

ALLEN COUNTY OHIO DEFENSE INITIATIVE 'SCENARIOS OF THE FUTURE'

ALLEN COUNTY, OHIO

Report from the Allen County Defense Initiative Strategic Planning
Think Tank workshop conducted on April 15 and 16, 2015



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PREPARED BY:



HOSTED BY:



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1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND

The Allen County Defense Initiative was launched in 2014 as a means of expanding community conversations around the future of the Joint Systems Manufacturing Center to consider common issues of need throughout the region. This process, funded by the U.S. Department of Defense Office of Economic Adjustment addresses both recent fluctuations in production at the facility, as well as the ability of the region to respond to the recent slowdown. The initiative also seeks to maintain future capacity to support projected demands. The findings obtained through Future iQ Partners' work in the region will provide the basis for a number of supplemental funding requests to support additional regional development initiatives.

1.2 INITIATIVE PROGRESS AND PRIOR WORK

A great deal of work has been conducted in support of the strategic planning think tank workshop described in this report. Critical support has come from Task Force LIMA, a public-private partnership formed in 2005 to advocate for continued production at the Joint Systems Manufacturing Center and to breed awareness of the importance of defense-related industries in Ohio. Information shared has provided a great deal of context regarding key issues and actors in the region.

Two other key deliverables have been developed and presented as a means of informing conversation:

- An asset inventory and readiness analysis identified key demographic, economic, and industry trends in the region and identified a number of critical challenges.
- A social network mapping exercise identified linkages between community and industry leaders and measured the intensity of this collaboration. Visual representations of regional collaboration and technical information flows were produced.



1.3 SCENARIO PLANNING PROCESS

A critical step in this process is initiating a wide-ranging discussion about different possibilities for the future of the region. To begin this exploratory conversation about the future, the region has engaged in an innovative Scenario Planning Process. This involved over 30 key stakeholders working together at the Strategic Planning Think Tank Workshop.

The Scenario Planning process brought together the local stakeholders to explore the future and develop a range of plausible future scenarios, looking out as far as 2025. The four scenario spaces were structured around two critical driver axes that define areas where the region both faces significant challenges and where future opportunities exist. The scenario spaces are defined by different points on the continuums established. These quadrants were used to formulate four plausible scenarios. The axes were 'Industry Innovation and Entrepreneurship' and 'Workforce Development'.

The four plausible scenarios were defined and described in detail. Participants speculated about the characteristics of each scenario and major events that could occur in the region, against the triple bottom line dimensions of business sector, workforce profile, and ecosystem function.





Photo Credit Ayers Inc.

2.0 INTRODUCTION

The scenario planning work and results presented in this report was conducted as an integral part of the Allen County Defense Initiative. It was designed to solicit input from community leaders as to their perspectives on the region and future challenges.

2.1 ALLEN COUNTY DEFENSE INITIATIVE

Allen County, Ohio is home to the Joint Systems Manufacturing Center (JSMC), a unique asset in the United States' national security infrastructure. The facility is the only government-owned, contractor-operated (GOCO) production center in the United States Department of Defense's assets. The facility is currently managed by the U.S. Army and operated by General Dynamics Land Systems. This arrangement has been in place since 1978 and has been responsible for the product of most of the heavy combat vehicles in the military's inventory.

The facility traces its history back to 1942 when the former Lima Tank Plant played a key role in building a number of components and offering final assembly on several lines of vehicles that were critical to victory in World War II, including the Sherman line of combat tanks. In the years that have followed, the plant has supported operations in every active military engagement and has recently garnered attention through its role in the production of the Abrams and Stryker vehicle lines.

The facility has also been the subject of some scrutiny over the last twenty years as it has been included for consideration in a succession of rounds of the Base Closure and Realignment process. The most recent analysis concluded in 2005 and led to the recommendation that the facility be shuttered or leased for commercial production. The genesis for the Allen County Defense Initiative and Task Force LIMA stems from the debate over this recommendation.

Task Force LIMA was formed as a coalition of business, community, and government leaders that organized to advocate for the continued operation of the JSMC in the wake of the findings of the 2005 BRAC analysis. The advocacy work conducted by this group has successfully brought national attention to the facility and has maintained production levels. Task Force LIMA has also assumed a leading role in bringing attention to and support for the role that defense-related industries play in Ohio's economy. It was pivotal in the release of a white paper that described the imbalance of federal funding flows in 2013 and has also provided input to the Governor's Military Jobs Commission over the last year. The



task force has most recently secured a significant infrastructure and maintenance investment from the U.S. Army to modernize the facility.

The project that has culminated in the scenario planning process described in this report was initiated by the Allen County Board of Commissioners and Task Force LIMA through a defense industry adjustment funding request to the U.S. Department of Defense Office of Economic Adjustment (DoD-OEA). The award, received in 2014 represents the first phase in investment directed at building greater responsiveness and industry diversification in the regional economy. It is under this framework that the scenario planning process advanced.

2.2 STRATEGIC PLANNING ‘THINK TANK’ WORKSHOP

The culminating step in the Allen County Defense Initiative has been to conduct the Strategic Planning ‘Think Tank’ workshop, which developed a range of plausible future scenarios for the region. The Scenario Planning process, as outlined in this report, provides a ‘vehicle’ to be used in the process of building a shared vision for the future of Allen County and the broader region. In addition, the deliberations can assist in identifying key actions and can identify how various stakeholders might best contribute to future developments.

Approximately 31 key stakeholders attended the ‘think-tank’ workshop, held over two half-days on 15 and 16 April 2015. The participants who were invited to attend the workshop represented a cross section of organizations, interest groups and industry perspectives.





2.3 FUTURE IQ PARTNERS

The Allen County Board of Commissioners has partnered with Future iQ Partners (www.future-iq.com), an international consultancy company, to design a robust, innovative and far-reaching process. Extensive community engagement and input will be obtained through Future iQ Partners' unique tools and processes, in order to ascertain the what, where and how this region will reach its full potential.

The key role being played by Future iQ Partners includes:

- Conducting unique background research on community, demographic, and economic assets.
- Performing a broad-scale social network mapping analysis of community leaders and stakeholders.
- Designing and facilitating the Allen County Defense Initiative Strategic 'Think-Tank' process, to explore a range of plausible futures.
- Designing a comprehensive Strategic Action Plan that describes possible community priorities and initiatives for funding consideration and implementation.

This initiative has the potential to establish an innovative and original framework for greater regional collaboration, industry innovation, and workforce readiness in Allen County. It has been identified as a strategic priority both for the Allen County Board of Commissioners and the U.S. Department of Defense Office of Economic Adjustment.



Photo Credit General Dynamics Land Systems



3.0 ALLEN COUNTY REGIONAL PROFILE

HISTORY

Allen County began its life on the frontier of a new nation's westward expansion but did not truly find its place on the map of the nation's consciousness until the mid-1850's when the rail industry began to make a lasting impression on its landscape and workforce. The blip that appeared on the map became a beacon after 1885 when the discovery of oil would bring the first proper industrial boom to the region. The attention, investment, and prosperity brought by the intersection of transportation and commerce over the next twenty five years would define much of the region for the last century.

The transition of the Lima Agricultural Works to the Lima Machine Works and later the Lima Locomotive Works marked the growth of heavy industry in the area, paving the way for other prominent manufacturers such as the Ohio Power Shovel Company and Superior Coach in the 1920's and the Lima Tank Plant in 1942. These industrial giants, along with strong regional ties to agriculture and the automotive industry defined the landscape of the region's economy throughout much of the twentieth century. While many of these large firms closed during a period of industrial decline in the 1970's and 1980's, the region still boasts a strong and proud manufacturing base through the presence of global firms such as Ford, Proctor-Gamble, and Potash.

The legacy of these predecessor firms defined much of the civic investment in the county's communities and supported a number of cultural amenities, such as the Lima Symphony Orchestra that may seem out of place in a region of this size. References to the county's cultural and economic history can also be seen in the architecture of downtown Delphos and Lima. Rather than viewing this as a vestige to the past, community leaders are now embracing the potential of the built environment for preservation and redevelopment.



Photo Credit Ayers Inc.

Allen County's Residents At A Glance

Population (2013)	105,298	Population over the Age of 65	16%
Population Growth (since 2010)	-0.9%	Population with a Bachelor's or Advanced Degree	17.10%
Projected Population Growth (2010 to 2040)	-5.9%	Labor Force Participation Rate	63%
Median Age	38.7 Years	Average Annual Wage (2013)	\$38,815
Birth Rate (2014)	1,275	Per Capita Personal Income (2013)	\$34,428

POPULATION DYNAMICS

Allen County's population reached its high point in 1980 at 112,241 residents. This period represents the height of the concentration of two key generations in the county, both the pre-World War II generation and the Baby Boom generation of the post-war years. This period also represents the height of labor force participation in the region at more than 74 percent.

Population has been slowly declining in the thirty-five years that have followed, losing around 7,000 residents during this period. Three factors have combined to dictate the losses. First, a period of deindustrialization that occurred in a series of waves from the 1970's through mid-2000's depressed economic opportunities for younger workers, leading to significant outmigration. Second, the presence of a generally older population also corresponded with a gradual decline in the region's birth rate. Finally, these dynamics have been stabilized as the declining birth rate correlates with a slowing rate of outmigration. The challenge facing the region's leaders is how to first reverse these patterns and then attract larger numbers of young residents into the region.

INDUSTRY AND EMPLOYMENT TRENDS

The economic composition of this region is strongly dominated by three industry sectors – petroleum and chemical processing, manufacturing, and health care. Each of the two traditional heavy industries have defined Allen County's economic landscape for more than a century while the growth in health care is a more recent phenomenon, largely in response to the needs of an aging population. Growth

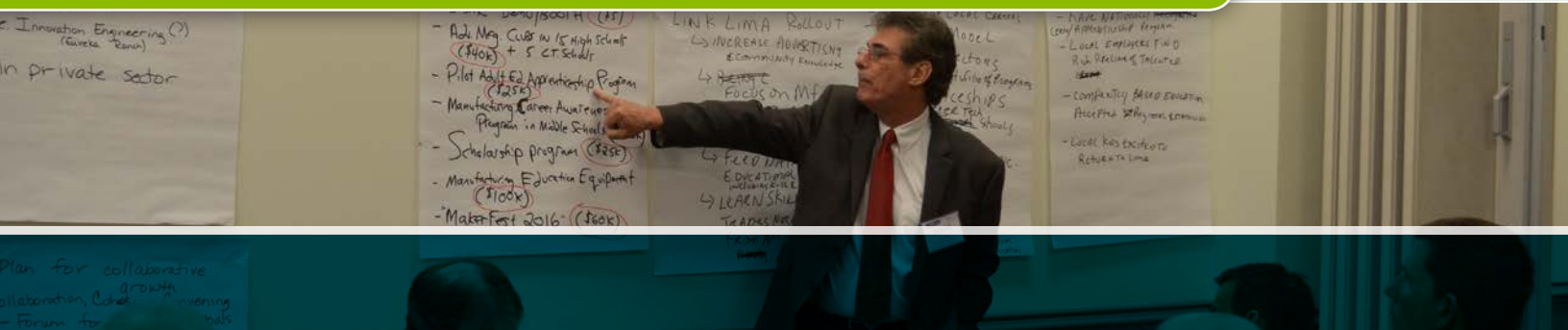
in manufacturing employment has largely been dictated both by government contracting activity at the JSMC and global changes in the automotive industry. The combination of negative trends in both of these sectors has depressed manufacturing employment over the last seven years, though the sector has shown some sign of rebounding.

One competitive advantage that the region has over its neighbors is the tremendously high level of manufacturing productivity demonstrated within the county. This is more than twice the state average and has increased by 36.4 percent over the last four years. Productivity in other principal industry sectors is also significantly higher than the state average, suggesting that the region continues to benefit from a high-class workforce. This will increase in importance over the next decade as the aging of the region's workforce will lead to labor shortages in a number of key industries.

INCOME DYNAMICS

Average wages in Allen County have historically lagged behind state and national averages across most industry sectors. Manufacturing (11 percent above average) and education and health services (1 percent above average) are two key exceptions. This wage disparity has historically been defined by a relative lack of professional, high value-added workers in a number of key industries and has been offset by a comparatively low cost of living. This difference also results in a relatively lower per capita personal income in the region. These trends are likely to moderate to some extent as the region continues to recover from the most recent recession, though they will need to reverse in order to retain and attract significant numbers of young professionals to the area.

For additional information about Allen County's economy and the critical trends facing the region, please see the Allen County Asset Inventory and Readiness Analysis.



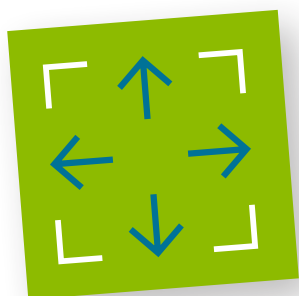
4.0 SETTING THE STAGE – SCENARIO PLANNING

The Allen County Board of Commissioners and U.S. Department of Defense have identified the need to building greater regional collaboration to promote economic resiliency. As part of this work, the Board of Commissioners has contracted Future IQ Partners to undertake the Allen County Defense Initiative Strategic Planning ‘Think-Tank’ workshop. This workshop aimed to:

- Deepen the understanding and examination of how external events and local conditions shape decision-making;
- Identify and understand the key influences, trends, and dynamics that will shape the County over the next 10 years;
- Create and describe four plausible long-term scenarios for the County; and,
- Begin exploring alignment around a shared County and regional vision

The scenarios developed during this Scenario Planning Process and outlined in this report are important to provide a “vehicle” to be used in the process of building a shared vision for the future of Allen County. In addition, the workshop deliberations can assist in identifying key actions for the region and assist in identifying how various groups might best contribute to future developments.

The Scenario Planning process, as applied in Allen County, offered an excellent opportunity for the community to examine the future in a thoughtful and structured manner. The design of the workshop included presentation and discussion about key forces shaping the future, at a global and local level. These exercises and work were aimed to build a robust basis for the scenario formulation.



Scenarios are not predictions, but are a way of exploring plausible futures

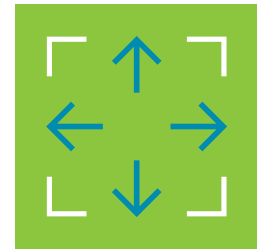


4.1 SCENARIO PLANNING PROCESS

This report presents the background, results, and recommendations from the scenario planning process. This process aimed to explore the future directions and opportunities for the region, and commence work on creating a regional vision for collaboration and growth. Leaders from across the region attended the workshop held on April 15th and 16th, 2015. At this workshop, participants discussed the region's future and developed plausible scenarios for Allen County in 2025.

The participants were then guided through a Scenario Planning process to develop four plausible scenarios for the future of the region. This process has been applied by Future iQ Partners in numerous planning projects across North America, Australia and Europe.

The process, which is described in detail below, involves exploration and discussion of global, regional, and local trends and forces of change; identification and ranking of drivers and influences that will likely shape the future of the region; development of a scenario matrix defining four plausible scenarios spaces for the future; and the development of descriptive narratives of each scenario. The event concluded with discussion of the scenarios and their desirability in contributing to a regional vision of the future. An important part of the Scenario Planning process is that it aims not merely to develop plausible scenarios for the future, but to identify how they may be turned into tangible actions in Allen County and compiled in a strategic action plan.



Decision**Path**

SCENARIO
PLANNING

4.2 WHY SCENARIO PLANNING?

Scenario Planning is a method that is used to develop plausible scenarios for the future. Scenarios are not predictions, but are a way of exploring plausible futures. The method differs from traditional strategic planning as it allows the exploration of many factors, or drivers of the future, concurrently. It does so by using local knowledge and expectations about the drivers to produce a framework that defines and explores a range of plausible futures. In this manner the approach enables people to explore the impacts and consequences of a range of different future pathways.



Photo Credit Ayers Inc.

Generally, Scenario Planning processes are run over several days, weeks, or even months. A condensed form of Scenario Planning, developed by Future iQ Partners, was used in this project so that the scenario session was completed in two days. This design is intended to allow otherwise busy and committed people to contribute and participate in a future planning process in an effective and efficient manner.

This design relies on sufficient background information being presented to enable realistic and informed evaluation by the participants. It also requires participants who are broad-minded and freethinking, and who collectively and individually can bring their experience to the identification of the key drivers and to the development of the scenarios.

4.3 DEVELOPING FOUR PLAUSIBLE SCENARIOS FOR THE FUTURE

The regional stakeholders explored the future and developed plausible future scenarios, looking out as far as 2025. To set the context for their thinking, the planning session included discussion of global, national, and local forces that could impact the region. The project facilitator presented an overview of prior work that has been conducted in this project, including the findings of asset inventory and social network mapping exercises. Participants reviewed and discussed these findings, considering how they could impact on the future direction of the region.

4.4 DRIVERS SHAPING THE FUTURE

An extensive array of prior research and series of conversations with community leaders during two site visits in February and March 2015 revealed two prominent trends shaping community and economic growth in the future – industry innovation and workforce development. Each of these key themes has been mentioned time and again in conversations with community and industry leaders and a great deal of work is already underway in the region to attempt to address their respective challenges. Similarly, issues of industry innovation and entrepreneurship and workforce readiness and availability are being addressed in regions throughout North America and nationally. Addressing each of these areas will require collaborative solutions. The two issue areas also present significant overlap both in the types of organizations and resources required, but also in their potential impact on the region's prominent industries.

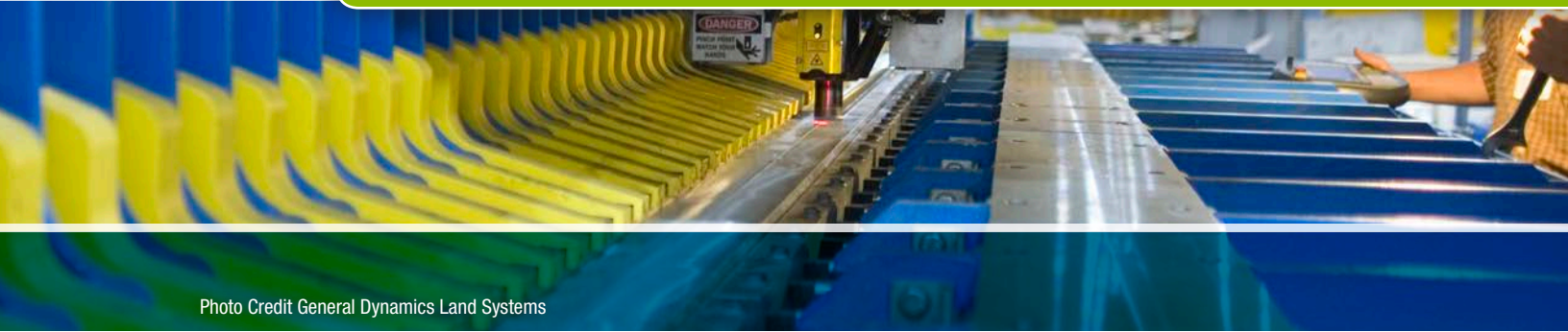


Photo Credit General Dynamics Land Systems

The key insights regarding the current state and future of industry innovation and entrepreneurship in the Allen County region include the following:

- Some manufacturing innovation has occurred in existing industries.
- Challenges exist in developing commercialization strategies for many existing processes.
- Entrepreneurship is being promoted through an incubator strategy, though interest is uncertain.
- The region has built some connections with local research universities, though little applied research occurs.

This suggests that the region has extended its history as a source of some industry innovation, though little entrepreneurship or commercialization occurs within the broader economy. Developing a more innovation-forward development culture is essential to ensure the continued economic competitiveness of the region.

Similar insights were gleaned from conversations with key stakeholders in the workforce development community. These concerns have been amplified in recent years as the signs of an aging and declining population have started to affect workforce availability in the region. Some of the conclusions offered include:

- The region is dominated by skills needs in traditional industries, such as manufacturing.
- Workforce availability is a growing concern, both in quality and quantity.
- The region has promoted collaboration across a number of industry sectors, such as manufacturing and automotive, but little collaboration exists across sectors.
- Regional training providers are divided by flexibility and credentials.

This again suggests that the Allen County region has significant resources at their disposal to address key issues of workforce readiness and availability, but the workforce development interests are largely disjointed. A more collaborative strategy is required to prevent competition and duplication of services.



4.5 CREATING SCENARIO SPACES – FOUR PLAUSIBLE SCENARIOS FOR THE FUTURE

Once the two key regional drivers of industry innovation and entrepreneurship and workforce development were presented to workshop participants and approved, they formed the basis of the axes that define the scenario space where the workshop participants would apply their collective knowledge. Brief descriptions were also attached to the end points of each driver axes. While these end points do not necessarily represent two extremes on a linear continuum, they are distinct enough to suggest some degree of separation and a plausible range of outcomes between them.

The four quadrants (scenario spaces), based on different combinations of the two cluster themes, were reviewed and discussed with the participants. This discussion explored the description of the end points included in each scenario space, the possible interaction between these drivers, and how they formed the axes that defined the four scenario spaces. The participants were asked to consider the main attributes of each of the quadrants and to begin to speculate about how the region would look in a future based on each of the quadrants.

4.6 CREATING NARRATIVES FOR EACH SCENARIO QUADRANT

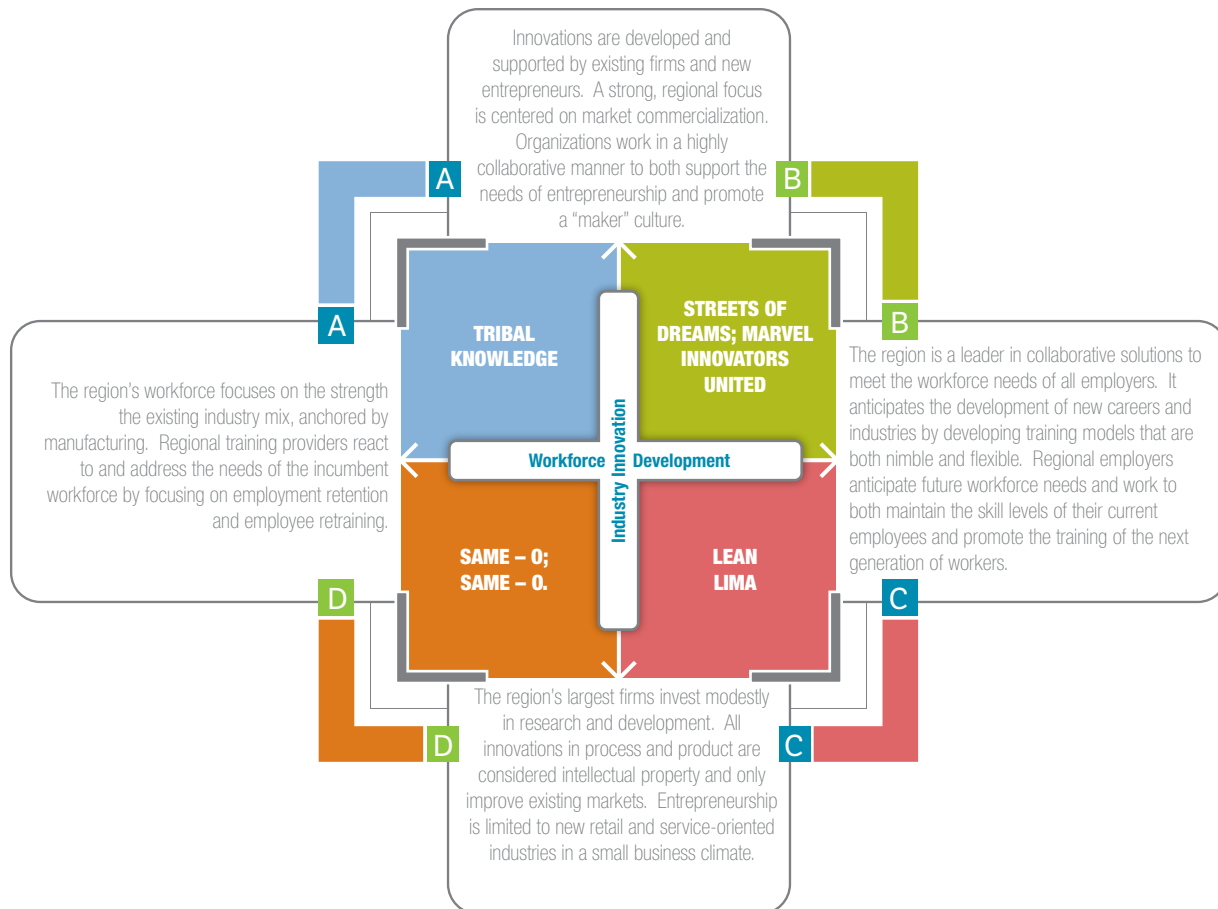
Event participants were randomly allocated to one of four groups and asked to formulate a scenario for their respective quadrant. Each group was facilitated by community leaders and Future iQ staff to describe the Allen County region in 2025 under the conditions of the scenario quadrant that they had been given in terms of the triple-bottom line of business profile, workforce profile, and ecosystem characteristics.

In addition, they were asked to devise major events or headlines of how the scenario occurred using the years 2015, 2020, and 2025 and to give their scenario a descriptive name. Once the scenarios had been developed, each group reported back, describing their scenario to the symposium participants.

This allowed for clarification, questions, and an assessment of the plausibility of each scenario. Each group's notes for their scenario and the description of it when it was presented to the other participants were used to produce the detailed narrative for each scenario that is presented in the next section of this report.



THE SCENARIO QUADRANTS DEFINED BY THE CLUSTER THEMES SHOWING THE NAMES OF EACH SCENARIO AS CREATED BY THE PARTICIPANTS.



These four scenarios paint very different plausible futures for the region. The workshop participants considered them all as plausible futures, as in, they could actually happen. Narratives and descriptions of each scenario, as developed by the workshop participants, are included in the following section.

Each scenario has its subsequent consequences and impacts on the fabric of the region – impacting the community, economy, organizational fabric in different ways. No one future is the 'perfect' future, as each comes with its attendant challenges and implications. The process, however, does provide a way to tease out the future scenarios and examine them from a speculative standpoint. They represent different possibilities for the future, and are not predictions.

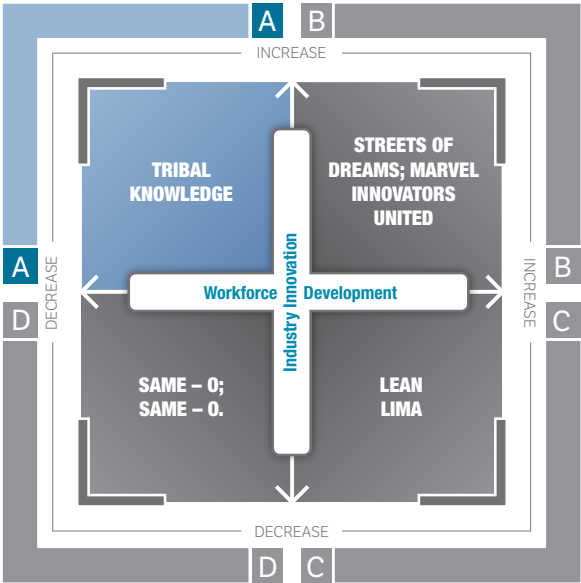


5.0 SCENARIO DESCRIPTIONS

Photo Credit Ayers Inc.

5.1 SCENARIO A – TRIBAL KNOWLEDGE

This scenario represents a plausible future where the region invests its energies and resources into fostering a strong innovation and entrepreneurial infrastructure in all sectors while maintaining the existing focus of its workforce development activities on meeting the needs of the region’s dominant industries. This creates a commitment to innovation and business formation that may not necessarily generate strong job creation, such as the development of more efficient production processes or automation solutions. The region’s workforce continues to age and eventually decline but the needs of existing employers are met both by employing the new innovations that are introduced and encouraging the young workers in the region to pursue traditional careers. The innovation focus drives entrepreneurship while the workforce development strategy stresses retention. This scenario marks a slight shift in regional orientation but also stresses the need to make the most of what is available.



An interesting aspect of the workgroup’s discussion in the creation of this scenario is the fact that they alluded to two quite disparate examples for inspiration – the science, technology, engineering, and math (STEM) innovation hubs of Austin, Texas and the Research Triangle of Raleigh-Durham-Chapel Hill, North Carolina, as well as the broad scale community revitalization efforts that are occurring in Detroit, Michigan. It is difficult to conclude whether the group believed that the region possesses the potential of the former, or if it requires the repair of the latter.



Photo Credit General Dynamics Land Systems

5.1.1 TRIBAL KNOWLEDGE - SCENARIO CHARACTERISTICS 2025

Business Sector

- The region focuses on supporting major manufacturing business – growth is limited.
- Innovative process improvements, but few innovations occur.
- Industry growth is moderate and incremental.
- Focus on traditional industries such as petrochemical, automotive, agriculture, and military.

Workforce Profile

- 'OWG receiving OJT' or 'Old, White Guys receive On-the-Job-Training.' Most workforce development resources are focused on retaining existing workers or placed dislocated jobseekers.
- Shop knowledge and tribal knowledge become critical as processes improve incrementally and older workers are asked to mentor younger incoming workers.
- The available workforce pool will shrink.
- Investment in and older workforce reduces the return on investment for most firms as benefits costs increase and the marginal value of training decreases.

Ecosystem Function

- Retention and retraining focus of regional organizations. Training providers compete for federal resources with little state or local investment.
- Large employers communicate to workforce development system what needs are, ignoring the needs of smaller businesses.
- The region assumes a generally reactive posture.



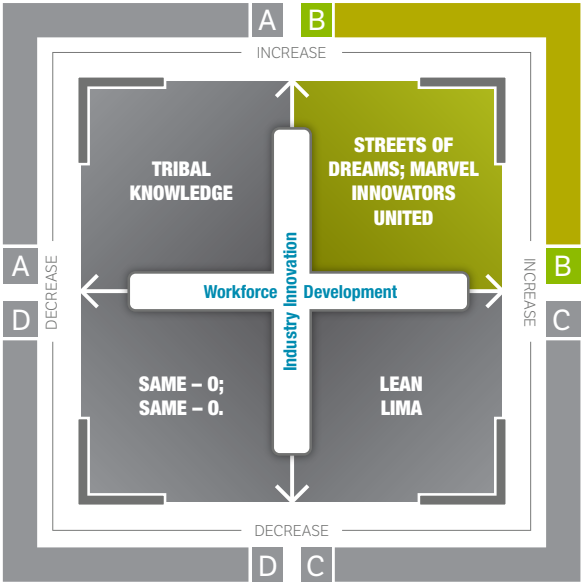
TRIBAL KNOWLEDGE - HEADLINE NEWS FROM THE FUTURE

	2015	2020	2025
Business Sector	"Old companies feed service sector."	"Companies improve processes."	"Process is king; product is same but improved."
Workforce Profile	"Old White Guys learn new tricks."	"Processes change; workers don't."	"Walkers in the workplace" – old employees transitioning out."
Ecosystem Function	"Local leaders meet with business community to understand workforce needs."	"Local colleges introduce new leadership training programs."	"Spending on senior services closing in on education spending for the first time."



5.2 SCENARIO B – STREETS OF DREAMS; MARVEL’S INNOVATORS UNITED

This scenario represents an increased investment by the region’s community leaders to both spur additional innovation as well as to meet current and future workforce needs. This suggests a shared awareness among business and community leaders of the importance of proactive strategies to both maintain the vibrancy of existing and new businesses as well as to meet some of their most vital needs. It is also a scenario that focuses on the general vitality of the region as efforts are made to encourage young professionals to both remain in the region and to relocate from elsewhere. This leads to additional family formation and a gradual reversing of population trends. The realization of this future will require significant effort on the part of all regional actors as well as the marshalling of new resources as the changes required to realize this future must also come with a related increase in the region’s capacity to anticipate and manage change.





5.2.1 STREETS OF DREAMS; MARVEL'S INNOVATORS UNITED - SCENARIO CHARACTERISTICS 2025

Business Sector

- Regional leaders speak with one voice and one mission.
- The region celebrates innovation and accomplishments.
- Intellectual property is shared within the region for competitive advantage.
- Workforce and community diversity is a non-issue.
- Investor engagement increases significantly.
- Corporate engagement strategy for localized decision-making is embraced.

Workforce Profile

- The region's per capita personal income rises above the national average.
- Population growth starts with a younger age concentration in the region.
- Innovative think tanks develop crossing company lines.
- Diversity is no longer issue in the community, as evidenced by data.
- Educational attainment is also above national average, as a result of documenting alternative learning.

Ecosystem Function

- The region has a clear STEM/STEAM focus.
- A regional clearinghouse for skill sets is deployed as needed.
- Early engagement in career options occurs in junior high.
- Community innovation think tank is also formed.
- The region is recognized for becoming a knowledge, skills, and innovation community.
- Quality of life opportunities are enhanced.
- The region considers metropolitan government or shared services.

STREETS OF DREAMS; MARVEL'S INNOVATORS UNITED - HEADLINE NEWS FROM THE FUTURE

	2015	2020	2025
Business Sector	<i>"Opportunity knocks: Companies band together to form manufacturing innovation think tank."</i>	<i>"Lima, Ohio leading nation in manufacturing developments."</i>	<i>"Innovation think tank receives ten new patents."</i>
Workforce Profile	<i>"Manufacturers and educators successfully identify skills gap; curriculum now in development."</i>	<i>"Integrated education system now completed within local schools and colleges."</i>	<i>"Lima hosts global symposium on creative manufacturing solutions."</i>
Ecosystem Function	<i>"Community leaders to create one common development platform."</i>	<i>"Washington, D.C. names Lima, Ohio as model community for collaborative growth by government, education, and business."</i>	<i>"Government coffers are overflowing; personal income taxes at all-time low."</i>

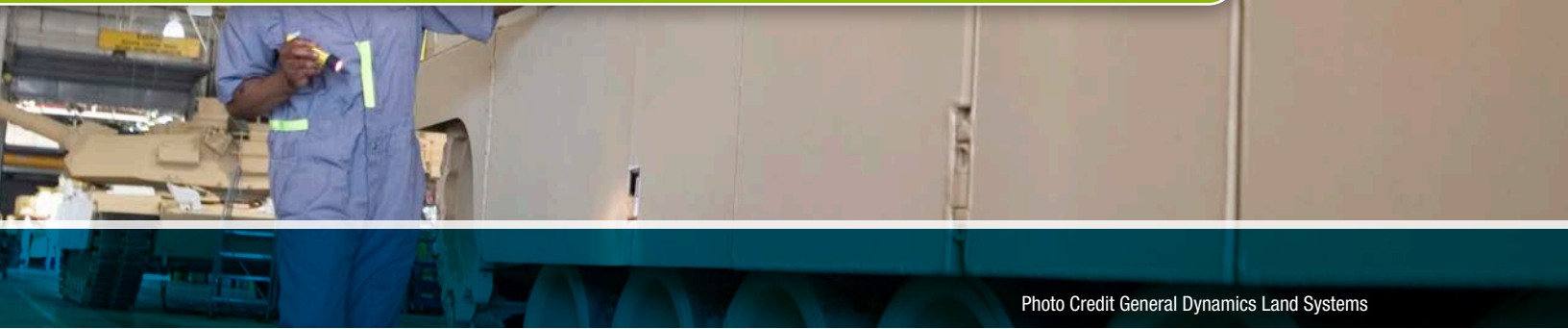


Photo Credit General Dynamics Land Systems

5.3 SCENARIO C – LEAN LIMA

This scenario is defined by an increase in regional collaboration around workforce development coupled with maintenance of the current level of effort and focus in promoting industry innovation and entrepreneurship. Within this context, the scenario describes a future where existing industries and firms continue to serve as the focus of innovation and research activities in the region. Conversely, the workforce development ecosystem innovates to both meet the needs of existing industries and to anticipate the future skills needs of these same firms as innovations developed begin to take hold. While there is little commercialization activity, the innovative processes and products that firms develop increase profitability and lead to some regional economic growth. Some young professionals may be retained in the regions as the innovative activities that occur will require new skill sets that the region's educational system is prepared to develop.

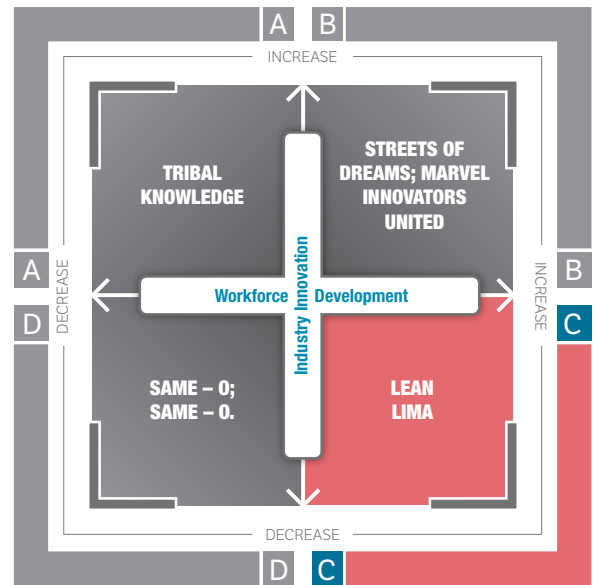




Photo Credit Ayers Inc.

5.3.1 LEAN LIMA - SCENARIO CHARACTERISTICS 2025

Business Sector

- The region maintains a solid manufacturing base.
- Retail and sales activity increase as incomes rise.
- Small business and niche retail markets also increase to meet resident needs.
- High-technology and information technology businesses also benefit from the growing demands of existing industries.
- Higher output results in lower costs and possibly fewer jobs.

Workforce Profile

- Population growth remains flat.
- Retention of younger workers (under 25) increases slightly.
- Incumbent worker training increases, as does worker retention.
- More companies rely on remote workforce delivery through information technology.

Ecosystem Function

- Community support systems increase to meet the needs of an aging population.
- Eldercare and childcare options increase.
- There are niche innovations in transportation.
- More collaborations form between industry and education.

LEAN LIMA - HEADLINE NEWS FROM THE FUTURE

	2015	2020	2025
Business Sector	<i>"Lima prepares for the future."</i>	<i>"New vehicles roll out at the JSMC."</i>	<i>"Manufacturing is still king."</i>
Workforce Profile	<i>"Unemployment is back at pre-recession levels."</i>	<i>"Lima attracts young professionals."</i>	<i>"Lima area boasts the highest workforce productivity highest in the state."</i>
Ecosystem Function	<i>"New courses roll out at postsecondary institutions."</i>	<i>"High speed rail system connects through Lima."</i>	<i>"Local colleges reach a combined 20,000 students enrolled."</i>



5.4 SCENARIO D – SAME O; SAME O

The final scenario described represents a future where resources continue to be invested in maintaining the strength of the region's industrial core. Industry innovation again occurs largely within existing firms and any entrepreneurship that does occur is focused on meeting the needs of local firms and regional markets. The workforce development ecosystem is again focused principally on worker retraining and retention. New workforce entrants are encouraged to consider traditional careers, and a focus on manufacturing and other heavy industry is also prevalent in the region's education system.

It would be a mistake to characterize this scenario as that which best represents a “status quo” state for the region. There is the potential for significant growth within this scenario space even if the industry innovation or workforce development focus does not change. Similarly, the region's leaders will still be required to develop innovative solutions to the industry and workforce challenges facing the region. As such, a regional future within this scenario space will still look sharply different in the next decade as in any of the other three scenario spaces.

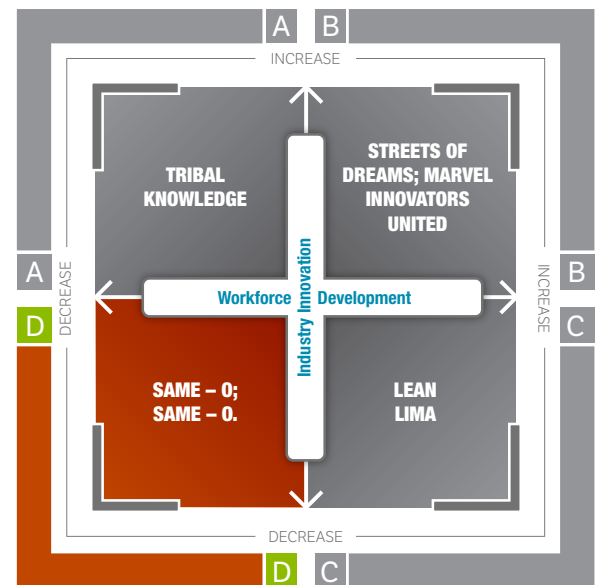


Photo Credit General Dynamics Land Systems



Photo Credit General Dynamics Land Systems

5.4.1 SAME 0; SAME 0 - SCENARIO CHARACTERISTICS 2025

Business Sector

- If no innovation occurs, where does the money come from?
- Difficulty in replacing and retaining the skilled technology positions created.
- Focus on trying to retain our existing businesses with dependence on national and global trends.
- The JSMC lacks the ability to bring in outside (commercial or foreign military) work.

Workforce Profile

- Difficulty in attracting and retaining the necessary skills along with an aging workforce puts strain on our business base.
- The region fights against an aging workforce as healthcare costs rise and primary care services increase.
- Job growth is dependent on foreign labor markets and competition among manufacturers.

Ecosystem Function

- The challenge will be if our isolated companies will work within the community for job growth or continue to be fragmented.
- Communities will continue to compete for smaller pieces of a shrinking pie.
- Infrastructure spending will be a growing concern as roadways and other infrastructure deteriorates.



LEAN LIMA - HEADLINE NEWS FROM THE FUTURE

	2015	2020	2025
Business Sector	"Manufacturing jobs are increasing, as are potholes."	"An aging population brings business to local stores; waiting rooms."	"Manufacturers large and small view consolidation as a means to survive."
Workforce Profile	"Local leaders stress STEM; technical opportunities target young people."	"'Help Wanted' signs increase as there is more jobs than workers."	"Community leaders consider broad incentives to attract new residents."
Ecosystem Function	"Regional healthcare system is ramping up for Mayor Berger's retirement."	"No depth in community engagement as most candidates in election run unopposed."	"Mayor Berger finally announces his retirement."



Photo Credit General Dynamics Land Systems

6.0 SELECTING A PREFERRED SCENARIO

Each of the four scenarios described represent plausible outcomes for Allen County’s regional future. They are based on certain expectations of the future role of the region’s economic and workforce development ecosystems and the potential for the region’s industries to innovate. While each of these scenarios may be viewed as possible, think tank participants expressed a clear preference for one of the presented outcomes.

Think tank participants were asked a series of questions regarding their preference for change along each of the scenario axes at the end of the first day’s session. They were also asked to provide their personal opinion on both where the region may be expected to head, given no change in the current economic and ecosystem composition, and where they may prefer it to grow if change was indeed possible. The aggregation of these perspectives is presented on the scatterplots below.



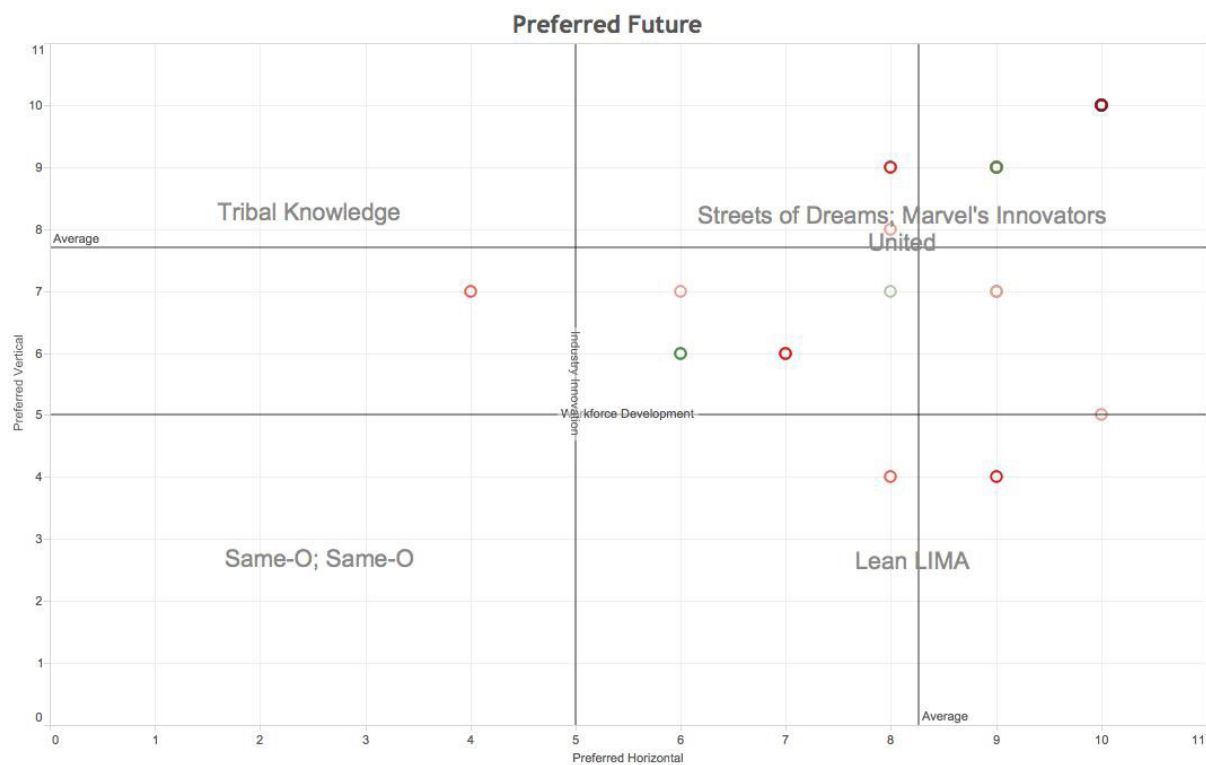
The expectations of the think tank participants are fairly evenly dispersed across each of the four plausible scenarios presented. Their perspectives appear to conclude that some additional regional



Photo Credit Ayers Inc.

collaboration will occur naturally, but that the industry mix will promote innovation from within. This produces a consensus point that is close to the equilibrium point and located in Scenario B: Streets of Dreams; Marvel Innovators United. This represents a relatively uncertain but somewhat conservative outlook for the future.

The expected future scenario identified by the think tank participants differs quite significantly from their preferred future. Again, participants were asked to locate their preferred future point in the same four-quadrant scenario space. The aggregation of these data points is presented on the scatterplot below.



The preferred future predictions presented above mark a significant change in the participant's collective mindset. We see that each of the participants independently aggregated their perspectives around Scenario B: Streets of Dreams; Marvel Innovators United. In doing so, their collective expectations have essentially eliminated Scenario D: Same-O; Same-O as a possibility and there was significant movement of all respondents to the left and up. This scenario space is again marked by significant increases both in regional collaboration around workforce development and industry innovation. What is equally striking



about the distribution of perspectives is that a significant number of respondents (6 of 26) placed their preferences at each of the two most upper-right points on the scatterplot. This suggests the presence of a great deal of optimism that the future presented in the preferred scenario can be achieved.

Another observation that must be kept in mind is that a considerable distance exists on the scenario space (approximately three point movement on both axes) between the expected and preferred scenario consensus points. This is a visual representation of the considerable distance and change that may need to be affected in the region over the next ten years to alter its future trajectory. In addition, respondents expressed a significantly higher level of overall confidence in the region's capacity to meet the expected scenario than to achieve the preferred scenario.

The visual depiction of the expected and preferred scenario points were further validated through participants' responses to a number of categorical statements on a variety of characteristics that define both the industry innovation and workforce development axes. A summary of a number of the key findings of these survey questions is presented below.

INDUSTRY INNOVATION

- When asked what the primary focus of any regional industry diversification effort should be, 60 percent of participants agreed that the region should look to build a balanced mix of traditional and new economy industries.
- Thirty-eight percent of participants further suggested that industry diversification could best be achieved through an entrepreneurial-based strategy that supports the development of new "home grown" businesses.
- Innovation was also identified as one of the key drivers of industry diversification. Fifty percent of participants believe that "we need to embrace the next generation of innovators and entrepreneurs to help our leading businesses grow."




Photo Credit Ayers Inc.

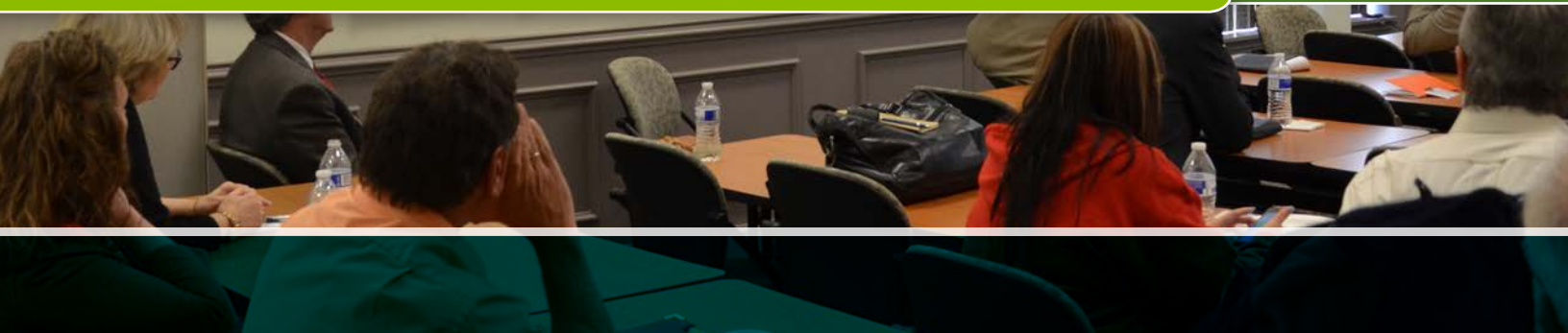
REGIONAL COLLABORATION

- There was some disagreement among participants as to the most appropriate future alignment of the workforce development ecosystem. While a large majority of participants believed that that worker retraining was an appropriate strategy, 46 percent of participants agreed that this should take place for dislocated and adult jobseekers, while 35 percent preferred to enhance this practice with an added focus on career exploration.
- There is a clear desire (65 percent) among the participants for the region to develop a more integrated service provider ecosystem that can anticipate and respond to emerging challenges and opportunities.
- Similarly, a majority (56 percent) of participants want the region's elected officials to pursue an orientation that establishes the region as a state and national leader in collaboration and industry diversification.

Taken in sum, the average of all responses to these questions largely validates the preferred scenario consensus point described earlier. Participants may have expressed a perspective on industry diversification and innovation that is somewhat more conservative than previously, but their expectation of the prospects for workforce development and regional collaboration is slightly more optimistic.

What is more important is that the responses to these questions validate two important conclusions regarding the think tank participants and their perceived role in shaping the region's future. First, they believe that change is both needed and feasible. Second, and more importantly, they believe that they and the organizations they represent can play a vital role in the shaping of that future. Each of these perspectives is an important precondition to affecting change at any level.

Finally, the findings presented above largely validate the perspectives of the broader region as suggested in the prior work leading up to the think tank event. This suggests that the perspectives of the think tank participants are not merely indicative of their personal preferences, but rather the outlook of the region, as a whole.



7.0 DEFINING THE PREFERRED SCENARIO

The first day of the Strategic Planning Think Tank and all of the precipitating analysis leading up to it was focused on the definition of a range of plausible scenario outcomes and the selection of a preferred scenario space. The second day of the think tank event shifted the participant's focus to further define the preferred scenario of Streets of Dreams; Marvel's Innovators United and to begin to identify strategic actions that could affect the changes needed to achieve it. Participants reviewed the basic parameters of the preferred scenario, and were reminded that the pursuit of the preferred future may require some stakeholders to temper expectations while others will be challenged to expand their horizons. This is true in any consensus-building exercise.

The think tank participants were asked to self-select and organize around the following strategic areas:

- Regional and Local Collaboration and Private Sector Engagement
- Economic Development Structure and Alignment
- Workforce Development Structure and Alignment
- Industry Innovation and Entrepreneurship

This division allowed each of the participants to share his or her specialized technical knowledge and experience with others in order to craft a comprehensive and detailed vision of the preferred future. Participants were first asked to identify the key characteristics of each of these issue areas at one, five, and ten year intervals. Next, they were tasked with the formation of a series of strategic recommendations of actions that could be taken in the next twelve to eighteen months by stakeholders in the region to affect the trajectory towards the preferred future. All issue groups were also asked to consider the collaborative framework and partnerships between public and private sectors interests that may be needed to implement these strategies.

The following section identifies the ten-year characteristics of each issue area, as defined by the participants of the Strategic Planning Think Tank.



7.1 ISSUE AREA CHARACTERISTICS

7.1.1 LOCAL AND REGIONAL COLLABORATION AND PRIVATE SECTOR ENGAGEMENT

The first workgroup addressed an issue that was clearly identified in the network mapping exercises as well as in a number of pre-workshop conversations. The region has a long history of fostering close relationships and collaboration between public sector and community actors. However, the same level of collaboration does not traditionally extend into the private sector, nor are there many examples of effective public private partnerships. The workgroup chose to begin their efforts by focusing on local best practices and expanding the scope of a regional definition.

These are their one, five, and ten year objectives.

1-Year

- Leverage groups such as the Auto Task Force and Task Force LIMA to expand into further supplier relationships, a larger radius, and more industries. Key characteristics include:
 - Continuity of effort
 - Schedules
 - Calendars
 - Meetings
- Create opportunities for broadening eco-system connections in organizational design and program, data-driven with external expertise, led by businesses as demand force/drive, to make intense conversations that advance efforts.
- Geography – choose Putnam and Auglaize Counties as initial focus.

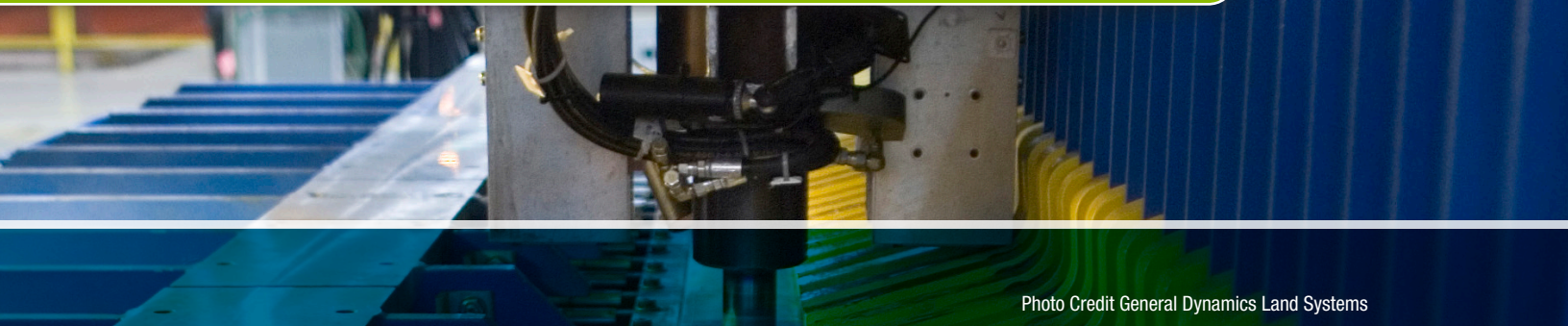


Photo Credit General Dynamics Land Systems

5-Year

- Specify crossover services that lessen restrictions of structures that are boundary-driven to address labor shed needs in 45-60 mile radius, i.e. confining political and services structures.
- Geography – expand into Van Wert and Hardin Counties.

10-Year

- Result is regional cohesion and common development objectives.
- Systematic, broad-based set of relationships with common goals of region, including:
 - Innovation
 - Workforce development
 - Service development as needed

7.1.2 ECONOMIC DEVELOPMENT STRUCTURE AND ALIGNMENT

Two of the remaining three issue workgroups considered ways to build collaboration between economic and workforce development stakeholders in the region. This was identified as one of the region's key organizational issues in both survey work and the network mapping platform. The formation of a collaborative ecosystem both between jurisdictions and functional areas will eliminate duplication and fill any gaps in service that may arise.

The focus of the economic development ecosystem workgroup's visioning discussion is built on the definition of roles and responsibilities among actors in the region, as well as the formation of a strong regional identity. Achieving both of these goals will lead to a region with clearly defined goals and is prepared to anticipate any future challenges.

Their one, five, and ten-year objectives are outlined below.

1-Year

- Initial industrial development and economic development resources develop a seamless one stop construction review for best practices.



5-Year

- Identify local innovators and entrepreneurs; innovation needs.
- Support research needs of clusters to identify entrepreneurial opportunities.
- Identify and categorize existing supports and needed supports for entrepreneurship.
 - Finance
 - Technical Assistance
 - Mentorship
- Recruit potential entrepreneurial leaders in clusters.
- Develop and document transferable skills to entrepreneurship.
- Innovation/entrepreneurship – define process impact or commercialization.
- Economic development – focus on politics, incentives, infrastructure, job ready sites.
- Develop a model that documents support for innovation and entrepreneurship.

10-Year

- Economic development structure to focus on regional collaboration for entrepreneurship and innovation building upon local infrastructure assets and regional economic development cooperation.
- The region has a strong and modernized infrastructure including rail, roads, water, and electric.
- Potential gaps may include: startup support, job ready sites, gas supply, and how to harness local college graduates.



7.1.3 WORKFORCE DEVELOPMENT STRUCTURE AND ALIGNMENT

The challenges faced by the workforce development ecosystem in building stronger collaborations differ from those of their counterparts in the economic development community as interests are inherently defined on a regional basis (i.e. the workforce development area model). There have been a number of efforts to connect industry and training providers in the past, such as the West Central Ohio Manufacturers Consortium and Link LIMA. However, there are still significant disconnects between training providers and in bringing career exploration into earlier levels of education. The workgroup assigned to this issue decided to focus on the development of a more integrated infrastructure that brings business, education and workforce development together. The partnerships that form from this model are essential in that the workforce needs of businesses have historically been communicated poorly to educators.

The statements below describe their ideal characteristics and objectives at a one, five, and ten year horizon.

1-Year

- Link LIMA rolls out.
 - Increase advertising and community knowledge.
 - Focus on manufacturing.
 - Get information on employer needs.
 - Feed data to educational institutions including K-12 and technical colleges.
 - Learn skilled trade needs from AFL/UAW (labor unions).



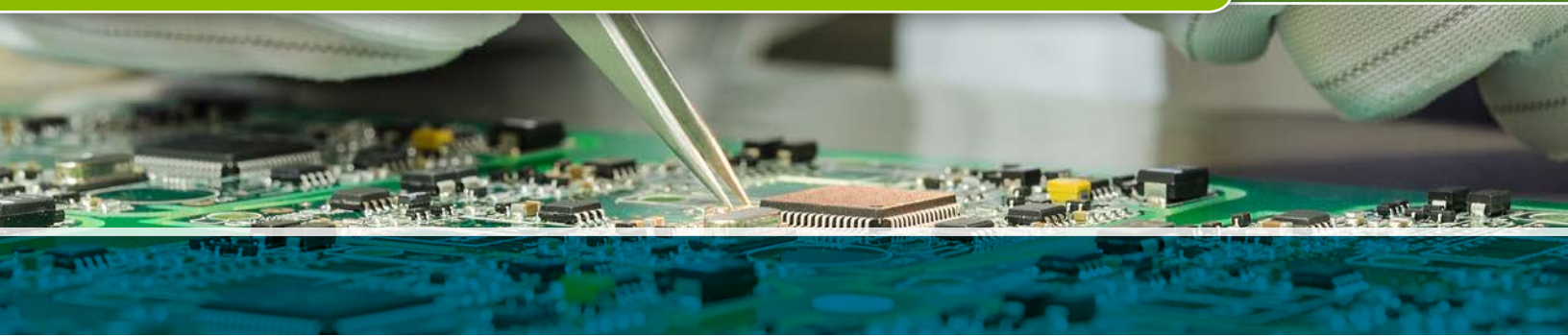
5-Year

- Encourage local careers and opportunities among students.
- Expand model to all industry sectors.
- Build and document a robust portfolio of training programs.
- Create apprenticeship programs with career tech schools.
- Require all local K-12 schools to include career assessments.
- Promote all job opportunities.
- Improve educational curriculum linkage and credit certification.

10-Year

- The region has a nationally-recognized and certified apprenticeship program.
- Local employers find rich pipeline of talent.
- Competency-based education is accepted regionally and statewide.
- Local children are excited to return to Lima.





7.1.4 INDUSTRY INNOVATION AND ENTREPRENEURSHIP

The final workgroup focused their energies on the second major issue and opportunity facing the region – industry innovation and entrepreneurship. There has historically been a strong tradition of industry innovation in the region and that tradition is carried on by organizations such as the Ohio Energy and Advanced Manufacturing Center. The challenge facing the region, as recognized by the workgroup is how to capitalize on this facility and instill a “maker” culture throughout the region.

These are their one, five, and ten-year objectives.

1-Year

- Center for Innovation Excellence formed.
 - Support and funding identified
 - Website and development of resources
- Connect with elected officials to re-enact 3rd frontier development program at OEAMC.
- Promote youth technology and innovation.
 - Establish focus groups of entrepreneurs and industry leaders.
 - Identify all applicable youth-focused programs.
 - Identify funding streams.
- Remove government obstacles at local, state, and national levels.
 - Reduce/streamline the number of approvals.
 - Increase awareness of public funding and assistance.
 - Form action group to maintain advocacy efforts.
 - Advocacy to state and federal government grows.
 - Grow the education and public awareness within the community.



5-Year

- Companies, schools, parents, and economic development groups all fostering goals.
- Focus groups matured to the point that ideas are being implemented.
- Sharing of expertise by companies through the center.
- Funding streams established.
- Local “shark tank investors” are identified and active.

10-Year

- Students have become business leaders in the community.
- Other cities and state governments recognize the model as a best practice.
- Center is the go-to source for innovation technology.
- National recognition and participation in international studies and symposia.
- Increased business startups in area.
- People and companies are actively coming into the community.





8.0 CONCLUSION AND NEXT STEPS

Allen County Ohio has demonstrated through its history that it possesses a strong work ethic, a desire to innovate, and great resiliency. Each of these are characterized in the Joint Systems Manufacturing Center. The region has survived and thrived through its share of economic challenges through the strength of a number of community partnerships and a vibrant private sector. While the region does face considerable demographic and workforce challenges in its immediate future, conversations are already underway to identify innovative solutions to meet these head on.

The perspectives of the workshop participants and community leaders shared in this report suggest that the region recognizes the need to develop collaborative solutions to meet the innovation and workforce needs of its key industries. It also views the present moment as a critical turning point to reshape the trajectory of future trends. By adopting a proactive stance that anticipates challenges, identifies key assets, and coordinates efforts, the region may effectively realize its preferred future outcome.

Many of the findings of the strategic planning think tank workshop and related efforts will be further distilled into the formation of a rapid action plan for the region. This report will contain a series of targeted actions and initiatives identified by workshop participants and community stakeholders as being of critical importance to bringing change in each of the four functional areas described through the workshop process. These recommendations will then be submitted to the U.S. Department of Defense Office of Economic Adjustment and other funding entities for consideration. The conversation will also continue among the region's leaders as to how best to effectively guide Allen County into a prosperous future.

9.0 ABOUT FUTURE IQ PARTNERS

Future iQ Partners is a market leader in the development and application of scenario planning; network analysis, industry and regional analysis, and community engagement and capacity building. We specialize in applying innovative tools and approaches to assist organizations, regions and industries shape their economic and community futures. We take a practical, hands-on approach to working with groups and communities. With over a decade of business experience, the company has grown to have a global clientele spanning three continents.

To learn more about Future iQ Partners, and our recent projects visit www.future-iq.com or by email at info@future-iq.com

REPORT AND SCENARIO PLANNING WORKSHOP PREPARED BY:



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As CEO of Future iQ Partners, David specializes in creating future planning approaches for the use in regional, community and organizational settings. David has worked in the field of organizational and regional economic and community planning for over 20 years. His work in community and economic development has earned his work international, national and state awards.

10.0 ABOUT TASK FORCE LIMA AND THE ALLEN COUNTY DEFENSE INITIATIVE

This study is one of many to be produced under an award issued by the U.S. Department of Defense Office of Economic Adjustment to assist Allen County and Task Force LIMA in developing strategies to ensure the economic health and vitality of the Joint Systems Manufacturing Center and the broader region.

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