GREATER PEORIA

PROPOSAL FOR DESIGNATION AS A MANUFACTURING COMMUNITY EDA 2015 APPLICATION

By

Legistar

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POINT OF CONTACT

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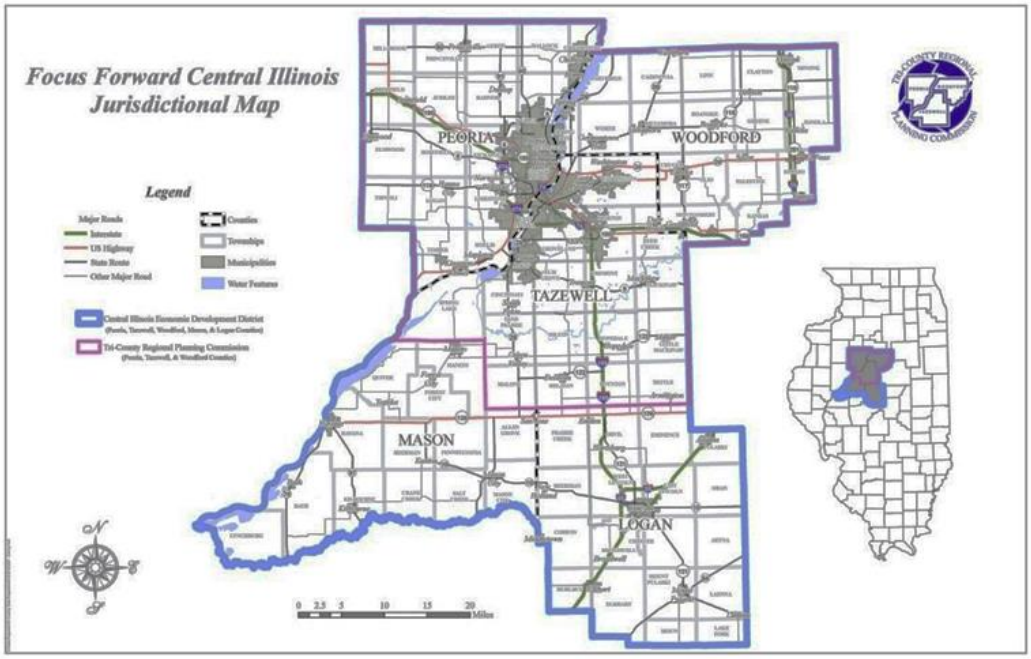
GEOGRAPHIC SCOPE / TOP THIRD REQUIREMENT

The proposed Manufacturing Community for this IMCP Application is the Greater Peoria Economic Development District (GPEDC), a collection of five counties in central Illinois, and the Earthmoving Capital of the World!

Greater Peoria Economic Development Council (GPEDC) Geographic Boundary



The Greater Peoria Economic Development District (Peoria, Tazewell, Woodford, Mason and Logan Counties) is home to a long tradition of manufacturing in the earthmoving industry, the region boasts a manufacturing supply chain and Original Equipment Manufacturers (OEMs) that are known nationally and internationally for their expertise in this industry. Caterpillar Inc., Komatsu America, and Kress Corporation collectively supply a large portion of the world's earthmoving machinery and equipment needs from the Greater Peoria region. The KTS for this area is the **Manufacturing Supercluster** as

defined by StatsAmerica.org, and more specifically the key components of this Supercluster that qualify with an LQ of greater than 1.0 (see below).

NAICS Concentrations for Manufacturing in GPEDC

Updated NAICS	Description	Industry Employees	% of Total Employment	EDD LQ	LQ Cutoff	% Of LQ Cutoff
3331	Agriculture, Construction, and Mining Machinery Manufacturing	5114	2.91%	15.98	1.08	1480%
3315	Foundries	1498	0.85%	7.73	1.0	773%
3323	Arch. & Structural Metals Manufacturing	3378	1.92%	7.03	1.29	545%
3353	Electrical Equipment Manufacturing	774	0.44%	4.40	1.0	440%
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	1347	0.77%	2.30	1.06	217%

Some additional primary data for this application is supplied by Purdue University Center for Regional Development (PCRD). Please see Optional Files for detailed PCRD analysis.

Attributes of GPEDC – Source PCRD

Economic & Demographic Attributes	Value	Remarks	Source
Population (2013)	408,266	People living in the region	Census
Jobs (2013)	229,728	Full and part-time jobs	EMSI (QCEW, BLS;BEA)
Average Earnings (2014)	$52,370	Includes wages, salaries, supplements and proprietor income	EMSI (BLS; BEA)
GRP, Gross Regional Product (2013)	$20,932,550,079	Final market value of all goods and services produced in the region	EMSI (BEA; QCEW, BLS)
Exports (2013)	$33,026,047,889	$ earned from selling goods and services to foreign and external domestic regions	EMSI model (BEA)

This region represents a population of 408,266 with over 15% of our workforce employed in the manufacturing industry which is 50% higher than the national average of 10%.

2014 Peoria MSA Industry Workforce Breakdown - IL Dept. of Employment Security	**Total**	**Percentage**
Total Nonfarm	178,800	100.0%
Mining and Construction	7,900	4.4%
Manufacturing	27,000	15.1%
Trade, Transportation, and Utilities	32,600	18.2%
Information	2,300	1.3%
Financial Activities	7,500	4.2%
Professional and Business Services	20,700	11.6%
Educational and Health Services	33,700	18.9%
Leisure and Hospitality	18,100	10.1%
Other Services	7,900	4.4%
Government	21,300	11.9%

Employment LQ Manufacturing Supercluster Categories – Source PCRD

NAICS	**Description**	**Industry Firms**	**GPEDC LQ**	**2013 Jobs**	**2013 Ave Individual Total Earnings**
331	Primary Metals	8	4.34	2,201	$80,817
332	Fabricated Metal Product Man.	101	2.30	4,318	$58,913
333	Machinery Manufacturing	43	9.73	14,197	$159,371

The earthmoving OEMs have stimulated the development of a vast supply chain of manufacturers with expertise in metals manufacturing, metal fabrication, machining, and machinery component manufacturing to support the earthmoving industry.

The Greater Peoria application concentrates on a group of focused and complimentary business sectors in and supporting the existing earthmoving equipment industry. The following table lists specific NAICS codes selected for the application, the location quotient for the five county area - all which are above 1.0, and other relevant data.

Employment LQ Manufacturing Supercluster Sub-Categories – Source PCRD

NAICS	**Description**	**GPEDC LQ**	**2013 Jobs**	**2013 Ave Individual Total Earnings**
331524	Aluminum Foundries	16.25	356	$55,473
331511	Iron Foundries	13.42	706	$76,759

331529	Other Nonferrous Foundries	9.67	156	$46,221
331110	Iron, Steel, Ferroalloy Mills	7.29	842	$104,325
332919	Other Metal Valve, Pipe Fitting	6.52	134	$77,752
332812	Metal Coating, Engraving	1.78	129	$48,895
332722	Bolt, Nut, Screw, Rivet, Washer	3.34	167	$41,977
332710	Machine Shops	4.54	1,812	$43,691
332322	Sheet Metal Manufacturing	3.59	463	$55,533
332312	Fabricated Structural Metal	4.22	469	$68,013
332313	Plate Work Manufacturing	4.16	255	$47,433
333120	Construction Machinery	122.84	11,310	$170,130
333131	Mining Machinery, Equipment	4.55	79	$95,422
333249	Other Industrial Machinery	3.53	251	$47,506
333514	Special Die and Tool, Die Set	1.42	128	$71,742
333618	Other Engine Equipment	31.98	1,816	$145,839

IMPLEMENTATION STRATEGY PARTIES

AAIM Employers' Association is an association of over 1,600 member organizations in the St Louis region and throughout Illinois dedicated to helping their members in developing and managing their people and processes. They offer peer networking opportunities, business research information, HR and management consulting, performance improvement and professional training and development.

Bradley University's Illinois Small Business Development Center and International Trade Center has helped over 500 companies expand their export sales by more than $400 million. Their local services include: assessing company readiness to export, identifying potential export markets, identifying potential foreign buyers, assisting with foreign market entry, international business planning, export document training, trade-lead matching from U.S. Embassies, education and networking forums, executive courses in international business, and export finance options.

CareerLink, our regional Workforce Investment Board, administers the federal Workforce Innovation and Opportunities Act (WIOA) to help job seekers in Greater Peoria access employment, education, training, and support services to succeed in the labor market and to match employers with the skilled workers they need to compete in the global economy.

CEO Council consists of over 60 business CEO's and leaders who share a common interest in developing the Greater Peoria Region as a destination place to work and live. By working together, these business

leaders provide insight and energy that helps fuel real and meaningful changes that benefit the entire community.

Downtown Development Corporation is a nonprofit organization dedicated to the historic preservation and development of Peoria's downtown district.

Greater Peoria Economic Development Council (GPEDC), established in 1982, is a 501(c) 6 non-profit organization governed by a board of directors including individuals from both the public and the private sector. The organization is supported by investment from businesses, organizations, counties, and cities throughout the five counties of Logan, Mason, Peoria, Tazewell, and Woodford. The GPEDC drives economic growth within the Greater Peoria Area in collaboration with local economic development partners through targeted business assistance and attraction, workforce development, and regional marketing.

Illinois Central College serves more than 13,000 students in Greater Peoria each year. The community college partners with local employers to equip future workers with the skills they need to succeed in the 21st-century workforce. The Morgan School of Industrial Technology offers occupational certificates and associate in applied science degrees.

Illinois Manufacturing Excellence Center (IMEC) works with manufacturing firms throughout the state of Illinois to link long-term plans with on-site implementation services by identifying performance gaps, solving these gaps, and building a culture to support sustained improvements. IMEC helps these organizations optimize operating capacity, implement advanced product and process innovations, increase sales and enter new markets, and improve profitability.

Peoria Area Association of Realtors (PAAR) serves over 700 REALTOR® members and approximately 125 Affiliates in developing and promoting essential and unique business programs and services.

Peoria Riverfront Museum is a one-of-a-kind art, history, science, and achievement museum located on Peoria's riverfront featuring interactive galleries, a dome planetarium, and a giant screen theater. They are the only museum in downstate Illinois to be affiliated with the Smithsonian Institution.

Regional Offices of Education administer of a multitude of state and federal grants, including the Preschool for All program, the hosting of the Illinois Virtual School, teacher and administrator certification, school district health/life safety issues, school district compliance visits, student hospital/homebound tutoring, school bus driver training, General Educational Development (GED) testing, criminal background checks, and many other programs and contracts.

River City Labs is a 501(c)3 non-profit makerspace consisting of mechanical/electrical/chemical engineers, computer scientists, additive manufacturing R&D fellows, aerial platform researchers (UAV's), students, scientists, artists, makers, and technology creators. Its members experiment and innovate in multiple rapid-prototyping technologies, emerging technologies; and educational programs. Having filled each class to capacity, RCL uses hands-on and project-based lessons to teach hardware and

software platforms. Classes are available to members and interested visitors alike- with the primary focus on fun and developing capability. Because incite and collaborative success are our greatest outputs, we have a culture of curiosity; a community of loyal members. "A head full of STEAM builds momentum!"

Startup Peoria is a grassroots movement to enable a community of thinkers, doers and innovators in Greater Peoria. The big idea is an all-encompassing, thriving ecosystem that connects at multiple levels. They are developing talent in all essential areas necessary to sprout startups, including designers, developers, entrepreneurs and intrapreneurs, the business savvy, and investors. Their training and mentoring programs include One Million Cups, Start with a "Why", The Nest Co-Working Space, and Rocket Science.

University of Illinois Extension is the flagship outreach effort of the University of Illinois at Urbana-Champaign, offering educational programs to residents of all of Illinois' 102 counties – and far beyond. U of I Extension offers educational programs in five broad areas: healthy society, food security and safety, environmental stewardship, sustainable and profitable food production and marketing systems, enhancing youth, family and community well-being.

FEDERAL FINANCIAL ASSISTANCE EXPERIENCE

The GPEDC and our partnering organizations have extensive experience implementing projects with federal funding components. Multiple municipalities, counties, workforce development agencies, and economic development organizations in the Greater Peoria have received federal funding for infrastructure improvements, workforce training, and community and economic development activities. Recent projects include the following:

EDA Financial Assistance Award ($191,289 with $191,289 match): GPEDC, the Greater Peoria Economic Development District, has advanced into its second 3-year 2012-2015 Financial Assistance Award to support the continued implementation of our economic development planning program work included in the Comprehensive Economic Development Strategy (CEDS). In addition, EDA Technical Assistance and Regional Readiness for Recovery Grants have been awarded and matched resulting in deliverables such as a Regional Labor Study.

HUD Sustainable Communities Regional Planning Grant ($1,200,000): In 2011, the Greater Peoria region was 1 of 46 communities awarded an inaugural 3-year HUD Sustainable Communities Regional Planning Grant. One component of the planning process was the hiring of a well-known economic development consultant, Vital Economy, to conduct a regional asset mapping and assessment, SWOT analysis and to provide SMART Performance Goals. As a result of several years work and the engagement of over 1000 community representatives, Focus Forward Central Illinois, was initially adapted into our 2012 EDA Comprehensive Economic Development Strategy (CEDS) as the GPEDC regional economic development 5-year strategy. We will be proactively rewriting our EDA CEDS in 2015 to encompass the final FFCI 5-year strategy. As a result of receiving the grant and completing the plan, the region has been awarded **Preferred Sustainability Status**.

CDBG Hurricane Ike Disaster Recovery Program Grant ($500,000): Peoria County and Woodford County received a Hurricane Ike Recovery Grant in 2013. The counties worked in partnership with the GPEDC and Tri-County Regional Planning Commission on the implementation of the grant including the creation of community comprehensive plans; disaster recovery for regional businesses through retention visits/reports; and the creation of an Economic Development Data Center.

DOL Accelerated Training for Illinois Manufacturing (ATIM) Grant ($892,773): In 2013, CareerLink was designated as the Grant Administrator on behalf of a 23 county Central Illinois region spanning 3 Local Workforce Investment Agencies (LWIA). The grant trains low income individuals and dislocated workers in four areas of manufacturing which include Welding, CNC Machining, Logistics, and Mechatronics. The grant origin was an idea from the GPEDC Strategic Manufacturing Group and had innovations including substance abuse testing prior to being accepted into training, accelerated training courses, internships, and on the job training funds.

EDA IMCP Planning Grant ($100,000 with $100,000 match): The GPEDC was one of 44 communities to receive a 2014 EDA IMCP Planning Grant funding to conduct a supply chain study of the region. The purpose of the study was to determine the needs of local business to grow or retain their current facilities within Greater Peoria.

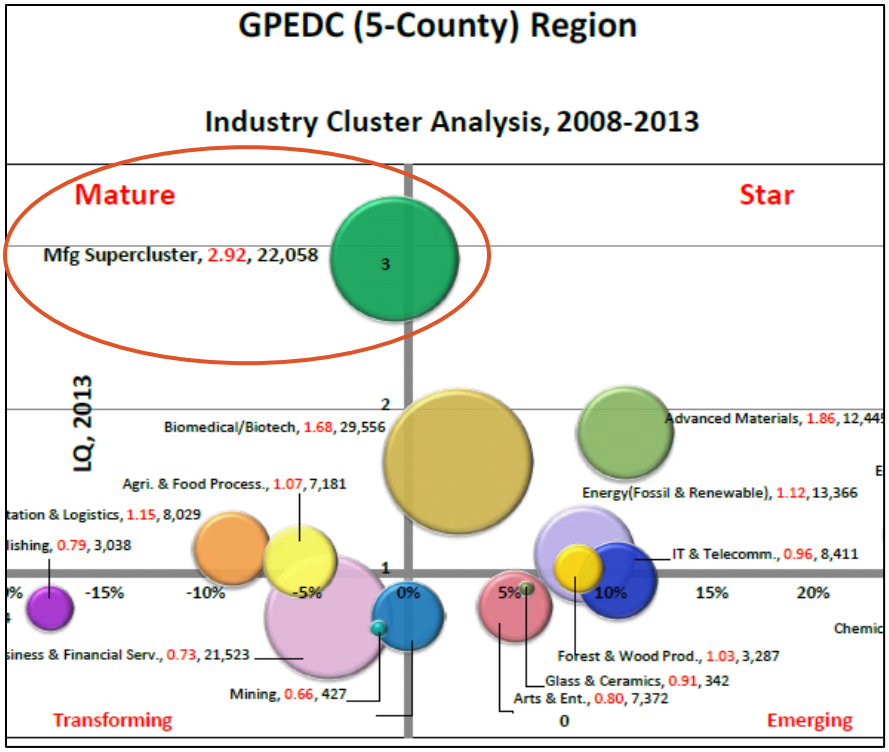
Please see Optional Files for GPEDC FFCI-CEDS Regional Economic Development Strategy, CDBG Hurricane Ike Disaster Program's GPEDC Business Retention/Expansion Visits Reports, IMCP Planning Grant's Industry Assessment and Recommendations Summary.

ASSESSMENT OF LOCAL INDUSTRIAL ECOSYSTEM

Greater Peoria is a five county area in Illinois' North Central Economic Region and has an extensive history in heavy metal manufacturing. Including Logan, Mason, Peoria, Tazewell, and Woodford Counties, this region represents a population of 408,266. **Over 15% of our workforce is employed in the manufacturing industry which is 50% higher than the national average of 10%.**

A Business Cluster Analysis of Greater Peoria provided by Purdue University's Center for Regional Development (PCDR) clearly shows our region's extensive Manufacturing Supercluster.

Mature
High Absolut e LQ/Low-Decreasing LQ growth Quadrant



STAR
High Absolut e LQ/High-Increasing LQ growth Quadrant

The region developed industrially in the early 1900's as heavy duty equipment manufacturers such as Caterpillar Tractor and LeTourneau entered the region. They chose Peoria because of its direct access to major rail lines and waterways, a central U.S. location which provided a cost effective point from which to ship large machinery to customers on both coasts, and relative proximity to iron and steel suppliers in Ohio and Pennsylvania.

Greater Peoria's large Original Equipment Manufacturers (OEMs) have stimulated the development of a robust supply chain of manufacturers with expertise in metal fabrication, electrical equipment, and machining to support the earthmoving industry. **The largest NAICS code concentrations for manufacturing in the region and over 70% of our manufacturing jobs are within this industry.** The concentration of earthmoving OEM's and suppliers have positioned Greater Peoria as the Earthmoving Capital of the World.

NAICS Concentrations for Manufacturing in GPEDC

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	Product; and Screw, Nut, and Bolt Manufacturing

This concentration has benefited the region in many ways including the availability of higher income jobs, extensive logistics systems, and well-developed international infrastructure. In 2014, Greater Peoria invested over $2 billion in research and development and in **2012 we exported more merchandise per capita than any other place in the country.**

The extreme concentration in the earthmoving industry has also brought challenges to Greater Peoria. When this industry is doing well, our economy booms. When the industry struggles, the reverberation through our local economy can be catastrophic. Greater Peoria, like many regions, was vulnerable during the most recent economic downtown, the Great Recession. We are still struggling with a **net loss of 10,669 jobs since 2009. Over 6,000 of those jobs were from the manufacturing sector**.

In 2012, our region embarked on the development of a new 5 year Comprehensive Economic Development Strategy (CEDS), a plan we call Focus Forward Central Illinois (FFCI). The earthmoving supply chain was a key focus of our examination and strategy development.

The GPEDC was also fortunate to receive an EDA IMCP Planning Grant in 2014. The grant allowed us to: 1) research the capabilities and capacities within our earthmoving supply chain; 2) research global demand for the production related to the region's capabilities and capacities; 3) communicate new production opportunities; 4) identify the quality, export requirements, and other issues; 5) develop a strategy to sustain the efforts; and 6) inform workforce partners of development needs. The report was instrumental in developing detailed strategies to build the resilience of this critical manufacturing sector.

Our goal in the pursuit of the IMCP Designation is to seek support in the development and implementation of strategies that will help our region strengthen and diversify our earthmoving supply chain. Based on the extensive planning completed through the development of our new CEDS and the IMCP Planning Grant, we have identified three primary implementation strategies including:

1) Build resilience in the earthmoving supply chain
2) Align workforce interests and skills with earthmoving supply chain needs
3) Help the earthmoving supply chain attract and retain talent

SUPPLIER NETWORK

A large number of manufacturers form the Greater Peoria Earthmoving Supplier Network. OEMs within the region include:

Major Earthmoving Supply Chain Employers In Greater Peoria by NAICS Codes

Company	Product	Regional Jobs
Case New Holland	Agricultural and construction equipment, trucks, commercial vehicles, busses, and specialty vehicles	650

Caterpillar Inc.	Construction and mining equipment, diesel and natural gas engines, and industrial gas turbines	16,000
FLSmidth	Equipment and services to the global cement and minerals industries	200
Philippi-Hagenbuch Inc.	Construction & mining equipment for articulated and rigid frame off-highway haul trucks	35
Komatsu America	Off highway mining trucks	500
Kress Corporation	Specialty transport carriers	150

A collection of small and mid-size manufacturers support these OEM's including Premier Fabrication, Specialized Metals Fabricators (SMF), Illinois Valley Plastics, McBride and Schoff, Chillicothe Metals, BTD, Illinois Machine and Tool Works, and many others. In addition to supplying OEMs in the region, many of these manufacturers serve nearby OEMs including John Deere and Mitsubishi Motors North America.

Major Earthmoving Supply Chain Employers In Greater Peoria by NAICS Codes

NAICS	Description	Employers
3331	**Agriculture, Construction, and Mining Machinery Manufacturing**	Caterpillar, Komatsu, Case New Holland, Kress, Philippi-Hagenbuch, Heritage Packaging, Inland Tool, Keystone Steel, KIFCO, FLSmidth
3315	**Foundries**	Caterpillar, Excel, Cast Technologies, Alcast, Tazewell Machine Works, Precision Products
3323	**Architectural and Structural Metals Manufacturing**	O'Brien, Hagerty, Hanna Steel, MATCOR, Morton Industries, Parsons, SMF, JT Fennell, GSS Machining Systems, Metamora Industries
3353	**Electrical Equipment Manufacturing**	Vansco Electronics, Enercon Engineering, Parker-Hannifin
3327	**Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing**	Keystone Steel, Boley Tool & Machine Works, Quality Metal Products, Illinois Machine & Toolworks

The growth and advancement of Greater Peoria businesses competing to produce parts for OEMs within the region has grown organically over the last 50 years. Greater Peoria OEMs are major exporters and require their suppliers to continuously improve in the areas of quality, velocity, innovation, and cost competitiveness, in order to keep their products globally competitive. Businesses have either adapted to the needs of these OEMs or left the supply chain.

Challenges

The OEMs being served by the Greater Peoria supply chain businesses have remained few and consistent in the past five decades. In fact, **70-90% of sales for our supply chain manufacturers come from just 3-5 customers**. One of the barriers for greater diversity is the current manufacturing model capacity of the earthmoving supply chain. Most processes are set up for manufacturing runs of 5 to 30 units, and with current customer orders filling the majority of capacity, it is difficult to identify growth opportunities to supply industries outside of heavy equipment machinery.

This narrow focus on earthmoving OEM needs has resulted in great responsiveness to OEM requests, but little expertise in identifying new global OEMs as possible clients. Therefore, many of our local manufacturers lack customer diversification, experiencing strong sales and growing employment when the earthmoving industry is doing well and significant decline and layoffs when it's not.

Strategies

The GPEDC received an EDA IMCP Planning Grant in 2014 and completed a study of our earthmoving supply chain with the help of consulting firm Blane Canada, Ltd. Overall, the study indicated a need to build resilience in the earthmoving supply chain. Recommended strategies include the **formation of a privately-led manufacturing network** providing opportunities for our manufacturers to collaboratively pursue work with OEMs outside the earthmoving industry and to **recruit new OEMs into our region** that can utilize the support of our supply chain but are not in the earthmoving industry. Building stronger manufacturers will benefit the local and regional economy and equip our region with the know-how to expand the current industry, or recruit the necessary new business.

In addition, opportunities exist for **manufacturers to connect through supplier scouting and expansion of existing supply chains**. In April 2014, the Illinois Manufacturing Excellence Center and local partners introduced the Manufacturing Matchmaking concept in central Illinois. At the event, manufacturers are provided the opportunity to meet with potential new customers and/or suppliers to share information, samples, and more that could help secure a new partner for business. The inaugural event resulted in the collaboration of more than 30 manufacturers and an opportunity for regional OEMs to connect with small and medium-sized companies that are not normally within reach.

SUPPLIER NETWORK SWOT ANALYSIS

STRENGTHS	**Large cluster of suppliers in the earthmoving industry driven to operational excellence by world class OEMs.**
WEAKNESSES	**Lack of customer diversity within this cluster.**
OPPORTUNITIES	**Recruit OEMs outside the earthmoving industry that need this same supply chain and can assist the existing supply chain in selling to other regional OEMs.**
THREATS	**Cyclicality of the earthmoving industry that reverberates through the entire supply chain (aka the "bull whip effect"), causing boom-bust cycles leading to devastating job loss or worker shortages, constraining sustainable economic growth.**

WORKFORCE AND TRAINING

Prior to 1980 individuals living in Greater Peoria had a clear pathway to high paying manufacturing jobs, primarily in the area of Earthmoving OEMs and their Tier 1 suppliers. Straight out of high school a person could find middle-income wage opportunities as a productive laborer. Many competed to become a skilled-trades apprentice and individuals with the benefit of post-secondary education filling openings in quality, safety, accounting, process engineering, product engineering, etc.

In the late 1980s more efficient process optimization and computer technology entered manufacturing and thus began the long term trend of companies requiring far fewer employees for production and support. Manufacturers were now able to produce more, higher quality products with less people.

While the employment trends fluctuate due to this and other factors, in Greater Peoria the percentage of our workforce engaged in manufacturing has shifted from over 22% in 1990 to 15% today.

Percentage of Workforce Engaged in Manufacturing

Year	Annual Jobs Manufacturing	Annual Jobs LQ	Annual Jobs Total	Percentage of Workforce	Annual Wages LQ	Annual Ave Wage
1990	35,410	1.35	160,162	22.1%	1.83	$37,678
1995	27,723	1.10	167,772	16.5%	1.74	$50,249
2000	34,250	1.40	183,664	18.7%	1.85	$50,607
2005	30,248	1.54	182,089	16.6%	2.21	$68,688
2010	25,921	1.60	179,445	14.5%	2.43	$82,610
2013	27,423	1.68	181,804	15.1%	2.60	$92,897

Over the years the region has evolved along with these trends and today we are seeing a resurgence of opportunity that encourages the movement to local manufacturing careers as a top choice for those entering the workforce. Several post-secondary training options are available in Greater Peoria for those who choose to pursue a manufacturing certification or higher degree, especially in areas of primary importance for the manufacturing employers. **Career Pathways are clustered in five areas: 1) product and process design; 2) production; 3) quality; 4) maintenance, installation, and repair; and 5) logistics and warehousing.**

The following table provides a snapshot of the pathways available in the region for these earthmoving careers:

Career	Programs	Training Institutions
Product and Process Design	Manufacturing Engineering Manufacturing Engineering Technology Mechanical, Electrical, Chemical, and other related Engineering	Bradley University Illinois Central College (transfer) University of Illinois
Production	Welding, Machinist, CNC Operators	Illinois Central College On The Job Training
Quality	Metrology, Quality, Industrial Engineering or Technology	Illinois Central College Bradley University
Maintenance, Installation, and Repair	Mechatronics, Industrial Electrical, Maintenance Mechanic	Illinois Central College Advanced Technology Services
Logistics and Warehousing	Mechanical Engineering, Manufacturing Engineering, Manufacturing Engineering and Technology, Industrial Technology	Illinois Central College Bradley University Illinois State University University of Illinois

To support the workforce needs of our regional economy, Greater Peoria residents hold over 64,000 college degrees with 30% of the population over the age of 25 holding a degree; 8% higher than the national rate. This is highlighted by science and engineering related degrees which have a location quotient of 1.04.

In all five pathway areas individuals need to advance their college credentials as they advance in the ranks of management as well as office positions such as accounting, purchasing, exports, human resources, marketing, and other areas. A number of public and private educational institutions stand ready to serve the needs of individuals seeking associate and bachelor degrees. Institutions in the region include the University of Illinois Springfield, Peoria Center; Bradley University; Eureka College; Midstate College; Illinois Central College; and Lincoln Christian University. Most offer coursework in accelerated formats such as the University of Illinois MBA, which is offered at the UIS Peoria Center campus in an accelerated weekend format.

Challenges

Modern production in the heavy equipment sector is linked closely to shifts in the mining and construction markets. In just the past decade, earthmoving OEMs and their supply chain businesses experienced **periods of difficulty in recruiting talent and training them quickly enough to meet demand, as well as periods where they laid talented individuals off.**

Also, talent development for manufacturing has changed. Twenty-five years ago, manufacturers could recruit young persons with farm backgrounds who brought valuable machinery operations and repair experience with them. Today, it is nearly impossible to recruit talent that is capable of completing the tasks required by manufacturers without some level of technical training. While workforce agencies have funds to provide technical training and the local colleges have some of the curriculum that meets employer needs, **the demand and supply of trained individuals is often out of sync**. Therefore the talent pipeline has not kept up with the rapid changes in the marketplace.

A recent survey of our local manufacturing firms reveal **over 85% are experiencing recruitment problems for many positions and skills.** Burning Glass, a company working with the State of Illinois initiative "60 by 25" Network, shared some statistics around our workforce needs in manufacturing. Between October 1, 2013, and September 30, 2014, there were 3,279 job postings for specialized skills in manufacturing in our region. Repair, machinery, and purchasing were the skills in greatest need by local employers.

Projected workforce needs tell a similar story. Data predicts an escalating need for machinists, machine-tool operators, and welders in upcoming years.

PROJECTED WORKFORCE NEEDS

OCCUPATION	2013 Jobs	2019 Jobs	Change '13-'19	Education Required
Machinists	1370	1506	136	Long-term OJT

Computer-Controlled Machine Tool Operators, Metal And Plastic	596	656	60	Moderate-term OJT
Welders, Cutters, Solderers, And Brazers	612	644	32	Postsecondary OJT
First-Line Supervisors Of Production And Operating Workers	625	637	12	Work Experience
Structural Metal Fabricators And Fitters	572	574	2	Moderate-term OJT

We often refer to a skills gap in the employers' need versus the skills job seekers demonstrate. This skills gap refers to both professional behavior as well as technical skills. Looking back to a time prior to 1980, Caterpillar was known for its world-class apprenticeships, which gave young people both the professional- and technical-training and experience to make them the best in the industry. In 2001, Caterpillar elected to outsource factory maintenance and discontinued its remaining apprenticeships. Today it is challenging to reproduce that experience in a high school or community college program. The demand for mechatronics or electrical/mechanical maintenance staff continues to outpace the numbers produced by the talent pipeline. **Without the attention placed on apprenticeships, it is difficult to interest young people in a career they cannot imagine.**

Strategies

Strategies in Workforce Training target the **alignment of our workforce pipeline** with manufacturing needs and the **recruitment and retention of talent**.

The GPEDC's Strategic Manufacturing Group began working on elements of the alignment strategy nine years ago and continues to introduce events and projects that seek to interest and educate teens and their caregivers about manufacturing careers. A Discover Manufacturing Expo and Educators Day have been held annually since 2007, impacting 800 students and their teachers each year. In 2015, the group is expanding its efforts by hosting a manufacturing competition. In response to the 2013 tornado that devastated our local community of Washington, IL and destroyed the town's miniature golf course, the group has embarked on a competition pairing student teams with local employers to design and build a miniature golf hole for the new course. Additional strategies under development include a critical careers marketing campaign and an internship and apprenticeship program to help provide access to acquiring appropriate skills needed for today's manufacturing workforce candidates.

Launched in 2013, the GPEDC's Workforce Alliance brings together educators and employers to share knowledge and develop solutions to our most pressing workforce development issues. Through this collaboration, we have diminished silos, identified collective solutions and brought funding sources together in a central network. Alignment strategies being coordinated by this group include the implementation of ACT's NCRC Work Ready Community Program, alignment of nationally recognized manufacturing credentials, the development of a STEAM Lab, and the implementation of more Career and Technical Education Programs in regional high schools.

New regional committees are beginning research on programs that will help our manufacturers to attract and retain the talent they can't find locally. Key strategies include a talent attraction campaign, welcome events, and a regional concierge. The Peoria Downtown Development Corporation is

renovating a historic warehouse district, preparing exciting housing and retail options for young professionals and empty nesters. The development of a Best Place to Work Program to improve talent retention is also a part of our plans.

WORKFORCE AND TRAINING SWOT ANALYSIS

STRENGTHS	**The Greater Peoria area has developed post-secondary programs that specifically serve the earthmoving OEMs and their Tier 1 suppliers. Individuals can earn industry recognized credentials (MSSC, NIMS, AWS, APICs, etc.). Training providers have capacity to increase training to satisfy employers' talent demands.**
WEAKNESSES	**Insufficient numbers of young people are drawn to seek education/training for careers in manufacturing resulting in skills gaps during periods of intense hiring. Young people who do enter these careers often lack the "soft skills" desired by employers.**
OPPORTUNITIES	**Business, education, workforce, and economic development professionals have partnered to provide new opportunities for high school students to learn about careers in manufacturing. Much more can be accomplished in this space such as regional programming around STEM careers and the creation of new manufacturing apprenticeships.**
THREATS	**High schools are cutting back on career and technical education. Local high schools have reported they are not able to find qualified certified instructors and many lack the student demand for these programs based on negative images around manufacturing careers.**

INFRASTRUCTURE

Greater Peoria's intermodal network offers many options for the movement of goods and raw materials by rail, air, truck or water. In any given week, **more than 1.3 million tons of freight pass through the region.**

Tons of Goods and Raw Materials Transported Per Week

Method of Transport	Tons of Goods Transported
Truck	635,000
Rail	455,000
Water	250,000
Air	17,000
Total	**1,300,000**

Mergers and acquisitions have sharply reduced the number of **freight railroads**, but even today there are four such carriers operating in Greater Peoria—extraordinary for a metro area of this size. The region also has its own terminal and switching railroad, as well as four regional carriers.

Along with heavy equipment manufacturing comes a substantial supply chain for raw materials and components, and a long list of **motor carriers** have gravitated to Greater Peoria to provide trucking capacity. A major hub for truck terminal activity has evolved in Morton, where I-74 meets I-155. Many of these carriers operate under contract to the industries they serve, furnishing a vital cog for "just-in-time" parts inventory management.

The **Illinois River** is a principal tributary of the Mississippi River. The river serves the link between Lake Michigan and the Mississippi River, transporting goods from the Great Lakes to the Gulf of Mexico. The largest city on the Illinois River, Peoria and the surrounding region are at the heart of the nation's inland waterway system. The regional port authority has jurisdiction over 95 miles of the river—its port range comprises the northernmost ice-free waterway operating year-round. From grain to coal, more than 13M tons of cargo-pass through local locks each year.

With its new $65 million terminal building open for business and a new international terminal under construction, the **General Wayne A. Downing Peoria International Airport** offers direct flights to nine nonstop destinations across the country. PIA serves as a U.S. Customs port of entry, with millions of pounds of cargo passing through it each year, and contributes over $328 million annually to the regional economy. Pekin Municipal Airport, Logan County Airport, Havana Regional Airport and Mt. Hawley Airport are all general aviation facilities within the region.

Challenges

The results of 140 business visits conducted in 2014 by the GPEDC indicate Pioneer Industrial Park and Truck Haven Road industrial area have **concentrated internet deficiencies** with speed and access. In addition, individual, rural manufacturers throughout the region had similar issues.

During the same business visits, the GPEDC identified infrastructure projects that could lead to immediate growth for existing and future manufacturers in our region. In the Mapleton area, several manufacturers need infrastructure improvements to the **water and sewer systems** for their future growth which could result in 100 new jobs. The preliminary estimate for the necessary extension of the wastewater force main to serve these Mapleton areas is approximately $20M. The estimated cost of the extension of the water mains is another $30M. In addition to allowing current manufacturers to grow, this upgrade would generate new, viable economic development sites for future manufacturers.

The Goodfield area has **critical gas issues** that have halted the growth of multiple manufacturers and the ability to develop an additional 150 acres of industrial property. The preliminary estimate for the necessary extension of the gas main is approximately $10M. In addition, the necessary expansion of Goodfield's wastewater and storm water systems to serve this area are estimated at another $10M.

Strategies

Addressing the infrastructure issues that may prevent existing manufacturing from expanding is our first priority. Discussions to identify solutions for Mapleton, Goodfield, and our internet deficient areas are already underway. However, the solutions identified are proving to be cost prohibitive.

Having the correct infrastructure along with available and **shovel-ready sites** are a critical part of our OEM attraction strategy, an effort to help our earthmoving suppliers diversify. The region currently has 25 green sites of 50 acres or more that will need some additional infrastructure to make them shovel-ready.

The **Eastern Bypass** is part of a long-range planning project taken on by the Illinois Department of Transportation (IDOT). A study is currently determining the best corridor location to improve travel flows and the development of communities in Greater Peoria. Various routes have been explored and there are currently four broad (3,000 foot wide) paths moving ahead. We believe the construction of the Eastern Bypass will not only strengthen our existing logistics systems for existing manufacturers, but will help in the recruitment of new OEM's to our region.

INFRASTRUCTURE SWOT ANALYSIS

STRENGTHS	**Greater Peoria's intermodal network offers many options for the movement of people, goods, and raw materials by rail, air, truck or water. The region also has multiple Broadband and Internet providers.**
WEAKNESSES	**Older infrastructure that is beyond repair results in very large capital investments. Green sites that lack infrastructure for new and existing expanding OEM locations.**
OPPORTUNITIES	**Land available in industrial parks for future industrial expansions and locations. Multiple companies involved in Broadband infrastructure allow for healthy competition leading to infrastructure growth and upgrades.**
THREATS	**Today's manufacturers require comprehensive infrastructure. Lack of adequate capital for infrastructure improvements could prevent a local manufacturer from expanding or remaining in the region. It could also eliminate options for newly recruited companies.**

RESEARCH AND INNOVATION

The current entrepreneurial community within our region is led by the following organizations and resources:

The Caterpillar Technical Center and Peoria Proving Ground has approximately 1,350 full time Caterpillar employees and 500 agency employees engaged in research and innovation, of which, around 200 hold PhD's. The Tech Center has helped Caterpillar achieve 14,000 pending and granted patents worldwide. The group collaborates with the Chief Technology Officer and product managers globally to predict and develop technologies that their customers will need in the future, in order to perpetually sustain Caterpillar's competitive advantage. This research focuses on four themes – Energy & Transportation Solutions, Machine & Machine Systems, Automation & Enterprise Solutions, and Factory Technology Solutions.

The **Peoria NEXT Innovation Center** is the home to researchers, inventors, and entrepreneurs that are transforming new technologies and innovations into commercial enterprises. The 48,000 square foot center opened its doors in 2007 and can house up to 27 companies. Companies in the fields of

medical devices, mechanical engineering, molecular studies, bio-fuels and information technology are currently tenants.

River City Labs is a local Makerspace with a membership of 40 paying local innovators and 100+ non-paying members. The lab is located in the Peoria Warehouse District and is currently seeking to expand to support their growing membership.

Startup Peoria is a grassroots movement to enable a community of thinkers, doers and innovators in Greater Peoria. They are developing talent in all essential areas necessary to sprout startups, including designers, developers, entrepreneurs and intrapreneurs, the business savvy, and investors. Their training and mentoring programs include One Million Cups, Start with a "Why", The Nest Co-Working Space, and Rocket Science.

University of Illinois Labs, the Illinois Manufacturing Lab (IML), and the federally designated Digital Manufacturing and Design Innovation Institute (DMDI), located at Goose Island in Chicago, IML and DMDI is a collaboration designed to significantly reduce development and deployment costs, while creating billions of dollars in value for the industrial marketplace—spurring long-term U.S. economic growth and job creation. Two of the ten IML pilot projects belong to the Greater Peoria businesses Premier Fabrication and Excel Foundry.

Illinois Small Business Development Center Technology Commercialization Program is located within the Bradley University Turner Center for Entrepreneurship. The center assists over 60 companies per year on tech-transfer and commercialization issues including IP research, IP protection, voice-of-customer research, market analysis, and business strategies. Their assistance in the past five years has supported 39 IP applications, 13 IP awards, and over 50 new jobs.

Critical to the earthmoving manufacturing base, new technologies promise to be transformational in many aspects. These new technologies can come from many sources. As an example, the US Commerce National Network for Manufacturing Innovation (NNMI) Institutes from digital manufacturing in Chicago and lightweight metals in Detroit, to additive manufacturing in Ohio and advanced batteries in North Carolina, promise to be important sources for research and new product ideas. Combined with the potential of other federal labs such as Argonne, NIST, and university-based research within the state and nationally, there are many points of innovation that can significantly impact the supply chain participants.

Challenges

Despite a wide variety of resources, Greater Peoria **manufacturers in the earthmoving supply chain have not been significant innovators.** Their primary focus has been on manufacturing efficiencies and quality. They have also not been significant Research and Development partners with the local OEMs. Of the over 100 companies assisted by the Turner Center for Technology Commercialization in the past two years, none are in the earthmoving and heavy equipment manufacturing supply chain. This represents a challenge and an opportunity.

Strategies

A technology scout and connector role is essential to help make connections with the multi-faceted research opportunities and the multiple needs of manufacturers in the region. As the state's U.S Department of Commerce Manufacturing Extension Partnership Center (IMEC) which is headquartered at Bradley University, is uniquely positioned to serve in a scouting role. Integrated with four leading universities in Illinois, connected to several federal labs, and a part of a national system of MEP centers, IMEC can provide leadership on identifying and networking with key technology stakeholders that can lead to the transfer of knowledge and technology to manufacturing leaders in the region.

To help support technology innovation within the targeted manufacturing base, the Bradley University SBDC plans to offer **training to area companies to support innovation in technology development** which ideally leads to new intellectual property. The training will also support innovation to support market diversification such as extending current manufacturing capabilities into new customers and industries. This training would also support technology development in the emerging earthmoving industries such as digital displays and autonomous vehicles. The training program is based on the NSF Innovation-Corps model and will leverage area innovation partners.

RESEARCH AND INNOVATION SWOT ANALYSIS

STRENGTHS	**Concentration of industry expertise. Over 8,000 engineers, and $2.1 billion spent on R&D at Caterpillar globally. Also, regional centers and organizations dedicated to building an innovative region. Greater Peoria residents hold over 64,000 college degrees which is over 8% higher than the national average.**
WEAKNESSES	**Proximity to high tech firms on the west or east coasts. Innovation occurring within OEMs but not trickling down to suppliers. Local innovation ecosystem, like the Bradley Innovation Center, tend to focus on medical instead of manufacturing innovation.**
OPPORTUNITIES	**Leveraging the resources of IMEC to create a formalized scouting approach to ensure the region is well-connected to national initiatives, particularly in technology research. Utilizing the resources of the Bradley Turner Center and River City Labs to focus on training and counseling to support technology development, transfer, and commercialization.**
THREATS	**A lack of innovation in our earthmoving supply chain may lead OEMs to identify suppliers outside the region that are advancing more quickly. A lack of support for manufacturing innovators in our region may lead to the development and commercialization of new products outside Greater Peoria.**

TRADE AND INTERNATIONAL INVESTMENT

International trade is a vital driver of economic growth. According to the U.S. Department of Commerce, Greater Peoria ranked as the nation's 25th largest market for merchandise exports in 2013 with $12.2 billion in exports. This represents 16 percent of the total Illinois exports, which is a top-six exporting state. The region also has one of the highest percentages of merchandise exports compared to gross metro product in the nation.

The five most popular products exported from Greater Peoria were machinery, chemicals, fabricated metal products, electrical equipment, and transportation equipment The most popular destinations for exports were Canada, Brazil, Belgium, China, and Australia. The Peoria region has experienced strong export growth after the 2008-2009 recession. **Overall exports increased 55% from 2009 to 2013**.

Peoria Export Data By NAICS Code 2013

NAICS Code	Exports	Ranking
332 (Fabricated Metal Products)	$396,038,484	19 (based on 2010 data)
333 (Machinery Manufacturing)	Data withheld	2
335 (Electrical Equipment)	Data withheld	Data withheld
Total Exports	**$12,184,465,636 (2013)**	**25**

Greater Peoria has several resources to support our manufacturers in exploring, developing, and expanding international trade and investment opportunities including:

Bradley University's Illinois Small Business Development Center's International Trade Center: Since 1989, the SBDC has helped over 1,000 companies expand their export sales by more than $750 million. Their assistance has led to 700 new jobs. Their local services include: assessing company readiness to export, identifying potential export markets, identifying potential foreign buyers, assisting with foreign market entry, international business planning, export document training, free trade agreement compliance, education and training, executive courses in international business, and export finance options. The center is federally funded through the SBA SBDC network. It was awarded the President E Award, the nation's highest honor in export assistance.

Foreign Trade Zone #114: Greater Peoria is a part of Foreign Trade Zone (FTZ) #114 which is a multi-modal zone – rail, air, river, road – serving the West Central, Central and East Central Illinois Region, providing over 2 million square feet of warehousing and distribution space available for General Purpose Zones usage and four Sub-zone sites. Global Trade Magazine, March/April 2013 issue reported that the FTZ Board named FTZ #114 as fifth in the country for 2011 exports.

Greater Peoria has an **EB5 Regional Center** called HI-TECH that we are just beginning to market for future project investment in our region. EB-5 is designed to facilitate investment in the United States by non-U.S. citizens in exchange for green cards.

Export Assistance Center, U.S. Department of Commerce, U.S. Commercial Service: Peoria hosts the only downstate Illinois federal export assistance center. All the remaining centers are in the Chicago metropolitan area. This federally funded center hosts a full-time trade assistance director and offers direct access to federal export assistance programs such as the Gold Key and International Company Profile. The center also works closely with other federal agencies including Ex-Im Bank and OPIC.

The region has also engaged in robust efforts to attract new manufacturers to our region from international markets. Over the past five years, we have attracted several manufacturers from outside

the United States including Yinlun USA (China), Tianjin Baolai Precision Machinery Co. (China), Puritech Emission Technologies (Germany), and GSS Machining (Japan). Local economic developers have traveled to China with Select USA and also to Germany to meet with business prospects.

Challenges

Although this is strength in our region, it is primarily driven by our largest OEM, Caterpillar Inc. Many of our smaller manufacturers are not engaged in international markets. In a series of visits with 39 of our earthmoving Tier 1 manufacturers in 2014, 50% of those companies shared that they were not engaged in any international sales activities.

Strategies

The SBDC Illinois Trade Center will lead two tactics to address this challenge. First, they will offer targeted manufacturers identified in the study **direct assistance** including export readiness assessment, foreign market identification, and linkage to state and federal programs to find potential partners. (The State of Illinois has nine overseas offices and there are over 120 federal posts).

A more challenging task will be to address the export readiness of manufacturers that may have high quality, but not a significant enough differentiation to compete internationally. For these companies, we plan to bring them into the new Manufacturing Network to identify **export opportunities available through partnering** of area companies whom by working together can offer products that can compete internationally.

We will also **introduce targeted OEM's to our trade support systems and resources** so they fully appreciate the international infrastructure available to support their success. Through this education, we believe we can increase the number of new OEM's recruited to the region in support of the diversification of our earthmoving manufacturers.

TRADE AND INTERNATIONAL INVESTMENT SWOT ANALYSIS

STRENGTHS	**Extremely strong export success for the region, led by Caterpillar. Strong supporting infrastructure including a dedicated international trade center SBDC, a federally funded center export center, FTZ, and EB5 regional center.**
WEAKNESSES	**Though as a sector manufacturing is a strength, a recent survey indicates many manufacturers are not engaged in exporting, or do limited exporting. A number of suppliers to local OEMs lack significant product and service differentiation to compete in foreign markets.**
OPPORTUNITIES	**The proposed new Manufacturing Network is an ideal platform to reach new potential exporters, or under-exporting manufacturers. The network also offers the ability for manufacturers to partner on export opportunities that increase product differentiation and enhance competitiveness.**
THREATS	**U.S. manufacturers not engaged globally risk greater downside risk when the U.S. economy incurs and shocks or slowdowns. Our manufacturing success is exposed to greater risk without more export diversification by our small to mid-sized exporters.**

OPERATIONAL IMPROVEMENT

Manufacturing industries are facing growing challenges. They are under continuous pressure to increase production by increasing efficiency. Market globalization and the growing sophistication of clients have increased the need for more complex products that can be individualized.

Local OEMs have played a significant role in elevating the operational excellence of our manufacturing supply chain. Because of the stringent supplier requirements of companies like Caterpillar, over 80% of the top 41 Tier 1 manufacturers in the Greater Peoria area are ISO 9001 and most have sophisticated inventory management systems, lean manufacturing programs, and current technology.

Our strongest regional ally in the support of manufacturing operations is IMEC. The **Illinois Manufacturing Excellence Center (IMEC)** works with manufacturing firms throughout the state to link long-term plans with on-site implementation services by identifying performance gaps, solving these gaps, and building a culture to support sustained improvements. IMEC helps these organizations optimize operating capacity, implement advanced product and process innovations, increase sales, enter new markets, and improve profitability.

Challenges

Despite their sophisticated operations, Greater Peoria **manufacturers haven't connected organically to develop strategic partnerships or cost-sharing solutions**. The EDA IMCP Planning Grant re-affirmed that most of the metals-related companies visited have been and remain "contract manufacturers" for the heavy metal machine industry. As primarily job shops, lacking innovation and capabilities expansion, area manufacturers view the others as "competitors" for OEM's business.

During a 2014 study of our local employers, we found that the **many of our manufacturers also lacked any specific plan for disaster preparedness**. Of the 39 manufacturers in the earthmoving industry surveyed, 13 shared that they didn't have any disaster preparedness plan.

Strategies

Two tactics have emerged for operational improvement based on our focus on the resilience of our earthmoving suppliers. First, IMEC will lead the new Manufacturing Network, helping manufacturers identify opportunities to **work collectively to reduce costs and improve their operations**. The GPEDC will also work hand-in-hand with regional experts on **disaster strategy preparation**, assisting manufacturers with putting disaster plans in place.

OPERATIONAL IMPROVEMENT SWOT ANALYSIS

STRENGTHS	**Significant concentration of "World Class" suppliers with over 80% of the top 41 Tier 1 manufacturers in the Greater Peoria area are ISO 9001 and most have sophisticated inventory management systems, lean manufacturing programs, and current technology.**
WEAKNESSES	**Manufacturers lack innovation and view each other as competitors. An estimated 30% have no disaster preparedness plans in place.**
OPPORTUNITIES	**The development of a manufacturing network will allow IMEC to work with suppliers**

	on cost reduction opportunities that can only be achieved collectively.
THREATS	**Manufacturers unable to drive down cost and operate efficiently will not be able to compete for opportunities with world class OEMs. Without disaster preparation plans, manufacturers may suffer during future disasters leading to the loss of sales and regional jobs.**

ACCESS TO CAPITAL

Greater Peoria has a wide network of financial institutions who understand the needs of our large manufacturing network. Commercial banks provide a full range of financing and leasing services to meet any possible funding needs including tax exempt, industrial revenue bond purchases. Many of these financial institutions have worked together on a loan participation basis, to spread risk. Many of these financial institutions work with the U. S. Small Business Administration and their programs for small business.

In addition to traditional financing, our manufacturers can take advantage of several other options including the following:

For tax-exempt financing, there are a number of conduit issuers available in addition to the typical municipal issuers. They include **Illinois Finance Authority**, **Tri-County River Valley Development Authority** and **The Heart of Illinois Port District (TransPort).** There are also well-qualified bond attorneys in the region to structure bank-qualified tax-exempt revenue bond issues.

Several **U. S. Small Business Administration Certified Lending Corporations** are present in the region for real estate and equipment transactions.

Greater Peoria offers several **Revolving Loan Funds (RLF)** that can provide gap financing for projects related to construction and capital equipment expenditures. Many of our small manufacturers have taken advantage of these programs to expand. At a multi County-level, over $12M in Revolving Loan Funds have leveraged $140M to help 186 business projects. The vast majority of these projects are small to medium-sized manufacturers expanding with new equipment and/or facility expansions.

The **Heartland Community Development Corporation** also has resources for both loans to and investments in qualifying entities in the region.

Greater Peoria has an **EB5 Regional Center** called HI-TECH that we are just beginning to market for future project investment in our region. EB-5 is designed to facilitate investment in the United States by non-U.S. citizens in exchange for green cards.

Central Illinois Angels is a membership-based angel investment organization composed of business leaders and professionals. Since inception, the members of Central Illinois Angels have invested nearly $5.5 million in 15 portfolio companies.

Greater Peoria formed and fully utilized the **Tri-County Venture Capital, LLC** as another source of venture capital that typically acts as a follow-on investor with approved venture capital entities. The Tri-County Venture Capital, LCC was closed out due to full utilization of its issuance. This void of a local venture capital resource is an opportunity for the region to evaluate and possibly pursue.

During a recent study of local manufacturers, access to capital was not found to be a critical need or barrier to growth. Area financial institutions leaders concur with this premise that there are plenty of conventional and incentive loan funds available in the Greater Peoria area. In addition, the mature and sophisticated manufacturers have had cash on hand to provide their own financing.

Challenges

While existing manufacturers are able to find the resources needed to stay and grow in Greater Peoria, **startup firms struggle to find the funding support needed to develop and commercialize new products**. Several startup manufacturers engaged in research and development of new technologies for this industry received funding through the Tri-County Venture Capital Fund. The closure of that fund has left a gap in our capital ecosystem.

Strategies

While we believe the development of a new Venture Capital program will be an asset to our region, we do not find it critical to the strategies developed in our IMCP Designation Plan.

ACCESS TO CAPITAL SWOT ANALYSIS

STRENGTHS	**There are multiple commercial, regional, and local lending institutions providing conventional financing, as well as many non-conventional financing tools, to assist manufacturers with expansions and equipment upgrade purchases.**
WEAKNESSES	**Lack of venture capital resources for startup firms engaged in the commercialization of new technologies in the manufacturing industry.**
OPPORTUNITIES	**Venture capital fund was fully utilized suggesting the ability to support a similar fund.**
THREATS	**A lack of funding resources to support startup firms focused on the commercialization of new technologies in the manufacturing industry may result in the loss of such technologies and new manufacturing facilities in our region.**

IMPLEMENTATION STRATEGY

The GPEDC, in partnership with the public and private sectors in our region, worked with consulting firm Vital Economy from 2012-2014 to develop a new five year comprehensive economic development strategy (CEDS) for our region. The Focus Forward Central Illinois (FFCI) plan is structured around four key goals: act regional, expand economic performance, improve human capital, and value and enhance our quality of life. Please see Optional Files for GPEDC FFCI/CEDS Regional Economic Development Strategy.

Several key strategies targeting our manufacturing sector emerged through the FFCI planning process. The first was the need to **build resilience in our earthmoving supply chain**. Many of our manufacturers are overly reliant on a few regional OEMs and only 50% have disaster preparedness plans. An IMCP Planning Grant received from the EDA and a Hurricane Ike Grant received through Peoria County allowed us to take a deeper dive into this strategy in 2014, identifying key tactics that could help this group become more resilient through diversification and disaster preparedness.

FFCI also identified the need to **align our emerging workforce** with the needs of our regional manufacturers. The GPEDC launched a Workforce Alliance in 2013 to pull educators and employers together for the purpose of developing tactics and leveraging partnerships and funding opportunities to address this critical issue.

Talent attraction and retention was determined a key strategy for our manufacturers. A significant percentage struggle to recruit the people they need to grow and thrive in Greater Peoria. Young professionals are especially challenging. Caterpillar's recent announcement of a headquarter expansion in our region creates an even greater urgency to capture talent needed by our OEMs and their suppliers.

Implementation of these strategies is underway. We believe an IMCP Designation will be a critical asset, helping us identify technical assistance and funding opportunities to support our efforts.

STRATEGY #1: BUILD RESILIENCE IN OUR EARTHMOVING SUPPLY CHAIN

Tactics	KTS Pillars	Partners	Cost	Gap
Form a **Manufacturing Network** for collective pursuit of new customers with OEMs outside the earthmoving industry and collaborations that drive down cost.	Supply Chain Operations Improvement	IMEC GPEDC SBDC ITC	$1 M over 5 years	$312,500
Attract OEMs to the area who are not in the earthmoving industry but need a similar supply chain. Address infrastructure and site needs to support this effort.	Supply Chain Infrastructure	GPEDC SBDC ITC TCRPC	$1 M attraction $197.5 M infrastructure $1 B Eastern Bypass	$0 attraction $190 M infrastructure $1 B Eastern Bypass
Assist earthmoving suppliers in developing or expanding their **international trade opportunities**.	Trade and International Investment	SBDC ITC	$50,000	$50,000
Increase innovation in our earthmoving supplier operations through **innovation training and scouting**.	Research and Innovation	SBDC ITC IMEC	$100,000	$75,000
Help our earthmoving suppliers create **disaster preparedness plans**	Operations Improvement	GPEDC	$20,000	$0
STRATEGY SUBTOTAL			**$1,199,670,000**	**$1,190,437,500**

STRATEGY #2: ALIGN WORKFORCE SKILLS AND INTERESTS WITH THE NEEDS OF OUR EARTHMOVING SUPPLY CHAIN

Tactics	KTS Pillars	Partners	Cost	Gap
Create a **manufacturing careers campaign** with transformational messaging and hands-on experiences designed to educate high school students and their teachers and caregivers about career pathways in the jobs most critically needed by our manufacturing sector.	Workforce and Training	GPEDC ICC	$1.M over 5 years	$1 M
Work with local manufacturers to develop a high school **Internship Program** targeting the most critically needed careers in the manufacturing industry including a soft skills development program.	Workforce and Training	CEO Council	$250,000 over 5 years	$210,000
Develop and launch a **Manufacturing Pre-Apprenticeship Program** that targets disadvantaged and dislocated 18-24 year olds who have completed high school and are struggling to find a career pathway.	Workforce and Training	CareerLink ICC	$500,000 over 5 years	$0
Develop and launch a **Manufacturing Apprenticeship Program** based on the German-American Chamber of Commerce model.	Workforce and Training	GPEDC ICC	$250,000 over 5 years	$250,000
Establish **ACT's NCRC Work Ready Community Program** to assess work ready skills in our current and emerging workforce.	Workforce and Training	GPEDC ICC	$150,000 over 5 years	$75,000
Develop a community **STEAM Laboratory** where families, students, and entrepreneurs can have access to materials and tools that allow for rapid prototyping and computer-aided design.	Workforce and Training Research and Innovation	River City Labs Peoria Riverfront Museum UI Extension Startup Peoria Superintendents of Schools	$2 M capital $440,400 operations over 5 years	$2 M $559,600
Increase the number of regional High Schools who offer **Career and Technical Education Programs.**	Workforce and Training	ICC GPEDC	$4 M capital $500,000 operations over 5 years	$4 M $500,000
Align manufacturing needs with **nationally recognized credentials** so educators can better prepare students for the specific careers they are most interested in. Create central repository of individual's credentials.	Workforce and Training	ICC IMEC	$250,000 over 5 years	$75,000

STRATEGY SUBTOTAL			**$9,900,000**	**$9,110,000**

STRATEGY #3: HELP OUR EARTHMOVING SUPPLY CHAIN ATTRACT AND RETAIN TALENT

Tactics	KTS Pillars	Partners	Cost	Gap
Develop and implement a **talent attraction strategy** that increases the percentage of professionals who choose to locate in Greater Peoria when offered an opportunity to do so by one of our manufacturers.	Workforce and Training	GPEDC Peoria Area Association of Realtors	$1,500,000 over 5 years	$850,000
Renovate historic buildings in Peoria's Warehouse District to provide residential housing that is appealing to young professionals and empty nesters.	Workforce and Training	Peoria Downtown Development Corporation	$30,000,000 infrastructure	$15,000,000
Research employment practices that are most correlated with employee retention and help manufacturers implement those practices through a **Best Places to Work** program.	Workforce and Training	GPEDC AAIM Employers Association	$150,000 over 5 years	$0
STRATEGY SUBTOTAL			**$31,650,000**	**$15,850,000**

			Cost	Gap
Grand Total			**$ 1,241,220,000**	**$ 1,215,397,500**

PERFORMANCE MEASUREMENT AND IMPACT EVALUATION

The Greater Peoria Economic Development District has a compelling combination of strengths and challenges which this application has delineated. As the lead agency for this IMCP application, the GPEDC is committed to the long term vision of a more resilient and growing regional economy serving its area citizens with stable, growing and sustainable employment and quality of life.

Having the desired impact with the strategies outlined above will require focused effort and long term commitments from the partners identified consistent with the vision cast. Measurable targets and outcomes will provide necessary milestones to gauge progress and to reinforce interim success to partners and the community at large that this vision is achievable. Most tactics involved with the three strategies developed will include both activities and resulting outcomes over the five year time horizons.

STRATEGY #1. BUILD RESILIENCE IN OUR EARTHMOVING SUPPLY CHAIN

Tactic	Name of Metric	Name of Project	Time of Metric	Frequency of Updates	Data Sources	Additional Information on Metrics

Manufacturing Network	New Customers	Business Missions	5 Years	Semi-annually	IMEC GPEDC	10% increase in diversification of sales by 20% of the manufacturers who participate
Attract OEMs	Targeted OEM Locations in Greater Peoria	Development of Targeted Marketing Materials Preparation of Appropriate OEM sites Meetings with Targeted OEMs and Site Selectors	5 Years 5 Years 5 Years	Semi-annually Semi-annually Semi-annually	GPEDC	1 location of new OEM outside the earthmoving industry 1 OEM site 5 Targeted OEMs 10 Site Selectors
International Trade Opportunities	New Export Customers	Workshop Follow Up	5 Years	Semi-annually	SBDC ITC	10 new manufacturers engaged in international sales
Innovation Training and Scouting	Use of new innovation	Training Creation of Scouting Position with IMEC	5 Years	Semi-annually	SBDC ITC IMEC	10 new manufacturers engaged in technology transfer
Disaster Preparedness Plans	Plans Completed	Workshop Follow Up	2 Years	Semi-annually	GPEDC	13 Plans Completed

STRATEGY #2. ALIGN WORKFORCE SKILLS AND INTERESTS WITH THE NEEDS OF OUR EARTHMOVING SUPPLY CHAIN

Tactic	Name of Metric	Name of Project	Time Metric	Frequency of Updates	Data Sources	Additional Information on Metrics
Manufacturing Careers Campaign	Attendance at Expo, Educator Day, & similar events Enrollment in High School & College Technical Training Programs	Discover Manufacturing Expo Educator Day Marketing Campaign	5 Years	Semi-annually	GPEDC High Schools ICC	25% increase in the total # of participants in recruitment activity 25% increase of participants who are enrolled in manufacturing training

Internship Program (High School)	Enrollment in Internship Program	Design Program Purchase and Populate Inspire Educate Students, Faculty, and Parents	5 Years	Semi-annually	CEO Council	200 enrolled in manufacturing internships
Manufacturing Pre-Apprenticeship Program (Post High School)	Enrollment in program % of Pre-Apprentices Employed in Manufacturing Career	Design Program Work with WIOA to Fund Program Recruit Individuals for Program	5 Years	Semi-annually	Career Link ICC	100 enrolled in program 65% employed in manufacturing career or enrolled in technical training
Manufacturing Apprenticeship Program (Post High School)	Enrollment in Program Completion of Program	Design Program with ICC and Manufacturers Recruit Employers to Create Apprenticeships Recruit Individuals for Program	5 Years	Semi-annually	GPEDC	75 apprenticeship positions created 75 "highly qualified" enrolled in program 100% successful completers
ACT's NCRC Work Ready Community Program (High School)	Number of assessments given % of Employers who recognize NCRC	Determine Targeted Groups for Assessment Fund Assessment	5 Years	Semi-annually	ICC	Assess 1,000 students annually. 50% of manufacturers recognizing NCRC
STEAM Laboratory (Elementary and Junior High)	Number of students who use the STEAM Lab	Design Program Fund Program	5 Years	Semi-annually	River City Labs	10,000 students who interact with STEAM Lab programming
Career and Technical Education Programs (High School)	Number of CTE Programs in Regional High Schools	Identify high schools without manufacturing programs & work with faculty to deploy new WBL	5 Years	Semi-annually	ICC	10 new career and technical programs in regional high schools

		programs				360 students enrolled annually by 5th year

STRATEGY #3. HELP OUR EARTHMOVING SUPPLY CHAIN ATTRACT AND RETAIN TALENT

Tactic	Name of Metric	Name of Project	Time of Metric	Frequency of Updates	Data Sources	Additional Information on Metrics
Talent Attraction	# Manufacturers Using Program Tools Capture Rate	Collect Data Develop Campaign Fund Campaign Deploy Campaign	5 Years	Semi-annually	Manufacturers Using Talent Attraction Tools	30 using program 30% increase in capture rate
Residential Development in Peoria Warehouse District	Number of new residential units and parking structure developed	Promote opportunities Work with Developers	5 Years	Semi-annually	Peoria Downtown Development Corporation	1,050 units with parking structure
Best Places to Work	# Manufacturers Using the Program Retention Rate	Collect Data Develop Program Recruit Employers Deploy Program	5 Years	Semi-annually	Manufacturers Who Complete Best Places to Work Program	30 using program 20% increase in retention rate

OPTIONAL FILES - LETTERS OF SUPPORTS

LEGAL CERTIFICATION