Mart Stores, Inc.	52,275	Bentonville, AR	Retail
Cleveland Clinic	39,400	Cleveland	Health
Kroger Co.	39,000	Cincinnati	Food Stores
Catholic Healthcare Partners	30,300	Cincinnati	Health
The Ohio State University	28,300	Columbus	Education and Health
Wright-Patterson AFB	26,300	Dayton	Military
University Hospitals	21,000	Cleveland	Health
JP Morgan Chase & Co	19,500	New York, NY	Finance
Giant Eagle, Inc.	17,000	Pittsburgh, PA	Food Stores
OhioHealth	15,800	Columbus	Health

Table 10: Ohio's Largest Employers in 2011
Source: Ohio Department of Development

Planning Implications

Population Growth

While the population of Ohio is still growing, it is not growing at as fast a rate as in the past. Slower population growth lessens the need to develop new infrastructure. However, statewide population growth is only one factor. Some areas of the state, such as Delaware County, are still growing fast while other portions of the state are declining in population. Finding the areas of growth and areas of decline will impact where new infrastructure may be needed compared to where maintenance of existing infrastructure is sufficient.

Land Use

Areas where there are large amounts of vacant housing point towards underused infrastructure. These are areas where there once was a much higher concentration of people and thus the transportation infrastructure was developed to transport a larger population. Redevelopment of vacant properties would be beneficial in getting optimal use out of existing infrastructure thereby cutting the need and thus cost to build new infrastructure.

Mode Choice

While an overwhelming majority of work trips are made by people driving alone, there are areas with higher concentrations of other modes. For example, only 69.27% of work trips in Athens County are made by motorists driving alone. Location of areas with high percentages of multimodal trips indicates potential areas of transit, bicycle, or pedestrian investment. In addition, locating areas with a larger percentage of households that do not own a vehicle will show potential locations for investment in transit, bicycle, or pedestrian infrastructure.

Economy

Industry employment gives indications as to the impact on transportation infrastructure. For example, manufacturing employment indicates trucking and intermodal infrastructure needs while finance or insurance simply indicates commuter needs. Projecting which industries will see growth in the future will be helpful in determining potential intermodal infrastructure needs.

Accessibility

Concentrations of populations with higher median age and higher amounts of no vehicle households could show areas of need for alternative modes of transportation. Higher median age might indicate that there is a larger elderly population which may rely on transit service to travel for basic needs. Similarly, areas with high amounts of no vehicle households need access to alternative modes of transportation. Rural areas of Ohio, specifically southeast Ohio, have higher concentrations of no vehicle households and higher median age.