Building on Springfield's Assets: Leveraging a Better Future

Produced for the Greater Springfield Chamber of Commerce



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Executive Summary

Springfield, Ohio is a community in transition. New development projects in the downtown area have changed the look of the community and revitalized the downtown area.

Yet Springfield's economic development growth is sluggish following the downturn of the automotive manufacturing industry and the U.S. recession. Although a recovery is underway, economic growth projections remain at about 1 percent annually.

However, the Springfield community can work to improve the economy and promote growth by leveraging the resources it has to focus on three economic development strategies:

- 1. **Promote and strengthen Springfield's industry clusters** that drive economic growth in the region;
- 2. **Support Springfield's workforce** to ensure that the community's talent pool grows and stays in the region; and
- 3. Build a culture of innovation and advancement that will help drive economic growth.

Implementing these strategies will help the Springfield economy grow and remain competitive, while building a talent pool that will continue to attract and support local industries.

Promote and Strengthen Springfield's Industry Clusters

Economic driver industries are those that:

- Employ large numbers of people;
- Have an industry concentration that is greater than the national average;
- Export goods and services outside of the region, bringing outside capital into the region;
- Pay higher wages than the average, and that have high job multipliers, meaning that each job creates additional jobs in support and supply chain industries.

If the economic driver industries are lost, then the support industries that are based on population – such as retail, healthcare, education, and many others – are also lost. Springfield can promote and strengthen these industry clusters with activities designed to leverage the community's industrial assets.

Focus on strong industry clusters and those with growth potential. Economic development efforts must focus on industries that "drive" the regional economy, which includes a strong industry concentration, high wages, and high job multipliers. Other targets should include industries with a strong growth potential. Support industries will follow the growth or loss of the driver industries, so they should not be the primary focus of an economic development strategy.

Recruit, retain, and expand businesses in the targeted clusters. Recruitment efforts do not provide the biggest return on investment for economic development activities, though efforts can be improved by targeted industries that have a local competitive niche or serve as supply chain elements for industries that are here. Retaining and expanding established businesses provides a better return on investment. By focusing on companies with the greatest economic impact and

growth potential, economic development efforts can result in additional investment and jobs in the region.

Grow exports. Expanding the region's exports could have one of the greatest economic impacts for local businesses. Exports provide new markets for established products, which not only expands the customer base but also helps companies weather shifts in both the national and global markets. Selling goods to international markets also brings much needed outside capital into the region.

Market industry strengths. Business executives talk to their industry peers and looking at industry magazines and newspapers in national media outlines to make location decisions about their companies. Marketing Springfield's industry strengths and supply chain presence will promote the region to targeted companies.

Support Springfield's Workforce

The shift from the labor economy – when companies just needed people with a high school diploma – to the knowledge economy has increased the demand for high-skilled workers. Springfield lags in educational attainment levels compared to the national average, yet the region has worked diligently to address this gap. Connecting the various workforce development initiatives into a comprehensive model that serves all levels of students and workers and connects them to the economic driver industries will ensure that Springfield companies have the talent they need to grow their responses and remain competitive in global markets.

Focus workforce development efforts on targeted industries. Understanding the workforce demands of the targeted driver industries is critical, yet analysis must also include the supply side – the occupations that are being overproduced or under-produced. In addition, education and training providers must be informed of those gaps so that programs might be altered to accommodate the demand.

Build a comprehensive workforce development model. A connected workforce development model that includes the secondary education, postsecondary education and the public workforce system will ensure that all levels of workers can access the education and training that is needed to be retained and employed in Springfield.

Implement a social media strategy. A workforce development system must include a social media component. Students and workers, as well as regional businesses, can discover career opportunities through a social media campaign that connects industries to the talent they need.

Promote quality of life to attract and retain workforce talent. Springfield is a livable city with many assets and resources that make it an ideal place to live and work. Marketing the quality of life to the community itself will help promote Springfield to any potential new residents as well as retain the ones who are already there.

Build a Culture of Innovation and Improvement

In a labor economy, workers held on to the same jobs for decades. In a knowledge economy, workers must be thinkers and problem-solvers – they must be able to generate and apply knowledge. Economic development efforts now depend on those abilities for the community to grow and prosper as this knowledge is turned into useful products and services. Innovation drives the knowledge economy and Springfield must be ready to support those efforts by building a culture that supports innovation and continuous improvement.

Expand support for entrepreneurs. The industrial shift to a knowledge economy requires more than just workforce talent. It also requires an innovative culture that allows that talent to explore new ventures, connects them to the needed resources, and allows them to improve and expand as their ideas reach the market.

Track measures for innovation and improvement. Innovation also requires continuous improvement. The Springfield region can build its industries, talent, and innovation by measuring various indicators and tracking their progress. This process will allow the community to invest resources in the areas where they are needed and make adjustments as the region transforms, grows, and prospers.

Promote and Strengthen Springfield's Industry Clusters

1. Focus on strong industry clusters and those with growth potential

Clark County Industry Cluster Analysis

Clark County has suffered significant job loss over the last decade as the shift from a production economy to a knowledge economy prompted the shed of unskilled workers. Significant losses of jobs occurred in 2002 (~3,200 jobs), 2003 (~1,200 jobs), 2009 (~3,000 jobs), and 2010 (~1,100 jobs).

Yet Clark County has also experienced positive job growth twice in the last dozen: 2006 (~350 jobs) and 2011 (~1,000 jobs). The dashed blue line in the following chart shows the projected job growth of Clark County and is based on a combination of historical data and the direction of the national economy¹. The projected growth rate over the next decade is around 1%, which would return Clark County to 2003 numbers by 2023. This baseline job growth will occur naturally, barring major changes in national trends, and without economic development efforts.

The Springfield CIC, City of Springfield, and other partners have the opportunity to escalate the growth in their community using targeted strategies to retain and grow their targeted industry clusters. This report will provide in-depth analysis of the targeted industry clusters that represent Clark County's strengths. Specific strategies for growing and leveraging these clusters will be included in the analysis of targeted recruitment, retention and expansion strategies, export opportunities, and supply chain enhancement.



Figure 1 Jobs in Clark County (2001-2023)²

¹ The data source for all industry data is EMSI 2013.2 Covered Dataset.

² Unemployment data from Ohio LMI.

The Economic Driver Industries

Manufacturing

Figure 2 Manufacturing in Clark County



Manufacturing is one of Clark County's most important economic driver industries. It creates additional jobs in professional services, logistics and transportation, and service industries that support both the supply chain and the workforce itself. Manufacturing is one of the biggest private employers in Clark County and employs more than 7,000 people at an average wage of \$48,131, which is significantly higher than the average wage across all industries of \$34,995.

Although the manufacturing industry is still projected to shed low-skilled jobs that have been replaced with programming and automation, the industry continues to grow in both productivity and, in small numbers, high-skilled jobs. In addition, the manufacturers account for 68% of US domestic R&D spending and 22% of manufacturing companies produce new innovations, compared to only 8% of non-manufacturing companies. Manufacturing employs about 9% of the U.S. workforce, though it employs 35% of its engineers.

The location quotient (LQ) measures an industry concentration compared to the national average (LQ=1.0). The LQ for Clark County indicates that manufacturing is 71% more concentrated in Clark County than the national concentration, showing a strong competitive advantage.

But the Clark County region also offers strong concentrations within specific areas of manufacturing. The following table indicates Clark County's strengths within the manufacturing industries, including industries with a high LQ or projected growth within the next five years.

		% Growth,			
Industry	2012 Jobs	2013-2018	LQ	Establish.	Avg. Earning
Aerospace Parts Manufacturing	99	0.6%	0.71	2	\$46,147
-		(US: 1.6%)			
Auto Parts Manufacturing	976	12.5%	5.49	13	\$42,919
		(US: -10.5%)			
Composites Manufacturing	442	4.1%	1.94	10	\$30,760
		(US: -1.4%)			
Machinery Manufacturing	837	-9.3%	2.11	29	\$64,208
		(US: -1.4%)			
Manufacturing Services	1.945	-3.0%	3.05	57	\$44,636
		(US: -0.4%)			

Table 1 Manufacturing Strengths in Clark County

Logistics and Distribution

Figure 3 Logistics and Distribution in Clark County



Logistics and distribution is also an important industry in Clark County, employing nearly 2,500 people and with a concentration almost three times the national average. Over the next five years, the logistics and distribution industry is projected to grow at nearly 15%, more than both the state and national averages.

The logistics and distribution industry is strong in Clark County due to its proximity to major U.S. highways, in addition to the importance of the manufacturing industry. Logistics and distribution is heavily dependent on the manufacturing industry. Investing in the health of manufacturing will continue to serve the logistics industry as well.

Potential Growth Opportunities

Insurance

Figure 4 Insurance in Clark County



Clark County's insurance industry has grown tremendously within the last decade from the investments of Assurant and Code Blue. Additional growth is projected in Clark County at a rate far greater than the national average. Wages are significantly lower than the US average, which indicates that Springfield may not have attracted the higher-level professional occupations. At the same time, the lower wages may offer an opportunity to recruit from areas with a tighter job market that require companies to pay higher wages. Another recruitment opportunity may be with companies who are directly connected to insurance companies or by those with similar staffing patterns or workforce opportunities.

UAS

The Unmanned Aerial Systems (UAS) industry may be a promising opportunity for Springfield and Clark County. The State of Ohio recently announced that the Ohio UAS Test Center will be located at Avetec in Springfield. UAS-related companies such as SelectTech and SAIC have also established a presence in Springfield. The Ohio Air National Guard base is flying UAS from the Springfield Air National Guard base. Ohio has also applied to the Federal Aviation Administration (FAA) to become a UAS test site for integration of UAS into the National Air Space. These developments, along with the strong manufacturing capacity of the Clark County region, offer an opportunity to connect UAS research and testing to future supply chain development and production.

Professional Services

Figure 5 Professional Services in Clark County



The professional, scientific, and technical services industry shows strong potential for Clark County and is expected to grow at approximately the same rate as the US average. Though the concentration is currently lower than the national average, if growth continues as projected, the industry concentration will be strengthened as well.

Though wages are significantly lower than the national average, this could be an asset for potential recruitment of back-end professional services offices. The following table shows the heavy concentration of targeted professional services industries in Greene County, suggesting support to Wright-Patterson Air Force Base and the concentration of contractors located in close proximity.

NAICS	Description	Clark County LQ	Greene County LQ
541191	Title Abstract and Settlement Offices	0.53	2.42
541330	Engineering Services	0.14	3.39
541370	Surveying and Mapping (except Geophysical) Services		1.13
541511	Custom Computer Programming Services	0.11	2.71
541512	Computer Systems Design Services	0.20	3.43
541513	Computer Facilities Management Services	0.00	5.96
541519	Other Computer Related Services	0.59	7.04
541611	Administrative Management and General Management Consulting Services	0.30	1.85
541614	Process, Physical Distribution, and Logistics Consulting Services	0.33	2.55
541690	Other Scientific and Technical Consulting Services	0.26	1.21
541711	Research and Development in Biotechnology		6.56
541712	Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)		6.04
541921	Photography Studios, Portrait		1.71

Table 2 Professional Services LQ Comparison, 2013

Clark County does show some growth potential in specific professional services industries, while others are experiencing some loss. The following table shows projections over the next five years in the industries in which Clark County has significant numbers of jobs.

		2013	2018	%	Avg.	
NAICS	Description	Jobs	Jobs	Change	Earning	LQ
541110	Offices of Lawyers	151	131	(13%)	\$36,903	0.40
541211	Offices of Certified Public Accountants	82	80	(2%)	\$87,164	0.54
541213	Tax Preparation Services	39	54	38%	\$27,174	1.12
541219	Other Accounting Services	106	134	26%	\$69,390	1.21
541310	Architectural Services	14	14	0%	\$37,615	0.24
541330	Engineering Services	47	51	9%	\$92,885	0.14
541350	Building Inspection Services	11	15	36%	\$44,655	1.57
541430	Graphic Design Services	41	47	15%	\$56,350	1.85
541511	Custom Computer Programming Services	30	42	40%	\$46,700	0.11
541512	Computer Systems Design Services	56	38	(32%)	\$91,613	0.20
541519	Other Computer Related Services	24	33	38%	\$73,749	0.59
541611	Administrative Management and General Management Consulting Services	47	69	47%	\$65,298	0.30
541614	Process, Physical Distribution, and Logistics Consulting Services	12	19	58%	\$63,256	0.33
541690	Other Scientific and Technical Consulting Services	19	24	26%	\$48,451	0.26
541910	Marketing Research and Public Opinion Polling	28	50	79%	\$20,171	0.76
541940	Veterinary Services	131	152	16%	\$21,740	1.15
	Total	901	1,012	12%	\$53,512	

Table 3 Professional Services in Clark County, 2013

Agribusiness, Food Processing and Technology

Figure 6 Agribusiness, Food Processing and Technology in Clark County



Clark County has a competitive advantage in the agribusiness, food processing, and technology area, as indicated by the LQ that shows the region to be 28 percent higher than the national concentration. Though growth is slightly declining compared to the national growth rate which is slightly increasing, the region offers higher wages than the national average.

The Clark County region has a unique opportunity in the agriculture, food processing, and technology industry. The Global Impact STEM academy will offer educational opportunities for students in the industry. In addition, the location of the Ohio UAS Test Center in Springfield may also offer opportunities for the agribusiness industry to collaborate with the aerospace industry to develop technology around UAS that will help the agribusiness to be more productive and efficient. In addition, global climate change may provide Clark County with a competitive advantage to attract food manufacturing, as the southern and western regions of the U.S. are plagued with drought.

Support Industries

Healthcare

Figure 7 Healthcare in Clark County



Healthcare in Clark County continues to grow, though at a lower percentage growth than the national average. The healthcare industry is generally considered a core industry, as it grows and declines based on the population that it serves. As it grows, the healthcare industry continues to provide career opportunities and additional industry support for its patients, workforce, and service industries.

Retail

Figure 8 Retail in Clark County



Retail sales are typically used as a national indicator of the economic health of the country, as retail growth follows economic growth. Clark County can monitor the health of their retail sector as proxy for the economic health of their region. The retail sector employs more than 11,000 people in Clark County. Currently concentrated slightly more than the national average, the region is expected to decline over the next five years. Wages in the retail sector are lower than the national average.

As support industries, the growth of the retail and health industries depend on the growth of the economic driver industries. If the economic driver industries struggle, support industries will also struggle. But if the economic driver industries are thriving, growth will also occur in the support industries. For this reason, community investments should be prioritized to focus on economic driver industries.

Industry Clusters in a 6-County Region

The surrounding counties of Clark County offer some key strategic opportunities. Champaign, Greene, Madison, Miami, and Montgomery counties offer complementary industry strengths that can be leveraged for commercial growth and strengthened supply chains when viewed as a 6-county region.

The infographic to the right demonstrates Clark County's industry concentration strengths and the combined 6county strengths. The concentration or location quotient (LQ) measures an industry concentration compared to the national average (LQ=1.0). An LQ above 1.25 is considered a strong industry concentration.

With the exception of insurance, Clark County's industry clusters would be enhanced by strategic partnerships. When considering insurance, it's clear that Clark County is currently the industry leader in the region and can use that position to grow and expand its workforce and industry influence in the region.



Industry Cluster Concentration

Figure 9 Industry Cluster Concentration

2. Recruit, retain, and expand businesses in the targeted clusters

Clark County has strong assets that can be leveraged to recruit, retain, and expand business in the targeted clusters.

Clark County Retention & Expansion Analysis

A majority of new jobs created in a region are from existing employers. A 1987 paper, "Job Creation in America", stated that 80% of net new growth comes from existing businesses while a 1995 study, "Retention First, Ohio's Challenge", listed the percentage anywhere from 70% to 86%.

A 1996 paper, "Business Attraction and Retention: Local Economic Development Efforts" states that there are about 200 major company relocations per year and thousands of communities, making one city's chances of locating one of these expansions slim. A more recent article³ in fourtheconomy.com, states "The competition for deals has always been tight. In the late 1990s and early 2000s there was one firm relocating for every 500 firms in the U.S. Today, there is only about one relocation for every 1,300 firms." With so many communities competing for these companies it is important to have a strong business retention and expansion strategy to ensure that one of those 1,300 relocations is not coming from your community.

The flip side of this argument is that if the chances of a firm relocating has decreased, the chances of a community getting a firm to relocate to their region has also decreased. In other words, existing firms are more important than ever to the long term growth and prosperity of a community. Concentrating more efforts and resources toward assisting existing businesses to expand can have a much stronger return on investment than the best recruitment strategy.

Current Effort: HITS Program

Clark County employs the HITS program for its current Retention and Expansion, or R&E, efforts. HITS, which stands for Hiring, Investment, Training, and Space, is a quick way to talk to a company to see if they have needs that can be solved by public incentive and assistance programs. This allows the R&E team in Clark County to reach out to a large number of companies each year.

Continue to use your HITS program for a majority of the companies in the county but introduce a more in-depth program for a targeted list of companies that may be at risk of leaving. The companies most at risk are identified in the R&E Model. In year one focus on the first 15-20 companies and in following years move down the list, reaching back out to companies visited in prior years as requested/needed.

These companies at risk should have significant research done on them ahead of time. This can be actual research or discussion among people who have had recent contact with the companies through HITS efforts or other interactions. The goal should be to identify any major issues the companies may be having and to prepare potential solutions to those issues ahead of time.

³ <u>http://fourtheconomy.com/3-economic-development-trends-that-are-closer-than-they-appear/</u>

Assist Existing Businesses

Use the information gathered from HITS and other environments that offer business intelligence to collect data needed for strategies that assist existing businesses overcome their barriers to expansion.

Clark County Recruitment Analysis Recruitment and Site Selection Background

Recruiting companies can be a difficult task. There are approximately 19,000 cities, towns, and villages in the United States according to the National League of Cities. In 2012, Site Selection Magazine reported 5,580 projects that had \$1M in investment, the creation of 50 jobs, or the construction of 20,000 Sq Ft. of new space. The 3-year average (2010-2012) is about 5,000 of these projects per year. This means that, on average, a city can expect a new or expanded project about once every three years.

Site Selection breaks out new vs. expanded facilities. In 2012, about 40% of projects won were new locations. The break out over the prior three years (2010-2012) is also around 40%. In the State of Ohio that number drops to 22% in 2012 and 26% over the three year period. It should be noted that Ohio had the second most manufacturing projects, following only Texas which had a 50/50 split between new and expanded facilities.

Development Counselors International (DCI) recently held a webinar on "Working with Top Site Selectors—BEST and NEXT Practices". In this webinar they listed the five best methods for influencing site selectors. <u>Traditional</u> items below are considered the current best practices, while the <u>Next</u> items are the initiatives that should be considered for the future of site selection strategies:

- Familiarization tours
 - Traditional: Host consultants in your region during a well-known event.
 - Next: Allow consultants to shadow a CEO or local executive.
 - Next: Host a virtual tour of sites.
- In-market events
 - Traditional: Visit areas with a concentration of site selectors.
 - Next: Engage a credible, third-party to highlight the community's advantages.
- Newsletters
 - Traditional: Create a newsletter that highlights developments/news in the community and include site selectors on the distribution list.
 - o Next: Share relevant news as it occurs in short blasts via email.
- Website design
 - Traditional: Provide spreadsheets and detailed reports that a site selector may need.
 - Next: Create infographics on your community.
- Face-to-face meetings
 - Traditional: Visit consultants in their office.

The best of these approaches, according to "A View for Corporate America: Winning Stratgies in Economic Development Marketing", is a face-to-face meeting with the consultant.

This report also highlighted the leading sources of information influencing executive perceptions of an area's business climate. Respondents were asked to pick three of the following options with the results as follows:



Figure 10 Leading Sources of Information Influencing Executives Perception of an Area's Business Climate

This same report also identified the publications they most frequently read. These included *The Wall Street Journal* (82%), local newspapers (39%), *The New York Times* (28%), industry/trade magazines (18.8%), *The Economist* (13.4%), *Bloomberg Business Week* (12.5%), and *Forbes* (11.6%).

When looking at marketing techniques the survey found that the most effective was planned visits to corporate executives. Nearly 60% of respondents rated this as a 4 or 5 on a scale of 1-5 where 1 was poor and 5 excellent. This was followed by website presence at 55%, hosting special events at 35%, trade shows at 35%, media relations/publicity at 33%, advertising at 16%, direct mail at 15%, and telemarketing at 4%.

When looking at location consultants, the most effective way to reach them was through planned visits, internet/website, and hosting special events where 80% of the respondents gave a score of 4 or 5. Media relations/publicity scored about 50% and trade shows about 30%. The lease effective measures were direct mail (~25%), advertising (~20%), and telemarketing (<10%).

When looking for a new site the internet has become a key source of information for corporate executives and site selectors. On a scale of 1 (not at all) to five (often), respondents were asked to rate the frequency in which they use the internet in their recent site location search. About 1/3 of large and mid-size executives do not use the internet at all, compared to <10% of site selectors. About 1/3 of large and mid-size executives were in the 2-4 range while about 1/3 selected 5. Site selectors on the other hand use the internet for their information about 2/3 of the time.

Site selectors were also asked the likelihood that they would visit the economic development organizations website during their next site visit and 60% of respondents said that likelihood was high. The most useful features for them were incentives information (~70%), workforce statistics (~60%), demographic information (~50%), available site database (~50%), comparisons to competitor locations (~50%), leading employers (~40%), target industry information (~35%), staff contacts (~30%), quality of life information (~25%), news section (~15%), maps of the community (~10%), local schools information (~10%), user generated content/blog (<5%), and video content (<5%).

Recruitment Strategy

Based on the data above from DCI, the best way to get results from recruitment is by focused recruitment efforts that lead to interaction with an actual person. That is where Clark County should focus its efforts.

A recruitment scorecard was created for Clark County that compares the county to other Metropolitan Statistical Areas (MSAs) across the country in seven business related variables that will allow the county to target its efforts. The seven variables are: right to work, real estate costs, taxes, utility costs, industry growth, wages, and supply chain. More detail on the variables can be found in the appendix.

The goal of the scorecard is to identify the combination of industry and region where Clark County has a competitive advantage. The scorecard uncovered a number of combinations where the Springfield MSA could look to recruit jobs to the region.

Insurance

The table below highlights the top 10 scores within the insurance industry. Most of these are focused in the Northeast, specifically Connecticut. Clark County has an advantage over these areas primarily due to wages where Bridgeport, CT and Hartford, CT MSA's have the highest average wages in the country for insurance industry jobs at \$160,000 and \$139,000 per year which are significantly higher than the \$47,000 average in Clark County.

Additionally, the Springfield MSA is projected to grow significantly in these areas where many of the Northeastern MSAs are projected to remain at constant levels or decrease slightly. The cost of real estate and taxes is also an advantage to push when speaking with firms from these areas.

Table 4 Recruitment Scorecard: Insurance

Industry	MSA Name	Right to Work	Real Estate	Taxes	Utilities	Growth	Wages	Supply Chain	Count	Score
Direct Health and Medical	Dridgenert CT	0	F	4	4	F	F	2	7	0.74
Insurance Camers	Bridgeport, CT	0	5	4	4	5	5	3	1	3.71
Carriers	Bridgeport, CT	0	5	4	4	5	4	3	7	3.57
Direct Health and Medical	Binghamton,		_		-	_	_		_	
Insurance Carriers	NY	0	5	4	3	5	5	2	1	3.42
Third Party Administration of										
Funds	Bridgeport, CT	0	5	4	4	3	5	2	7	3.28
Insurance Agencies and										
Brokerages	Bridgeport, CT	0	5	4	4	3	3	1	7	2.85
Claims Adjusting	New York, NY- N.I-PA	0	5	4	3	5	3	-1	7	2 71
Claims Adjusting	Bridgeport, CT	0	5	4	4	0	2	3	7	2.57
Direct Health and Medical										
Insurance Carriers	Hartford, CT	0	3	4	4	1	3	3	7	2.57
Claims Adjusting	Hartford-, CT	0	3	4	4	5	-1	3	7	2.57
Direct Health and Medical										
Insurance Carriers	New Haven, CT	0	2	4	4	5	0	3	7	2.57

Another recruitment opportunity may be with companies who are directly connected to insurance companies or by those with similar staffing patterns or workforce opportunities.

Professional Services

The following table highlights the top ten scores within the professional services industry. Like Insurance, the majority of these companies are focused in the Northeast.

The MSA's in the list below have wages that greatly exceed and, in two cases (Trenton and Bridgeport), are more than double the average salary of \$50,000 for professional services in Springfield.

Additional operating costs are also significantly different for most of these metropolitan areas with a higher tax burden, real estate costs, and utilities. In addition, for most of the industries Springfield is projected to grow faster than the other regions.

Industry	MSA Name	Right to Work	Real Estate	Taxes	Utilities	Growth	Wages	Supply Chain	Count	Score
Other Scientific and	Tranton Ewing									
Services	N.I	0	3	5	5	5	5	3	7	371
Other Accounting Services	Bridgeport- Stamford- Norwalk, CT	0	5	4	4	5	5	2	7	3.57
Other Scientific and Technical Consulting Services	Bridgeport- Stamford- Norwalk, CT	0	5	4	4	4	5	3	7	3.57
Administrative Management and General Management Consulting Services	Bridgeport- Stamford- Norwalk, CT	0	5	4	4	5	5	0	7	3.29
Graphic Design Services	Bridgeport- Stamford- Norwalk, CT	0	5	4	4	5	1	4	7	3.29
Direct Mail Advertising	Bridgeport- Stamford- Norwalk, CT	0	5	4	4	5	4	0	7	3.14
Human Resources Consulting Services	Bridgeport- Stamford- Norwalk, CT	0	5	4	4	3	5	0	7	3.00
Human Resources Consulting Services	Hartford-West Hartford-East Hartford, CT	0	3	4	4	5	5	0	7	3.00
Computer Systems Design Services	New Haven- Milford, CT	0	2	4	4	5	5	1	7	3.00
Other Computer Related Services	Norwich-New London, CT	0	4	4	4	5	2	2	7	3.00

Table 5 Recruitment Scorecard: Professional Services

UAS

Clark County and Springfield have already been leveraging themselves to attract UAS businesses. This is evidenced by the State of Ohio locating the Ohio/Indiana Unmanned Aerial Systems Center and Test Complex in the Nextedge Industrial Park.

The State of Ohio and State of Indiana have also applied to be one of six designated "test sites" by the Federal Aviation Administration to integrate unmanned aerial systems into the national airspace. If selected, the Ohio/Indiana Unmanned Aerial Systems Center and Test Complex would have companies in the county and region testing their UAS, sensors, and other equipment its facility

One potential way to get these businesses to open a Springfield office would be to offer them cheap or free rent in a location where they can be around other similar companies for a certain number of months. This could be especially important in the defense industry where most

companies want to start in a new city with a small office that would not be eligible for state incentives.

The following table highlights the top ten regions that have an aerospace manufacturing industry. The aerospace manufacturing industry would encompass any manufacturing of the unmanned vehicle but not necessarily the sensors or software needed for the vehicle.

The majority of MSAs where Springfield has an advantage are located in the Northeast, similar to the insurance and professional services industries. Unlike the other industries above, wages in the aerospace manufacturing in Clark and the surrounding counties is actually higher. The scores here are driven by the robust manufacturing supply chain in region and state.

Table 6 Recruitment Scorecard: Aerospace Manufacturing

Industry	MSA Name	Right to Work	Real Estate	Taxes	Utilities	Growth	Wages	Supply Chain	Count	Score
Aircraft Engine and Engine Parts Manufacturing	New Haven- Milford, CT	0	5	4	2.5	5	0	5	7	3.07
Aircraft Engine and Engine Parts Manufacturing	Boston- Cambridge- Quincy, MA- NH	0	5	4	5	3	-1	3	7	2.71
Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	Bridgeport- Stamford- Norwalk, CT	0	5	4	2.5	5	-2	3	7	2.50
Aircraft Engine and Engine Parts Manufacturing	Hartford-West Hartford-East Hartford, CT	0	2	4	2.5	4	0	5	7	2.50
Aircraft Engine and Engine Parts Manufacturing	Concord, NH	0	5	2	5	4	-4	5	7	2.43
Aircraft Engine and Engine Parts Manufacturing	Bridgeport- Stamford- Norwalk, CT	0	5	4	2.5	5	-5	5	7	2.36
Aircraft Engine and Engine Parts Manufacturing	Philadelphia- Camden- Wilmington, PA-NJ-DE-MD	0	4	3	2	5	-3	5	7	2.29
Aircraft Engine and Engine Parts Manufacturing	Portland- South Portland- Biddeford, ME	0	2	4	5	5	-5	5	7	2.29
Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	Boston- Cambridge- Quincy, MA- NH	0	5	4	5	4	2	-5	7	2.14
Aircraft Engine and Engine Parts Manufacturing	New York- Northern New Jersey-Long Island, NY-NJ- PA	0	5	4	1	5	-5	5	7	2.14

Clark County Supply Chain Analysis⁴

The Springfield/Clark County region in southwestern Ohio hosts a dynamic manufacturing industry. One of the largest private employers in the County employing nearly 7,500 workers, the manufacturing industry has a concentration 70% greater than the national average.



Figure 11 Manufacturing in Clark County

Although Clark County's manufacturing assets are broad, the region has strong concentrations in several targeted industries: aerospace parts, automotive parts, composites, and machinery manufacturing. In addition, Clark County offers a strong concentration in manufacturing services – the manufacturing industry that serves other manufacturing businesses. Whether a company needs a composite material, fabricating, supplies, component parts, and the machinery required to manufacture products, Clark County alone has a strong competitive edge, as demonstrated below.

Table 7 Manufacturing S	Strengths in Clark	County
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		% Growth,			
Industry	2012 Jobs	2013-2018	LQ	Establish.	Avg. Earning
Aerospace Parts Manufacturing	99	0.6%	0.71	2	\$46,147
		(US: 1.6%)			
Auto Parts Manufacturing	976	12.5%	5.49	13	\$42,919
		(US: -10.5%)			
Composites Manufacturing	442	4.1%	1.94	10	\$30,760
		(US: -1.4%)			
Machinery Manufacturing	837	-9.3%	2.11	29	\$64,208
		(US: -1.4%)			
Manufacturing Services	1,945	-3.0%	3.05	57	\$44,636
		(US: -0.4%)			

For an industry to be successful, it depends on many other industries to either provide "input" such as raw materials, human capital, transportation services, and many others or "output" – customers who will buy directly from that business as well as the businesses that support that customer. In the US economy, 48% of the manufacturing industry's dollars flow to other manufacturing industries. Simply put, manufacturers are spending nearly half of their dollars on other manufacturers.

⁴ The data source for all supply chain data is EMSI 2013.2 Covered Dataset.

One of the greatest strengths in Clark County's manufacturing industry is in its supply chain. Not only does the region offer strong concentrations in the manufacturing that original equipment manufacturers (OEMs) need to produce their products, but the region also offers the supply chains necessary for that production. Of the top manufacturing industries that are required for aerospace parts manufacturing, auto parts manufacturing, composites manufacturing, and machinery manufacturing, the Springfield and Clark County region houses the industries that are required for are required for production of those goods.

Aerospace Parts Manufacturing

The top ten industries required to produce aerospace parts (in Clark County and contiguous counties) make up 62% of the manufacturing supply chain. Of these ten industries, seven are heavily concentrated in the Clark and surrounding counties region, while two are available in the Ohio/Kentucky/Indiana region.

		Amount			Other
NAICS	Industry	Required	Jobs	LQ	MSA
336412	Aircraft Engine and Engine Parts Manufacturing	\$57,970,273	1207	4.72	
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	\$18,916,077	1172	3.44	
332312	Fabricated Structural Metal Manufacturing	\$6,422,080	816	2.12	Louisville
332111	Iron and Steel Forging	\$6,308,110	680	24.98	Canton
326199	All Other Plastics Product Manufacturing	\$6,154,712	2278	2.67	
332510	Hardware Manufacturing	\$4,747,602	109	1.35	
332710	Machine Shops	\$3,995,051	2017	2.23	
332313	Plate Work Manufacturing	\$3,842,999	308	1.95	
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	\$3,807,187	627	1.53	
336411	Aircraft Manufacturing	\$3,690,521	n/a	n/a	

Table 8 Aerospace Parts Supply Chain

Auto Parts Manufacturing

The top 20 industries in the manufacturing supply chain for the automotive parts supply chain make up almost 60% of the total industry requirements. Similar to the aerospace supply chain, the Clark and surrounding counties region offers a strong concentration of those industries that are required for automotive parts manufacturing. For the industries not available in the Clark and surrounding counties region, automotive parts manufacturers have easy access to the vibrant supply chain that exists throughout Ohio and into Kentucky and Indiana.

NAICS	Industry	Amount Required	Jobs	LQ	Other MSA
331111	Iron and Steel Mills	\$102,578,393	780	24.98	Canton
332710	Machine Shops	\$69,579,438	2017	2.23	
331511	Iron Foundries	\$46,710,513	317	2.49	
336399	All Other Motor Vehicle Parts Manufacturing	\$44,598,921	1891	4.60	
332312	Fabricated Structural Metal Manufacturing	\$37,080,197	816	2.12	Louisville
326199	All Other Plastics Product Manufacturing	\$32,699,999	2278	2.67	
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	\$31,252,102	2290	4.82	Cincinnati
331524	Aluminum Foundries (except Die-Casting)	\$27,853,973	248	4.50	
336370	Motor Vehicle Metal Stamping	\$27,717,624	2036	9.22	
331521	Aluminum Die-Casting Foundries	\$26,384,913	1045	9.07	Indianapolis
332722	Bolt, Nut, Screw, Rivet, and Washer Manufacturing	\$23,358,553	770	2.79	Cincinnati
332114	Custom Roll Forming	\$22,811,450	371	13.98	Cleveland
332313	Plate Work Manufacturing	\$22,188,938	308	1.95	
332116	Metal Stamping	\$21,265,749	1391	8.35	
332721	Precision Turned Product Manufacturing	\$21,177,194	373	3.00	
336312	Gasoline Engine and Engine Parts Manufacturing	\$21,039,962	507	3.36	
331513	Steel Foundries (except Investment)	\$20,766,905	866	6.56	Columbus
334413	Semiconductor and Related Device Manufacturing	\$18,610,152	1396	3.26	Toledo
336322	Other Motor Vehicle Electrical and Electronic Equipment Manufacturing	\$17,779,390	320	2.33	
326150	Urethane and Other Foam Product (except Polystyrene) Manufacturing	\$17,737,885	350	1.60	Columbus

Table 9 Automotive Parts Supply Chain

Composites Manufacturing

Fifteen industries make up almost 75% of the manufacturing industries that are required to produce composite materials. The Clark and contiguous counties region has an industry concentration greater that the national average in seven of the fifteen industries. In the remaining eight industries, metropolitans within Indiana and Ohio offer strong industry concentrations. This strong supply chain concentration in Clark and the contiguous counties and their proximity to other high-producing metropolitan areas makes this region competitive for the composites manufacturing industry.

		Amount			
NAICS	Industry	Required	Jobs	LQ	Other MSA
325211	Plastics Material and Resin Manufacturing	\$108,274,870	247	1.40	
325199	All Other Basic Organic Chemical Manufacturing	\$38,945,786	191	1.77	
324110	Petroleum Refineries	\$37,352,860	321	11.94	Lima, OH
325110	Petrochemical Manufacturing	\$34,707,587	239	26.23	Lima, OH
326113	Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	\$14,195,927	289	2.31	
326111	Plastics Bag and Pouch Manufacturing	\$8,612,435	350	1.69	Cincinnati
326121	Unlaminated Plastics Profile Shape Manufacturing	\$8,428,291	1250	7.15	Cleveland
325193	Ethyl Alcohol Manufacturing	\$8,251,929	225	22.34	South Bend, IN
325212	Synthetic Rubber Manufacturing	\$7,773,192	396	15.12	Akron
326199	All Other Plastics Product Manufacturing	\$7,579,116	2278	2.67	
325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing	\$7,175,255	429	1.74	Cincinnati
322211	Corrugated and Solid Fiber Box Manufacturing	\$7,000,634	309	1.10	
332710	Machine Shops	\$5,749,521	2017	2.23	
326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing	\$4,802,117	531	4.97	Cincinnati
326130	Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing	\$3,950,731	131	2.43	

Table 10 Composites Supply Chain

Machinery Manufacturing

The Clark and contiguous counties region's strength in machinery manufacturing can also be partly attributed to its supply chain. The manufacturing industries that are required to manufacture machinery can be found in either Clark or its contiguous counties or in other metropolitan areas in Ohio and Indiana. The 25 industries below make up almost 60% of the manufacturing supply chain required to produce machinery.

Table 11 Machinery Manufacturing Supply Chain

NAICS	Industry	Amount	Jobs	LQ	Other MSA
331111	Iron and Steel Mills	\$64,194,421	2284	3.47	Cincinnati
332710	Machine Shops	\$45,894,536	2017	2.23	
331511	Iron Foundries	\$30,146,416	317	2.49	
333618	Other Engine Equipment Manufacturing	\$17,060,584	406	2.88	
335312	Motor and Generator Manufacturing	\$14,609,106	774	6.29	
335314	Relay and Industrial Control Manufacturing	\$13,599,845	462	1.35	Cincinnati
331513	Steel Foundries (except Investment)	\$13,402,717	866	6.56	Columbus
326199	All Other Plastics Product Manufacturing	\$12,729,627	2278	2.67	
334413	Semiconductor and Related Device Manufacturing	\$11,504,273	1396	3.26	
332722	Bolt, Nut, Screw, Rivet, and Washer Manufacturing	\$10,782,588	770	2.79	
332111	Iron and Steel Forging	\$10,049,558	780	24.98	Canton
331210	Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	\$9,847,739	182	2.04	
332721	Precision Turned Product Manufacturing	\$9,775,647	373	3.00	
332991	Ball and Roller Bearing Manufacturing	\$8,742,799	793	4.15	Indianapolis
331221	Rolled Steel Shape Manufacturing	\$8,301,541	809	5.34	Cincinnati
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	\$8,224,775	3226	15.38	
333996	Fluid Power Pump and Motor Manufacturing	\$8,067,922	178	1.36	Columbus
331512	Steel Investment Foundries	\$7,951,300	412	30.39	Canton
333515	Cutting Tool and Machine Tool Accessory Manufacturing	\$7,374,740	449	5.73	
339991	Gasket, Packing, and Sealing Device Manufacturing	\$7,292,069	717	7.46	
332912	Fluid Power Valve and Hose Fitting Manufacturing	\$6,768,284	385	3.34	
333613	Mechanical Power Transmission Equipment Manufacturing	\$6,587,058	45	1.06	
331524	Aluminum Foundries (except Die-Casting)	\$6,334,877	248	4.5	
332322	Sheet Metal Work Manufacturing	\$6,321,056	1020	1.58	Indianapolis
333995	Fluid Power Cylinder and Actuator Manufacturing	\$6,007,527	282	4.99	

3. Grow exports

Clark County Exports Analysis

Out of the 388 MSAs, Springfield ranked number 238 at its most recent peak exporting year in 2011 with approximately \$351 million in exports.⁵ In 2011, the Springfield MSA ranked 12th in Ohio for exports which accounted for only 0.7% of all exports for the state.⁶ Springfield ranked seventh though for exports as a percentage of GDP.

MSA	2011 Exports	Exports as % of GDP
Cincinnati-Middletown, OH-KY-IN	\$18,744,231,548	18%
Cleveland-Elyria-Mentor, OH	\$11,276,112,870	11%
Columbus, OH	\$4,327,460,203	5%
Akron, OH	\$3,888,960,990	14%
Dayton, OH	\$2,749,220,304	8%
Toledo, OH	\$2,445,602,276	9%
Canton-Massillon, OH	\$1,744,437,217	13%
Youngstown-Warren-Boardman, OH-PA	\$1,211,795,222	7%
Parkersburg-Marietta-Vienna, WV-OH	\$1,028,458,766	18%
Lima, OH	\$654,580,808	13%
Huntington-Ashland, WV-KY-OH	\$442,596,246	4%
Springfield, OH	\$351,664,891	10%
Mansfield, OH	\$301,127,466	8%
Sandusky, OH	\$212,716,112	7%
Wheeling, WV-OH	\$176,889,340	3%
Steubenville-Weirton, OH-WV	\$162,593,007	5%

Table 12 Exports from Ohio MSAs (2011)

Springfield is closest in GDP comparison to Steubenville and Mansfield with all three having a GRP of around \$3.5B. Parkersburg and Lima are slightly larger in scale and exports make up 18% and 13% of their economies, respectively.

Over the past 8 years, Clark County has averaged about \$288.5M per year in exports. This accounts for 8%-14% of Springfield's economy on any given year. The following chart shows that the dollar value of exports was at its highest in 2006 and 2008 saw the highest share of the economy supported by exports.

⁵ International Trade Administration "MSA 2012 (Full Year) Exports" Export.gov

⁶ Ohio Development Services Agency "Ohio Exports 2012 Origin or movement Series" March 2013



Figure 12 Exports from Clark County (2005-2012)⁷

Exports dropped significantly during the recession with a nice rebound year in 2011. The share of exports has not rebounded though. When looking at USA, exports the value and percentage of exports has increased every year since 2009. In fact, exports helped the U.S. out of the recession by accounting for almost half of the national growth within the first year of the post-recession economy.⁸

Export industries have varied through the recession, as well. Transportation manufacturing was by far the strongest export industry Clark County had in 2006. In 2007, the industry started to decline and machinery manufacturing continued to rise. In 2009 and 2010, machinery manufacturing was within \$2 million of taking over as the top export industry for Clark County.



Figure 13 Exports by Industry (2005-2012)

⁷ Export data from trade.gov, GDP data from BEA

⁸ Istrate and Marchio "Export Nation 2012"

Exports also translate easily to jobs and the machinery manufacturing industry is Clark County's leading industry. In the peak year of 2011, the machinery manufacturing industry accounted for 426 direct jobs at companies and an additional 201 jobs in the supply chain industries as well as induced jobs (government, healthcare, retail, etc.). This far surpassed the transportation manufacturing industry which supported 297 direct jobs and 161 indirect jobs in its peak year of 2006.



Figure 14 Jobs Supported by Exports (2005-2012)⁹

⁹ Numbers based on 2012 job multipliers for the industry.

Export Initiative Recommendation

According to the Brookings Institution, "70% of the world's purchasing power comes from outside the United States". Based on the Brookings Institute's <u>Metropolitan Export Initiative</u>, it is possible to organize a region to increase export activity. In Brookings' "Ten Steps to Delivering a Successful Metro Export Plan," it lays out the basics in organizing a metro export initiative and will be structurally summarized below:

Go Metro to Go Global

The initial phase of an export initiative structure involves the action of prioritizing exports in the region. This means contacting local business leaders and other members of government and helping them to understand the importance of exports in a regional economy. Not only should large-business executives be contacted to gain support for an export strategy, but also the corporate leaders of small- and mid-sized firms. According to the U.S. International Trade Commission, "Small- and mid-sized firms (SMEs) that export generally experience greater revenue growth than non-exporters and weathered the recession better as a result; in one study, SME manufacturing exporters grew revenues by 37% while non-exporting manufacturers experienced a 7% decline in revenues."¹⁰

There is a great deal of economic opportunity for firms that choose to export and it is possible, with organization and communication, to create a seamless and streamlined export strategy. Structuring of the initiative will be key once leaders from the government and business sector are on board with the idea and willing to champion the initiative.

Recommendation: Identify Key Champions

- 1. Identify champions that are currently exporting Sweet Manufacturing Company, Fluid Quip
- 2. Identify champions that are foreign owned

Pratt Industries, Andritz Inc, Extendicare Homes, Heroux-Devtek Inc, Ritchie Brothers Auctioners, Konecranes, Hef USA, Meva Formwork Systems, Seepex, Cascade Corporation, Clark Trucking, Coilplus, Teikuro Corp, Trutec Industries, Yamada North America, LexisNexis

3. Identify potential champions who could export TBD

Organize to Success

From the beginning, there will need to be a set *Core Team*. The Core Team is responsible for pre-planning, staffing the steering committee, scheduling and preparing meetings, and conducting export research. This team is best equipped when a member of state or local government is included.

¹⁰ US International Trade Commission, 2010 "Small and Medium-Size Enterprises: Characteristics and Performance" Washington

These members are crucial when the implementation of the export strategy begins and when funding, staffing, and the alignment of services is necessary. In the four metro areas where the Brookings' <u>Metro Export Initiative</u> was piloted, each of the areas had a slightly different structure from each other. For example, in Los Angeles the Core Team was led by the mayor, the chamber of commerce, and UCLA's School of Management program called CIBER. In the other cities, the team was usually led by the office of the mayor, an economic development partnership, and/or the chamber of commerce.

Next, the *Steering Committee* will need to be staffed and created. The Steering Committee will be most effective when involving key stakeholder organizations from the region and state. Almost all of the metro areas where these export strategies have been implemented reported to have wished the involvement of international trade professionals. These organizations will be able to provide resources such as valuable ideas and input, consultants, facilities, and time for the initiative. By including key leaders from various organizations and levels of government, a sort of export network will start to develop. This network has the capacity to help push alignment with federal and state efforts for exports.

Recommendation: Potential Steering Committee

Metro area

- 1. City of Springfield
- 2. Chamber of Commerce
- 3. Dayton Development Coalition
- 4. University International/Business Schools
 - a. Wittenberg http://www5.wittenberg.edu/academics/business.html
 - b. Wright State http://business.wright.edu/
 - c. Wright State <u>http://business.wright.edu/community/business-</u> consulting/international-business-expansion
 - d. University of Dayton http://www.udayton.edu/business/
 - e. <u>Ohio State University http://fisher.osu.edu/prospective/graduate/phd/phd-in-</u> <u>business-administration/international-business</u>
- 5. Springfield Port
- 6. International Trade Associations
 - a. Ohio ITAC- Kathy Marshalek http://development.ohio.gov/files/bs/exportitacmap04252013.pdf
- 7. Private Sector-Exporting Companies
 - a. Listed in section 1
- 8. Freight Forwarders/Logistics Companies
- 9. Private-sector export service firms (banks, legal)
- 10. District Export Council
 - a. Southern Ohio District Export Council https://sites.google.com/site/southernohiodec/
- 11. Small Business Development Center
 - a. Springfield SBDC http://www.smbusdev.org/

State

- 1. Office of the Governor
- 2. State Trade Office
 - a. GlobalOhio http://development.ohio.gov/bs/bs_globalohio_contact.htm
- 3. JobsOhio
- 4. State Chamber of Commerce http://www.ohiochamber.com/mx/hm.asp?id=staff
- 5. State Elected Officials

Federal

- 1. U.S. Dept of Commerce <u>http://www.commerce.gov/about-commerce/commerce-services-offices-near-you/ohio</u>
- 2. U.S. Small Business Administration http://www.sba.gov/about-offices-content/2/3138
- 3. Export-Import Bank of the United States http://www.exim.gov/about/contact/
- U.S. Dept of Agriculture <u>http://www.usda.gov/wps/portal/usda/usdahome?navid=EXPORTING_GOODS</u>
- 5. U.S. Trade and Development Agency http://www.ustda.gov/program/usbusinesses.asp

Produce a Data-Driven Market Scan

The Core Team is responsible for developing an export market assessment. This measures the position where the metro area is currently in the market for exporting and will also assess the opportunities the area has for growth. This data becomes the basis for all strategies that will be developed and includes an overview of the local economy and its recent performance.

It is important to develop a specific variety of metrics that fairly measures and benchmarks the local/metro economy. Data of specific companies is harder to come by than metro/regional/county export data but in the four metros implementing export strategies, all of them found that available export data was enough to produce a strategy. Whatever these metrics are, it is important to understand the impact of exports on the local economy.

Recommendation: Data Analysis

A baseline of export data was provided at the beginning of the export section. This data can be updated on an annual basis.

Capture Local Market Insight

Once the market assessment is complete, the next step is to reach out to local firms to get a real understanding of the position of companies in the area and their efforts towards exporting. Some service providers and product manufacturers may not have a reason to export, or maybe they do not have the resources or the expertise to start going in that direction.

When reaching out to local firms, surveys and one-on-one interviews accomplish the most. Questions can include things like:

- Do you export?
- Why do you export to the countries to which you export?
- What type of impact does exporting have on total sales?
- What is preventing you from exporting more or to begin exporting?

It was found that after conducting these same surveys in other pilot metro-areas, many of the business leaders were fascinated by the export strategy and wanted to be involved. Many of those individuals became valuable resources to the export initiative process. Once there is sufficient data collected from the local export market, the steering committee should now be able to make some serious talking points about the importance of exports and their effect on the local economy.

Recommendation: Survey Local Companies

Create a survey (or use one of the below surveys) to reach out to local companies on their exporting efforts.

- The survey template, as well as other valuable documents, can be found at www.brookings.edu/about/projects/state-metro-innovation/mei
- Export.gov also has a 9 question survey that can be used in R&E meetings and that could help identify potential export companies: <u>http://export.gov/begin/assessment.asp</u>

Incorporate export questions R&E or HITS outreach efforts

Champion Exports Now

Industry champions, especially those currently exporting, are key to gaining support of an export initiative. In the four metropolitans that have executed a regional export plans, many of these leaders were found through the export surveys and were then later invited to participate in the steering committee. In the Minnesota Saint-Paul Metro Export Initiative, this was accomplished by securing the participation of high ranking metro-based federal, state, and local officials in the export plan committee. By having high ranking officials become a part of the process, it was simple to attract the attention and support by local industry leaders. It was also found that tapping into global trade and engagement was not a part of many regional chambers or economic development partnership groups' mission.

Recommendation: Show Value

Use data to show how increasing exports will lead to more jobs and money in Clark County. For instance, for every \$1,000,000 in export sales a materials moving company has they would create an additional 3 jobs at the company, 1 in the supply chain, and two in the community with nearly \$400,000 in new payroll a year.

1 job in the supply chain



Developing a Customized Export Plan

It is important to develop an export plan that will cater to the region's very specific needs for economic growth. The most simplified structure of the plan should be a document which makes a strong case for exports and a logical plan or guide on how to achieve a long-term economic goal. In its simplest form, the export plan should cover a few basic sections:

1) The areas rationale for exports

- Increased jobs
- Outside money coming into the region
- 2) Key findings from the market assessment
 - Listed at the beginning of this section
- 3) Goals and objectives
 - Need to be developed by the steering committee
- 4) Strategies and tactics that will work towards those goals and objectives
 - Need to be developed by the steering committee
- 5) The implementation plan (funding, staffing, responsibilities)
 - Needs to be developed by the steering committee
- 6) Performance goals to use as a benchmark for progress
 - Need to be developed by the steering committee

The more the strategy builds off of existing economic development structures and resources, the more likely implementation will be a success. When developing an export plan, there are many questions that are beneficial to ask. For example

How can existing resources be leveraged? What firms should be targeted first? What current federal, state, and local export programs/efforts can be better aligned or strengthened? After developing a base strategy for the region, the drafting process can begin. It is best to develop a draft and allow the steering committee to suggest various strategies. After publishing the draft, allow time for feedback from the committee and business leaders. It is important to know the possible limitations while developing the draft export plan. Some of the challenges may be the small amount of resources for export development, coordinating the many leaders in the area working towards a common and understood goal, making export services well-known and easy to start, and also determining the metrics to measure the impact of the strategies on the export market.

Recommendation: Create an Export Plan

Analyze the current barriers to exporting identified by the companies surveyed and identify the currently available programs that could help. Start efforts with companies that are interested in exporting but have simple barriers to overcome. Set priorities to identify or develop additional resources to resolve barriers that companies have identified.

Prepare for Implementation

Before finalizing efforts, coordination of responsibilities is critical. This includes securing funding as well as determining who is responsible for which parts of implementation. It also includes the details on the deliverables, phasing, budgets, and the division of labor. Even in very large metropolitan areas, there is often a lack of resources on hand in terms of products and services available in the area. This may call for the formation for a new group or program to assist exporting businesses. Some pilot metro areas where export plans have been implemented aligned universities and MBA students with small-to-mid-size enterprises to develop export strategies.

The next important phase of the implementation process is the financial aspect. What is the budget? Where will resources come from? It is vitally important to secure initial seed money before or at the time of publicizing the plan. For example, the Los Angeles MEI was able to secure funds through federal STEP grants. In Minnesota, they were fortunate enough to begin the process with funds already available to them. Another example is of CenterState New York, which raised funds through its private-sector members.

At this point in the process, it should be clear what group or organization is accountable for ensuring the plan gets carried out. Sometimes this requires multiple partners working in collaboration or the creation of a new group. Los Angeles created the Regional Export Council that is within the Area Chamber of Commerce. In Portland, the City of Portland and the Portland Development Commission led the export planning process. It all depends on what existing groups are present and how available resources are. The implementation phase of the export plan is very crucial in giving the plan any significance in the region or the state. The next important step is to set policy priorities to show to federal and state government what policies need to be put in place to properly carry out an export plan.

Recommendation: Available Funding Sources

Below are a few available federal grants that can help support export efforts:

- 1. STEP Grants- www.sba.gov/about-offices-content/1/2889/resources/14315
- 2. MDCP Grants- Market Development Cooperator Program. www.ita.doc.gov/td/mdcp/
- 3. Jobs and Innovation Accelerator Grants- www.manufacturing.gov/accelerator
- 4. TIGER Grants- Transportation Investment Generating Economic Recovery. <u>www.dot.gov/tiger/</u>
- 5. For Businesses: http://development.ohio.gov/bs/bs_image.htm

Identify and Promote Policy Priorities

Planning an export initiative and forming a committee with a clear idea of the responsibilities of each working member is the backbone of the whole process, but without an agreed upon set of priorities at the state and federal level, it could all be for nothing. It is important to create a policy memo that tells state and federal leaders what priorities and policies would best support an export plan.

During the planning process, many of the obstacles towards making an export initiative will make themselves clear and this can be used to form a policy memo that shows what is preventing the plan from reaching maximum potential. Without the support of the state and federal government, an export plan may never reach the implementation phase.

State government has a direct impact on the capacity of the entire initiative. It provides funding, staffing, export promotion and not to mention the control of trade policy in general. In some areas, funding is limited due to budget restraints and cuts. For example, Minnesota has a fairly established exports effort through the Minnesota Trade Office, even with the burden of a limited budget. This policy memo should be seen as a working document, just as the export plan document is subject to editing and comments from leaders abroad. In the four Metropolitan Export Initiative areas, all of them created policy recommendations to help ease the process of an export initiative.

In Los Angeles, recommendations to state and federal government involved: putting companies first in the provision of coordinated services and in measuring success, and boosting export funding and to make it more effective. In the Syracuse/Central New York MEI, export service priorities were shifted to support U.S. companies in foreign markets, and simplified U.S. export control laws and regulatory compliance which would decrease the excessive number of agencies responsible for reviewing regulations and would speed up the decision making process.

Recommendation: Involve Elected Officials

Have state elected officials on the steering committee and/or communicate the progress and major wins with them regularly.

Track and Publicize Progress

Without tracking and publicizing performance, there is no way for citizens, companies, and government officials to know if their efforts are worthwhile. This is why it is important to have an agreed upon set of metrics that will be used to measure the success of the region, companies, and export services. These metrics will help keep partners' priorities aligned and to show measureable results. Success of the region can be measured by such things as export growth, number of export jobs, intensity, and diversification of services.

Company success can be shown by expansion of export markets, number of firms engaging in global trade, increased demand, and many others. The last but often overlooked success metrics are for export service providers which can be measured by the overall satisfaction of companies by use of surveys, trade shows, overseas efforts, and others. It is important to publicize any successes based on these ongoing performance measurements. This way, confidence about the initiative will grow and begin to gain momentum.

Recommendation: Publicize

Publicize all "wins" to the steering committee, business community, and local media.

Mainstream Exports into Economic Development

To see and experience the maximum benefit of exports as a strategy, it must be integrated into current economic growth strategies. First off, export metrics should be used as a serious economic indicator, reporting it as being as important as something used commonly, such as employment rates. This is a common performance indicator in countries such as Brazil, China, Germany, Korea and others. The Syracuse/CenterState New York MEI team accomplished this, in part, by prioritizing export driven projects.

In this day and age, global trade and the global marketplace heavily influence economic performance. A Metropolitan Export Initiative, aligned with state efforts, will reach maximum effectiveness as part of a broader plan. By supporting and mainstreaming exports, regional small, medium, and large-size companies will be capable of expanding their presence in the global marketplace, and hopefully at the same time help the region to achieve a level or economic performance that has yet to be seen.

Recommendation: Incorporate

Incorporate export questions into R&E visits and strategic initiatives.

4. Market industry strengths

Winning Strategies in Economic Development Marketing a study by Development Counselors International done in September of 2011 surveyed company executives with site selection responsibilities on their leading sources of information about an area's business climate. Respondents were asked to pick three of the following thirteen variables.



Figure 15 Leading Sources of Information Influencing Executive Perceptions of an Area's Business Climate

As the figure above shows, the leading sources of information influencing an executive's site selection decisions are not coming from advertising or outreach/sales pitches. The most valuable information someone is getting about your community is coming from industry peers, followed closely by articles in newspapers and magazines. Dialogue with peers and articles in newspapers/magazines have been the top two influencers for the last 15 years.

The best way to ensure industry peers are providing positive information about a region is to ensure their needs are being met through an effective R&E strategy.

One effective way to control the message is to be the one delivering it. There are a few routes an organization could take to getting their message out. First, and especially locally, is developing a relationship with publishers and reporters. Second, there are companies that, for a fee, will help place stories in national media outlets and industry publications. Third, an organization can develop a press release process and go through an organization such as PR Newswire and select target publication types being reached.

Other strategies that would be beneficial and the community could influence are:

- Host executives coming in to the region
- Meet with executives of local branches when traveling to conferences
- Keep website updated

Support Springfield's workforce

1. Focus workforce development efforts on targeted industries

Industry-Led Workforce Model

Historically, the public workforce system is designed to assist workers with soft skills training and short-term training programs, but there is no system to put dislocated workers on a path toward post-secondary education. Education and training programs have been designed and delivered based on interest and demand of the workforce, rather than the demands of employer. Clark County must ensure that demand for talent from its local businesses drives workforce development initiatives, similar to the Code Blue model.

The Code Blue model was built in response to the company's potential relocation to Springfield. Community leaders, businesses, legislators, and economic developers were committed to attracting Code Blue, and education and the public workforce system responded.

In the Code Blue model, Clark State Community College worked directly with Code Blue, identifying the skills needed by participants to successfully complete the training. Code Blue and Clark State developed the curriculum required so that training participants would be qualified for employment at the end of the training program. The Code Blue and Clark State collaborative also selected the assessments that would ensure participants were capable of completing the training. As a result, **98% of participants successfully completed training.** Code Blue has hired and retained 84% of trained workers.

Curriculum was packaged in a short-term training program that was delivered to participants for academic credit. The academic credit articulated into an associate degree program, and the associate degree program can articulate into a bachelor's degree program. This articulation ensures that the participants have credentials and academic credit that can be carried with them on a career or academic pathway beyond the Code Blue training and employment.

The Code Blue model could be used to further workforce development in the Dayton Region using the following components.

1. Data analytics. Connecting workforce development to economic development efforts, the Code Blue Model will analyze industry and occupational data to determine what industries are driving the regional economy and the workforce shortages that may be a challenge to retaining and expanding those businesses.

For example, of the businesses that have requested workforce investments, two examples illustrate the difference in economic impact. Each industry has a jobs multiplier, which means that for every job the industry brings, the multiplier calculates the total jobs that would be impacted, including direct, indirect and induced jobs.

The example below shows the impact of a specific retail trade industry versus one in manufacturing. Note that in addition to a higher multiplier in the manufacturing industry, the wages of the jobs are far different.

Economic development priorities will not necessarily select an industry investment that has higher multipliers and higher wages, but when calculating a return on investment potential (ROI), multipliers and wages will be considered. With limited resources to invest in regional businesses, economic development priorities must consider the investments that will create the most jobs and have the largest impact.

Table 13 Job Multiplier Example

Industry	Jobs Multiplier	Total jobs (per 100)	Avg. Earning
Retail trade	1.17	117	\$17,123
Manufacturing	3.17	317	\$124,418

In addition to analyzing industry and occupational data, targeted industries may also be surveyed to better understand workforce demand. When specific industry data is required, industries will be surveyed to identify specific occupational demands and the skills sets needed to fill those demands. For example, although manufacturing continues to be a high-demand area, internal machining processes may be very diverse, requiring skills working with specific materials or specific programming capabilities.

- 2. Employer engagement. To better target workforce gaps, the Code Blue model will connect employers directly to the educational institutions. Using one large employer or a team of smaller employers, college administration and faculty will work directly with employers to identify the skills that are needed to fill workforce demand. The collaboration between business and education will also determine the assessment required to ensure that training participants have the capability to successfully complete training and are a good fit for the organization.
- 3. Training inventory and curriculum packaging. Educational institutions will develop any new curriculum that may be needed by employers. Where curriculum already exists, educational institutions will re-package the curriculum. This may include packaging the curriculum into modules and/or designing accelerated programs that can quickly lead to employment. Training programs will lead to academic credit or a transferable credential so that participants can be on a career pathway that makes their experiences relevant and offers an entryway into additional education and training.
- 4. Program implementation. Working with the One-Stop Centers, training participants will be recruited and assessed for potential participation. Once participants have been identified, the one-stops will also identify if participants are eligible for WIA and/or TAA funding. The one-stops may also provide employment support services when needed to training participants.
- **5. Evaluation.** The program implementation will be evaluated both qualitatively and quantitatively. Employers, educational institutions, one-stops, and training participants

will all be surveyed to determine what worked with the process, what barriers existed, and what challenges will need to be overcome in future training programs to ensure success. For the quantitative evaluation, participants will be tracked to determine the numbers that gain employment at the end of the training program, and the wages that they are earning. This will not only help calculate a return on investment for training, but it will determine what training investments have been the most successful in gaining employment for workers.

Instead of operating in silos that are not connected, the Industry-Led Workforce Development model will connect businesses, educational providers, and the future workforce so that businesses have the skilled workforce they need, educational institutions deliver relevant and timely curriculum, and students have educational opportunities that lead to employment.

Figure 16 Continuous Quality Improvement Cycle to Provide High ROI Industry-Specific Training



Source: Center for Urban and Public Affairs, Wright State University

Return on Investment

The impact of the Industry-Led Workforce Model is its Return on Investment (ROI). The model optimizes the ROI by identifying immediate needs of employers and packaging short-term training models that will provide skills that are in demand while starting workers on an education and training pathway on which they can continue to upgrade their skills.

This model aligns with the findings from a January 2012 report from the U.S. Government Accountability Office (GAO) entitled "Workforce Investment Act: Innovative Collaborations between Workforce Boards and Employers Helped Meet Local Needs." This study identified what federal agencies identified as the most promising or innovative collaborations across the country that had produced positive results. Based on reviews of these programs, the GAO identified six factors that facilitated collaboration within these programs and produced results¹¹.

¹¹ http://www.gao.gov/assets/590/587809.pdf

Focusing on urgent need	Leadership	Leveraging Resources	Employer- responsive services	Minimizing administrative burden	Demonstrating results
Addressing similar needs for multiple employers across a sector	Involving leaders with authority or persuasive ability	Using resources such as grants to attract additional support	Employing staff with industry knowledge	Streamlining data collection methods	Increasing supply of skilled workers
Working together to define scope of problem	Using a natural convener to build trust	Finding ways to build on limited WIA funds	Tailoring services to address employers' specific needs	Having a single point of contact or program manager	Helping employers address recruitment and turnover
Finding common ground to develop solutions		Attracting employer contributions and in-kind support	Making training services more relevant and useful to employers	Limiting length, frequency, or focus of meetings	Increasing skills for jobseekers and workers
			Serving a diverse mix of jobseekers and workers to address employers' needs		Placing jobseekers in jobs
					Increasing employer involvement in the workforce system
					Achieving cost savings or efficiency improvements

Figure 17 GAO Factors for Collaboration and Results

Source: GAO Interviews

Clark County Workforce Analysis

An industry-led model requires an assessment of industry demand for talent. The 21st century brought with it an era of turmoil for the entire Dayton Region. Thousands of job losses occurred simultaneously with growth in technological innovations and industries. This duality has made it imperative to leverage the assets that Clark County offers to create new jobs and opportunities for the county's residents and the industries that drive the economy. At the same time, the culture, workforce, and investment priorities must be realigned to ensure future growth and prosperity.

A highly educated and skilled workforce is critical to change the culture and advance a knowledge economy. It is also one of the region's most fractured and critical challenges. A snapshot (6/19/13) of the positions listed on *OhioMeansJobs.com* showed that within Clark and surrounding counties, more than 10,000 jobs listings were posted, of those positions, 45 percent required postsecondary credentials.

Supply and Demand Key Findings

The basis of the modeling used to create the supply and demand of Clark County's, the Dayton Region's, and the State of Ohio's workforces was created by Georgia State University and the Georgia Career Information Center for the U.S. Department of Labor. GSU and the Georgia Career Information Center mapped all college program codes, Classification of Instructional Programs (or CIP), to occupation codes, Standard Occupational Classification (or SOC). This allows for the supply of college completers to be compared to the demand for workers uniformly.

For this analysis the supply of college completers is from the National Center for Education Statistics' (NCES) Integrated Postsecondary Education Data System (IPEDS). Occupational demand data is derived from Economic Modeling Specialists International's (EMSI) *Analyst* which provides labor market data.

The supply for each category is organic to the region with the demand. For example, the supply for Clark County was determined based on Wittenberg and Clark State Community College. The Dayton Region supply considered all high education institutions in the 14 county region, and the state supply was determined by the completers coming out of all Ohio higher education institutions.

Table 14 Gap Analysis Summary

Occupation Group	Clark County	Dayton Region	State of Ohio
Accounting & Financial Mgmt	Gap of 26	Surplus of 296	Surplus of 669
Actuarial Science	Gap of 1	Gap of 9	Gap of 21
Aircraft Mechanics	Gap of 1	Gap of 20	Gap of 77
Biological/Life Science	Surplus of 41	Surplus of 435	Surplus of 2,407
Business Management	Surplus of 17	Surplus of 417	Surplus of 3,750
Cardiology Technology	Gap of 0	Gap of 11	Gap of 64
Communications/Journalism	Surplus of 17	Surplus of 367	Surplus of 2,286
Computer Engineering	Gap of 4	Gap of 129	Gap of 808
Computer Systems	Gap of 20	Gap of 164	Gap of 978
Counseling	Gap of 11	Surplus of 15	Gap of 325
Dental Assisting	Gap of 4	Gap of 24	Surplus of 213
Dental Hygiene	Gap of 3	Gap of 36	Gap of 155
Dentistry	Gap of 2	Gap of 47	Gap of 146
Diesel Engine Repair	Gap of 7	Gap of 50	Surplus 170
Dietetics/Nutrition	Gap of 2	Surplus of 31	Surplus of 291
Educational Administration	Surplus of 19	Surplus of 316	Surplus of 1,451
Human Resources Momt	Gap of 11	Gap of 107	Gap of 468
Industrial Engineering	Gap of 1	Surplus of 2	Gap of 89
Insurance	Gap of 7	Gap of 52	Gap of 191
Legal Assisting	Gap of 1	Surplus of 35	Surplus of 253
LPN	Surplus of 27	Surplus of 824	Surplus of 2.666
Marketing/Advertising/PR	Gap of 8	Surplus of 294	Surplus of 1,161
Massage	Gap of 2	Surplus of 271	Surplus of 584
Materials Science	Gap of 0	Gap of 5	Gap of 21
Mechanical Engineering	Gap of 2	Surplus of 124	Surplus of 406
Mechanical Eng. Technology	Gap of 0	Surplus of 24	Surplus of 215
Medical Equipment Repair	Gap of 0	Gap of 11	Gap of 16
Medical Lab Technology	Gap of 2	Gap of 25	Gap of 61
Medical Office/Secretarial	Surplus of 11	Surplus of 962	Surplus of 3.424
Medical Radiology Tech	Gap of 1	Gap of 10	Surplus of 47
Medical Services Momt	Gap of 2	Gap of 74	Gap of 50
Medical Transcription	Gap of 0	Gap of 9	Gap of 11
Nursing	Gap of 16	Surplus of 222	Surplus of 2,800
Occupational Therapy	Gap of 1	Gap of 32	Gap of 107
Occ. Therapy Assisting	Gap of 0	Surplus of 6	Surplus of 99
Pharmacy	Gap of 4	Gap of 80	Gap of 117
Physical Therapy	Gap of 2	Gap of 33	Gap of 124
Phys Therapy Assisting	Gap of 1	Surplus of 19	Surplus of 166
Physician Assisting	Gap of 1	Surplus of 6	Gap of 35
Psychology	Gap of 1	Surplus of 163	Surplus of 499
Quant, Business Analysis	Gap of 1	Surplus of 11	Gap of 58
Recreation & Fitness	Gap of 4	Surplus of 14	Surplus of 471
Recreational Therapy	Gap of 0	Gap of 4	Gap of 19
Respiratory Therapy	Gap of 1	Surplus of 10	Surplus of 17
Social Science	Gap of 1	Surplus of 25	Surplus of 226
Social Work	Gap of 9	Gap of 96	Gap of 62
Speech Pathology	Gap of 1	Gap of 20	Surplus of 79
Surgical Technology	Gap of 0	Surplus of 39	Surplus of 267
Veterinary Assisting	Gap of 2	Gap of 28	Surplus of 180
Veterinary Medicine	Gap of 1	Gap of 18	Gap of 50
Welding/Soldering	Gap of 7	Surplus of 137	Surplus of 82
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Manufacturing Industry

The manufacturing industry employs over 7,000 in Clark County, primarily in production occupations, as shown in the table below. The industry is projected to lose about 10% of its jobs over the next five years, primarily in production occupations (-192 jobs, 5% of current).

SOC	Occupation Category	Employed (2013)	% of Industry
51-0000	Production Occupations	4,237	57.8%
53-0000	Transportation and Material Moving Occupations	972	13.3%
43-0000	Office and Administrative Support Occupations	576	7.9%
49-0000	Installation, Maintenance, and Repair Occupations	323	4.4%
11-0000	Management Occupations	319	4.3%
17-0000	Architecture and Engineering Occupations	213	2.9%
41-0000	Sales and Related Occupations	193	2.6%
13-0000	Business and Financial Operations Occupations	180	2.5%
47-0000	Construction and Extraction Occupations	113	1.5%
15-0000	Computer and Mathematical Occupations	80	1.1%

Table 15 Manufacturing Staffing Pattern, 2-Digit SOC, 2013

A deeper dive into production occupations shows significant projected loss (400+) in assembly occupations. These occupations are primarily focused in the automotive industry.

Half of these projected losses are offset by increases in metal/plastic workers (i.e., machinists, specialized machine operators) and other production occupations (i.e., inspectors, packaging, helpers). Metal/plastic worker growth is expected in the metal stamping industry and the gasoline engine/parts manufacturing industry. Other Production occupation growth is projected in the following industries: fluid milk, fiber box manufacturing, temporary help services, and metal stamping.

The figure below shows the age of the manufacturing workforce in Clark County. The figure shows that about one quarter of the manufacturing workforce is at retirement age or will be within a decade. This is about two percentage points higher than national average for the industry.



Figure 18 Manufacturing Workforce Age Breakout, 2013

The manufacturing industry in Clark County has the infrastructure in place locally and regionally to support a manufacturing workforce. Industrial production managers, welders, operations managers, mechanical engineers, accountants, and electricians make up the majority of the positions requiring postsecondary education, and all occupations are overproduced regionally and state-wide, making a strong case to recruit and expand manufacturing facilities.

Yet the number of people reaching retirement could post a significant risk to the manufacturing industry in Clark County. The significantly smaller percentage of people in younger age brackets is also a concern.

Traditionally, jobs in the manufacturing industry require only training. This is true in Springfield and Clark County, where 79.5% of the current jobs are in occupations that traditionally require only training. However, across the nation, manufacturing is moving toward a higher skilled workforce. This trend is becoming evident on job posting sites, like *OhioMeansJobs.com*, where there are currently 31 available manufacturing jobs for Clark County as of June 18, 2013. Of those jobs 10 require a bachelor's degree, 1 an associate's degree, 4 a technical award, 14 a high school diploma, and 2 are open to anyone.

Projections over the next five years show that the manufacturing industry will grow, albeit slightly, in occupations requiring postsecondary education (1.2% growth within occupations). Occupations requiring on-the-job training are projected to decrease by 2.2%.

In the Dayton MSA, *OhioMeansJobs.com* posting reported 5 jobs requiring an advanced degree, 267 a bachelor's degree, 48 an associate's degree, 31 a technical award, 173 a high school diploma, and 12 are open to anyone. The same trend is available at the state level where 48% require a bachelor's degree, and 68% require some form of postsecondary education.

Industrial engineers are the one occupation requiring postsecondary education that is not being produced statewide. However the Dayton Region is meeting current demand.

Logistics & Distribution

The Logistics & Distribution industry is projected to grow 14.9% over the next 5 years in Clark County, more than double the national average. Most of this growth is within occupations involved in transportation and material moving, and office and administrative support.

SOC	Occupation Category	Employed	% of Industry
53-0000	Transportation and Material Moving Occupations	1,802	72.9%
43-0000	Office and Administrative Support Occupations	324	13.2%
49-0000	Installation, Maintenance, and Repair Occupations	146	5.9%
11-0000	Management Occupations	59	2.4%
51-0000	Production Occupations	35	1.4%
41-0000	Sales and Related Occupations	32	1.3%
13-0000	Business and Financial Operations Occupations	31	1.3%

Table 16 Logistics	& Distribution	Staffing Pattern.	2-Diait SOC, 2013
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The logistics & distribution industry is projected to grow for both on-the-job training occupations (16.2%, 344 jobs) and postsecondary education jobs (14.0%, 16 jobs). Specific occupations projected to grow include heavy and tractor-trailer truck drivers (136 job growth), laborers and freight movers (75 job growth), and industrial truck and tractor operators (34 job growth).

Truck and mechanics/diesel engine specialists (13 jobs) are the top growth occupations requiring postsecondary education. This occupation could be of concern for the industry as it is currently a shortage in the county and region. However the State of Ohio has a surplus of 170.

The chart below highlights the age breakout of the logistics & distribution industry in Clark County. The industry won't likely experience the effect of retirements to the magnitude that the manufacturing industry will. The number of people in the 25-34 range is a good sign for this industry's future workforce.



Figure 19 Transportation & Logistics Workforce Age Breakout, 2013

The Logistics & Distribution Industry currently has 46 open jobs on *OhioMeansJobs.com*. All of these jobs require a high school diploma or less, however they do require other certifications. For instance, 27 require a Commercial Driver's License, 2 require a Class A Commercial Driver's License, 4 require a certified purchasing manager certification, and 1 requires an Automotive Service Excellence certification.

Professional Services

Clark County currently has about 1,000 people employed in the professional services industry. These include lawyer's offices, engineering services, testing laboratories, graphic design services, computer systems, R&D, and marketing agencies, among others.

SOC	Occupation Category	Employed	% of Industry
43-0000	Office and Administrative Support Occupations	252	28.0%
13-0000	Business and Financial Operations Occupations	164	18.2%
15-0000	Computer and Mathematical Occupations	108	12.0%
23-0000	Legal Occupations	87	9.6%
17-0000	Architecture and Engineering Occupations	40	4.4%
11-0000	Management Occupations	39	4.3%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	38	4.2%
29-0000	Healthcare Practitioners and Technical Occupations	36	4.0%
41-0000	Sales and Related Occupations	35	3.9%
31-0000	Healthcare Support Occupations	33	3.7%

Table 17 Professional Services Staffing Pattern, 2-Digit SOC, 2013

Professional services has the highest concentration of employees requiring a postsecondary education and has the most workforce opportunities, particularly within IT occupations. Computer engineering occupations currently have a gap of 4 in the county, 129 in the region, and 808 in the state. Other IT occupations are even more critical: Clark County has a gap of 20, the region a gap of 164 and the state is under producing by nearly 1,000 workers.

The county, region, and state all have an overabundance of students graduating with business degrees but there are shortages in accounting and finance. It's possible that this overabundance is filling the demand for accounting and finance occupations.

An analysis of OhioMeansJobs.com job postings shows 33 current job postings. Of those, 8 require a bachelors, 5 require an associates, and 13 a high school diploma. Greene County, where professional services is one of their established driver industries, currently has 107 job openings, 76 of which require a bachelor's degree or higher.

Insurance

The Insurance Industry employs 2,205 in Clark County and is projected to grow by 28% over the next five years, almost 10 times the national average. The table below highlights that three quarters of these jobs are office and administrative support or sales occupations.

SOC	Occupation Category	Employed	% of Industry
43-0000	Office and Administrative Support Occupations	1,222	55.4%
13-0000	Business and Financial Operations Occupations	391	17.7%
41-0000	Sales and Related Occupations	361	16.4%
11-0000	Management Occupations	99	4.5%
15-0000	Computer and Mathematical Occupations	94	4.3%

Table 18 Insurance Staffing Pattern, 2-Digit SOC, 2013

The insurance industry is another industry with growth in both on-the-job training occupations (560 jobs, 34.1% growth) and postsecondary education occupations (70 jobs, 23.4% growth). Clark County, the Dayton Region, and the State of Ohio may have difficulties meeting demands for specific insurance occupations. Only The Ohio State University has an Insurance bachelor's degree program which had 32 graduates in 2011.

The shortages in IT that impacted the professional services industry would also be a factor in the insurance industry, as would the potential shortage of accounting and finance workers.



Figure 20 Insurance Industry Age Breakdown, 2013

The insurance industry in Clark County is very heavily weighted towards the younger age group with 40% of the industry under 35, and it is predominately women.

As of June 18, 2013 *Ohiomeansjobs.com* currently has forty-two job listings for Assurant. Eighteen of those jobs require a bachelor's degree, seven require an associate's degree, and one requires post-secondary training.

The Dayton MSA has 42 listings in the insurance industry with all jobs requiring at least a high school diploma and 31% requiring a bachelor's degree. In the State of Ohio there are currently 360 openings in the insurance industry requiring a bachelor's degree.

Agribusiness, Food Processing and Technology

The agribusiness, food processing and technology industry employs over 1,000 in Clark County. Table 6 shows that two thirds of the occupations in this industry are logistical or production oriented.

SOC	Occupation Category	Employed	% of Industry
53-0000	Transportation and Material Moving Occupations	362	33.4%
51-0000	Production Occupations	335	30.9%
43-0000	Office and Administrative Support Occupations	99	9.1%
41-0000	Sales and Related Occupations	80	7.3%
49-0000	Installation, Maintenance, and Repair Occupations	65	6.0%
11-0000	Management Occupations	38	3.5%
35-0000	Food Preparation and Serving Related Occupations	36	3.3%

Table 19 Agribusiness, Food Processing and Technology Staffing Pattern, 2-Digit SOC, 2013

The workforce for the agribusiness, food processing and technology industry is typically a lower skill industry with most occupations requiring on-the-job training. These jobs could serve as a strong entry-point for production workers that could continue education and training to gain advanced skills that are in demand in other industries.

There are currently five open positions on *OhioMeansJobs.com* in this industry, all of which require a high school diploma. Four of the five have to do with the logistical operations of a food processing plant.

The industry is not projected to be significantly impacted by retirements in the next 10 years as only 20% of the industry will be retirement age and a large portion of younger generations are working in this industry. This could be because food processing operations typically pay less than other manufacturing operations.



Figure 21 Agribusiness, Food Processing and Technology Age Breakdown, 2013

Healthcare

The healthcare industry in Clark County employs 7,801 and is expected to grow by 3.5%, about one third of the national average. Women make up 82% of the medical industry in Clark County. Not surprisingly, over half of the occupations in the healthcare industry are healthcare practitioners and healthcare support occupations. There is also a significant number of office and administrative support, personal care, food preparation, and community and social service occupations.

SOC	Occupation Category	Employed	% of Industry
29-0000	Healthcare Practitioners and Technical Occupations	2,138	27.4%
31-0000	Healthcare Support Occupations	2,135	27.4%
43-0000	Office and Administrative Support Occupations	959	12.3%
39-0000	Personal Care and Service Occupations	589	7.6%
35-0000	Food Preparation and Serving Related Occupations	548	7.0%
21-0000	Community and Social Service Occupations	452	5.8%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	239	3.1%
11-0000	Management Occupations	191	2.4%
25-0000	Education, Training, and Library Occupations	129	1.7%
13-0000	Business and Financial Operations Occupations	100	1.3%

Table 20 Healthcare Staffing Pattern, 2-Digit SOC, 2013

A closer look into the healthcare occupations shows that growth will primarily be coming from the lower-skill, on-the-job training occupations (2.6% growth, 89 jobs) while those requiring higher education are projected to decrease by 3.2% (122 jobs).

The largest growth comes in the home health aides (76 new jobs, 11% growth) and personal care aides (100 new jobs, 36% growth) which do not require postsecondary education. Major job losses are projected in registered nurses (66 jobs, 8%) and nursing aids (18 jobs, 2%) which do require postsecondary education.

The region and State of Ohio are currently producing an excess of nursing graduates. The surplus for the region is 220 and 2,800 for the state. LPNs are also being overproduced in Clark County (+27), the region (+824), and the state (+2,666). It's possible that these occupations would fill the demand for home health aides and personal care aides.

The region (132 gap) and state (371 gap) also have an undersupply of physicians and surgeons. The closest medical schools to Clark County are at Wright State University and The Ohio State University.

Medical and health service managers are another position experiencing gaps statewide (50 gap) and regionally (74 gap).

An analysis of open positions in Clark County on *OhioMeansJobs.com* shows 182 open positions, 105 of which are healthcare practitioners and 35 of which are healthcare support occupations. Of all the occupations, 10 require a PhD or MD, 7 require a master's degree, 21 require a bachelor's degree, 71 require an associate's degree, and 40 require a postsecondary credential.



The age range for the Healthcare Industry is fairly distributed and likely will not be hurt by a large retiring population of people currently 55 or older. It also has a strong rate of people under 25 in the industry.

Healthcare for most regions is population driven. The current trend in healthcare growth is being led by the number of Baby Boomers aging. This could lead to a downsize in workforce when future, smaller generations reach retirement age and beyond.

Retail

The retail industry employs 11,546 in Clark County and is projected to decrease by about 3%. The majority of the occupations are in food preparation & service and sales.

SOC	Occupation Category	Employed	% of Industry
35-0000	Food Prep and Serving	4,231	34.9%
41-0000	Sales	3,491	28.8%
43-0000	Office and Admin	961	7.9%
53-0000	Transportation and Material Moving	884	7.3%
49-0000	Installation, Maintenance, Repair	801	6.6%
39-0000	Personal Care and Service	625	5.2%
51-0000	Production	301	2.5%
29-0000	Healthcare Practitioners	220	1.8%
11-0000	Management	203	1.7%
37-0000	Building and Grounds	185	1.5%
	Other	232	1.8%

Table 21 Retail Staffing Pattern, 2-Digit SOC, 2013

As of 6/19/2013, an analysis of *OhioMeansJobs.com* postings show 234 open jobs about twothirds of the available postings are in sales and food preparation & service. Most of the jobs do not require postsecondary education. Of the jobs 95 do not require a high school diploma, 113 require a high school diploma, 3 require a postsecondary credential, 4 require an associate's degree, 8 require a bachelor's degree, and 3 require a professional degree (pharmacists).

2. Develop a comprehensive workforce development model

Several strategy sessions were held with key workforce development professionals in Clark County. The measurements to determine success of a comprehensive workforce development initiative were determined by the team:

• Regional Metrics: Available and Measureable

- Lower unemployment rate
- Reduction in public assistance
- Overall population growth in Clark County
- Higher high school retention, college graduates
- Increase in workforce
- Growth in all industries
- Increased soft skills

The following model was developed as a result of feedback and coordination of multiple partners.

Figure 23 Workforce Development Model



Training & Development: the county requires a Comprehensive Internship Program. This would be accomplished by

- Creation of group/organization as a "one-stop-shop" for students and businesses.
- Increasing number of companies providing internships and retaining interns in job openings; and
- Increasing the number of available internships and students completing internships.

Goals were developed to measure outcomes for this first prong:

- Increase the number of internships available to the future workforce by x%
- Track employment rate of the interns post internship
- Track retention of the interns that are placed in permanent positions
- Develop a plan that:
 - provides low impact exposure to career opportunities;
 - educates the future workforce and unemployed on future opportunities based on demand;
 - connects the demand to available education and training programs; and
 - develops a guided placement process into education and training programs.
- Establish an effective business roundtable that works with education and training to build a pathway to employment
 - Businesses with future workforce shortages would engaged in curriculum development to ensure the completers have the skills needed
 - Businesses posting employment and future employment opportunities to an platform like Hometown Opportunities
 - Businesses vetting and adding to the future gap data with real world requirements

In addition, an initial structure was developed for the group/organization that would be created to be the "one-stop-shop".





Organizational Development: Although Training & Development is a critical prong to workforce development, several other initiatives are needed for successful talent development and retention. A key step for the county is to development a culture and systems necessary to sustain the workforce. This starts with understanding the future demand and engaging businesses in the solutions that will meet those future needs.

The following priorities should be considered:

- Manufacturing is projecting a loss for Clark County. However, the current workforce is lacking the next generation demographic (age 18-25) and manufacturing is the central industry cluster that currently exists in the county and the region.
- Future demand of existing industry not being met:
 - 1. Actuarial Science(1 in Springfield /9 in the Dayton Region/21 in the State of Ohio)
 - 2. HR Management (11/107/468)
 - 3. Industrial Engineering (1/2/89)
 - 4. Insurance (7/52/191)
 - 5. Medical Laboratory Technology (2/25/61)
 - 6. Medical Services Management (2/74/50)
 - 7. Occupational Therapy (1/32/107)
 - 8. Pharmacy (4/80/117)
 - **9.** Physical Therapy (2/33/124)
- Gaps in non-academic credentials and soft skills cannot be measured

- Future demand of new industry that would not be met:
 - 1. Aircraft Mechanic (1/20/77)
 - 2. Computer Systems (20/164/978)
 - 3. Computer Engineering (4/129/808)

Retention & Recruitment: It is important to enhance the existing network that connects talent to employers. Developing strong business connections between existing businesses and Jobs and Family Services can lead to early communications from businesses needing to locate talent and potentially stop a business relocation outside of the county or region. This will require attention to the Research & Evaluation prong of the Workforce Development Strategy. Additionally, there is an opportunity to benchmark best practices from the Regional Medical Center's successful recruitment program.

Infrastructure Development: The workforce council that meets monthly is a natural cluster of existing workforce initiatives that identify strengths, weaknesses and gaps. It is recommended that the group identify the major challenges the group can tackle and set a work plan. The internship model that was built during the development of this report can be used as a guide to set short, mid and long term goals across all workforce challenges. The most immediate needs for consideration could be: developing strategies for dealing with the adult population that is either under employed or unemployed, identifying ways to address the manufacturing age gaps, and developing or attracting talent needed for new industry attraction.

Research & Evaluation: An understanding of both projected industry growth and real projections from businesses. Data can be provided on a regular basis regarding projected industry job growth. However, a tool is needed to capture real-time data, possibly modeled after the "Hometown Opportunities" described on page 61 or a regular business survey of existing employers. Caution is given to surveys. It is recommended that surveys only be conducted once there is an established group that can follow up with the concerns of the businesses. Businesses will contribute if they see value and outcomes.

Internships and Co-ops

The Southwestern Ohio Council for Higher Education (SOCHE) is in the midst of their 20x20 Challenge, a program to have 20,000 interns in the region by 2020. In 2012, the conversion rate for turning interns into full-time employees was 59.6% according to the "2012 Internship and Coop Survey" by the National Association of Colleges and Employers". Additionally, employees who intern before full-time employment have a 10% higher retention rate after one year and 15% higher after five years.

This means less training costs because of lower turnover for businesses. These companies also reduce their risk with SOCHE interns because the intern is an employee of SOCHE. The company is invoiced monthly for their interns. The following packet can be provided to businesses interested in hiring a SOCHE intern:

http://www.socheintern.org/media/61/socheintern_host_business_packet__1_.pdf

Both Clark State and Wittenberg are currently members of SOCHE. Students interested in interning can fill out the form on this site: <u>http://www.daytoninterns.com/resources-for-students/submit-your-resume-to-daytoninterns/</u>

Out of State Student Retention

Wittenberg has a significant number of out of state students and retaining those students would be a benefit to the community. A 2006 Study from the University of Toledo's Urban Affairs Center on "Brain Drain in Ohio" found that migration of graduates typically occurs within the first three years after graduation. Engraining these graduates into the community during this time is vital, and the most important aspect for that is a job.



Figure 25 Wittenberg Freshman Class Enrollments by Residence, 2008-2011

3. Implement a social media strategy around industry workforce demand

Recruiting and hiring for jobs has changed dramatically over the last few decades. As print media has declined, more people get their information from the Internet and from social media sites in particular. A recent study from *eMarketer* reported that 84% of Millennials and 66% of Generation X are using social media. Although Baby Boomers are not as active, 44% of them are on social media. This change in the way information is communicated about local business demand, career opportunities, and education and training programs must also fit this format, as demonstrated in the example below.

Hometown Opportunities

<u>Hometown Opportunity</u>, representative of Auglaize, Mercer, and other surrounding counties, aims to increase awareness of the local career and educational opportunities of the area. It offers job postings for specific companies in the area and the types of requirements that the local businesses are seeking to find. Hometown Opportunities also summarizes the key industries of the area. Under each of these categories, the major companies in each are profiled with what the company does, who they hire, the types of skills that are required, and much more.

On top of the business aspect of the region, Hometown Opportunities also highlights the many schools, community colleges, and career centers that will allow applicants to pursue the career they want inside the region. In addition to all of the businesses, schools, and other resources, Hometown Opportunities links relevant sites and tools that may be useful to those pursuing careers and educations.

The key to Hometown Opportunity is the ground work done by economic development professionals or other community leaders to connect businesses and schools. During R&E visits to companies the CIC or City would be convincing companies to post to their job boards. Someone would also be visiting schools to provide information on the companies in the Springfield area.

On the school side, this strategy breaks down stereotypes about the community and its industries. For instance, Mercer County uses YouTube videos to highlight companies that are hiring. They could be telling the story about a high-tech manufacturing plant or an occupation that doesn't immediately come to mind when a student thinks of Springfield.

Breaking those perception barriers may be the biggest service the CIC/City could do for a business. In addition, this strategy brings a local, active audience to view their job postings.

4. Promote quality of life to attract and retain

Similar to a social media strategy around workforce development, Springfield must also engage its local community in the many offerings that are available that will improve the quality of life. A social media could include special events that are happening, such as summer festivals or Holiday in the City. Also included could be increase awareness of activities and offerings through the National Trail Park and Recreation District, such as the recent opening of the NRPTD Chiller or kayaking at Buck Creek. Performances at the Clark State Performing Arts

Center could be promoted, as well as cultural events at Wittenberg, Clark State, or other area venues.

A social media strategy will help retain the young people to the region by engaging them in the community and its various offerings. In addition, it will attract new individuals and families to the region by demonstrating all of Springfield attributes that make it such a livable city.

Build a culture of innovation and improvement

1. Expand support for entrepreneurs

In addition to implementing strategies to enhance industry and workforce strengths, Springfield also needs to focus on building an entrepreneurial culture. By connecting entrepreneurs to the resources they need to help be successful, Springfield can incubate and grow new companies and job opportunities.

Springfield can work closely with resources like Net Incubator and the Small Business Development Center (SBDC) to promote the resources that are available for small business; including loans, grants, and technical support for business development.

Springfield can also partner with the Dayton Development Coalition's Accelerant program to provide seed funding and business development services for start-up companies.

A social media strategy focused on entrepreneurs will help Springfield promote the resources that are available, while connecting audiences to regional, state, and national organizations that provide assistance for start-up businesses.

2. Track measures for innovation and improvement

Traditional economic development has always been measured by the number of new jobs that economic development organizations can attract to a region. Yet this measure alone is limited during this period of transformation. Measuring job creation should take into account low-skilled jobs versus high-skilled jobs, wages, and job multipliers.

Metrics also need to include workforce indicators, including educational attainment levels and the gaps and changes in workforce supply and demand. Entrepreneurial measures might include new revenue or jobs from start-ups. Other economic measures might also be included, like monitoring access to capital for small businesses, changes in GDP, poverty and unemployment levels, and any other indicators deemed important in the community.

The Dayton Development Coalition will release its first Innovation Index (i^2) in early 2014. The Springfield community can review the regional measures that are being used to monitor innovation in the Dayton Region and select measures that may also be important for the Springfield community. Measures can be tracked annually to monitor gaps, challenges, and successes in the community.

Conclusion

Springfield is in a period of transition from a labor economy into a knowledge economy. Although this transition will require a shift from the "business as usual" strategies that has become the common practice for economic development efforts, the Springfield community has strong industrial and community assets positioned to successfully accomplish this transition.

Promoting and strengthening targeted industry clusters will ensure that economic development efforts are focused on activities that will result in the biggest return on investment. This effort will help sustain current businesses in the targeted industries while building a stronger network of suppliers that will help those businesses grow and remain competitive.

A talented workforce is one of the most important assets required for the transition to a knowledge economy. Springfield's education and training providers have stepped up to this challenge by convening across all levels of workforce participation to help close the gap between workforce supply and demand. Future efforts must ensure that workforce development efforts are aligned, coordinated, and communicated to the Springfield community.

Attracting and retaining knowledge workers will require a community that is open to innovation and advancement. While Springfield has some resources for entrepreneurs and innovators, these assets must be expanded, connected to opportunities in the Dayton Region and beyond, and promoted throughout the community. In addition, Springfield needs to measure various economic and innovation indicators to ensure progress is being made and to realign resources as needed.

One of Springfield's greatest assets is the business and community leaders who are committed to the community and its ability to transform. With their continued collaboration, Springfield has a bright future.