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MIDDLE GEORGIA CHARRETTE AND REGIONAL PLANNING INITIATIVE

REGIONAL ACTION PLAN

December 2018



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This report presents the Regional Action Plan for the Middle Georgia Region. This report has been produced as part of the overall work associated with the Middle Georgia Charrette and Regional Planning initiative.



This report was prepared under contract with Georgia Department of Economic Development (GDEcD), with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of Future iQ and local stakeholders and does not necessarily reflect the views of the Office of Economic Adjustment or the Department of Defense.

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The planning process has allowed regional stakeholders to work together to explore important topics, which has helped strengthened the regional networks

1.0 INTRODUCTION – REGIONAL ACTION PLAN

The Georgia Department of Economic Development (GDEcD) is the state agency responsible for both attracting and growing businesses within Georgia. As part of this effort, the GDEcD's Workforce Division and Center of Innovation for Aerospace obtained a grant award from the Department of Defense's Office of Economic Adjustment in order to study current Department of Defense contract work that is being conducted in Georgia. One of the projects that has resulted from this grant is The Middle Georgia Charrette and Regional Planning initiative.

The Middle Georgia Charrette and Regional Planning initiative includes the 11 counties within Middle Georgia. The initiative has aimed to build on the existing defense industrial base and explore opportunities to diversify the regional economy away from a dependence on Department of Defense contracts. Currently Robins Air Force Base (RAFB) is a critical industry in the region employing, as of 2016, 21,864 personnel. The intention of this initiative has been to assess Middle Georgia's strengths, and determine opportunities to develop business in alternative markets.

The project has aimed to produce outcomes at two main levels:

- **Strategic and tactical action plan:** The planning process was designed to produce agreed defined strategic and tactical steps to activate asset opportunities in the region.
- **Ecosystem development:** The project was designed as a collaboration building and planning process. This included a focus on network and shared vision development, including innovation ecosystems; workforce and education systems; and leadership collaboration.



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KEY THINGS TO NOTE:

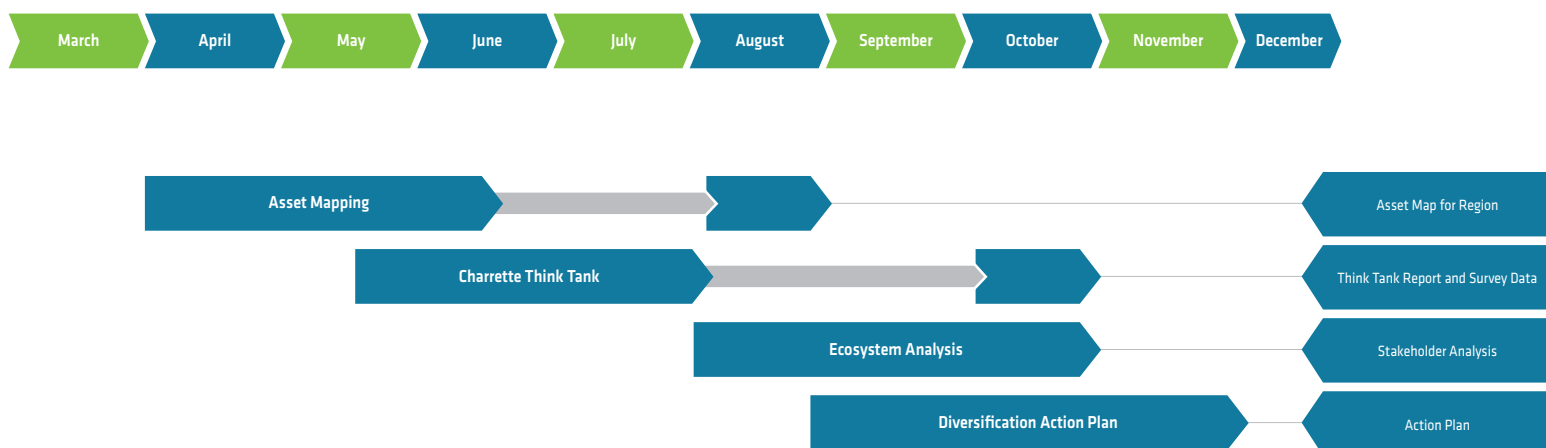
- The stakeholder planning approach has resulted in deep thinking about the future of the region and has explored the key regional assets.
- The planning process has revolved around a core group on 50-70 stakeholders who have participated in many of the sessions, and therefore provided continuity throughout the process.

1.1 PROJECT TIMELINE

The Regional Action Plan, and associated work, is the culmination of several months of detailed stakeholder engagement. This work has been defined by a strong data-driven approach combined with an extensive stakeholder engagement methodology. This has included Asset Mapping, Stakeholder surveys, Think Tank and Reconvened Think Tank workshops, Engagement Sessions and Network Mapping. The Regional Action Plan brings together the insights gained through these approaches to produce a locally driven objective roadmap for the future, that identifies key initial action steps.

The eight-month planning process has identified five initial key action steps and has produced foundational analysis on regional assets

Middle Georgia Charrette and Regional Plan | February 2018 - November 2018



DataInsight

KEY THINGS TO NOTE:

- The planning process included four critical streams; asset mapping, future-oriented think tanks, ecosystem analysis and the production of a strategic action plan.
- The Charette Think Tank was a pivotal step in the planning, as it allowed the key stakeholders to build a framework to explore future options and implications.



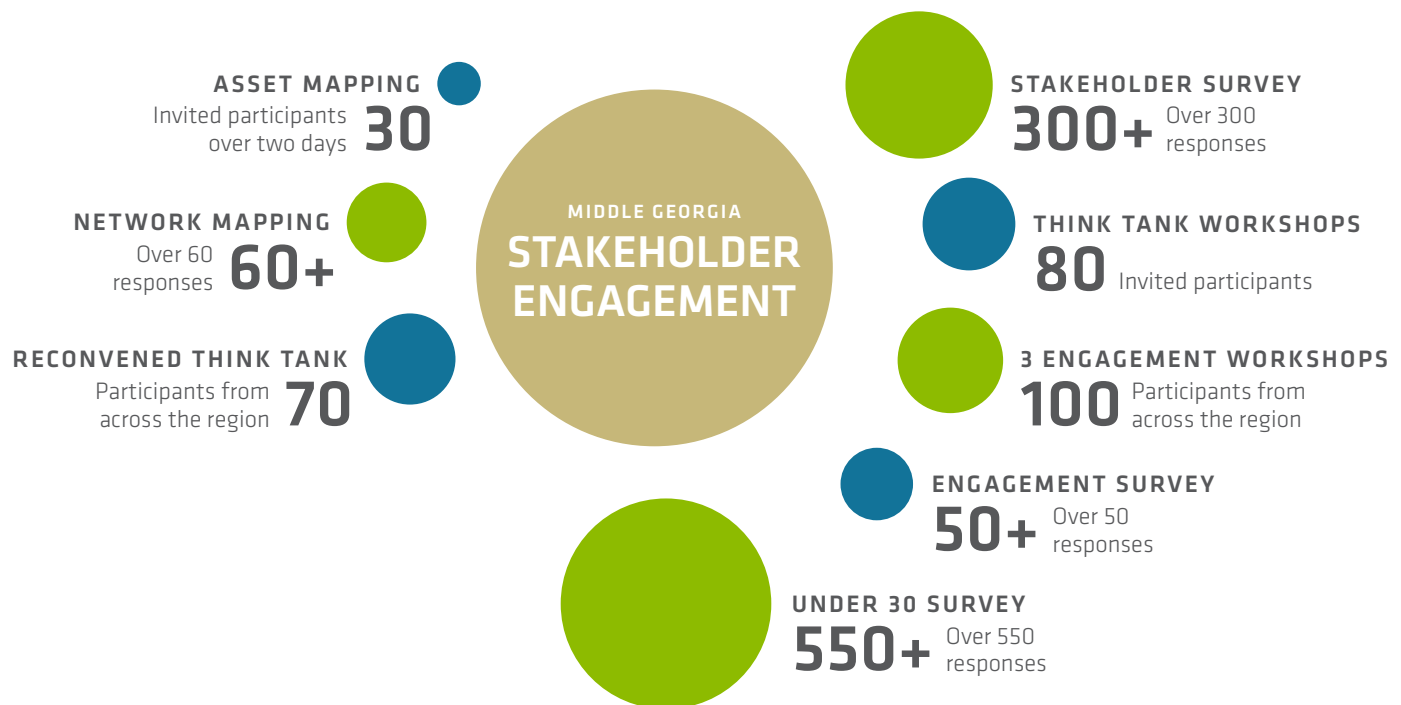
1.2 STAKEHOLDER DRIVEN PROCESS

Throughout the initiative, there has been considerable work carried out in order to engage stakeholders and provide the opportunity for robust input. This work included:

- Initial Region-wide Stakeholder Survey
- Asset Mapping Workshops
- Think Tank Workshop and Think Tank Report
- Stakeholder Engagement Sessions and Stakeholder Engagement Report
- Data Visualization of Survey results
- Under 30's survey
- Network Mapping
- Reconvened Think Tank

The stakeholder engagement process collected input from a range of voices including elected official, economic development professionals, educators, youth and military personnel

Stakeholder engagement metrics



KEY THINGS TO NOTE:

- The youth survey collected input from over 500 under 30's across the region. This provides a valuable insight into the perspectives of the emerging population cohort.
- Representation was sought from all 11 counties, especially in the core planning workshops.

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1.3 UNDERPINNED BY OBJECTIVE DATA-DRIVEN ANALYSIS

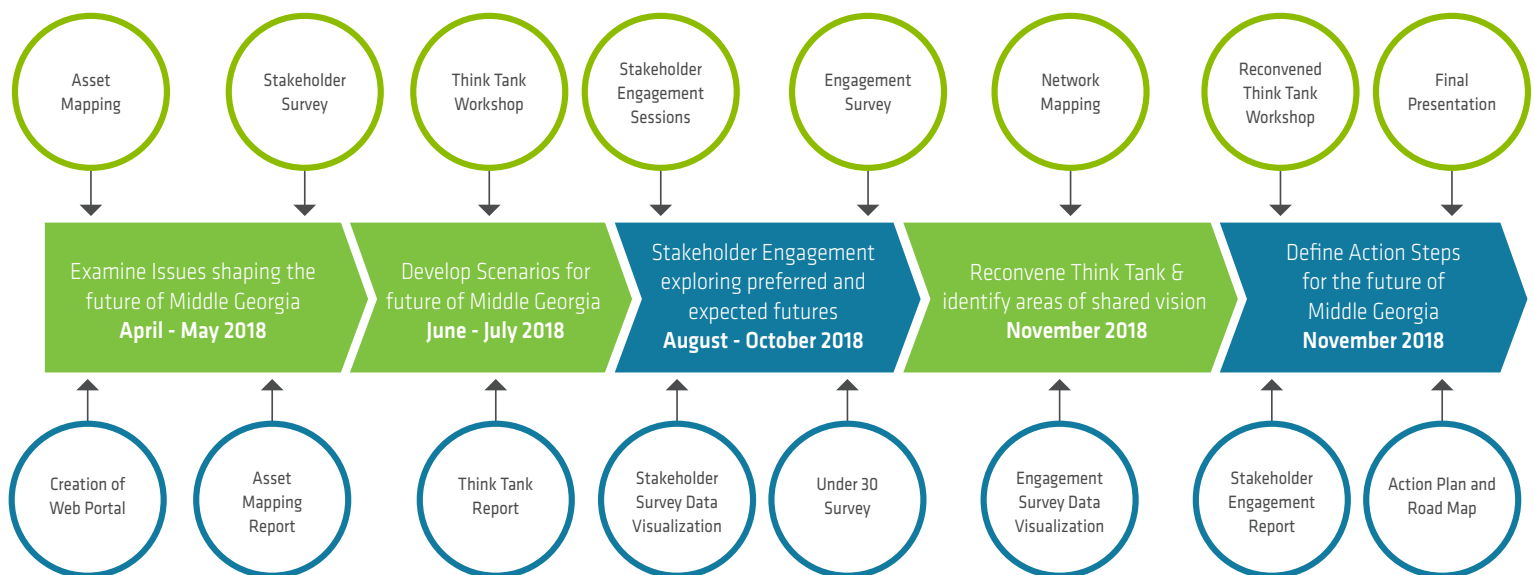
The extensive stakeholder-driven process was underpinned by objective data-driven analysis. This approach helps draw together the collective insight and intelligence, and then to be able to analyze and visualize the data in an objective manner. This process includes a methodical building of layers of insight and understanding which helps identify consensus-based strategic actions.

Throughout the project, data was collected and presented in the following manner:

- Project web portal that allowed access to key information
- Publication of the Think Tank report
- Asset mapping summary report
- Survey data was presented in a data visualization platform on the portal
- The Stakeholder engagement report was produced which summarized results from all workshops

The planning process has collected and presented a substantial body of information about the assets in the region, and the future aspirations of the stakeholders

Project engagement and data presentation stages



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KEY THINGS TO NOTE:

- Three main reports were produced, including the Think Tank report. Stakeholder Engagement report and this final action plan.
- Three main surveys were conducted, including the initial regional survey, stakeholder survey and the under 30's survey.
- Ecosystem mapping included the network mapping work, and preliminary regional asset mapping.



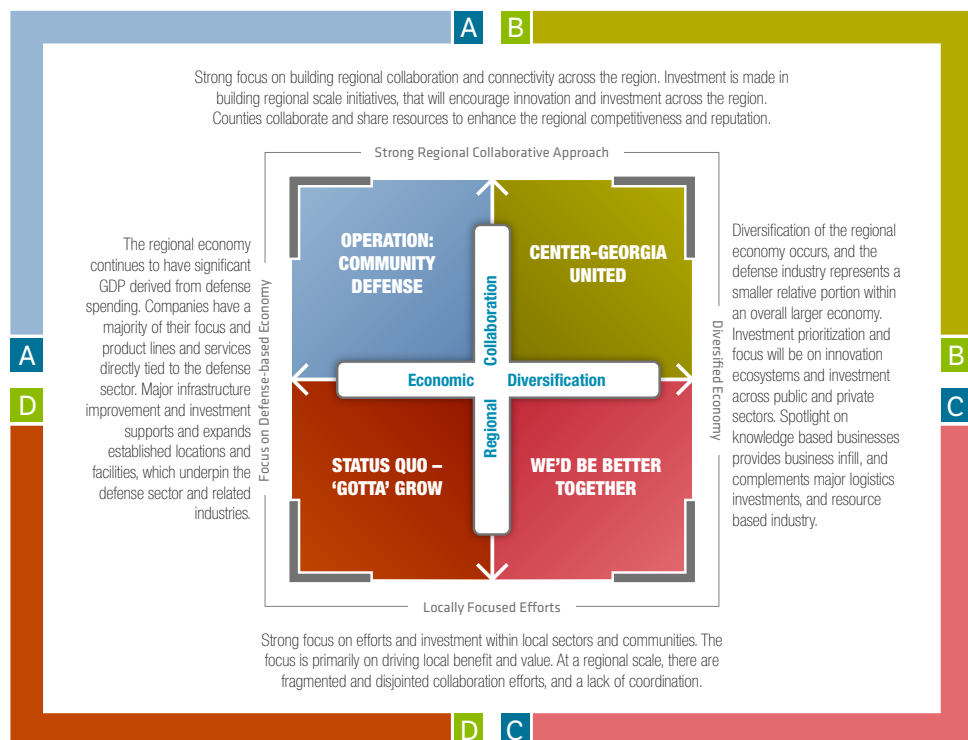
The scenario planning undertaken as part of the Think Tank created four plausible versions of the future, based on varying degrees of collaboration and economic diversification

2.0 CREATING SHARED VISION AND DIRECTION

The planning process used a scenario planning methodology to explore future directions and implications. This approach helps understand the full range of impacts and consequences of various decisions.

2.1 SCENARIO FRAMEWORK

The following diagram was developed with the regional stakeholders. It creates four plausible versions of the future, built around the main themes of 'Regional Collaboration' and 'Economic Diversification'. These detailed scenarios are reported in the Think Tank report that can be accessed at: <http://lab.future-iq.com/middle-georgia-economic-alliance/>



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KEY THINGS TO NOTE:

- The four scenarios provide a glimpse into the future. In this way, they allow an exploration of the potential of different future pathways.
- These scenarios were described by the Think Tank participants. They were based on the scenario framework and participants insights about the future regional characteristics.

2.2 ALIGNMENT AROUND PREFERRED FUTURE

A key outcome of the planning process was to identify a shared vision for the future, which could then be supported by strategic actions. Using the scenario framework, participants in the Think Tank and subsequent engagement sessions were asked to identify their expected and preferred futures. These were located within the 100-cell scenario matrix. The following diagram shows the remarkable concentration of shared views about the location of the preferred future. The 'Center-Georgia United' future is one where there is a high level of regional collaboration and a strong push towards economic diversification.

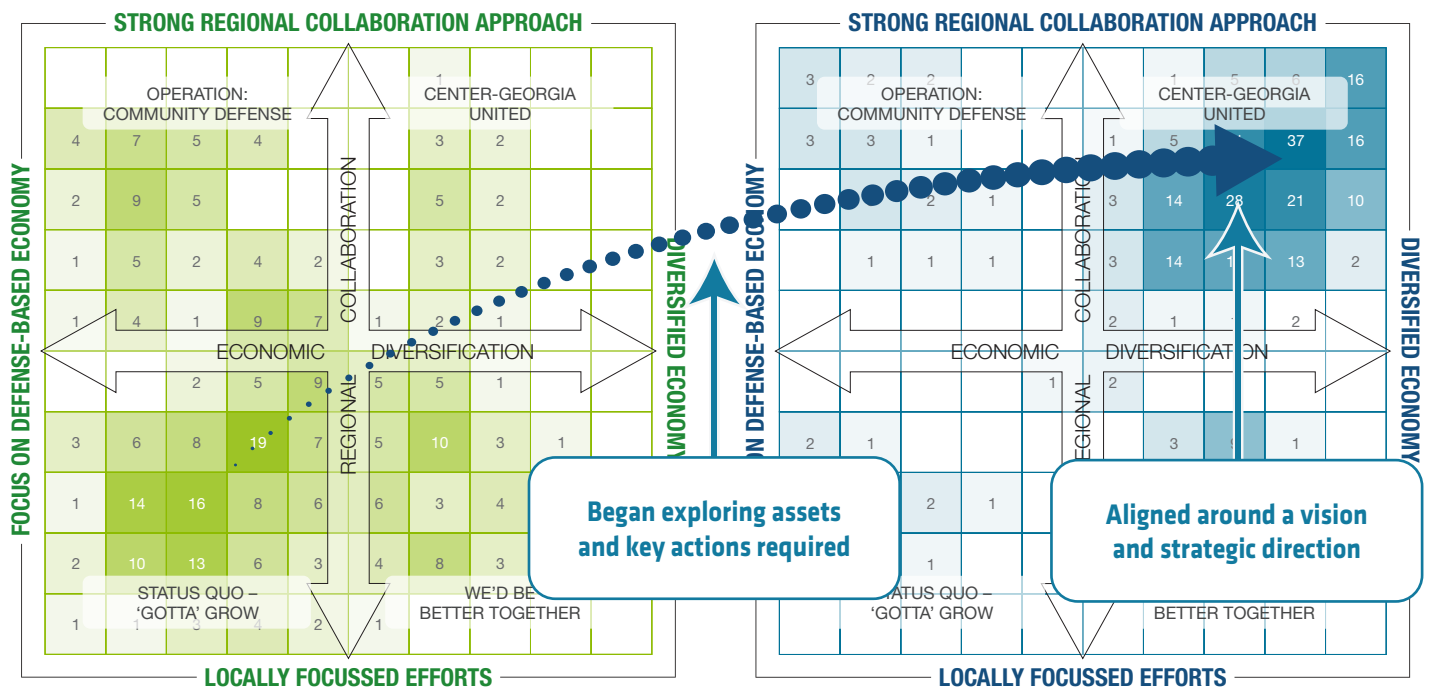
The planning process has allowed regional stakeholder to align around a vision and strategic direction. They also began exploring the actions required to close the gap between the expected and preferred futures

MIDDLE GEORGIA CHARRETTE AND REGIONAL PLANNING HEAT MAPS

EXPECTED FUTURE – 2030

MIDDLE GEORGIA CHARRETTE AND REGIONAL PLANNING HEAT MAPS

PREFERRED FUTURE – 2030



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KEY THINGS TO NOTE:

- The planning process was very successful in helping the stakeholders align around a regional vision. Over 90% of responses for the Preferred Future occur within the 'Center-Georgia United' quadrant.
- Throughout the planning work, key assets and actions were identified that will help lay out the road map to achieve the preferred future.

2.3 IDENTIFIED REGIONAL CHALLENGES

Throughout the planning process, there were discussions about the gaps and challenges that the region faces. This data was collected through surveys and in workshop sessions. The data identifying these challenges is published in the Think Tank report, Stakeholder Engagement report, and the Asset Mapping report. The identified immediate regional challenges can be distilled into the following topics:

- Lack of dynamic collaborative leadership
- Potential over-dependence and reliance on Robins Air Force Base
- Perceived lack of regional collaboration
- Workforce skills and talent pipeline challenges
- Limited speed and scale of moving from innovation to commercialization
- Livability and quality of life in region
- Lack of mojo

The Middle Georgia region has a series of identified challenges. This action plan addresses a number of these well understood challenges

The Challenges



Lack of dynamic collaborative leadership



Potential over-dependence and reliance on RAFB



Perceived lack of regional collaboration



Workforce skills and talent pipeline challenges



Limited speed and scale of moving from innovation to commercialization



Livability and quality of life in region



Lack of mojo



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KEY THINGS TO NOTE:

- The solutions to the challenges are well within the capacity of the region. In most cases it will require working together in new ways, activating assets and shifting mindsets.
- The challenge of a 'Lack of Mojo' is somewhat the consultant's perspective. This points to the lack of vitality and sense of urgency. The future offers abundant opportunity for the region, but the leaders and stakeholders will need to grasp these opportunities with enthusiasm.

2.4 IDENTIFYING THE REGION'S NATURAL, TECHNOLOGICAL AND INTELLECTUAL ASSETS

As was discussed at the Think Tank, emerging macro trends and economic forces are rapidly reshaping regions and local economies. To stay relevant and competitive, regions must respond in new and more agile ways. Understanding and activating local assets is a key strategy. During the asset mapping workshops held as part of the planning process, local experts identified asset concentrations in eight critical areas:

- Software development, application, maintenance and security
- The 'research to innovation to commercialization' continuum
- Water resources and distribution
- Adaptive manufacturing maintenance and sustainment
- Intellectual capital and talent
- Veteran Center of Excellence
- Film and digital entertainment
- Healthcare and research

The Middle Georgia region has significant unique concentrations of excellence. Leveraging these strengths provides a fast track to drive economic diversification and growth

Of these critical areas, the asset mapping workshops identified immediate opportunity for catalytic work in the following:

- **Software and cyber security.** It was identified there is a very logical opportunity to expand this 'island of excellence' into broader commercial activity and economic diversification, especially building off the concentration of expertise around the Robins Air Force Base.
- **Research – Innovation – Commercialization continuum.** Potential 'islands of excellence' were identified around: Healthcare and medical devices; Aerospace, drones and defense applications and Kaolin and mining companies
- **Adaptive manufacturing maintenance and sustainment.** Manufacturing maintenance and sustainment is an emerging industrial capacity in Middle Georgia. Adaptive manufacturing, 3D printing (additive manufacturing) capability, corrosion testing and reliability focused maintenance are potential regional strengths.
- **Intellectual capital and talent.** The Middle Georgia region has a significant concentration of higher education institutions. Enrolment figures for 2017 indicate over 30,000 students across a range of technical and university campuses.



KEY THINGS TO NOTE:

- Middle Georgia has the potential to be a significant center of excellence for adaptive manufacturing maintenance and sustainment.
- Education is a key regional economic driver. In April 2017, a Board of Regents of the University System of Georgia report estimated that 2.2 local jobs were generated by every job in the institutions.



The six strategic pillars were identified from the engagement work with stakeholders. These underpin the preferred future, and represent the main areas for action over the short and long term

3.0 KEY STRATEGIC PILLARS

The concept of strategic pillars is that there are key strategies that underpin and support the vision. These were identified through the stakeholder engagement work and represent the repeated themes that emerged throughout the process. The pillars are organized to support the scenario axes as follows:

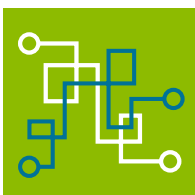
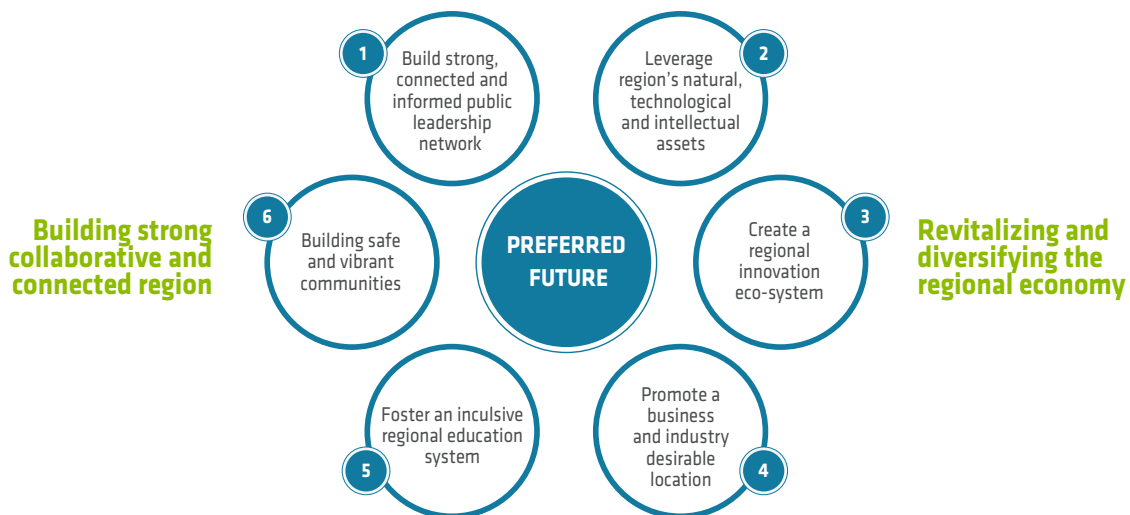
Revitalizing and diversifying the regional economy

- Leverage the region's natural, technological and intellectual assets
- Create a regional innovation eco-system
- Promote a business and industry desirable location

Building strong collaborative and connected region

- Build strong, connected and informed public leadership network
- Building safe and vibrant communities
- Foster an inclusive regional education system

Key Strategic Pillars that support the Preferred Future



FUTURE INSIGHTS:

- A key issue identified in the engagement workshops was the need to create a forward-looking innovation focus in the region, to unlock some of the existing assets.
- The fastest way for the Middle Georgia region to progress will be to harness existing strengths and build a critical mass through collaborative approaches.

3.1 TARGET PILLARS FOR IMMEDIATE ACTION

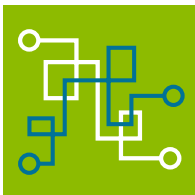
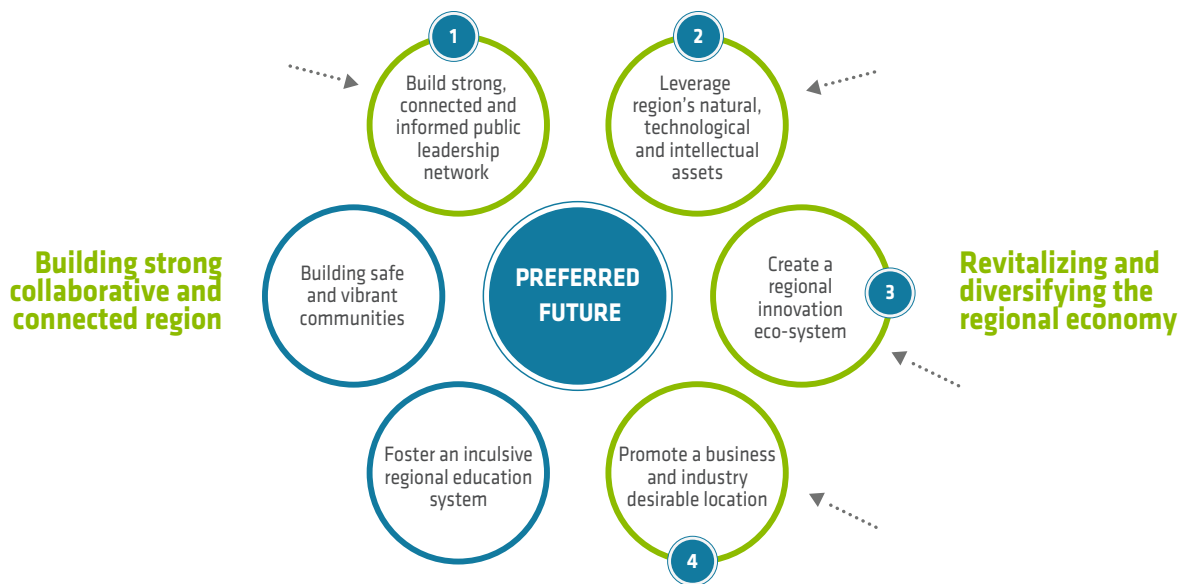
In designing the regional Action Plan, consideration was given to the key initial steps required. In addition, consideration is also given to other initiatives and work being undertaken in the region. It was identified that there are four of the pillars that need to be targeted for immediate action as part of this Regional Action Plan.

These target pillars are:

- Build strong, connected and informed public leadership network
- Leverage the region's natural, technological and intellectual assets
- Create a regional innovation eco-system
- Promote a business and industry desirable location

The four key pillars are perceived to be where the most immediate opportunities lay. Each of these pillars can help trigger new thinking and activities in the region, in the short and medium term

Target Pillars for immediate action



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FUTURE INSIGHTS:

- The survey data suggests that building vibrant communities and an inclusive education system are important pillars. However, they represent areas that require medium and long terms solutions. In this Action Plan, emphasis is given to the areas that can help produce change in the short term.
- The most important opportunity in the region will come from building new 'ecosystems' that support collaboration and innovation. This will help drive faster change and build the critically needed momentum.

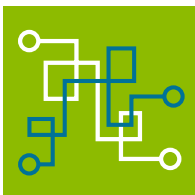
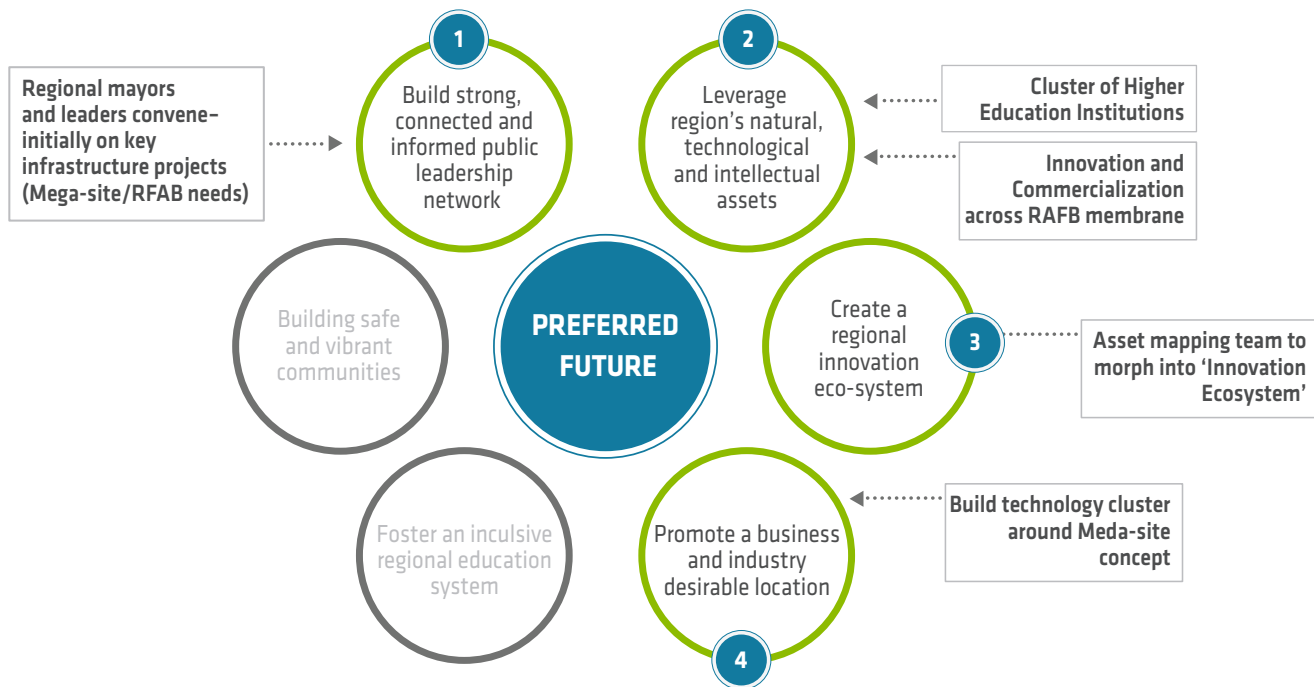
3.2 IDENTIFYING 5 KEY STRATEGIC ACTIONS

The Asset Mapping work and the reconvening of the Think Tank helped to identify five key strategic actions, that will support the pillars. These actions were ones that could be implemented quickly and would continue the work commenced in the regional planning. The five immediate were identified as:

- Convene Mayors and other leaders from the region – initially to focus on key infrastructure projects (Mega-site / RAFB needs)
- Form a cluster of Higher Education Institutions to drive innovation
- Establish a working group to catalyze innovation and commercialization across RAFB membrane
- Reconvene the asset mapping team to morph into ‘Innovation Eco-system’
- Build technology cluster around Mega-site concept

The five actions were all identified as being achievable in the short term. These actions continue the important ecosystem building work commenced in the regional planning process

5 Key Strategic Actions



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FUTURE INSIGHTS:

- The five key actions all share a common principle of convening existing actors in the region, to focus collaborative efforts on priority topic areas.
- Each action has an ‘eye on the future’. They are designed to take advantage of the technical advantage provided by the industries clustered around the Robins Air Force Base, and to position the region for emerging identified opportunities.

3.2.1 STRATEGIC ACTION: CONVENE MAYORS AND LEADERS FROM ACROSS REGION

Regional leaders banding together will help build the clout and the shared decision making needed to be successful in today's globalized world. Building economic, political and financial strength through collaboration is just common sense.

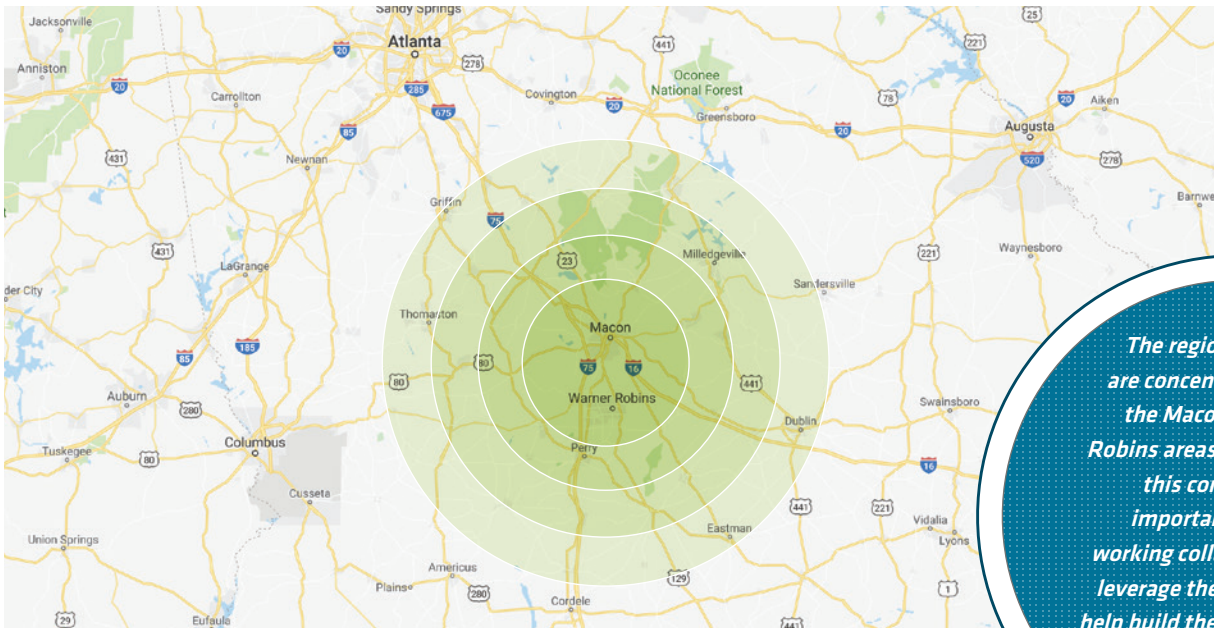
RECOMMENDED ACTION: Convene the Mayor and leaders from across the region to focus on collaborative solution-based topics.

- This group should initially focus on key regional infrastructure projects (Mega-site / RAFB needs etc).
- They should work to establish a sense of shared purpose.
- It is important to commit to building some regional clout – helping build critical mass and increase the speed of decision making.

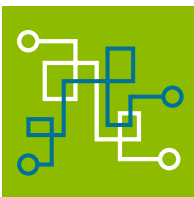
1

STRATEGIC PILLAR

Build strong, connected and informed public leadership network



The region's key assets are concentrated around the Macon and Warner Robins areas. Recognizing this concentration of important assets, and working collaboratively to leverage these assets will help build the clout needed to attract resources and investments



FUTURE INSIGHTS:

- Technological advancement as part of the new industrial revolution is driving the speed of change. This means that regional economies must be able to adapt faster, and leaders must be able to respond quickly. This accelerated speed of decision making will require close working relationship between the region's leadership groups.

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- The Middle Georgia region is ideally positioned, given its proximity to Atlanta and main transport corridors. The region needs to combine its strengths to develop heft and clout.

3.2.2 STRATEGIC ACTION: FORM CLUSTER OF HIGHER EDUCATION INSTITUTIONS

The asset mapping work identified the Middle Georgia region has a significant concentration of higher education institutions. This represents a core concentration of intellectual capital and talent.

RECOMMENDED ACTION: Convene Higher Education Institutions to explore how they can connect together and help drive the regional ecosystem:

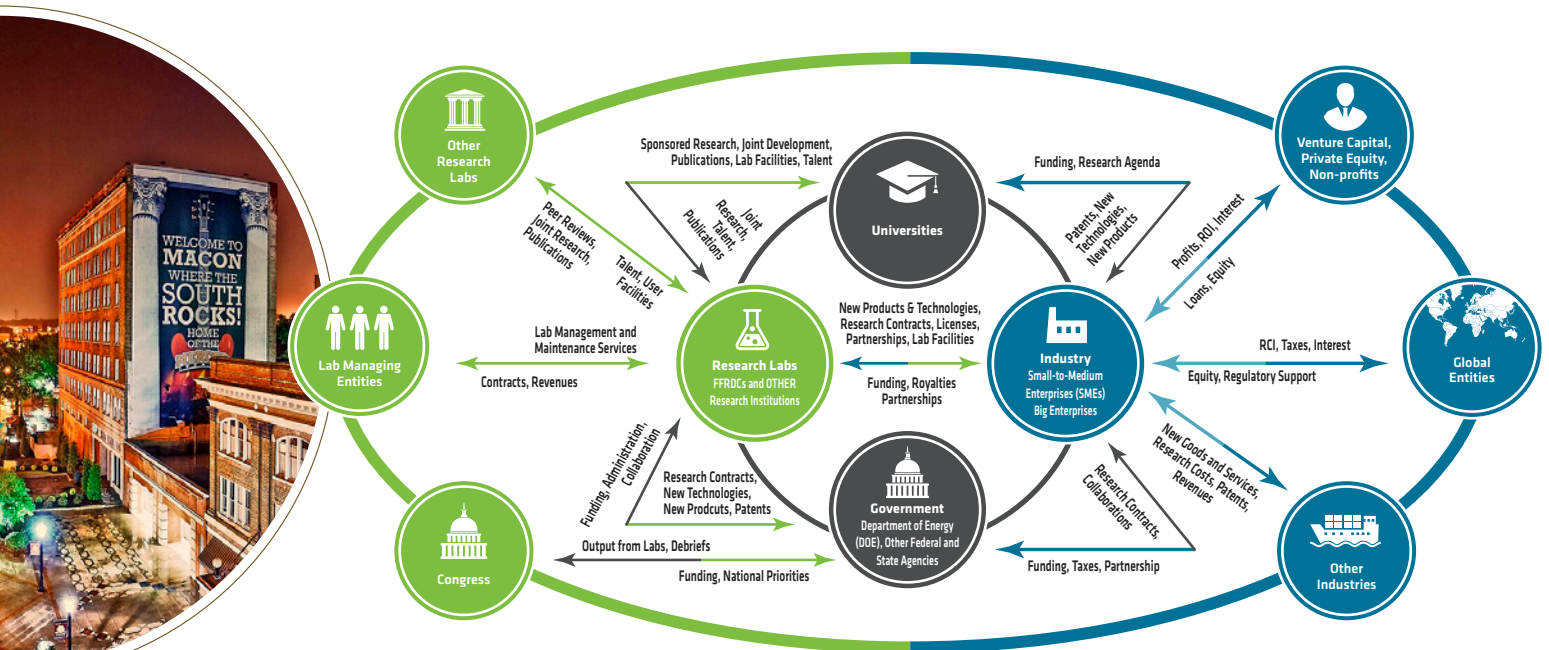
- These institutions should assess how they can strengthen their critical role in driving new innovation.
- They have enormous potential in helping unlock the region's natural, technological and intellectual assets, especially given the direct connection to so many of the region's youth.

2

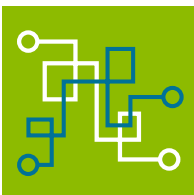
STRATEGIC PILLAR

Leverage region's natural, technological and intellectual assets

Educational Institutions can help drive a regional innovation culture



Source: Advanced Technology Initiative, Deloitte and the Council on Competitiveness



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FUTURE INSIGHTS:

- Driven by the technology of the new industrial revolution, the speed of change is accelerating. This will demand institutions are able to be more agile.
- By combining the technical capabilities of businesses surrounding the RAFB with the institutional strength of the higher education cluster, the region could create a remarkable research and innovation capacity.

As hotbeds of learning, and representing a huge concentration of young people, the educational institutions can bring some important zing!

3.2.3 STRATEGIC ACTION: DRIVE INNOVATION AND COMMERCIALIZATION ACROSS THE RAFB MEMBRANE

The initiative has aimed to build on the existing defense industrial base and explore opportunities to diversify the regional economy away from a dependence on Department of Defense contracts. The Asset Mapping identified potential 'islands of excellence' such as cyber security, aerospace, drones and defense applications. Building off the concentration of expertise around the Robin Airforce Base could help diversify the economy into other areas. The 'membrane' refers to the notion of a separation of defense activities from other sectors.

2

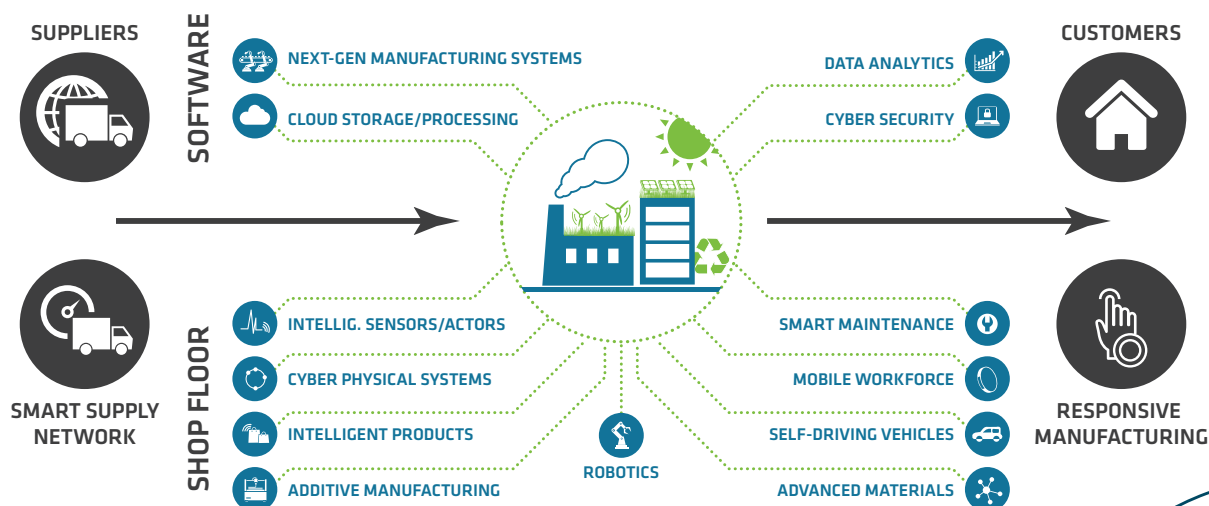
STRATEGIC PILLAR

Leverage region's natural, technological and intellectual assets

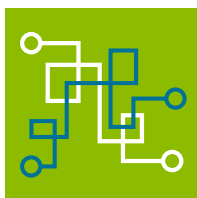
RECOMMENDED ACTION: Establish innovation and commercialization working group, initially to focus on:

- Adaptive manufacturing maintenance and sustainment
- Software development, application, maintenance and security

Industrial models are increasingly being driven by new technology platforms



Source: IOT Analytics. 2015. Will the industrial internet disrupt the smart factory of the future?



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FUTURE INSIGHTS:

- The new industrial revolution is seeing the integration of different streams of science to create breakthroughs in manufacturing and maintenance systems.
- Because of the expertise surrounding Robins Airforce Base, Middle Georgia has a unique depth and experience in adaptive manufacturing, maintenance and sustainment.

The Robins Air Force Base and associated technical capacity has core strengths in a number of the emerging sciences associated with the new industrial revolution. These offer the potential for application in other sectors

3.2.4 STRATEGIC ACTION: ASSET MAPPING TEAM TO MORPH INTO 'INNOVATION ECO-SYSTEM'

Strong regional innovation ecosystems foster a strong entrepreneurial culture and dynamic business environment. The regional network at the core of the innovation eco-system needs to be deepened and strengthened. The initial network mapping in the region shows good connectivity, but insufficient depth to be self-sustaining. Building this ecosystem network is a priority action.

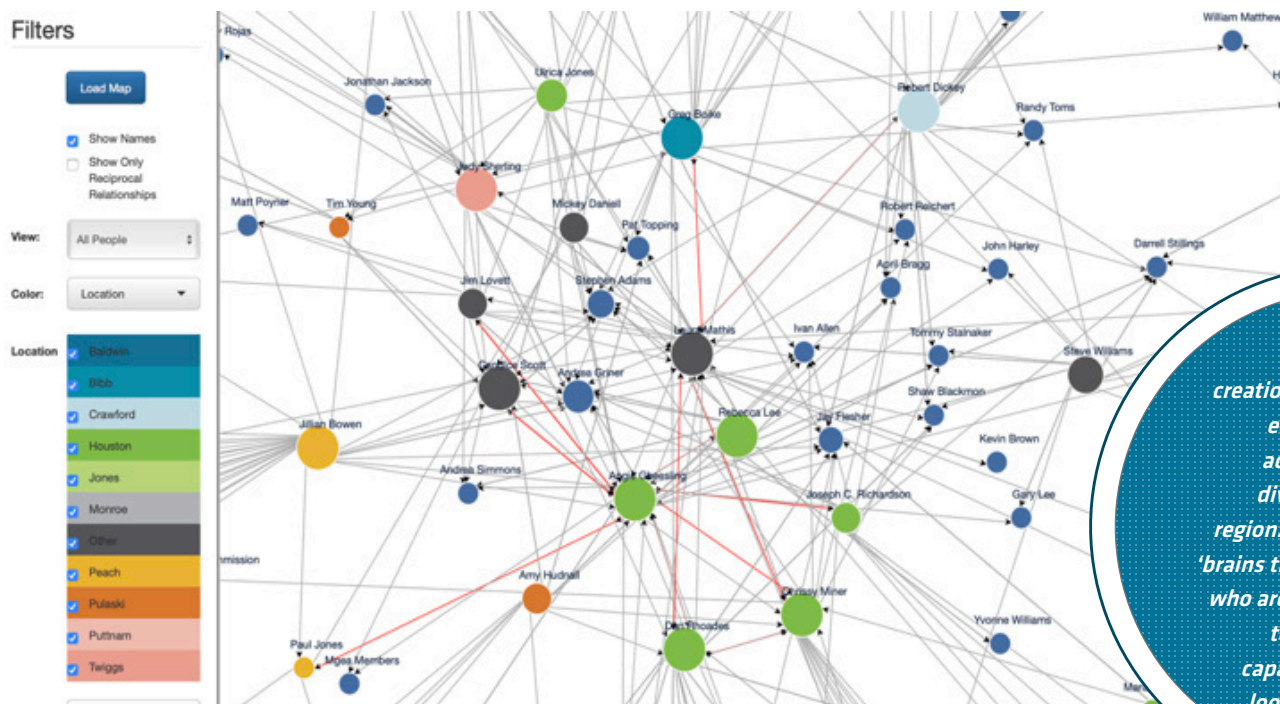
RECOMMENDED ACTION: Asset Mapping Team to continue to be convened by Middle Georgia Economic Alliance (MGEA), and its role is to:

- Focus on building an innovation ecosystem, that connects industry / education / government
- Deepen the initial asset mapping work
- Be future looking, and advocate for emerging opportunities

3

STRATEGIC PILLAR
Create a regional innovation eco-system

The regional ecosystem needs to be deepened and strengthened



The deliberate creation of an innovation ecosystem will help accelerate economic diversification in the region. It will also build a 'brains trust' of key people who are working together to build the regions capacity to be forward looking and futuristic



NETWORK INSIGHTS:

- The Middle Georgia network shows there is great potential to strengthen the network, which will help the more rapid identification of new opportunities for local commercialization of ideas.
- The regional network should also ensure it creates strong links into other hubs of innovation around the world.

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3.2.5 STRATEGIC ACTION: BUILD TECHNOLOGY CLUSTER AROUND MEGA-SITE CONCEPT

The concept of a mega-site in Middle Georgia has attracted interest. This concept involves amassing a significant parcel of land, that can be used to drive a technology focus. The region has identified its potential to support a logistics and distribution economy, as well as supporting a concentration of technological services. These ideas help drive economic diversification and tap into key parts of the economy.

RECOMMENDED ACTION: Create a working group to focus on building a technology cluster around mega-site concept.

This cluster should include:

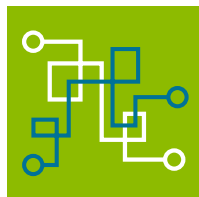
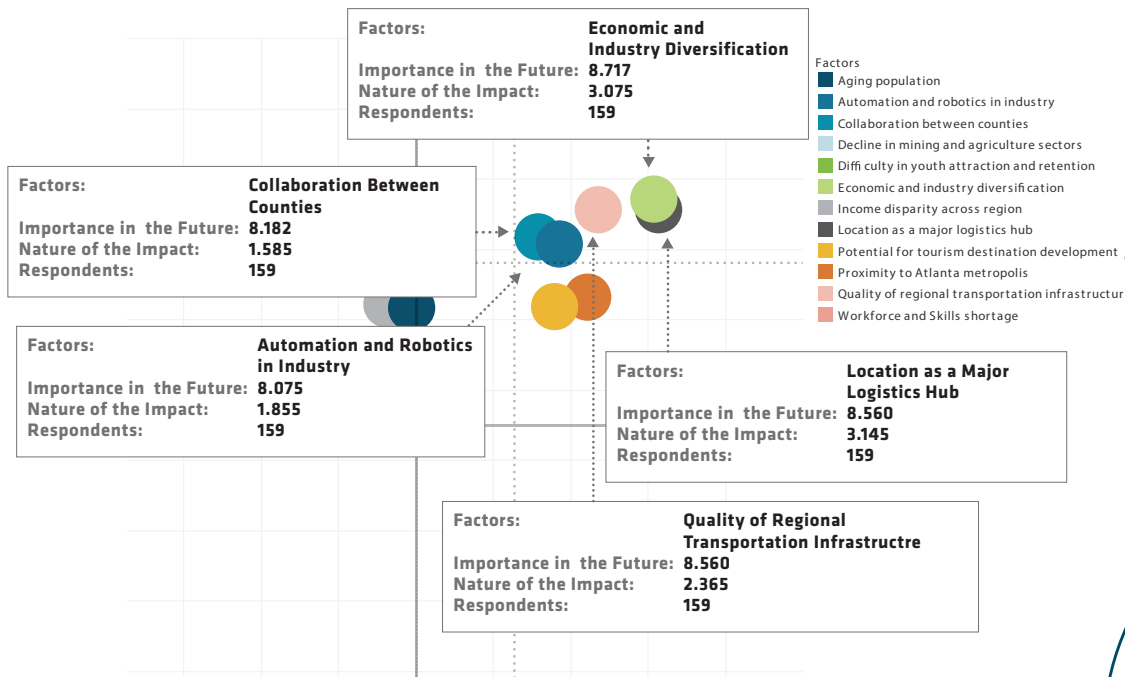
- Logistics Technical services, including labor force opportunities
- A focus on advanced manufacturing, robotics, aerospace and automation

4

STRATEGIC PILLAR

Promote a business and industry desirable location

Regional stakeholders have identified the potential regional strength of a technology cluster



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FUTURE INSIGHTS:

- The mega-site concept helps deliver the needed regional clout, especially for large scale investments.
- Building a technology cluster will help position the region at the forefront of commercialization and implementation of technology, which could be particularly useful to support the commercialization across the RAFB membrane.

Building a technology cluster after the mega-site concept supercharges the economic impact. Putting together a mega-site will require strong regional collaboration and the understanding of shared value



The Regional Action Plan represents a pivot point from research and planning to action

4.0 NEXT STEPS

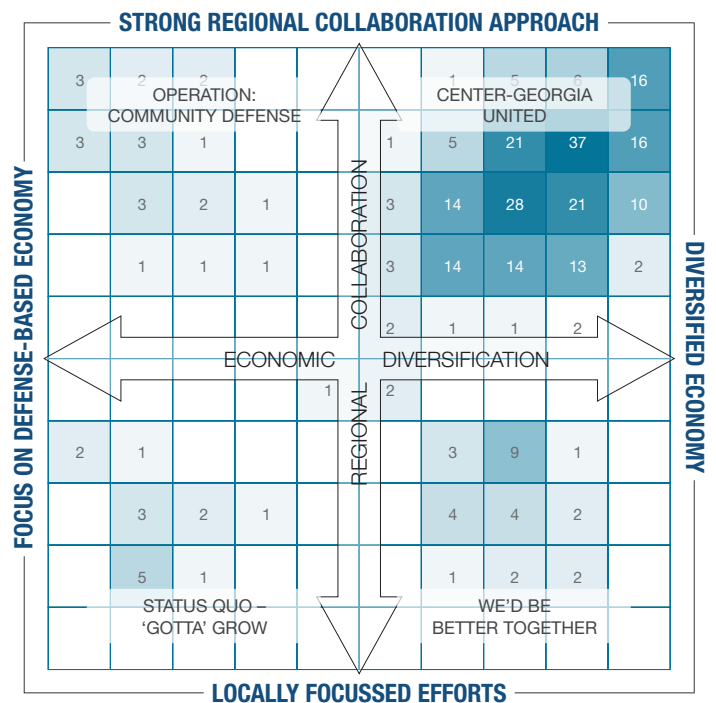
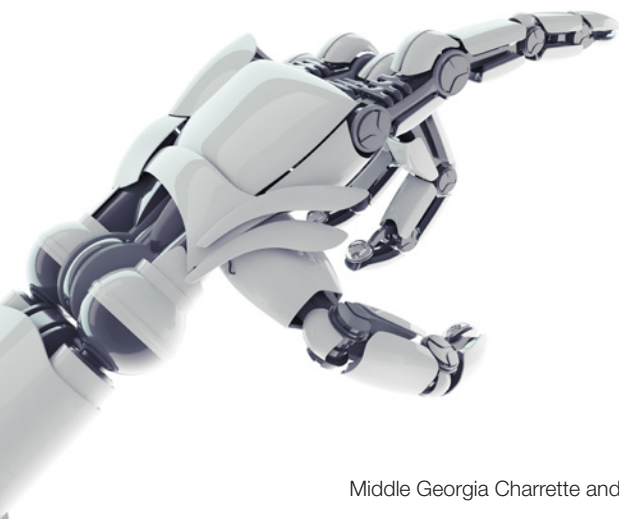
The Regional Action Plan lays out a stakeholder driven plan, underpinned by objective data analysis. The plan was developed by a core group of regional stakeholders and has identified five key actions. These actions have been outlined in this report. The key features of the actions include a focus on:

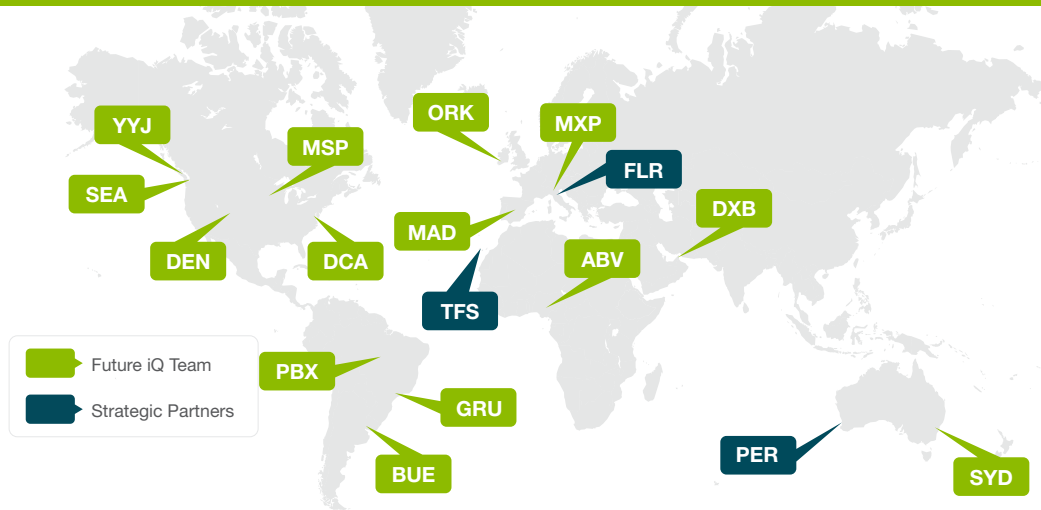
- Collaboration
- Economic Diversification
- Innovation

These features are at the core of the regional strategy and have been identified as the critical success factors for the future of the region.

The critical next steps include:

- Middle Georgia Economic Alliance (MGEA) to be acknowledged as the lead entity to execute and coordinate the actions identified in this report.
- Define detailed scope and terms of reference for each of the working groups and action areas.
- Convene each group and begin work.





5.0 ABOUT FUTURE IQ

Future iQ is a market leader in the development and application of scenario planning; network analysis, industry and regional analysis, and community engagement and capacity building. Future iQ specializes in applying innovative tools and approaches to assist organizations, regions and industries shape their economic and community futures. 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, and our recent projects visit www.future-iq.com or by email at info@future-iq.com

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For more information:

<http://lab.future-iq.com/middle-georgia-economic-alliance/>

Future iQ would like to acknowledge the substantial support from Amy Hudnall and her team at Georgia Department of Economic Development (GDEcD). We would also like to especially acknowledge Angie Gheesling from Development Authority of Houston County, for leading the initiative.



Future iQ would like to acknowledge the stakeholders of the Middle Georgia Region who have engaged with interest and great commitment to this initiative

6.0 FOR MORE INFORMATION

For more information on the Middle Georgia Charrette and Regional Planning initiative, please contact:



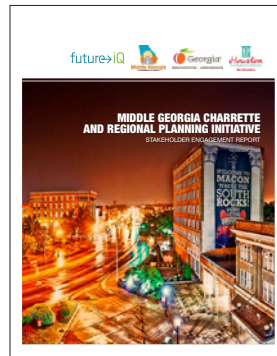
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For more details, and to access additional reports, please visit

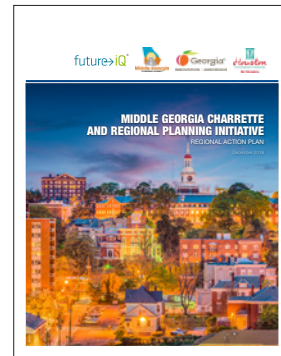
<http://lab.future-iq.com/middle-georgia-economic-alliance/>



Middle Georgia Charrette
and Regional Planning Initiative
Scenario-Based Think Tank Workshop Report
June 2018



Middle Georgia Charrette
and Regional Planning Initiative
Stakeholder Engagement Report
November 2018



Middle Georgia Charrette
and Regional Planning Initiative
Regional Action Plan
December 2018



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