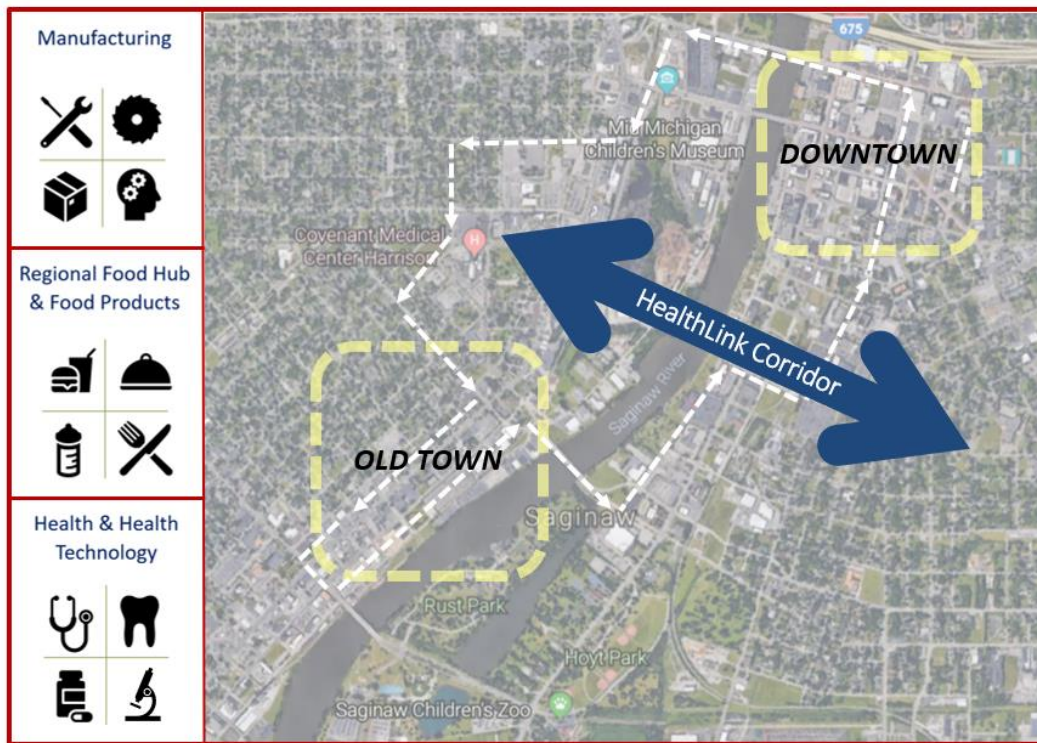




STRATEGIC ECONOMIC DEVELOPMENT PLAN

Summary Report
May 31, 2018



Diane Lupke & Associates, Inc.
Consultants in Economic Development and Emerging Markets

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1. EXECUTIVE SUMMARY

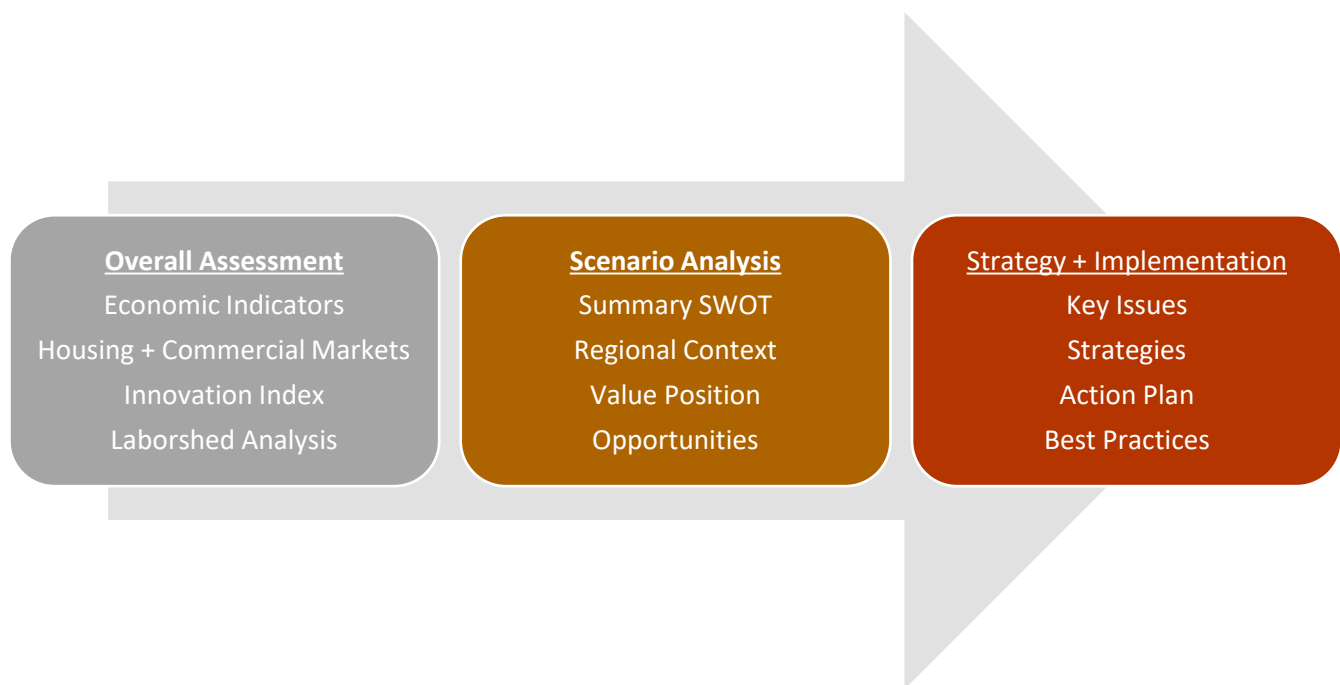
What makes a community great is not ticking the boxes of the pieces it contains. Rather, it is about how the pieces interact, where they are interdependent, and why one piece advances another. It is about collaborative thinking and collective action and why the whole of a great community is greater than the sum of its parts.

Saginaw has made an enviable recovery within a region that has struggled mightily to adapt and prosper within the buffeting forces of globalization. Jobs and incomes have rebounded, business attraction has improved, and new commercial businesses are seeking space. Job placement woes have been replaced by talent attraction concerns. Affordable housing needs are sharing space with too limited higher end residences suited to incoming executives and physicians. Yet, a persistent poverty remains that saw its beginnings in the industrial transition that began decades ago. For this population, family supporting jobs, housing security, crime, and urban blight are continuing concerns. How can this population participate in the innovation and growth from new and old-line businesses in the region, and the tremendous promise and potential of the new Medical School Campus in Saginaw?

Diane Lupke & Associates, Inc. was engaged to consider these issues and more in the development of a Strategic Economic Development Plan for the City of Saginaw. The purpose of the engagement was to examine the City of Saginaw's place in the regional economy, understand how it adds value to the region, and develop a strategy to use those advantages to move the community forward for all its citizens.

Process

The process used to complete the study and plan consisted of three interconnected and interdependent tasks: Task 1 – Overall Assessment; Task 2 – Scenario Analysis; and Task 3 – Strategy and Implementation.



Summary Findings

The transformation of the manufacturing industry and 2008 recession dramatically reduced the number and size of businesses and overall population.

- Loss of tax base and critical resource shortages
- Continued loss of population
- Both a loss of total and a shift in buying power
- Appearance and perception of crime
- Low wages
- Low property values stunt investment
- Negative self-image

Through the loss of businesses and population, existing linkages have been fractured, broken, and lost.

- Neighborhoods marred by vacancy lack cohesion and connectivity
- Open-space is unkempt and uninviting, discouraging community gathering
- Distances among economic anchors, such as major employers and commercial districts, are long and connections indirect
- Poor connectivity among and within industrial clusters
- Neighborhood schools have closed, educational attainment has suffered, and though there are bright spots, schools are perceived in general as poorly funded and under-performing

Despite significant losses, major economic engines remain fueling modest but steady growth.

- Manufacturing remains a major employer, source of community wealth, and tax base; includes strong and emerging linkages in healthcare “doctorpreneurship” and food sectors; legacy of patents and patent diversity
- Major investment in healthcare education broadens and solidifies the local workforce pipeline from primarily low wage into higher skilled medical professionals
- Daily employment draw of 21,000
- City and environs remain a retail and restaurant draw, although retail offerings will change as industry restructuring continues; major investment in city market creates multiple opportunities for entrepreneurship and joint ventures
- Regional economy strong, growing, and attracting attention i.e. Site Selection Magazine

Strategy and Plan

The transformation of the manufacturing industry and 2008 recession have dramatically reduced the number and size of businesses and overall population. Through the loss of businesses and population, existing linkages have been fractured, broken, and lost. It is necessary to reestablish and reinforce linkages throughout the economy to recreate the pathways for growth and maximize that growth for everyone.

Mission

Re-establish and reinforce linkages throughout the economy to recreate the pathways for growth and maximize that growth for everyone

Key Issues & Strategies:

- GOAL A – Linkages: Recreate and reinforce geographic, economic, and interpersonal linkages
- GOAL B – Innovation: Recognize and maximize existing economic opportunities for growth, innovation, and job and wealth creation

- GOAL C – Talent: Reestablish the workforce pipeline among businesses, educational institutions, and emerging and established workforce

GOAL A – Linkages: Recreate and reinforce geographic, economic, and interpersonal linkages

Strategic Action 1: Recognize existing linkages among healthcare entities with a Healthcare Corridor

Strategic Action 2: Re-establish geographic linkages with re-imagined public-private transit

Strategic Action 3: Form a Community Development Corporation for Housing, Corridor Development, and Entrepreneurship

GOAL B – Innovation: Recognize and maximize existing economic opportunities for growth, innovation, and job and wealth creation

Strategic Action 1: Mine the supply chain / value chain for existing business development opportunities

Strategic Action 2: Mine the supply chain / value chain for entrepreneurship opportunities in food + food products

Strategic Action 3: Ramp up housing renovation, infill construction, and development with support to local housing contractors

GOAL C – Talent: Reestablish the workforce pipeline among businesses, educational institutions, and emerging and established workforce

Strategic Action 1: Facilitate talent linkages through transparent and supported career pathways

Strategic Action 2: Facilitate talent linkages through cooperative degrees

Strategic Action 3: Facilitate talent linkages through education-industry partnerships

Strategic Action 4: Introduce youth entrepreneurship programming into K-16 schools.

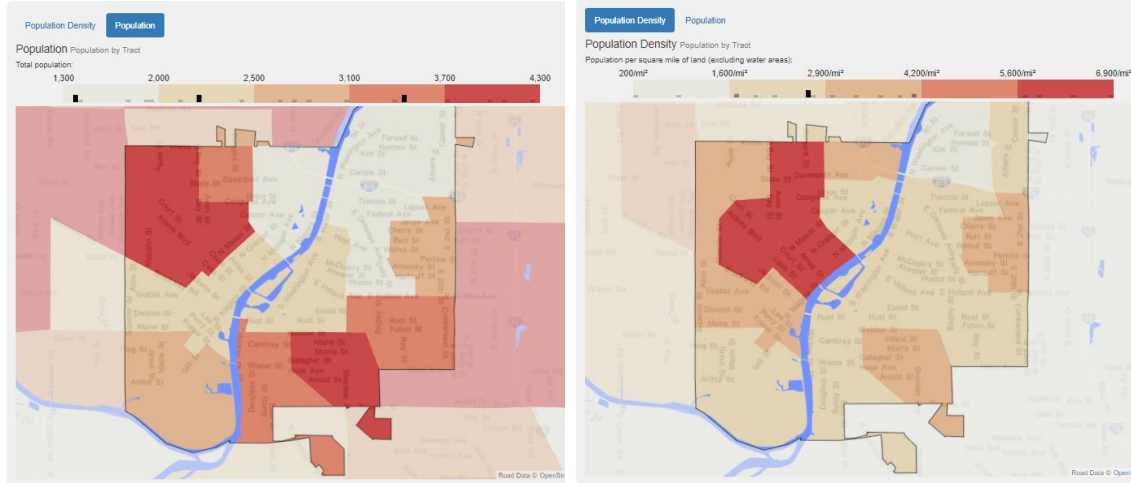
Recommendations

Lupke provides six recommendations to support successful implementation. Lupke recommends beginning with an Approach focused on quick wins, learning by doing, and complementary actions by others. A solid and secure workforce pipeline is the number one issue of importance to businesses. Engagement of the Schools through transparent school to work career pathways is critical to the success of incoming and existing businesses. Saginaw already has a wealth of activity in healthcare. Yet these many economic actors are disconnected and in many cases unknown to each other. Lupke recommends a focus on the physical and economic connections among and between healthcare entities in a HealthLink Corridor. The many opportunities created through Supply Chain Mapping enable existing businesses to leverage each other, keep employees local, and enable economies of scale. Entrepreneurship is not just for the high-tech coasts, it is the reality of modern work including self-employment, high growth technologies, and future employers. Lupke recommends supporting the entrepreneurship that is already gaining ground in manufacturing, healthcare, and food and food products, and a new emphasis on youth entrepreneurship programming for all ages in the schools.

2. WORKFORCE & EMPLOYERS

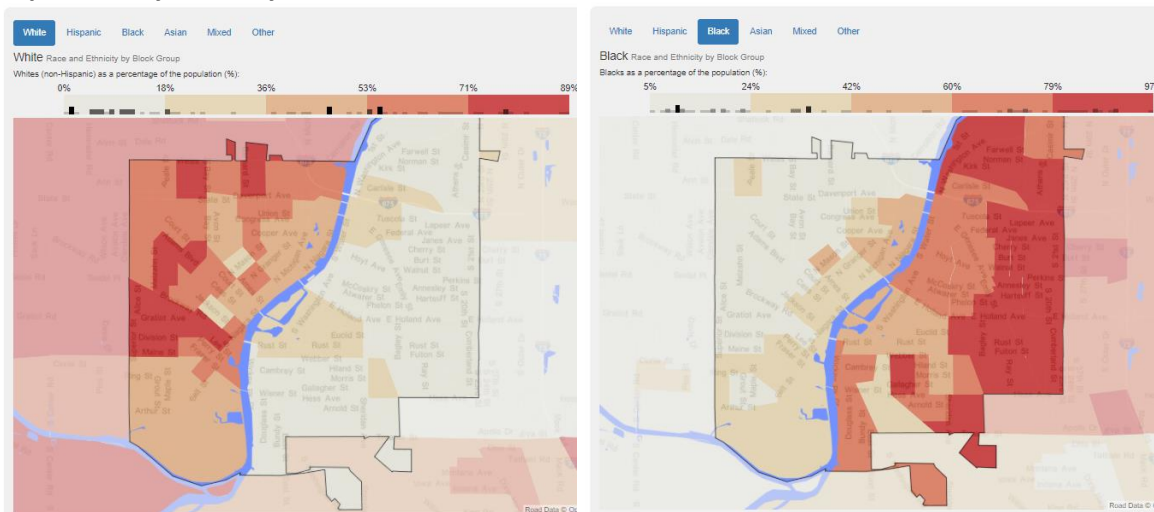
Due to its population size advantages and heritage industries, Saginaw has a substantial competitive advantage in terms of its workforce and small business potential in comparison to its regional competitors. One of the primary advantages in terms of workforce and small business development population is due to its population and population density. The figures below represent a population of 48,984 within the Saginaw city limits. The majority of this population resides west of the river in the four census tracts surrounding the medical campus.

Population & Population Density:



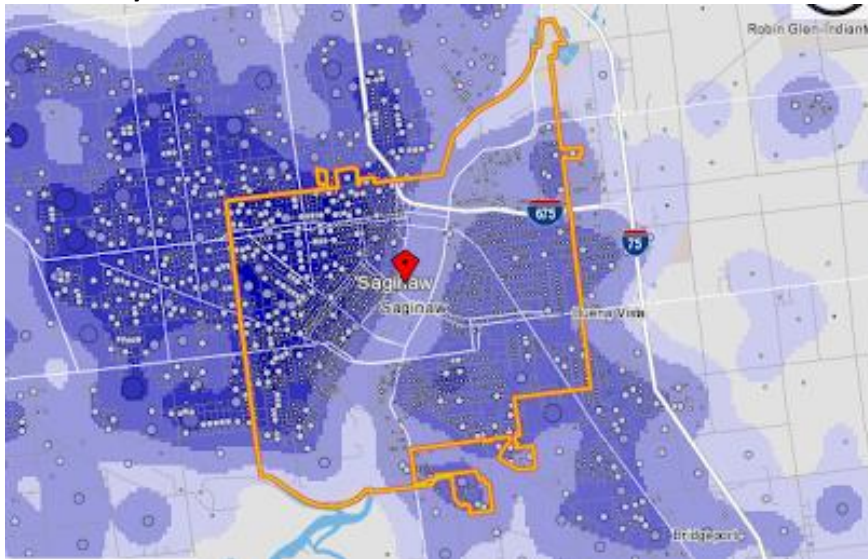
One of the most notable characteristics of Saginaw is the clear divide that exists between the two sides of the river based on race. The majority of census tracts are between 50% and 90% white on the west side of the river, while the majority of census tracts east of the river area are at least 80% black. This clear divide between the two sides of the river is primarily due to the population settlement patterns during the mid-20th century when Saginaw had approximately twice as many residents with a total population exceeding 100,000. Now, over sixty years later, there have been some influxes of other diverse populations, including Hispanic and Asian. However, there has been relatively little change in the east-west racial divide, as illustrated in the following maps.

Population by Ethnicity:



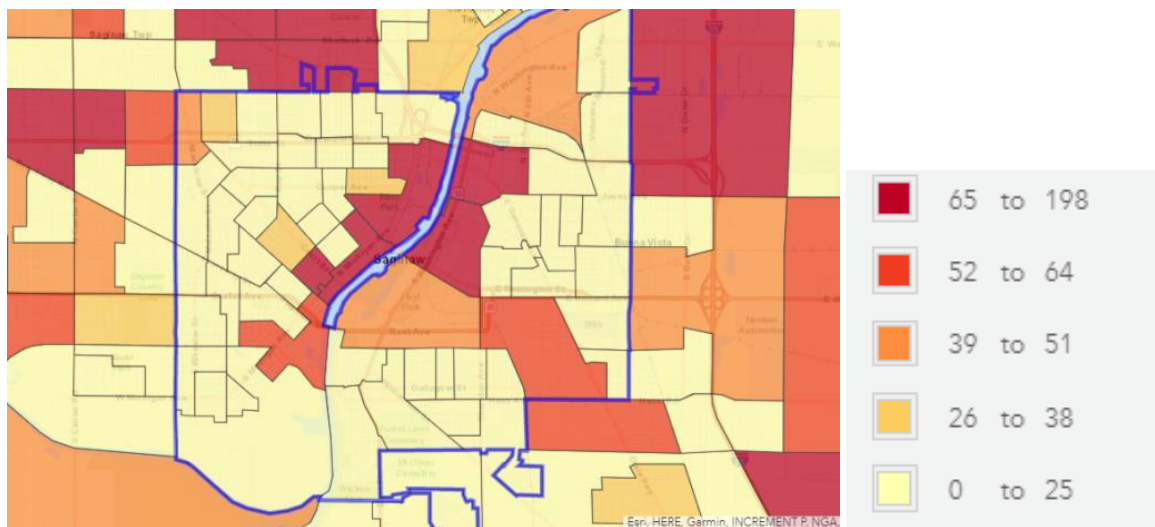
The highest concentration of employment in the city is centered around Covenant Medical Center and various institutional uses west of the river. The map shows how higher densities near the courthouse, art museum, children’s museum, and medical center extend westward towards the city limits. Meanwhile, east of the river is considerably less dense. The northwest corner of the city has the lowest density in the city and is characterized by vacant lots and abandoned homes. The highest density east of the river is located south of the zoo and west of Saginaw High School. Generally speaking, the density observed east of the river is 20% to 40% as dense as neighborhoods west of the river.

Job Density:



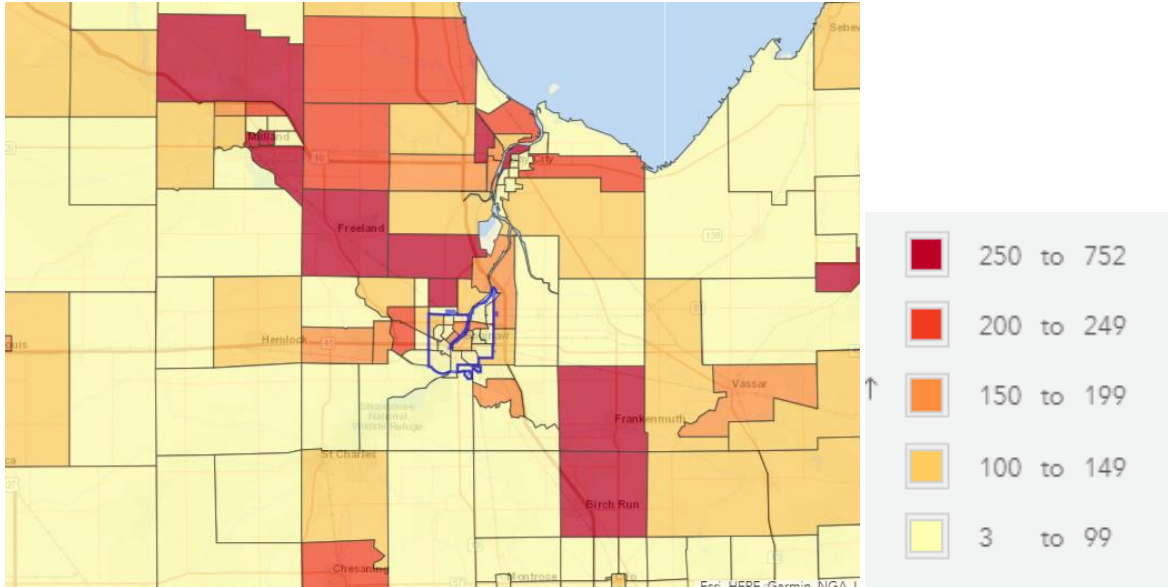
Saginaw’s business corridors center along the main arterials on both sides of the river. Five census tracts have at least 65 businesses. Downtown and Old Town provide two concentrated areas for business development. Outside of these main business corridors, there are a few additional pockets for businesses in the southeast corner of the city south of Old Town and the southwest corner of the city along Genesee Avenue.

Total Businesses by Census Tract, Saginaw County:



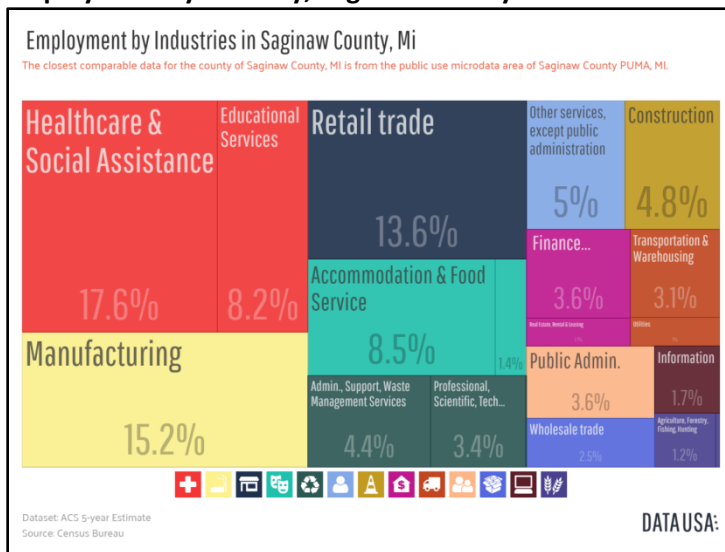
In terms of regional business, there are four areas outside of Saginaw that have heavy business concentrations and serve as competitors for businesses located within the city limits. Bay City and Midland are comparable regional competitors in terms of size and business density. There are also two business corridors that compete with Saginaw: one is located directly between Frankenmuth and Birch Run and the other is located directly between Saginaw and Midland, as referenced in the figure below.

Total Businesses by Block Group, Saginaw City:



The industry segmentation for Saginaw County is extremely diverse with no industry taking more than an 18.0% share of the total business mixture. Healthcare leads in the region (17.6%) followed by manufacturing (15.2%) and retail trade (13.6%). Accommodation and food services (8.5%) and educational services (8.2%) round out the top five. The remaining industries are 5.0% or below.

Employment by Industry, Saginaw County:



Saginaw is a regional leader in terms of clean and sustainable industries. When compared with other regional clean industry leaders—Flint, Kalamazoo, and Fort Wayne—Saginaw has 81 times as much of a comparative advantage in terms of solar photovoltaic production and distribution. Saginaw also leads the way with 3 times as many energy-saving building material manufacturers as the regional average.

Clean Industry Subindustries in Saginaw and comparative cities:

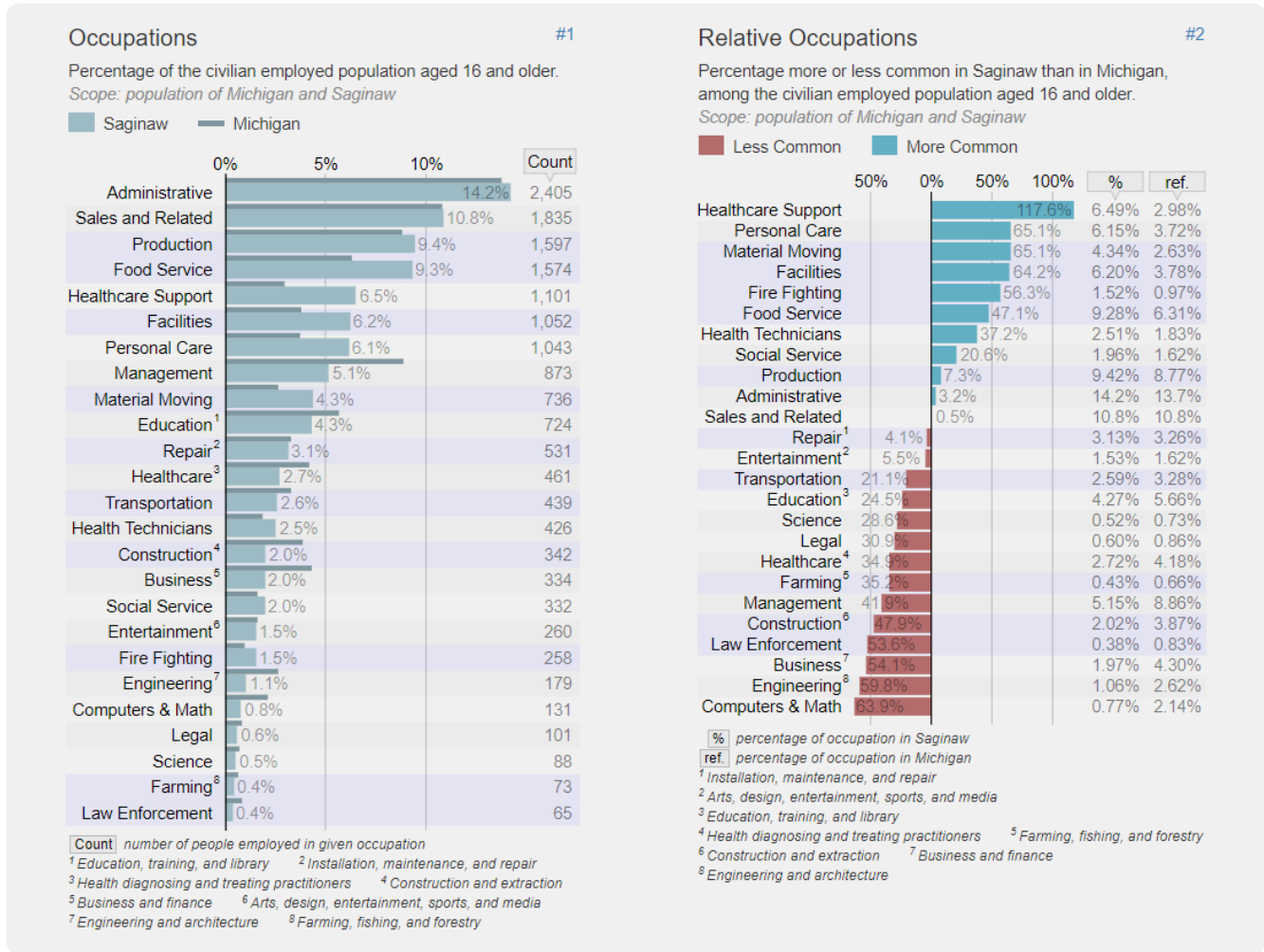
Metros Holland and Saginaw have strong specializations in specific clean economy sectors
Top three clean economy segment specializations by metro, 2009

Metropolitan Area	Clean economy segment name	Segment employment as share of all-metro average
Flint, MI	Electric Vehicle Technologies	219%
	Recycling and Reuse	153%
	HVAC and Building Control Systems	145%
Kalamazoo, MI	Electric Vehicle Technologies	2496%
	Sustainable Forestry Products	664%
	Nuclear Energy	559%
Holland, MI	Green Consumer Products	8375%
	Energy-saving Building Materials	540%
	Energy-saving Consumer Products	251%
Saginaw, MI	Solar Photovoltaic	8135%
	Energy-saving Building Materials	303%
	Public Mass Transit	123%
Fort Wayne, IN	Geothermal	4779%
	Battery Technologies	525%
	Pollution Reduction	372%

When compared to the state of Michigan occupational averages, Saginaw has over twice the state average in terms of Healthcare Support workers. It also ranks high in Personal Care, Health Technicians, Administrative, and Social Service workers, which are all associated with its strong healthcare presence.

The STEM fields in Saginaw have extremely low numbers in terms of Computers & Math workers as well as Engineering workers. Additionally, the Business, Construction, and Management workforce is well below the state average. The lack of STEM and business workers further emphasizes the importance of focusing on other industries that Saginaw has a competitive advantage in, namely manufacturing and healthcare.

Occupations in Saginaw Relative to State of Michigan Average:



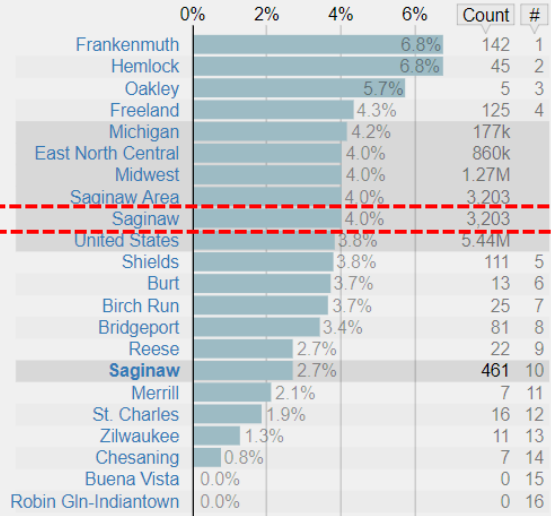
Wage Stagnation of Healthcare Support Workers:

One particularly important phenomenon that is preventing upward social mobility in Saginaw is the existence of wage stagnation and, possibly, wage suppression within certain industries. The following charts provide a summary of the number of workers in Saginaw in various healthcare related occupations and the median income of these workers in Saginaw compared to the average for the state of Michigan. While Healthcare Occupations and Health Technicians compare favorably when compared to the state average, the lowest-paid workers in the industry, Healthcare Support Occupations, have among the lowest wages in the entire state. This is a strong statistical outlier that suggest that, despite profitable hospitals and favorable wage situations for other healthcare professions, Healthcare Support Occupations positions are paid well below the fair market rate.

Healthcare

Healthcare¹ Occupations by Place #40

Percentage of the civilian employed population aged 16 and older.
Scope: population of Saginaw, selected other places in the Saginaw Area, and entities that contain Saginaw



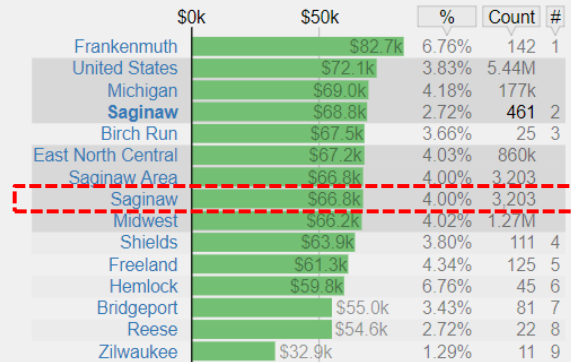
¹ Health diagnosing and treating practitioners

Healthcare

Healthcare¹ Income by Place #65

Median income for the full-time year-round civilian employed population aged 16 and older.

Scope: population of Saginaw, selected other places in the Saginaw Area, and entities that contain Saginaw



% percent of the workforce employed in given occupation

Count number of people employed in given occupation

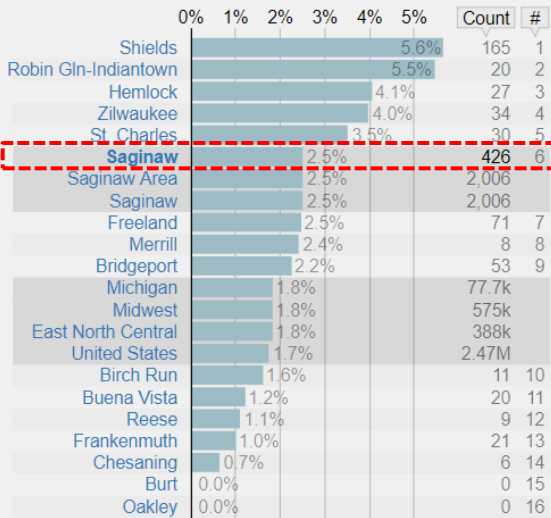
rank of place out of 9 by income in given occupation

¹ Health diagnosing and treating practitioners

Health Technicians

Health Technicians Occupations by Place #41

Percentage of the civilian employed population aged 16 and older.
Scope: population of Saginaw, selected other places in the Saginaw Area, and entities that contain Saginaw

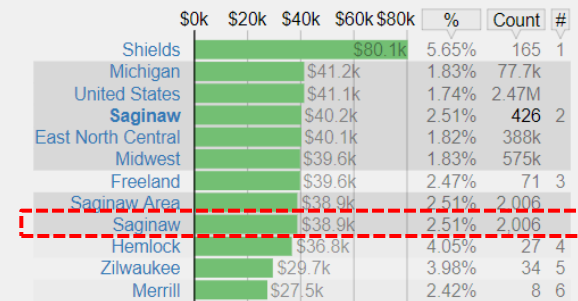


Health Technicians

Health Technicians Income by Place #66

Median income for the full-time year-round civilian employed population aged 16 and older.

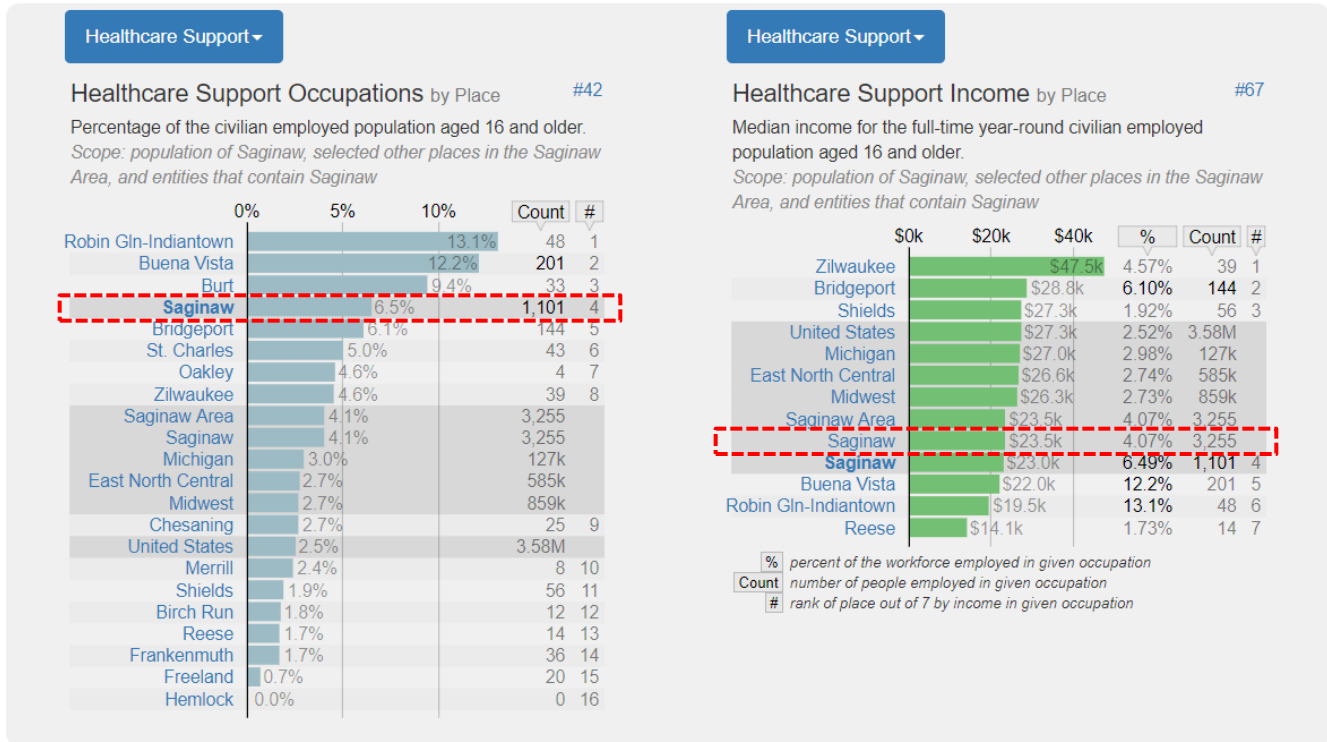
Scope: population of Saginaw, selected other places in the Saginaw Area, and entities that contain Saginaw



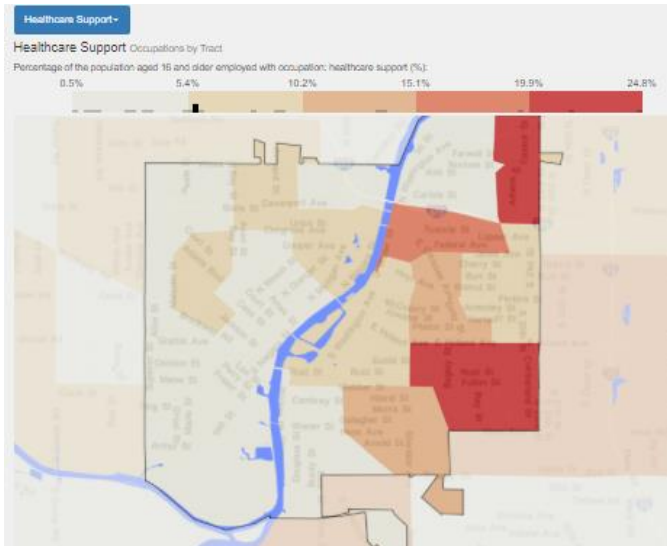
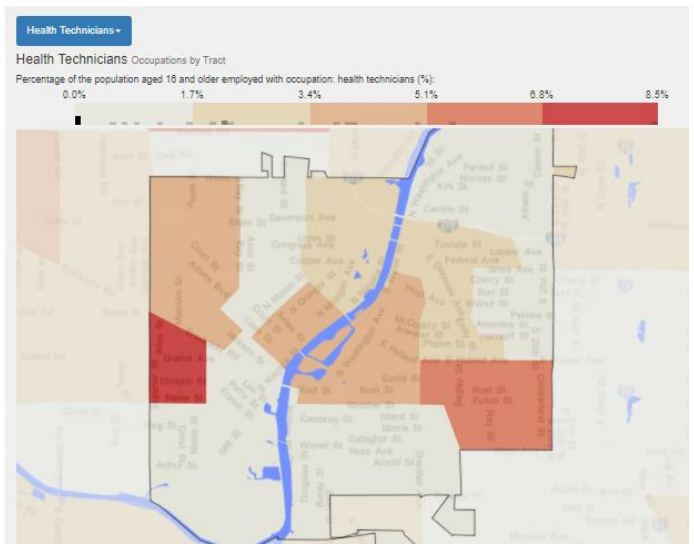
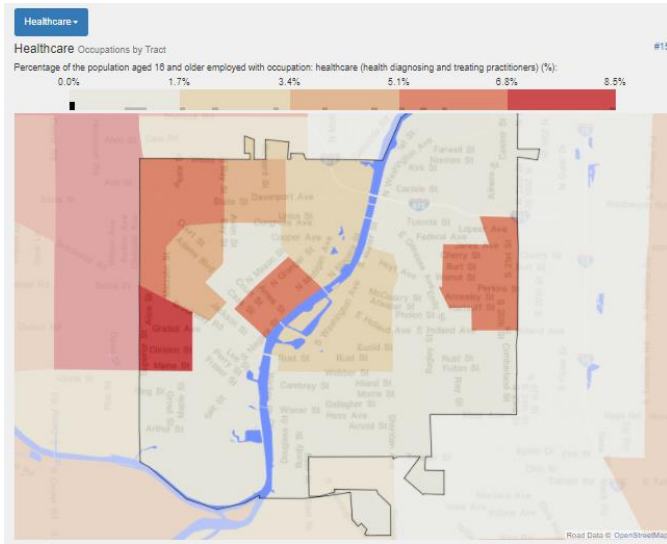
% percent of the workforce employed in given occupation

Count number of people employed in given occupation

rank of place out of 6 by income in given occupation



The wage situation for Healthcare Support Occupation workers is especially pronounced when compared to the geographic location of these workers. The following maps show that the only healthcare occupation that is underpaid when compared to the state average is also the only occupation that is predominantly filled by labor force that domiciles on the east side of the river. This correlation between a high density medical workforce and highly-skilled workforce along with an below average income in the Healthcare Support occupation is troubling. Additional analysis is necessary here to evaluate training, turnover, productivity, and other factors that may contribute to this wage differential. Wage rates may need to be increased for this subsector of the healthcare workforce in Saginaw if a competitive working environment is to be maintained.



Manufacturing Advantage

Manufacturing is a clear competitive advantage for Saginaw County. Automotive manufacturing leads the way with over six thousand employees in seven firms. Chemical product manufacturing and construction building materials each have approximately 1,000 employees spread amongst 56 firms for the two industries. The dental laboratory manufacturing industry is unusually high for Saginaw County with 275 employees in five firms, which emphasizes the competitive advantage for the region in terms of medical manufacturing.

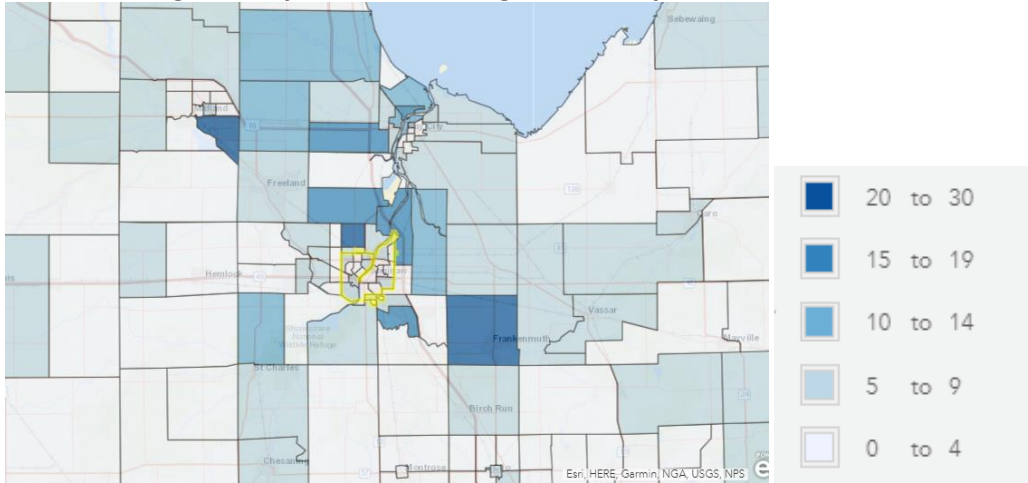
Manufacturing Firms within Saginaw County:

Industry by NAICS Code	# of Employees	# of Firms	Annual Sales Volume
Other Motor Vehicle Parts Manufacturing	6,033	7	476,287,000
All Other Miscellaneous Chemical Product and Preparation Manufacturing	1,083	23	\$119,909,000
Construction Building Materials	934	33	296,321,000
Light Truck and Utility Vehicle Manufacturing	431	3	183,367,000
Ornamental and Architectural Metal Work Manufacturing	358	5	42,899,000
Dental Laboratories	275	5	71,437,000
Plate Work Manufacturing	231	11	30,495,000
Wood Kitchen Cabinet and Countertop Manufacturing	72	9	14,803,000
Sign Manufacturing	52	14	2,323,000
Total =	9,469	110	1,237,841,000

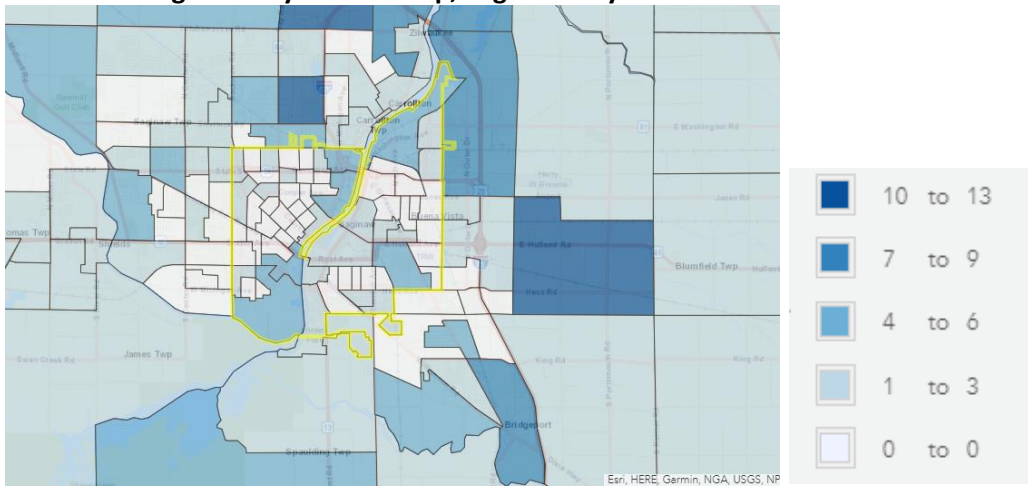
The following series of figures and maps provide additional representation of the extent to which manufacturing firms are prevalent within the city of Saginaw, Saginaw County, and its regional neighbors. The US is currently experiencing a lack of skilled manufacturing workers; however, the Saginaw region has one of the highest concentrations of manufacturing workers per capita. As a result, this workforce skills advantage should be aggressively marketed towards businesses who may be considering relocating to the region.

Furthermore, it should be noted that these manufacturing skills must be promoted and cultivated by local universities and vocational schools, in order to ensure that the collective manufacturing skills do not atrophy. In order to remain competitive in the manufacturing space, additional emphasis must be placed on developing advanced manufacturing and digital manufacturing skills that are more computer-focused as opposed to the heritage manufacturing industries that were more manual labor-intensive. The wide variety of manufacturing firms and workers present in the region makes a clear case that Saginaw is well-positioned as a leader in the state, region, and country.

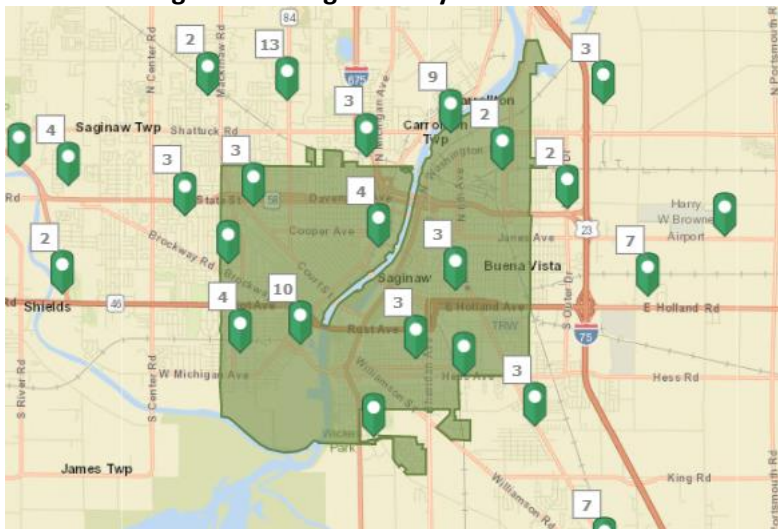
Manufacturing Firms by Census Tract, Saginaw County:



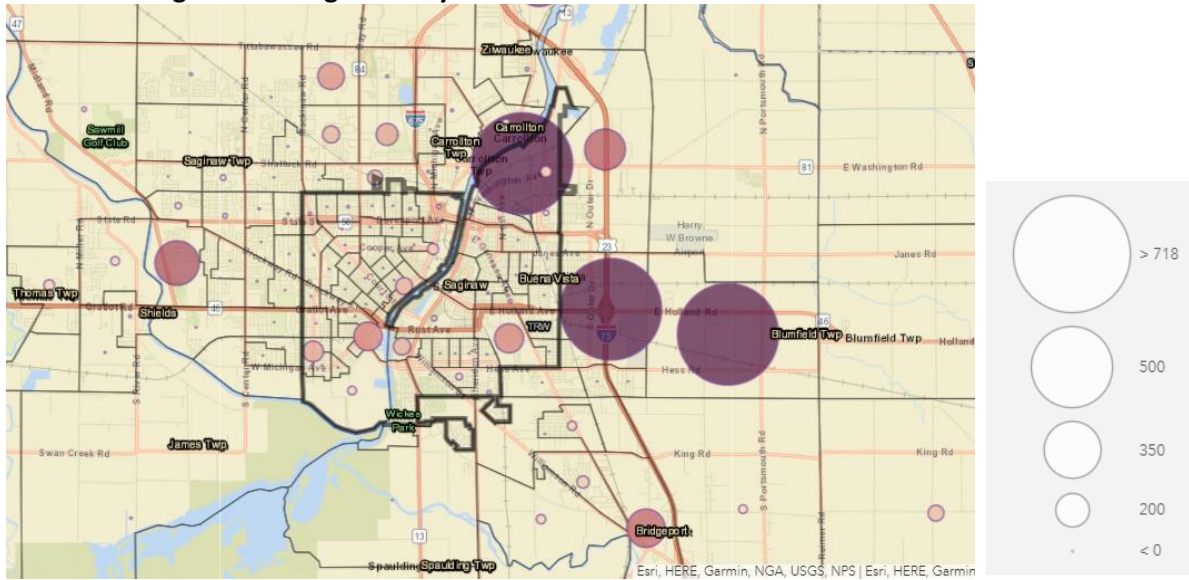
Manufacturing Firms by Block Group, Saginaw City:



Manufacturing Firms in Saginaw City:

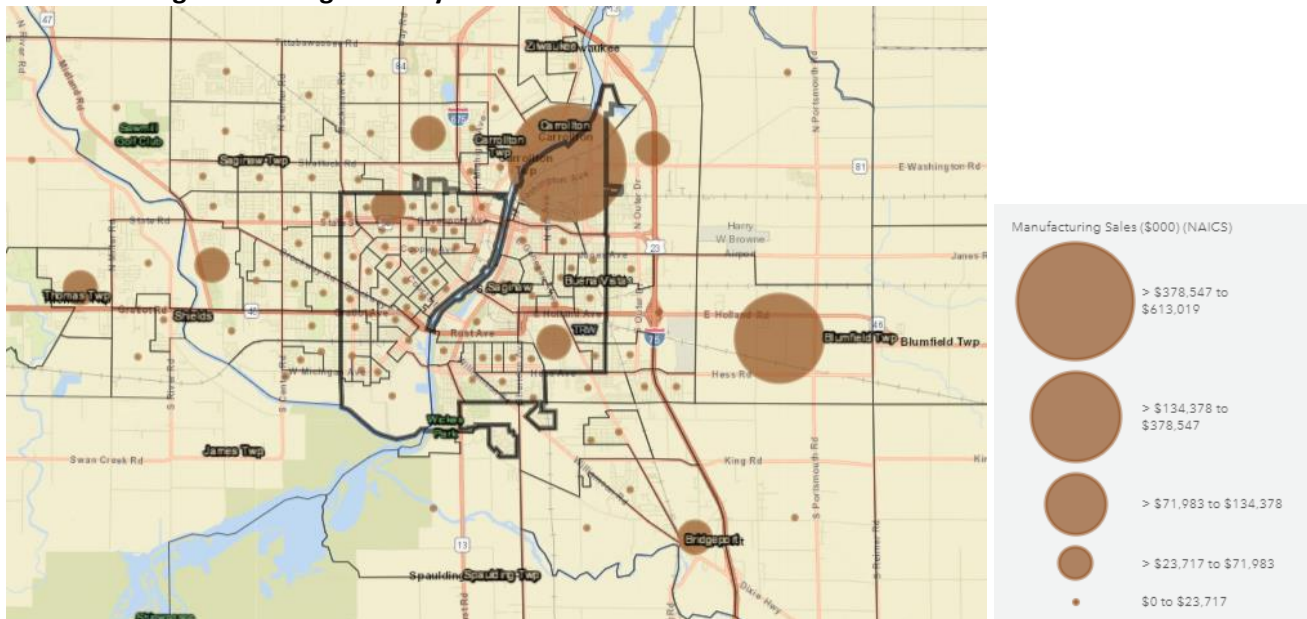


Manufacturing Firms in Saginaw City:

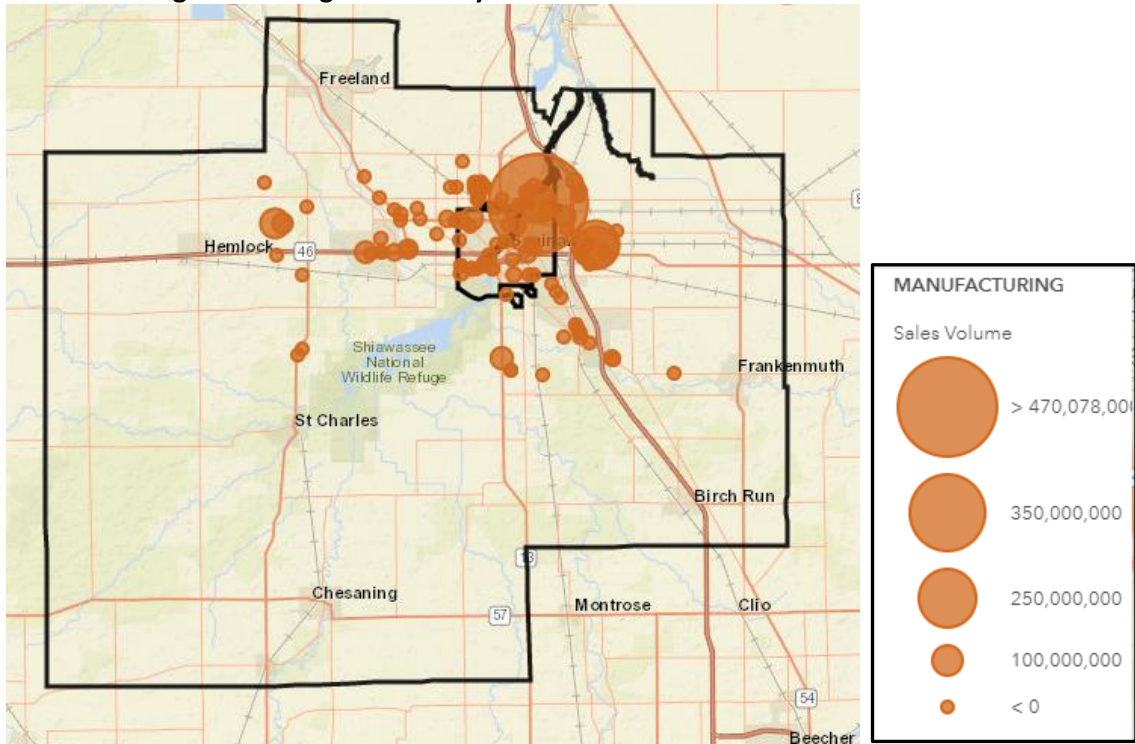


The GM plant in northeast Saginaw is not only the largest manufacturing sales site for the city or county, but it is also the site of the largest manufacturing sales in the entire Great Lakes Bay Region.

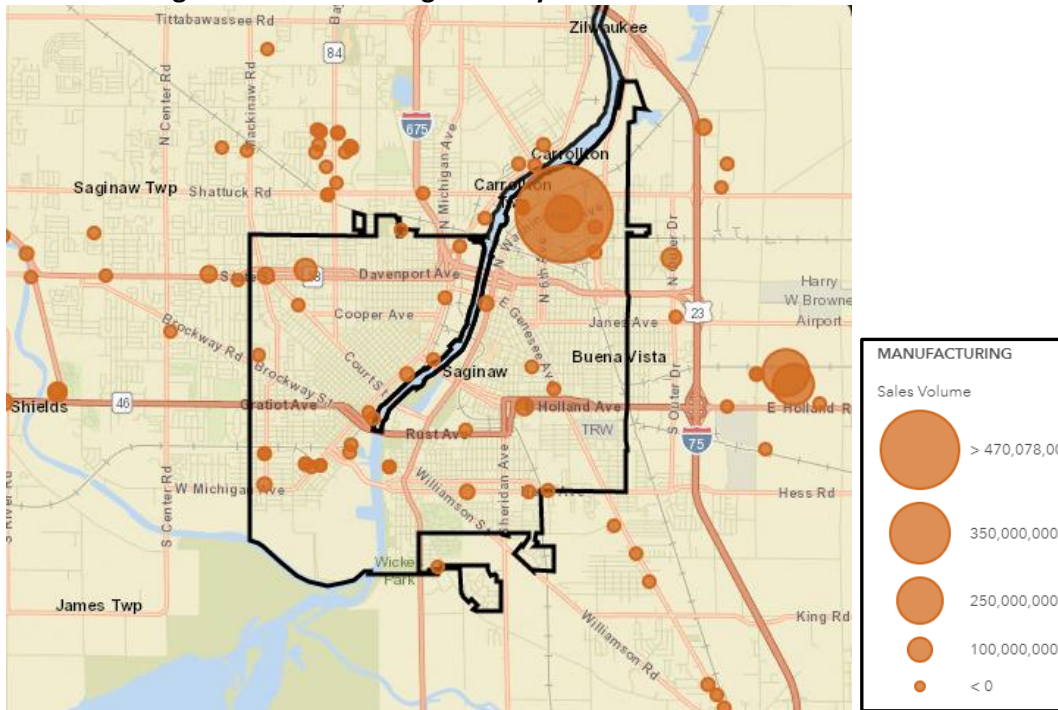
Manufacturing Sales in Saginaw City:



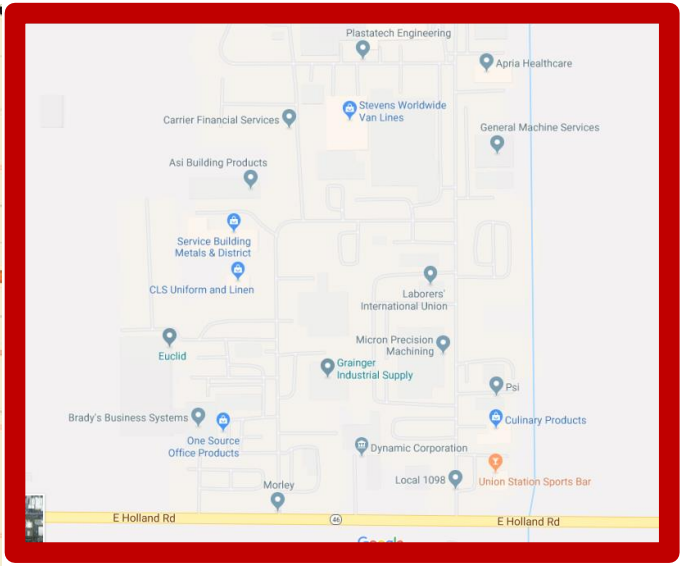
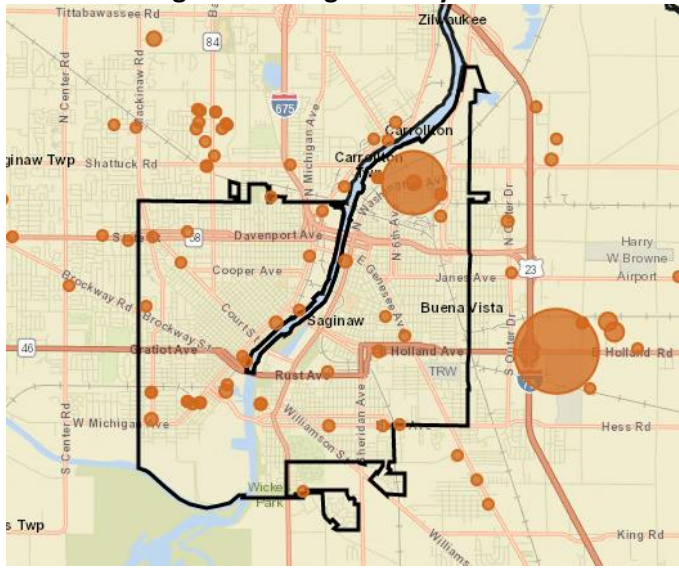
Manufacturing Sales in Saginaw County:



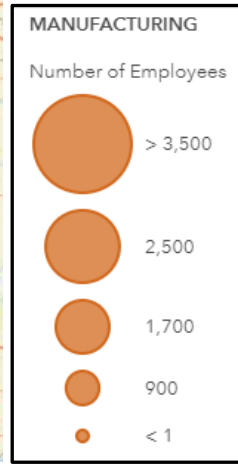
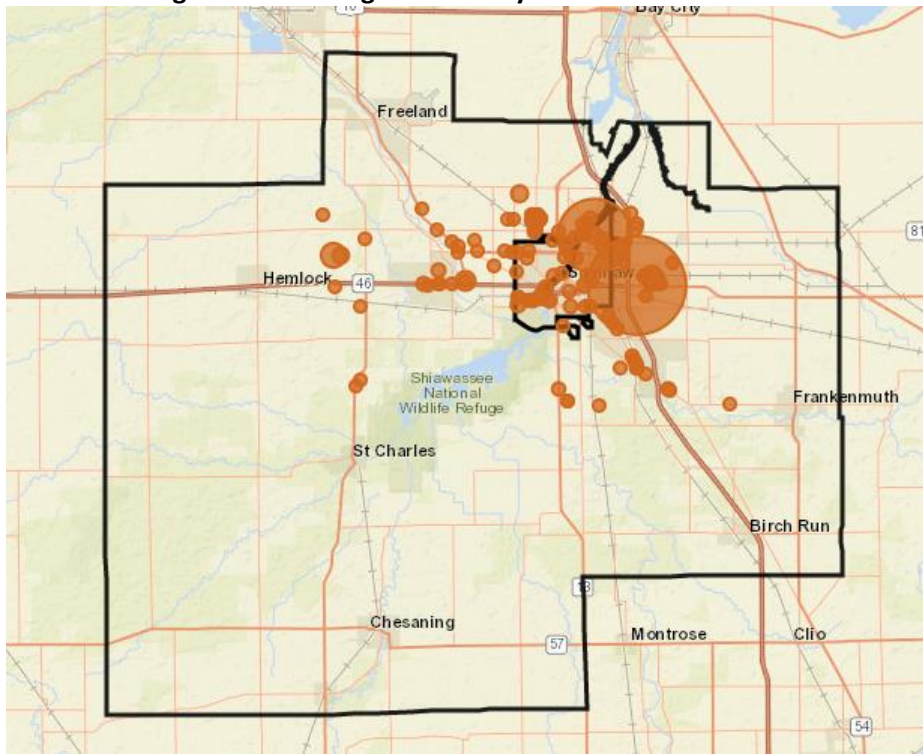
Manufacturing Sales Volume in Saginaw City:



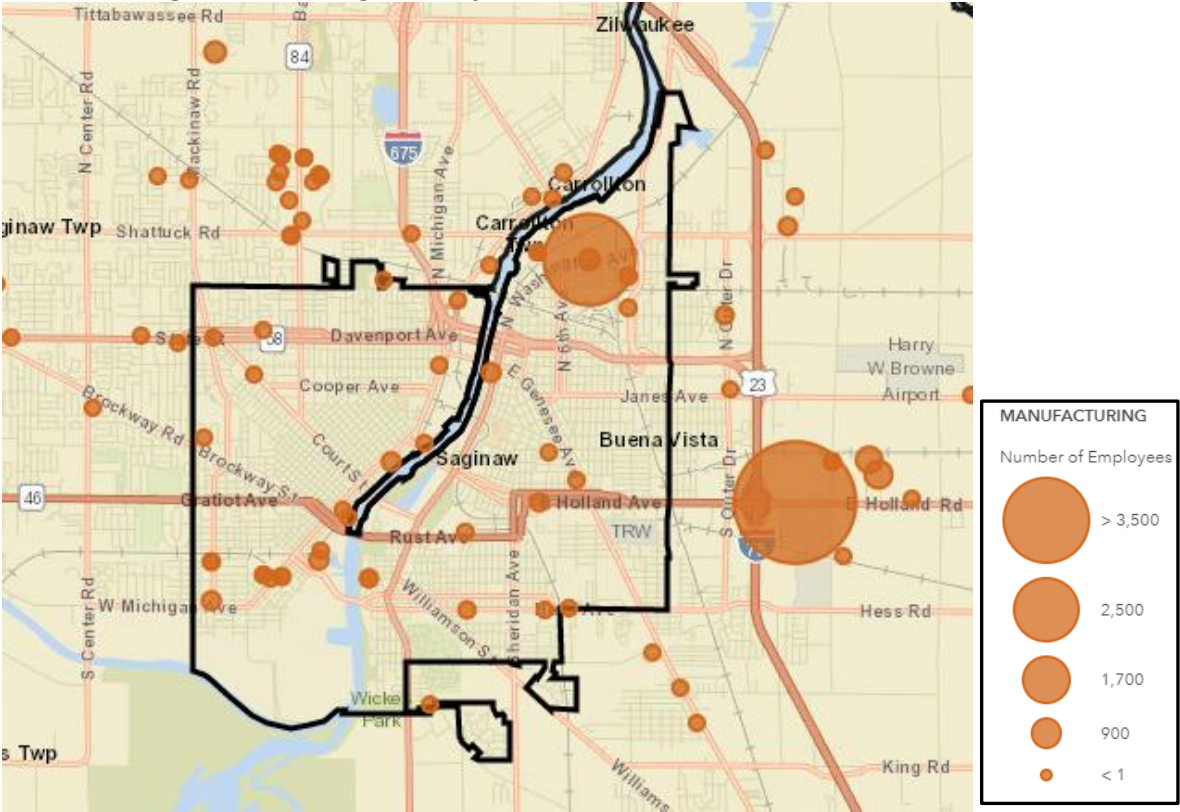
Manufacturing Firms in Saginaw City:



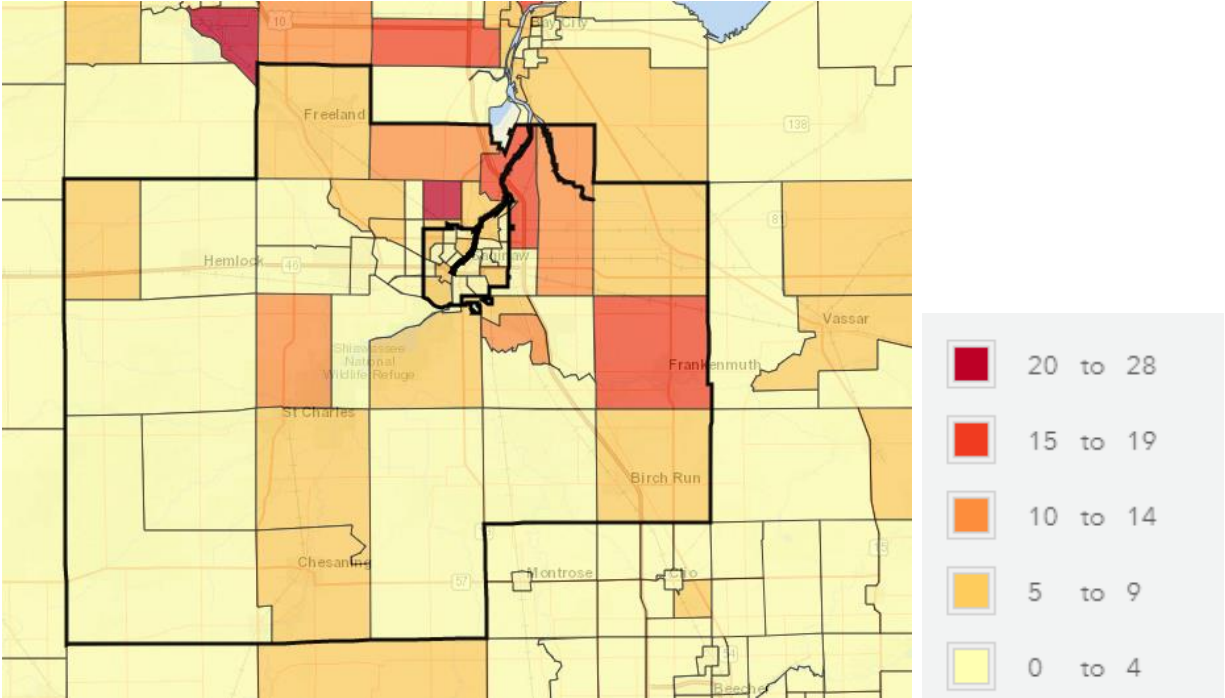
Manufacturing Workers in Saginaw County:



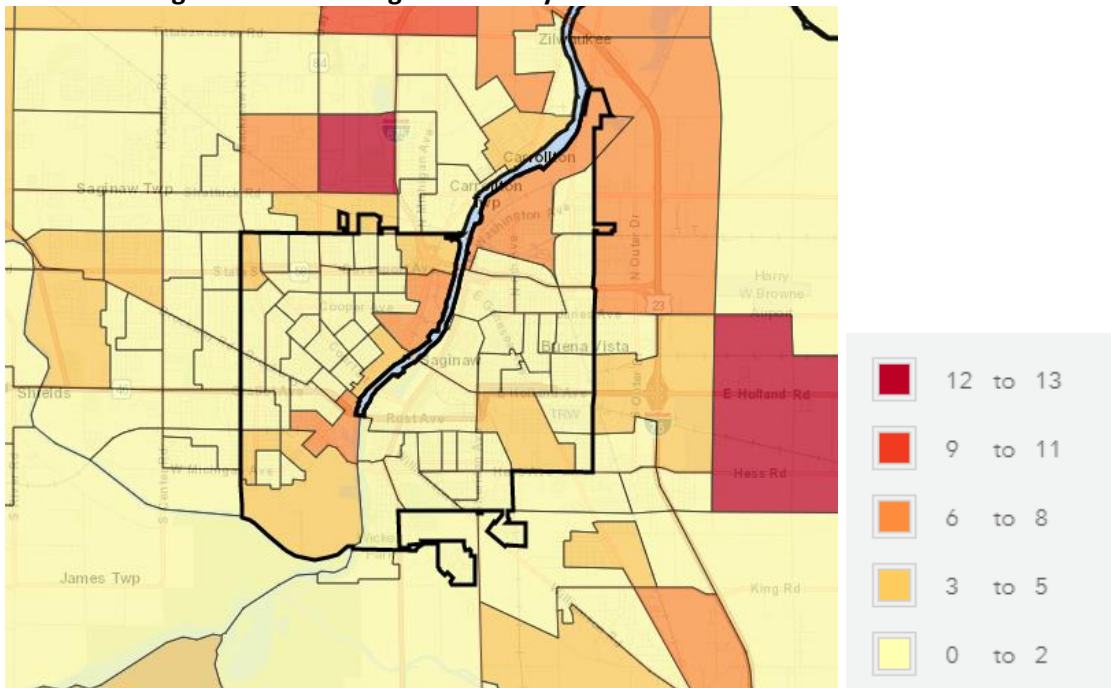
Manufacturing Workers in Saginaw City:



Manufacturing Businesses in Saginaw County:



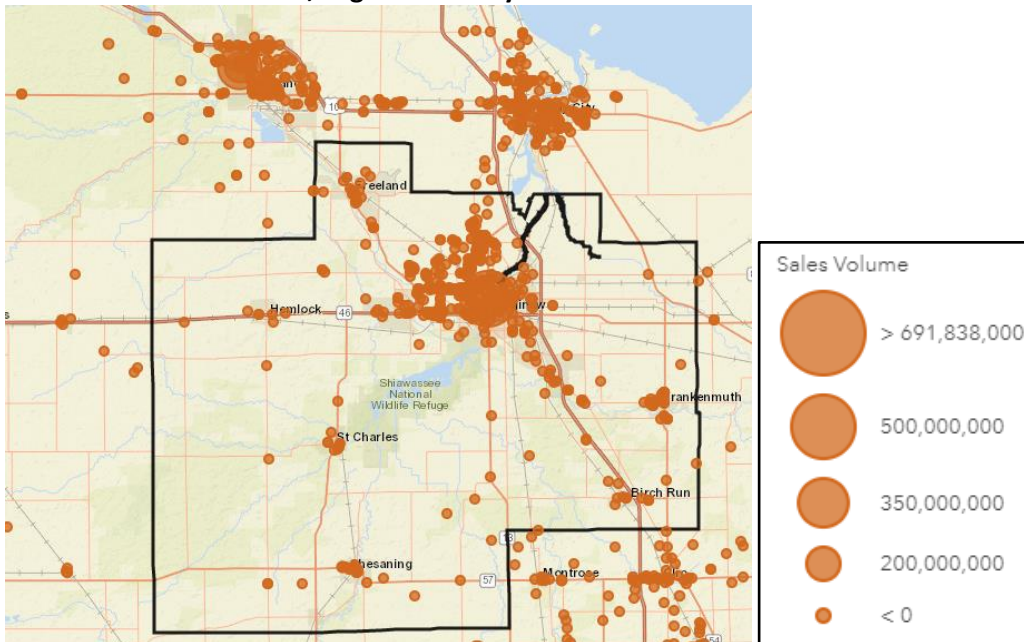
Manufacturing Businesses in Saginaw County:



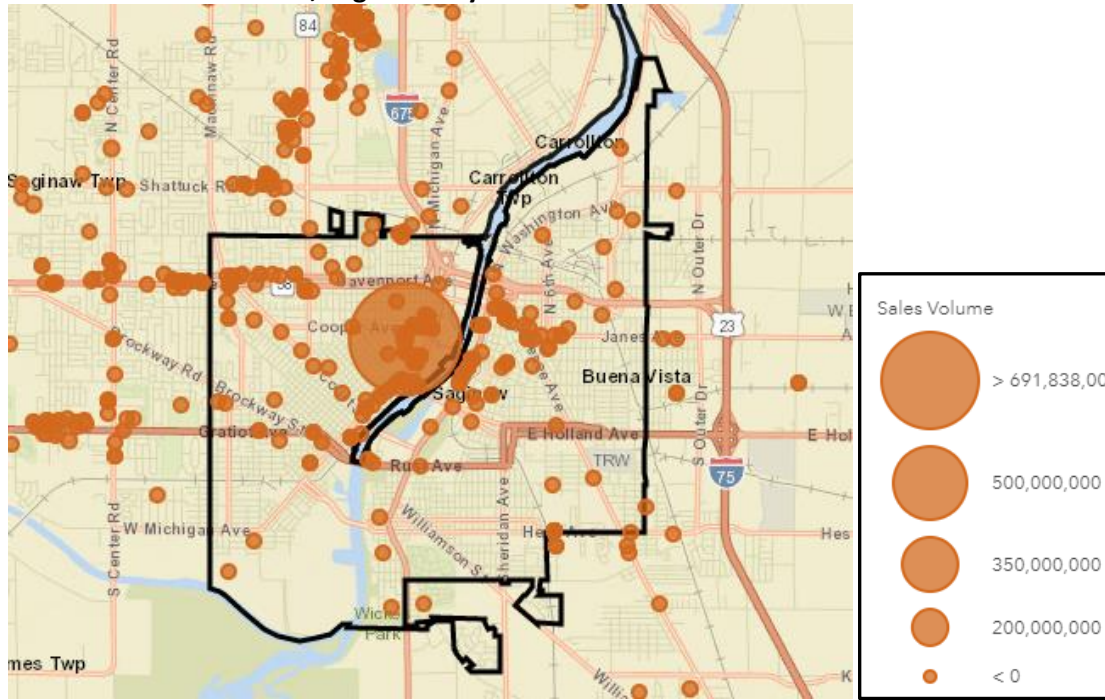
Healthcare Advantage

Saginaw exhibits a strong competitive advantage in terms of both healthcare talent and healthcare-related businesses. The tri-city Great Lakes Bay Region consists of a strong network of healthcare-related firms that center around MBS Airport in Freeland, Michigan. The number of workers in the healthcare industry in the region leads the state and should be considered a major competitive advantage in terms of business attraction, since very few regions in the country have as concentrated and diversified labor pool in this industry.

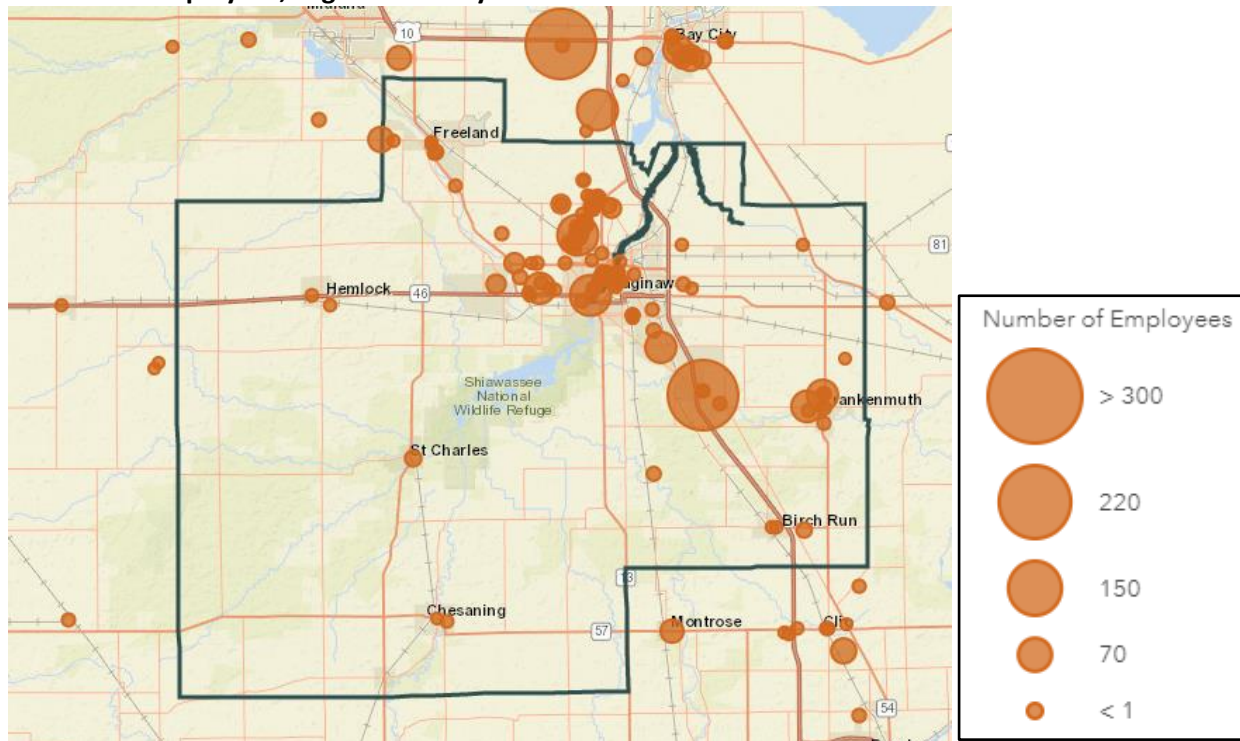
Healthcare Sales Volume, Saginaw County:



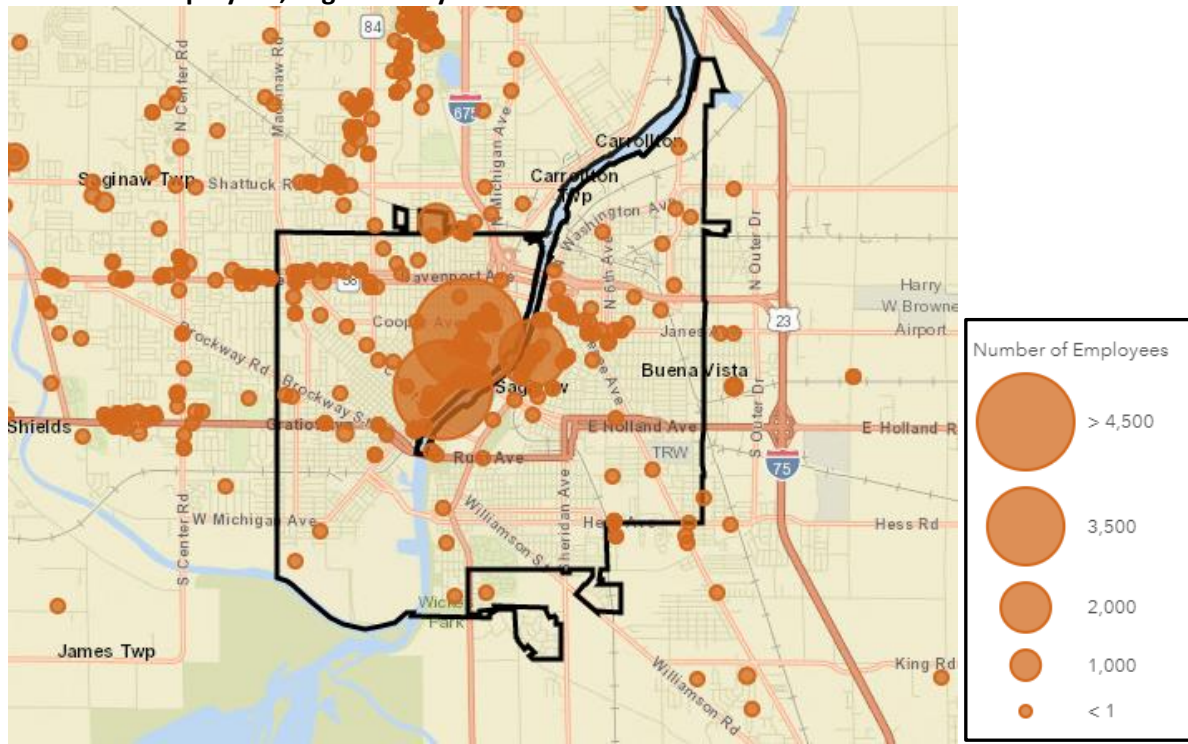
Healthcare Sales Volume, Saginaw City:



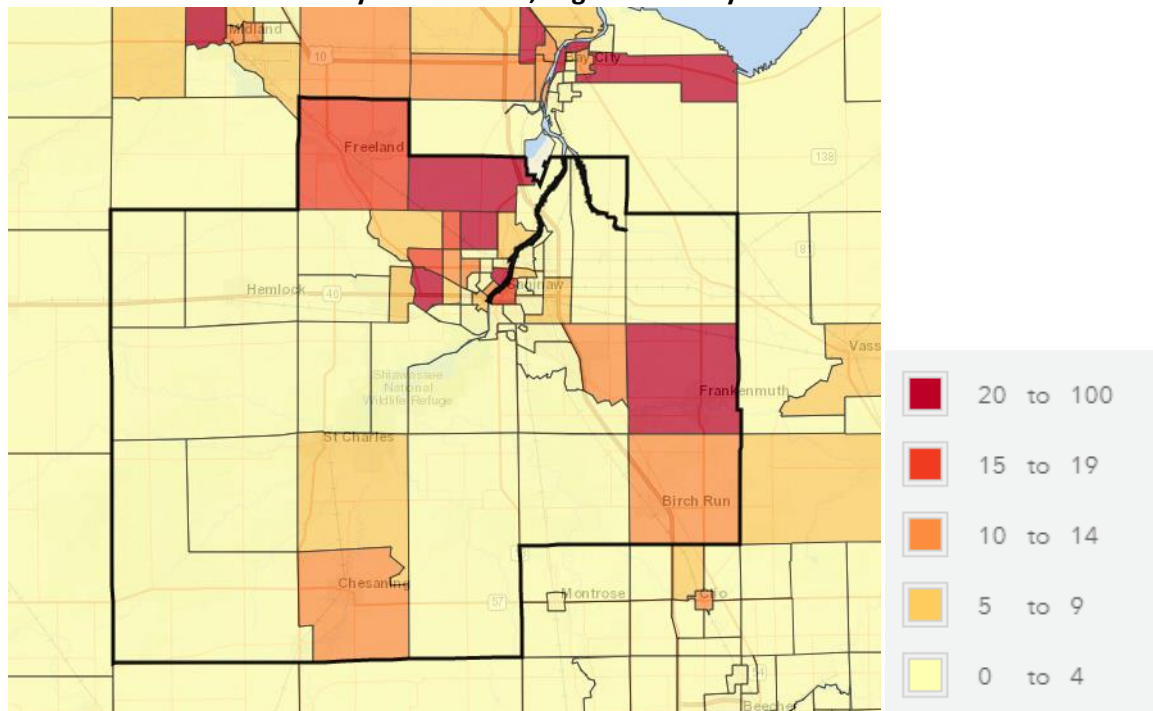
Healthcare Employees, Saginaw County:



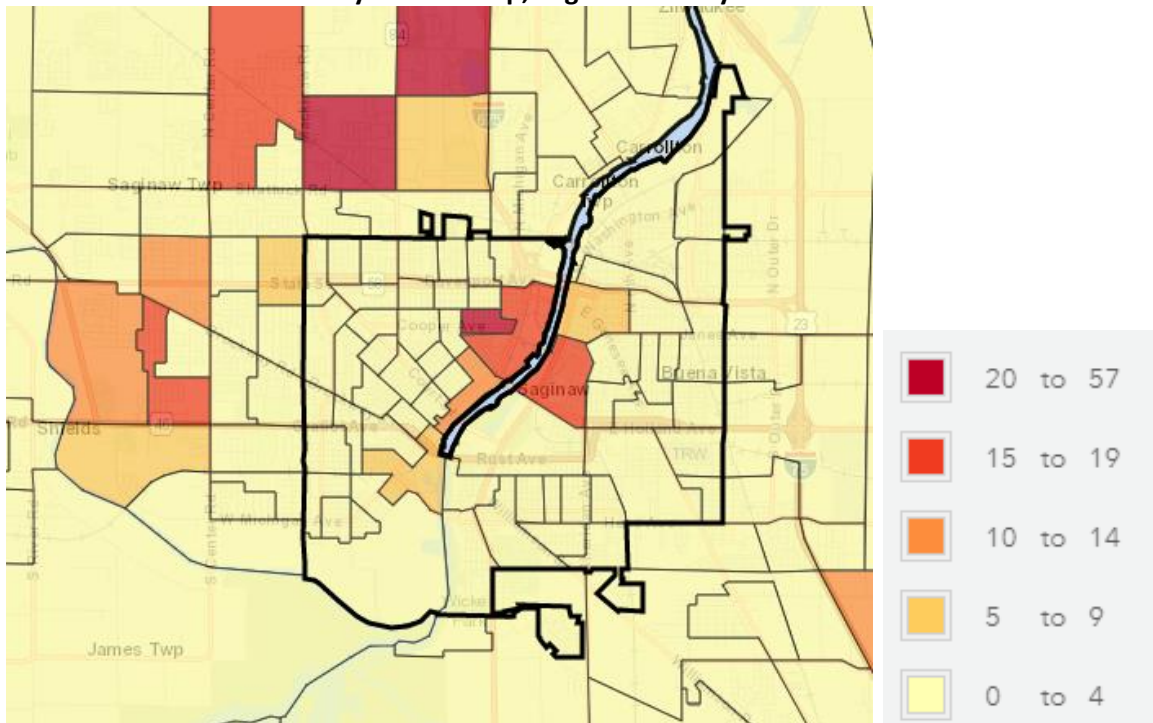
Healthcare Employees, Saginaw City:



Health Services Businesses by Census Tract, Saginaw County:



Health Services Businesses by Block Group, Saginaw County:



Summary Analysis

After reviewing the workforce and industry trends over the past five years, it is clear that Saginaw has a competitive advantage in terms of the manufacturing and healthcare industries. Within the city limits there is a much higher percentage of workers in both of these industries than the rest of the Great Lakes Bay Region, the state of Michigan, the Midwest, and the country. Furthermore, the number of businesses corresponds with the workforce to comprise a vibrant ecosystem for both manufacturing and healthcare.

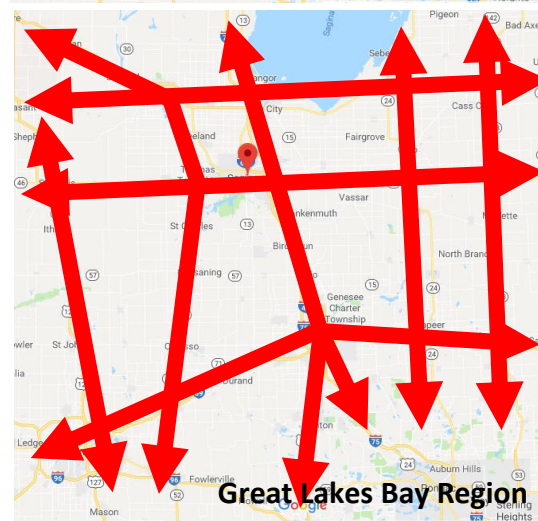
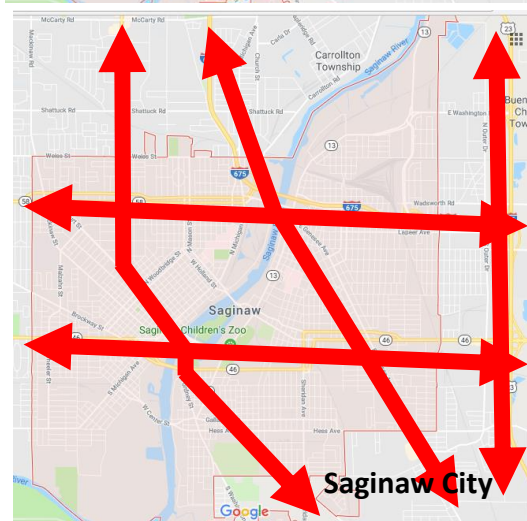
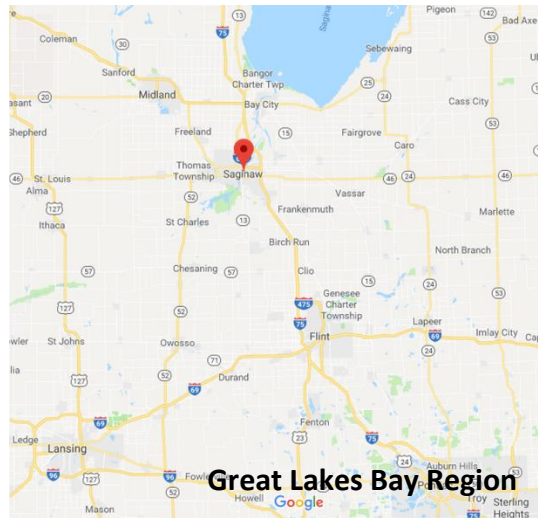
This analysis confirms that the clustering opportunities for future investment in Saginaw are in each of these key industries. The question then become which subindustries to focus on for future workforce training and business attraction efforts. The next section of this report, *Section 3: Access to Jobs & Mobility*, will provide further analysis related to the workforce strengths and developing a workforce ecosystem that addresses the immediate needs of the existing workforce while also creating the right conditions to attract additional workforce talent that targets these key industries.

3. ACCESS TO JOBS & MOBILITY

Saginaw is fortunate to have excellent highway connections. Its auto legacy in the region is obvious and clearly benefits from its proximity to Detroit. The lattice of highway connections throughout the region connects Saginaw to neighboring cities, regions, and even internationally to Canada. This is a major advantage when attracting businesses and promoting the region as a transportation and logistics hub. MBS International Airport is positioned to utilize trucking freight to ship international goods that arrive at its hub.

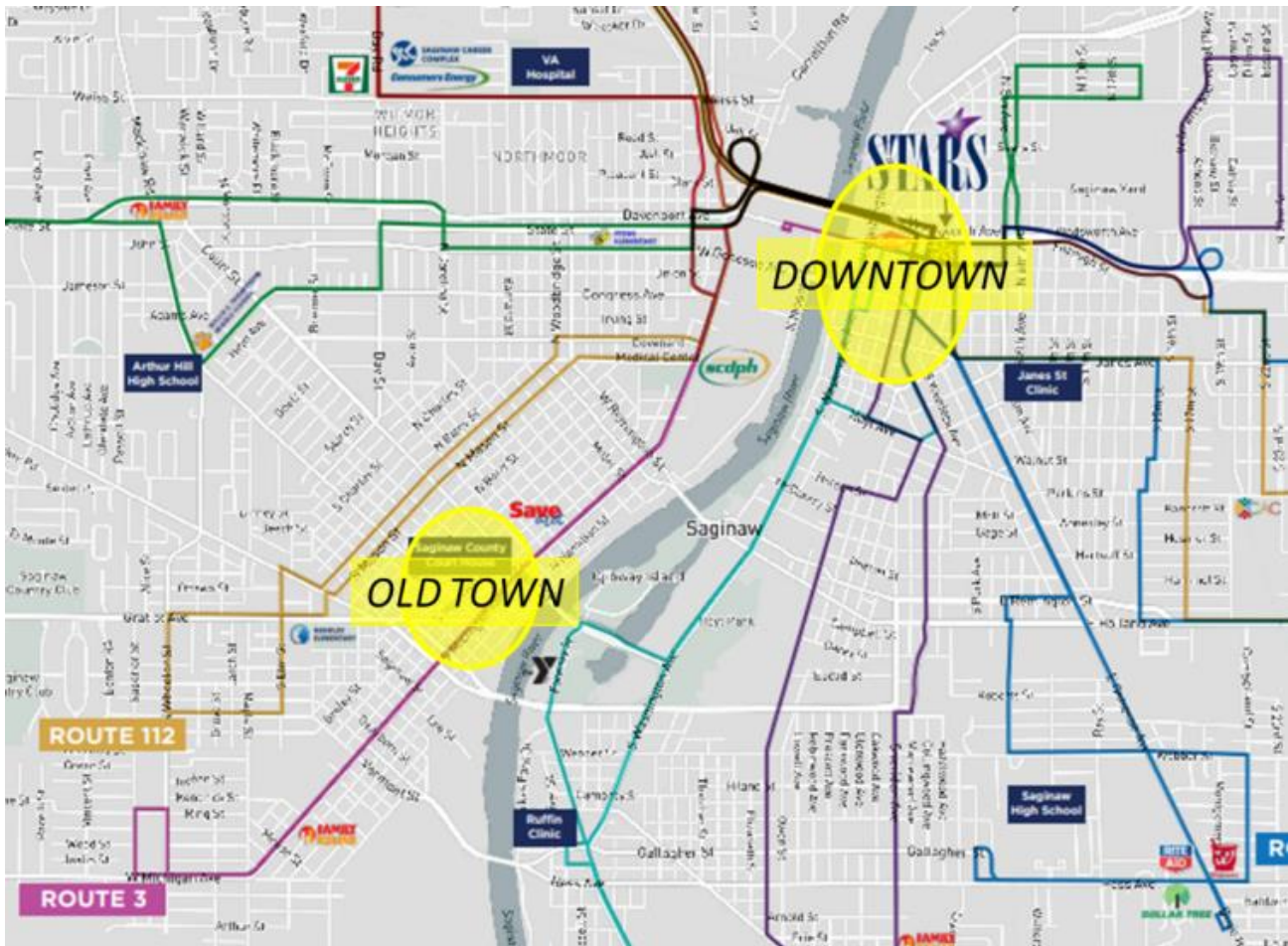
Transportation Nodes: Highways

While the highway network is complete and thorough, the public transit system has a few gaps. The STARS system is a clear asset for Saginaw and is far more built out compared to its regional neighbors, but there are a few areas in which public transportation could be improved in the city. Namely, the southeast corner of Saginaw has a large labor force that works at Covenant Medical Center on the west side of the city, but there are no STARS buses that cross any of the four southernmost bridges. Instead, workers who reside in the southeast corner of the city must take a bus towards the arena where they can transfer to another bus that will take them southwest to the medical center. This is a transportation inefficiency that can easily and affordably be resolved.



Transportation Nodes: Buses

There is also a need for a better connector between the Downtown and Old Town areas for visitors who may not be accustomed to using public transportation. There is a major cultural impediment to utilizing public transportation for many residents of Michigan, since the status quo consumer preference throughout the state is to use a car for all transportation needs. However, there is also a growing tourist industry in Saginaw that would be interested in frequenting the Arena area near Downtown in addition to the restaurants and pubs in Old Town. A new bus service line targeted at the health and medical campuses could also serve as a linkage between the workforce and jobs on each side of the river.



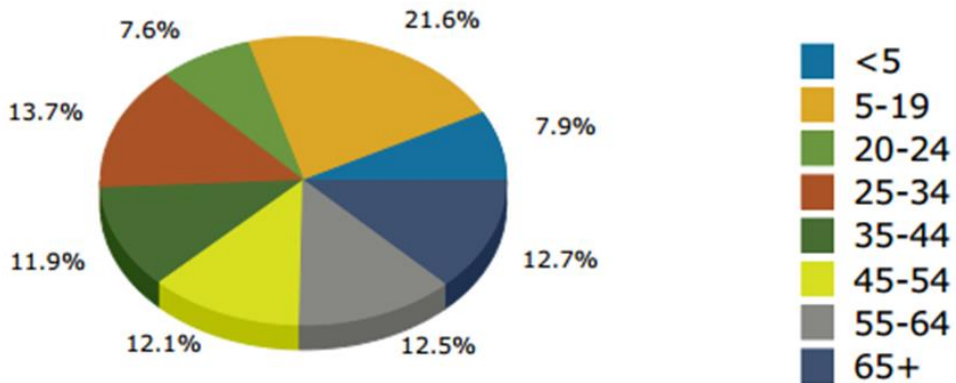
Demographic Advantages

Saginaw has a particularly young population with 31.9% of the population under the age of 20 and only 11.0% of the population over 64. This is a unique situation in comparison to much of the Upper Midwest, which tends to have a graying population. As such, Saginaw has considerable long-term comparative advantages in terms of its long-term workforce capabilities when compared with its regional neighbors.

Population by Age

Total	51,505	100.0%
Age 0 - 4	4,244	8.2%
Age 5 - 9	3,996	7.8%
Age 10 - 14	3,783	7.3%
Age 15 - 19	4,406	8.6%
Age 20 - 24	3,636	7.1%
Age 25 - 29	3,325	6.5%
Age 30 - 34	3,349	6.5%
Age 35 - 39	3,168	6.2%
Age 40 - 44	3,037	5.9%
Age 45 - 49	3,419	6.6%
Age 50 - 54	3,672	7.1%
Age 55 - 59	3,371	6.5%
Age 60 - 64	2,466	4.8%
Age 65 - 69	1,540	3.0%
Age 70 - 74	1,212	2.4%
Age 75 - 79	1,009	2.0%
Age 80 - 84	922	1.8%
Age 85+	950	1.8%
Age 18+	36,855	71.6%
Age 65+	5,633	10.9%

2017 Population by Age



Household

Dynamics

Saginaw also has a heavily family-oriented population with 61.9% of the population in family households. Most notably, 37.4% of the total population lives in family households with four or more people. This suggests that the population of Saginaw will have substantial staying power in comparison to its regional neighbors which are dominated by more households with singles and couples without children.

The following charts provide more detailed information related to the households and demographics of Saginaw. Note that all of the above are considered to be very high:

- 41.2% of households spend at least 50% of their household income on housing
- 43.8% of households are on food stamps
- 40.7% of households have at least one person with a disability
- 16.0% vacancy rate for housing in Saginaw

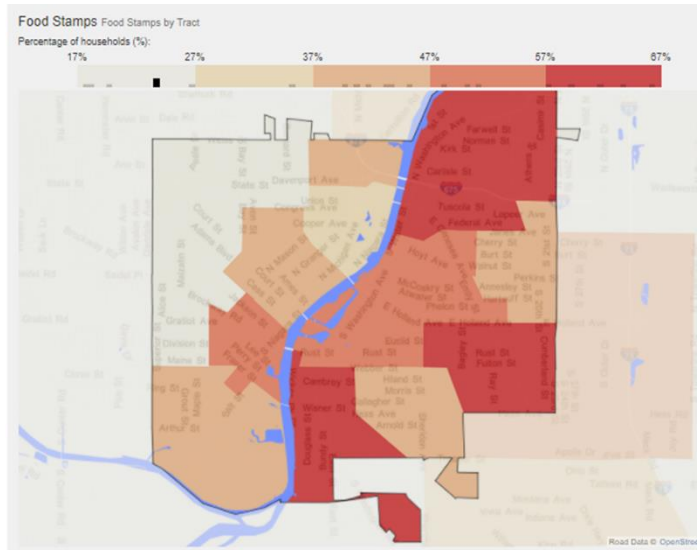
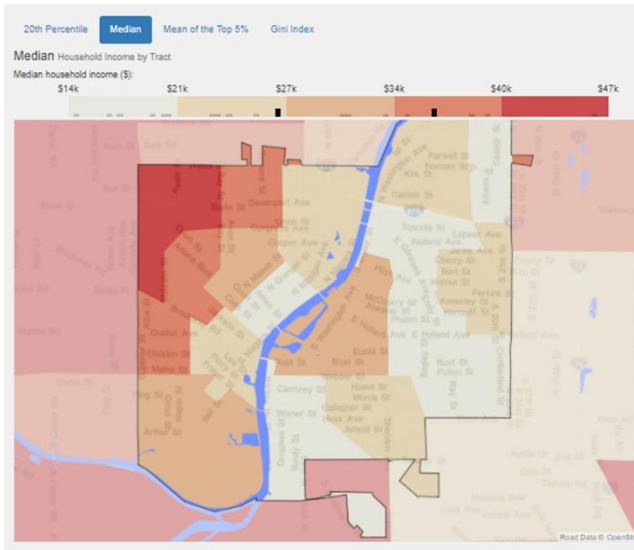
Households by Type		
Total	19,798	100.0%
Households with 1 Person	6,357	32.1%
Households with 2+ People	13,441	67.9%
Family Households	12,251	61.9%
Husband-wife Families	5,322	26.9%
With Own Children	2,036	10.3%
Other Family (No Spouse Present)	6,929	35.0%
With Own Children	4,030	20.4%
Nonfamily Households	1,190	6.0%
All Households with Children	7,128	36.0%
Multigenerational Households	1,159	5.9%
Unmarried Partner Households	1,645	8.3%
Male-female	1,541	7.8%
Same-sex	104	0.5%
Average Household Size	2.52	
Family Households by Size		
Total	12,251	100.0%
2 People	4,524	36.9%
3 People	3,134	25.6%
4 People	2,377	19.4%
5 People	1,242	10.1%
6 People	564	4.6%
7+ People	410	3.3%
Average Family Size	3.19	

GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS

<10% of Income	218	2.8%
10-14.9% of Income	361	4.7%
15-19.9% of Income	629	8.2%
20-24.9% of Income	490	6.4%
25-29.9% of Income	654	8.5%
30-34.9% of Income	531	6.9%
35-39.9% of Income	292	3.8%
40-49.9% of Income	586	7.6%
50+% of Income	3,180	41.2%
Gross Rent % Inc Not Computed	770	10.0%

Total Housing Units by Occupancy

Total	23,573	100.0%
Occupied Housing Units	19,798	84.0%
Vacant Housing Units		
For Rent	1,096	4.6%
Rented, not Occupied	53	0.2%
For Sale Only	556	2.4%
Sold, not Occupied	232	1.0%
For Seasonal/Recreational/Occasional Use	47	0.2%
For Migrant Workers	1	0.0%
Other Vacant	1,790	7.6%
Total Vacancy Rate	16.0%	



HOUSEHOLDS BY PUBLIC ASSISTANCE INCOME IN THE PAST 12 MONTHS		
Total	19,286	100.0%
With public assistance income	1,545	8.0%
No public assistance income	17,741	92.0%

HOUSEHOLDS BY FOOD STAMPS/SNAP STATUS		
Total	19,286	100.0%
With Food Stamps/SNAP	8,456	43.8%
With No Food Stamps/SNAP	10,830	56.2%

HOUSEHOLDS BY DISABILITY STATUS		
Total	19,286	100.0%
With 1+ Persons w/Disability	7,842	40.7%
With No Person w/Disability	11,444	59.3%

Workforce Inflow/Outflow Analysis

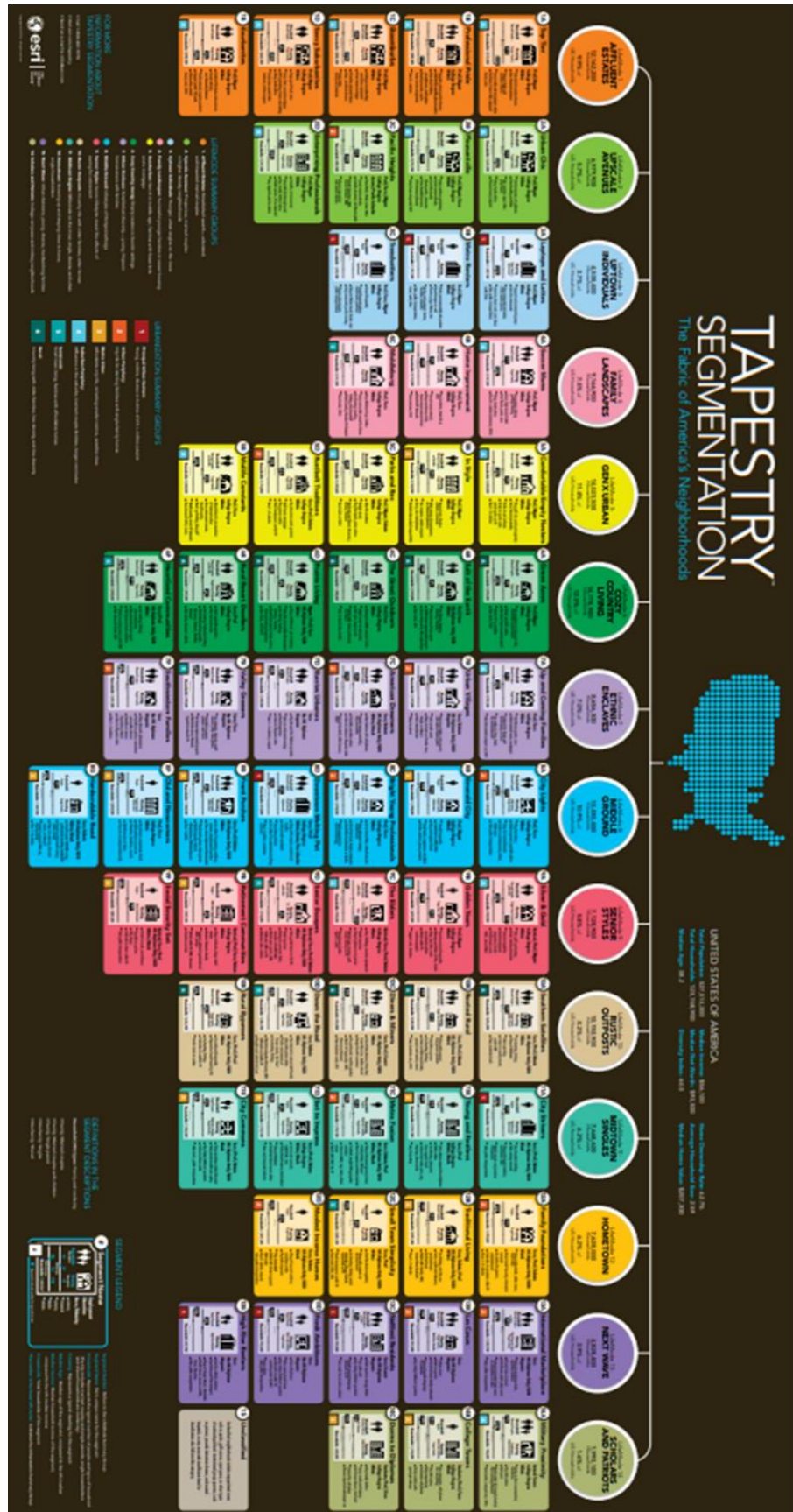
In terms of daily workforce counts, 21,381 commute into Saginaw and an additional 11,657 workers leave the city on a daily basis. Meanwhile, only 3,253 people who reside within the city limits also work in the city. The live-work retainage rate of 6.6% is an unusually low number of individuals who live and work in a city of nearly 50,000 people. It would be recommended that efforts are made to increase the number of residents who work locally. That said, the overall inflow-outflow analysis for Saginaw is positive, since the difference between inflow and outflow yields a net increase of 9,724 people who commute into the city on a daily basis



Household Tapestry Segmentation

The geographic information systems consultancy, Esri, produces an annual “Household Tapestry Segmentation” analysis categorizes all American households into 14 categories and 68 subcategories based on income, household ownership characteristics, family demographics, and consumer preferences.

According to this Tapestry Segmentation analysis, approximately one-third of its households (32.9%) are characterized as “12D: Modest Income Homes.” These households are primarily located on the east side of the river. All of these households reside on the east side of the river and make up approximately 90% of the household population east of the river.



Meanwhile, an additional third of the population (29.3%) live in households that are described as “8G: Hardscrabble Road.” All of these households reside on the west side of the river and make up approximately 70% of the household population west of the river.

Rank	Tapestry Segment	2017 Households		2017 U.S. Households		Index
		Percent	Cumulative Percent	Percent	Cumulative Percent	
1	Modest Income Homes (12D)	32.9%	32.9%	1.3%	1.3%	2487
2	Hardscrabble Road (8G)	29.3%	62.2%	1.2%	2.5%	2,393
3	Traditional Living (12B)	18.2%	80.4%	1.9%	4.4%	938
4	City Commons (11E)	6.0%	86.4%	0.9%	5.3%	669
5	Rustbelt Traditions (5D)	3.9%	90.3%	2.2%	7.5%	175
Subtotal		90.3%		7.5%		
6	Heartland Communities (6F)	3.2%	93.5%	2.3%	9.8%	139
7	Social Security Set (9F)	3.0%	96.5%	0.8%	10.6%	374
8	Small Town Simplicity (12C)	2.1%	98.6%	1.9%	12.5%	113
9	Midlife Constants (5E)	1.4%	100.0%	2.5%	15.0%	54
Subtotal		9.7%		7.5%		



A detailed analysis of the household compositions associated with these two Tapestry Segmentations is listed on the following page. “12D: Modest Income Homes” households tend to be characterized by low incomes, low household wealth, spend very little on apparel and services, are slightly younger than the US median age (37.0 as opposed to the US average of 38.2 years old), and are typically African American.

“8G: Hardscrabble Road” households are similarly characterized by low incomes and low household wealth, but they spend more than the US average on transportation, are much younger than the US median age (32.4 years old) and are typically White.

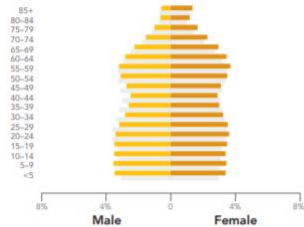




AGE BY SEX (Esri data)

Median Age: **37.0** US: 38.2

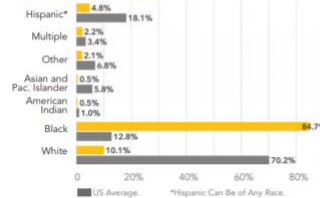
|||| Indicates US



RACE AND ETHNICITY (Esri data)

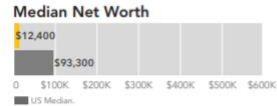
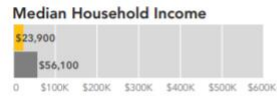
The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

Diversity Index: **34.0** US: 64.0



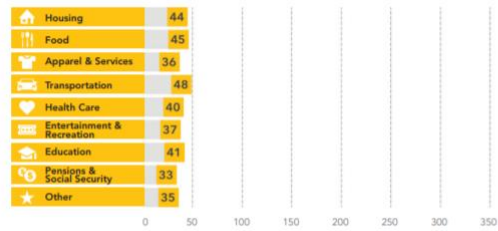
INCOME AND NET WORTH

Net worth measures total household assets (homes, vehicles, investments, etc.) less any debts, secured (e.g., mortgages) or unsecured (credit cards). Household income and net worth are estimated by Esri.



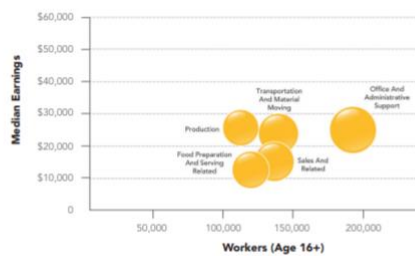
AVERAGE HOUSEHOLD BUDGET INDEX


The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures are estimated by Esri.




OCCUPATION BY EARNINGS

The five occupations with the highest number of workers in the market are displayed by median earnings. Data from the Census Bureau's American Community Survey.



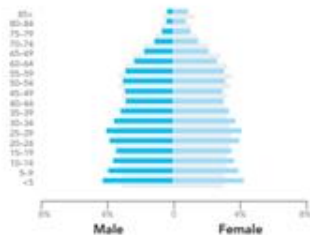




AGE BY SEX (Esri data)

Median Age: **32.4** US: 38.2

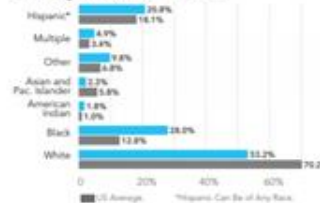
|||| Indicates US



RACE AND ETHNICITY (Esri data)

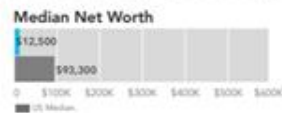
The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

Diversity Index: **75.7** US: 64.0



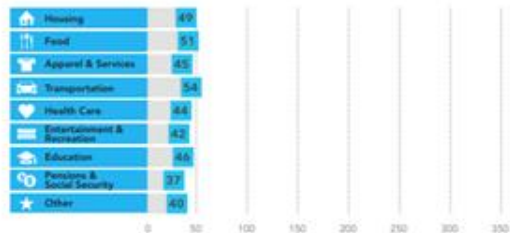
INCOME AND NET WORTH

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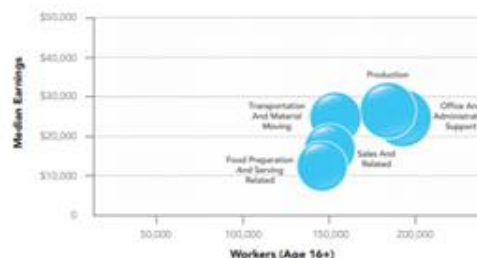
AVERAGE HOUSEHOLD BUDGET INDEX

The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures are estimated by Esri.



OCCUPATION BY EARNINGS

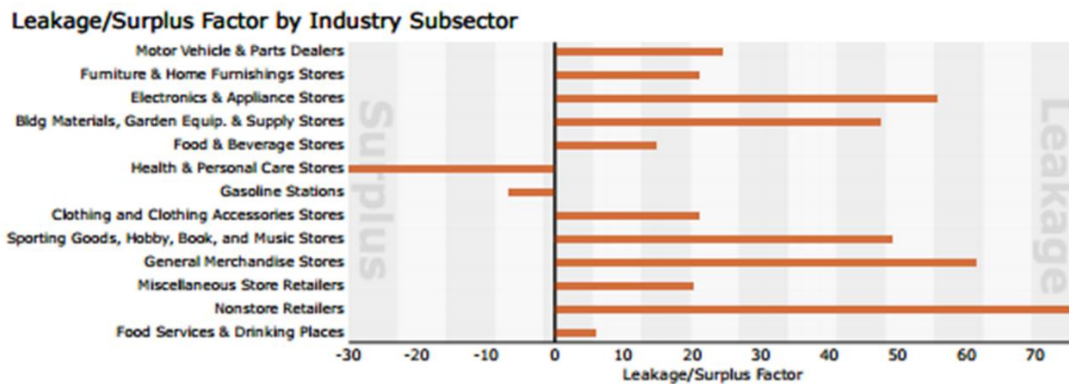
The five occupations with the highest number of workers in the market are displayed by median earnings. Data from the Census Bureau's American Community Survey.



Retail Access

Although there is some local retail revival near Old Town, there is very little retail availability within the Saginaw city limits. Consumers rely on several shopping centers for the majority of their clothing, recreational apparel, and household furnishing needs. Fashion Square Mall, Fashion Corner, and Green Acres Plaza serve as the shopping centers that Saginaw residents regularly identify as local shopping alternatives. However, it is clear that the high levels of retail leakage that occur in Saginaw yield substantial opportunity for increased retail in the area.

There is a sizeable opportunity for increased retail in Saginaw, as evidenced by the extremely high leakage/surplus factor that exists for numerous industries. The only major surplus industries serving the Saginaw market are “Health & Personal Care” stores and gas stations. However, there is an enormous missed opportunity for retail associated with “General Merchandise” (59% leakage factor), “Electronics and Appliance Stores” (56% leakage factor), and “Building Materials, Garden Equipment and Supply Stores” (49% leakage factor). (chart source: Esri)



Site Selection

Saginaw scores very well in terms of attracting businesses to relocate within its city limits. Site Selection Magazine recently named Saginaw the ninth-placed city in the US amongst all metro areas with less than 200,000 people. Saginaw attracted seven new large-scale businesses in 2017.

2017 Rank	2016 Rank	Metro	State	Projects
1	1	Sioux City	Iowa-Neb.-S.D.	26
T2	T7	Owensboro	Ky.	13
T2	2	Bowling Green	Ky.	13
T2	3	Gainesville	Ga.	13
5	T60	Florence-Muscle Shoals	Ala.	12
6	T31	Sheboygan	Wis.	11
7	T20	Decatur	Ala.	9
8	T48	Joplin	Mo.	8
T9	T60	Midland	Texas	7
T9	T60	Lewiston-Auburn	Maine	7
T9	T31	St. Joseph	Mo.-Kan.	7
T9	T9	Saginaw	Mich.	7

Source: Conway Projects Database

Summary Analysis

Saginaw has several attributes that support further business investment, including the following:

- Low housing costs provide an attractive environment for attracting workforce
- Relatively low wages create an affordable climate for attracting businesses
- City management and economic development efforts have attracted seven large-scale investment projects to Saginaw, which places it in a tie for 9th in the nation for metro areas under 200,000 people
- Based on Esri's "Retail Leakage/Surplus Factor" analysis, 11 out of 13 of the industry subsectors identified were determined to be areas where leakage has occurred. The only two categories that Saginaw exhibits a surplus are Health & Personal Care Stores and Gas Stations. This suggests that there is substantial opportunity for investment in the remaining 11 industry subsectors.
- Unlike their regional neighbors, Saginaw has a more dependable public alternative to car ownership, which provides a lower-cost alternative to commuting
- The relatively youthful population when compared to its regional neighbors is an incentive for attracting businesses, since the workforce diversity promotes a greater variety of skills and responsibilities

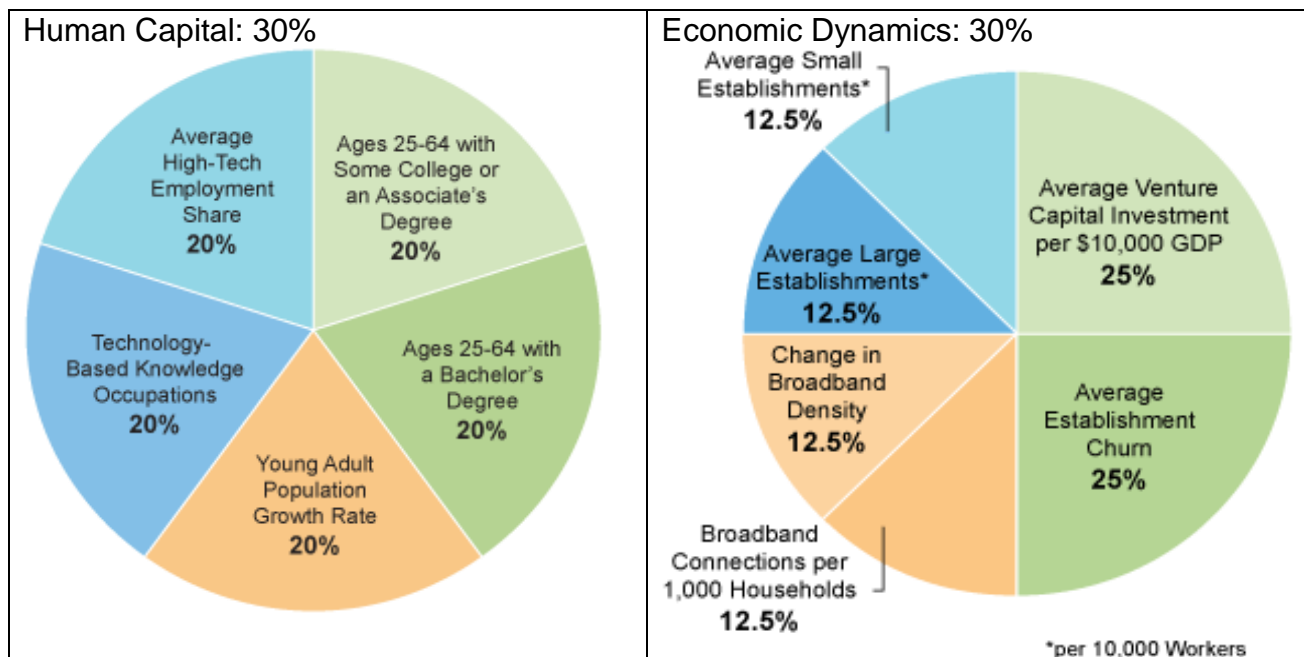
The next section continues upon this workforce and business attraction discussion by providing a more detailed assessment of the human capital and economic dynamics of Saginaw and the immediately surrounding region through the Innovation Index.

4. INNOVATION INDEX

Over the past decade, the Indiana Business Research Center and the Purdue Center for Regional Development in collaboration with the Rural Policy Research Institute have worked on a series of tools to more accurately portray economic attributes and potential. The tool is the Innovation Index. The index is calculated from a number of traditional and proprietary sources in four specific categories: human capital, economic dynamics, productivity and employment, and economic well-being. Each category is made up of a series of data points that taken together provide a picture of a geographic area’s current economic condition and potential.

The Innovation Index compares regional performance to the United States and is calculated from four component indexes. It takes a broad look at indicators related to innovation from both the input and output perspectives. Based on statistical analysis, several factors appear to be especially important for increasing economic growth: educational attainment; young-adult population growth; high-tech employment growth; and the number of small establishments. Economies do not recognize political boundaries used in governing, such as counties and states. Each region will have a different mix of qualities that can boost its overall innovation score, and no two regions will be exactly alike.

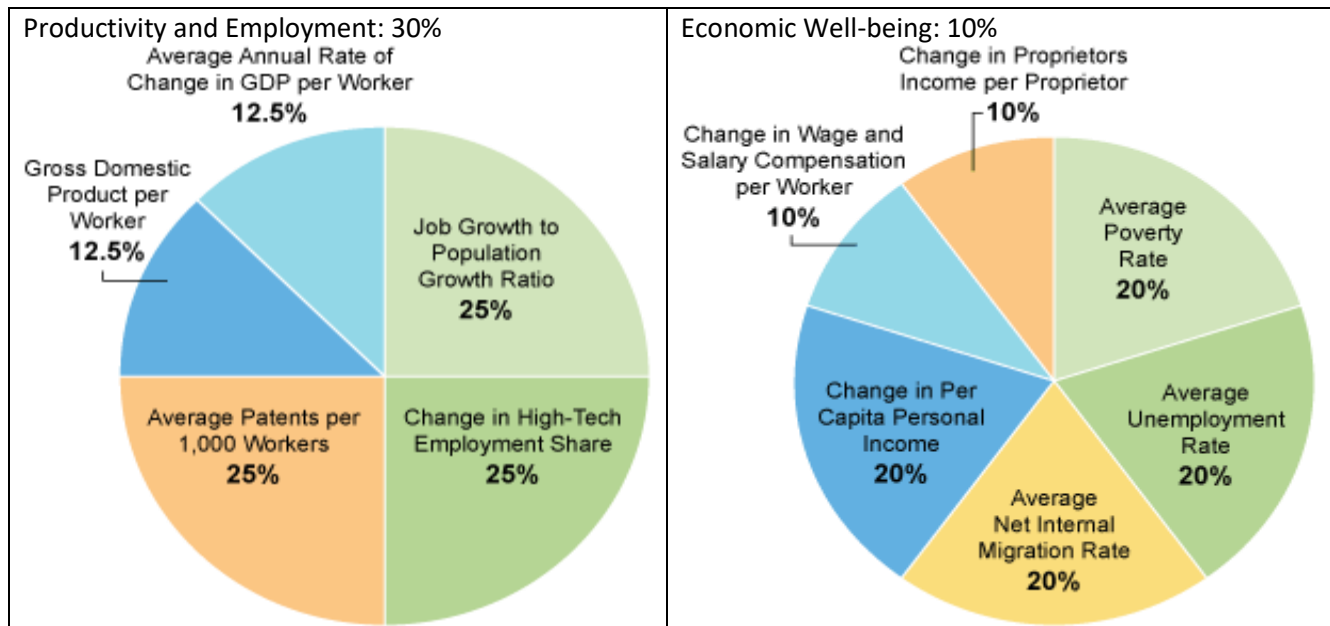
Variables in the Innovation Index are derived from both official government statistical agencies and several private, proprietary sources, including Moody’s economy.com, Decision Data Resources, Economic Modeling specialists, Inc. and Venture Deal. These proprietary data were used in specific index calculations. The public sources include: the Federal Communications Commission, National Science Foundation, US Bureau of Economic Analysis, US bureau of Labor Statistics, and the US Census Bureau. The weight for each variable is listed below.



The index incorporates a mix of input measures that characterize the place and its people, such as, educational attainment, youth population, and high tech jobs. These account for 60% of the overall index score. The index also characterizes output measures, such as, business starts and venture capital that characterize its economic success (40% of the overall score).

Inputs and capacity refer to the ability of the population and labor force to innovate. It is captured in two component indexes that include inputs into local economies: *Human Capital and Economic Dynamics*.

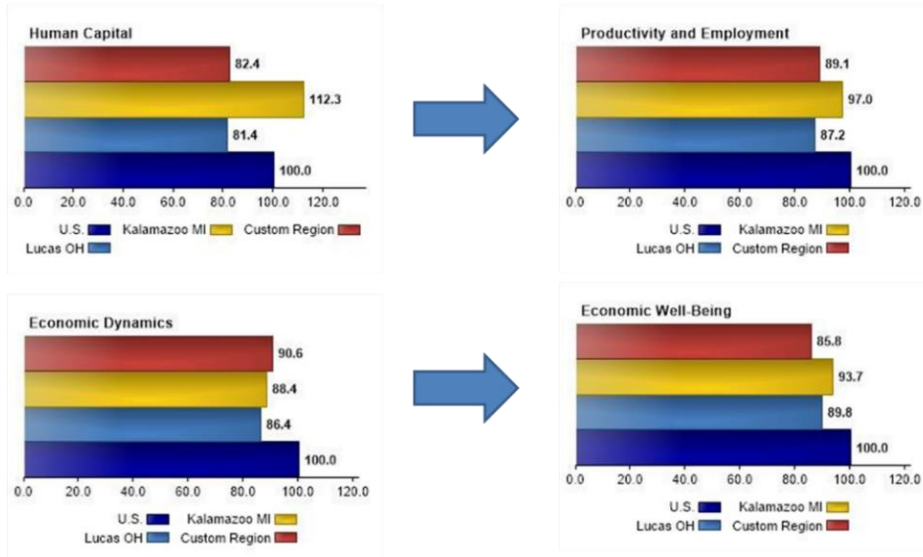
Outputs refer to direct outcomes and economic improvements as a result of innovative activities. It is captured in two component indexes that include: *Productivity and Employment, and Economic Well-being*.



The summary Innovation Index displays the United States in blue, Lucas County, Ohio in light blue, Kalamazoo County, Michigan, in yellow, and Saginaw and Saginaw County together in red (referenced as the “custom region”). It combines all variables, including both inputs, and outputs, into a single index of current condition and potential.

According to this summary index, all three regions are below the national average for innovation and potential with one exception for Kalamazoo County in human capital. Digging into the individual elements of the index will demonstrate those factors that are contributing to the region’s growth and innovation and which elements are limiting the region’s potential. Note that the following images in each category display data over time while the index is from the most recent year data is available.

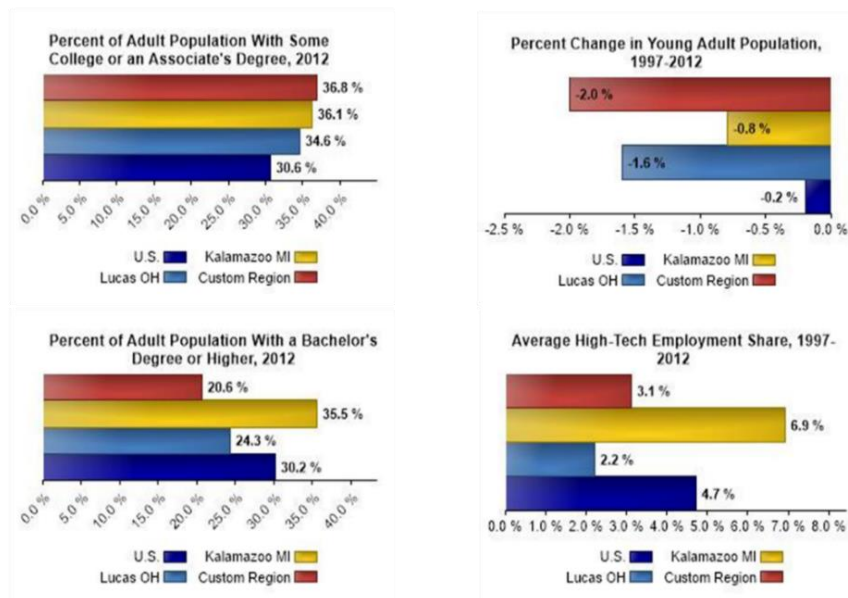
Overall Index 79.9



Human Capital Index

Human capital inputs are those characteristics that describe the ability of the population and labor force to innovate. The inputs include: educational attainment, population growth rates, high-tech employment share, and technology-based knowledge occupations. Note the images display data over time while the index is from the most recent year data is available.

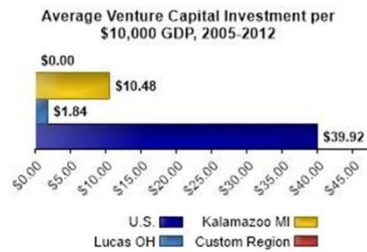
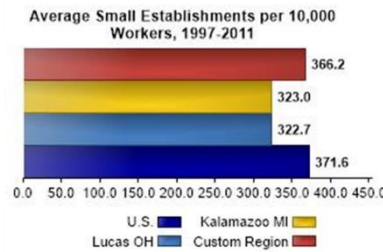
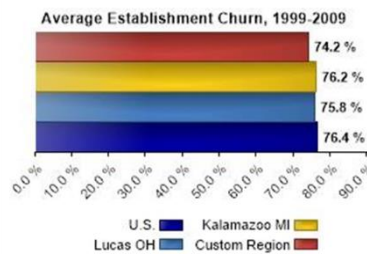
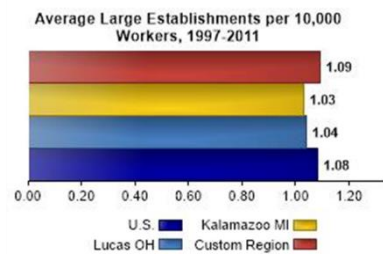
Human Capital – Index 100.4



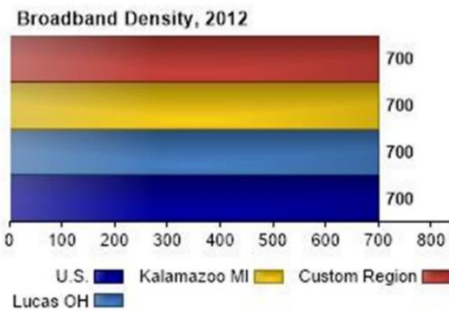
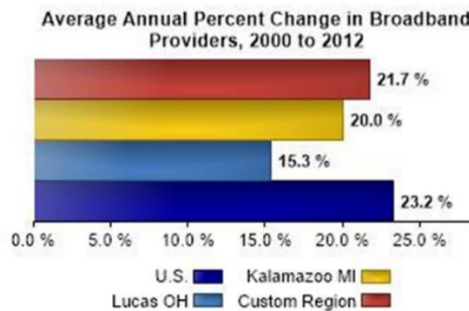
Economic Dynamics Index

Economic dynamics inputs are those characteristics that describe *local* resources available to regional entrepreneurs and businesses that encourage innovation close to home. These inputs include the venture capital available to fuel start-ups and business growth, broadband density and penetration necessary to connect individuals and companies to the world at large (meaning, in part, the potential to locate in a geographically isolated rural area rather than a densely populated urban community), and how quickly innovation forces companies to reinvest and retool, as new companies enter the market. Note the images display data over time while the index is from the most recent year data is available.

Economic Dynamics – Index 43.9



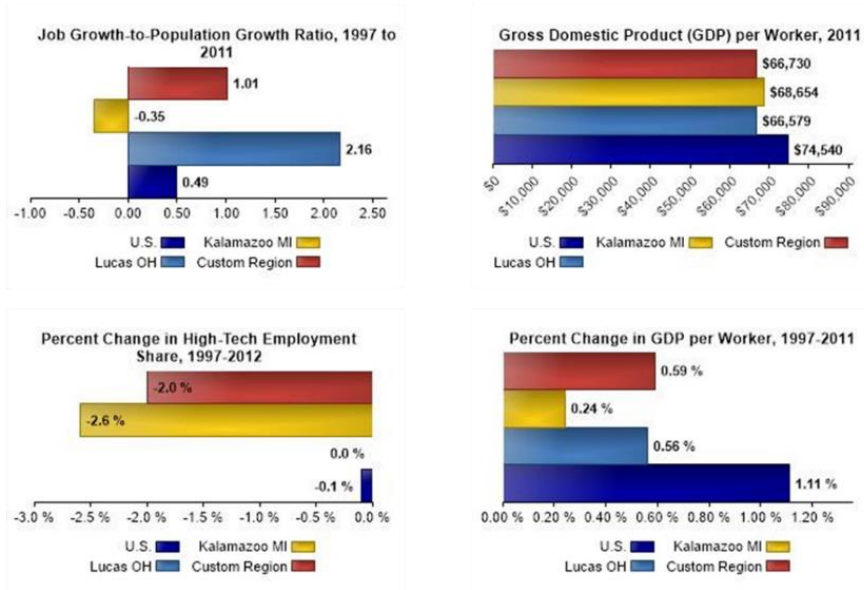
Economic Dynamics – Index 43.9



Productivity & Employment Index

Productivity and employment measures economic improvement, regional desirability, and the direct outcomes of innovation. It includes data that measures changes in high tech employment, job growth, gross domestic product per worker, and average patents per worker. Note the images display data over time while the index is from the most recent year data is available.

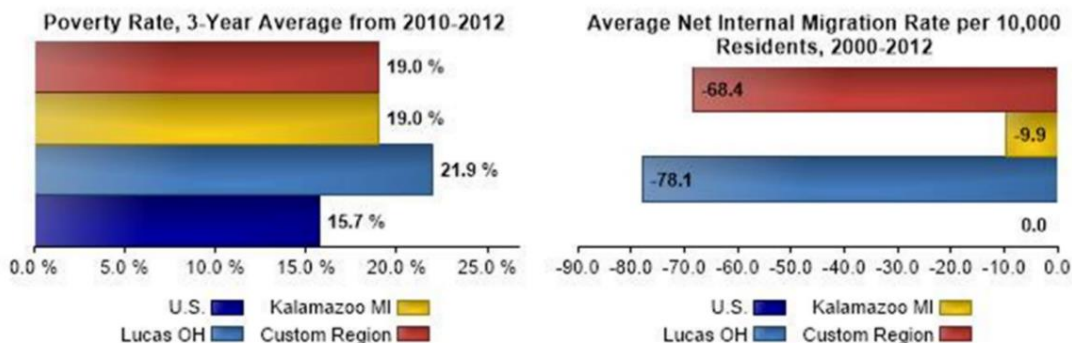
Productivity + Employment – Index 91.1



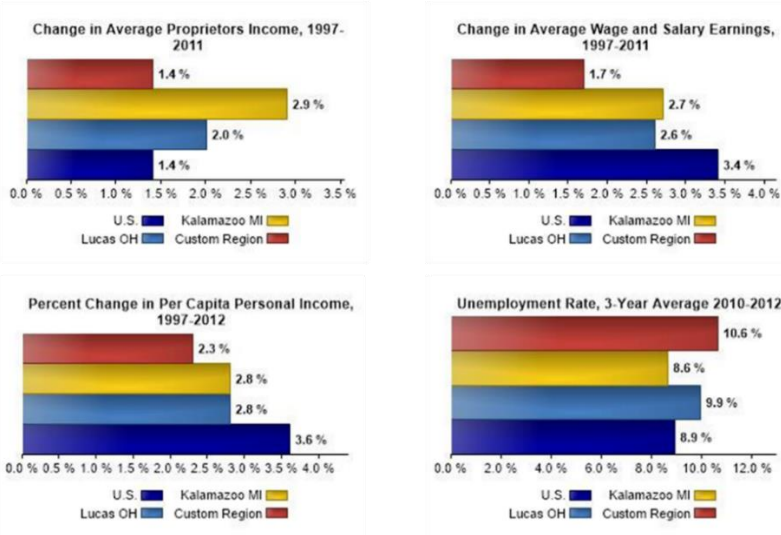
Economic Wellbeing Index

Innovative economies improve economic well-being for residents because they earn more and have in increasing standard of living. The index includes individual measures that have been discussed separately earlier in this section, such as, unemployment, growth, and compensation, and adds poverty and migration as factors. Note the images display data over time while the index is from the most recent year data is available.

Economic Wellbeing – Index 81.1



Economic Wellbeing – Index 81.1



Overall Index Summary

The overall index summary chart compares Saginaw to the cities of Dayton, Kalamazoo, and Toledo. Saginaw trails its peers in every category. However, it is important to note that Saginaw’s score in Productivity + Employment is much better than its other scores and nearly on par with its peers. Saginaw’s strength in patents in particular, productivity, and general economic improvement indicates assets on which to build for future growth.

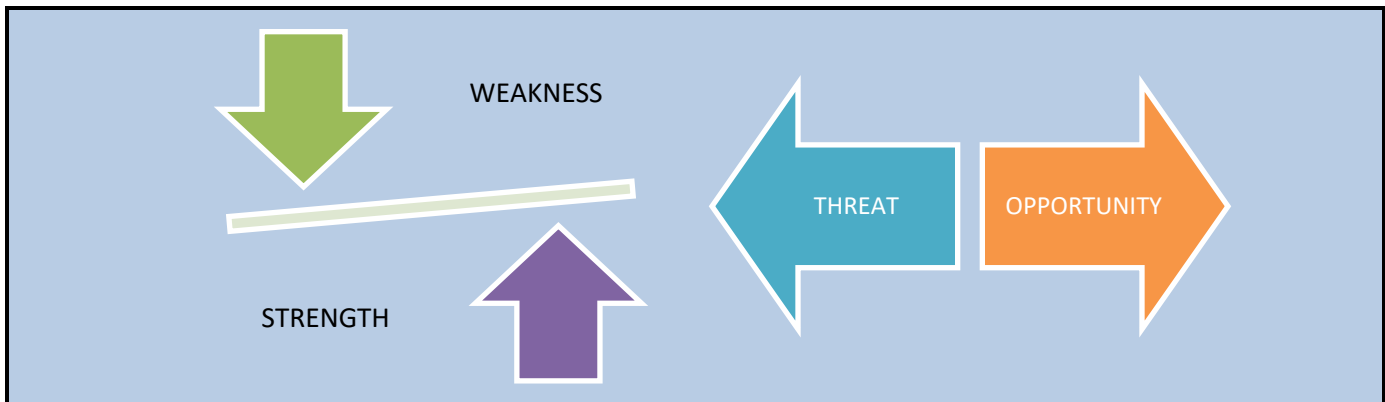
Index	Saginaw	Dayton	Kalamazoo	Toledo
• Overall	• 79.9	• 99.4	• 109	• 98.8
• Human Capital	• 100.4	• 141.6	• 153	• 122.8
• Economic Dynamics	• 43.9	• 70.1	• 101.8	• 70.4
• Productivity Employment	• 91.1	• 96.8	• 100.2	• 92.4
• Economic Wellbeing	• 81.1	• 97.3	• 104.4	• 92.4

Strengths, Weaknesses, Opportunities, and Threats (SWOT)

Identifying the strengths and weaknesses of your community helps to assess current conditions, understand assets, and be prepared to shore up limitations. Considering those opportunities and threats identified means looking externally into the future for things that could change conditions either positively if acted upon or negatively if no action is taken.

A critical element of successful planning is understanding how to separate the good ideas from the merely interesting or trendy. The SWOT analysis is a critical component in making those decisions. Often, the SWOT is considered just one component of the asset inventory. That use of a SWOT analysis simply does not go far enough and undervalues its potential as a decision making tool. It is not enough to know your strengths and weaknesses. You must know how you can make the most of your strengths and mitigate the internal weaknesses. Employing the SWOT at the decision stage helps you to choose the pathway to success.

How do successful communities get that way and stay that way? What can we learn from them?



A SWOT analysis is an instrumental framework in value-based management and strategy formation. Strengths and weaknesses are internal value-creating or value-destroying factors such as assets, skills, or resources a community has in relation to its competition. They can be measured with internal assessments or external benchmarking.

Opportunities and threats are external value-creating or value-destroying factors a community cannot control but emerge from either the competitive dynamic among communities, their unique mix of companies and institutions (such as a research university), or other forces including demographic, economic, geographic, political, technological, social, legal, or other factors.

Every community must try to fit within its external environment. The SWOT diagram is very good at analyzing the internal strengths and weaknesses and external opportunities and threats. The challenge is finding that fit, actually creating alignment among factors sometimes seemingly diametrically opposed either in value or aspiration.

Following are the strengths, weaknesses, opportunities, and threats as identified in previous reports, as reported to us through the surveys, and as discovered by us through extensive analysis of economic indicators, indices, and on-site review. The consultants have given you a Power Matrix of factors that in our judgment will be the determinants of your future advancement or limit your progress. This matrix allows you to approach development from a more holistic viewpoint; manage from the outside by using strategies driven by the marketplace; and, manage from the inside by best using local resources to drive strategies.

Power Matrix

Examining historical factors and current conditions and applying those to the reported strengths, weaknesses, opportunities, and threats results in the Power Matrix. The following factors have been historic drivers or limitations of the regional economy and will play a significant role in building future prosperity.

Power Matrix

STRENGTHS	WEAKNESSES
Healthcare education Energy building products – solar 21,000 employment draw Manufacturing depth Patents / patent diversity Retail / restaurant draw Site Selection #9	K-12 education Few BA / Master’s graduates Lack of geographic and transportation linkages Poor connectivity among and within clusters Selective low wages Loss/shift in buying power 40%↓ Limited fresh food and retail offerings
OPPORTUNITIES	THREATS
21,000 employment draw New city market Affordability index 79 Housing index 27 Healthcare employees Doctorpreneurship Need for new housing product Vacant lots near hospitals, arena, and other key sites Opportunity Zone Designation	Appearance and perception of crime Continued loss of population Loss of tax base / resources Retail constricting – big box loss Inaction, especially in education

Summary Analysis

The Innovation Index and SWOT Analysis provided a helpful framework for determining the types of investment that could be made by the City of Saginaw to unlock additional resources, better utilize its existing workforce, and promote further business retention and expansion (BRE) in the region. Most critically, the SWOT allows Saginaw to make decisions that are concrete, defensible, and evidence-based.

The next section, *Section 5: Scenario Analysis*, narrows the focus to three specific subsector industries. Whereas Section 2 and Section 3 of this report focused on identifying the competitive advantages in terms of workforce and industries and Section 4 prioritized the various investment areas, the following section provides an analysis of three key subindustries that should be targeted in the form of a more detailed Scenario Analysis.

5. SCENARIO ANALYSIS

Scenario analysis is a process of analyzing possible future events by considering alternative possible outcomes (sometimes called "alternative worlds"). Thus, the scenario analysis, which is a main method of projections, does not try to show one exact picture of the future. Instead, it presents several alternative future developments.

Though most frequently used in the financial sector, these assessments can be used to examine the amount of risk present within a given investment as related to a variety of potential events, ranging from highly probable to highly improbable. Depending on the results of the analysis, an investor can determine if the level of risk present falls within his comfort zone

For purposes of community planning, the Scenario Analysis method allows leaders to consider multiple factors of future potential from an overall assessment, interviews, surveys, and SWOTs summarized in Key Findings and applied during the planning process to determine the feasibility of individual actions and opportunities. It allows factors, such as, cultural differences or the regulatory environment, to be considered as measures of potential feasibility, rather than just the financial cost of and available resources for a project. Thus, it enables a more accurate assessment of potential success. Simply, analyzing the change in multiple variables at a time and assessing their impact on the viability of the project as a whole, is called scenario analysis.

Summary of Key Findings

The transformation of the manufacturing industry and 2008 recession dramatically reduced the number and size of businesses and overall population.

- Loss of tax base and critical resource shortages
- Continued loss of population
- Both a loss of total and a shift in buying power
- Appearance and perception of crime
- Low wages
- Low property values stunt investment
- Negative self-image

Through the loss of businesses and population, existing linkages have been fractured, broken, and lost.

- Neighborhoods marred by vacancy lack cohesion and connectivity
- Open-space is unkempt and uninviting, discouraging community gathering
- Distances among economic anchors, such as major employers and commercial districts, are long and connections indirect
- Poor connectivity among and within industrial clusters
- Neighborhood schools have closed, educational attainment has suffered, and though there are bright spots, schools are perceived in general as poorly funded and under-performing

Despite significant losses, major economic engines remain fueling modest but steady growth.

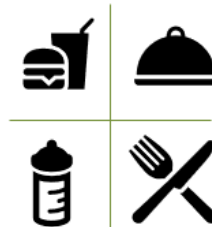
- Manufacturing remains a major employer, source of community wealth, and tax base; includes strong and emerging linkages in healthcare "doctorpreneurship" and food sectors; legacy of patents and patent diversity
- Major investment in healthcare education broadens and solidifies the local workforce pipeline from primarily low wage into higher skilled medical professionals
- Daily employment draw of 21,000

- City and environs remain a retail and restaurant draw, although retail offerings will change as industry restructuring continues; major investment in city market creates multiple opportunities for entrepreneurship and joint ventures
- Regional economy strong, growing, and attracting attention i.e. Site Selection Magazine

Manufacturing



Regional Food Hub & Food Products



Health & Health Technology



Scenario A – Health & Health Technology:

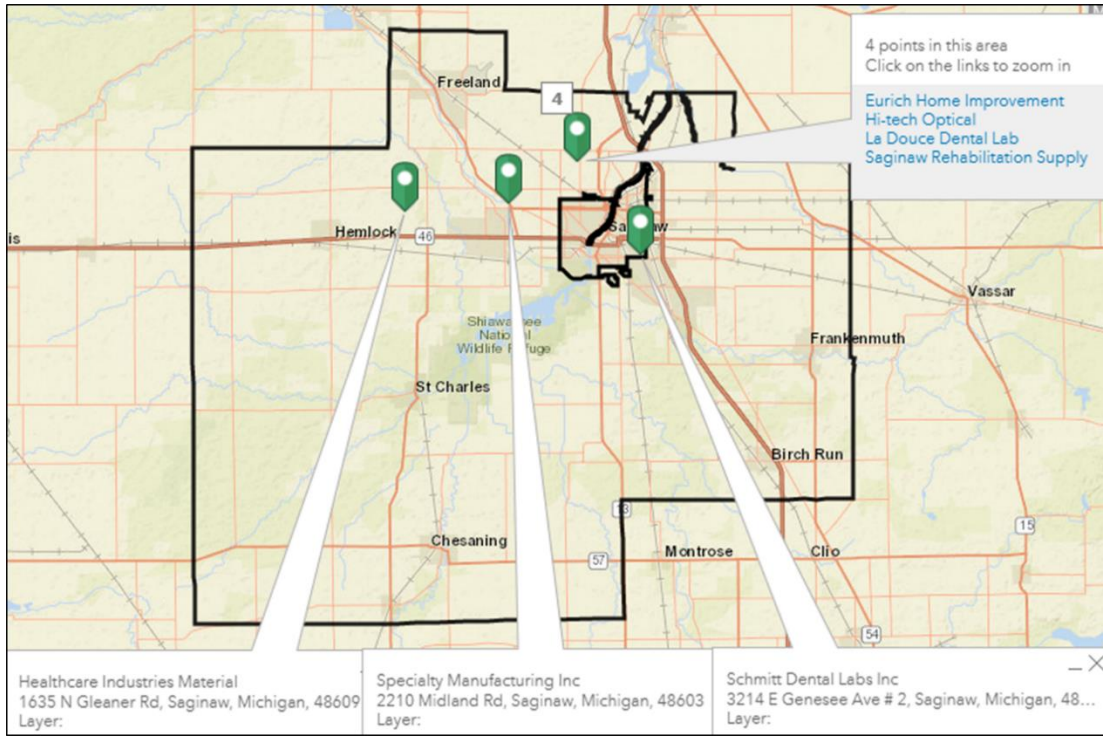
Justification:

- Healthcare depth and capacity / Major investment in health education
- Serving a regional market
- Linkage to housing, healthy food products, and health implement manufacturing
- R+ D related to spinal cord / neural surgery; need for housing product for doctors / healthcare workers / families

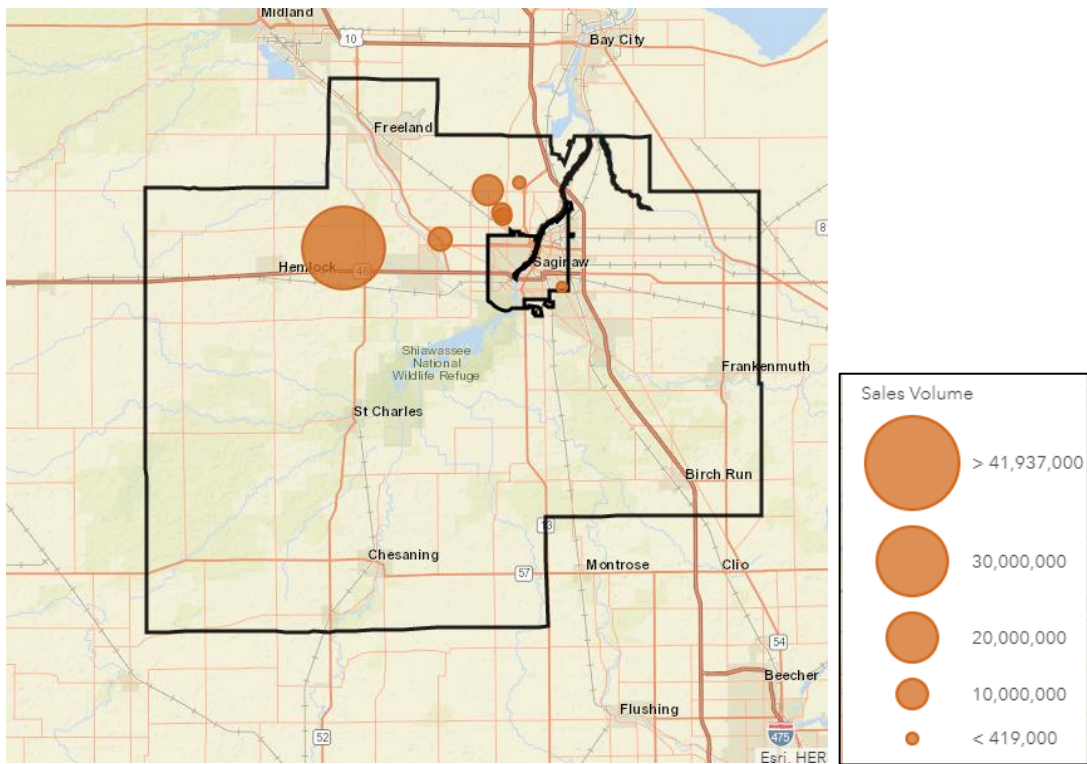
Opportunities:

- Health Campus + Corridor (reinforce / create connections)
- On-campus / corridor healthcare personnel housing
- Health Career Pathways
- Dual Degree HS / Health Tech
- Health value chain business recruitment / entrepreneurship
- Residential care facility (mental, substance, long term care other)
- HealthLink – health industry connector trolley
- Medical manufacturing Makerspace
- Hospital based Community Development Corporation for Housing Development and Entrepreneurship

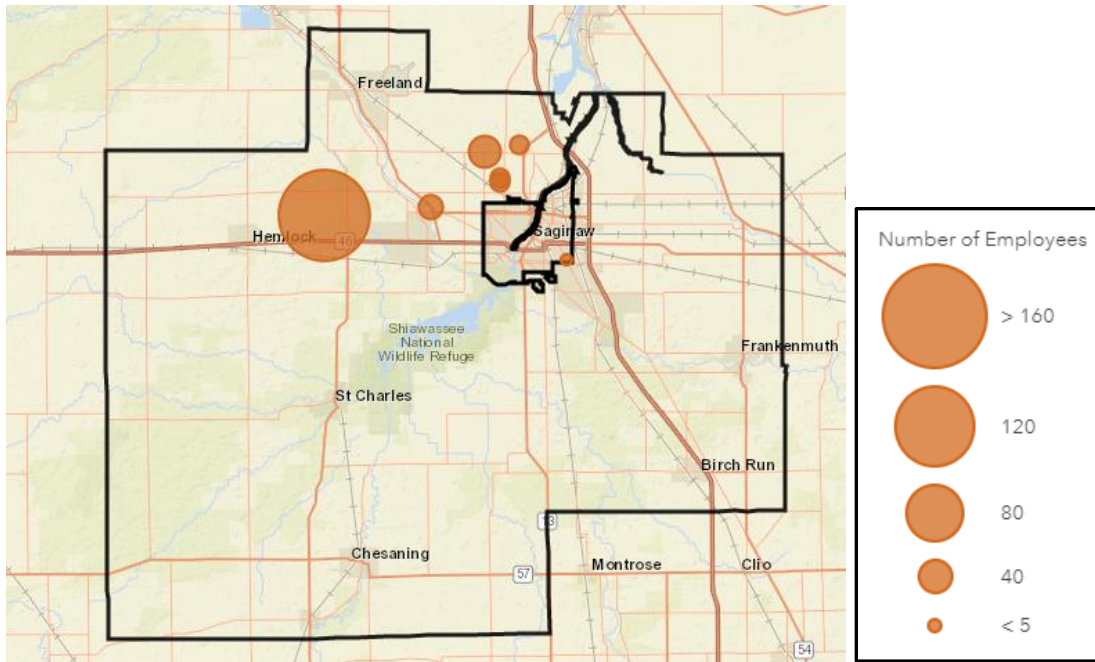
Medical Manufacturing firms, Saginaw County:



Medical Equipment & Supplies Manufacturing Sales Volume, Saginaw County:



Medical Equipment & Supplies Manufacturing Workers, Saginaw County:



Scenario B – Regional Food Hub & Food Products:

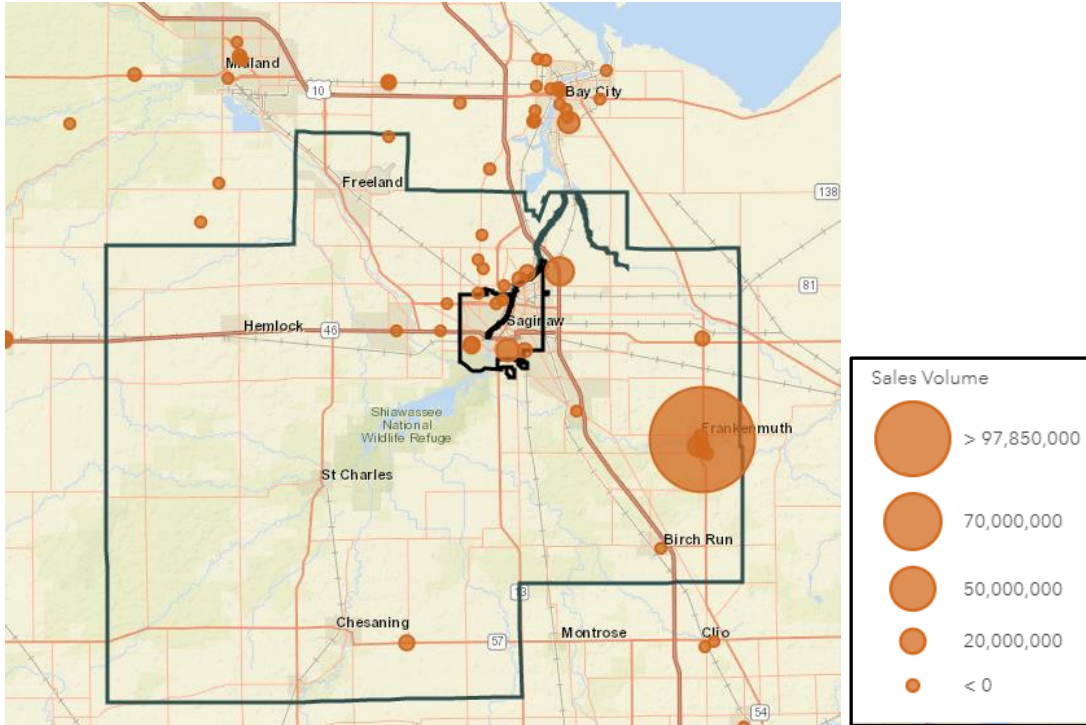
Justification:

- Major investment in City Market
- Limited fresh food options
- Linkage to regional food products agriculture and manufacturing
- Major purchaser of food by healthcare providers
- Market for specialty food products, i.e. gluten free, allergy free, salt free related to healthcare
- Education related to entrepreneurship
- Possible infill / pop-up opportunities along corridor

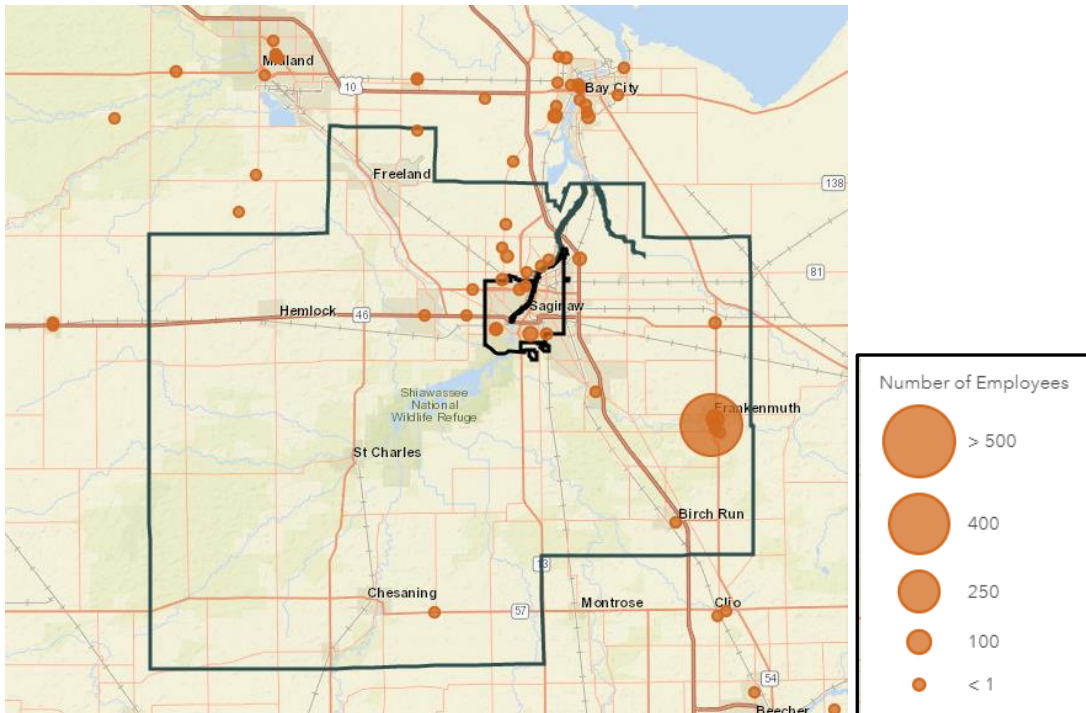
Opportunities:

- Commercial Kitchen
- Dual Degree HS / Food Tech
- Student Chef and Management Restaurant
- City Market Entrepreneur Support
- Co-packing Facility
- Food Products Accelerator
- Specialty Health Food Products Manufacturing
- Link Entrepreneurs, Market Intelligence, Education (SVS, Delta), Funding

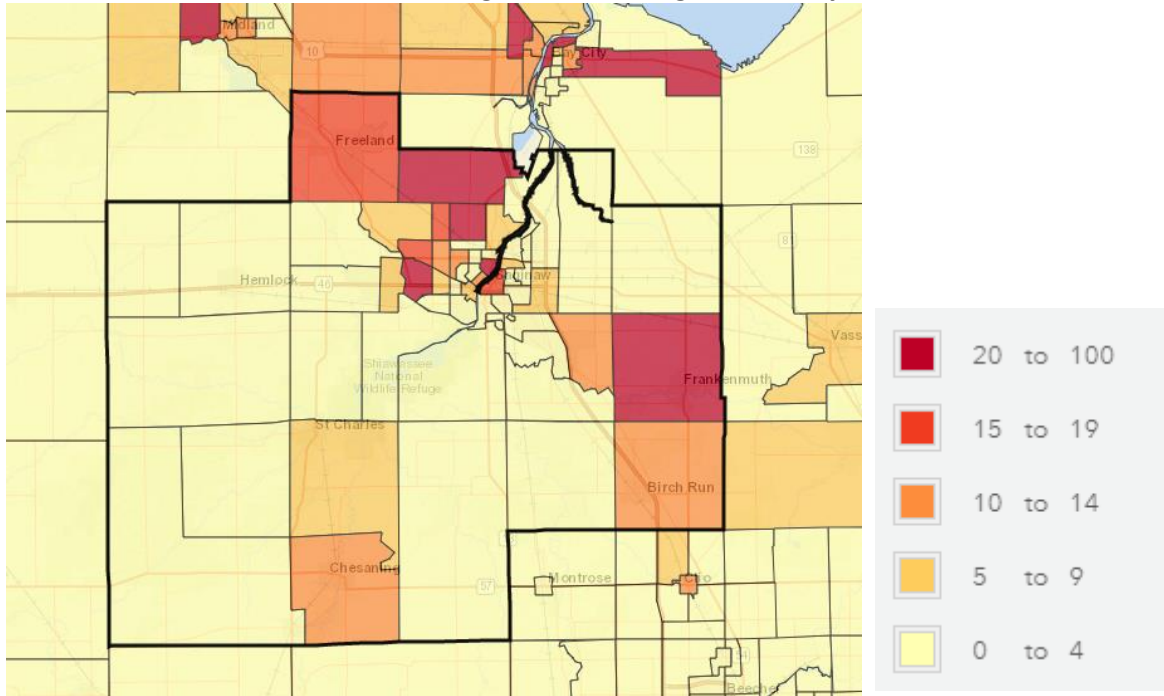
Food & Beverage Manufacturing Sales Volume, Saginaw County:



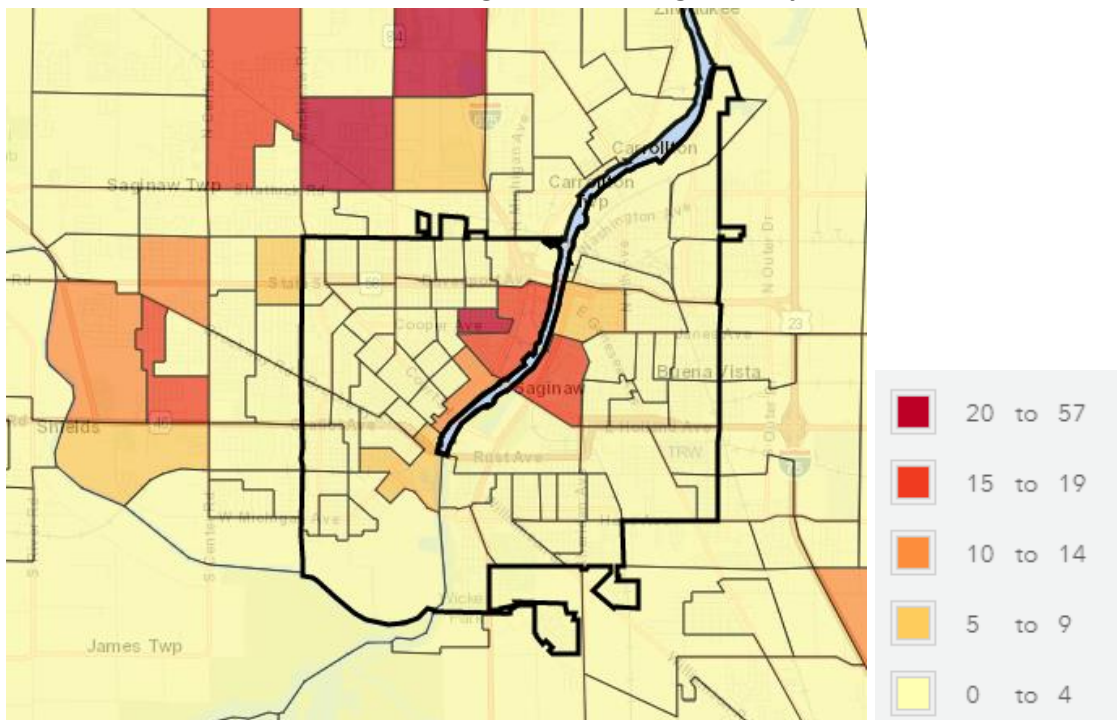
Food & Beverage Manufacturing Workers, Saginaw County:



Food & Kindred Products Manufacturing Businesses, Saginaw County:



Food & Kindred Products Manufacturing Businesses, Saginaw City:



Scenario C – Manufacturing:

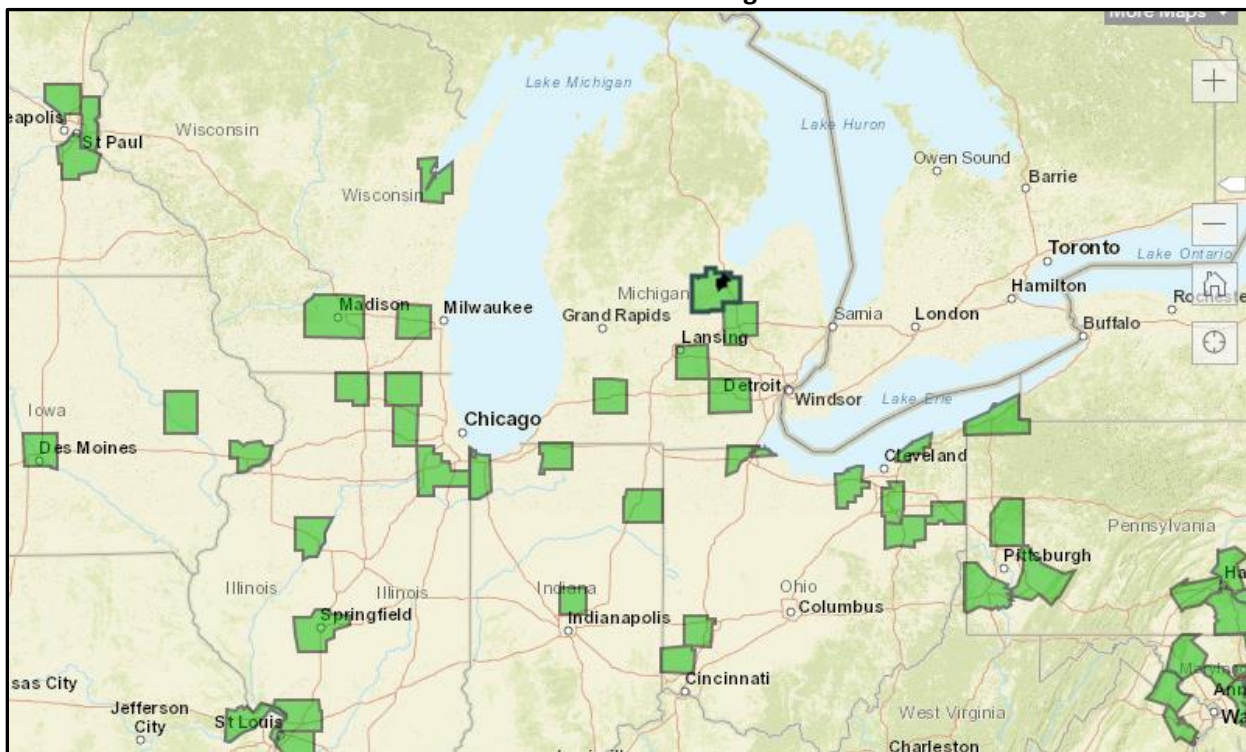
Justification:

- Long-time regional presence and capacity in manufacturing
- Need for new housing product to meet demand
- Need for affordable product meeting code
- Shortage of manufacturing workers
- Potential of healthcare and food related manufacturing
- Limited Saginaw based developers / construction firms to augment / upgrade housing
-

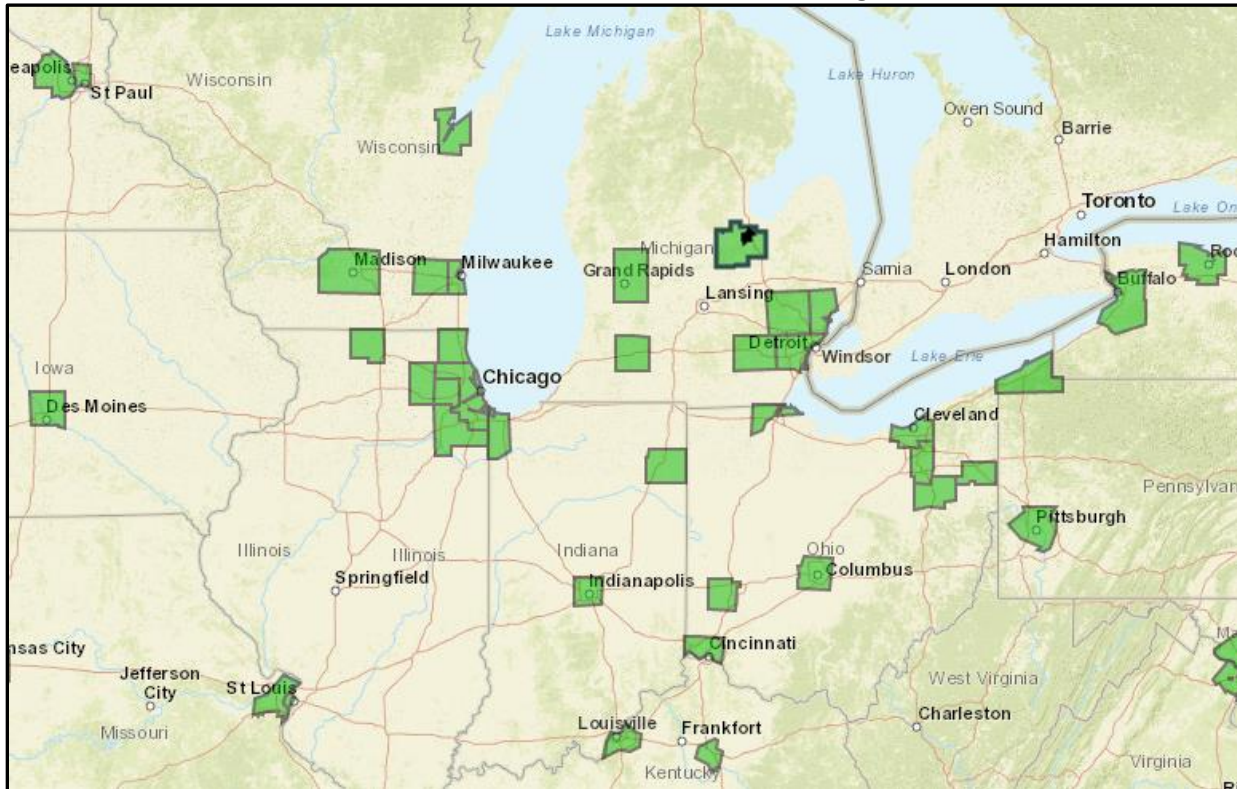
Opportunities:

- Linkage to Regional Employers
- Dual Degree HS / Man Tech / Metals / Construction / Food / Healthcare
- Housing Manufacturing
- Construction Skills Training / Housing Rehabilitation
- Housing Technologies Makerspace
- New Housing Construction for Hospital Personnel
- Housing Rehabilitation Program
- Architectural building materials salvage / reuse
- Saginaw is one of only a few counties of its size in the country with at least 600+ healthcare firms and 200+ manufacturing firms

Counties with 600+ Healthcare Firms and 200+ Manufacturing Firms:



Counties with 23,000+ Healthcare Workers and 13,000+ Manufacturing Workers:



Financing

Effectively employing the resources necessary to create the conditions for economic growth can be complicated and confusing. An individual transaction of economic development, such as, the financing of a business, or the funding of an economic development program, may be completed by a single entity using a single source of funding. But, a program of long term sustainable economic development requires a collaborative approach inclusive of the entire community: businesses, residents, government, and institutions. Finding the best source of funding and the most effective funding tool for a particular task can be difficult. Employing the wrong tool or the incorrect source may mean ones' dollars are less flexible then they need to be, that funds are not available in a timely way, or that scarce resources are wasted needlessly, meaning less dollars overall for all purposes.

There are numerous financial tools available to help support the types of economic development scenarios we have proposed. These include federal place-based programs that can be used to finance new economic development in Saginaw, such as: Community Development Block Grants (CDBG) and the newly-created Opportunity Zones.

There are several ways in which communities can facilitate development finance. Various strategies and approaches to increase the breadth and efficiency of financing are outlined below.

Reduce the development cost to lower a developer's front end costs and reduce the amount that has to be financed.

1. Reduce mortgage / financing costs to lower the debt service of a project
2. Reduce operating costs to improve the cash flow of a project
3. Facilitate the process of redevelopment through programs and policies.

Program funders and program offerings change over time. There are standard funding mechanisms for assistance in multiple programs provided by multiple funders that cover the following methods:

- The use of special purpose or municipal bond financing
- SBA, EDA,, or other loan guarantees
- Subsidized or special terms lending from a variety of sources
- Federal or State Tax credits
- Tax Increment Financing
- Project specific creative financing, such as, the sale and leaseback of a building or its associated parking garage or other semi-public purpose facility
- Grants from public or nonprofit sources
- Small-scale Real Estate Investment Trusts or other methods of shared real estate financing
- Crowdfunding or other broad-based and community-based financing methods

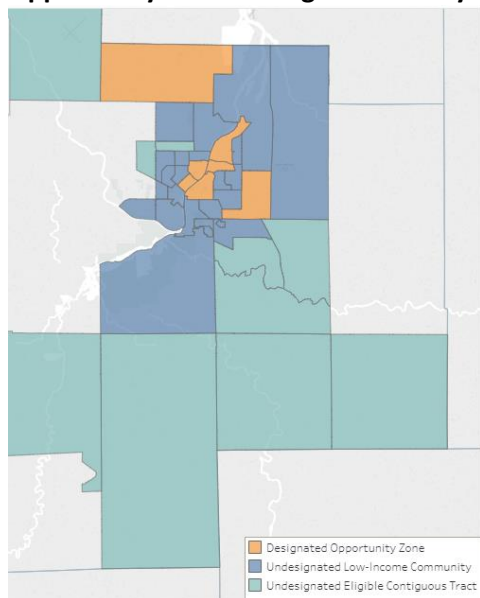
Regardless of which funding tools are used for a particular project, all methods benefit from market, feasibility, and cost-benefit analysis. Such analysis will clearly indicate the challenges inherent in a given development project, the costs that cannot be covered in the private marketplace, and what portion of a project, if undertaken, justifies public or nonprofit participation.

Opportunity Zone Analysis

Saginaw is among the first sites selected to use the new Opportunity Zone designations. This new funding source is important because, unlike other tools that largely rename the same resources, the Opportunity Zone has the potential to bring new investment dollars to the table without the loss of existing program dollars.

The following map provides a summary of all of the census tracts that qualify for Opportunity Zones in Saginaw County. There are seven census tracts in Saginaw County that have been designated by the State of Michigan and approved by the federal government to be considered Opportunity Zones. Five of these census tracts are within the city of Saginaw. (*map source: Enterprise Community Partners*).

Opportunity Zones in Saginaw County:



Maximum Tract Designations	
	288
Filtered Tracts:	
Designated Opportunity Zone	7
Undesignated Eligible Contiguous Tract	10
Undesignated Low-Income Community	21

6. STRATEGIC ECONOMIC DEVELOPMENT PLAN

The transformation of the manufacturing industry and 2008 recession have dramatically reduced the number and size of businesses and overall population. Through the loss of businesses and population, existing linkages have been fractured, broken, and lost. It is necessary to reestablish and reinforce linkages throughout the economy to recreate the pathways for growth and maximize that growth for everyone.

Mission:

Re-establish and reinforce linkages throughout the economy to recreate the pathways for growth and maximize that growth for everyone

Key Issues & Strategies:

- **Linkages** – Recreate and reinforce geographic, economic, and interpersonal linkages
- **Innovation** – Recognize and maximize existing economic opportunities for growth, innovation, and job and wealth creation
- **Talent** – Reestablish the workforce pipeline among businesses, educational institutions, and emerging and established workforce

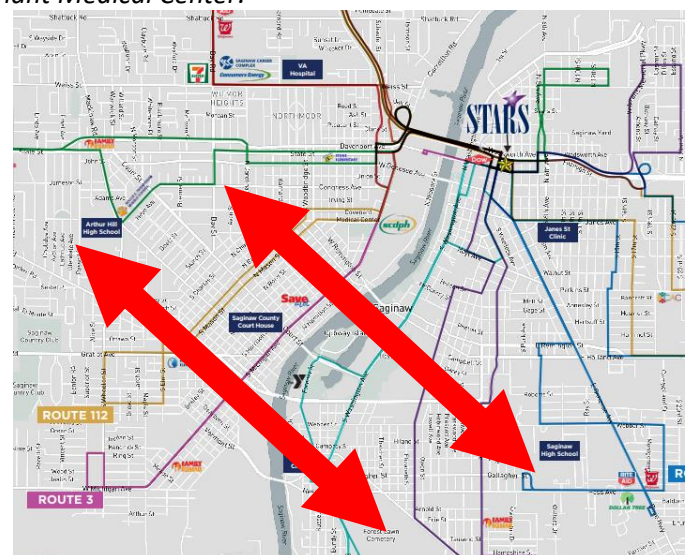
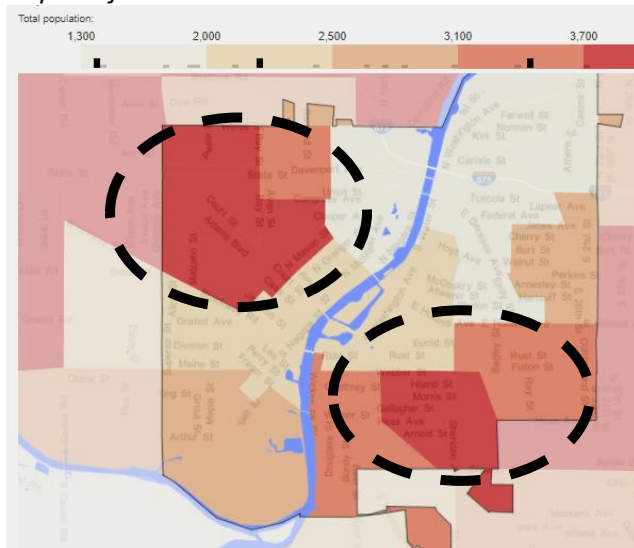
GOAL A – Linkages:

Recreate and reinforce geographic, economic, and interpersonal linkages

Strategic Action 1: Recognize existing linkages among healthcare entities with a Healthcare Corridor

- 1.1: Map healthcare entities, and healthcare related connections such as educational institutions and manufacturers
- 1.2: Identify a HealthLink brand to reinforce linkages among healthcare providers, researchers, educators, and health product entrepreneurs and manufacturers

Proposal for a Southeast Connector Bus Route to Covenant Medical Center:





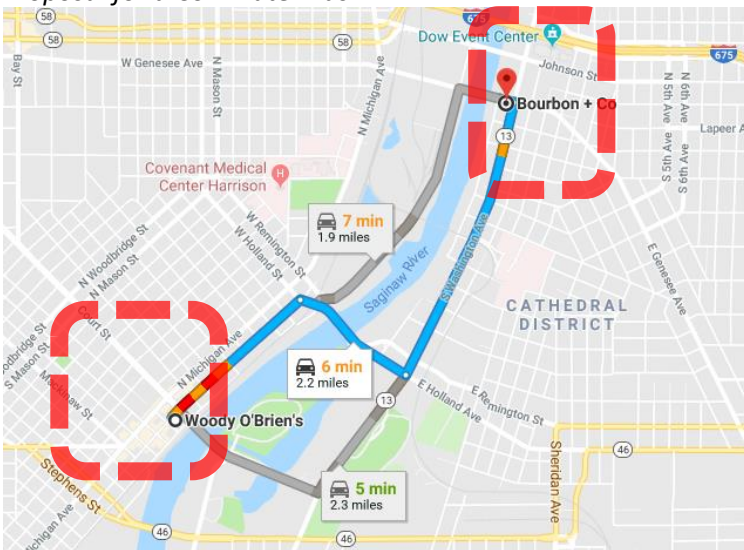
Best Practice: Cleveland Health-Tech Corridor www.healthtechcorridor.com

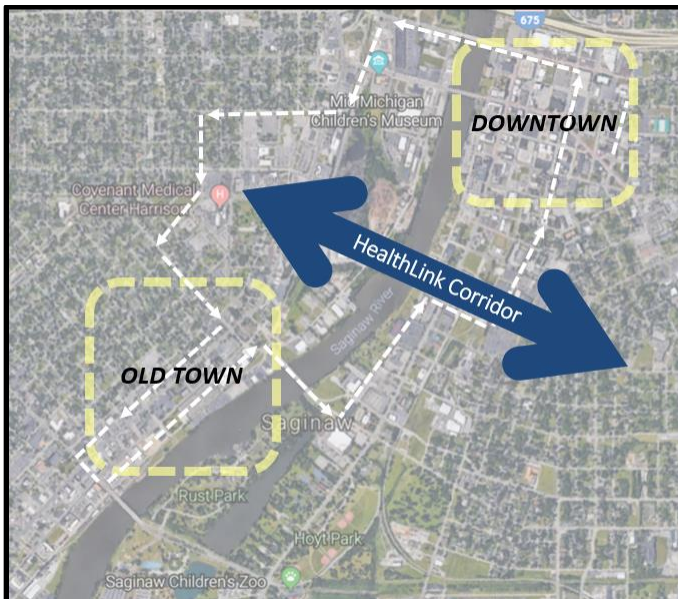
Strategic Action 2: Re-establish geographic linkages with re-imagined public-private transit

- 2.1: Create a HealthLink trolley route from hospitals to Delta College to major medical office buildings
- 2.2: Create a HealthLink trolley route from housing to healthcare related employment
- 2.3: Create an entertainment amenity linkage from the health corridor to housing to entertainment destinations

In order to bridge the 2.2-mile gap between the Arena area near Downtown in addition to the restaurants and pubs in Old Town, a circulator trolley route could be introduced that utilizes a higher end bus. If desired, this higher-end bus trolley could also include a route that services the medical district.

Proposal for a Commuter Bus:





Strategic Action 3: Form a Community Development Corporation for Housing, Corridor Development, and Entrepreneurship

- 3.1: Engage healthcare corridor anchors, banking community, and community leadership to explore formation of a Community Development Corporation
- 3.2: Work with hospital anchors and City to identify development strategies
- 3.3: Explore creation of an Opportunity Zone fund for investment

Best Practice: United North www.unitednorth.org

Best Practice: Detroit Land Bank Authority www.buildingdetroit.org

GOAL B – Innovation:

Recognize and maximize existing economic opportunities for growth, innovation, and job and wealth creation

Strategic Action 1: Mine the supply chain / value chain for existing business development opportunities

- 1.1: Conduct supply chain / value chain mapping related to healthcare, food, and manufacturing
- 1.2: Identify and explore gaps in supply chain / value chain for opportunities for existing businesses
- 1.3: Develop specialized Business Retention Expansion (BRE) programming related to supply / value chain opportunities
- 1.4: Facilitate collaboration among existing businesses and universities in off-site “skunkworks” to realize opportunities
- 1.5: Publicize opportunity zone benefits to potential investors

Strategic Action 2: Mine the supply chain / value chain for entrepreneurship opportunities in food + food products

- 2.1: Conduct supply chain / value chain mapping related to food and food products
- 2.2: Support city market tenants with technical assistance and training to explore supply / value chain opportunities
- 2.3: Create student run / student chef restaurant / food truck to test products
- 2.4: Develop a food products accelerator and co-packing facility
- 2.5: Publicize opportunity zone benefits to potential investors



Best Practice: New North, Inc. www.wisupplychainmarketplace.com

Strategic Action 3: Ramp up housing renovation, infill construction, and development with support to local housing contractors

- 3.1: Support new and emerging construction contractors to contract with the City for housing rehabilitation and development
- 3.2: Engage building materials manufacturers and suppliers, educators, students, and local contractors and sub-contractors to develop a self-help housing construction/renovation solutions makerspace
- 3.3: Explore workforce funding for housing construction skills training as a means to housing renovation and construction careers

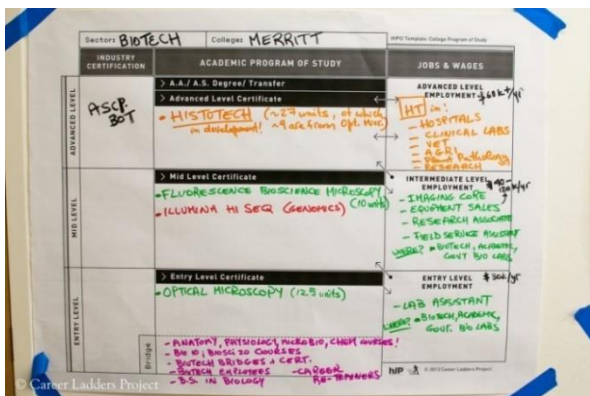


GOAL C – Talent:

Reestablish the workforce pipeline among businesses, educational institutions, and emerging and established workforce

Strategic Action 1: Facilitate talent linkages through transparent and supported career pathways

- 1.1: Map the career path from high school to employment to advancement in three expansion industries: healthcare, manufacturing, and food + food products
- 1.2: Introduce Pathway Counselors supported by industry and available to emerging and incumbent workers in high school, technical school, and industry
- 1.3: Create a scholarship fund to incentivize and support education and training along identified pathways



Best Practice: California Career Ladders Project www.careerladdersproject.org

Strategic Action 2: Facilitate talent linkages through cooperative degrees

- 2.1: Develop cooperative degree programs in three expansion areas: healthcare, manufacturing, and food + food products
- 2.2: Promote the dual degree and apprenticeship programs regionally as a way to promote improved local schools with specialty programming



Best Practice: Georgia Consortium of Advanced Technical Training www.gacatt.com

Strategic Action 3: Facilitate talent linkages through education-industry partnerships

- 3.1: Facilitate age appropriate education – industry partnerships in K-12, technical schools, and colleges in manufacturing, healthcare, and food
- 3.2: Establish formal internships, job shadowing, and career exploration opportunities in manufacturing, healthcare, and food technology
- 3.3: Promote new programming throughout the region to attract students and families back to area schools



Best Practice: Sweetwater Sound / University of Saint Francis SOCA - www.art.sf.edu

Best Practice: St Augustine Academy Milwaukee Wisconsin - www.augprep.org

Best Practice: Heavy Metal Bus Tour - www.mstc.edu/events

Strategic Action 4: Introduce youth entrepreneurship programming into K-16 schools

- 4.1: Develop and adopt age-appropriate curriculum for exposure to business ownership as a career
- 4.2: Develop and adopt age-appropriate curriculum for gaining experience with business ownership as a career
- 4.3: Develop and adopt age-appropriate curriculum for developing expertise in business ownership as a career



Best Practice: Nebraska Extension Entrepreneurship & Innovation www.extension.unl.edu/entrepreneurship

Action Plan

Linkages Action Plan					
GOAL A: Recreate and reinforce geographic, economic, and interpersonal linkages					
Strategic Action	Action Step	Task	Collaboration	Funding	Priority
1 – Recognize existing linkages among healthcare entities with a Healthcare Corridor	1.1 – Map healthcare entities, and healthcare related connections such as educational institutions and manufacturers	1.1a Create opportunities for networking among corridor businesses, health providers, entrepreneurs, and workers	Public Private Nonprofit	Private Nonprofit	High
		1.1b Engage providers, researchers, educators, entrepreneurs, and manufactures to identify support needs and develop programming	Private Nonprofit	Public Private Nonprofit	Medium
		1.1c Develop a space for independent healthcare contractors to connect and co-work	Private Nonprofit	Private Nonprofit	Medium
2 – Reestablish geographic linkages with reimagined public-private transit	2.1 – Create a HealthLink trolley route from hospitals to Delta College to major medical office buildings	1.2a Develop a logo, website, and materials to publicize, recognize, and inform	Private Non-profit	Private Nonprofit	High
		2.1a Convene healthcare entities and educators to identify needs, plan routes, and consider timing	Public Private	Public Private	High
		2.1b Explore use of unique vehicles for high visibility and recognition	Public Private	Public Private	Medium

	2.2 – Create a HealthLink trolley route from housing to healthcare related employment		Public Private	Public Private Workforce	Medium
	2.3 – Create an entertainment amenity linkage from the health corridor to housing to entertainment destinations	2.3a Explore creation of a BID (business improvement district) to support retail / restaurant development	Public Private	BID	Medium
3 – Form a Community Development Corporation (CDC) for Housing, Corridor Development, and Entrepreneurship	3.1 – Engage healthcare corridor anchors, banking community, and community leadership to explore formation of a CDC	3.1a Explore reuse of dormant existing CDC 501c3	Healthcare entities Banks Residents	Private Nonprofit	High
	3.2 – Work with hospital anchors and City to identify development strategies	3.2a Explore strategies for healthcare worker focused housing development adjacent to anchors	CDC Banks State City	Public Private Nonprofit	High
		3.2b Explore strategies for housing renovation	CDC City	Public Nonprofit	High
		3.2c Explore strategies for vacant lot absorption	CDC City	Public Private	Medium
		3.2d Explore strategies to foster entrepreneurship in housing contracting, food + food products, and healthcare	CDC Banks Businesses	Nonprofit Private City	Medium
	3.3 – Explore formation of an opportunity zone fund for investment		CDC Banks	Private Nonprofit	High

Innovation Action Plan					
GOAL B: Recognize and maximize existing economic opportunity for growth, innovation, and job and wealth creation					
Strategic Action	Action Step	Task	Collaboration	Funding	Priority
1 – Mine the supply chain / value chain for existing business development opportunities	1.1 – Conduct supply chain / value chain mapping related to healthcare, food, and manufacturing	1.1a Convene healthcare, food, and manufacturing entities, conduct self-mapping	City Nonprofit Business	Private	High
		1.1b Identify gaps in supply chain / value chain			High
	1.2 – Explore gaps in supply chain / value chain for opportunities for existing businesses		Public Private Nonprofit	Private	High
	1.3 – Develop programs for existing businesses to pursue opportunities related to supply / value chain		Public Private Nonprofit	Nonprofit	Medium
	1.4 – Facilitate collaboration among existing businesses and universities in off-site “skunkworks” to realize opportunities		Public Private Nonprofit	Private	Low
	1.5 – Publicize opportunity zone benefits to potential investors		Public Nonprofit Private	Nonprofit	High
2 – Mine the supply chain / value chain for entrepreneurship opportunities in food + food products	2.1 – Conduct supply chain / value chain mapping related to food and food products	2.1.a Identify and explore gaps in supply chain / value chain for opportunities for entrepreneurship	Public Private Nonprofit	Private	Medium
		2.1.b Link SVS and Delta Entrepreneurship students with supply / value chain opportunities	Public Private Nonprofit	Private Nonprofit	Medium
		2.1c Facilitate collaboration among	Public Private	Private Nonprofit	Medium

		existing businesses and entrepreneurs to realize opportunities	Nonprofit		
	2.2 – Support city market tenants with technical assistance and training to explore supply / value chain opportunities		Public	Public	High
	2.3 – Create student run / student chef restaurant / food truck to test products		Private Nonprofit	Private Nonprofit	Medium
	2.4 – Develop a food products accelerator and co-packing facility		Public Private Nonprofit	Public Private Nonprofit	Low
	2.5 – Publicize opportunity zone benefits to potential investors		Public Nonprofit Private	Public Nonprofit	
3 – Ramp up housing renovation, infill construction, and development with support to local housing contractors	3.1 – Support new and emerging construction contractors to contract with the City for housing rehabilitation and development	3.1a Identify local contractors and sub-contractors to discuss barriers to entry and successful completion of City contracts	Public	Public	Medium
		3.1b Explore workforce for necessary training and certifications	Public	Public	Medium
		3.1c Pursue additional funding for housing rehabilitation	Public	Public	Medium
	3.2 – Engage building materials manufacturers and suppliers, educators, students, and local contractors and sub-contractors to develop a self-help housing construction / renovation solutions makerspace		Private Nonprofit	Private Nonprofit	Low

	3.3 – Explore workforce funding for housing construction skills training as a means to housing renovation and construction careers		Public Nonprofit	Public Nonprofit	Medium
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Talent Action Plan					
GOAL C: Reestablish the workforce pipeline among businesses, educational institutions, and emerging, and established workforce					
Strategic Action	Action Step	Task	Collaboration	Funding	Priority
1 - Facilitate talent linkages through transparent and supported career pathways	1.1 - Map the career path from high school to employment to advancement in three expansion industries: healthcare, food, manufacturing		Employers Educators City	Workforce Education Private	High
	1.2 - Introduce Pathway Counselors for emerging and incumbent workers		Public Private	Industry Workforce	Medium
	1.3 - Create a scholarship fund to incentivize and support training along identified pathways		Private	Private	Low
2 - Facilitate talent linkages through cooperative degrees	2.1 - Develop cooperative degree programs in three expansion areas: healthcare, manufacturing, and food + food technology	2.1a Convene educators, employers, and students to explore dual degree opportunities	Public Private	Public Private	High
		2.1b Target introductory high school and associates degree cooperative degrees in high demand / high	Public Private	Public Private	High

		growth occupations, such as, welding, catering, and nursing			
		2.1c Enhance the dual degree programming with apprenticeships in target occupations	Public Private	Public Private	Low
	2.2 – Promote the dual degree and apprenticeship programs regionally as a way to promote improved local schools with specialty programming		Public	Public	Low
3 – Facilitate talent linkages through education – industry partnerships	3.1 – Facilitate age appropriate education – industry partnerships in K-12, technical schools, and colleges in manufacturing, healthcare, and food	3.1a Re-imagine education with topics related to manufacturing technologies, healthcare, food + food products integrated into daily curriculum, such as, practical project based exploration and problem solving to keep subjects interesting, relevant, and real-world focused	Public Private	Public Private	High
		3.1b Introduce industry visits for students, parents, and teachers, such as Heavy Metal Bus Tours	Public Private	Public Private	High
	3.2 - Establish formal internships, job shadowing, and career exploration opportunities in manufacturing, healthcare, and food technology		Public Private	Public Private	High
	3.3 – Promote new programming throughout the region to attract students and		Public	Public	Medium

	families back to area schools				
4 – Introduce youth entrepreneurship programming into K-16 schools	4.1 - Develop / adopt age appropriate curriculum for exposure to business ownership as a career	4.1a Work with area businesses to arrange business visits for elementary age students	Public Private	Public Private	Medium
		4.1b Introduce interactive business games such as The Lemonade Stand	Public	Public	Medium
		4.1c Engage in problem solving makers activities	Public	Public	Medium
	4.2 - Develop / adopt age appropriate curriculum for gaining experience with business ownership as a career	4.2a Work with area businesses to do on-site job shadowing	Public Private	Public Private	Medium
		4.2b Introduce online business games into the curriculum	Public	Public	Medium
		4.2c Engage in business idea makers activities	Public	Public	Medium
	4.3 – Develop / adopt age appropriate curriculum for developing expertise in business ownership as a career	4.3a Work with area businesses to identify real world work problems for classroom workshopping	Public Private	Public Private	Medium
		4.3 b Introduce business plan development with area business mentors	Public Private	Private	Medium
		4.4c Work with area businesses to develop a business plan competition with a cash prize	Public Private	Private	Medium

7. RECOMMENDATIONS

Diane Lupke & Associates, Inc. provides six recommendations to support successful implementation. Lupke recommends beginning with a **Zoom In Zoom Out Approach** focused on quick wins, learning by doing, and complementary actions by others. A solid and secure workforce pipeline is the number one issue of importance to businesses. **Investment in Local Schools** through transparent school to work career pathways is critical to the success of incoming and existing businesses. Saginaw already has a wealth of activity in healthcare. Yet these many economic actors are disconnected, and in many cases, unknown to each other. Lupke recommends a focus on the physical and economic connections among and between healthcare entities in a **HealthLink Corridor**. Saginaw needs partners. A proven strategy for creating development partners is through a **Community Development Corporation**. The many opportunities created through **Supply Chain Mapping** enable existing businesses to leverage each other, keep employees local, and enable economies of scale. **Entrepreneurship** is not just for the high-tech coasts, it is the reality of modern work including self-employment, work for others, and entrepreneurship. Lupke recommends supporting the entrepreneurship that is already gaining ground in manufacturing, healthcare, and food and food products, and a new emphasis on youth entrepreneurship programming for all ages in the schools.

1 - Zoom In, Zoom Out Approach to Implementation

The consultants recommend a Zoom In, Zoom Out approach to implementation. Such an approach encourages a long view but a short-term focus on discrete and highly visible projects that may be implemented quickly for high impact. This approach keeps to a vision while allowing for quick wins that create and maintain momentum in world weary and long disappointed participants.

As those first projects are implemented, look immediately to where you can find competitive advantage. Use the initial projects as a way to learn the process that will work over time and where Saginaw has experience or resources to which others lack ready access. Double-down on those factors and characteristics in which Saginaw adds value to the region. For example, restaurants and retail, healthcare education, and healthcare provisions. Once competitive advantage is clear, encourage complementary actions by others within Saginaw and within the region to reinforce your reach and support success.

2 - Investment in Local Schools

Saginaw has many assets both emerging “doctorpreneurship” and long-standing metals manufacturing. Moreover, there is evidence that Saginaw is turning the corner economically. However, a long-term threat to success is the local school system. Investment in a quality school system is critical to success. Saginaw’s ability to attract working families depends largely on its quality of life. Quality schools are a central piece of a high quality of life. Families with children will not choose Saginaw without this critical asset. Moreover, there is evidence throughout the country that families extant will choose to relocate, rather than risk their children’s future livelihood with a substandard education, when their children reach school age.

Individual schools, such as those in Georgia’s Consortium for Advanced Technical Training program can become such assets that they drive location decisions for families and businesses. Programs that combine solid academics with specialty programming such as internships, apprenticeships, entrepreneurship and other methods of experiential learning make a difference to families and employers.

Lupke recommends strengthening core academics while reinforcing public school-corporate partnerships through the design and implementation of programs that channel students into career paths that meet the future needs

of business. This could be accomplished by inventorying current work-study and internship programs available with and through area businesses. The initial focus would be on introducing curriculum in healthcare fields (including non-hospital-based groups), manufacturing and food production related firms. Also, survey students regarding their career path expectations and what would help them realize those expectations. Continue efforts to determine what future employment needs for business and industry will be. Special emphasis would be on healthcare related changes in employment demand as well as changes coming in manufacturing skills needed. Match student expectations/aspirations with employer needs to determine how to maximize the intersection of both.

Continue to develop work-study programs, internships, and apprenticeships that lead to skills building and potential career paths for students. Consider adding dual degree programs in which students earn an Associates Degree at the same time as they complete their high school degree. Again, healthcare, manufacturing sectors and food production areas would be the primary focus.

Foster an environment for innovation. Specifically, initiate entrepreneurship programming for all ages from the early years through college. Look to the University of Nebraska Extension for curriculum examples. Provide age appropriate resources from businesses within the educational system. Create an environment wherein students are taught to examine their environment and skill sets to realistically assess opportunities and pathways to implementation. Link to the programs at Delta and SVSU as well as other institutions to foster creativity and innovation.

3 - Healthcare Corridor Linkages

Saginaw's largest employment sector is healthcare and all indicators point to continued growth in this sector, particular as the population ages. Support of this vital sector is important, not just for its continued viability, but also to assure a continuous and reliable employment stream. As referenced elsewhere, this employment stream has several dimensions that are suitable for development, such as supportive housing opportunities in proximity to employers. Additionally, providing targeted training opportunities for Saginaw's youth means that not only will employer needs be addressed, but the opportunity to retain youth in life-long meaningful career opportunities will be available.

Saginaw already has a notable wealth of activity in healthcare. Yet these many economic actors are disconnected, and in many cases, unknown to each other. Lupke recommends a focus on the physical and economic connections among and between healthcare entities in a HealthLink Corridor. The Corridor would provide a place to place linkage with a HealthLink connector trolley traveling a route from education anchors, hospitals, and employment anchors. Physical linkages could be enhanced by increased density with infill housing for healthcare workers, enhanced healthcare services, and new business development.

Opportunities also exist to foster innovation related to healthcare. As documented, there is already an important albeit small, healthcare research and development and manufacturing presence in Saginaw. As medical treatments and procedures continue to evolve, this frontier of healthcare advancement could provide a place for innovation and job creation.

4 - Community Development Corporation

The City of Saginaw needs partners for development. A Community Development Corporation (CDC) provides local businesses, residents, and institutions the legal authority and financial benefit of a tax preferred nonprofit entity to be such a partner. Consider reactivation of the dormant 501(c)(3) into a Community Development Corporation to aggressively pursue multiple avenues of development. An active CDC provides a partner to the City to be able

to access resources not available to the City and to carry out tasks beyond what the City would normally do. To be a good partner, the CDC must be private-sector driven with strong community engagement. It could be envisioned as the lead developer for the HealthLink Corridor housed at one of the hospitals or other health related anchors. Alternatively, the CDC could be housed at Saginaw Future, the Chamber, with an existing foundation, or as a stand-alone group.

Specifically, in the area of housing development, the CDC could update the existing housing study with a survey of healthcare workers regarding housing needs and desires. From the survey work, it can be determined if there is sufficient demand to move forward on various types of housing, such as, townhomes, apartments, or single family detached properties. Target within the survey recent healthcare hires that have had to seek housing to determine which factors were most relevant for their residential determination. Work with the County and hospitals, to target specific vacant or available sites for housing development, starting with areas around the medical centers. Package groups of sites for development/redevelopment. This could incorporate an RFP process to determine developer interest.

For existing but substandard or abandoned housing, the CDC could identify and nurture housing rehabilitation entrepreneurs. The source of such entrepreneurs could include school system and college programs, and skills retraining programs. Bring together contractors, students, homeowners and entrepreneurs in a Housing Rehabilitation Solutions Makerspace. Identify short-term funding resources for housing rehabilitation entrepreneurs, nonprofits, and contractors. This could include the City, Department of Labor, and CDC-funded pools of funds.

Another opportunity for use of a CDC is in the realm of commercial corridor development. Such a CDC could inventory properties along Genesee Street, starting at the downtown end, that are suitable for reuse/adaptive reuse. In the process, identify ownership and the willingness of owners to reuse and/or participate in creative approaches to corridor revitalization. It could identify which, if any properties, need to be demolished for massing purposes and undertake a demand-driven analysis of the immediate communities, moving outward, to ascertain what goods and services could be supported by the various communities. Link Genesee revitalization to the vacant properties along Washington Street to ascertain if these could be mutually reinforcing. For instance, given the success of the Bourbon project, explore the potential for second and third level housing conversion. The Genesee corridor could, if appropriate, become an entrepreneur-technical corridor that reinforces partnerships with the school district, entrepreneur paths at Delta College and Saginaw Valley State, and retraining programs. This could include MakerSpace, incubator and accelerators for new and emerging businesses. With the agreement of owners, craft RFP(s) that seek developer interest in the corridor(s). Consider that the RFP(s) may need to break the redevelopment opportunities into smaller parts to attract diverse interest. Publicize the various development opportunities to developers within Saginaw and in the surrounding region.

5 – Supply Chain Mapping

The benefits of supply chain mapping are to better understand the relationships of stakeholders in the supply chain and to reveal relationships between individual suppliers. The first step in creating sustainable supply chains is knowing who is involved in the sourcing and production of a company's products. This can be done through self-mapping by individual businesses.

The process of supply chain mapping includes but also moves beyond Tier 1 suppliers (those that provide immediate product) to those who are the suppliers in the supply chain and from Tier 1 suppliers' source, the so-called Tier 2 suppliers. The biggest impact most companies have lies beyond their Tier 1 suppliers. Behind a single Tier 1 supplier, a multitude of Tier 2 suppliers are present, all delivering inputs. This process continues multiple

times, resulting in a supply chain of thousands of suppliers, all directly or indirectly linked to a company. If suppliers are also subcontracting complete or partial orders, the supply chain becomes even longer and more complex.

Understanding the supply chain can reveal vulnerabilities for disruption of goods beyond the control of Tier 1 suppliers. It also can present opportunities by identifying local gaps. Such gaps represent the means to shorten the supply chain and potentially incorporate more local suppliers, or where no supplier is present, identify opportunities for entrepreneurs.

Supply chain mapping can take place in Saginaw very quickly and can be convened by the public and private sectors. Prior evidence from other communities doing supply chain mapping themselves (such as New North in Wisconsin) are replete with examples where supplier connections are made in the first couple of meetings, benefiting several firms in the process. Supply chain mapping identifies opportunities for new product development in existing businesses, opportunities for joint ventures among local firms, and opportunities for new entrepreneurs.

6 – Entrepreneurship

Entrepreneurs see possibilities and solutions where the average person only sees annoyances and problems. Most of us tend to focus on the annoyances without appreciating the opportunities. Learning to think about opportunities, to seek innovation, can be taught and nurtured. To nurture this type of thinking and creativity means that it has to be fostered at an early age, starting with the primary grades in school and reinforced at every level.

An entrepreneur is a person who sets up a business with the aim to make a profit. This vague definition of an entrepreneur is due to the range it covers spanning self-employment to high growth technologies. It can be a person who sets up their first online store on the side, develops new product meeting a specific need, or is a freelancer contracting with various concerns.

There are many successful examples of entrepreneurship development. Both Delta College and SVSU have recognized this in their curriculums. The establishment of the City Market can be a wonderful incubator in food and food products for new and emerging entrepreneurs. For others a MakerSpace or Co-working space may spark entrepreneurship or enable entrepreneurs to work together and collaborate.

As noted above, the best way to foster entrepreneurship is through exposure to business at a very young age. Intentional incorporation of business thinking and activities make entrepreneurship a viable alternative or addition to a rich and lifelong career. The University of Nebraska Extension has an extensive and well-integrated program from which much can be learned. The benefits to entrepreneurship are multifold, aside from the potential for business creation and job generation, are its support to a vibrant community, creating a place that values and retains a younger generation.

APPENDIX

Through its extensive work across the country and in training and education, Diane Lupke & Associates, Inc. has identified a number of Best Practices that may be of benefit to the City of Saginaw as examples. The following are Best Practice Examples in areas related to the Strategic Economic Development Plan envisioned herein.

Best Practices

Cleveland Health-Tech Corridor www.healthtechcorridor.com

United North www.unitednorth.org

Detroit Land Bank Authority www.buildingdetroit.org

New North, Inc. www.wisupplychainmarketplace.com

California Career Ladders Project www.careerladdersproject.org

Georgia Consortium of Advanced Technical Training www.gacatt.com

Sweetwater Sound / University of Saint Francis SOCA www.art.sf.edu

St Augustine Academy Milwaukee Wisconsin www.augprep.org

Heavy Metal Bus Tour www.mstc.edu/events

Nebraska Extension Entrepreneurship & Innovation www.extension.unl.edu/entrepreneurship



Cleveland Health Technology Corridor (HTC)

www.healthtechcorridor.com

The HTC is a 1,600-acre area spanning the heart of Cleveland's east side, connecting Cleveland's vibrant Downtown to its cultural hub of University Circle. Because of the immense health, technology, and educational capital that Cleveland's hospitals and universities provide, the HTC has taken off as the place in the region to develop business synergies and partnerships in the health and technology sector. The opportunities for business attraction to Cleveland by partnering with the area's institutions are tremendous and have resulted in over 1,800 new jobs, 500,000 square feet of new or renovated office and lab space, and over \$4 billion of investment since 2008.

The HTC offers companies access to everything they need to grow and thrive – entrepreneurial support services, venture capital funding, a community of like-minded innovators, thought leaders at the academic and health-care institutions, local manufacturing capacity and expertise, a highly skilled workforce, and a commitment from the public sector to help small businesses expand.



United North

www.unitednorth.org

NorthRiver **Development Corporation** (NRDC, now United North) was founded in 1981 by a group of concerned residents in partnership with the former **Riverside Hospital** to address neighborhood concerns through housing, economic and community **development** initiatives.

Over the years some of NRDC's most visible accomplishments include:

- ✓ 230 home loans
- ✓ 315 units of housing
- ✓ 100 business attraction + expansion projects
- ✓ financial literacy and other educational opportunities to neighborhood residents and businesses
- ✓ \$259,000 in grants to property owners to paint and/or landscape neighborhood homes
- ✓ \$1,247,016 in business loans and façade improvement grants for neighborhood businesses

Detroit Land Bank

www.buildingdetroit.org

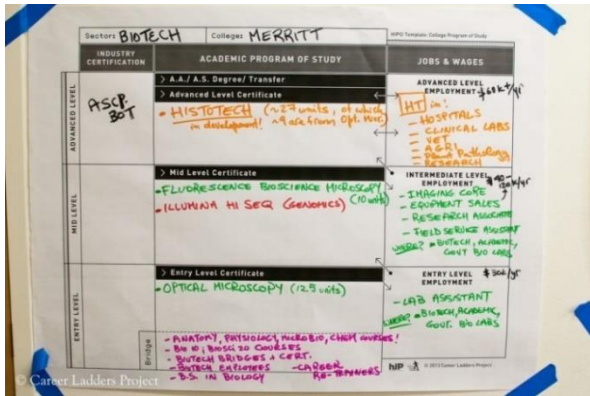
The Detroit Land Bank is a public authority dedicated to returning Detroit's vacant, abandoned, and foreclosed property to productive use. Current programs include auction, side lot, community partnership and demolition. More than 500 properties are returned to the community through these programs every quarter.



Wisconsin Supply Chain Marketplace

www.wisupplychainmarketplace.com

Wisconsin Supply Chain Marketplace directory is a two-pronged online tool that connects buyers and Wisconsin suppliers, making sourcing easy. It provides companies with a convenient avenue to find Wisconsin suppliers in a simple to use system that delivers results and supplier solutions. Similarly, the Marketplace offers suppliers a dynamic platform to get their information out to a broader customer base. Suppliers in the Marketplace get access to RFPs, RFQs, and CFIs with an opportunity to respond to the requests and access new markets.



[California Career Ladders Project](http://www.careerladdersproject.org)
www.careerladdersproject.org

The Career Ladders Project (CLP) aims to improve educational and career outcomes for Californians. Such opportunities are fostered through research, policy reforms and strategic assistance to community colleges—and their K16 education, workforce and community partners.

Helping youth and adults succeed in today’s knowledge-based economy requires a new approach to meet workforce requirements, an approach that brings together educators, employers and workers to create ladders of opportunity. The Career Ladders Project for the California Community Colleges was created to help realize this goal. In 2001, the Board of Governors of the California Community Colleges called for the formation of a statewide comprehensive career ladders initiative, entitled Ladders of Opportunity, to ensure access to post-secondary career pathways for under-served populations.



[Georgia Consortium for Advanced Technical Training](http://www.gacatt.com)
www.gacatt.com

The Georgia Consortium for Advanced Technical Training (GA CATT) is an innovative and industry-led approach to education. Coweta County’s Central Educational Center, West Georgia Technical College, the Technical College System of Georgia, and eight Coweta County manufacturers launched the nation's first apprenticeship program that focuses on high school students.

Benchmarked on the German Dual Education System, this program is an educational model developed together with technology leaders. Companies get access to a high quality candidate pool. Students profit from guaranteed employment for the time of their training, the opportunity to earn an Associate’s Degree with no debt to pay off afterwards, and a German DIHK certification. This certification demonstrates to companies that the apprentice was trained to internationally recognized standards and has been trained to adequately perform the skilled work needed in most manufacturing settings.

University of Saint Francis and Sweetwater Sound
www.art.sf.edu

In 2007, [Sweetwater Sound](http://www.art.sf.edu) began a partnership with Fort Wayne, Indiana’s University of Saint Francis — providing funds for scholarships, gear purchase and installation, and other music-related projects — to help create a four-year degree program in Music Technology including Recording Engineering and Production; Audio for the Creative Arts; and Music Technology Sales.

Sweetwater provides internships for students and hires the program’s graduates as sales engineers and to work in Sweetwater Studios. The USF Music Technology Center in downtown Fort Wayne, Indiana houses a 2,000-seat concert hall, several recording studios, a mastering studio, classrooms, a piano lab, 12 individual mix/edit suites, large-ensemble rooms, and individual practice rooms.

“Students are receiving the best possible education in music technology, as professional as any in the country, which benefits the music business, the community, and Sweetwater.” --Sweetwater CEO Chuck Surack



St Augustine Preparatory Academy
www.augprep.org

An innovative partnership between Marquette University, the Milwaukee School of Engineering, Wheaton Franciscan Healthcare, and the Ramirez Family Trust. The \$80-90 million investment was initially envisioned by Husco CEO Gus Ramirez for his low income Latino neighborhood on Milwaukee’s southside.

In its first year, St Augustine Prep enrolled 500 K-12 Students in 2017. The school plans to expand to 2000 by 2024. The school uses blended learning, project based learning, and personalized learning methods for each of its students. Engineering, healthcare, and athletics curriculum in a student-centered environment where young learners take ownership of their education not only in academics, but also physical health, creativity, and faith. Graduates are envisioned to achieve their highest potential and make the Milwaukee, and ultimately the world, a better place.



[Heavy Metal Bus Tour](http://www.mstc.edu/events)
www.mstc.edu/events

Thousands of eighth-grade students from across central and northern Wisconsin tour manufacturing facilities and learn about one of three technical colleges in the region. Mid-State Technical College hosts separate tours at its Marshfield, Stevens Point and Wisconsin Rapids Campuses. The 2016 tour featured 66 manufactures and 3,800 students.

The event is the result of a collaboration between the North Central Wisconsin Workforce Development Board, Central Wisconsin Metal Manufacturer’s Alliance (CWIMMA) and three technical colleges, including Mid-State. The tours of high-tech manufacturing facilities showcase educational and career opportunities in welding, fabricating, machining, engineering and manufacturing trades.

[Nebraska Extension Entrepreneurship & Innovation](http://www.extension.unl.edu/entrepreneurship)
www.extension.unl.edu/entrepreneurship

The University of Nebraska Extension operates innovative all ages entrepreneurship programming for area schools. **TEC Box Tinker, Explore, Create (TEC) Boxes** is an activity for the youngest grades and includes supplies for hands-on activities to foster problem solving, critical thinking, and innovation. **Inventure Day** is a Single-Day Entrepreneurial Adventure for Middle Schoolers. Students familiarize themselves with local businesses and business owners, and identify potential entrepreneurial careers. **Capitol Contest** selects the best ideas from Inventure Day to be featured at the State Capital. **Entrepreneurship Clinic** is for high school students in which students problem solve and create solutions identified by local businesses within their own factories and retail establishments or others.

