Livingston County Economic Action Plan A Talent and Land Use Analysis

Ann Arbor SPARK



Acknowledgements

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TABLE OF CONTENTS

Who Are	Page 4	
Introduc	Page 5	
Land Us	Page 6	
	Findings and Recommendations	Page 6
	CPIX Analysis	Page 8
	Utility Services	Page 11
	Site Selector Searches	Page 12
	Zoom Prospector Searches	Page 13
	Broker Survey	Page 15
Talent		Page 16
	Findings and Recommendations	Page 16
	Educational Attainment	Page 17
	Industry/ Occupation	Page 18
	High School Employment Tracking	Page 20
	Training Providers	Page 20
	Inflow/ Outflow	Page 21
	Real Time Data Analysis	Page 23
	High Ranking Occupations	Page 25
Benchm	arking	Page 27
	Findings and Recommendations	Page 27
	Introduction	Page 28
	Communities (Map)	Page 29
	Setting the Stage	Page 31
	Median House Value	Page 35
	State Equalized Value	Page 36
	Commercial Property Listings	Page 37
	Median Household Income	Page 38
	Educational Attainment	Page 39
	Employment	Page 40
	Manufacturing	Page 41
	Wages	Page 42
	Employees per Business	Page 43
	Population Change	Page 44
	Housing Affordability	Page 45
	Final Rankings	Page 46
Conclus	Page 48	
Appendi	Page 49	

Who are we?



The Economic Development Council of Livingston County (EDCLC) is comprised of a committed group of community leaders from the public and private sectors who come together to achieve county-wide goals for economic development. The EDCLC oversees Ann Arbor SPARK's work in Livingston County.



Ann Arbor SPARK is a non-profit organization dedicated to the economic prosperity of Washtenaw and Livingston Counties. Ann Arbor SPARK's expert staff uses their skills and knowledge to attract, develop, strengthen, and invest in driving industries to help the region thrive.



The Workforce Intelligence Network for Southeast Michigan (WIN) helps to cultivate a comprehensive and cohesive talent system to ensure employers' success. WIN is a partnership of 10 community colleges and 6 Michigan Works! agencies in southeast Michigan.

What are Driving Industries?

Driving industries are businesses that sell goods and services and grow our region's economy. They create jobs, attract investment, and form businesses clusters that attract other companies to the region. They encompass a broad range of companies and employment opportunities.

Introduction objectives and important takeaways

The goal of this report is to better understand the economic needs of Livingston County, particularly in the talent and real estate markets. Gathered through gap analysis techniques, the data identify county-wide needs in the markets studied. This data is benchmarked against comparable communities to help us to understand where Livingston County stands regionally and nationally. The purpose of this study is not to market the region or to use data to promote Livingston County. Instead, this information is intended to strengthen the EDCLC's understanding of where Livingston County stands and what needs can be addressed in order to bolster the County's economy.

There are three main sections of this report:

Land Use

This section of the report provides an analysis of land use within Livingston County to better understand potential barriers to development. It examines the impact that zoning and utilities have on property availability, while providing an in-depth analysis of market demand.

Talent

The data and information compiled in this section of the report were selected to better illuminate challenges within the talent market to provide a basis for innovative and data-driven workforce development strategies.

Benchmarking

This section of the report makes use of benchmarking techniques to show where Livingston County stands among neighboring communities in the region, and in comparison with a selection of communities across the nation with likecharacteristics.

Key Takeaways from the Livingston County Land Use Study

1. Livingston County's greenfield sites are not shovel-ready. Although Livingston County has an abundance of vacant greenfield sites on the market, lack of access to infrastructure for utilities on these sites hinders them from being developed into job-creating projects. Without utility serviced sites, demand for new construction remains low in the county.

Recommendation: Municipalities should take a prudent approach to exploring whether new infrastructure would promote development and evaluate the costs and benefits.

2. Livingston County has very little land zoned for commercial or industrial development. Although commercial and industrial uses create jobs and yield significant property tax revenue, most of the county's land is zoned for residential or agricultural uses.

Recommendation: In order to attract projects with a significant economic impact, greenfield sites that are served by utilities and close to highways should be zoned for commercial or industrial development.

3. The inventory of both available land and available buildings in Livingston County is smaller than what is typically desirable for large job-creating projects.

Recommendation: Municipalities should be strategic about identifying potential sites for land assembly and explore strategies to lower barriers for assembling land, and continue to work with Ann Arbor SPARK to keep these sites on the radar of national site selectors via responses to RFP's from the Michigan Economic Development Corporation and the Detroit Regional Chamber.

Land Use Commercial & Industrial Property Supply and Demand

Livingston County is home to a range of settings, from walkable downtowns, to suburban residential developments, to rural communities and farms. Given its range of character, the county is amenable to new development while maintaining its natural and agricultural assets. Recent growth has included significant multiparcel industrial operations, small mom-and-pop retail storefronts, single family home and condo developments, healthcare facilities, and more. While growth within the county is projected to continue, barriers stand in the way of meeting market demand.

In the following analysis we seek to better understand what real estate assets exist within the county and how they can effectively leverage development. The study looks at indicators of supply and demand for different land uses in order to quantify the gap. In addition, survey data was used to gain a deeper, more nuanced understanding of the local market.

Supply

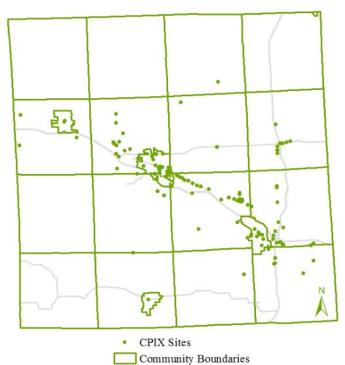
In the following sections of this report, we seek to show a clear picture of real property assets that exist within Livingston County today. In the CPIX Analysis we explore the current property listings on CPIX (Michigan's commercial real estate listing site) to provide a relevant sample of properties that are on the market in Livingston County and the features and amenities that these properties have to offer. Next, the Water, Sewage, and Broadband Access Analyses delve into access and availability of utilities for sites within the county. Ultimately, understanding what real estate assets Livingston County *has* will help to shed light on what real estate assets Livingston County *needs* to meet the current market demand.



Land Use CPIX Analysis- May 2017

CPIX, Michigan's leading commercial property database, has 345 listings in Livingston County. This section of the report breaks down the listings to identify available properties, and factors such as zoning, utility access, property size, and price.

ALL CPIX LISTINGS



Source: CPIX GIS: Livingston County Information Technology and GIS, Ann Arbor SPARK

CPIX Utility Access

Most of the sites that are posted on CPIX are serviced by utilities (71% access water and 88% access sewage) and access Broadband for Business (88%).



71%

Access

Water Utilities



Sewage



88% Access Broadband

Business

There are 345 listings on CPIX located in Livingston County, of which 56.5% are for sale and 43.8% are for rent. The listings are clustered in close proximity of Grand River Avenue and US 23, with a few scattered sites through out the county. Most of the listings (42%) are for vacant land, which is unsurprising given the county's large stock of undeveloped land. Other commonly posted property types include retail/commercial, office, and industrial. The average building size is 34,696 SF and the average site acreage is 22.6 acres.

Average Sale Price \$129.77

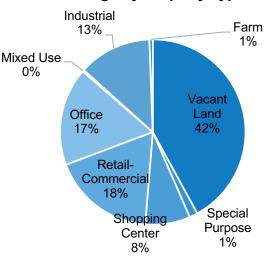
Per Square Foot

(Building)

Average Sale Price \$167K Per Acre (Site)

Average Lease Price

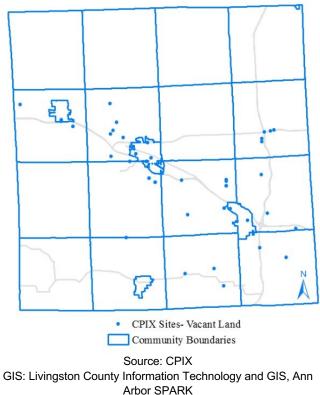
\$11.66 Per Square Foot Annually



CPIX Listings by Property Type

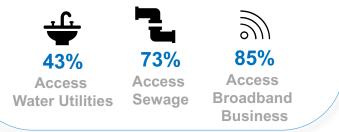
Land Use CPIX Analysis- May 2017, Continued

Vacant Land

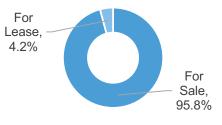


CPIX Vacant Land Utility Access

While most of the available properties posted to CPIX are serviced by utilities, the prevalence of water and sewage service access among vacant parcels was much lower than for developed parcels. Only 43% of the CPIX postings for vacant land are serviced by water and only 73% are serviced by sewage. Broadband for Business is largely accessible (85% of parcels have access).

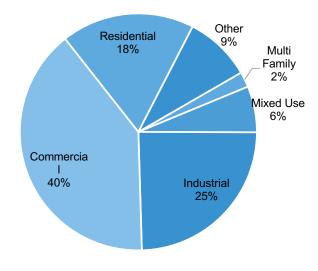


Vacant land makes up 42% of all CPIX postings in Livingston County. The average listing price for vacant sites is \$167,000 per acre. Sites range from less than half an acre to 981 acres of land, with a median area of 6.1 acres. Forty percent of all vacant sites are located in commercial zoning districts; however, these sites tend to be on the smaller size and only comprise 17% of the total land area that is marketed on CPIX.



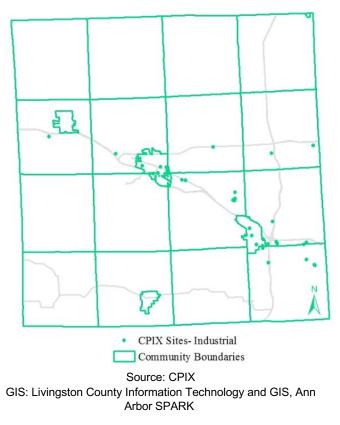
Average Sale Price \$167K Per Acre

CPIX Listings- Vacant Sites Postings by Zoning Classification



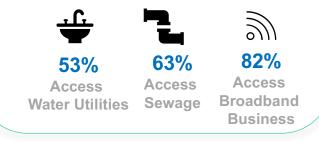
CPIX Analysis- May 2017, Continued

Industrial Sites



CPIX Industrial Sites Utility Access

Only about half of all available industrial sites on CPIX have access to water utilities (53%) and slightly more access sewage (63%). Most industrial sites on CPIX have access to Broadband for Business (82%)



Even though only 13% of the listings on CPIX are industrial sites, industrial development serves as a major economic catalyst for Livingston County. Industrial properties range from less than an acre up to 60 acres, with an average acreage of 7.2. The majority of industrial sites are for sale, with only 41% for lease. Of the rental properties, about half have triple-net leases and the other half are either gross or modified gross leases. The average sale price for an industrial property is \$57.39 per square foot or \$151,000 per acre. The average square footage of an industrial building is 59,421 SF.

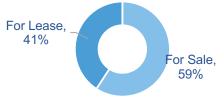
Average Sale Price Average Lease Price

\$57.39 Per Square Foot (Building)

\$6.44 Per Square Foot annually

Average Sale Price

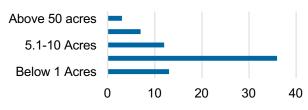
\$151k Per Acre (Site)



CPIX Sites- Industrial Average acreage: 7.2 Acres Median acreage: 3.5 Acres

Average ceiling height: 19.6 Feet Average loading docks: 1.3 Docks

Number of industrial CPIX listings by acreage



Utility Service

Utility access can serve as a catalyst to development. Without water, sewage, or Broadband, companies will often turn to a site that more easily accommodates their needs. The next sections of this report examine utility access within the county.

In Livingston County, only 367 of 1,017 Industrial Parcels (36%) and 1,361 of 2,221 Commercial Parcels (61%) are located within the **Water Service Area**.

1,631 of 1,993 Vacant Parcels (82%) in Livingston County are located outside of the Water Service Area. This finding supports the hypothesis that there is higher demand for real estate within the water service area than outside of it.

In Livingston County, only 568 of 1,017 Industrial Parcels (56%) and 1,714 of 2,221 Commercial Parcels (77%) are located within the **Sewer Service Area**.

1,458 of 1,993 Vacant Parcels (73%) are located outside of the Sewer Service Area. This finding supports the hypothesis that there is higher demand for real estate within the sewage service area than outside of it.

In Livingston County, only 678 of 1,017 Industrial Parcels (67%) and 1,689 of 2,221 Commercial Parcels (76%) are located within the **Broadband Business Service Area**.

1,038 of 1,993 Vacant Parcels (52%) are located outside of the Broadband Business Service Area

A Census "Block" is considered to be serviced by Broadband for business if at least one parcel within the block has access. To see a map of Census blocks in Livingston County, please see the Appendix.

Data on utility access was provided by SEMCOG and created in 2005. Although the dataset included planned infrastructure through the year 2025, there may be some inconsistencies in the representation of the sewage and water area.

Demand

The following sections of this report provide a better understanding of what brokers, site selectors, and developers look for when making a property selection, aggregating information from a variety of sources to understand needs of the major players in the market.

First, we include an analysis of site selector searches to understand the market for large jobcreating projects. This analysis uses information from Requests for Proposals (RFPs) directed to the Michigan Economic Development Corporation.

Next, we include an analysis of all property searches using Zoom Prospector, an online property database. Since Zoom Prospector is a free tool that is available to a broad audience, this analysis helps to reveal demand based on a large cross-section of the market, including investors, site selectors, developers, and more.

Finally, a broker survey leverages the expert opinions of local real estate professionals to shed light on market demand. An analysis of the survey results is included.

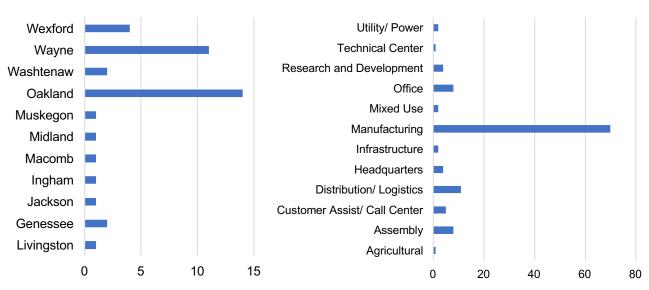
Site Selector Searches

The Michigan Economic Development Corporation receives Requests for Proposals (RFP's) from site selectors to provide assistance with the identification of viable sites for the development of large job-creating projects with substantial investment and a statewide impact. The following analysis uses data from these site selector requests to identify trends in demand.

Of the 213 Site Selector Searches since 2013, 41 were county-specific. Of the county-specific searches, only 1 was in Livingston County.

Of the 213 Site Selector Searches since 2013, 118 identified a facility type. The majority of these searches were for manufacturing facilities.

Site Searches by Facility Type



County-specific Site Searches

Site Selector Searches, Continued

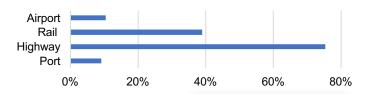
Of the 213 Site Selector Searches conducted since 2013, 88 identified specific transportation requirements. Trucking access was the most frequently identified transportation need, with 75% of the requests listing highway access as desirable or a necessity.

Average building minimum size: 95,378 SF Median building minimum size: 42,500 SF

Average building maximum size: 182,960 SF Median building maximum size: 70,000 Average site minimum size: 94 Acres Median site minimum size: 15 Acres

Average site maximum size: 207 Acres Median site maximum size: 20 Acres

Site Selector Searches by Transportation Requirements

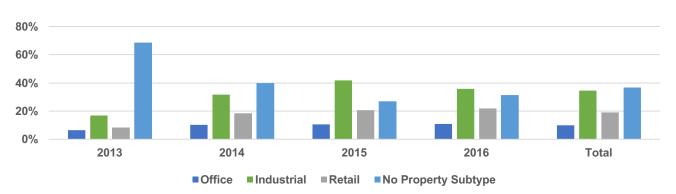


Utilities requests inclu

These requests include a variety of utility needs (electric, sewage, water). Sites that are shovelready and equipped with utilities are much more likely to attract large jobcreating developments

Zoom Prospector Searches

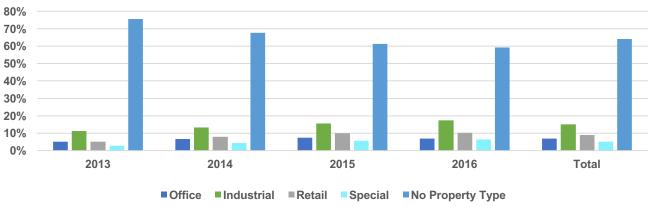
Ann Arbor SPARK and the Michigan Economic Development Corporation partner with a commercial real estate search database, Zoom Prospector, to promote available sites and buildings. All Zoom Prospector searches are tracked using Google Analytics. When the data is aggregated, these searches serve as an indicator of market demand. Below is a summary of what developers, business owners, site selectors, and more are looking for when they use the Zoom Prospector database.



LAND Percent of Total Searches by Property Type

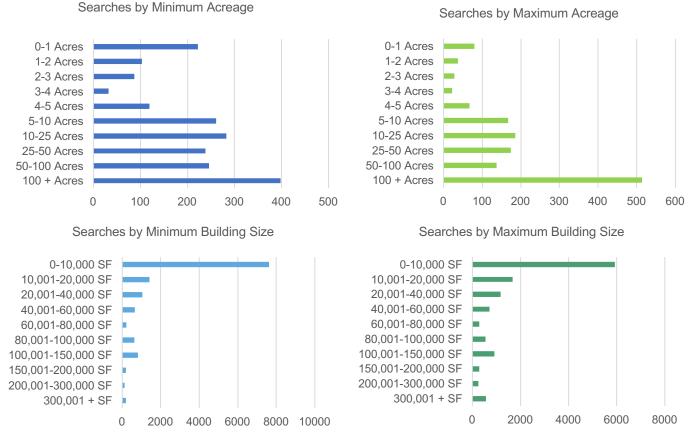
Out of all of the land searches, industrial properties were the most frequently searched property type between 2013 and 2016.

Land Use Zoom Prospector Searches, Continued



BUILDINGS Percent of Total Searches by Property Type

Out of all of the building searches, industrial properties were the most frequently searched property type between 2013 and 2016.



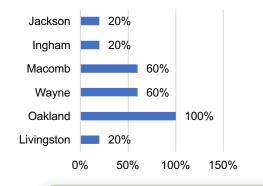
Zoom Prospector searches were for a broad range of sizes, however, in both the minimum and maximum search filters, searches for sites exceeding 100 acres and buildings under 10,000 SF were the most prevalent.

Broker Survey

Ann Arbor SPARK surveyed local brokers on the real estate market in Livingston County. Their expert opinion sheds light on what developers are looking for and how the local market serves them best. Five professionals representing firms that cover the Livingston County market answered the survey, the results are summarized below.

What counties in the southeast Michigan market are the most popular for industrial development? (Select top three)

What counties in the southeast Michigan market are the most popular for commercial development? (Select top three)

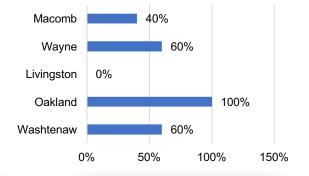


Approximately what percentage of your clients express interest in Livingston County?

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Average response: 37.6%
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Approximately what percentage of your clients express interest in new construction?

Average response: 24%



When a client is looking for a building with specific requirements in Livingston County and they are unable to find it, are they more likely to explore new construction or look to other counties?

100% of survey respondents said that the client would look outside of Livingston County if specifications could not be met locally.

What are the biggest barriers to development in Livingston County?

Lack of move-in ready buildings, lack of greenfield sites, **infrastructure problems**, **lack of workforce**, no industrial sites in the northeast part of the county.

Talent



Key Takeaways from the Livingston County Talent Study

The talent base in Livingston County is one composed primarily of individuals with at least a high school education, but less than a Bachelor's degree, which presents a unique set of opportunities and challenges to employ its workforce. Indeed, there are a few key challenges (or gaps) that exist between the base explored in this study and the demand for talent identified by this analysis:

1. High-skilled workers are currently underserved by the demand for jobs in Livingston county. The *Real-Time Analysis* section demonstrates that with only one of the top ten occupations being high-skill, workers with a Bachelor's degree and above are better served looking for employment outside of the county.

Recommendation: Focus business attraction efforts on employers with high-wage/highskill employment opportunities.

2. We do not fully understand the progression of talent through high school and beyond. As demonstrated in the *High School Employment Tracking* section of this analysis, all high schools in Livingston are relying singularly on self-reporting at graduation to identify next steps for their students. This results in these schools lacking a clear picture of whether or not they are effectively preparing their students for the jobs available in today's economy.

Recommendation: Follow-up with students after they graduate from high school (five or even 10 years down the road) to create a more complete snapshot of the effectiveness of secondary education in Livingston county.

3. Half of the top ten advertised occupations in Livingston county are middle-skill. The *Real-Time Data Analysis* section demonstrates that having at least a middle-skill education is a good indicator that an individual will be able to find work, since half of the available jobs in Livingston are middle-skill, with six of ten being middle-skill and above. In addition, both the *Real Time Data Analysis* and the *High Ranking Occupations* sections skills in the healthcare sector were identified as in-demand.

Recommendation: Work with the Livingston Educational Services Agency to make sure that school curricula provide students with training to meet workforce demands.

Collaborate with the growing healthcare sector to ensure local talent has access to new employment opportunities.

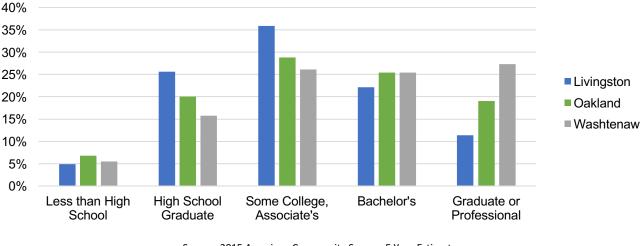


WORKFORCE

INTELLIGENCE

Talent Educational Attainment

The Workforce Intelligence Network for Southeast Michigan (WIN) has partnered with Ann Arbor SPARK to study employment supply and demand in Livingston county in order to identify a potential talent gap. The study covers topics such as completion rates from training programs, educational attainment of the workforce, in-demand occupations, and wage rate analysis.



Livingston County, Michigan Educational Attainment (Population 25+)

Source: 2015 American Community Survey, 5 Year Estimates Analysis: Workforce Intelligence Network

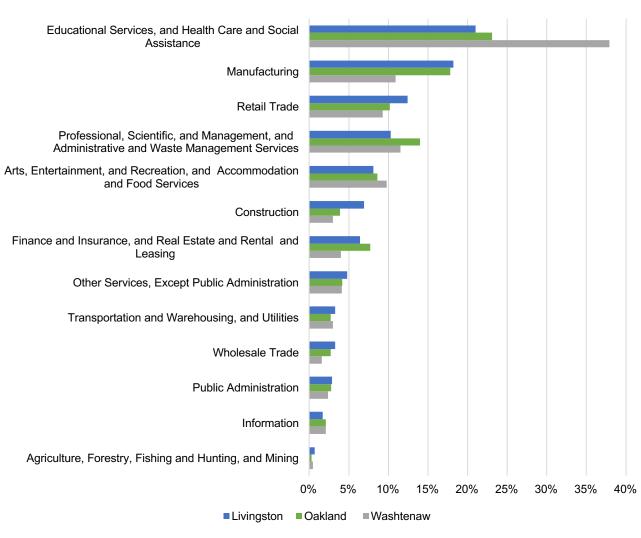
Compared to neighboring Oakland and Washtenaw Counties, Livingston County has a higher percentage of its 25+ population with a high school education, and some college or associate's degrees. In Livingston county, just over one-third of the 25+ population (36.0%) has either some college or an associate's degree, while approximately one-quarter of the 25+ population (25.6%) has a high school education. This amounts to 61.6% of the Livingston county population with at least a high school education but less than a bachelor's degree, while both Oakland and Washtenaw counties see less than 50% of their populations with the same level of educational attainment. This presents unique challenges and opportunities to employ and supply talent in Livingston county compared to its neighbors.



Talent

Industry and Occupation of Residents

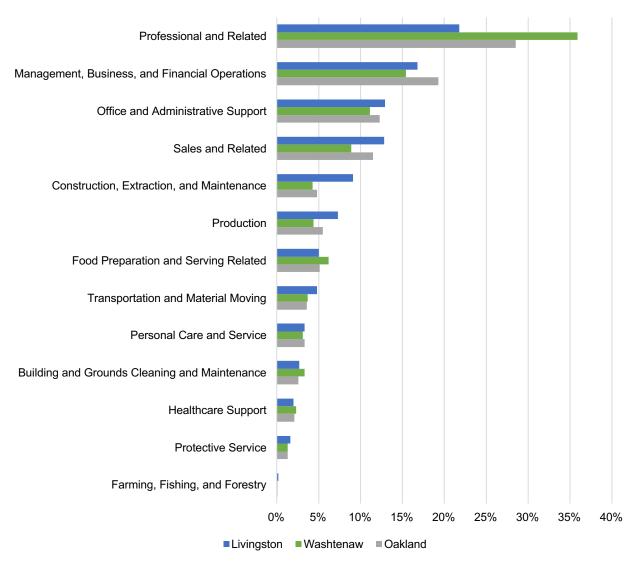
Compared to Washtenaw and Oakland Counties, Livingston County has a residential population that is employed in a broad range of industries. The industry with the most concentrated employment in Livingston County is the *Educational Services and Healthcare and Social Assistance* sector, but employment in this sector is considerably lower than in Oakland or Washtenaw Counties. The next leading sector by employment in Livingston County is *Manufacturing*, followed by *Retail Trade*. Together, these three sectors make up more than half (51.6%) of the employed civilian population that lives in Livingston County.



Industry by Occupation for Employed Civilian Population 16 and Over

Source: 2015 American Community Survey, 5 Year Estimates Analysis: Ann Arbor SPARK Talent WIN MUNICIPAL Industry and Occupation of Residents, Continued

As with industry classifications, Livingston County residents are employed in a more diverse range of occupational classifications than in Oakland or Washtenaw Counties. The three categories that employ the largest number of Livingston County residents are considered to be "White Collar" occupations and are typically high-skilled. Surprisingly, even though nearly one in five (18.2%) residents are employed in *Manufacturing*, only 7.3% work in *Production Occupations*, indicating that residents who work in *Manufacturing* are employed in a variety of occupational classifications.



Occupation for Employed Civilian Population 16 and Over





Talent High School Employment Tracking

Tracking students post-high school graduation provides information on whether the developing population base of an area is prepared for the unique needs of the labor force in their region. It also can help provide insight as to how well the secondary educational system is performing in developing its students for success: What kinds of jobs do children have after high school? Do they make a living wage? How many pursue additional education or training?

- Livingston County has six high schools, five of which are public and one charter school. These include Brighton High School, Hartland High School, Howell High School, Kensington Woods Schools, Fowlerville High School and Pinckney Community High School.
- In the qualitative analysis that WIN conducted to determine if student tracking occurs posthigh school, only two schools responded to say that tracking is accomplished through selfreporting by graduating seniors on immediate plans after graduation.

Training Providers

When looking at the tri-county region (Oakland, Washtenaw and Livingston), Livingston County residents have 33 schools with many different occupational programs from which to choose. Graduation rates, industries, school size and distance learning availability vary widely between programs. The most popular career tracks are those in the medical and therapeutic field, business administration, and skilled trades. In particular, skilled trades tend to have plentiful openings in the region, providing an optimistic growth outlook for Livingston County residents.

Institutions focused on specific certificate programs lasting under one year, such as those at the Ross Medical Education Centers and Dorsey Business Schools, had completion rates over 75%. Completion rates were considered for 150% of normal time for the program of study based on the requirements to complete the degree from the institution's catalog. Community colleges on the other hand, offer long-term schedule flexibility and the ability to take relevant coursework without entering a degree path, which may appeal to part-time and nontraditional students. They tend to have lower completion rates near 15% for this time frame. Other institutions fall in between.

Median earnings for each program reflect the wide variety of industries, training costs, and specialization represented. Cosmetology occupations, precision metal working, and medical and administrative assistants receive relatively low wages, possibly reflecting their short length of study. However, median earnings for information systems, accounting, more technical medical professions such *as Registered Nurses*, and mechanical and drafting occupations may be over \$30 hourly.

For a detailed breakdown of training program completions in the three-county region, please see Appendix .

Talent Inflow/ Outflow



In 2014, Livingston County's workforce consisted of 77,716 residents. 19,600 (25.2%) of the residents lived and worked within Livingston County, while the remaining 58,116 residents (74.8%) traveled outside of the County for work. Since 2011, the number of residents that traveled outside of the County for work increased by 3,252 (5.9%) individuals from 54,864 to 58,116.

Livingston County residents were more mobile in 2014 than in 2011. In 2014, 42.1% of the County's workforce (34,418 individuals) traveled more than 25 miles to their place of employment compared to 2011 when 41.2% (32,575 individuals) traveled more than 25 miles. Oakland County was the most popular destination outside of Washtenaw County for residents to find employment. 17,744 residents (22.8% of the County's workforce) traveled to Oakland County for employment in 2014, followed by 13,234 residents (17.0% of the County's workforce) that traveled to Washtenaw County.

Livingston County is a commuting community. In 2014, 50,964 workers were employed in Livingston County. 31,364 (61.5%) of those workers were employed in Livingston, but lived outside of its borders. Of those that traveled to Livingston County for work, 9,404 (30.0%) of the workers were 29 or younger. While Genesee County employers were able to attract a sizable amount of young workers in 2014, 16,664 (53.1%) of the internal jobs were filled by workers between the ages of 30 and 54. This indicates a desire for experienced workers in Livingston County.

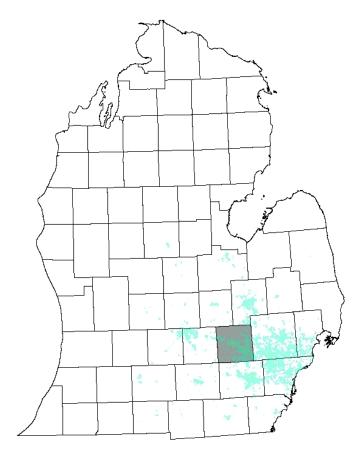
Unlike the outflow of Livingston County residents, the great majority of workers that travel to Livingston reside in either Oakland or Wayne Counties. 7,222 (14.2%) of Livingston County workers travel in from Oakland County followed by 5,766 (11.3%) that travel in from Wayne County. 20,853 (40.9%) of the 50,964 workers in Livingston County traveled more than 25 miles to their place of employment in 2014.



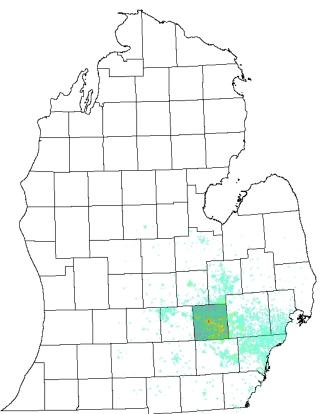
Talent



Inflow/ Outflow



Where Livingston County Residents are Employed Source: Census On The Map Analysis: Workforce Intelligence Network GIS: Ann Arbor SPARK



Where Livingston County Workers Reside Source: Census On The Map Analysis: Workforce Intelligence Network GIS: Ann Arbor SPARK

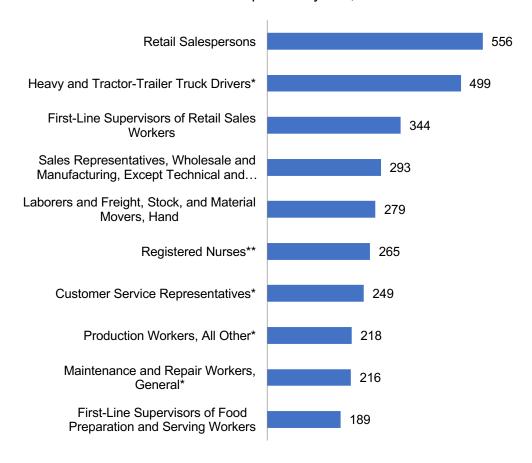
Real Time Data Analysis

Another key to understanding the full picture of the talent gap in Livingston County is real-time analysis. This type of data provides insight into where occupational advertisements are concentrated, and thus, what types of employment needs are not being fulfilled currently. Listed below are the top occupations by advertisements for the calendar year 2016. Noteworthy is the lack of overlap with the emerging in-demand occupations above, only one occupation overlaps (*Registered Nurses*), perhaps indicating that the jobs being currently advertised for at high rates reflect more temporary needs of the Livingston area.

Five of ten of these occupations are also considered middle-skill; these include Sales Representatives, Customer Service Representatives, Maintenance and Repair Workers, Production Workers and Heavy and Tractor-Trailer Truck Drivers. One occupation (Registered Nurses) is considered high-skill.



Talent *Real Time Data Analysis, Continued*

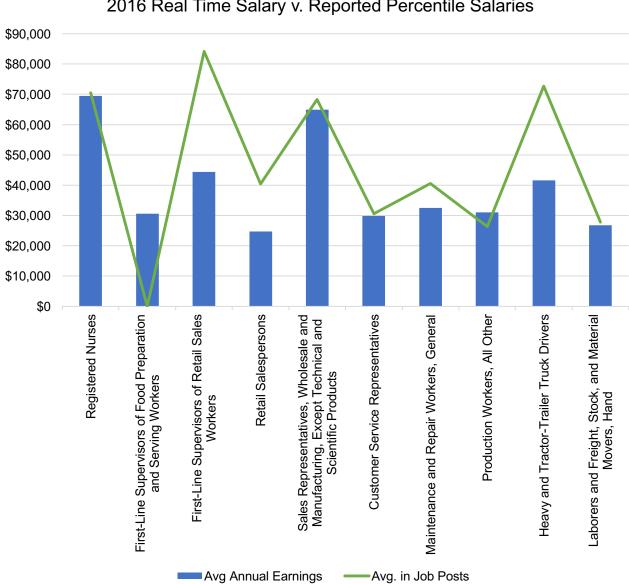


Livingston County, MI In-Demand Occupations by Ads, 2016

Source: Labor Insight[™] Burning Glass Analysis: Workforce Intelligence Network Note: * are Middle-Skill Occupations; ** is High-Skill Occupation

For these occupations, analyzing the difference between advertised salaries in job postings and the reported wages of currently-employed workers in the same occupations can provide insight into why they have such a high volume of advertisements, i.e., do they go unfilled because advertised salaries are lower than workers expect? As can be seen from the following graph, with the exception for *First-Line Supervisors of Food Preparation and Serving Workers* (where real-time salary ad data was unavailable) and *Production Workers* the real time average salary nearly matched or exceeded the reported average annual salary for each occupation.





Livingston County, MI 2016 Real Time Salary v. Reported Percentile Salaries

> Source: Labor Insight[™] Burning Glass, EMSI 2017.2; QCEW Analysis: Workforce Intelligence Network

WORKFORCE INTELLIGENCE NETWORK

Talent High Ranking Occupations



To best understand the emerging in-demand occupations in the Livingston County market, analysis was completed on both middle-skill and high-skill occupations. Middle-skill occupations are those occupations with more than a high school diploma (such as training or apprenticeships), but less than a bachelor's degree. Many skilled trades and advanced manufacturing positions fall into this designation. High-skill occupations are those occupations that require at least a bachelor's degree. While the population aged 25+ in Livingston county with this level of education is smaller, both Oakland and Washtenaw have higher bases in this regard, indicating an analysis of these occupations provides insight into how to best attract and develop talent from neighboring counties.

To develop a list of occupations for both educational designations, the above education filters were applied. Then, to make sure only high wage and high demand occupations were analyzed, occupations with less than the median wage of Livingston County (\$18.59) were excluded, along with occupations that had negative growth over the next ten years. Thus, the following lists reflect the top ten occupations, based on 2016 employment, in both middle-skill and high-skill educational categories. An individualized break down of the demographics of each of the above middle-skill and high-skill occupations can be found in the Appendix.

Top High-Skill Occupations in Livingston County, 2016								
Occupation	Median Annual Earnings	2016 Jobs	2026 Jobs	Percent Change	Annual Opening s	Typical Entry Level Education	Typical On-The- Job Training	
Accountants and Auditors	\$63,253	345	438	22%	27%	20	Bachelor's degree	
Business Operations Specialists, All Other	\$59,010	291	374	42%	29%	13	Bachelor's degree	
Computer Systems Analysts	\$77,230	185	239	10%	29%	8	Bachelor's degree	
General and Operations Managers	\$90,230	968	1,180	19%	22%	49	Bachelor's degree	
Industrial Engineers	\$84,074	460	548	27%	19%	24	Bachelor's degree	
Management Analysts	\$79,643	337	502	49%	49%	23	Bachelor's degree	
Market Research Analysts and Marketing Specialists	\$50,710	185	277	29%	50%	12	Bachelor's degree	
Mechanical Engineers	\$81,765	520	571	61%	10%	23	Bachelor's degree	
Physical Therapists	\$83,554	192	310	50%	61%	19	Doctoral or professional degree	
Registered Nurses	\$64,709	584	828	29%	42%	42	Bachelor's degree	

High-Skill Occupations



Middle-Skill Occupations

	Тор Г	Middle-Sl	cill Occupat	tions in Livi	ngston County, 2	016	
Occupation	Median	2016	2026	Percent	Annual	Typical Entry	Typical On-The-
	Annual Earnings	Jobs	Jobs	Change	Openings	Level Education	Job Training
Automotive Service Technicians and Mechanics	\$42,411	294	304	3%	9	Postsecondary non-degree award	Short-term on- the-job training
Carpenters	\$42,473	373	419	12%	9	High school diploma or equivalent	Apprenticeship
Dental Hygienists	\$57,304	187	216	16%	6	Associate's degree	None
Electricians	\$58,947	252	280	11%	7	High school diploma or equivalent	Apprenticeship
Industrial Machinery Mechanics	\$47,008	190	269	42%	14	High school diploma or equivalent	Long-term on- the-job training
Plumbers, Pipefitters, and Steamfitters	\$63,939	192	228	19%	7	High school diploma or equivalent	Apprenticeship
Police and Sheriff's Patrol Officers	\$57,949	298	411	38%	24	High school diploma or equivalent	Moderate-term on-the-job training
Sales Representatives, Services, All Other	\$44,741	331	418	26%	17	High school diploma or equivalent	Moderate-term on-the-job training
Sales Representatives, Except Technical and Scientific Products	\$54,538	844	1,038	23%	39	High school diploma or equivalent	Moderate-term on-the-job training
Tool and Die Makers	\$43,909	216	228	6%	3	High school diploma or equivalent	Long-term on- the-job training

Source: EMSI 2017.2; QCEW

Analysis: Workforce Intelligence Network

Note: This list reflects the top ten occupations with the highest 2016 employment, with more than a high school education and less than a bachelor's degree, after occupations with less than the median wage (\$18.59) and negative growth over the next ten years were removed.

Key Takeaways from the Livingston County Benchmarking Study

1. When compared to nearby counties in Michigan, Livingston County is in the middle of the pack when it comes to educational attainment, but when we look at our national competitive set, we rank last. This trend means that the community needs to attract more high skilled people and jobs to the area.

Recommendation: Focus business expansion and attraction efforts on companies with high-wage/high-skill positions that will bring new high-skill employees to the County. Promote training funding to current residents who might want to increase their skillset.

2. We need more people who want to work in our community to be successful with talent connections. Livingston's labor force participation rate is 7th out of 8th in our national set, meaning that a high percentage of Livingston residents are indicating that they want to work in other markets.

Recommendation: A large percentage of retirees live in Livingston County and are unlikely to re-enter the labor force. In order to increase labor force participation, municipalities in Livingston County should provide opportunities for young professionals to live, work, and play. Business attraction efforts should target companies that employ a large percentage of young professionals.

3. There are disparities between the County's worker population and residential population. Livingston County's wages are last when compared to nearby counties in Michigan and 5th out of 8 when compared to our national set, despite the fact that Livingston County has the highest median household income in Michigan. This speaks to Livingston as a bedroom community – people can find homes in Livingston and work elsewhere to earn higher wages.

Recommendation: Access to different housing types and public transportation play a role in Livingston County's ability to sustain its existing workforce. Municipalities could prioritize making housing available at a variety of price points.

Companies should look to Community Ventures and State-funded programs as potential transportation funding options. Ann Arbor SPARK's business retention and growth program should continue to publicize these funding sources and encourage businesses to take advantage of them.

Introduction

This section of the study compares Livingston County's talent market to those in regionally and nationally competitive counties. A series of metrics were applied to two different sets of comparable communities. The first set includes neighboring communities, and the second set includes a national set of communities with attributes similar to Livingston County. The selection methodology for the national set of communities was based on median household income, average commute time, and population density.

The metrics selected for the benchmarking study fall under two categories: Talent and land use. These data, in concert with the land use and talent gap analyses, provide a deeper understanding of Livingston County's developmental strengths and challenges.

Metrics

Population, 2015 American Community Survey **Area**, 2010 Decennial Census

Land Use

Median House Value, 2015 American Community Survey Tax Base (Regional comps only), 2016 County Equalization Reports Commercial Listings (Regional comps only), CPIX

Talent

Median Household Income, 2015 American Community Survey Educational Attainment, 2015 American Community Survey Employment, 2016 Bureau for Labor Statistics Manufacturing Industry, 2015 American Community Survey Wage, 2015 Quarterly Census of Employment and Wages Employees per Business, 2014 Census County Business Patterns Population Change, 2016 Census Population Estimates Housing Affordability, 2015 American Community Survey



Ozaukee, WI Livingston, MI

Hendricks, IN Warren, OH

Shelby, AL

Saratogan IY Litchfield, CT

Carroll, MD

National Set

Shelby County, AL Litchfield County, CT Hendricks County, IN Carroll County, MD Saratoga County, NY Warren County, OH Ozaukee County, WI

Why were these communities selected?

Communities selected for the national set are similar in character as Livingston County. These communities were selected using three metrics that are intrinsic to Livingston County's identity: Population density, average commute time, and median household income.

How to Read the Study

Each page represents a single metric or a family of metrics.

National

Each page also contains a quick reference box spotlighting Livingston County's performance:

Rank: 7th...

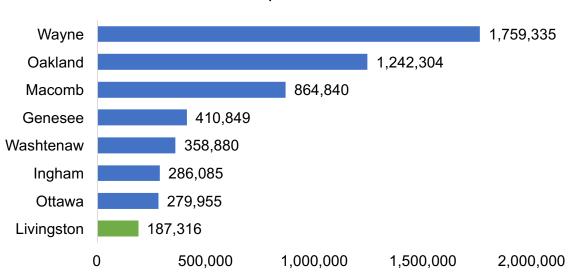
Set of competitor regions

Livingston County's rank among the chosen competitor regions, with #1 being top performance in the category. Some metrics do not include data for all regions, so the lowest rank may change accordingly.

Setting The Stage

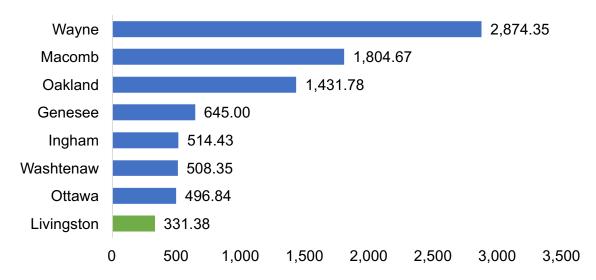
Population (Regional Set)

The communities included in the regional set were chosen due to their proximity to Livingston County. While there are many similarities between these communities and Livingston County, it is important to keep in mind that Wayne County, for example, has a population ten times larger than Livingston County. Where possible, data have been normalized for population. However, since this is not always feasible, these population charts serve as helpful reference points.



Population

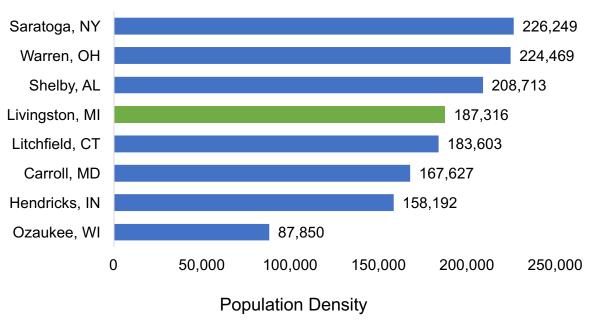
Population Density



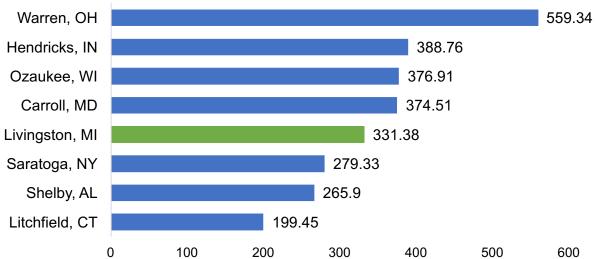
Setting the Stage

Population (National Set)

The communities selected in the national set were chosen due to their performance in three separate metrics: Population density, commute time, and income. As a result, there is much less variation in population and population density among the national set of comps than the regional set. Regardless, these population charts serve as helpful reference points when data is not normalized for population.



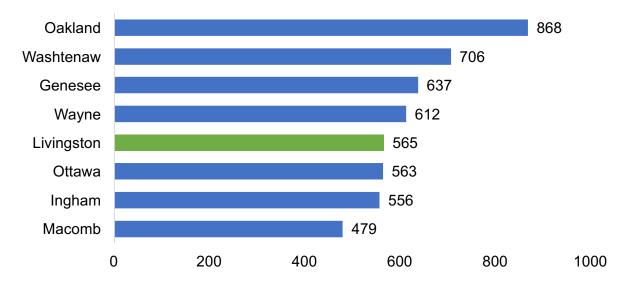
Population



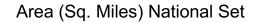
Benchmarking Setting the Stage

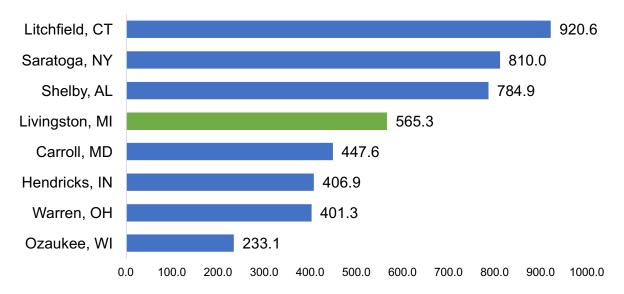
Land Area

In addition to population, land area is another metric that impacts trends and results for different communities. For example, Oakland County is more than 300 square miles larger than Livingston County, which is over twice the size or Detroit, or ten times the size of Ann Arbor.



Area (Sq. Miles) Regional Set





Benchmarking Metrics and Rankings

Median House Value Livingston County: \$224,300

What it is:

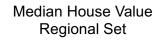
The median value for all owneroccupied housing units in Livingston County.

Why it matters:

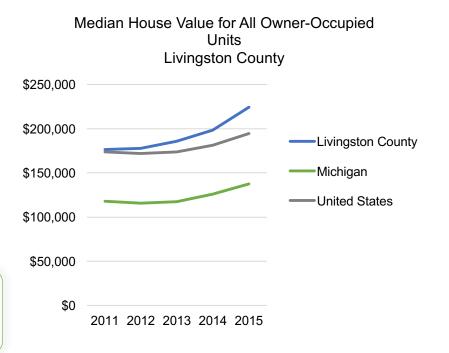
This metric serves as a helpful indicator of the real estate market overall: As prices change in the residential market, similar trends are often apparent across all property types.

The trend: Livingston County has experienced growth in median house value at a higher rate than Michigan or the United States.

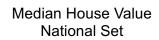
Regional Rank: 2nd of 8







Rank: 5th of 8





State Equalized Value

Livingston County: \$9,906,056,059, 22.27% Increase

State Equalized Value (Millions)

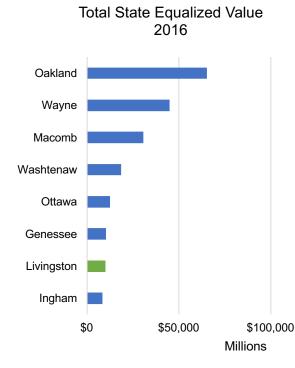
What it is:

The State Equalized Value (SEV) is the total assessed value for all personal and real property, adjusted following County and State equalization.

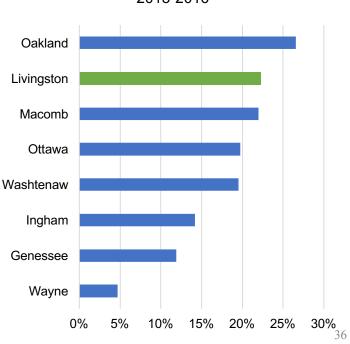
Why it matters:

State, County, and Municipal assessors total real and personal property value in order to calculate the annual tax levy; the SEV is therefore an indicator of municipal revenue. In addition, SEV is a helpful measure of the health of the local market.

The trend: Livingston County's total SEV has increased by 22% since 2013 and by 7% in the last year alone. As the County is poised for growth, this trend is expected to continue.







0%

5%

10%

15%

20%

25%

Commercial Property Listings

Livingston County: 345 Listings on CPIX

What it is:

Regional

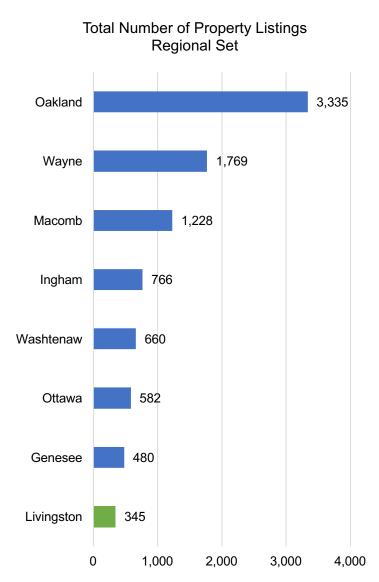
Rank: 8th

The number of commercial property listings posted on CPIX on June 14, 2017.

Why it matters:

The number of commercial property listings is an indicator of the current real property supply.

The trend: Livingston County has the lowest number of commercial listings out of the regional set of counties. Without a large and diverse range of properties on the market, Livingston County may miss out on business attraction opportunities.



Median Household Income

Livingston County: \$76,455

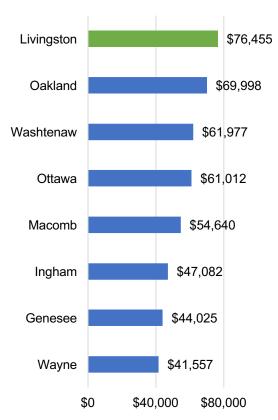
What it is:

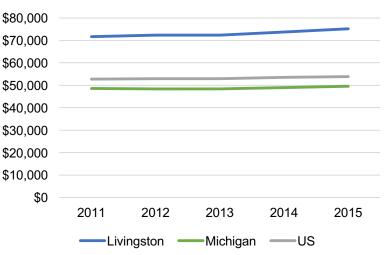
The median income for all households.

The trend: Livingston County has the highest median household income in Michigan. The median household income has stayed consistently over \$10,000 higher than that of the state and the country since 2011. Median household income has only slightly increased since 2011, consistent with inflation rates.

Regional Rank: 1st of 8

Median Household Income Regional Set





Median Household Income

Median Household Income National Set



Note: Median household income was one of the metrics used to select the national set, as a result, there is not substantial variation. For this reason, rankings were not assigned for median household income from the national set.

Educational Attainment

Livingston County: 32% with a Bachelor's Degree or Higher

What it is:

The percent of the population, 25 years and over, with a Bachelor's Degree or higher.

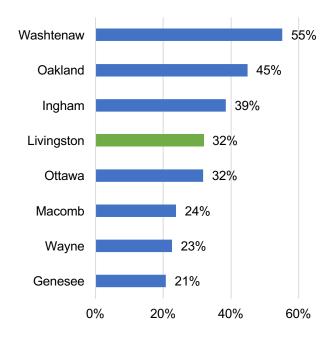
Why it matters:

Educational attainment is the best indicator of the skill level of the local workforce. High educational attainment metrics are desirable for business attraction.

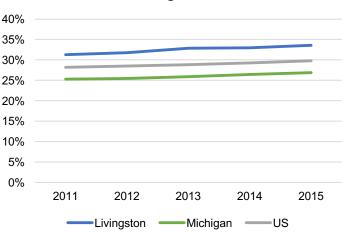
The trend: A larger percentage of Livingston County's population has a Bachelor's Degree or higher than Michigan or the United States.

Regional Rank: 4th of 8

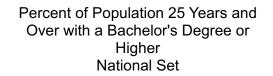
Percent of Population 25 Years and Over with a Bachelor's Degree or Higher Regional Set

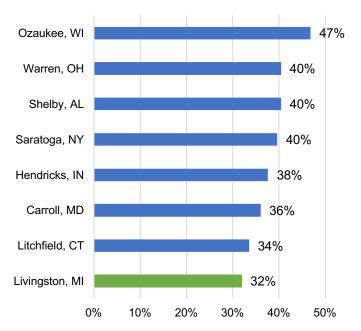


Percent of Population 25 Years and Over with a Bachelor's Degree or Higher



National Rank: 8th





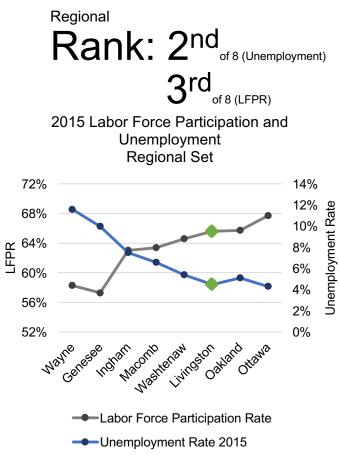
Employment

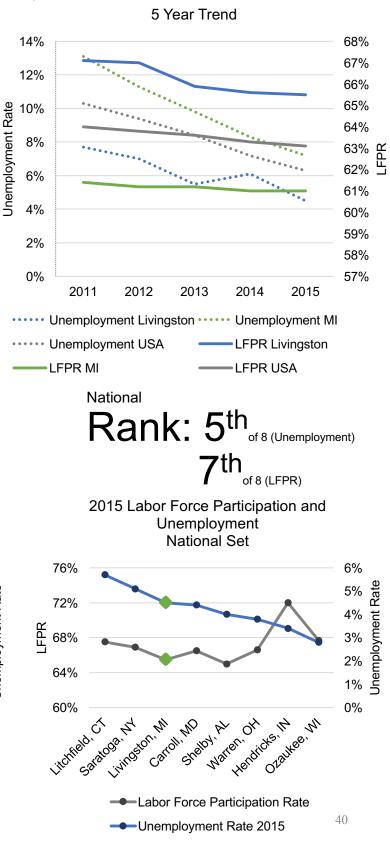
Livingston County: 65.5% LFPR, 4.5% Unemployment

What it is:

The national unemployment rate reflects the number of unemployed people as a percentage of the labor force. The labor force participation rate measures the number of people in the labor force as a percentage of the civilian noninstitutionalized population 16 years old and over. In other words, it is the percentage of the population either working or actively seeking work.

The trend: The unemployment rate has been steadily decreasing, as has the labor force participation rate, even though these two statistics are usually inversely proportional. Policy solutions could include working to attract new labor and/or engaging labor that has self-selected out of the workforce.





Manufacturing

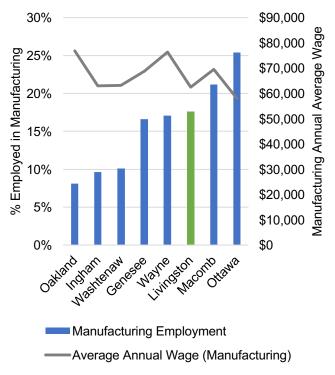
Livingston County: 17.6%, \$62,560

What it is: The percent employed in manufacturing is the percentage of the total workforce that is employed in the manufacturing industry. The Average Annual Wage for Manufacturing is the amount of income that an individual worker in the manufacturing industry earns on average.

The trend: Although manufacturing wages have increased in Livingston County, they remain lower than Michigan and the U.S. on average. Employment in manufacturing has increased since 2012.



Manufacturing Employment and Wages Regional Set

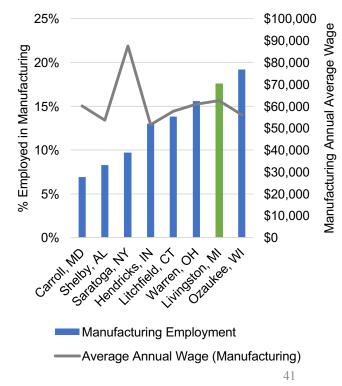




Manufacturing Wages and Employment, 2011-2015



Manufacturing Employment and Wages National Set



Wages

Livingston County: \$40,986

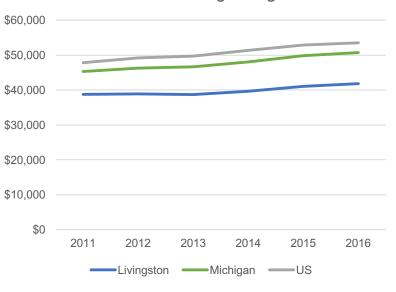
What it is:

The annual average wage for all industries in Livingston County.

Why it matters:

Competitive wages are necessary to attract and retain a talented workforce.

The trend: Livingston County has consistently had a lower Annual Average Wage than the entire state or country. Livingston County had the lowest wage among the regional set and the third lowest wage among the national set. This was in part due to the county's reliance on the retail sector.



Annual Average Wage

Rank: 5th of 8



Regional Rank: 8th of 8



Employees Per Business

Livingston County: 12

What it is:

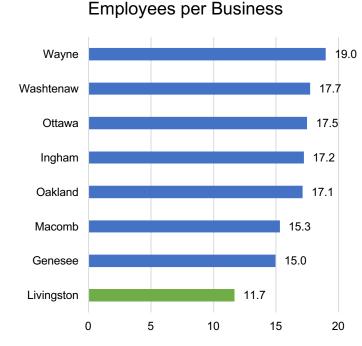
The average number of employees at each business.

Why it matters:

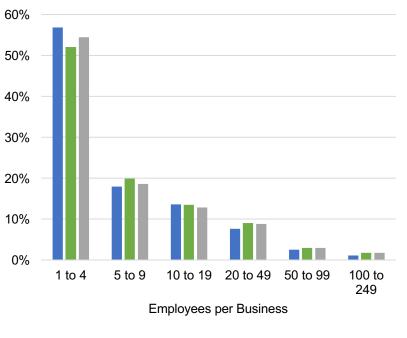
A low average number of employees per business indicates that there is a large number of small businesses and sole proprietors.

The trend: Livingston County has the lowest average number of employees per business among the regional set and the second lowest average number of employees per business among the national set, with 56.8% of jobs at companies with 1 to 4 employees.

Regional Rank: 8th of 8



Establishments by Employee Size, 2014

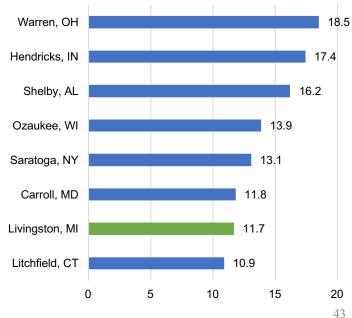


Livingston County

Michigan United States

National Rank: 7th of 8

Employees per Business



Population Change

Livingston County: Net migration 2.7%, Natural Increase 1.3%

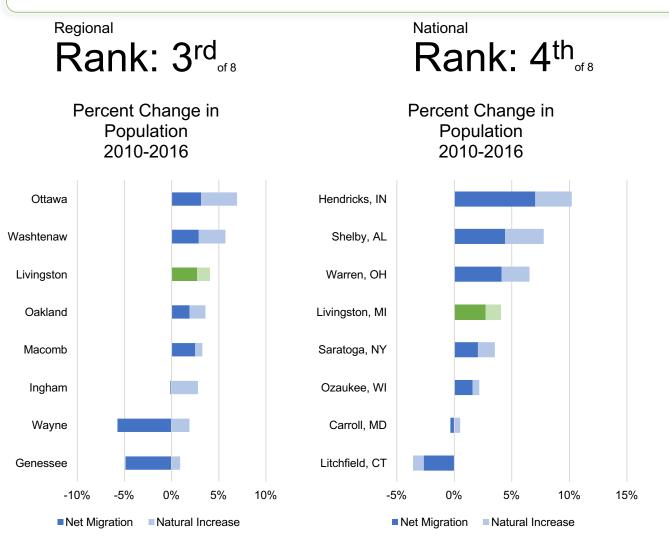
What it is:

The population change estimates are taken from the Census Population estimates, which use data on births, deaths, and migration to total population change. Natural increase is the total population change as a result of deaths and births, net migration is the total population change as a result of people moving in or out.

Why it matters:

Employers in Livingston County face major challenges when it comes to hiring the talent that they need. Sustaining a growing population and positive net migration is critical to meeting the talent needs of local employers.

The trend: Livingston County has experienced population growth since 2012, and more than half of the growth was attributed to Net Migration.



Housing Affordability

Livingston County: 2.9

What it is:

The Housing Affordability Index is the ratio of median household income to median house value. (*i.e.*: Median house value is X times median household income)

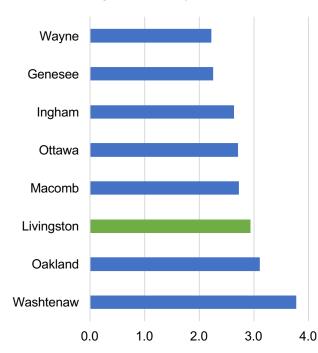
Why it matters:

Housing affordability is desirable to accommodate a workforce with a diverse range of skill sets and income levels.

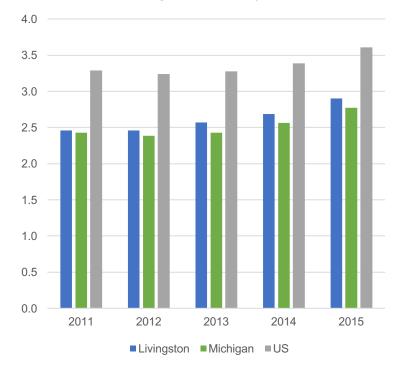
The trend: Livingston County has become increasingly less affordable since 2011. Although Livingston County has a higher Housing Affordability Index than the State of Michigan, it has a considerably lower Housing Affordability Index than the country.

Regional Rank: 6th of 8

Housing Affordability Index



Housing Affordability Index



Rank: 4th of 8

Housing Affordability Index



Final Rankings- Regional Set

	Median House Value	State Equalized Value Change	Commercial Property Listings	Median Household Income	Educational Attainment	Unemployment 2015	Labor Force Participation	Manufacturing Employment	Manufacturing Wages	Wages	Employees Per Business	Population Movement	Housing Affordability
Genesee	7	7	7	7	8	7	8	5	4	7	7	8	2
Ingham	6	6	4	6	3	6	6	7	6	6	4	6	3
Livingston	2	2	8	1	4	2	3	3	7	8	8	3	6
Macomb	5	3	3	5	6	5	5	2	3	5	6	4	5
Oakland	3	1	1	2	2	3	2	8	1	1	5	5	7
Ottawa	4	4	6	4	5	1	1	1	8	4	3	1	4
Washtenaw	1	5	5	3	1	4	4	6	5	3	2	2	8
Wayne	8	8	2	8	7	8	7	4	2	2	1	7	1

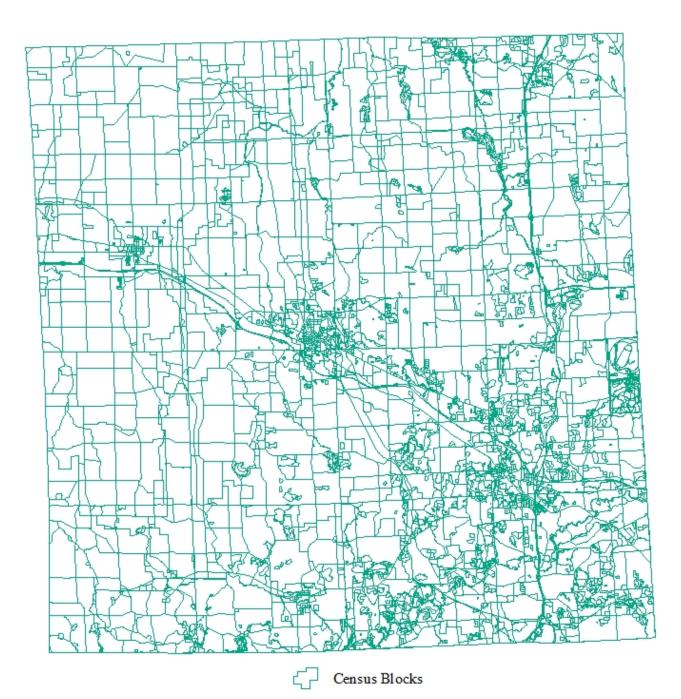
Final Rankings- National Set

	Median House Value	Educational Attainment	Unemployment 2015	Labor Force Participation	Manufacturing Employment	Manufacturing Wages	Wages	Employees Per Business	Population Movement	Housing Affordability
Shelby, AL	7	3	4	8	7	7	1	3	2	3
Litchfield, CT	3	7	8	3	4	5	5	8	8	7
Hendricks, IN	8	5	2	1	5	8	8	2	1	1
Carroll, MD	1	6	5	6	8	4	7	6	7	8
Saratoga, NY	4	4	7	4	6	1	2	5	5	6
Warren, OH	6	2	3	5	3	3	3	1	3	2
Ozaukee, WI	2	1	1	2	1	6	4	4	6	5
Livingston, MI	5	8	6	7	2	2	6	7	4	4

Conclusion Livingston County Economic Action Plan

The intent of this economic study is to reveal areas of strength and weakness to stakeholders in the Livingston County economic development community so that we might work together to help the county's economy grow and thrive. While many of the results of the report are expected, and merely back up anecdotal truths that are generally accepted with data, some interesting areas of weakness and opportunity came to the surface. The recommendations included in this report reveal some areas of improvement upon which municipal, business, and community leaders could act quickly, such as updating zoning codes, or publicizing middle-skill jobs in a favorable light. The gap between available high-skilled talent and high-skill jobs suggests that our local economic development efforts should continue to focus on attracting employers offering these sorts of positions. Overall, Livingston County is geographically situated for success, and on average its residents are financially situated for prosperity. These factors position economic development and business leaders to work creatively and collaboratively to turn existing gaps into opportunities for future development that will help Livingston County's economy continue to grow and thrive in new and expanded ways.

Appendix Livingston County by Census Blocks



*Data retrieved from the US Census Bureau

Property Classification Analysis

State Equalized Value by Property Classification								
	Taxable Value Percent of Total Taxable Value							
Agricultural	\$260,703,229.00	2.62%						
Commercial	\$1,006,855,056.00	10.13%						
Industrial	\$268,925,528.00	2.71%						
Residential	\$8,393,949,673.00	84.49%						
Developmental	\$4,939,200.00	0.05%						
Total County	\$9,935,372,686.00	100%						

Land Area by Property Classification

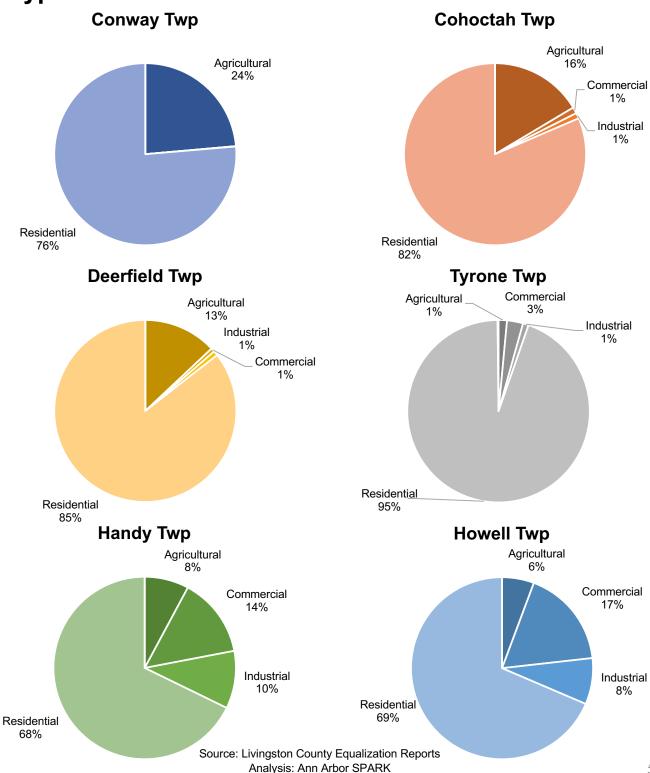
	Total Area (Acres)	Percent of Total Land Area
Agricultural	94,946	25.40%
Commercial	13,551	3.62%
Industrial	10,425	2.79%
Residential	195,018	52.17%
Exempt	24,053	6.43%
Other	35,831	9.58%
Total County	373,824	100%

State Equalized Value per Acre by Property Classification

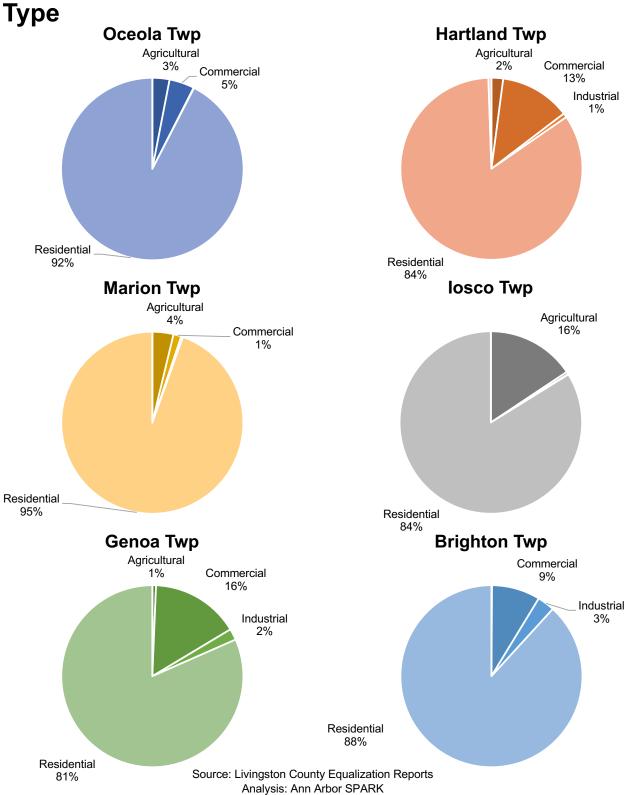
	Taxable Value per Acre					
Agricultural	\$2,745.81					
Commercial	\$74,301.16					
Industrial	\$25,796.21					
Residential	\$43,041.92					

Source: Livingston County GIS and Information Technology, Livingston County Equalization Reports Analysis: Ann Arbor SPARK

Property Classification Analysis Percent of Total Real Assessed Property Value by Type

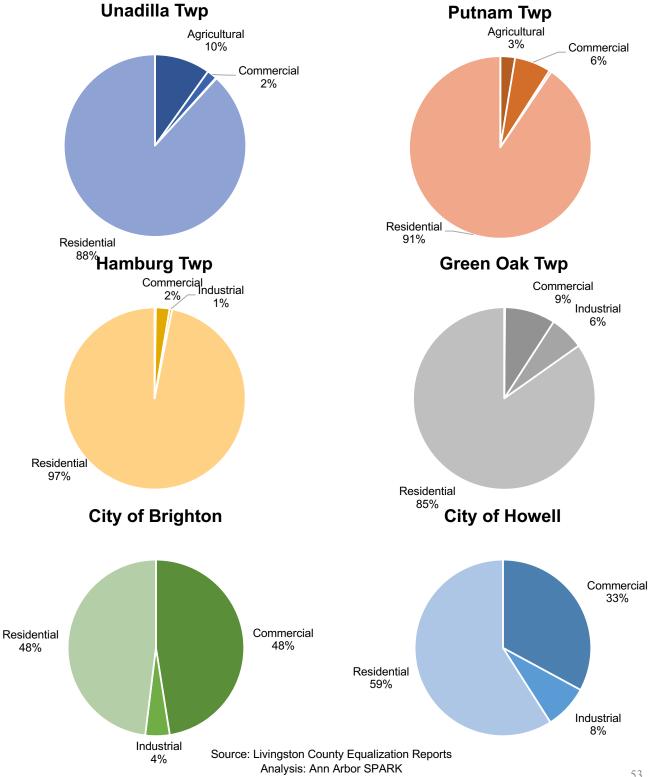


Appendix Property Classification Analysis Percent of Total Real Assessed Property Value by

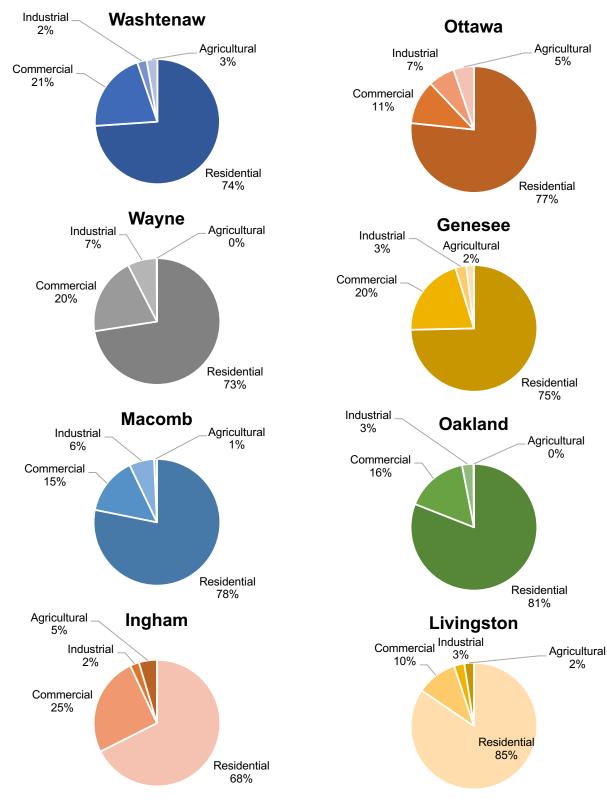


Appendix Property Classification Analysis Percent of Total State Equalized Value by Type

(Real Property Only)



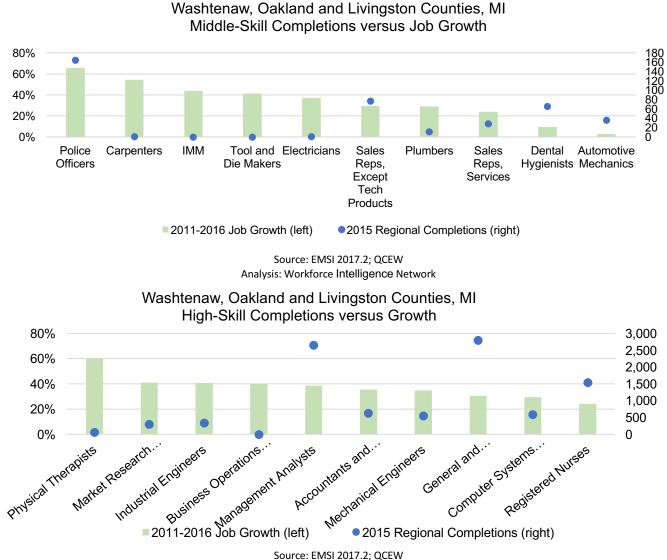
Appendix State Equalized Value Detailed Breakdown



Completions vs. Job Growth

Over the last five years, each of the 10 middle-skill occupations have seen positive growth numbers, with two, *Police and Patrol Officers* and *Carpenters*, actually seeing an above 50% expansion rate. Many of these occupations also saw high numbers of regional completions (Washtenaw, Oakland and Livingston counties) in 2015. In a match of skills to a growing need in the region, the most completions were seen in police and law enforcement programs, as well as sales training. Occupations that have seen high growth over the last five years, but are still lacking in regional completers include several Skilled Trades – *Electricians, Carpenters, Tool and Die Makers, Plumbers, Pipefitters and Steamfitters* and *Industrial Machinery Mechanics*.

The graphs below reflect growth over the last five years on the left, and regional completions in 2015 on the right. The regional area was used, as opposed to the singular Livingston county, due to the almost negligible number of completers in Livingston alone.



Analysis: Workforce Intelligence Network

Completions from Livingston County Post-Secondary Education and Training Institutions, 2015							
Institutions in three County Region Offering Degrees	Bachelor's Degrees	Graduate Degrees (Masters or Doctoral)	Post Baccalaureate or Post Masters Certificate	Total Completions (2015)			
University of Michigan	8,097	5,908	181	14,186			
Eastern Michigan University	3,625	1,212	226	5,063			
Oakland University	2,828	935	63	3,826			
Walsh College	360	526	21	907			
Cleary University	85	40	0	125			
Cranbrook Academy	0	70	0	70			
Michigan School of Professional Psychology	0	66	0	66			
Michigan Jewish Institute	61	0	0	61			
Yeshiva Gedolah of Greater Detroit	2	1	0	3			

Completions f	Completions from Livingston County Post-Secondary Education and Training Institutions, 2015								
Institutions in three County Region Offering Degrees	Certificates	Associate's Degrees	Bachelor's Degrees	Total Completions (2015)	Completion Rate from IPEDS				
Oakland Community College	445	2,509	0	2,954	9%				
Washtenaw Community College	1,622	1,137	0	2,759	15%				
Lawrence Technological University	55	15	299	663	56%				
Specs Howard School of Media Arts	573	0	0	573	n/a				
Everest Institute- Southfield	499	0	0	499	67%				
University of Phoenix-Michigan	0	2	297	387	9%				
Rochester College	0	8	207	223	35%				
Michigan College of Beauty-Troy	222	0	0	222	91%				
Northwestern Technological Institute	217	0	0	217	61%				

Completions f	Completions from Livingston County Post-Secondary Education and Training Institutions, 2015								
Institutions in three County Region Offering Degrees	Certificates	Associate's Degrees	Bachelor's Degrees	Total Completions (2015)	Completion Rate from IPEDS				
The Art Institute of Michigan	25	111	79	215	31%				
Ross Medical Education Center- Madison Heights	192	0	0	192	80%				
ITT Technical Institute-Troy	0	130	51	181	33%				
Irene's Myomassology Institute	176	0	0	176	70%				
Carnegie Institute	175	0	0	175	87%				
Dorsey Business Schools-Madison Heights	156	0	0	156	82%				
Dorsey Business Schools-Waterford Pontiac	151	0	0	151	24%				
South University- Novi	2	21	51	143	n/a				
Ross Medical Education Center- Brighton	129	0	0	129	89%				

Completions from Livingston County Post-Secondary Education and Training Institutions

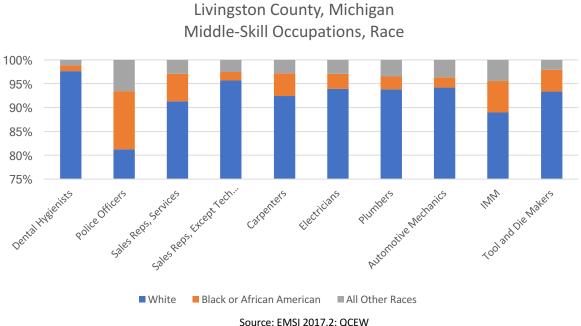
Completions from Livingston County Post-Secondary Education and Training Institutions, 2015 Institutions in three Bachelor's Certificates Associate's Total Completion **County Region Offering** Degrees Degrees Completions Rate from IPEDS Degrees (2015)0 0 119 **Abcott Institute** 119 100% 0 0 **Brighton Institute of** 42 42 83% Cosmetology 33 0 0 **Excel Academies of** 33 N/A Cosmetology-Troy **Port Huron** 29 0 0 29 58% **Cosmetology College** 0 24 0 **ITT Technical** 24 N/A Institute-Southfield 8 Concordia 1 77 43% 114 **University-Ann Arbor** 106 0 0 **Ross Medical** 106 82% **Education Center-**Ann Arbor 101 0 0 **David Pressley** 101 59% School of Cosmetology 0 9 88 International 97 18% Academy of Design and Technology-Troy

Completions from Livingston County Post-Secondary Education and Training Institutions, 2015

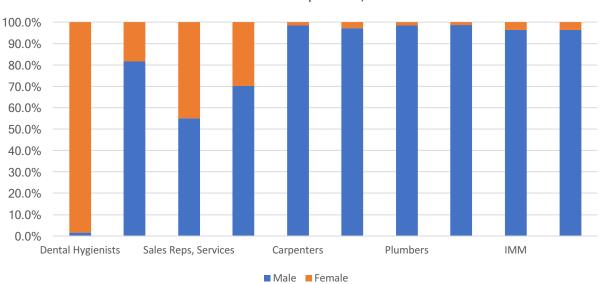
Institutions in three County Region Offering Degrees	Certificates	Associate's Degrees	Bachelor's Degrees	Total Completions (2015)	Completion Rate from IPEDS
Ann Arbor Institute of Massage Therapy	54	0	0	54	94%
DeVry University- Michigan	0	8	21	54	N/A
Dorsey Business Schools-Farmington Hills	49	0	0	49	33%
Marketti Academy of Cosmetology	44	0	0	44	76%

Source: EMSI 2017.2; QCEW; IPEDS Analysis: Workforce Intelligence Network Note: Those listed as N/A did not have an available completion rate from IPEDS

Middle-Skill Workforce Demographics



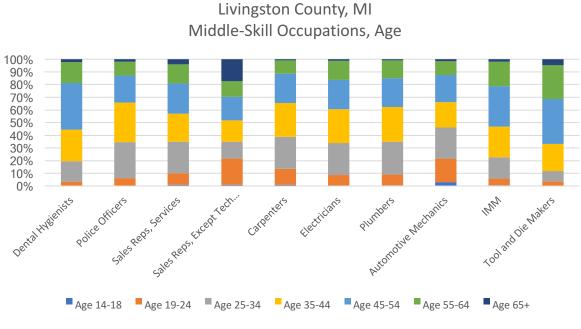
Analysis: Workforce Intelligence Network



Livingston County, MI Middle-Skill Occupations, Gender

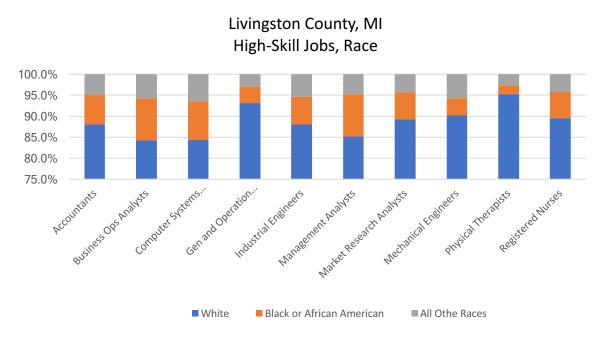
Source: EMSI 2017.2; QCEW Analysis: Workforce Intelligence Network

Middle-Skill Workforce Demographics



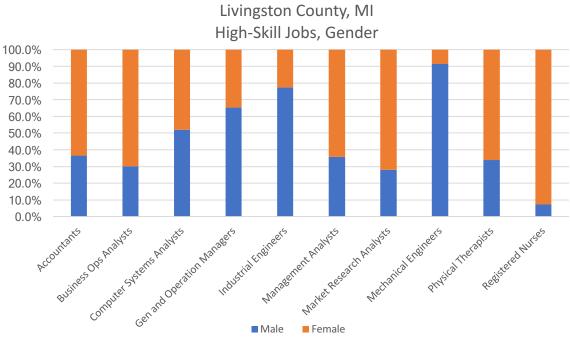
Source: EMSI 2017.2; QCEW Analysis: Workforce Intelligence Network

High-Skill Workforce Demographics



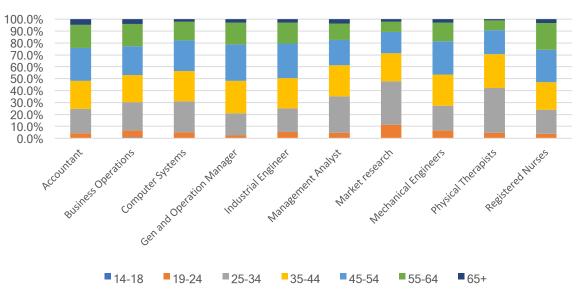
Source: EMSI 2017.2; QCEW Analysis: Workforce Intelligence Network

High-Skill Workforce Demographics



Source: EMSI 2017.2; QCEW Analysis: Workforce Intelligence Network

Livingston County, MI High-Skill Jobs, Age



Source: EMSI 2017.2; QCEW Analysis: Workforce Intelligence Network



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