# **CHAPTER 2:** REGIONAL TRENDS

Central Ohio is the fastest growing region in the Midwest and is one of the fastest growing in the entire country. The Columbus MPO is home to 1.6 million residents and over 900,000 jobs. The MPO is expected to hit 2.2 million residents and 1.2 million jobs by the year 2050. Both the magnitude and pattern of expected development impact demand on the region's transportation system.

Just as land uses and economic systems provide the origin and destinations of travel patterns, the transportation system provides the means for connecting them. Transportation systems support Central Ohio's inter-regional economic connections, and serve the intra-regional mobility needs of residents and commerce.



### **2.a GROWTH & DEVELOPMENT PATTERNS**

The Columbus region is positioned as a fulcrum for distributing goods to the Eastern United States and Midwest. Its physical infrastructure is extensive and augments its close proximity to large markets (goods leaving Columbus can reach approximately 46 percent of the U.S. population within a 10-hour drive). The regional economy is diverse and growing as a center for innovation—it is a national center for insurance and finance, healthcare, research facilities, and increasingly the tech sector. At the same time, numerous anchor institutions lend stability to the region's economy – Central Ohio is home to 52 college and university campuses (including The Ohio State University) and is the center of seat of state government for Ohio.

The region is attractive both to businesses and residents—evidenced by a decade with the strongestever annual average population growth—an increase of 24,000 residents each year during the 2010s.

The pattern of this recent growth has changed compared with prior periods of expansion for the region. Preferences and lifestyles of the growing number of older adults (Baby Boomers) and young adults (Millennials and Gen Z) in the region are changing demand for housing. This changing demand, along with a shifting emphasis on the quality of life and cost-saving benefits of more compact development have resulted in the most centralized and compact growth pattern the region has experienced in decades.

#### **DRIVERS OF CHANGE**

Broadly, historic growth trends provide understanding of the key drivers of growth, which set the stage for predicting the future trajectory. As natural increase (the excess of births minus deaths) slows down in the region in alignment with national trends, future growth will increasingly rely on new residents moving into Central Ohio from the U.S. and abroad.

#### Residents' life stages and generational preferences will impact demand.

The needs of a growing population shift over time. The population will change by age as generations shift through different life stages in the next 30 years. Baby Boomers will age into older adulthood, Millennials will enter the typically more settled late 30s and 40s, and Gen Z will enter the more geographically mobile early adulthood years. As Baby Boomers retire, there will be changes for employers and social service providers as more of the population leaves the labor force. There will also be changes in housing and transportation needs that support residents at all stages of life, and that appeal to the changing preferences and lifestyles of young people choosing a place to live when entering the workforce.

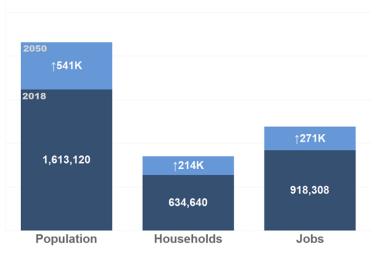
#### Policies and planning strategies in the region set the stage for continued growth.

Compact, connected neighborhoods and the strategies of infill and redevelopment can help to meet the changing needs and preferences of the region's growing population. Initiatives such as insight2050 and insight2050 Corridor Concepts explore how more walkable, bike-able, transit-supportive neighborhoods can positively impact transportation, infrastructure, housing, and the environment. These studies show there are clear quality of life, economic, community development, and environmental benefits that come from such development patterns, including better access to jobs, more and better mobility options, and more inclusive communities. By building upon the infrastructure we have today, Central Ohio can afford to grow in a way that makes resources go further and helps to meet the region's growing need and preference for better-connected neighborhoods.

#### HISTORIC AND FUTURE GROWTH

The location of new housing and employment growth, and the density and proximity of future development, define what types of transportation services will be necessary to support improved quality of life and continued economic success for the region in the years to come.

The MPO is expected to increase from 1.6 million people in 2018, to 2.2 million in 2050. This increase of an additional 541,000 people (34%) will require growing the housing stock from 635,000 to 850,000 units (34% increase) and growing the job market from 918,000 to 1.2 million (30%), as shown in Figure 2.1.





#### Recent trends toward denser and more centralized housing is a step in the right direction.

Residential development in the region has shifted in response to changing market preferences in the region, with denser, multifamily projects comprising more than half of all housing units over the past decade. Developers and communities are diversifying housing 'products' on the market to meet the changing demands of a growing and diversifying region. Furthermore, the pattern of denser, more centralized housing signals a shift toward redevelopment and focused growth that can support high capacity transit and active transportation-friendly neighborhoods within the region.

#### Employment growth continues. Many large employers are opting for infill and redevelopment.

Employment growth in the region over about the past decade demonstrates a strong rebound of the local economy following the Great Recession. The region is positioned to support logistics and transportation business, is home to strong anchor employers, is an emerging leader in tech and innovation, and is home to a diverse portfolio of industries. While growth of employment continues in non-centralized parts of the region, many companies are opting for infill and redevelopment opportunities of their office headquarters, further contributing to the reinvigoration of the region's downtown and surrounding neighborhoods.

#### Future growth in the region is expected to align with community plans and regional initiatives.

The distribution of future growth in the region is dependent on many factors—and that pattern of growth will inform, while also being influenced by, the needs of the region's transportation system. Existing conditions, community land use plans, infrastructure, environmental constraints, and regional planning and policy initiatives all play a role in the future development pattern. These factors were considered in a model, designed to predict the distribution of growth out to the planning horizon year.

MORPC used an approach to develop forecasts that begins with projections of growth of households and jobs by industry type at the county level. Figure 2.2 shows the process for establishing those growth control totals. The process requires multiple stages (the next dependent on the last) starting with projections for overall population growth.

The process begins with the overall trajectory of population growth at the county level, using a statistical model that accounts for the cyclical pattern of population growth in the observed trend. This cyclical pattern is largely driven by changes in migration, which are influenced by global and national geopolitical, economic, and social factors, as well as regional and local policies and initiatives.

In addition to using historic trends in births, deaths and migration to predict growth at the county level, population projections are broken down into key subgroups (population by age, population in households versus group quarters, and population in the labor force and employed workers), then translated into the number of households (based on household size and occupancy rates of housing units) and jobs (based on county-to-county commuting patterns) that would likely correspond with those additional people.

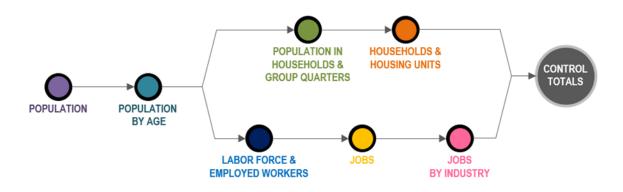


FIGURE 2.2 ESTABLISHING COUNTY LEVEL CONTROL TOTALS

#### HISTORIC DYNAMICS OF POPULATION CHANGE

From 2010 - 2018, Delaware and Franklin counties experienced growth that was 50% (around 90,000 residents) driven by natural increase (births minus deaths), and 50% (around 90,000 residents) by net migration into the two counties (Figure 2.3). This is a contrast from the previous decade. In the 2000s, more than 70% of growth was driven by natural increase, and less than 30% by migration.

In part, this shifting pattern aligns with a national trend. According to the U.S. Census Bureau:

*"[B]ecause of population aging, immigration is projected to overtake natural increase [in the year 2030] …as the primary driver of population growth for the country."* 

To the extent that the United States continues to grow its immigrant population, growth in the region will increasingly depend on migration from abroad and elsewhere in the U.S. One factor in continued growth in this part of the country will be the region's growing attractiveness for residents and economic development opportunities.

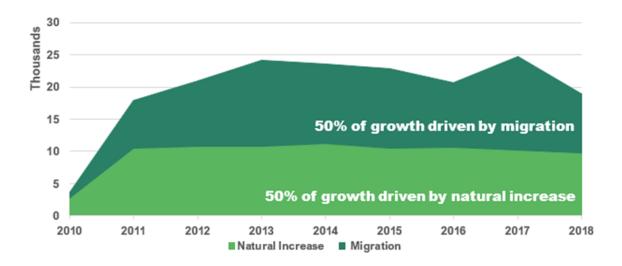


FIGURE 2.3 POPULATION CHANGE BY TYPE Franklin and Delaware Counties Source: U.S. Census Bureau Population Estimate Program, Components of Change

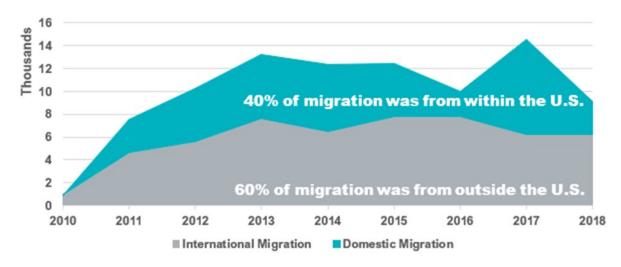
Migration into the region can be largely attributed to new residents from places outside the United States. International migration into Franklin and Delaware counties made up nearly 60% (around 55,000 residents) of net migration into the region, while migration from elsewhere in the United States, or domestic migration, comprised around 40% (around 35,000 residents) (Figure 2.4).

In the 2000s (again, when less than 30% of all growth was driven by migration into the region), most of the growth (90%) was from people moving in from outside the United States (around 40,000 residents), and only 10% were residents from elsewhere in the nation (around 5,000 residents).

Domestic migration in Central Ohio was largely driven by residents moving in from elsewhere within the state of Ohio—from 2010 – 2018, only 29 counties within Ohio grew in population (including all five counties within the MPO), while 59 counties in the state lost population. In the 2000s, 46 counties gained population, while 42 had fewer residents over the course of the decade.

Estimates of migration into Franklin County suggest there were also significant net gains in residents from Eastern and Central cities like the D.C. Metro, Philadelphia and Detroit. There are also new residents moving from Western and Southwestern locations including El Paso and Seattle.

Migration is a key driver of growth in Central Ohio. Half of the past decade's growth was from residents moving to the region, and over 60% of those new residents were younger adults from about 25 to 39 years old. Expected future growth is dependent upon Central Ohio continuing to attract new residents. Availability of diverse housing choices and mobility options will play a prominent role in maintaining a competitive advantage by attracting and retaining a skilled workforce.



**FIGURE 2.4 MIGRATION BY TYPE** Franklin and Delaware Counties Source: U.S. Census Bureau Population Estimate Program, Components of Change

#### CHARACTERISTICS OF PROJECTED POPULATION GROWTH

Since 1980, the share of growth attributed to the prime working-age population, residents ages 35 to 64, has gradually decreased. In the 2010s, that age group represented only 40% of total growth in the region and is predicted to make up an even smaller share of growth in the 2020s (only 22%) (Figure 2.5). Higher proportions of growth are among residents 65 and older and under 35, but for different reasons.

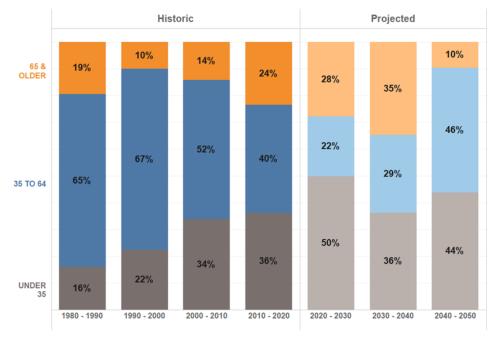
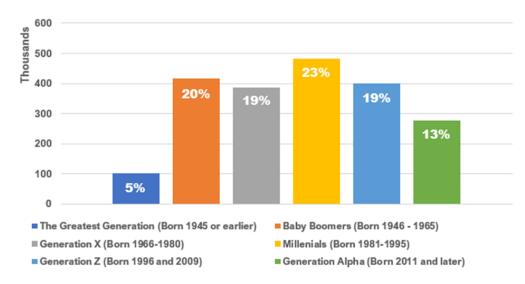


FIGURE 2.5 POPULATION GROWTH BY AGE 7-County Central Ohio Region Source: U.S. Census Bureau (historic); MORPC County Projections (projected)





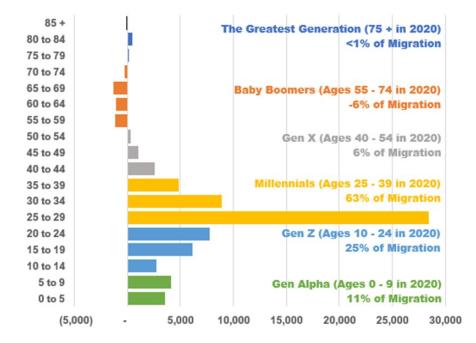
**FIGURE 2.6 POPULATION BY GENERATION** 7-County Central Ohio Region, 2020 Source: MORPC 2012-2017 Cohort Component Analysis

The large Baby Boomer generation is currently driving the increase in population 65 and older and will continue to drive growth of this age group through around 2040. In 2020, the youngest members of this generation are about 55 years old. The entire Baby Boomer generation will be 65 and older by about 2030.

More people in the Baby Boomer generation and older moved out of the region than have moved in (Figure 2.7). As migration is not driving growth, the increases in this age group are almost entirely caused by the sheer size of the population in the Boomer generation as they age into the 65 and older category. In 2020, there were an estimated 415,000 Baby Boomers in the region, making up 20% of the population (the second largest generation in Central Ohio) (Figure 2.6). In spite of a lack of older residents moving into the region, as this generation ages into older adulthood, the 65 and older age group is expected to make up an increasingly large share of population growth through the 2030s (a projected 35% of population change in the 2030s) (Figure 2.5). Growth of that age group will slow down considerably in the 2040s when the smaller Generation X (19% or about 61 million people nationwide, and 19% or about 385,000 in Central Ohio) are 65 and older (Figure 2.5).

The Millennial generation is large, like the Baby Boomers, and the generation is in a geographically mobile life stage. Millennials are the largest generation in the region (23% or about 480,000 people) (Figure 6). In 2020, Millennials were from about 25 to 39 years old. Central Ohio has a higher-thannational-average share of this generation due to high net migration. Over 60% of the population that moved to the region in recent years are members of the Millennial generation (Figure 2. 7).

High net migration of Millennials accounts for an increasingly large share of growth of the population under 35. In the 2010s, this age group made up 36% of population growth, and is expected to make up the largest proportion of growth in the 2020s (50%) (Figure 2.5). By 2030, the Millennials will be about 35 to 49 years old and are expected to become less geographically mobile during this life stage. At that time, the smaller Generation Z (19% or about 400,000 in Central Ohio) will be about 20 to 34 years old. While it is still predicted that this age group will continue to be at a "mobile" life stage, there will be fewer in the age group overall, which will cause growth in the population under 35 to slow down.



**FIGURE 2.7 MIGRATION BY AGE AND GENERATION** 7-County Central Ohio Region, 2012-2017 Source: MORPC 2012-2017 Cohort Component Analysis

#### POLICY & PLANNING IMPACTS ON DEVELOPMENT

The regional insight2050 study completed in 2014 helped achieve consensus around a vision for compact, focused development throughout Central Ohio — an approach that comprehensively addresses the land use, housing, and transportation challenges ahead. Taking the direction of the "Focused Growth" scenario as a starting point, insight2050 Corridor Concepts (2019) builds on the momentum of that initial study, and outcomes of other recent planning efforts in the region, to better ground the vision. It explores in detail where growth can occur and how to make it happen. With Central Ohio considering investment of substantial resources in new transit options, the study evaluates the potential of coordinated transit and development to serve existing communities and new growth.

Insight2050 Corridor Concepts is a critical next step in the region's commitment to thoughtful urban planning to improve livability and keep the region competitive. By evaluating the role of "mobility corridors" in structuring growth, the study explores how best the region could support a projection of continued growth.

Like other major metropolitan areas across the nation, Central Ohio is at the precipice of a new generation of mobility options that must be carefully considered and weighed. How will emerging technologies impact larger goals to address housing needs and affordability, promote equitable access to opportunity, foster complete communities, and grow in more compact and fiscally efficient ways?

Well-informed discussions of these impacts and a holistic approach to the region's growth will be necessary for Central Ohio to encourage a high quality of life for all. This is particularly true of housing: over the years, various studies have concluded Central Ohio lacks sufficient housing of all types and price points to meet the needs and preferences of its growing population. In response, a Regional Housing Strategy was introduced in 2020. This comprehensive report complements and builds upon past work to develop a regional approach to expanding the supply and affordability of housing in Central Ohio.

The Regional Housing Strategy presents scalable, implementable, context-sensitive strategies – including policies, programs, and funding resources – to address housing needs in the unique and varied markets across the region. In addition to increasing the supply of housing, these strategies recognize the relationship between land use and transportation. Housing and transportation costs together are often the two largest household expenses. Therefore, to improve affordability, a complete approach to mobility will be required — one that addresses walking, biking, transit, and automobile use, and balances impacts on land use, community health, and economic and environmental sustainability.

#### **RESIDENTIAL DEVELOPMENT TRENDS**

Growth in Central Ohio is strong regionwide. On average, the 7-county region grew by almost 67 new residents per day in the 2010s, up from 61 new residents per day in the 2000s, and 55 per day in the 1990s. That growth was highly centralized in Franklin County, which grew by a record 47 new residents per day (Figure 2.8).

In fact, over 70% of the region's growth occurred in Franklin county (the most populous county in the region and in the state) in the 2010s. This is up from the 42% of regional growth in Franklin county that happened in the 2000s. While growth continues in the 6 counties surrounding Franklin county, it has slowed in those suburban or exurban counties in the 2010s (Figures 2.8 & 2.9).

The past decade marks a distinctive shift toward more centralized, higher-density development than in decades past. Estimates from the U.S. Census Bureau (Figure 2.10) show for that for the first time, more multifamily than single family housing units were built. In the U.S. overall, there has also been a trend toward less single family and more multifamily construction, but that trend has been more pronounced in Central Ohio. In Franklin and Delaware Counties, the share of multifamily unit construction more than doubled from 26% in the 2000s to 56% in the 2010s.

	1970s	1980s	1990s	2000s	2010s
Delaware	3.3	3.2	11.1	17.9	10.4
Fairfield	5.5	2.9	5.3	6.6	3.1
Franklin	13.4	20.5	29.9	25.8	47.2
Licking	3.7	1.8	4.6	5.9	3.2
Madison	1.3	1.2	0.9	0.8	0.3
Pickaway	1.2	1.2	1.1	0.8	0.8
Union	1.7	0.7	2.3	3.2	1.8

FIGURE 2.8 AVERAGE NEW RESIDENTS PER DAY 7-County Central Ohio Region SOURCE: U.S. Census Bureau, Historic Decennial Census Population

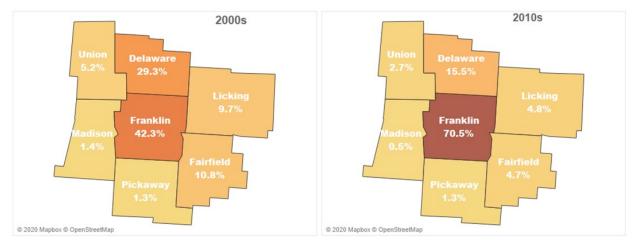
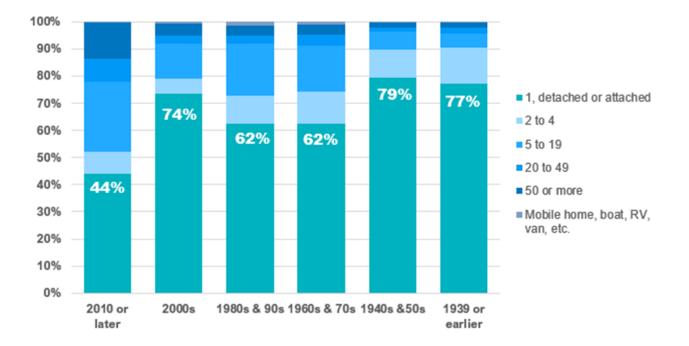


FIGURE 2.9 SHARE OF POPULATION GROWTH 7-County Central Ohio Region SOURCE: U.S. Census Bureau, Historic Decennial Census Population



**FIGURE 2.10 UNITS IN STRUCTURE BY YEAR BUILT** *Franklin and Delaware Counties SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B25127* 

#### Page 2-10

MORPC building permit data similarly suggests that most of the new residential construction was multifamily in the past decade. Of the permits issued from 2010 – 2017, an estimated 59% were for multifamily units (Figure 2.11). While not always the case, multifamily units are typically renter-occupied households. There was strong growth in renter-occupied households in the 2010s, and recent estimates suggest that the Columbus MPO has a greater share of renter households (39%) than the state (29%), the Midwest region (28%), or the country (34%) (Figure 2.12). The share of renter households in the MPO has increased by about 4% since 2006 - 2010 period estimates.

The strong growth in multifamily housing supporting a growing number of renter households in the region over the past decade, is another indicator of the region's shift to denser and more centralized growth. While this meets changing preferences and demand in part, there is a continued need for well-planned, mixed-use, walkable development that serves Central Ohio residents across all income levels.

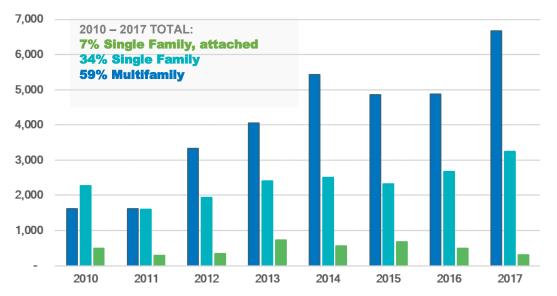


FIGURE 2.11 NUMBER OF NEW RESIDENTIAL UNITS BY TYPE Metropolitan Planning Organization SOURCE: MORPC Residential Building Permits

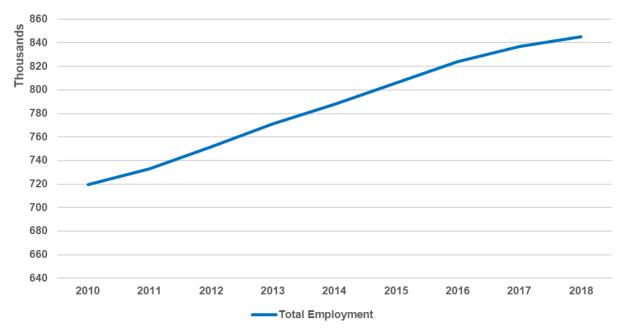


FIGURE 2.12 SHARE OF OWNER AND RENTER HOUSEHOLDS 2013-2017 Estimates SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B08137

#### MAJOR INDUSTRIES AND EMPLOYERS

The population growth that spurs residential development is inextricably linked with industry growth in the region, and regional travel patterns largely depend upon the relative locations of workforce residences and employment locations.

From 2010 to 2018, Bureau of Labor Statistics data suggests a 17.5% increase in average annual employment in Franklin and Delaware counties, combined (Figure 2.13). While this strong growth, in part, reflects the recovery from the Great Recession, the Central Ohio region is better positioned than most to weather economic downturns and recover more quickly. Significant employment in stable industries like health care, insurance, higher education, and state government; a prime location for logistics operations; world-class research institutions; and a diversity of industries all contribute to the region's economic resilience.

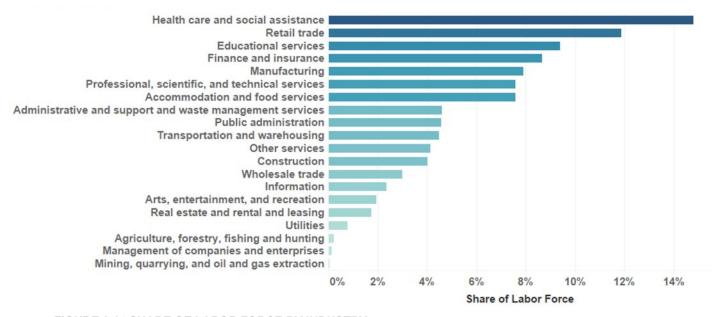




Franklin & Delaware Counties

SOURCE: Bureau of Labor Statistics, Quarterly Census of Wages and Employment

The highest proportions of the labor force work in (1) health care and social assistance, (2) retail trade (including some distribution and warehousing), (3) educational services, (4) finance and insurance, and (5) manufacturing (Figure 2.14).



**FIGURE 2.14 SHARE OF LABOR FORCE BY INDUSTRY** *Metropolitan Planning Organization SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table C24030* 

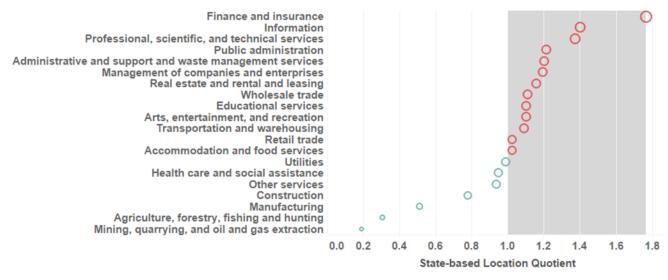
Compared with both the state of Ohio and the U.S., Central Ohio has a very high concentration of jobs in the finance and insurance sector. Compared with Ohio, there is also a high concentration of jobs in both the information and professional, scientific, and technical services industries (Figure 2.15), as well as a significant concentration of jobs in public administration, administrative and support services, and management of companies and enterprises.

Relative to the United States, the region has a high share of jobs in management of companies and enterprises (Figure 2.16). There is also notable strength in the information, wholesale trade, and professional, scientific, and technical services industries.

Recent trends in redevelopment and infill is not limited to residential—recent projects include mixed use developments, with retail commercial that encourages walkability for residents, as well as the inclusion of office uses. Corporate offices are being built or rebuilt as infill projects in and near the urban core as well. Chipotle, Columbia Gas, Cover My Meds, Ohio Health, Rogue Fitness, and White Castle, are just a few examples of strong regional employers opting for centrally located redevelopment located proximate to complementary land uses and robust transportation options.

There are still major employment centers that are continuing to add new businesses beyond the urban core. Airports—especially John Glenn International Airport, and Rickenbacker International Airport and Intermodal Yard serve as hubs for logistics, distribution and warehousing. Additional sites serve as major centers of research and development, light manufacturing and warehousing, such as the New Albany Beauty Park and the Prologis Park in Pataskala. Additionally, there are major office parks combined with regional shopping centers like Easton Towne Center and Polaris. Figure 2.17 shows the distribution of existing employment throughout the MPO area, with areas of high job concentration both around the perimeter of the region, and within the urban core.

#### Page 2-13



High Concentration of Jobs (relative to Ohio)

Low Concentration of Jobs (relative to Ohio)

FIGURE 2.15 CONCENTRATION OF JOBS BY INDUSTRY (COMPARED TO OHIO) Metropolitan Planning Organization SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table C24030

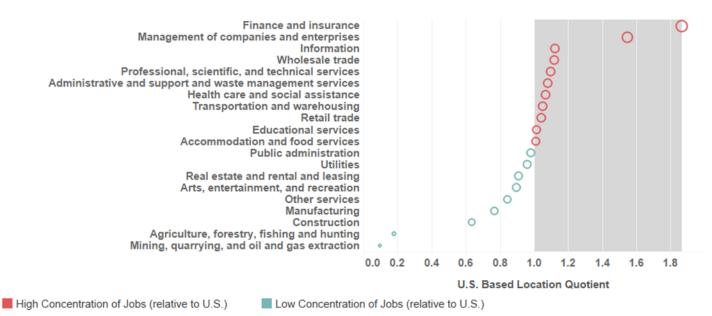


FIGURE 2.16 CONCENTRATION OF JOBS BY INDUSTRY (COMPARED TO U.S.)

Metropolitan Planning Organization SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table C24030

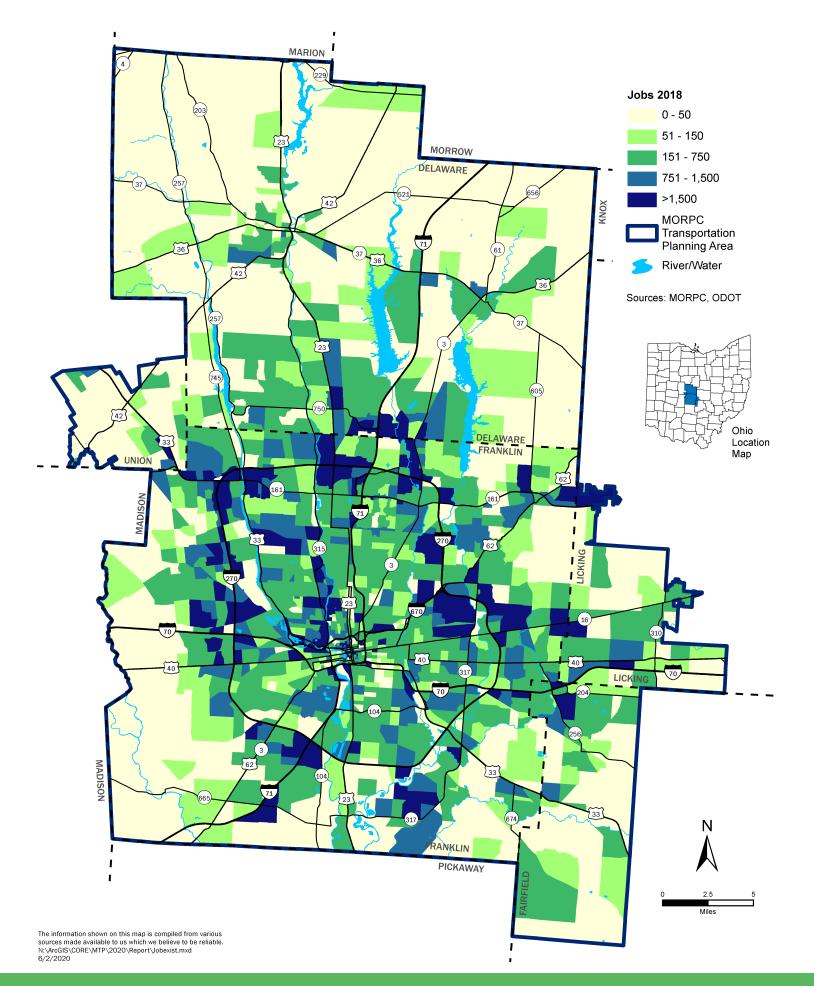


Figure 2.17 *Total Jobs, 2018* 



#### FUTURE ALLOCATION OF GROWTH

Using community-based land use plans, along with data and research to contextualize development patterns and decisions, MORPC distributed future projected county growth to small geographic units called Traffic Analysis Zones (TAZs) for consumption by the travel demand model. Whereas the travel demand model is used to predict future traffic volumes and transit ridership, MORPC uses another model to allocate future development called the land use allocation model (see Appendix A for a more detailed methodology).

A graphical overview of the land use allocation model process is shown in Figure 2.18. The model uses existing data about the locations of households and jobs, along with community land use to determine the capacity for new growth in each small geographical unit. Once it was determined how much growth could occur in each location, data and research-based factors were used to determine how likely growth will be in each location. A set of measurable criteria were used to either attract or deter development. When possible, the strength, or "weight," of each criterion was calibrated by measuring its relationship with existing development activity.

The criteria fell into four categories: (1) economic development, (2) environmental, (3) infrastructure, and (4) land use nuisances. Future implementation of the insight2050 Corridor Concepts study was considered in the model by including a criterion to represent future, high capacity transit along the five corridors identified in that study.

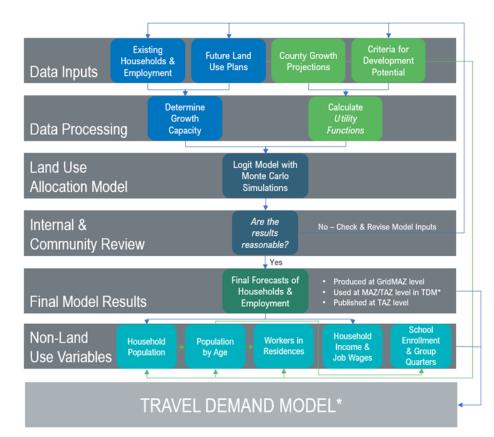


FIGURE 2.18 LAND USE ALLOCATION PROCESS

After running the model, there were opportunities for community review. That feedback was incorporated by verifying inputs into the model and making adjustments to the underlying data or the criteria weights as needed, as opposed to making adjustments to the model outputs. The final results by Traffic Analysis Zone can be seen in Figures 2.19 & 2.20.

Finally, the forecasts of households and employment were used to forecast other variables like population by age, workers, income and wages, and enrollment in schools and group quarters facilities.

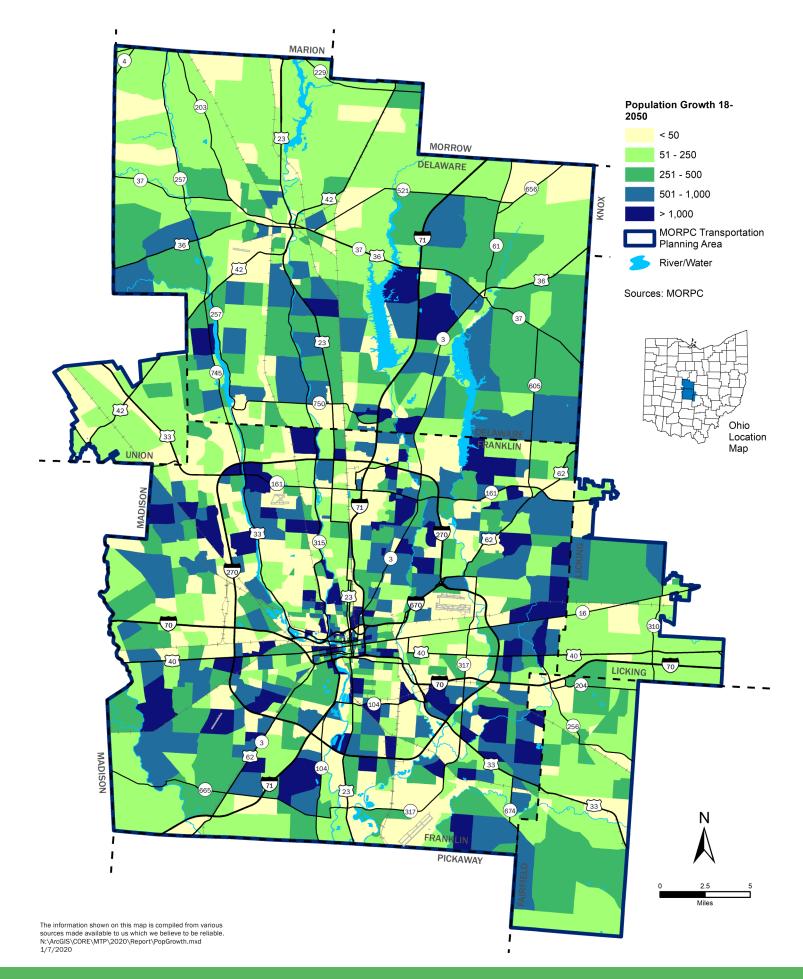


Figure 2.19 Forecast Population Growth, 2018-2050



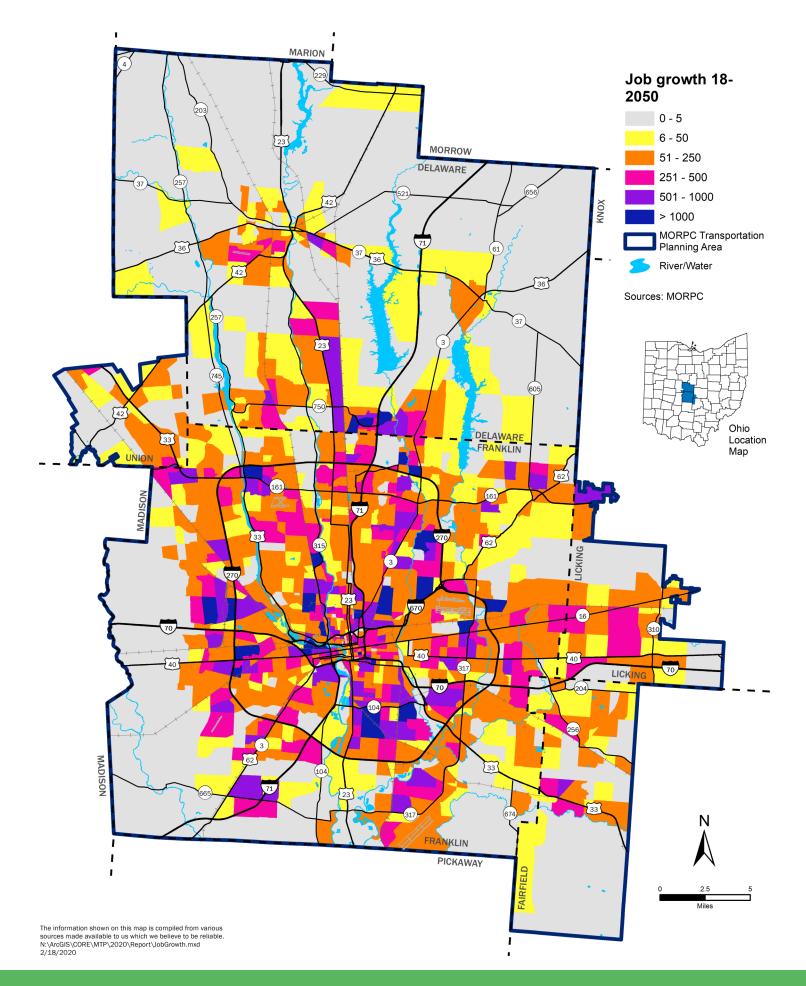


Figure 2.20 Forecast Employment Growth, 2018-2050





### **2.b** TRANSPORTATION, SOCIETY & THE ENVIRONMENT

Growth and development are integral to understanding and planning for the transportation needs of the region. Consideration of the social and economic characteristics of residents sits at the nexus of regional patterns of housing, employment, and transportation system development. It is imperative that planning for growth is evaluated through a lens of the diverse races, ages, cultural backgrounds, financial circumstances, and abilities of the residents that comprise the region.

Furthermore, some populations have historically been disproportionately impacted by changes made to the transportation system. As such, all proposed projects are evaluated in the context of Environmental Justice.

According to the US Environmental Protection Agency, Environmental Justice addresses "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."

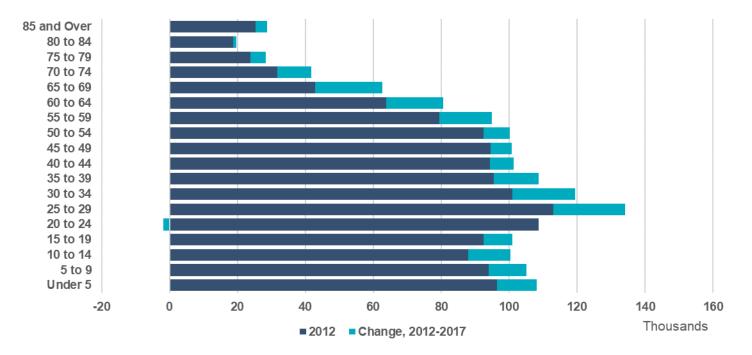
#### SOCIOECONOMIC CONDITIONS

#### Age

As described previously in section 2.a, the age structure of the region's population is a strong determinant of housing needs and preferences. Recent trends show an increase not only in the number of older adults in the region, as the Baby Boomer generation ages, but also in the number of younger adults, especially ages 25 – 39 (Figure 2.21). The increase in the number of younger adults has been strongly driven by migration. As Baby Boomers retire and leave the workforce, it will continue as a priority to attract younger working adults with diverse housing options and employment opportunities.

#### NATURAL LANDSCAPE

Central Ohio benefits from its natural landscape. Parks and open spaces improve the health of people and the environment. The natural landscape also plays a critical role in mitigating the effects of weather events including flooding, tornadoes, severe thunderstorms and winter storms. As the region continues to grow, it is necessary to balance development with preservation of the natural landscape. Infill and redevelopment strategies can assist, as can the implementation of best management practices for storm water runoff and green infrastructure. Management strategies relating to the natural landscape are found in Chapter 4.



**FIGURE 2.21 CHANGE IN POPULATION BY AGE** *Metropolitan Planning Organization; 2008-2012 to 2013-2017* SOURCE: U.S. Census Bureau American Community Survey, 2008 – 2012 & 2013 – 2017 5-year estimates, Table B01001

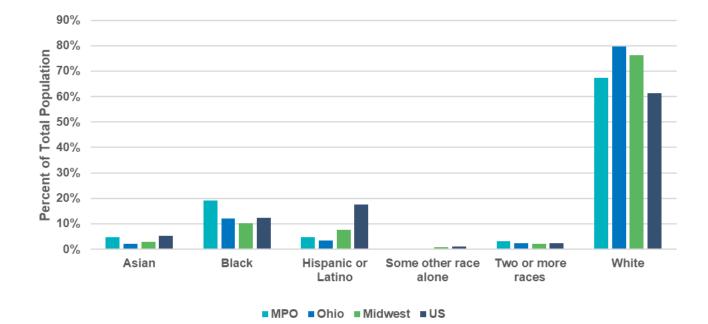
#### Race and Ethnicity

Central Ohio's residents are predominately white (67%); although, the region is more racially and ethnically diverse than the State of Ohio (80% white) and the Midwest region as a whole (76% white). Within the Columbus MPO area, 19% of residents are Black or African American, 5% are Hispanic or Latinx, and 5% are Asian (Figure 2.22). In recent years, the majority of population change in the region was driven by non-white residents (around 55%). This growth represents a combination of natural increase and net migration, in part driven by the increases in international migration experienced in Central Ohio over about the past decade (Figure 2.23).

The vast majority of the region's non-white population is concentrated in Franklin County, mostly in the City of Columbus; however, there are some distinct geographic areas within the region where certain races or ethnicities are concentrated. In some instances, emerging communities of New Americans (immigrants or refugees) have formed the region's first new ethnic enclaves in over a century. These communities may face language barriers, embody different cultural norms, and face distinct transportation challenges. In other instances, there are long-standing, mostly Black or African American communities, with historical neighborhood ties that span many generations. These communities, in particular, also bear the marks of decades of segregation, disinvestment, and public policies (e.g., urban renewal, limited services, and interstate construction) that continue to limit opportunities for residents to this day.

There are also clear differences across race and ethnicities in socioeconomic indicators (such as poverty rates), which will be discussed more in following sections.





**FIGURE 2.22 PERCENT OF POPULATION BY RACE** US, Midwest, Ohio, MPO 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B03002

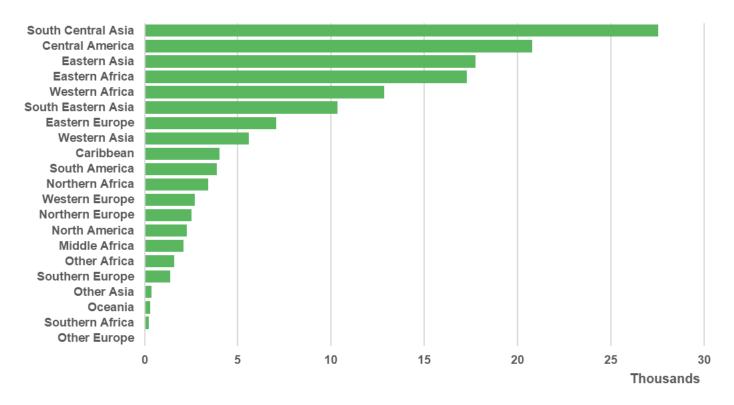
**FIGURE 2.23 PERCENT POPULATION CHANGE BY RACE** *Metropolitan Planning Organization 2008-2012, 2013-2017* SOURCE: U.S. Census Bureau American Community Survey, 2008 – 2012 & 2013 – 2017 5-year estimates, Table B03002



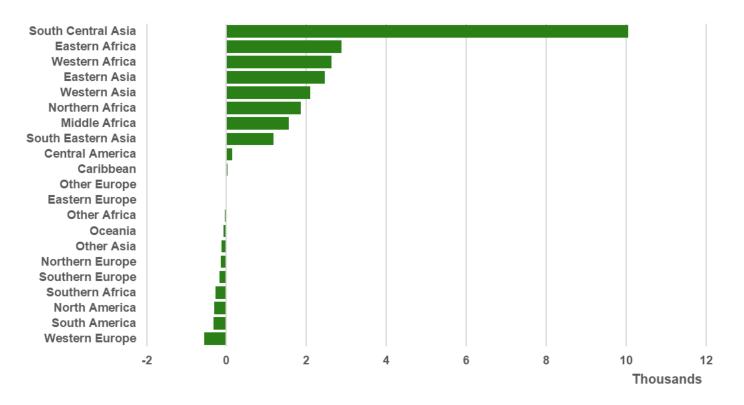
#### New Americans

Central Ohio is a region with rich international diversity. Over the past decade, 60% of the growth from migration in the MPO area was new residents from overseas. Based on the most recent estimates , most foreign-born residents in the region today are from South Central Asia (around 28,000), which includes a recent settlement of Bhutanese refugees. The second largest group are residents from Central America (21,000), followed by residents from Eastern Asian countries (18,000). The fourth largest group are residents from Eastern Africa (17,000), which includes refugees resettled from Somalia, Eritrea and Ethiopia (Figure 2.24).

In recent years, most of the increase of foreign-born residents are from continental regions with large refugee communities (especially Bhutanese, Somali, Eritrean, and Ethiopian communities mentioned earlier). All of the increase was from residents in continental regions in Asia and Africa. There was an increase of over 10,000 residents from South Central Asia, and an increase of nearly 3,000 residents from Eastern Africa (Figure 2.25).



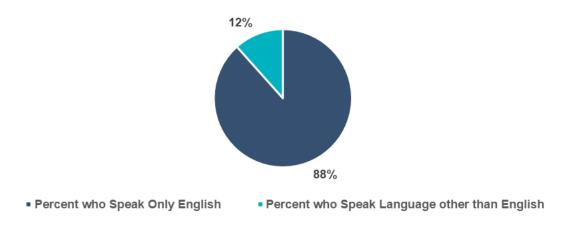
**FIGURE 2.24 NEW AMERICAN POPULATION BY PLACE OF ORIGIN** *Metropolitan Planning Organization; 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B05006* 



**FIGURE 2.25 CHANGE IN NEW AMERICAN POPULATION BY PLACE OF ORIGIN** *Metropolitan Planning Organization;* 2008-2012 TO 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2008 – 2012 & 2013 – 2017 5-year estimates, Table B05006

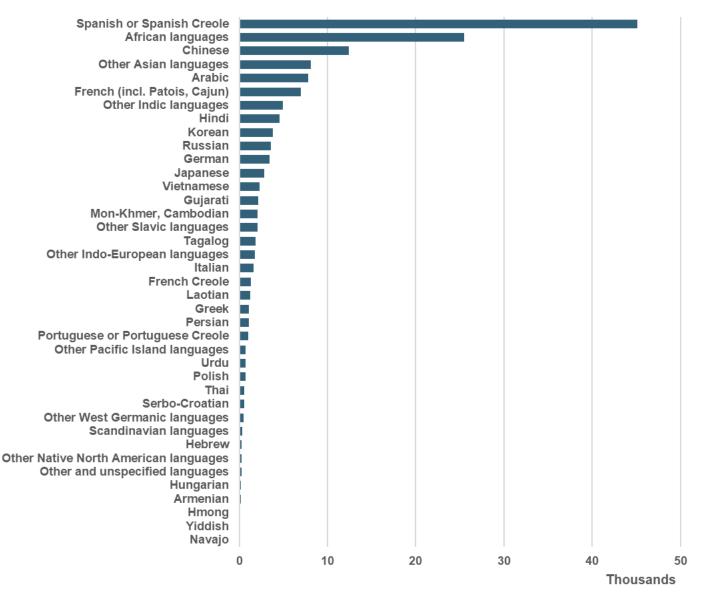
#### English Proficiency

As a region with rich international diversity, there is a great diversity in languages spoken by residents. Recent estimates suggest that 12% of households in the Columbus MPO speak a language other than English in their homes (Figure 2.26).

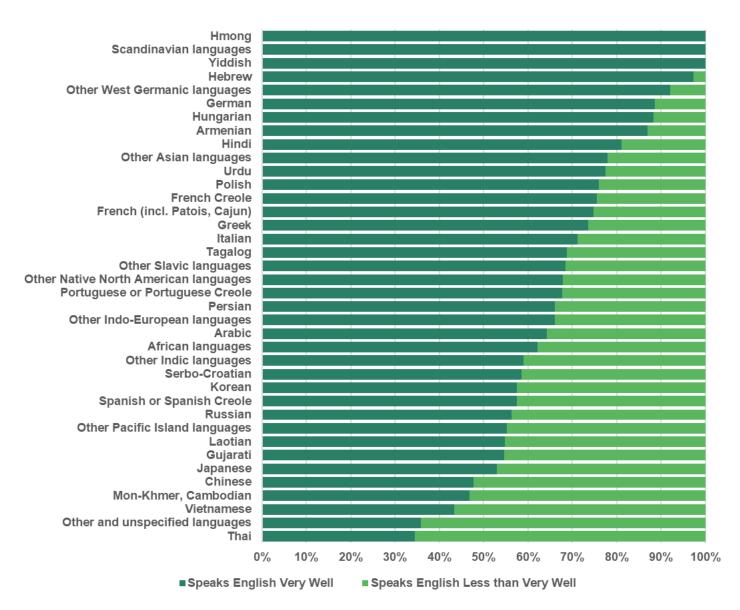


**FIGURE 2.26 HOUSEHOLDS BY LANGUAGE SPOKEN AT HOME** *Metropolitan Planning Organization;* SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B16001 Most of the 154,000 non-native English residents in the region speak Spanish (29%), followed by 16% of non-native English-speaking residents who speak African languages. Nearly 8% of these residents speak Chinese, another 5% speak other Asian languages, and another 5% speak Arabic (Figure 2.27). Within these categories, there is an incredible amount of diversity in languages and dialects—according to the Columbus City School District, 101 languages and dialects are spoken by students within that district.

Of the region's speakers of other languages, 38% (around 59,000 residents), speak English less than very well. English proficiency varies by residents' first language, as seen in Figure 2.28. Typically, European language speakers are more likely to speak English very well, while many Spanish speakers, and Asian and African language speakers are more likely to be less English proficient.



**FIGURE 2.27 NUMBER OF PERSONS SPEAKING LANGUAGE OTHER THAN ENGLISH AT HOME** *Metropolitan Planning Organization; SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B16001* 



## FIGURE 2.28 PERCENT ENGLISH PROFICIENT FOR PERSONS SPEAKING LANGUAGE OTHER THAN ENGLISH AT HOME

Metropolitan Planning Organization;

SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B16001

#### People with Disabilities

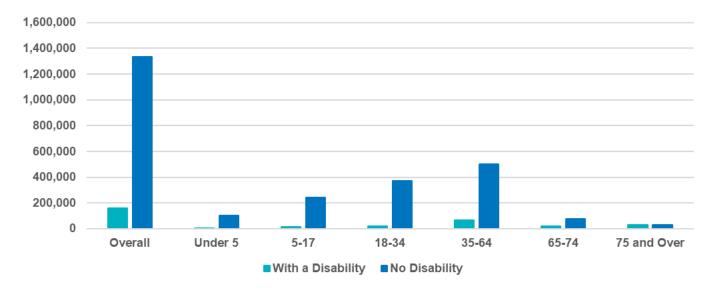
While there exists a tremendous range within this subgroup of the population, people with disabilities often have distinct needs around transportation, housing, and employment. Within the Columbus MPO, there are 163,000 people with one or more disabilities, calling attention to a need for universal design considerations in planning efforts (Figure 2.29).

There are people of all ages with disabilities. The greatest number (around 70,000) are 35- to 64-yearsold. In some instances, these residents may have unique challenges centered around access to employment. Among the population 75 and older, the vast majority of residents have one or more disabilities (97%) (Figure 2.29). In all of these age groups, depending on the type of disability a person

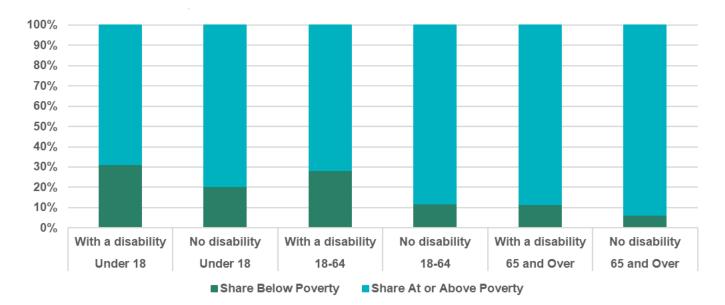
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has, there may be limitations in mobility and independence that are magnified by accessibility limitations in the built environment.

In some instances, these environmental barriers to independent mobility can have economic consequences for individuals. In all age categories, people with disabilities are more likely to live below the poverty level than their age counterparts without disabilities (Figure 2.30).



**FIGURE 2.29 AGE BY DISABILITY STATUS** *Metropolitan Planning Organization; 2013-2017* SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B18101



**FIGURE 2.30 POVERTY BY AGE BY DISABILITY STATUS** *Metropolitan Planning Organization; 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table C18130* 



#### Household Income

Considering the Central Ohio MPO as a whole, the region has seen a 'rebound' in household incomes over the decade, resulting in a median household income (\$57K) greater than the State of Ohio (\$52K), the Midwest region (\$56K), and on par with the United States (\$57K) (Figure 2.31). The increase in household incomes over this time span is a marker of recovery from the Great Recession.

In spite of overall positive markers of improved conditions during the recession recovery, there are clear and persistent disparities in household income. In Franklin County, White and Asian householders continue to have the highest earnings, on average. Households with Asian householders, however, saw a decline in median household income over the comparison period. While Hispanic and Latinx households only earn about two-thirds as much as White households, both groups saw an increase in median household income of about \$4,000 a year. Black or African American households continue to have the lowest earnings—on average earning only about half of white household incomes. Furthermore, the lowest earning Black or African American householder group also saw the smallest gains in household income during the economic recovery—increasing average household earnings by only about \$1,000 per year (Figure 2.32).

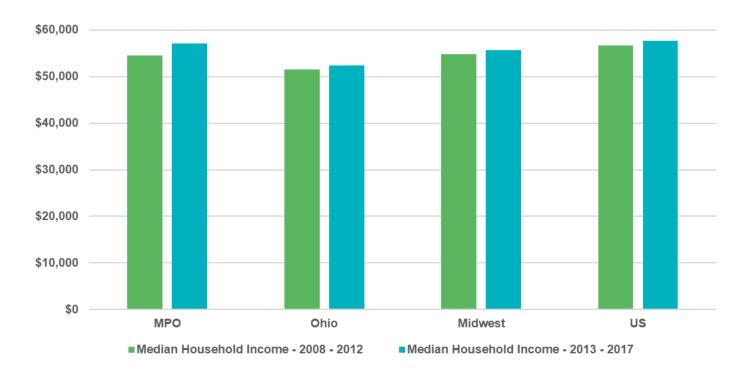


FIGURE 2.31 MEDIAN HOUSEHOLD INCOME 2008-2012 to 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B19013

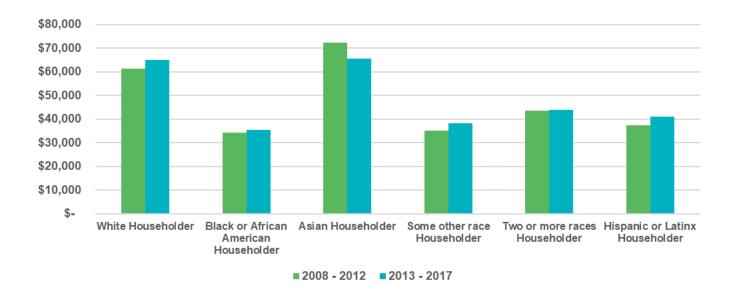


FIGURE 2.32 MEDIAN HOUSEHOLD INCOME BY RACE/ETHNICITY OF HOUSEHOLDER Franklin County; 2008-2012 to 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2008 – 2012 & 2013 – 2017 5-year estimates, Table B19013 (A – I)

#### <u>Poverty</u>

In the most recent estimates, the poverty rate in Central Ohio was lower than the state of Ohio, but higher than the Midwest Region, and the United States. The poverty rate in Central Ohio (14.8%) was considerably lower than estimates from the 2008 – 2012 period (15.7%), which is likely a result of recovery from the Great Recession (Figure 2.33).

While the per capita rate of poverty has gone down during the recovery, the total number of people living below the poverty level has actually increased. According to a report from the Franklin County Commissioners on poverty challenges, poverty has spread to more areas within Franklin County in recent years, and has shown persistent high concentrations in certain neighborhoods, especially those with predominately black or African American residents.

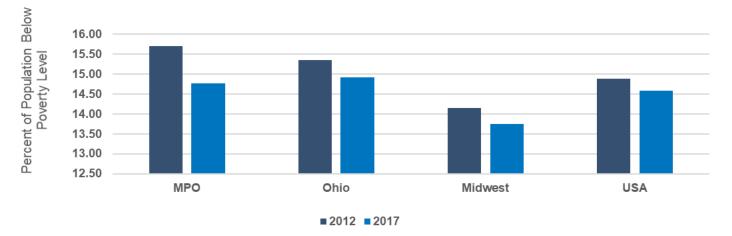
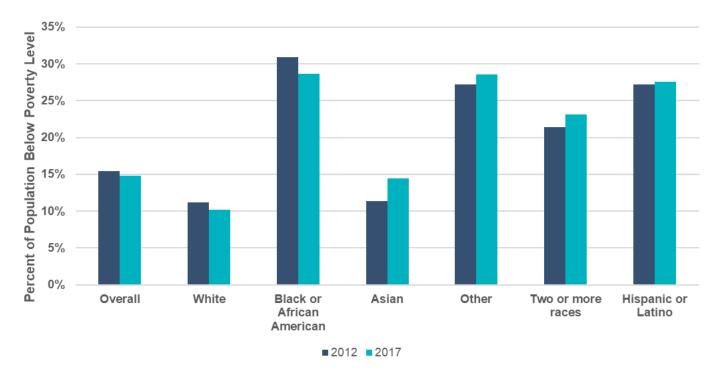


FIGURE 2.33 POVERTY RATE 2008-2012 to 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2008 – 2012 & 2013 – 2017 5-year estimates, B16009

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When considered by race and ethnicity, there is a lower poverty rate for white residents (10%) than for any other race or ethnic group. Black or African American residents and Hispanic or Latinx residents have nearly three times the poverty rate of white residents. White and black or African American residents each had a decrease in poverty rates (about a 1% decline for white residents, and a 3% decline for black or African American residents. All other race or ethnic groups saw an increase— notably there was a 3% increase in the poverty rate for Asian residents in the region, a group that typically fares as well or better than white residents across economic indicators (Figure 2.34).



**FIGURE 2.34 POVERTY RATE BY RACE AND ETHNICITY** *Metropolitan Planning Organization; 2008-2012 to 2013-2017* SOURCE: U.S. Census Bureau American Community Survey, 2008 – 2012 & 2013 – 2017 5-year estimates, B16009

#### Housing Cost Burden

According to the U.S. Department of Housing and Urban Development (HUD), households are considered 'housing cost burdened' if they are spending more than 30% of their income on housing costs. Households spending too much of their income on housing are often stretched to cover other costs like food, transportation, childcare, or healthcare.

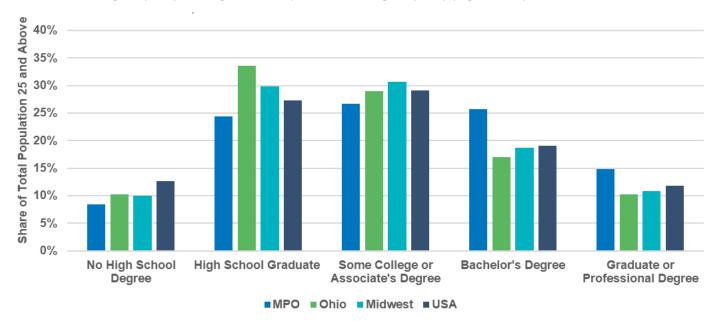
In the Columbus MPO, more renter households are housing cost burdened (43%), compared with only 20% of owner households. This varies when broken down by different locations or sub-populations. Notably, housing cost burden varies by income. Not surprisingly, households that earn less are much less likely to find housing that costs less than 30% of what they earn. This is most dramatic for the lowest earning households in the region (86% of owners and 91% of renters earning less than \$20,000 a year both spend more than 30% of their incomes on housing). The majority of all households earning less than \$50,000 a year meet the HUD definition of 'housing cost burdened' (Figure 2.35).



**FIGURE 2.35 PERCENTAGE OF COST BURDENED HOUSEHOLDS BY INCOME AND TENURE** *Metropolitan Planning Organization; 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, B25106* 

#### Educational Attainment

The Central Ohio region, which is home to 52 college and university campuses (including The Ohio State University), stands out for its high number of residents with post-secondary degrees. Relative to the State of Ohio, the Midwest Region, and the U.S., Central Ohio has a high share of residents with a bachelor's degree (26%) and a graduate or professional degree (15%) (Figure 2.36).

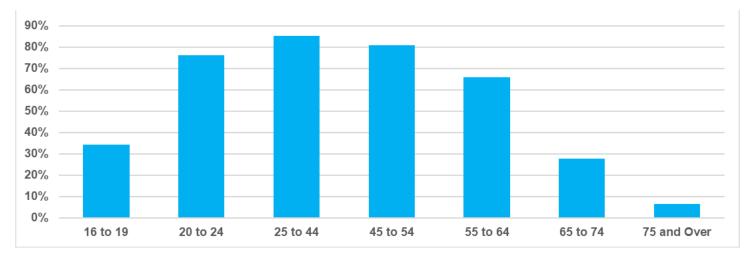


**FIGURE 2.36 PERCENTAGE OF POPULATION 25 AND ABOVE BY EDUCATIONAL ATTAINMENT** *Metropolitan Planning Organization; 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B06009* 

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#### Labor Force and Employment

The labor force in Central Ohio is predominately residents from ages 25 to 64. Labor force participation is highest among 25- to 44-year-olds (85%), followed by 45- to 54-year-old residents (81%), then 20- to 24-year-olds (76%), then 55- to 64-year-olds (66%) (Figure 2.37).



#### **FIGURE 2.37 LABOR FORCE PARTICIPATION RATE BY AGE** *Metropolitan Planning Organization; 2013-2017*

SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B23001

Not all who participate in the labor force are employed. Based on estimates from the American Community Survey, 5.2% of the labor force was unemployed. Like with poverty rates, unemployment varies widely by race and ethnicity. 3.8% of white labor force participants are unemployed, whereas 10.7% of black or African American labor force participants are unemployed. There are also higher unemployment rates for other, two or more race, and Hispanic or Latinx residents in the labor force. Asian residents on the job market fare almost as well as white residents, with a 4.0% unemployment rate (Figure 2.38).

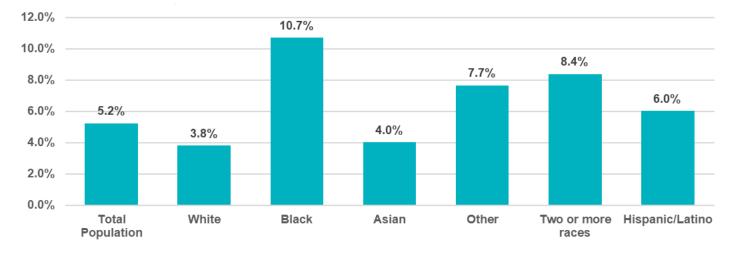


FIGURE 2.38 UNEMPLOYMENT BY RACE AND ETHNICITY Metropolitan Planning Organization; 2013-2017 SOURCE: U.S. Census Bureau American Community Survey, 2013 – 2017 5-year estimates, Table B23001



### **2.c TRAVEL PATTERNS**

This section covers regional trends in travel patterns through 2050, corresponding to the forecasted land use changes discussed in the previous sections. Because distance divides where one lives, works, shops, and learns, daily life requires travel. One's travel behaviors depend upon:

- The locations of daily activities
- Socioeconomic status
- The transportation systems available

#### **TRIP END DISTRIBUTIONS**

Where one travels depends upon where one lives, works, shops, and eats. A variety of measures can be used to identify where people likely travel, such as population, households, and jobs. The only direct way to identify where people travel is to observe the trip itself.

MORPC's Travel Demand Model is currently the best tool to translate the forecasted changes in population, households, jobs, and density into the change in person trips for the MPO planning area. General inputs to the Travel Demand Model are land use information, broken down into small irregular geographic areas called "traffic analysis zones" (TAZs) and information about the transportation system.

The model was used to estimate the numbers of 2018 and 2050 vehicle trips throughout the region. Every trip has two ends—origin and destination. The model-estimated trip ends (including both origins and destinations) were summed by TAZ across the region. To overcome the irregularity of TAZs, the TAZ trip end data were transferred to a quarter-mile by quarter-mile square grid system by using GIS. The results were then used to create a density map showing the distribution of trip ends throughout the region. As the maps in Figures 2.39 and 2.40 show, vehicle travel will continue to increase in existing high travel corridors and areas, while also expanding some outside the I-270 outerbelt. This will have an impact on average trip length.

#### AVERAGE TRIP LENGTHS

Trip length is a good indicator of travel patterns for a region. One's trip length varies based on the transportation system, the spatial structure of the urban area, and one's socioeconomic characteristics. Estimates of average trip lengths and travel time for the MPO planning area are based on the results of the Travel Demand Model. Table 2.1 shows

# Table 2.1Average Trip Lengths

	2018	2050
Average Trip Length (in miles)	7.36	7.27
Average Trip Travel Time (in minutes)	11.15	11.88

the regional changes in average trip lengths from 2018-2050. Average trip lengths decrease slightly from 2018 to 2050. This is likely due to the more compact development expected to occur by 2050. Table 2.1 also shows the regional changes in average trip travel time from 2018 to 2050. From 2018 to 2050, average trip travel time will increase about 6.5 percent. This assumes no roadway expansion or other transportation system improvements as described in the MTP, and that travel behavior remains the same as today.



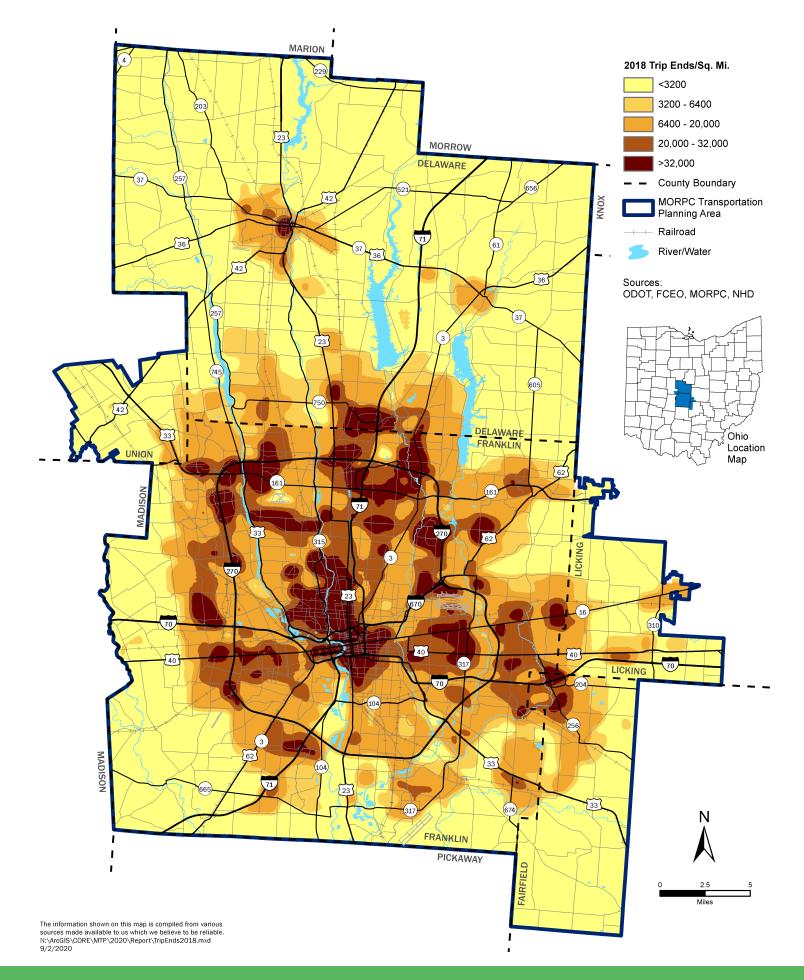


Figure 2.39 *Vehicle Trip End Density,* 2018



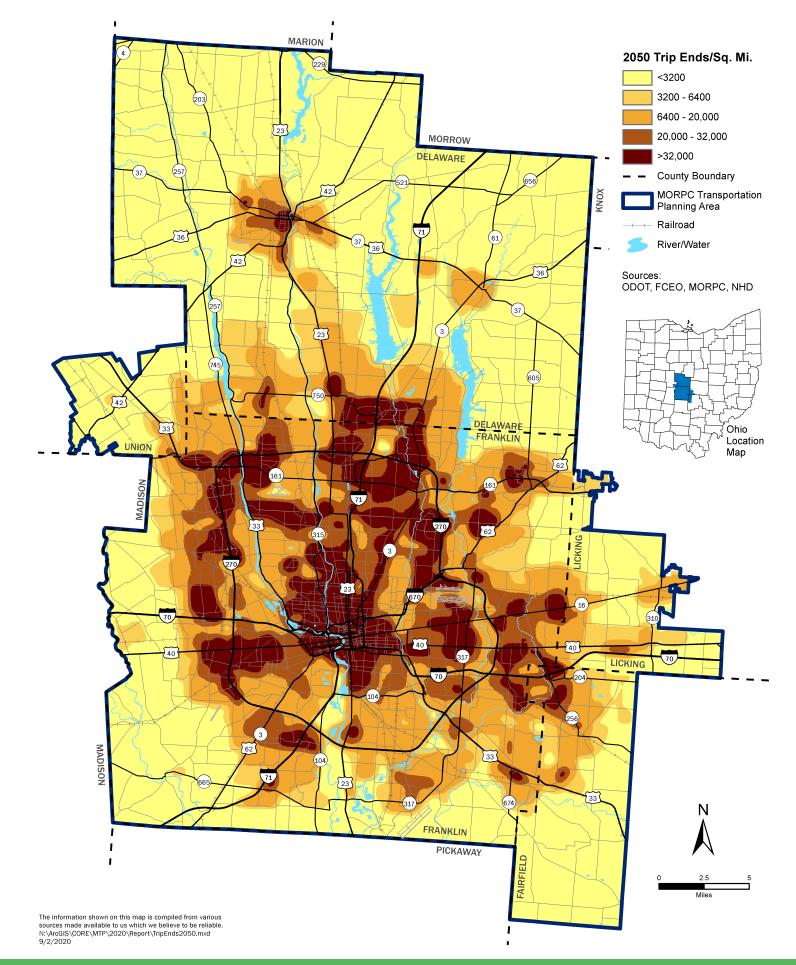


Figure 2.40 <u>Vehicle</u> Trip End Density, 2050

