

4. Economic Development

Strategic Analysis Memo | Envision Montgomery 2040 Comprehensive Plan

February 15, 2019

The following outlines the key findings, maps and tables for the Economic Development Strategic Analysis. This research integrates initial findings from the Factbook with deeper analysis into key conditions and trends and/or topics proposed by stakeholders. This analysis will serve as the foundation from which plan recommendations are built. This is one in a series of 12 topical memos produced through this phase.

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Introduction

The Economic Development component of the Comprehensive Plan focuses on conditions and trends related to the city's industrial makeup, workforce, small business and entrepreneurialism, and general economic competitiveness both around the state of Alabama and across the country. Montgomery's local economy supports more 100,000 jobs. These are gathered, largely in stable sectors such as government, military and health care. While this provides a strong foundation of employment, small business activity trails other metros in Alabama and commuting patterns reveal a workforce that is largely out-of-town. The opportunities, however, are many. The city's unique historic assets and rejuvenating downtown are prime tourism assets. Additionally, the community has made strategic investments in its information and technology infrastructure. Finally, the large number of daily commuters present an opportunity attract more residents and expand the tax base. The following report highlights the key takeaways from this research and provides the basis for plan direction and recommendations.

MAJOR CHALLENGES / OPPORTUNITIES

- ⊗ Pool of total employers or firms is shrinking over time; local labor force shrinking and aging
- ⊗ Start-up engine in Montgomery underperforms compared to peer cities in Alabama and around the Southeast
- ⊗ Labor shed has expanded over time with more worker commuting in from farther away

- ⊗ Community is both cushioned and exposed by government supported employment with private sector growth
- ⊗ Risks for employment loss in sectors with the growth of artificial intelligence and automation (especially true of local manufacturing and call center operations)
- ⊗ Cyber and tech opportunities can be built around community investments and unique assets
- ⊗ Tourism is a key focus area based on the city's unique assets

2. Industry Trends

The following provides a breakdown of the conditions and trends within Montgomery's major employment sectors. The data focus on the major employment industries, establishment size and change over time, and a breakdown by sector.

Approximately 133,000 people work in Montgomery in approximately 5,600 businesses. Maxwell Gunter Air Force Base and state government represent 18% of the city's employment base. Because of the data limitations it's difficult to determine a precise employment number for each industry category. With that said the five largest private industries in Montgomery are:

Top Five Employment Sectors in Montgomery

Sector	Employment	% of total
Manufacturing	13,000	14
Retail Trade	12,000	13
Health Care and Social Assistance	11,500	12
Administrative and Waste Services	10,400	11
Accommodation & Food Services	10,300	11

Table 1: Top Five Employment Sectors in Montgomery

EMPLOYMENT AND ESTABLISHMENTS

Eighty percent of Montgomery's businesses have fewer than 20 employees. The vast majority of firms in Montgomery employ fewer than 20 people; 65 percent of these firms employ fewer than 10. Since 2010, the total number of firms in the city has decreased by 66 to now include 5,568 establishments. This shrinkage occurred as overall employment increased.

Manufacturing is the largest sector and growing. In 2016 there were just under 13,000 jobs in this sector alone. This accounts for 14 percent of the overall employment in Montgomery. The recent location of firms like Hyundai and MOBIS into the community have been a boon to this sector. According to Wards Auto, the Montgomery Hyundai plant is 3 million sq.-ft. and currently builds nearly 1,300 Sonata and Elantra sedans daily with 2,500 mostly hourly workers. At the time, this was one of the largest single investments by a foreign firm in the United States and at full build-out, will represent a \$1.7 billion-dollar investment by the company.

Employment Size

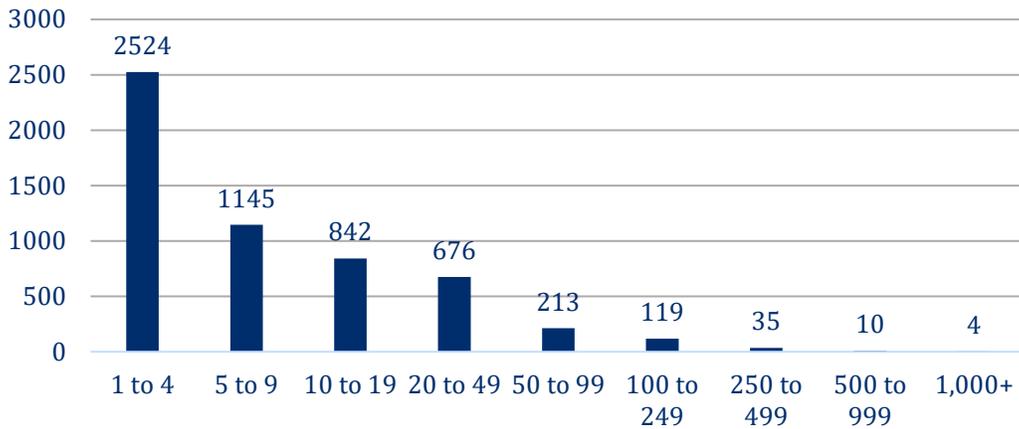


Figure 1: Employment Size

One third of jobs are associated with federal funding. Below are the ten largest employers in Montgomery. Like many cities in the US public sector employment and healthcare are major sources of employment. The Montgomery economy is relatively unique in its dependence upon federally funded employment. The community's largest employer, Maxwell Air Force Base, accounts for just 12,000 individual jobs. Government jobs (Federal, State, and Local) makeup an additional 29,000 jobs, and additional 11,000 private sector jobs can be directly tied to federal funding. Many of the remaining 92,000 jobs in the local economy have some tangential connection to this pool of employment. This is called a multiplier effect and typically felt most in service related jobs but also supports a wide variety of other industries.

Top Employers in Montgomery

Company/Organization	Employees	Product/Service
Maxwell Gunter Air Force Base	12,280	Federal Government
State of Alabama	11,639	State Government
Montgomery Public Schools	4,524	Public School System
Baptist Health	4,300	Hospitals/Clinics
Hyundai Motor Manufacturing Alabama	3,100	Automobile Manufacturing
Alfa Insurance Companies	2,568	Insurance Services
City of Montgomery	2,500	Local Government
Jackson Hospital & Clinic	1,300	Hospitals/Clinics
Koch Foods	1,250	Poultry Processing
Rheem Water Heaters	1,147	Water Heater Manufacturing

Table 2: Top Employers in Montgomery

Since 2010 more than 3,000 jobs have been added in Montgomery representing approximately a two percent gain. Manufacturing and the hospitality industry each added approximately 1,200 jobs representing the largest gains in employment. Finance and insurance represented the highest share of the job losses.

Change by Industry, 2010 to 2016

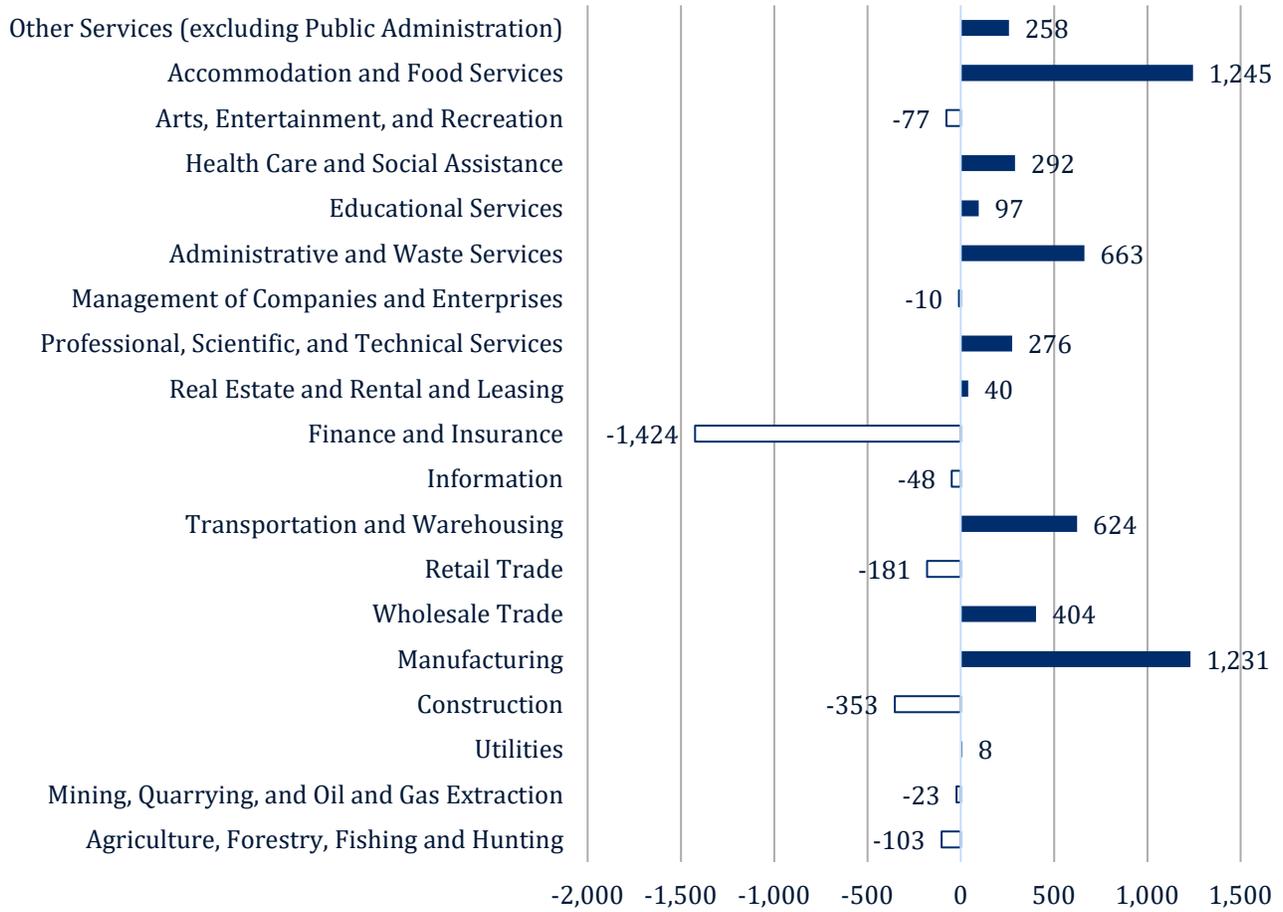


Figure 3: Change by Industry, 2010 to 2016

While employment has been growing, the number of establishments in Montgomery has been shrinking. There are 66 fewer businesses in Montgomery in 2016 versus in 2010. This shrinkage occurred while the overall employment in the city increased.

Total Number of Establishments

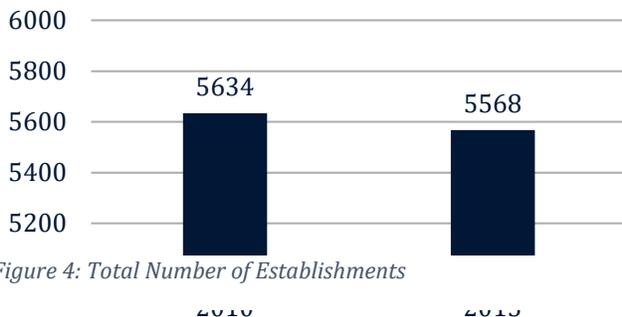


Figure 4: Total Number of Establishments

Hospitality related businesses are the dominant source of business growth. Since 2010 roughly 3,000 net new jobs have been added in Montgomery. The largest growth industries were accommodation & food service and manufacturing. This growth, however, was not consistent across all sectors, with the finance & insurance sector losing just over 1,400 net jobs. in 2016 the City of Montgomery had just over 133,000 jobs, with 92,000 private, 29,000 government, and 12,000 military.

Establishment Change by Industry 2010 - 2016

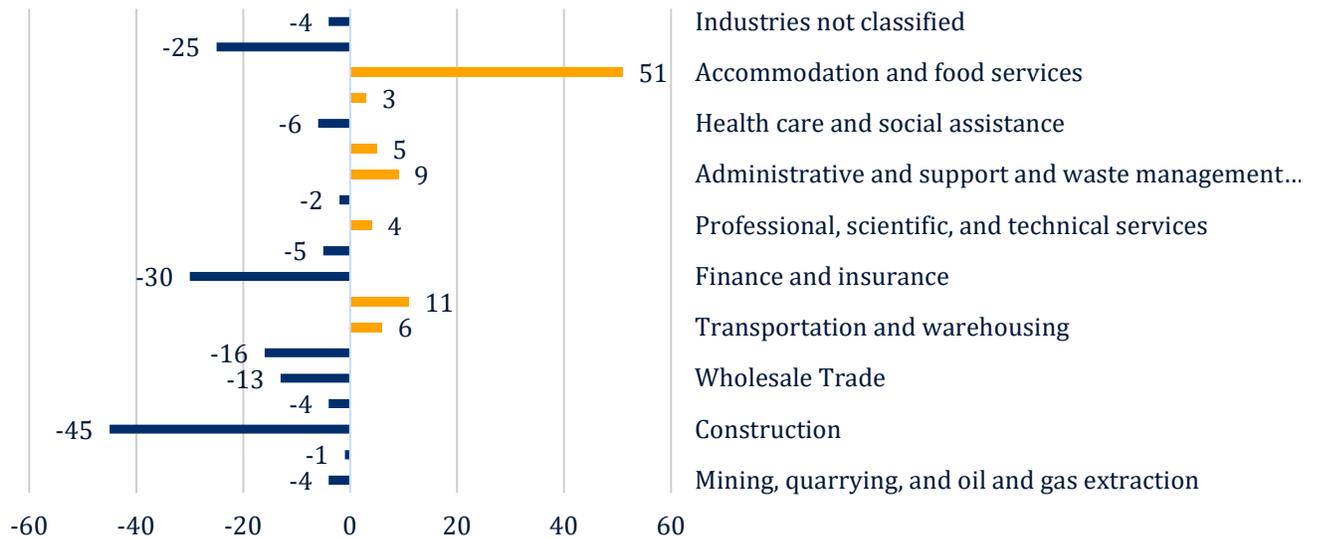


Figure 5: Establishment Change by Industry 2010 - 2016

Montgomery County led every other county in the state for announced jobs by new and expanding industries. Of the six new and expanded businesses adding more than 50+ employees, three fall in the city limits:

- ASK Telemarketing (expansion) – 435 jobs
- Convergent Outsourcing (expansion) – 175 jobs
- Hewlett Packard Customer Support Center – 232 jobs

3. Entrepreneurism and the Creative Economy

Despite its increasing focus in economic development there is no simple way to assess entrepreneurship. For example – are you measuring tech startups and the opening of a neighborhood coffee shop, or landscaping business? Few statistical measures exist, particularly at the city level, to assess the amount of activity. Therefore, proxies need to be used that can provide indications of the amount of activity and where.

SMALL BUSINESS & CROWDFUNDING

Kickstarter is a crowdsourcing website used by innovators, artists and entrepreneurs to obtain funding for their projects, art and startup ideas. In Montgomery, there has been 111 total projects listed on Kickstarter. The most popular project types are Film/Video (26 listings) and publishing (15). By comparison, Huntsville has 303 projects, Birmingham 509 and Mobile 239 Kickstarter projects.

Kickstarter Project Count Feb 2019

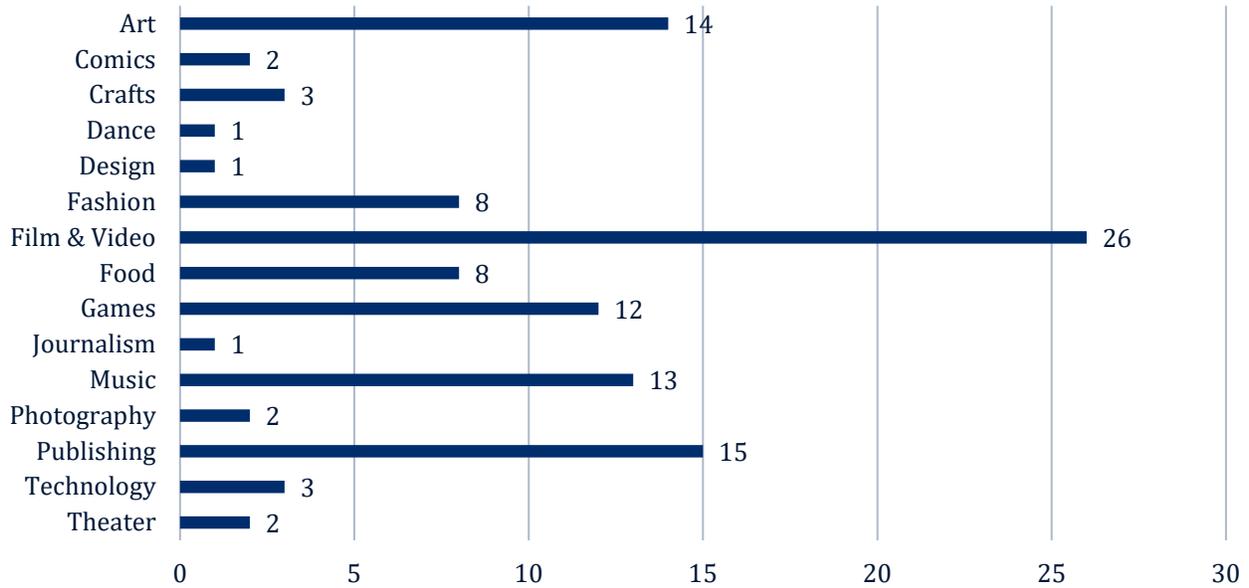


Figure 6: Kickstarter Project Counts, Feb. 2019

E-commerce website Etsy is a popular venue for artisans and artists to sell handmade goods. Currently, 5,700 “hand-made” items are for sale. By comparison, Birmingham has 43,053 item listings and Huntsville has 20,507 listings.

Product Counts

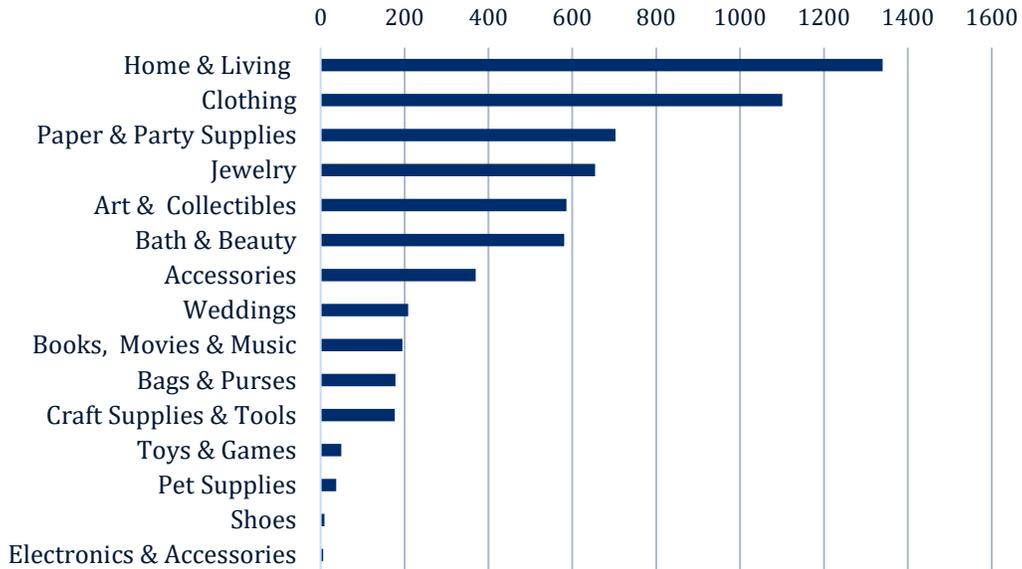


Figure 7: Product Counts via Etsy

One of the interesting findings from this analysis is the categories of significant activity in Montgomery. Typically, jewelry is the dominant category. Home and living constitutes a broad category ranging from furniture to kitchenware to home décor. Clothing is the other leading category. These categories tend to be among the more complex because of the nature of the products, the creation process, cost of goods sold and other related issues. This may suggest there is a pool of consumer product makers in the Montgomery area.

BUSINESS DYNAMICS

Business dynamics measures the startup and closure rates of businesses. City level data is not available, but county and metro data does exist. One of the dilemmas is the data lags by several years therefore it is limited in drawing too many conclusions about the present state of business formation. However, when considered with several other data sources it can help frame an overall issue. The Montgomery MSA lags Alabama in business formation rates by on average about .5 a percentage point.

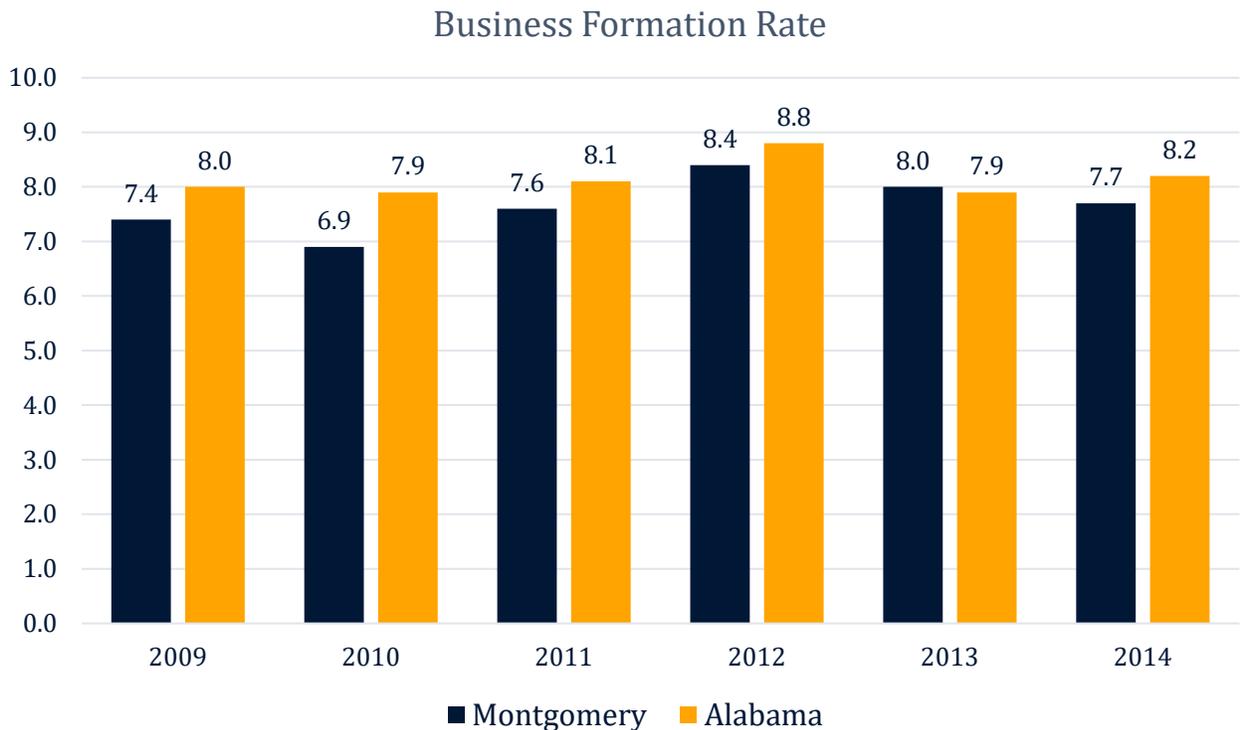


Figure 8: Business Formation Rate

SBIR activity is another indicator primarily regarding technology-driven companies or university spin-offs. SBIR stands Small Business Innovation Research. It is a federal program to provide research funding to small businesses in areas of interest for federal agencies. Since 2016 Montgomery has had no businesses receive SBIR funding support. This suggests there are few small businesses in Montgomery developing new technologies requiring significant research funding.

SBIR Funded Projects – Award Levels

City	2016	2017	2018 ytd
Auburn	\$ 855,364	\$ 849,999	
Birmingham	\$ 795,671	\$ 2,869,856	
Huntsville	\$ 41,691,283	\$ 46,724,638	\$ 10,178,938
Madison	\$ 354,639	\$ 1,324,387	\$ 499,861
Mobile	\$ 520,997	\$ 580,844	
Orange Beach	\$ 300,000	\$ 300,000	
Owens Cross Roads		\$ 149,941	\$ 124,988
Montgomery	\$ -	\$ -	\$ -

Table 3: SBIR Funded Projects – Award Levels

4. Workforce

LABOR SHED & COMMUTING PATTERNS

A labor shed is from a community draws its employment base. Few communities employ all its residents. One of the important considerations is how far and from what direction the workforce travels for employment. This information can help frame transportation issues, housing and retail development opportunities. Montgomery is a regional employment center drawing employee from a wide area.

Based on federal LEHD data, Montgomery is a net importer of workers with nearly 65,000 employees coming into the city and sends over 21,000 workers out of the city. Approximately 50,000 residents work in the city. (Note: Please refer to maps 1 and 2 in the map gallery)

Approximately 70 percent of Montgomery residents live within ten miles of their work. Although Montgomery is a diversified employment center, almost 20 percent of the city residents are employed outside of the Montgomery area with commutes over 50 miles. Those commutes are primarily in the direction of Tuscaloosa and Birmingham.

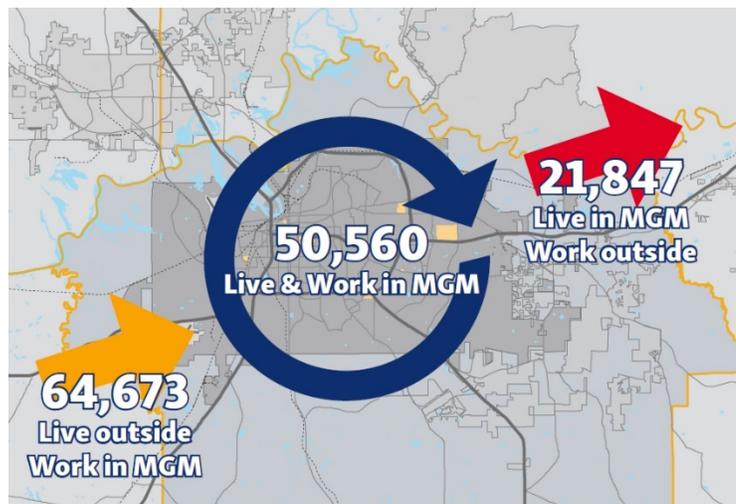
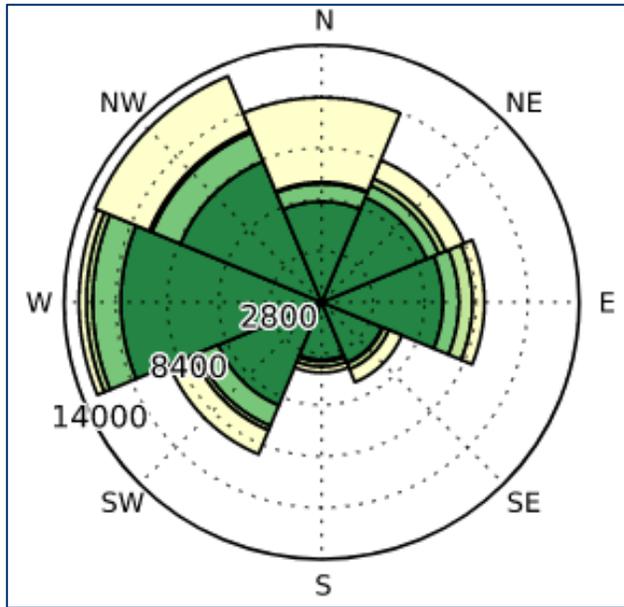


Figure 9: Commuting Patterns



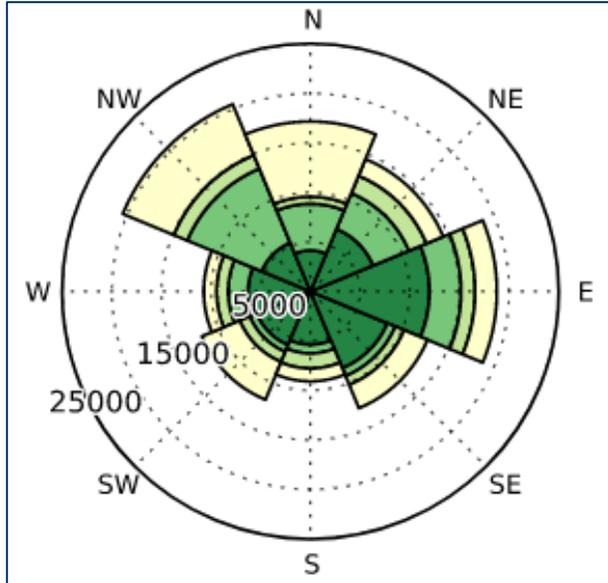
Jobs by Distance

Home Census Block to Work Census Block

	Count	Share
Total Primary Jobs	72,407	100
Less than 10 miles	50,282	69.4
10 to 24 miles	7,144	9.9
25 to 50 miles	2,602	3.6
Greater than 50 miles	12,379	17.1

Figure 10: Where workers Live

For workers who live outside of Montgomery but work in Montgomery, approximately 52 percent live greater ten miles from the city. More than 30 percent live over 25 miles away with 23 percent living over 50 miles away. For those living over 50 miles away this is primarily toward Birmingham and Mobile.



Jobs by Distance

Work Census Block to Home Census Block

	Count	Share
Total Primary Jobs	115,233	100
Less than 10 miles	54,190	47
10 to 24 miles	24,383	21.2
25 to 50 miles	10,248	8.9
Greater than 50 miles	26,412	22.9

Figure 11: Where residents Work

LABOR FORCE & OCCUPATIONS

Office administration, sales, production and food service top occupations for residents. The occupational distribution describes the jobs held by residents. Not all these jobs are within Montgomery but are held by residents of the city. Office and administrative support services are the leading association with nearly 16

percent of all workers. This is consistent with the national share of these workers. Montgomery out performs the national average when it comes to production work where just over ten percent of workers are employed compared to 6.5 percent nationally. All other major categories are relatively consistent with national averages.

Lower wages across most occupations. According to a 2016 study by the Bureau of Labor Statistics on occupational employment and wages, workers in the Montgomery Metropolitan Statistical Area had an average (mean) hourly wage of \$19.55 in May 2016, about 18 percent below the nationwide average of \$23.86. The community has a significantly higher share of individuals employed in production, ten percent compared to 6.5 percent nationally, but their wages trail the national average by 13 percent (\$15.55 compared to \$17.88 national average). This is true in each of the major occupational groups except community and social service.

Decreasing unemployment rate in line with state trends. Unemployment only measures those individuals that are part of the labor force that are not currently employed but are actively looking for work. Retirees or discouraged job-seekers are not counted. Local unemployment rates have fallen since the recession along with the state and are currently approaching full employment. The February 2018 rate in the Montgomery Metro Area, 4.1, is just below the state figure of 4.3. This outperforms Mobile at 5.1, but is just above Birmingham-Hoover, 3.8 and Huntsville, 3.7.

Underemployed percentage reveals a larger labor pool. Of major Alabama cities, Montgomery has one of the highest rates of underemployed individuals. According to the Organization for Economic Cooperation and Development underemployment exists when a person's employment is inadequate in relation to specified norms of alternative employment, account being taken of his or her occupational skill. In Montgomery, 26 percent or one-in-four workers qualify as underemployed this compares to 25 percent in Birmingham, 21 percent in Mobile, and 24 percent in Alabama overall. Combining these workers with the unemployed reveals an available labor pool of just over 50,000 within the metro area.

Labor force participation increasing. Between 2000 and 2016 the labor force for Montgomery expanded by 3,000 new workers. Labor force is defined as the segment of the over-16 population that is actively working or seeking employment. Retirees, disabled citizens, discouraged job-seekers (those not actively seeking employment) would not be counted in the labor force. As pointed out in earlier sections the country is getting older on average. Therefore, the overall labor force in many regions has begun to plateau and/or decrease. In Alabama, the labor force shrank by three percent over this period.

7. Key Conversation Points from Interviews and Focus Groups

Over the course of a week in April, in person discussion groups and interviews were held with a cross section of employers and economic stakeholders regarding their perspectives on the state of the Montgomery economy. The following represents a synopsis of key discussion point.

Strengths

- Stable employment base from key anchor industries
- Aggressive business recruitment in targeted industries
 - Military & DOD
 - Advanced Manufacturing
 - Cyber & Tech
 - Medical
 - Automotive
- Central location within the state
- Maxwell Gunter AFB

Opportunities

- Expanded tourism – historic and meetings
- Improving downtown
- MGMWERX
- MGMix

Challenges

- Schools
- Flight to suburbs – neighborhood quality
- Technical talent pool
- Retail corridor abandonment

The tech / innovation potential created by the combination of Gunter and the location of the Air Force Cloud coupled with the unique MGMix Internet Hub was viewed as a real asset to build on to help develop the tech base in the city.

Another area of frequent mention was the role of historic tourism and building on the city's abundant historic and civil rights venues. A common concern expressed was finding a balance between promoting the city's history as a tourism opportunity but doing so in a way that is respectful to the topics and legacy of the civil rights movement.

8. Considerations

These base conditions analysis suggests several focal points for future economic development discussion in Montgomery.

- ⊗ Build ... an entrepreneurial engine
- ⊗ Balance ... exposure to government supported employment
- ⊗ Monitor ... Artificial intelligence & automation to mitigate its impacts
- ⊗ Leverage ... Cyber infrastructure and defense tech
- ⊗ Grow ... The Right Type of Tourism Growth
- ⊗ Attract ... home the commuters

BUILD AN ENTREPRENEURIAL ENGINE

Every source of data related to start ups, entrepreneurship and business creation suggests that Montgomery has room for improvement in developing new businesses. Developing programs and activities that can encourage more entrepreneurship as well as help entrepreneurs scale businesses is a potentially important component to developing a growth engine and neighborhood revitalization tool for the Montgomery economy

From a tech start up perspective the lack of a major research university and local engineering depth means there is a not an entity to fill a continual pipeline of local tech start-ups. It is more likely to come from within an existing company. However, to support any nascent local tech start up scene, corporate recruitment is a necessary component to support a talent pool. The best immediate option is to focus on defense related tech to support Maxwell Gunter. MGMWERX provides a good foundational start to leverage that opportunity.

BALANCE EXPOSURE TO GOVERNMENT SUPPORTED EMPLOYMENT

Approximately 1/3 of Montgomery's employment is tied to federal government funding directly through employment or indirectly as the primary payment mechanism (defense contractors & hospital employment). Government employment provides a stable employment base for Montgomery. But in the era of substantial federal deficits it can also be a risk factor to the economy. These sectors need to remain an area of focus for local economic development. Defense tech is the quickest way for Montgomery to build its tech base. Continued efforts to increase units home-based at Maxwell both help the local economy and extend the infrastructure to mitigate any future potential BRACs. Healthcare can drive employment increases. However, efforts to reduce the federal deficit through spending changes or shifts in emphasis could have an outsized impact on Montgomery.

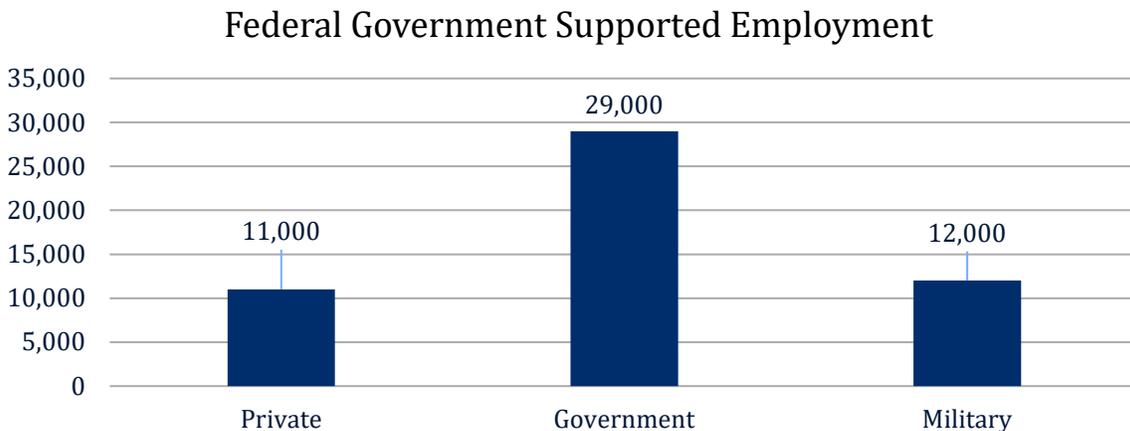


Figure 12: Federal Government Supported Employment

MONITOR AI AND AUTOMATION AND MITIGATE ITS IMPACT ON KEY INDUSTRIES

Montgomery’s strengths in advanced manufacturing, automotive industries and call center / customer support operations put it at some risk for job loss from automation and artificial intelligence. Brookings report¹ on the potential impact of automation suggests that 24.5% of Montgomery’s job base is at high risk for substitution by automation and 38% is at medium risk. The dilemma for Montgomery is the highest risk is in some of its target industries with high wage levels for populations with relatively low skills. Managing through this transition will be critical.

LEVERAGE CYBER/TECH AND THE WORKFORCE

The presence of Gunter and the goals of the MGMix provide some foundational elements to build this area of the economy. However, based on available workforce data, Montgomery based companies will need to recruit this talent pool for the foreseeable future based on the relative lack of depth in the local computer tech market.

For example, based on occupational attributes analysis computer occupations have relatively low concentrations in the Montgomery region. Montgomery has an estimated 4200 people with computer and related engineering skills. Its computer occupational skills are primarily in legacy occupations requiring programming and database management. It has relatively few application developers – fully 1/3 of what can be found nationally. Additionally, another item to consider is what are the emerging programming languages particularly in the areas of AI & machine learning that will be required to support the local defense needs and can local programming talent get access that upskilling.

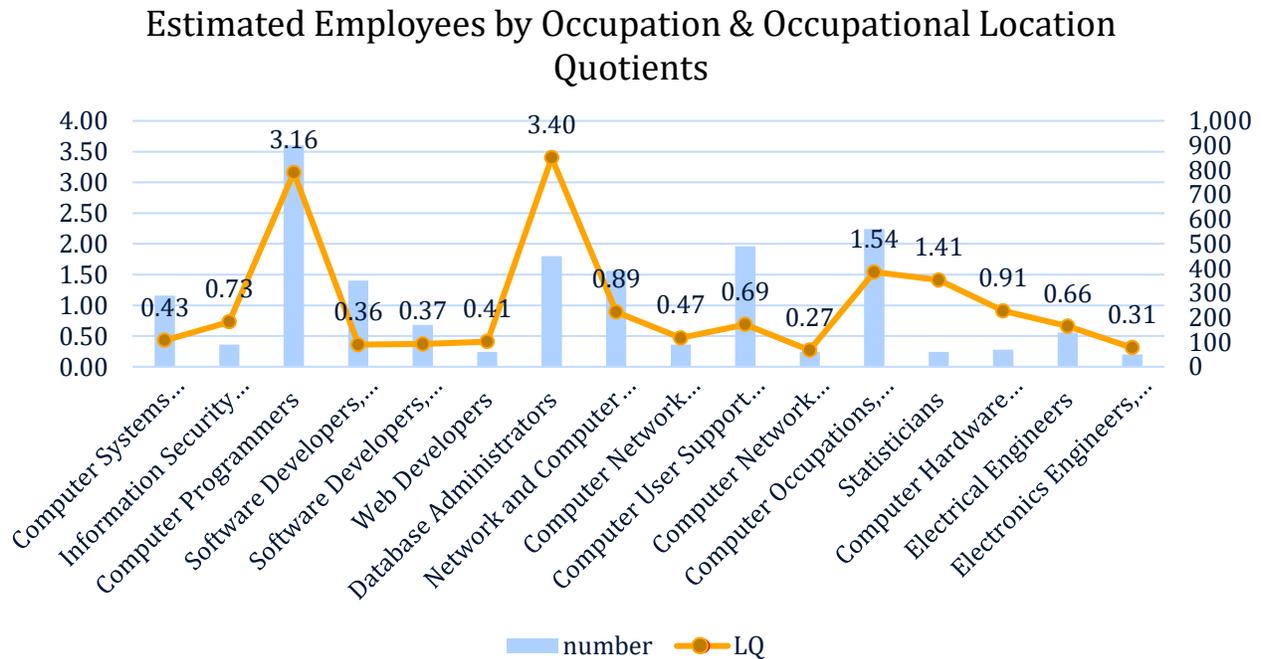


Figure 13: Estimated Employees by Occupation & Occupational Location Quotients

¹ Brookings, *Automation and Artificial Intelligence: How Machines are Affecting People & Places*, January 2019

Because recruiting talent into Montgomery will be such a critical component of developing the more value-added sectors of cyber and tech issues of livability, educational offerings and other related issues are a critical component of an effective strategy in this sector.

GROW THE RIGHT TYPE OF TOURISM GROWTH

County level tourism statistics² suggest tourism in the Montgomery area has not seen the same growth rates as other parts of the state. Montgomery County tourism grew at 1.4% compared to 5.1% statewide. But there is an opportunity to do more. History is palpable in Montgomery. Historical and civil rights tourism is a real opportunity for Montgomery. Tourism can support a vibrant amenity base that helps draw talent to the community. It supports growth in the sales tax base.

However, while this segment of tourism can be a real opportunity to grow this part of Montgomery's economic base, there is risk of "Disneyfication" such as found along the Freedom Trail in Boston. Given the context of the tourism opportunity for Montgomery creating the right "tourism products" needs to be part of a discussion on how to grow tourism.

ATTRACT HOME THE COMMUTERS

An estimated 26,000 people commute more than 50 miles to work in Montgomery. Assuming these commuters make the average wage of \$41,000 that translates to more than \$1b in personal income leaving the community³. Simply keeping 10% of this long-range commuter pool adds another \$106m in spending capacity to Montgomery. Given the city's finances being dependent on property and sales taxes this is not an insignificant amount of economic activity. What will be required to relocate this population into the city is unclear, but interviews suggested several factors including livability (related to school performance, housing quality, and other factors) and economic opportunities were significant contributors to people leaving the city. Taking actions that reinvigorate the neighborhoods and improve the schools can be important steps to bringing home the commuters.

² Alabama Tourism Economic Impact Study 2018 for FY2017

³ Given the cost involved based on the distance it is quite likely the average wage of these workers is substantially higher than the city average