

ECONOMIC DEVELOPMENT

ASSESSMENT AND RECOMMENDATIONS

Madison, Alabama
INDUSTRIAL AREA PLAN

May 7, 2018



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1. INTRODUCTION

This section of the report sets forth the economic development analysis performed for the Madison Industrial Area Plan. It contains an assessment of the City's current economic development situation and recommendations for an economic development strategy going forward. This section is organized as follows:

1. Economic Overview: population, income, education, employment, labor force, occupations, industries, growth trends;
2. Available Industrial Buildings and Land: inventory and description;
3. Current Economic Development Status: recent events, the economic development process and Madison's participation, strengths and weaknesses;
4. Regional Clusters and Industries for Future Growth: industry clusters in Madison and metro area, clusters and industries for future growth;
5. Conclusions and Recommendations: economic development vision, creating an economic development strategy and plan, making Madison development ready, resources.

This economic development analysis was completed using:

- Demographic and economic data from numerous government and private sources;
- Information from confidential interviews and discussions with over forty local Madison stakeholders and economic development personnel at the regional and state level;
- Visits and tours of Madison;
- The professional judgement of the Project Team based on a combined 60+ years of business location and economic development consulting and practice.
- The City recognized the need for this economic development analysis because it is a key input into planning for Madison's future growth. As explained in Section 4 of the Economic Development Assessment and Recommendations, this analysis could really be considered a foundation or prerequisite for the existing Madison Growth Plan.

2. ECONOMIC OVERVIEW

To plan for the future, it is critical for any community or organization – public or private – to understand its current situation and how it got there. It would be naïve to set goals and chart a course to achieve them without knowing how far you have to go, and understanding how historical trends are pushing you toward or away from these goals. In addition to analyzing trends, understanding how a community or organization compares to its peers provides useful information and perspective for planning purposes. Trend and peer comparison information is especially important for communities and regions because it can help guide citizens and elected officials who often have very different ideas towards a consensus.

To set the stage for this report’s findings and recommendations and to help guide future planning efforts, this section of the report provides an overview of the demographic and economic status and recent trends for the City of Madison. Numerous data sources were used for this overview, and for other sections of the report as well. These sources include:

- Economic Modeling Systems, Inc. (EMSI), a leading source of industry data commonly used in economic analysis, as provided for the Janus Institute through the University of Southern Mississippi, Department of Economic Development.
- US Cluster Mapping Project, a collaboration between the US Economic Development Administration and the Harvard Business School that provides a wealth of information on the economic structure and status of counties, regions and states in the US. The focus of this data source is on identifying and tracking clusters, or groups of related industries, that drive local and regional growth.
- Various other data sources from the US Census Bureau and Department of Labor such as County Business Patterns and American Fact Finder, state sources such as the Alabama Department of Labor, and direct research by the Project Team.

Data are reported in these sources for various years. Often data a year or two old are used because of reporting delays to provide geographical consistency. A word of caution on data for the City of Madison: when data services report data at smaller geographic areas such as cities and zip codes, issues can arise such as zip codes that cross political jurisdictions, or even individual companies whose facilities may span zip codes or city limits. For this report, every effort was made to obtain the best available small area data, including conversations with the data providers.

2. ECONOMIC OVERVIEW CONTINUED

Population, Income and Education

Table 2.1 shows how the total population in the City of Madison has grown since the 2010 Census. From 2010 to 2016, the City of Madison added an estimated 5,021 residents for a total of 47,959, representing a rapid growth rate of 11.7%. During that same period, the State of Alabama added an estimated 83,564 residents for a total of 4,863,300 representing a much lower growth of 1.7%. Undoubtedly, the strong population growth in the City of Madison reflects its location in one of the most economically dynamic metro areas in the State of Alabama and the nation as a whole.

Table 2.1 Population and Growth, City of Madison vs. State of Alabama

Population	City of Madison	State of Alabama
2010 Census	42,938	4,779,736
2016 Estimate	47,959	4,863,300
Growth	5,021	83,564
% Growth	11.7%	1.7%

Source: US Census Bureau, July, 2016 est

Table 2.2 shows the breakdown of population by age cohort. This can be a significant factor in labor analysis for business location decisions. A higher percentage of older and retired workers compared to younger and prime working age residents can indicate a potential demographic tightening of the labor market and more demands for local social services from older residents. The City of Madison has a larger population share than the State as a whole in the key working age cohorts of 25-34 and 35-54. Children of these working age adults probably account for the higher population share in the 5-17 cohort. The City has a much smaller share of population 65 and over (9.7% vs. 14.9%) compared to the state. Overall, the City of Madison has a favorable ratio of prime working age adults to older adults compared to the State, which could be a positive to some businesses looking to locate in the area.

Table 2.2 Population Age Distribution

Age Cohort	% of Population	
	City of Madison	State of Alabama
<5	5.5	6.1
5-17	20.0	16.9
18-24	8.5	9.9
25-34	13.1	12.9
35-54	30.3	26.4
55-64	12.9	12.9
65+	9.7	14.9

Source: NeighborhoodScout.com

2. ECONOMIC OVERVIEW CONTINUED

Table 2.3 shows income and poverty data for the City of Madison and the State. Median household income is more than twice the State level, and Madison's poverty rate is far below the State level.

Table 2.3 Income and Poverty

Income Measure	City of Madison	State of Alabama
Median household income	\$95,493	\$44,758
% below poverty level	5.7%	17.1%

Source: US Census, 2016 est

Educational attainment is higher in the City of Madison compared to the State, as shown in Table 2.4. The percent of City residents holding a bachelors or higher degree is more than twice that of the State.

Table 2.4 Educational Attainment

Degree Obtained	% of Pop 25 yrs and over	
	City of Madison	State of Alabama
High school or higher	96.2%	84.8%
Bachelors degree or higher	57.4%	24.0%

Source: US Census, 2016

2. ECONOMIC OVERVIEW CONTINUED

Labor Market and Workforce

Table 2.5 shows the civilian labor force for the City of Madison, Huntsville MSA and the State. The City's civilian labor force of 24,680 accounts for 11.2% of the labor force for the Huntsville MSA (Madison and Limestone counties). Unemployment rates in all three areas are very low, down to 2.8% in the City as of November 2017. These unemployment rates are down significantly in all three areas from one year ago.

Table 2.5 Civilian Labor Force and Unemployment

	City of Madison	Huntsville MSA	State of Alabama
Civilian labor force	24,680	219,896	2,163,284
Unemployment rate	2.8%	3.1%	3.5%

Source: Alabama Dept. of Labor, Nov 2017, revised

Labor Force by Occupation

Table 2.6 presents data on the workforce for the City of Madison classified by US Government Standard Occupation Codes (SOC). Table 2.6 shows the number of jobs in the City of Madison for each of the SOCs listed. Not all occupation codes are presented, just selected ones based on high location quotients and significant employment levels.

Utilizing a measure called the location quotient, Table 2.6 identifies occupations that are relatively more prevalent in terms of employment in the City of Madison compared to the country as a whole. For example, if welders in City A account for 2 percent of all employment, while accounting for only 1 percent in the US as a whole, then the location quotient would be 2.0 (2/1), indicating that City A has a relatively high concentration of welders. Conversely, a low location quotient (less than 1) would show that a city has a lower concentration of jobs in a particular occupation. Table 2.6 also shows the average hourly wage for each occupation, and also the net commuting inflow or outflow from the City for each occupation.

For example, the data show that in the City of Madison, there are 463 jobs held by Aerospace Engineers with average hourly earnings of \$56.63. There are some 576 workers classified as Aerospace Engineers that live in the City, and 113 of them commute out of the City to work. The location quotient of 32.0 shows that there is an extremely high concentration of Aerospace Engineers working in the City compared to the nation.

Jobs in Madison, where larger numbers of particular occupations commute into the City (large number of 2016 Net Commuters), include Business Operations Specialists, Logisticians, and Labor and Materials Movers.

2. ECONOMIC OVERVIEW CONTINUED

Table 2.6 City of Madison Workforce Composition

SOC	Description	2016 Jobs	2016 Location Quotient	Avg. Hourly Earnings	2016 Resident Workers	2016 Net Commuters
17-2011	Aerospace Engineers	463	32.00	\$56.63	576	-113
17-2061	Computer Hardware Engineers	270	17.80	\$54.43	204	66
17-2199	Engineers, All Other	489	16.91	\$56.56	397	92
13-1081	Logisticians	473	15.18	\$44.81	312	161
17-2072	Electronics Engineers, Except Computer	196	7.00	\$53.30	210	-14
15-1131	Computer Programmers	370	6.13	\$48.20	399	-29
17-3023	Electrical and Electronics Engineering Technicians	159	5.59	\$29.01	191	-32
15-1133	Software Developers, Systems Software	414	4.77	\$51.91	392	22
51-2022	Electrical and Electronic Equipment Assemblers	172	3.87	\$15.05	144	28
15-1132	Software Developers, Applications	521	3.10	\$49.56	509	12
15-1199	Computer Occupations, All Other	159	2.75	\$42.77	104	55
15-1121	Computer Systems Analysts	310	2.55	\$41.70	303	7
13-1199	Business Operations Specialists, All Other	515	2.52	\$45.64	336	179
51-2099	Assemblers and Fabricators, All Other	121	2.51	\$11.34	144	-23
17-2112	Industrial Engineers	129	2.45	\$44.41	206	-77
11-3021	Computer and Information Systems Managers	148	1.98	\$67.71	145	3
25-3099	Teachers and Instructors, All Other	147	1.97	\$11.58	94	53
13-1111	Management Analysts	310	1.84	\$47.13	250	60
15-1151	Computer User Support Specialists	211	1.51	\$23.51	225	-14
29-2052	Pharmacy Technicians	124	1.50	\$13.61	99	25
51-9198	Helpers--Production Workers	119	1.36	\$10.82	170	-51
15-1142	Network and Computer Systems Administrators	105	1.32	\$37.67	138	-33
13-1071	Human Resources Specialists	145	1.28	\$33.66	130	15
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	691	1.27	\$11.32	591	100
25-2021	Elementary School Teachers, Except Special Education	320	1.11	\$22.98	267	53
13-2011	Accountants and Auditors	318	1.11	\$36.10	383	-65
43-6014	Secretaries and Administrative Assistants	619	1.10	\$17.83	791	-172
29-1141	Registered Nurses	652	1.09	\$27.10	539	113
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	117	1.08	\$19.11	171	-54
41-2031	Retail Salespersons	960	1.01	\$12.40	877	83

Source: EMSI

2. ECONOMIC OVERVIEW CONTINUED

Major Industry Sectors

The Federal Government uses the North American Industry Classification System (NAICS) to report employment, wages and other data by industry. Data are reported from the aggregate 2-digit major sector level (e.g. manufacturing) down to more detailed 4- and 6-digit levels, which are very industry and sub-industry specific. Table 2.7 shows employment at the 2-digit major sector level for the City of Madison compared to the 2-county Huntsville metro area and the State of Alabama as a whole. The largest employment sectors in the City of Madison include Retail Trade (NAICS 44), Professional, Scientific and Technical Services (54), Manufacturing (31), Government (90), and Accommodation and Food Services (72). Employment in Table 2.7 is by place of work (where the job is), not place of residence.

Table 2.7 Employment by Major Industry Sector, City of Madison vs. MSA and State

NAICS	Sector Name	City of Madison		2-County Metro Area		State of Alabama	
		# Empl	% Share	# Empl	% Share	# Empl	% Share
11	Agriculture, Forestry, Fishing and Hunting	0	0.0%	1,439	0.6%	20,222	0.9%
21	Mining, Quarrying, and Oil and Gas Extraction	0	0.0%	85	0.0%	5,410	0.3%
22	Utilities	0	0.0%	24	0.0%	14,282	0.7%
23	Construction	1,072	4.2%	9,506	4.1%	111,207	5.2%
31	Manufacturing	2,914	11.3%	24,368	10.4%	263,592	12.3%
42	Wholesale Trade	896	3.5%	4,935	2.1%	75,958	3.5%
44	Retail Trade	3,559	13.8%	24,968	10.6%	240,836	11.2%
48	Transportation and Warehousing	1,294	5.0%	3,325	1.4%	65,320	3.0%
51	Information	121	0.5%	2,519	1.1%	22,162	1.0%
52	Finance and Insurance	613	2.4%	4,277	1.8%	74,544	3.5%
53	Real Estate and Rental and Leasing	282	1.1%	2,624	1.1%	26,497	1.2%
54	Professional, Scientific, and Technical Services	3,546	13.7%	32,772	14.0%	108,214	5.0%
55	Management of Companies and Enterprises	80	0.3%	763	0.3%	16,450	0.8%
56	Admin, Support, Waste Mgmt, Remediation Services	1,592	6.2%	18,858	8.0%	132,801	6.2%
61	Educational Services	507	2.0%	3,300	1.4%	29,173	1.4%
62	Health Care and Social Assistance	2,306	8.9%	17,785	7.6%	214,435	10.0%
71	Arts, Entertainment, and Recreation	230	0.9%	2,756	1.2%	21,766	1.0%
72	Accommodation and Food Services	2,626	10.2%	18,463	7.9%	180,753	8.4%
81	Other Services (except Public Administration)	1,651	6.4%	9,557	4.1%	111,896	5.2%
90	Government	2,500	9.7%	52,201	22.3%	407,845	19.0%
	Total	25,790	100.0%	234,525	100.0%	2,143,364	100.0%

Note: City of Madison Government employment is an estimate based on DataUSA statistics

Source: EMSi and DataUSA

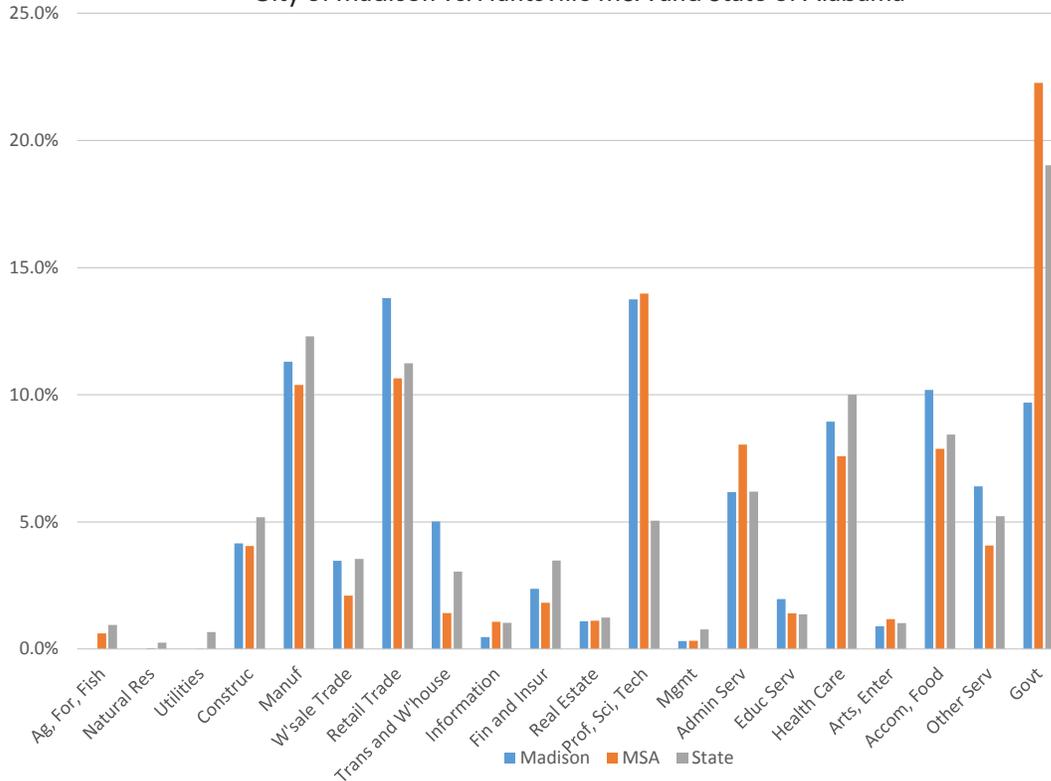
It is useful to compare employment shares by major sector for the City to those of the Huntsville 2-county MSA and the State of Alabama, as Figure 2.1 illustrates. The City has relatively high employment shares in Retail Trade; Transportation and Warehousing; Professional, Scientific and Technical (about equal to the Huntsville MSA, but far higher than the State); Accommodation and Food Services; and Other Services. The City has relatively low employment shares in Information; Management; and Arts and Entertainment.

¹ Please note that employment (jobs) in the Government sector in the City of Madison is an estimate based on DataUSA statistics instead of EMSi due to questions of data disaggregation.

2. ECONOMIC OVERVIEW CONTINUED

Figure 2.1

Employment Share (2016) by Major Industry Sector
City of Madison vs. Huntsville MSA and State of Alabama



Employment and Growth by Industry

An important distinction is made in local economic analysis between export or basic industries that supply manufactured goods or services to consumers outside of the local area (in this case, City of Madison) and non-basic industries that mainly serve the local area. Basic industries bring in a flow of new money and revenues into the economy and thus are the main sources of economic support and growth. Manufacturing is almost always a basic industry, and in today's economy, many service industries such as computer programming are strongly export based. Non-basic industries serving mainly local customers such as grocery stores, restaurants, hair salons, etc. still contribute to the economy by preventing "leakage" (e.g. driving out of Madison to spend money for clothes, food, etc.), and certainly contribute to the quality of life and fabric of a community.

Breaking down employment on a more disaggregate basis, Table 2.8 shows the largest industries by employment (greater than 150) for the City. Restaurants, retail and other services are prominent in the list. These industries mostly serve local consumers (therefore non-basic), but these local establishments do bring in "outside" money when serving non-Madison residents. Of course, the employment statistics do not speak to the quality of restaurants and retail offerings in Madison. Numerous interviewees stated their opinion that the City would benefit from more "upscale" restaurants and retail offerings. Basic or export goods- and service-producing industries such as Computer Systems Design (5415); Computer and Peripheral Equipment Manufacturing (3341); Aerospace Product and Parts Manufacturing (3364); and Management, Scientific, and Technical Consulting Services (5416) are also prominent in the City's economy. This analysis of basic vs. non-basic industries shows that Madison has its own strong economic base and is far from just a commuter city.

2. ECONOMIC OVERVIEW CONTINUED

Table 2.8 Largest 4-Digit NAICS Industries by Employment, City of Madison

NAICS Industry Name	2016 Employ
7225 Restaurants and Other Eating Places	2,509
5415 Computer Systems Design and Related Services	2,364
9036 Education and Hospitals (Local Government)	2,012
9039 Local Government, Excluding Education and Hospitals	1,566
3341 Computer and Peripheral Equipment Manufacturing	1,260
4529 Other General Merchandise Stores	772
5617 Services to Buildings and Dwellings	717
5613 Employment Services	700
4451 Grocery Stores	644
3364 Aerospace Product and Parts Manufacturing	594
8131 Religious Organizations	541
4841 General Freight Trucking	480
6211 Offices of Physicians	438
5416 Management, Scientific, and Technical Consulting Services	432
8121 Personal Care Services	403
4441 Building Material and Supplies Dealers	373
6231 Nursing Care Facilities (Skilled Nursing Facilities)	345
5413 Architectural, Engineering, and Related Services	325
2382 Building Equipment Contractors	324
9012 Federal Government, Military	316
4521 Department Stores	299
5221 Depository Credit Intermediation	283
4921 Couriers and Express Delivery Services	281
6116 Other Schools and Instruction	259
6212 Offices of Dentists	257
4511 Sporting Goods, Hobby, and Musical Instrument Stores	257
2362 Nonresidential Building Construction	247
6213 Offices of Other Health Practitioners	243
9029 State Government, Excluding Education and Hospitals	241
8141 Private Households	238
4881 Support Activities for Air Transportation	214
6111 Elementary and Secondary Schools	202
6244 Child Day Care Services	198
6232 Residential Disability Facilities	189
5616 Investigation and Security Services	187
5419 Other Professional, Scientific, and Technical Services	187
2361 Residential Building Construction	181
4461 Health and Personal Care Stores	177
8123 Drycleaning and Laundry Services	173
8111 Automotive Repair and Maintenance	170
6221 General Medical and Surgical Hospitals	166
3222 Converted Paper Product Manufacturing	158
6214 Outpatient Care Centers	158
4413 Automotive Parts, Accessories, and Tire Stores	153
4251 Wholesale Electronic Markets and Agents and Brokers	152

Source: EMSI

2. ECONOMIC OVERVIEW CONTINUED

Table 2.9 shows the 4-digit industries in Madison (2016 employment 50 or greater) with the highest ten-year growth in employment (2006 to 2016). The table also shows average earnings by industry. The “competitive effect” column is a measure of industry growth due to the unique characteristics of the local economy. It is derived from the economic technique of shift-share analysis that accounts for local job growth due to overall growth in the national economy, and also growth in each particular industry at the national level. For example, the first industry in Table 2.9 Outpatient Care Centers (under Educational Services and Health) added a net of 158 jobs from 2006 to 2016. However, based on national economic and industry growth trends, only 25 new jobs would have been “expected” in this industry in the City. Hence, 133 more jobs can be attributed to the comparative advantage and consumer demand in Madison for Outpatient Care Centers.

Many of Madison’s fastest growing industries are non-basic and local in nature such as Drycleaning and Laundry Services (8123) and Specialty Food Stores (4452). Also, many healthcare related industries are growing quickly in Madison. These could serve local as well as non-local residents. However, several fast growing industries are undoubtedly export-oriented industries, for example Aerospace Product and Parts Manufacturing (3364) and Support Activities for Air Transportation (4881). Both of these industries are very high-paying and exhibit large competitive effect job creation numbers.

Table 2.9 Fastest Growing Industries, City of Madison

NAICS Industry	2016 Jobs	2006 - 2016 % Change	Avg. Earnings Per Job	Competitive Effect
Manufacturing				
3364 Aerospace Product and Parts Manufacturing	594	267%	\$109,609	427
Wholesale, Retail, Transportation				
4237 Hardware, and Plumbing and Heating Eqmt and Supplies Wholesaler	56	107%	\$62,860	30
4451 Grocery Stores	644	38%	\$28,599	133
4452 Specialty Food Stores	53	96%	\$27,882	26
4511 Sporting Goods, Hobby, and Musical Instrument Stores	257	111%	\$23,848	122
4533 Used Merchandise Stores	127	51%	\$21,248	18
4539 Other Miscellaneous Store Retailers	60	30%	\$24,681	11
4541 Electronic Shopping and Mail-Order Houses	56	300%	\$27,041	33
4881 Support Activities for Air Transportation	214	251%	\$85,410	138
Finance, Professional				
5222 Nondepository Credit Intermediation	149	32%	\$79,742	60
5321 Automotive Equipment Rental and Leasing	67	72%	\$26,878	26
5419 Other Professional, Scientific, and Technical Services	187	31%	\$34,684	3
5511 Management of Companies and Enterprises	81	93%	\$99,617	29
5613 Employment Services	700	102%	\$25,529	365
Educational Serices and Health				
6116 Other Schools and Instruction	259	69%	\$27,979	42
6213 Offices of Other Health Practitioners	243	59%	\$49,649	28
6214 Outpatient Care Centers	158	1029%	\$46,857	133
6219 Other Ambulatory Health Care Services	122	74%	\$57,624	33
6221 General Medical and Surgical Hospitals	166	32%	\$57,015	26
6232 Residential Intellectual and Developmental Disability Facilities	189	311%	\$33,290	133
6241 Individual and Family Services	50	85%	\$20,305	-8
Personal Services				
7113 Promoters of Performing Arts, Sports, and Similar Events	74	363%	\$101,472	50
7139 Other Amusement and Recreation Industries	147	60%	\$12,975	39
8121 Personal Care Services	403	39%	\$22,427	75
8123 Drycleaning and Laundry Services	173	179%	\$48,474	119

Source: EMSI

2. ECONOMIC OVERVIEW CONTINUED

Table 2.10 portrays the City of Madison economy in another way. Utilizing a measure called the location quotient, Table 2.10 identifies industries that are relatively more prevalent in terms of employment in the City of Madison compared to the country as a whole. For example, if the widget manufacturing industry in City A accounts for 2 percent of all employment, while it accounts for only 1 percent in the US as a whole, then the location quotient would be 2.0 (2/1), indicating that City A has a relatively high concentration of widget manufacturing. This could be an indication that City A is very competitive in widget manufacturing. Conversely, a low location quotient (less than 1) would show that a city has a lower concentration in a particular industry.

Since retail, restaurants, personal services and similar industries often cater to local consumers, high location quotients in these industries can indicate a high local demand. For example, one would expect employment and the location quotient for restaurants and food establishments to be proportionately higher in New York City than in rural North Dakota.

Table 2.10 shows high location quotients in the Manufacturing sector for computer, electronics, and aerospace products. In the Wholesale/retail sector, motor vehicle dealers, home furnishings, and sporting goods industries have high location quotients. In the Professional Services sector, as expected, the City of Madison has a relatively high concentration of employment in computer systems, but for other professional industries such as architectural/engineering, management/scientific/technical services, the location quotients are not far above one. This is a bit surprising given the highly educated workforce in the City, and may be an indication of opportunities to attract and grow these industries. In the Food and Personal Services sector, it is apparent that Madison is well served by drycleaning and laundry services (location quotient of 2.65), but given the high incomes of City residents, a location quotient of 1.18 for restaurants and other eating places seems to be lower than one might expect, a potential indication that the local restaurant market is underserved.

2. ECONOMIC OVERVIEW CONTINUED

Table 2.10 City of Madison Industries with High Concentration (Location Quotient) Ratios

NAICS	Description	2016 Jobs	2016 Location Quotient	Avg. Earnings Per Job
2362	Nonresidential Building Construction	247	1.42	\$85,221
	Manufacturing			
3222	Converted Paper Product Manufacturing	158	2.86	\$63,654
3231	Printing and Related Support Activities	111	1.15	\$47,920
3341	Computer and Peripheral Equipment Manufacturing	1,260	37.42	\$88,237
3344	Semiconductor and Other Electronic Component Manufacturing	128	1.69	\$82,001
3362	Motor Vehicle Body and Trailer Manufacturing	118	3.77	\$77,858
3364	Aerospace Product and Parts Manufacturing	594	5.94	\$109,609
	Wholesale, Retail, Transportation			
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	139	1.01	\$72,275
4412	Other Motor Vehicle Dealers	102	3.15	\$44,596
4413	Automotive Parts, Accessories, and Tire Stores	153	1.32	\$35,277
4422	Home Furnishings Stores	106	1.96	\$28,451
4441	Building Material and Supplies Dealers	373	1.59	\$35,941
4451	Grocery Stores	644	1.15	\$28,599
4511	Sporting Goods, Hobby, and Musical Instrument Stores	257	2.21	\$23,848
4521	Department Stores	299	1.11	\$23,690
4529	Other General Merchandise Stores	772	1.97	\$29,449
4533	Used Merchandise Stores	127	2.84	\$21,248
4841	General Freight Trucking	480	1.96	\$62,823
4881	Support Activities for Air Transportation	214	5.21	\$85,410
4921	Couriers and Express Delivery Services	281	2.31	\$42,657
	Finance, Professional			
5222	Nondepository Credit Intermediation	149	1.17	\$79,742
5413	Architectural, Engineering, and Related Services	325	1.05	\$96,770
5415	Computer Systems Design and Related Services	2,364	5.45	\$114,380
5416	Management, Scientific, and Technical Consulting Services	432	1.26	\$90,063
5419	Other Professional, Scientific, and Technical Services	187	1.10	\$34,684
5617	Services to Buildings and Dwellings	717	1.25	\$26,297
	Educational Services and Health			
6116	Other Schools and Instruction	259	2.20	\$27,979
6212	Offices of Dentists	257	1.30	\$61,420
6213	Offices of Other Health Practitioners	243	1.21	\$49,649
6219	Other Ambulatory Health Care Services	122	1.84	\$57,624
6231	Nursing Care Facilities (Skilled Nursing Facilities)	345	1.02	\$35,689
6232	Residential Intellectual and Developmental Disability, Mental Health Facilities	189	1.47	\$33,290
	Food and Personal Services			
7225	Restaurants and Other Eating Places	2,509	1.18	\$17,244
8121	Personal Care Services	403	1.57	\$22,427
8123	Drycleaning and Laundry Services	173	2.65	\$48,474
8131	Religious Organizations	541	1.53	\$17,962
8141	Private Households	238	1.30	\$11,207
	Local Government			
9036	Education and Hospitals (Local Government)	2,012	1.15	\$60,379
9039	Local Government, Excluding Education and Hospitals	1,566	1.36	\$62,570

Source: EMSI

2. ECONOMIC OVERVIEW CONTINUED

Conclusions from Economic Overview

- Madison is a rapidly growing city with a very favorable population age distribution, i.e. a high concentration of prime working age adults and a lower concentration of older adults. It is a wealthy community, with a median household income of \$95,493, more than twice that of the State.
- The civilian labor force in the city as of November 2017 stood at just under 25,000, with a very low unemployment rate of 2.8%. By most standards, this would be considered full employment, considering the usual “frictional” unemployment that comes from events such as changing jobs and new people entering the labor force. The City boasts thousands of highly educated and highly paid residents and workers (57.4% of the population has a college degree or higher). Among the most prevalent occupations in the City are Aerospace Engineers, Computer Hardware Engineers, Software Developers and many other similar titles. Average hourly earnings for many of these professions exceed \$50, or over \$100,000 on an annual basis.
- Major industry sectors with the highest levels of employment in the City include Retail Trade (13.8%); Professional, Scientific and Technical Services (13.7%); Manufacturing (11%); and Accommodation and Food Services (10.2%). An 11 percent share of employment for manufacturing for the City exceeds the share for the Huntsville MSA of 10.4%, and the share for the country as a whole of approximately 8%. In other words, the City’s manufacturing employment share is almost as high as the State’s share of 12.3%, and Alabama is one of the most manufacturing intensive states in the country. .
- Rapidly growing basic industries in the City (at the disaggregate 4-digit NAICS level) include Support Activities for Air Transportation and Aerospace Product and Parts Manufacturing. Many personal service industries such as Outpatient Care Centers and Laundry Services are also rapidly expanding to serve the growing and affluent city population.
- Overall, the City of Madison has an extremely healthy economy and highly educated workforce that should position it well for future growth and prosperity. The only question is what form that growth and prosperity will take.

3. AVAILABLE INDUSTRIAL BUILDINGS AND LAND

Table 3.1 shows industrial real estate and office space listed as available for sale or lease in the City of Madison (Xceligent database, November 2017, and TVA database). As of November, 2017, there was a total of 257,970 sq ft of available industrial space. However, there was only 95,075 sq ft in buildings with a maximum ceiling height of at least 20 feet, which could be considered a lower limit for many modern industrial uses. Furthermore, the data do not show how much of the available space in each building features the maximum height. While additional space and land may well be available for lease or sale “at the right price,” the listings provide an indication of the industrial and office market in the city. Furthermore, many industrial users rely on available listings to find space, rather than seeking out and negotiating with owners who may or may not be interested in selling or leasing.



3. AVAILABLE INDUSTRIAL BUILDINGS AND LAND

Table 3.1 Available Industrial Building Space, City of Madison

Property	Address	Building Size	Year Built	Height Maximum	Dock Doors	Drive-In Doors	Available Sq Ft	Maximum Lease Rate
Xceligent Database								
Jetplex Circle Business Park	113 Jetplex Cir.	44,570	1988	24.00	8	3	15,135	\$5.87
Jetplex Circle Business Park	115 Jetplex Cir.	29,700	1999	20.00	4	1	29,700	\$4.50
Jetplex Circle Business Park	117 Jetplex Cir.	41,256	1991	20.00	10	2	10,800	\$5.00
500 Lanier Rd. SW Bldg. 3	500 Lanier Rd.	43,584	1982		0	4	30,000	
500 Lanier Rd. SW Bldg. 2	500 Lanier Rd.	60,000	1982	9.00	5		60,000	
501 Lanier Rd. SW Bldg. 1	500 Lanier Rd.	40,284	1982		0	5	22,500	
Putnam Plaza	9580 Madison Blvd.	29,000	1987	14.00	0	15		
Putnam Plaza	9582 Madison Blvd.	42,184	1989		0	15	7,500	\$6.00
303 Production Ave.	303 Production Ave.	2,520	1999		0	1	2,520	
Jetplex Circle Business Park	485 Production Ave.	50,216	2003	25.00	16	1	9,900	\$5.15
Jetplex Circle Business Park	495 Production Ave.	40,800	2006	25.00	1		17,090	\$9.50
Jetplex Circle Business Park	1003 Production Ct.	36,300	2006	24.00	11	1	1,200	\$12.00
Jetplex Circle Business Park	1015 Production Ct.	22,835	2006	22.00	9	1		
102 Tribble Dr.	102 Tribble Dr.	12,000	1987		0	2	12,000	
104 Westchester Dr.	104 Westchester Dr.	6,875	2012	18.00	1	1	6,875	\$5.59
115 Celtic Cir.	116 Celtic Cir.	26,000	1974	16.00	0	2	21,500	\$5.50
TVA Database								
Jetplex Circle Business Park	129 Jetplex Cir.	40,000	1987	20.00			11,250	\$7.50
Totals							257,970	
							95,075 (>=20 ft. height)	

Source: City of Madison Planning Department from Xceligent Database; City of Madison IDB website portal to TVA Database

3. AVAILABLE INDUSTRIAL BUILDINGS AND LAND CONTINUED



Table 3.2 shows industrial land listed for sale in the City of Madison. The total is only 35 acres, and all except one parcel of 2.69 acres do not have utilities on site. Furthermore, about half of the total (approximately 16 acres) has a “mixed use” zoning classification, which can be a deterrent to some industrial users. Even though the Xceligent listing indicates no utilities to some sites in Table 3.2, all of them have utilities adjacent in the city Right of Way.

Table 3.2 Available Industrial Land, City of Madison

Property	Address	City	Lot Size (Acres)	Water	Gas	lectricit	Sewer	Zoning Class	Price (Ac)
Westchester Dr. Land	Madison Blvd & Westchester Dr.	Madison	6.94	No	No	No	No	Industrial	\$42,363.11
Madison Blvd. & Researc	Madison Blvd. & Research Blvd.	Madison	10.00	No	No	No	No	Commercial	
5 Acres 565 & County Lir	NE of County Line Rd NW & Madison	Huntsville	5.00	No	No	No	No	Mixed-Use	
County Line Road Land	SE of Palmer Rd. & County Line Rd.	Madison	10.46	No	No	No	No	Mixed-Use	\$305,927.34
2.69 Acres NE of Product	NE of Production Ave. & County Line	Madison	2.69	Yes	Yes	Yes	Yes	Industrial	\$653,400.00
Totals			35.09						

Table 3.3 shows that a total of 197,059 sq. ft. of office space was available for lease in the City of Madison as of November, 2017. However, all of this available space is listed as Class “B” or “C” and was constructed many years ago. Of course, manufacturing operations would require industrial, not office, space. Many manufacturers prefer contiguous flex space where the square footage devoted to physical production operations and office functions can be adjusted as needed. The available office space in Madison is not flex space, so it would be of limited appeal to manufacturers. Furthermore, while the older Class “B” and “C” office space may be suitable for small commercial operations (e.g. professional offices), it may not be suitable for larger companies who might be considering Madison as a location for office operations.

3. AVAILABLE INDUSTRIAL BUILDINGS AND LAND CONTINUED

Table 3.3 Available Office Space, City of Madison

Property	Address	Building Class	Building Size	Year Built	Stories	Available SF	Lease Rate Maximum
Xceligent Database							
Meadow Green Center Bldg. 1	9238 Madison Blvd.	B	53,885	1985	1	28,284	\$14.75
Meadow Green Center Bldg. 2	9238 Madison Blvd.	B	53,885	1985	1	25,787	\$14.00
Airport Office Center	9668 Madison Blvd.	B	57,815	1987	3	13,130	\$14.00
Midway Office Center Bldg A	9694 Madison Blvd.	B	10,206	1978	1	1,875	\$9.60
Madison Research Park	100 Research Blvd.	B	20,066	1968	1	20,066	\$10.80
Madison Research Park	102 Research Blvd.	B	22,029	1968	1	22,029	\$10.80
Madison Research Park	111 Research Blvd.	B	23,675	2003	1		
Madison Research Park	140 Research Blvd.	B	20,000	1968	2	9,563	\$10.80
Madison Research Park	145 Research Blvd.	C	25,000	1983	1	25,000	
Madison Research Park West	1038 Research Blvd.	B	35,000	2009	1	14,510	\$15.50
Madison Research Park West	1040 Research Blvd.	B	45,000	2011	1	10,500	
Madison Research Park	121 Research Blvd.	B	23,639	1983	1		
TVA Database							
Hughes Road Commercial Park	450 Lanier Road		26,315	2003	1	26,315	
Totals						197,059	

Source: Xceligent and TVA property databases

To summarize, the real estate listings show that there is a very limited amount of industrial land with the characteristics that most companies looking for a site expect (and most other communities provide) including: immediate availability at a set (or incentivized) price without negotiation with a third party owner; appropriate zoning; assurance that environmental or other issues will not delay construction (at least a Phase I environmental study); and “pad ready” sites with interior road access.



4. CURRENT ECONOMIC DEVELOPMENT STATUS

Section 2 above addressed the current demographic and economic situation in the City of Madison, and Section 3 addressed the availability of industrial sites and buildings. This section addresses the economic development environment, Previous Economic Development Planning Efforts, processes and programs in the City of Madison and Region, and summarizes the City's economic development strengths to build on and weaknesses to address.

Previous Economic Development Planning Efforts

Prior to 2008, the City of Madison focused almost exclusively on residential development and intentionally did not seek out or promote commercial or industrial development. The City engaged its first economic development consultant in 2009, and hired that consultant in 2010 as the Planning and Economic Development Director. That Director then spearheaded a very comprehensive growth planning effort with broad-based public input via surveys, focus groups and town-hall style meetings. The results of that planning effort are contained in the document Madison Growth Plan which is posted on the City's website under the Economic Development section.

The report is composed of three parts:

- Inventory and Assessment that reviews the socioeconomic, transportation and landuse/zoning situation in the City.
- Framework and Growth Plans that addresses future land use and connectivity and identifies six "Key Development Areas" (KDAs). The Plan outlines a "vision" for how development and land-use planning should proceed for each KDA.
- Action Plan & Implementation that contains a detailed matrix of the steps and responsibility to address the growth plans.

The Report includes an Appendix with detailed analyses of the residential market, retail market, office market and industrial market for the City. Various demand scenarios for each sector are considered, and options and implications are drawn for where this development could occur and how it should be planned for.

For the industrial sector, the Report states the following (page 4.51):

"While Madison is not currently a major industrial node, the City would be attractive to potential industrial uses that are looking to locate in the Greater Huntsville Area, because of the City's location along Interstate 565 and the availability of city services without significant planning and intervention by the City, industrial development will likely remain small and somewhat haphazard. Madison has the opportunity, however, to develop a major industrial presence by setting aside land for large-scale industrial parks that have strict development controls and the necessary infrastructure."

The Report then assumes 5-year low-demand (passive industrial recruitment) and high-demand (active industrial recruiting) scenarios for local-serving industries and regional industries and offers recommended development characteristics.

While this sector and market analysis is very comprehensive, the Project Team would like to draw a distinction between growth plans and economic development plans. The growth and development plans, vision, and action steps/implementation presented in the Madison Growth Plan assume certain economic development parameters and forecasts and draw from those land-use implications and planning needs.

4. CURRENT ECONOMIC DEVELOPMENT STATUS CONTINUED

The scope of the Madison Growth Plan did not include the extent to which the City wants to become more proactive in economic development or “industrial” recruiting. As discussed elsewhere in this report, the economic base of a community is composed of industries that export locally produced goods or services outside of the community, thus bringing in outside income and new money. In most communities, a comprehensive economic development plan addresses issues such as

- What mix of economic activity across different sectors is desired (industrial, commercial, retail, residential)?
- What kinds of industries does the community desire?
- What industries should we target for future growth based on community preferences, comparative advantage, and industry characteristics (e.g. wage rates, environmental considerations, etc.)?
- What other economic goals do we have (e.g. increasing per capita income, reducing income disparity, etc.)?

These questions must be answered before a true economic development “vision” can be established. After the vision comes the plan to attain it in the form of an economic development marketing plan that includes:

- Specific economic development goals and objectives (e.g. create XX number of new jobs in the next year);
- Action steps to address each objective including who or what organization is responsible, milestones, and metrics;
- Detailed budget and staffing plans to provide adequate resources to meet objectives
- Periodic reviews and adjustments to plan and vision as necessary.
- The Plan document notes that such a comprehensive economic development planning effort is yet to be undertaken by the City (pages 4.52-3):

“Current industrial development in Madison north of I-565 is fairly haphazard when compared to the larger industrial developments in other parts of metro Huntsville. There are few sites that can compete with the bigger industrial parks along I-565 within the City of Huntsville for the larger regional industries.....whether this scale of industrial development is desirable for the community is a public policy decision.”

Recent Economic Development Events in the Madison Area

According to the Alabama Jobs Report (January 2018), Madison County was the State’s second largest producer of new and expanding industry announcements in 2016 with 34 projects, 1,548 jobs and a total of \$228,221,000 in new investment. (Alabama Dept. Of Commerce, Annual Jobs report, 2018). The largest job creators in the County included Boeing with 470; Sierra Nevada, 200; Yulista, 200 and Jacobs Technology 193. This strong job and investment growth in 2016 was followed by a spectacular industrial announcement in January 2018. A joint Toyota-Mazda project team announced its decision to construct a \$1.6 billion, 3-million square foot facility on a 2,500-acre TVA Mega-site. The site is .38 of a mile from the City’s border on the West side and when completed in 2021, it is expected to employ 4,000. With suppliers and additional jobs generated by the multiplier effect, upwards of 10,000 or more new jobs could be created by the facility. Future developments at Redstone Arsenal and the Huntsville Madison County Airport are expected to

4. CURRENT ECONOMIC DEVELOPMENT STATUS CONTINUED

create many more thousands of federally funded jobs. The City of Madison is, thus, in a favorable position of being literally surrounded by expanding employers, its economic future seemingly bright.

Addressing Economic Development Now and in the Future

Rapid growth can pose serious challenges to infrastructure, schools, retail and residential development, and city services. The City is now faced with choices on how to plan for future growth, how to best use its resources, how it wants to develop and most importantly, what kind of city it wants to be. Does the City want more industrial development so that fewer residents have to commute to surrounding areas? What kind of industry does the City want? Many different opinions on these questions were expressed in the formal interviews and casual conversations conducted by the Project Team. Based on the confidential interviews and the observations and experience of the Project Team, the City also does not have enough staff resources devoted to economic development.

The City of Madison has an established Industrial Development Board with volunteer members that assist staff in all economic development functions. This adds significantly to the economic development “capacity” of the City.

The Economic Development Process and Madison’s Participation

The economic development process involves working with many allies at the state, regional and local levels. Most significant industrial projects are presently handled by a combination of The State of Alabama, The Huntsville-Madison County Chamber of Commerce and the North Alabama Industrial Development Association (NAIDA). For the most part, the City of Madison has not been working directly with the state and regional economic development teams on recruiting industrial businesses. With its limited staff resources, Madison does participate and cooperate with these partners, and did so with the Mazda-Toyota project, but the other agencies take a lead role. Most cities the size of Madison and even much smaller normally have a designated full- or part-time economic development director. In Madison, the Planning Director has served as the Economic Development Director, and in 2016 the City did have an economic development consultant for a one year contract. If the City of Madison wants more control over its economic development future, it should play a larger role in the recruitment and assimilation of new businesses into the community, and work more proactively with state and regional economic development officials.

Economic Development and the Role of the Madison City School System

The City’s school system is one of the best in the Huntsville metro area and the 13-county Tennessee Valley Region, according to the latest Alabama school rankings school released February 1, 2018. The City of Madison was the third highest ranked school system in Alabama (Graded 95) and the only system in Alabama where every school ranked an “A”. The school system is central to Madison’s identity or “brand” and undoubtedly the reason many chose to reside there. In many communities, good public schools and desired access to them can exert upward pressure on housing and land prices, and this seems to be the case in Madison. The City of Madison has an established Industrial Development Board with volunteer members that assist staff in all economic development functions. This adds significantly to the economic development “capacity” of the City.

Since most business location decisions are made on a regional basis (regional labor force, transportation, amenities, etc.), Madison’s schools are an asset to the broader Huntsville region as well. Interviewees stated that Madison’s schools and high quality of life are often used by the Huntsville Madison County Chamber of Commerce, NAIDA and State of Alabama as a recruiting tool to attract business to the MSA. This indirect

4. CURRENT ECONOMIC DEVELOPMENT STATUS CONTINUED

but very significant impact on economic development should be kept in mind as the City of Madison plans its economic future and the future of its school system. The City has many other economic development assets, but also, like any community, some economic development weaknesses as well as discussed below.

Economic Development Strengths and Weaknesses

Every community has certain economic development strengths and weaknesses although they are not always obvious to residents or leadership. How one sees themselves is rarely the same as how an outside observer may assess them. Therefore, it's very helpful to know an area's strengths and weaknesses, especially when marketing a community to an industry or business. Which strengths to promote and how to answer questions about weaknesses are essential elements in the recruiting process. Furthermore, one must identify weaknesses to address them.

The listing of strengths and weaknesses below are derived from three sources: data analysis, confidential interviews conducted with local leadership and business owners and managers, and the combined 60+ years of business location and economic development experience of the report authors. Strengths are characteristics that a current or potential business would likely view as positive, whereas weaknesses are factors that business would likely assess as undesirable or would likely be disadvantageous to attract new and retain existing business operations.

Economic Development Strengths:

- Geographic location in a thriving Huntsville MSA, a leading aerospace research and production center with world-class technology companies. Madison is adjacent to Cummings Research Park, Huntsville International Airport, Redstone Arsenal, and the future Mazda-Toyota facility.
- Strong, balanced economy covering a wide range of goods- and service-producing industries. Highly educated workforce, especially in engineering and technology skills
- High household income levels (ranked seventh in Alabama) to support local service and retail industries.
- Good environment for new business start-ups including highly educated workers and a high quality of life. The Huntsville MSA is recognized nationally as leading entrepreneurial region.
- Excellent K-12 school system, among the best in the state and tops in the Tennessee Valley encouraging residents and businesses to locate and stay in Madison.
- Proximity to post-secondary education institutions both four-year (University of Alabama, Huntsville) and two-year (JF Drake State Technical College and John C. Calhoun State Community College).
- High quality of life with a “small town” atmosphere and safe family location. Reasonable cost of living for a smaller MSA (combined cost of living index number of 91.4, i.e. almost 9 percent below the national average, according to Sperling's Best Places).
- Excellent healthcare available locally. First-class hospitals and medical facilities are available in the region.
- Pro-economic development leadership and an active Industrial Development Board
- The commercial/industrial development community in the Huntsville MSA is strong, active and understands the potential of the Madison Community and is willing to invest.

4. CURRENT ECONOMIC DEVELOPMENT STATUS CONTINUED

Economic Development Weaknesses:

- No publicly owned or controlled industrial land or buildings immediately available at an appropriate price for a particular project. This can hamper industrial recruitment efforts particularly for large projects when competing with other communities that own properties and may have more flexibility.
- Very limited inventory of available industrial sites and buildings. Available buildings are older and most do not meet modern industrial standards. Virtually no Class A office space readily available on the market.
- Outdated industrial and business parks that need landscaping, street lighting, and road upgrades.
- Significant transportation congestion for east/west and north/south primary arteries. During prime morning and evening working commutes. A growing number of businesses have begun to stagger work hours to adjust.
- Limited staff resources devoted to economic development. Currently the City planning staff handles most of the industrial and retail responsibilities with not enough time to perform core economic development responsibilities such as industrial recruitment, business retention and expansion, and liaison activities between the City and its businesses.
- Some delays in code inspections and permitting. This issue was evident in several interviews with business owners.
- No pure economic development as opposed to growth city-wide vision and plan as discussed in section 4.
- Upscale retail is lacking and very much needed in Downtown and throughout the City. Downtown lacks vibrancy and a sense of place. It is undeveloped based on the size of the city and income of the residents. Good retail and restaurants can increase the “curb appeal” of a community to individuals making residential and business location decisions.
- Lack of certainty for long-term school funding needs.

These strengths and weaknesses will help influence the economic development future of the City. Good economic development strategy involves building on the strengths, and working to minimize and improve upon the weaknesses. As the City moves forward with many economic development opportunities, it is important to keep these strengths and weaknesses in mind and to act on them accordingly.

5. REGIONAL CLUSTERS AND INDUSTRIES FOR FUTURE GROWTH

The data and analysis in Section 2 (Economic Overview) demonstrated that the City of Madison has a strong underlying economy generally well diversified across manufacturing, service and retail industries. The City's labor force is remarkably skilled, and the unemployment rate is very low. The Huntsville metro area's continuing economic development strength in aerospace and a host of technology-intensive industries combined with the recent announcement of the Mazda-Toyota assembly plant and the FBI and ATF expansion at Redstone Arsenal certainly bodes well for the economic development future of Madison.

Future regional economic growth will generate jobs in many industries at many different skill and income levels. As mentioned elsewhere in this report, the economic development question for Madison is what types of new industries and jobs will develop in the City, and will they be what the City prefers? Rather than just let growth "happen," many cities, regions and states across the country seek to control their economic destiny by attracting and growing "target" industries and jobs that they prefer.

Target industries can be selected using a variety of criteria depending on the desired outcome. Common criteria include:

- Locational fit (labor force, geographic location, transportation, education, etc.);
- Industry growth (industries that are currently expanding and are likely to in the future);
- Skill levels and pay scales for industry workers;
- Diversifying the economy;
- Community preferences.

Target industry analysis is both a quantitative and qualitative exercise. Quantitative measures such as industry growth rates and measures of competitive advantage can be the foundation, but qualitative criteria (e.g. what a community aspires to or how well certain subjective community aspects match up with industries) is also very important.

Two measures of local comparative advantage are often used in target industry analysis:

- **Industry Concentration.** If employment in Industry Y in Region X accounts for a higher share (percent) of total employment in Region X than it does in a comparison area (usually the US as a whole), this can be an indication that Region X has a competitive locational advantage in this industry.
- **Shift-Share Analysis.** This measure starts with the premise that growth of industries in a local area is heavily influenced by the health of the overall economy (measured by change in Gross Domestic Product or related indicator) and the growth trend of each industry at the national level. Shift-share analysis adjusts growth in industries at the local level by these two national factors. If local growth in industry X is higher than that expected given overall national economic and industry growth, then the "competitiveness factor" is positive, meaning that the local area could have some comparative advantage in that industry. If the competitiveness factor is negative, it could be an indication that the local area has a competitive disadvantage for industry X.

5. REGIONAL CLUSTERS AND INDUSTRIES FOR FUTURE GROWTH CONTINUED

Both of these measures were defined and used in Section 2 of this report, which dealt specifically with the economy of the City of Madison. The City is part of the larger metro Huntsville economy, and in most cases, businesses (certainly in export or basic industries) look at the broad regional economic geography including labor force, transportation, infrastructure, etc. Therefore, a target industry analysis for the City of Madison should begin at the regional level, and one of the best ways to assess the regional economy and help identify target industries is with industry cluster analysis.

Industry Clusters

Industry “clusters” are groups of industries that are linked in some synergistic way so that the whole is greater than the sum of the parts. The linkages could be buyer-seller relationships, similar workforce skills or other factors of production, knowledge and human capital concentrations, and many other things. Many clusters are defined by similarity of product, which usually implies similar labor and input needs, but many clusters include industries that produce different products or services. Many forward-thinking communities and regions look at target industries from the cluster standpoint, reasoning that strengthening local industries in a cluster will help other industries in that cluster also.

Traded vs. Local Clusters

As discussed previously in this report, economic growth and development is based on bringing new revenues and incomes into a community, which is done primarily by selling products and services to buyers outside of the area – in the next county, state or country. In all but the largest regions, most products from manufacturing firms are exported out of the local area. By definition, tourism also brings in outside revenue when visitors eat, sleep and shop in a community. Service industries, however, usually are a mix of products – some that are consumed locally and some that are exported to out-of-area consumers. While service and retail businesses such as hair salons or locally-oriented restaurants provide a great service, they mainly serve a local clientele and therefore recirculate money that is already in the local economy (however, they often help stem leakage of local money going out of the area, which can be equivalent to bringing in money). Industries that are more export-based should normally be chosen as targets for economic development purposes as the non-basic local industries will usually follow. However, many communities also work to enhance their quality of life and stem leakage by encouraging more retail and local service firms in their area.

Industry clusters that primarily sell (export) their products or services outside of the region and bring in new outside revenue and income are called **traded clusters** while clusters that primarily sell their products or services to consumers in the region are called **local clusters**.

Identification or “mapping” of area clusters is a very involved process of data gathering and analysis, but a tool is now available that can be used to more easily assess clusters at the local, regional and national levels. The U.S. Cluster Mapping Project is the result of a partnership between Michael Porter of the Harvard Business School and the US Economic Development Administration (www.clustermapping.us) to identify industry interrelationships and map important national clusters. This cluster architecture can then be applied to local and regional economies.

5. REGIONAL CLUSTERS AND INDUSTRIES FOR FUTURE GROWTH CONTINUED

Selected Clusters for Future Growth

As stated elsewhere in this report, the current economic development environment in which Madison sits is very favorable – a good labor force, good quality of life, part of a rapidly growing metro area, etc. The strong aerospace and related industries in Huntsville area and the future Toyota-Mazda assembly plant will in all likelihood lead to businesses in these two industries locating and growing in the City of Madison. However, as discussed in Section 6 of this report and elsewhere, the City will be in competition with other jurisdictions in the metro area and beyond to attract companies and suppliers in these industries.

However, as the sector and industry economic analysis of the City of Madison in Section 2 and the cluster economic analysis for the metro area in this section show, there are many other strong goods- and service-producing industries that are growing in the region that could also be an important part of the City's (and Region's) economic future.

The Project Team screened all clusters that appear to be good prospects or “targets” for creating good jobs in the City and metro area for the future. These clusters were chosen based on a number of criteria including:

- Existing presence and size;
- Strong cluster rating and national rank;
- Net growth in total employment over 15 years;
- Growth in employment over 15 years due to “competitive effect” (defined in Section 2);
- Project Team experience and professional judgment.

There are two ways to use this cluster industry information for economic development:

1. Prioritize the key industries within each cluster for recruiting, retention and expansion, and entrepreneurial/start-up support – the “ride your core strength” strategy.
2. Identify “underrepresented” industries that are present in a national cluster, but not in the local version of that cluster – the “build and strengthen clusters” strategy.

Few local clusters would mirror the national “ideal” and contain all industries classified in that cluster. One way to build and strengthen a local cluster is to identify these missing industries that could then be targeted for recruitment and start-up programs. The logic of this approach is two-fold:

1. Clusters are geographic and industry based. Very often there are advantages from industries within a cluster locating in proximity to each other (e.g. buyer-seller relationships, common workforce skills, etc.). Therefore, cluster industries that are missing or underrepresented in the Region might be more prone to economic development marketing efforts.

5. REGIONAL CLUSTERS AND INDUSTRIES FOR FUTURE GROWTH CONTINUED

2. Building up partial clusters in the Region into more complete ones would likely enhance the synergy of the entire cluster and the competitive advantage of the local industries in them.

Table 5.1 lists target clusters and industries that appear to have strong potential to fuel future growth in the Metro Area and the City of Madison in the future. For the individual 6-digit NAICS industries within each cluster the following data are provided:

- Employment in 2-county metro area;
- Location quotient (measure of relative industry concentration in the area);
- Average annual industry earnings (national);

Each industry is classified as either a “core” industry or a “build” industry for that cluster. A core industry is well-established in the metro area and accounts for a substantial share of employment for that cluster (the “ride your core strength” strategy). A build industry is an industry that is included in the national cluster definition, but is not significantly represented in the Huntsville metro area (the “build and strengthen your clusters strategy”).

5. REGIONAL CLUSTERS AND INDUSTRIES FOR FUTURE GROWTH CONTINUED

Table 5.1 Key Industry Clusters for Future Growth

NAICS	Cluster/Industry Name	Madison-Limestone, AL		Nation	
		2016 Jobs	2016 Location Quotient	Avg. Earnings Per Job	Core/Build
Aerospace Vehicles and Defense					
336411	Aircraft Manufacturing	1,394	4.10	\$130,979	core
336414	Guided Missile and Space Vehicle Manufacturing	2,630	31.71	\$161,780	core
336415	Guided Missile and Space Vehicle Propulsion Unit and Parts Manufacturing	798	55.36	\$118,012	core
336412	Aircraft Engine and Engine Parts Manufacturing	11	0.10	\$113,331	build
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	92	0.58	\$89,373	build
Automotive					
336111	Automobile Manufacturing	345	1.95	\$103,805	core
336211	Motor Vehicle Body Manufacturing	126	1.48	\$64,650	core
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	1,504	15.62	\$80,456	core
336370	Motor Vehicle Metal Stamping	439	3.45	\$73,233	core
336390	Other Motor Vehicle Parts Manufacturing	315	1.37	\$65,760	core
336999	All Other Transportation Equipment Manufacturing	357	15.91	\$64,482	core
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	77	0.85	\$66,611	build
336330	Motor Vehicle Steering and Suspension Components Manufacturing	<10	0.09	\$67,086	build
336340	Motor Vehicle Brake System Manufacturing	0	0.00	\$71,795	build
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	0	0.00	\$83,809	build
336360	Motor Vehicle Seating and Interior Trim Manufacturing	0	0.00	\$63,290	build
Biopharmaceuticals					
325412	Pharmaceutical Preparation Manufacturing	1,086	3.62	\$152,564	core
325411	Medicinal and Botanical Manufacturing	0	0.00	\$138,385	build
325413	In-Vitro Diagnostic Substance Manufacturing	<10	0.01	\$127,039	build
325414	Biological Product (except Diagnostic) Manufacturing	<10	0.01	\$132,581	build
Medical Devices					
339112	Surgical and Medical Instrument Manufacturing	160	0.89	\$111,082	core
333314	Optical Instrument and Lens Manufacturing	<10	0.15	\$104,926	build
339113	Surgical Appliance and Supplies Manufacturing	33	0.22	\$102,327	build
339114	Dental Equipment and Supplies Manufacturing	0	0.00	\$83,585	build
339115	Ophthalmic Goods Manufacturing	<10	0.01	\$80,618	build
Telecommunications					
334210	Telephone Apparatus Manufacturing	1,432	52.75	\$144,066	core
334220	Radio and TV Broadcasting and Wireless Communications Eq Manufacturing	150	2.04	\$128,420	build
334290	Other Communications Equipment Manufacturing	10	0.38	\$97,759	build

Source: US Cluster Mapping Project, EMSI, Janus Institute

5. REGIONAL CLUSTERS AND INDUSTRIES FOR FUTURE GROWTH CONTINUED

The aerospace and automotive clusters are obviously prime targets for future growth given their current strength in the area (and the Mazda-Toyota announcement). Even in these clusters, however, there are individual industries that do not have a significant local presence that may be good targets for future growth because of the cluster advantage. Suppliers for the Mazda-Toyota plant are of course included in the automotive cluster “build” industries.

To diversify and grow the local economy, there are opportunities to build stronger clusters in Biopharmaceuticals, Medical Devices and Telecommunications around core industries already in the metro area.

Table 5.2 lists industries that have a presence in Madison-Limestone County, have large location quotients (indicator of concentration and strength) and also good earnings per job. These industries are technology-oriented and/or advanced manufacturing in nature, and should also make good target industries for the City of Madison and the metro area as well.

Table 5.2 Additional Target Industries

Limestone-Madison County				
NAICS	Description	2016 Jobs	2016 Location Quotient	Avg. Earnings Per Job
332912	Fluid Power Valve and Hose Fitting Manufacturing	362	6.88	\$81,771
334111	Electronic Computer Manufacturing	1,260	8.09	\$88,237
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing	462	7.62	\$52,198
334412	Bare Printed Circuit Board Manufacturing	516	11.85	\$85,537
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing	314	3.81	\$76,210
334419	Other Electronic Component Manufacturing	338	3.65	\$62,368
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	163	2.93	\$151,269
334614	Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing	735	41.64	\$54,815
335931	Current-Carrying Wiring Device Manufacturing	123	2.49	\$81,928
541512	Computer Systems Design Services	6,268	4.26	\$114,645
541715	Research and Development in the Physical, Engineering, and Life Sciences	4,509	6.63	\$118,821

Source: EMSI, Janus Institute

The target industry approach can be a powerful tool to help plan and build stronger economic futures for states, regions and communities. Target industry analysis can be used to help identify industries that a community would like to attract in the future. The community can then work to make itself more attractive to these industries through specific workforce development initiatives, infrastructure investment, planning/zoning or other budget and policy initiatives. Identifying target industries also helps make economic development marketing efforts more successful and efficient. Industries in which a community has a comparative advantage and an existing base may be more receptive to marketing initiatives.

This section identified industries that appear to be good targets for future economic growth and diversification in two ways: 1) building and strengthening area industry clusters; and 2) identifying additional individual industries for which the metro area shows competitive strength. Further research on and prioritization of these target industries would be part of the formulation of an economic development program and plan discussed in Section 6 below. Definitions of all the 6-digit NAICS target industries from Tables 5.1 and 5.2 are given in the Appendix.

6. CONCLUSIONS AND RECOMMENDATIONS

As discussed throughout this report, the City of Madison is in a very fortunate position of having a strong economy with low unemployment, a highly skilled workforce, and an excellent quality of life. It is located in a rapidly growing metro area with thousands of high-paying jobs in aerospace, automotive, government and other sectors. When the Mazda-Toyota assembly plant comes online on the City's western border in about three years, Madison will be surrounded by job generators that include the Redstone Arsenal and the Huntsville Madison County Airport to the south, Cummings Research Park to the east, and commercial and retail to the north.

Accordingly, the city is in a position to influence the type and mix of businesses and residents it wishes to attract to build its economic future. The City can allow the development process to evolve spontaneously with minimum city influence or, like many cities, it can help shape its own destiny by creating and implementing a development strategy.

With the new Mazda-Toyota assembly plant, the employment increases at the Redstone Arsenal and the continued growth of many companies in an around Madison, there is going to be increasing demand for land, industrial/commercial/retail buildings and housing. Brokers interviewed by the Project Team indicated that inquiries into available land in Madison are increasing after the Mazda-Toyota announcement.

Therefore, time is of the essence if the City wants to implement a proactive economic development strategy. Four key steps involved in this process are discussed below.

1. Develop a Purpose and Vision for Economic Development

The first step in any economic development strategy should be to develop a vision or plan for a community based on extensive input from a broad spectrum of community stakeholders – residents, business leaders, elected officials, etc. For Madison, there are many questions that could be addressed through public input such as:

- What kind of “industrial” development would be best for the City? Should we recruit auto suppliers, aerospace and other technology-intensive jobs? How much should we diversify across industries? Should there be a mix of white- and blue-collar jobs in the City?
- How proactive should the City be in economic development? Should we increase resources developed to recruit preferred or “target” industries? By how much? Should the City increase its presence in other economic development efforts such as business retention and expansion? Should the City play a more proactive role in encouraging new business start-ups given its good environment for this?
- While the City does have a comprehensive Growth Plan, the document does not address “core” economic development questions such as those directly above. As discussed in Section 4, a “pure” economic development vision would actually serve as a prerequisite to the existing Madison Growth Plan by addressing fundamental questions concerning the nature and type of future job and income growth.

2. Create an Economic Development Strategy and Program

To better assist Madison to influence its economic development future to realize its economic development vision, the City will need to create an economic development plan with goals, objectives, action steps and milestones. The plan will need to specify staff and budget resources necessary to meet the goals and objectives. The core functions of an economic development program for Madison (or most any city) are

6. CONCLUSIONS AND RECOMMENDATIONS CONTINUED

described below.

Target and Recruit New Industry

As discussed above, in the coming years there will continue to be companies considering locating in Madison because of the strong growth in the metro area including significant expansions of existing companies and new investments, most notably the Mazda-Toyota plant. For a number of reasons, the City may prefer certain types of industries and companies over others due to environmental concerns, labor skills and wage rates, compatibility with the resident labor force, or other factors. Section 5 of this report identified some industries that could be a good locational fit for Madison and factors that could have a more desirable economic impact on the City and metro area through strengthening existing clusters.

The new Mazda-Toyota assembly plant will present opportunities to attract prime suppliers, but there will be many communities competing for them. The State of Alabama has estimated that there will be up to 40 first, second and third tier suppliers that locate to support the Mazda-Toyota assembly facility. Generally, the first-tier suppliers locate within 60-miles of the assembly facility for transportation and scheduling advantages. These suppliers deliver the components ready for immediate assembly directly to the plant. These businesses generally offer higher wages and more job security and are, therefore, the most desirable. They will be the most sought-after suppliers throughout the Tennessee Valley and beyond. The City of Madison offers a prime location for one or more of these operations. However, to increase the likelihood of locating one of these suppliers the City will need to offer a desirable site and actively recruit the prospect, working with the appropriate state and regional economic development officials.

The City should immediately get involved with the Mazda-Toyota project. It should become a member of The State of Alabama-led Mazda-Toyota implementation team that coordinates the incentives and deals with issues throughout the site preparation, construction and operating phase of the Toyota Project. This will alert city leadership concerning progress, problems and potential opportunities generated by the project.

The Huntsville-Madison County Chamber has a very strong economic development program, and recruits industry for the entire metro area. It is most always best for cities within a metro area to work closely with the metro recruiting entity and be a team player for the good of the region, and there are strong economies of scale in regional marketing. Individual cities will then attract investment if they are the best location in the metro area for particular project. However, cities can also undertake additional marketing activities related to specific industries or economic activities they want to emphasize strongly.

6. CONCLUSIONS AND RECOMMENDATIONS CONTINUED

Recruiting Auto Assembly Plant Suppliers

- Toyota and Mazda recently announced their intention to locate an auto assembly plant on the mega-site located on the western boundary of the City of Madison. This “game changing” declaration certainly alters the current economic outlook in and surrounding Madison. To help the City of Madison with the repercussions and take full economic advantage of this event, the Project Team researched and interviewed economic development leaders in three communities that recently went through a similar experience. What were the problems, solutions and lessons learned from the new auto assembly plant and recruiting suppliers. The Project Team interviewed economic development managers in Montgomery and Talladega, AL and LaGrange, GA. The automobile assemblers were Hyundai, Honda and Kia, respectively.

Some lessons learned:

- Establish a relationship with the auto company’s management ASAP. They influence where many of their key suppliers locate.
- Designate someone in the community to be responsible for working with management’s families. They need assistance buying homes, securing drivers licenses, registering children for schools, etc. Whereas most of the company executives speak English, a bi-lingual person may be very helpful, especially when working with family members.
- Do not ask for community contributions from the plant for 2-years. They will give generously after the plant is constructed.
- Many tier 1 suppliers prefer to be within 10-miles of the assembly facility. This puts Madison in a prime location to attract suppliers if they can compete for the project. The general rule with tier 1 suppliers “the closer to the assembly plant the better”.
- Hire a professional experienced in economic development or industry executive to establish a relationship with the company management, represent the community and solve problems.
- During the building phase participate with the state and have regular meetings to reveal progress and eliminate problems. These meetings help state and local agencies co-ordinate their efforts.

Recruiting the right kind of industry for Madison will require developing a marketing program with professional print and electronic marketing materials that convey the advantages of locating in Madison. In addition, companies and site consultants normally request substantial amounts of information about potential locations, often in voluminous Requests for Proposals (RFPs), and a community has to be prepared to respond very quickly with up-to-date information.

Many larger economic development projects come through state or large regional organizations such as the Alabama Department of Economic and Community Affairs, The Economic Development Partnership of Alabama, or utilities that are involved in economic development. Close relationships with these lead-generators are important, and these organizations must know exactly who to contact and work with in a community. A city economic developer’s job is to cultivate these contacts and ensure that these lead-

6. CONCLUSIONS AND RECOMMENDATIONS CONTINUED

generators know the types of industries that are preferred by the community.

Business Retention and Expansion

As surveys and research have shown, in most communities most new jobs are created by existing companies expanding and new companies starting up, not by new companies moving in. Keeping in touch regularly with local businesses to understand and help rectify any issues they may have that could cause them to leave the City or to expand elsewhere can save and/or create hundreds of jobs. There are many issues that companies may have where a local economic development official could assist, for example:

- Need for additional (or less) space
- Permitting or regulatory issue
- Identifying local suppliers or customers (business to business)
- Labor supply and workforce development
- Identifying business assistance resources such as financing, export assistance, etc.

Business retention and expansion personnel in many communities often sponsor business appreciation dinners, and host regular meetings where companies can get together and discuss common issues. The Industrial Development Board of the City of Madison sponsors occasional existing business events. Most businesses are very appreciative of business retention and expansion efforts from their communities.

New Business Start-Up

New business start-up can be a huge job generator for many communities. Some of the nation's leading technology centers such as Silicon Valley, the Boston area, Research Triangle Park, and others are obvious testaments to this effect. Research by David Birch at MIT and others has shown that new business start-ups often thrive in an area that has a concentration of well-educated technology workers and a high quality of life. These technology workers may be employed by larger companies and decide to strike out on their own but remain in the local area because of the high quality of life. The Huntsville metro area including Madison fits this description well, and the Project Team interviewed at least one successful company in Madison that started in just this way. In addition to creating jobs, incomes and tax revenues in the city, companies that start-up and grow in Madison may also help reduce out-commuting and therefore traffic congestion.

There are small business assistance resources available in the metro area, including the Small Business Development Center (SBDC) at the University of Alabama at Huntsville, and Madison would certainly want to avoid duplicating existing programs and resources. However, helping aspiring entrepreneurs in Madison access and benefit from these resources would be an excellent economic development service.

Retail Recruitment

Numerous interviewees commented on the need for more “upscale” retail in Madison. Retail businesses can be recruited just like goods- or service-producing businesses can be recruited, and many communities make retail recruiting a part of their economic development program. Retail development contributes to local sales and property tax revenues and often prevents “leakage” of retail dollars out of a community.

Many communities include retail recruitment in their overall economic development plans for two reasons:

6. CONCLUSIONS AND RECOMMENDATIONS CONTINUED

1. Retail outlets that keep residents from spending their disposable income at locations outside of the city prevent “leakage” of money out of the city. In most cases, this has the same effect as bringing new money into the local economy through the “export” of goods or services. Through the income multiplier effect, this money that would otherwise leave the economy supports additional spending and local incomes. This certainly qualifies as “economic development.”
2. Attractive retail and restaurants can contribute to the quality of life in a community, often making it a better place to live and operate a business in the minds of key decision makers.

Economic Development Advocate and Liaison

Recruiting new businesses, retaining and expanding existing businesses and helping with new business start-ups are the three main legs of the economic development program in most communities. However, there are always issues and decisions facing any city that have economic development ramifications – infrastructure development, zoning and land use, permitting and regulation and a host of others. An economic development director can provide valuable input into how these many decisions may affect economic development in a city. In addition, an economic development director should always be working with city officials, business leaders, and all relevant stakeholders to keep on track with the economic development plan.

3. Make Madison Development Ready

Just as important as the economic development program and process discussed above is the community development program – making and keeping the community development ready for the types of economic activity desired. The community development recommendations offered below are provided in the context of the City’s economic environment of companies and jobs in aerospace and other technology-driven industries, and the automotive sector, which will increase significantly with the new assembly plant.

Industrial Sites and Buildings

As discussed in Section 3, the City of Madison has very little inventory of available sites and buildings and office space that meets current standards on the market. Much of the industrial space is older with lower ceilings, the available parcels are small and isolated and the office space is older, with no Class “A” office space on the market. Furthermore, the existing industrial parks are frequently lacking in landscaping, signage, curbs and other amenities that can make a positive impression on prospect companies.

This is a significant economic development impediment for the City of Madison for several reasons:

- In most location decisions, speed is important. Companies want to be up and running in new facilities as quickly as possible to minimize the opportunity cost of lost production. Therefore, existing buildings or “pad-ready” sites that can minimize start-up time is usually preferred. Communities that do not have these are often eliminated from consideration early in the site selection process.
- Companies themselves, or through their consultants or brokers, generally do not want to negotiate to buy land from original owners who may or may not be motivated to sell. Assembling a site from multiple land owners is definitely not preferred.

6. CONCLUSIONS AND RECOMMENDATIONS CONTINUED

- Companies are generally risk-averse in their location and real estate decisions. If suitable sites and buildings are not available and further development is needed, this introduces added risk that the property may not be ready in time, thus delaying production start-up.
- Many communities provide publicly owned industrial land and buildings to selected prospects at below-market prices as an incentive to attract them. This common practice is often necessary to compete with other communities doing the same thing. Furthermore, land and building subsidies can easily be offset by the economic benefits the company brings to the community, including increased tax revenues.

While there are numerous privately-owned land parcels in Madison that could be developed into attractive industrial sites or parks, the City has not made it a practice to acquire land for this purpose. In some larger industrial markets (primarily metro areas) often private companies assume the role of acquiring land and developing pad-ready sites or available modern industrial buildings because of a steady demand for such product. However, in many areas this private industrial real estate development is not very viable because of competition from other communities that may be offering a lower selling price through subsidies. Furthermore, industrial demand often has to compete with other land uses such as residential, commercial or retail which may offer developers a higher return. However, from the community's standpoint, the "return" may be higher from industrial development that generates jobs and tax revenues as opposed to, say, residential development that usually does not generate as much tax revenue, creates only temporary construction jobs and usually requires more services (e.g. education).

Some communities are hesitant to acquire and develop land and buildings for industrial use because they fear there will be no buyers. Often such communities say "wait until we have a company that wants to move or expand here, then we'll build something." The problem with this approach is that in most cases, these communities will be passed over because they do not have suitable and available sites and buildings. In the vast majority of cases in communities that are otherwise "development ready" (i.e. have not a "fatal flaw" such as water/sewer capacity issues or a thoroughly remote location) a speculative building of the right size in the right location will attract a tenant if it is properly marketed.

The Project Team strongly suggests that the City of Madison begin immediately to examine options for developing an industrial site or park that would be attractive to companies looking to locate or expand in the Huntsville metro area and to auto suppliers once the Mazda-Toyota plant is complete. The site should:

- Have all utilities on site;
- Have good transportation access and visibility;
- Have good "curb appeal" with good signage, roads, landscaping, etc;
- Not be close to incompatible land uses such as schools or heavy residential areas;
- Be free of environmental, permitting and regulatory issues.
- Both the Tennessee Valley Authority (TVA) and the Economic Development Partnership of Alabama (EDPA) sponsor separate Site Certification programs, known as, a TVA Certified Site and an AdvantageSite, respectively. An industrial site in Madison will enjoy a marketing advantage from one

6. CONCLUSIONS AND RECOMMENDATIONS CONTINUED

of these designations, and we recommend that the city seek a certification on any industrial site it acquires.

Of course, it is impossible to predict with certainty what type of company might want an industrial site in Madison and what they would prefer. As a general guide, Tier 1 auto suppliers for the auto assembly plants mentioned above require 20 to 30 acre sites. The Project Team believes that an industrial park with a minimum of 100 acres, and up to 200 or 250 acres would be a good fit for the City of Madison. The site should be master planned and have flexibility on how the individual sites within are configured.

The City (or its designated entity) would have the choice of purchasing the land and developing the industrial site, or working with a private-sector partner for acquisition and development. The City can play a key role in the development of industrial sites through bond issuance, zoning and land use planning, and infrastructure development.

Downtown Redevelopment and Place Appeal

The availability of highly educated and skilled workers (knowledge workers) has become one of the most important criterion in business location decisions. In turn, these workers often prefer to live and work in attractive communities with amenities and a high quality of life. A common theme in the interviews for this project was the need for downtown redevelopment. A vibrant downtown not only enhances a community's appeal to potential residents and businesses, it sends a strong signal that a community is proactive with a "can do" attitude.

Currently a major multi-million dollar phased downtown redevelopment effort is underway. The five-acre project involves four-story residential apartments, a city owned park and 12,000 square feet of new retail space. This effort is designed to remove unsightly buildings, relocate an electric substation, add street lighting and landscaping. This total effort is critical to the appearance and viability of Downtown. It should reflect the history, charm and character of Madison. Downtown is currently under-developed, and these infrastructure improvements will greatly enhance the activity and commerce of the downtown Sullivan Street area. It is important to encourage residential development downtown to help sustain new retail such as pharmacies, food stores, and other stores vital to residents. The Millennial Generation born from 1980-2000 (those presently ages 18-38) now composes the largest buying group in the United States. Many prefer a walk-around-environment that offers residential, entertainment, retail and commercial services. A renewed and redeveloped downtown will ensure that Madison offers this option to Millennials as well as others who prefer to live downtown.

There are several live-work-play developments that have recently come on line in Huntsville. Madison's recent announcements of the above mentioned projects will help Madison to keep pace with this trend.

Workforce Development

Workforce development is a very broad term. Certainly K-12 and post-secondary education qualifies as workforce development. Workforce development is also training and re-training workers who have completed their formal education. This can be as simple as in-company training sessions or formal programs to re-skill large numbers of displaced or underemployed workers. There are many workforce development programs in the Huntsville area and in Madison under the banner of Calhoun Community College, J.F. Drake State Technical College, the Huntsville-Madison County Chamber and other organizations.

6. CONCLUSIONS AND RECOMMENDATIONS CONTINUED

As discussed above, helping existing businesses in the City access services that may help them can be a very valuable economic development service, and this would certainly include workforce development programs. This may take on even more importance when the Mazda-Toyota facility comes on line. The thousands of jobs that will be generated by the facility will increase the need for workforce development. Furthermore, as some interviewees commented on, it could greatly tighten the local labor market for existing companies, and workforce development programs could help widen and deepen the labor pool in the area.

Addressing Other Issues

Making Madison more development ready also includes addressing some of the other economic development weaknesses discussed in Section 4. Traffic congestion especially at rush hour was cited frequently by interviewees as an issue (and experienced by the Project Team as an issue). While it is certainly beyond the scope of this report to address ways to remedy traffic congestion, we note this as a significant economic development issue. Creating more jobs in Madison that existing residents can hold rather than commute out to other areas could help reduce traffic congestion. Improving the code inspection and permitting process as suggested by several interviewees will also make Madison more development ready and friendly. An economic development plan can help a community focus on becoming more development ready and even help guide municipal budget decisions.

A City Transportation Plan Update is underway and will be completed in Spring 2018. This will lead to an updated CIP, and allocations of budget dollars to road projects.

4. Resources

The community and economic development opportunities and challenges facing the City of Madison discussed in this report will require resources to address. However, the City does not have a full-time designated director of economic development. Currently, economic development duties are handled by city planning department personnel.

The Project Team believes that a full-time economic development director would be necessary to implement the recommendations in this report - coordinating the community-wide effort to create an economic development vision and strategy for the City, working to recruit new preferred industry and retail, continuing existing business programs, helping with new business start-ups programs and assistance, and other activities suggested in this report. Recruiting suppliers for the new Mazda-Toyota plant alone will require significant economic development resources. An economic development budget, including travel for recruiting, interacting with regional and state economic development entities and implementing other aspects of an economic development plan will have to be developed.

Currently, the City's budget includes funds for some key economic development events such as the annual Southern Economic Development Council meeting. However, additional funds will likely be needed for activities such as company recruiting trips (some with state and regional economic development representatives) and other outreach and marketing activities should the City decide on a more proactive economic development strategy as discussed in this report. Many communities spend \$2 to \$3 per capita on marketing and branding for economic development, excluding fixed personnel and operating costs. Economic development should be viewed as an investment, not necessarily just a cost. A good economic development program adequately staffed and resourced can pay large dividends in terms of attracting

6. CONCLUSIONS AND RECOMMENDATIONS CONTINUED

new investment into a community, generating jobs and tax revenues that can far outweigh the direct cost.

The Madison Industrial Development Board (IDB) is a city-sponsored organization that plays an important role in local economic development efforts. Under Alabama Law, IDBs are given broad authority to issue bonds and conduct a wide variety of economic development activity. Although the seven IDB members are appointed by city government, they are empowered to act independently unencumbered by many municipal regulations, and able to respond swiftly to industry requirements. Current Madison IDB board members represent a cross-section of local business professionals. The IDB has served and will continue to serve an important advisory function for the City's economic development efforts. In addition, the IDB can own and/or manage industrial property. The Madison IDB represents a valuable resource to help manage a comprehensive city-wide economic development program.

Structures of economic development programs vary. In some cities, the economic development director is a city employee, reporting to the Mayor or City Manager. In other cases, economic development activities are handled by an organization outside city government – a chamber of commerce, industrial development board, or some other non-profit entity with financial support from the city (and/or country depending on the situation) and often private sector.

Concluding Observations

The City of Madison and the Huntsville metro area are among the best places to live and work in the Country, as evidenced by “best place” rankings from CNN Money Magazine, U.S. News and World Report, and other national publications. The City and Regional economies are strong, incomes are high and unemployment is low. An observer might ask “why worry about economic development, just let things happen.”

The short answer to that question is that city residents might not particularly like what just might “happen.” There are opportunities to control and improve the buildout of the city through encouraging the right kind and mix of development, including industrial, retail, commercial and residential. Many cities less economically well off than Madison might not have the luxury of shaping their destiny. The ultimate goal of city planning and management is to create the best possible living and working environment, and Madison has lots of resources to help with this endeavor.

Appendix

Clusters for Future Growth

Aerospace Vehicles and Defense

336411 Aircraft Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing or assembling complete aircraft; (2) developing and making aircraft prototypes; (3) aircraft conversion (i.e., major modifications to systems); and (4) complete aircraft overhaul and rebuilding (i.e., periodic restoration of aircraft to original design specifications).

336412 Aircraft Engine and Engine Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing aircraft engines and engine parts; (2) developing and making prototypes of aircraft engines and engine parts; (3) aircraft propulsion system conversion (i.e., major modifications to systems); and (4) aircraft propulsion systems overhaul and rebuilding (i.e., periodic restoration of aircraft propulsion system to original design specifications).

336413 Other Aircraft Parts and Auxiliary Equipment Manufacturing

This U.S. industry comprises establishment primarily engaged in (1) manufacturing aircraft parts or auxiliary equipment (except engines and aircraft fluid power subassemblies) and/or (2) developing and making prototypes of aircraft parts and auxiliary equipment. Auxiliary equipment includes such items as crop dusting apparatus, armament racks, inflight refueling equipment, and external fuel tanks.

336414 Guided Missile and Space Vehicle Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete guided missiles and space vehicles and/or (2) developing and making prototypes of guided missiles or space vehicles.

336415 Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing guided missile and/or space vehicle propulsion units and propulsion unit parts and/or (2) developing and making prototypes of guided missile and space vehicle propulsion units and propulsion unit parts.

Automotive

336111 Automobile Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing complete automobiles (i.e., body and chassis or unibody) or (2) manufacturing automobile chassis only.

336211 Motor Vehicle Body Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing truck and bus bodies and cabs and automobile bodies. The products made may be sold separately or may be assembled on purchased chassis and sold as complete vehicles.

336310 Motor Vehicle Gasoline Engine and Engine Parts Manufacturing

This industry comprises establishments primarily engaged in (1) manufacturing and/or rebuilding motor vehicle gasoline engines and engine parts and/or (2) manufacturing and/or rebuilding carburetors, pistons, piston rings, and engine valves, whether or not for vehicular use.

336320 Motor Vehicle Electrical and Electronic Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding electrical and electronic equipment for motor vehicles and internal combustion engines. The products made can be used for all types of transportation equipment (i.e., aircraft, automobiles, trucks, trains, ships) or stationary internal combustion engine applications.

336330 Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle steering mechanisms and suspension components (except springs).

336340 Motor Vehicle Brake System Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle brake systems and related components.

336350 Motor Vehicle Transmission and Power Train Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle transmissions and power train parts.

336360 Motor Vehicle Seating and Interior Trim Manufacturing

This industry comprises establishments primarily engaged in manufacturing motor vehicle seating, seats, seat frames, seat belts, and interior trimmings.

336370 Motor Vehicle Metal Stamping

This industry comprises establishments primarily engaged in manufacturing motor vehicle stampings, such as fenders, tops, body parts, trim, and molding.

336390 Other Motor Vehicle Parts Manufacturing

This industry comprises establishments primarily engaged in manufacturing and/or rebuilding motor vehicle parts and accessories (except motor vehicle gasoline engines and engine parts, motor vehicle electrical and electronic equipment, motor vehicle steering and suspension components, motor vehicle brake systems, motor vehicle transmissions and power train parts, motor vehicle seating and interior trim, and motor vehicle stampings).

336999 All Other Transportation Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing transportation equipment (except motor vehicles, motor vehicle parts, boats, ships, railroad rolling stock, aerospace products, motorcycles, bicycles, armored vehicles and tanks).

Biopharmaceuticals

325411 Medicinal and Botanical Manufacturing

This U.S. industry comprises establishments primarily engaged in (1) manufacturing uncompounded medicinal chemicals and their derivatives (i.e., generally for use by pharmaceutical preparation manufacturers) and/or (2) grading, grinding, and milling uncompounded botanicals.

325412 Pharmaceutical Preparation Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

325413 In-Vitro Diagnostic Substance Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing in-vitro (i.e., not taken internally) diagnostic substances, such as chemical, biological, or radioactive substances. The substances are used for diagnostic tests that are performed in test tubes, petri dishes, machines, and other diagnostic test-type devices.

325414 Biological Product (except Diagnostic) Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing vaccines, toxoids, blood fractions, and culture media of plant or animal origin (except diagnostic).

Communications Equipment and Services

334210 Telephone Apparatus Manufacturing

This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.

334290 Other Communications Equipment Manufacturing

This industry comprises establishments primarily engaged in manufacturing communications equipment (except telephone apparatus, and radio and television broadcast, and wireless communications equipment).

Medical Devices

333314 Optical Instrument and Lens Manufacturing

This U.S. industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing optical instruments and lens, such as binoculars, microscopes (except electron, proton), telescopes, prisms, and lenses (except ophthalmic); (2) coating or polishing lenses (except ophthalmic); and (3) mounting lenses (except ophthalmic).

339112 Surgical and Medical Instrument Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus (except electrotherapeutic, electromedical and irradiation apparatus). Examples of products made by these establishments are syringes, hypodermic needles, anesthesia apparatus, blood transfusion equipment, catheters, surgical clamps, and medical thermometers.

339113 Surgical Appliance and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing surgical appliances and supplies. Examples of products made by these establishments are orthopedic devices, prosthetic appliances, surgical dressings, crutches, surgical sutures, personal industrial safety devices (except protective eyewear), hospital beds, and operating room tables.

339114 Dental Equipment and Supplies Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing dental equipment and supplies used by dental laboratories and offices of dentists, such as dental chairs, dental instrument delivery systems, dental hand instruments, and dental impression material and dental cements.

339115 Ophthalmic Goods Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing ophthalmic goods. Examples of products made by these establishments are prescription eyeglasses (except manufactured in a retail setting), contact lenses, sunglasses, eyeglass frames, and reading glasses made to standard powers, and protective eyewear.

Additional Target Industries

332912 Fluid Power Valve and Hose Fitting Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing fluid power valves and hose fittings. Illustrative Examples:

- Fluid power aircraft subassemblies manufacturing
- Hose assemblies for fluid power systems manufacturing
- Hydraulic and pneumatic hose and tube fittings manufacturing
- Hydraulic and pneumatic valves manufacturing

334111 Electronic Computer Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers. Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program; (2) can be freely programmed in accordance with the requirements of the user; (3) perform arithmetical computations specified by the user; and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and contain at least analog, control, and programming elements. The manufacture of computers includes the assembly or integration of processors, coprocessors, memory, storage, and input/output devices into a user-programmable final product.

334118 Computer Terminal and Other Computer Peripheral Equipment Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing computer terminals and other computer peripheral equipment (except storage devices). Illustrative Examples:

- Automatic teller machines (ATM) manufacturing
- Computer terminals manufacturing
- Joystick devices manufacturing
- Keyboards, computer peripheral equipment, manufacturing
- Monitors, computer peripheral equipment, manufacturing
- Mouse devices, computer peripheral equipment, manufacturing
- Optical readers and scanners manufacturing
- Plotters, computer, manufacturing
- Point-of-sale terminals manufacturing

- Printers, computer, manufacturing

334412 Bare Printed Circuit Board Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components. These establishments print, perforate, plate, screen, etch, or photoprint interconnecting pathways for electric current on laminates.

334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing

This U.S. industry comprises establishments primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards. Also known as printed circuit assemblies, electronics assemblies, or modules, these products are printed circuit boards that have some or all of the semiconductor and electronic components inserted or mounted and are inputs to a wide variety of electronic systems and devices.

334419 Other Electronic Component Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing electronic components (except bare printed circuit boards; semiconductors and related devices; electronic capacitors; electronic resistors; coils, transformers and other inductors; connectors; and loaded printed circuit boards). Illustrative Examples:

- Crystals and crystal assemblies, electronic, manufacturing
- Electron tubes manufacturing
- LCD (liquid crystal display) unit screens manufacturing
- Microwave components manufacturing
- Piezoelectric devices manufacturing
- Printed circuit laminates manufacturing
- Switches for electronic applications manufacturing
- Transducers (except pressure) manufacturing

334515 Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals

This U.S. industry comprises establishments primarily engaged in manufacturing instruments for measuring and testing the characteristics of electricity and electrical signals. Examples of products made by these establishments are circuit and continuity testers, voltmeters, ohm meters, wattmeters, multimeters, and semiconductor test equipment.

334614 Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing

This U.S. industry comprises establishments primarily engaged in mass reproducing computer software or other prerecorded audio and video material on magnetic or optical media, such as CD-ROMs, DVDs, tapes, or cartridges. These establishments do not generally develop any software or produce any audio or video content. This industry includes establishments that mass reproduce game CDs and cartridges.

335931 Current-Carrying Wiring Device Manufacturing

This U.S. industry comprises establishments primarily engaged in manufacturing current-carrying wiring devices. Illustrative Examples:

- Bus bars, electrical conductors (except switchgear-type), manufacturing
- GFCI (ground fault circuit interrupters) manufacturing
- Lamp holders manufacturing
- Lightning arrestors and coils manufacturing
- Receptacles (i.e., outlets), electrical, manufacturing
- Switches for electrical wiring (e.g., pressure, pushbutton, snap, tumbler) manufacturing

541512 Computer Systems Design Services

This U.S. industry comprises establishments primarily engaged in planning and designing computer systems that integrate computer hardware, software, and communication technologies. The hardware and software components of the system may be provided by this establishment or company as part of integrated services or may be provided by third parties or vendors. These establishments often install the system and train and support users of the system. Illustrative Examples:

- Computer systems integration design consulting services
- Local area network (LAN) computer systems integration design services
- Information management computer systems integration design services
- Office automation computer systems integration design services

541715 Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)

This U.S. industry comprises establishments primarily engaged in conducting research and experimental development (except nanotechnology and biotechnology research and experimental development) in the physical, engineering, and life sciences, such as agriculture, electronics, environmental, biology, botany, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary and other allied subjects.

