# Middle Georgia Charrette and Regional Planning Discovery / Asset / Information Mapping

Summary Report of workshops in May and August 2018.









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# 1.0 Purpose and Approach

Characterizing regional assets is a valuable first step to inform the stakeholder charrettes and the building of a long term economic diversification strategy for Middle Georgia. Assets have been identified and prioritized by what is "truly unique" or originating naturally or generated freely resulting in a true competitive advantage. The asset focus was confined to the 11-county Middle Georgia region.

The asset mapping methodology utilizes an opportunity analysis for the discovery and development process. Opportunity analysis is designed to discover new or emerging assets and realize connections that may have not be identified previously in order to generate or retain economic value.

The Middle Georgia Discovery/Asset/Information mapping consisted of a three-step mapping procedure;

- Categorized asset mapping,
- 2. Timeline/trend analysis of the assets and
- 3. Asset opportunity development.

The mapping exercise was completed in two sessions with regional economic development leaders and other subject matter experts. The sessions were two hours in duration.

Transportation, logistics and distribution centers was purposely left out of this asset mapping process. This decision was based upon the recognition of extensive work and analysis that has been done and a desire to focus on new or non-traditional asset categories.

# 2.0 Categorized Asset Mapping

Step one of the asset mapping procedure is primarily discovery by capturing as many assets, both tangible and intangible, as possible within the following categorized framework.

- **Innovation** a particular invention or advancement that resides in an area or a concentration of innovation resources or idea ignitors.
- **Geography and Natural Environment** the regions location in respect to the global, continent or proximity to markets. This also includes natural features or characteristics such as air, climate, soil, water sources, etc.
- Excellence identification of individuals, organizations or other aspects of the region which are recognized as superior or 'best in class'. Preferably these assets are recognized by outside or third-party entities.
- Infrastructure and Production Capacity listing of special elements of the built environment that provide the region with a unique or a highly competitive position. This may also include particular equipment labs or underutilized production capability.
- Knowledge/Skills the concentration of knowledge or skills that reside in the region for an extended period of time enabling the growth of related industry clusters. The category may also include a significant concentration of knowledge in companies or higher education institutions.
- **Culture/Heritage** does the region have a history and/or recognized belief, traditions or social characteristics that reinforce a lifestyle or the place?
- **Government/Political** characteristics of the political and policy environment in the Middle Georgia region that enable or provide a positive and attractive economic region.
- **Financial** identification of public, private and non-profit funding sources, structures or networks that enable public and private venture launch and growth. The list should include both traditional funding sources in addition to non-traditional sources such as angel and venture investing entities.

At the completion of step one, Future iQ conducted an analysis of the information obtained in order to determine initial asset concentrations for additional discovery and analysis.

# 3.0 Asset Concentrations, Trends and Strengths

## 3.1 Software Development, Application, Maintenance and Security

The region has multiple organizations and institutions that have a history of software development or are emerging with a focus on cyber security; Robins Airforce Base (RAFB), Mercer Engineering Research Center (MERC), Air Force Advance Technology and Training Center (ATTC), Middle Georgia State University (MGA), Mercer University and Georgia Tech Research Institute (GTRI)

#### Definition

Software sustainment involves orchestrating the processes, practices, technical resources, information, and workforce competencies for systems and software engineering, in order to enable systems to continue mission operations and also to be enhanced to meet evolving threat and capability needs. Software maintenance is the process of modifying a software system after delivery to correct faults, improve performance or adapt it to a changed environment (i.e. AI, Machine Learning and Big Data Analytics)

#### > Trends

Cyber security software is expanding rapidly into many other industries including finance, insurance, healthcare, aerospace, defense, and personal devices. Mercer has seen increases in computer science majors (30 to 60) and computer engineers (40 to 50) in the past 10 years. Mercer is adding cyber security majors in the near future.

### Strengths and Opportunities

- Value Chain a continuum of assets and resources in cyber security and software; research, development, application, maintenance and education and training.
- Human Capital a large concentration of software engineers and scientists, private industry and education. Freelancers are one opportunity in the emerging workforce. Universities are filling the workforce pipeline.
- Proximity The Middle Georgia cyber security software assets are near complementary concentrations and programs; Columbus (robotics), Augusta (cyber), Savannah (Center for Applied Cyber Education)
- Incoming Advanced Battle Management Systems (ABMS)

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### ➤ Needs to Leverage the Asset Concentration

- Access to experts in the field
- Facilitation of "over the fence" access to RAPB
- Access to venture capital
- Community buy-in
- Concentrated marketing effort

- Need for certified coders
- Inventory of offerings and programs from the region's colleges, technical colleges and school systems K-12.

#### 3.1.1 Summary from Asset Mapping Workshop

## Assessment of Middle Georgia strengths and determination of scale of opportunities:

- Local research entities
- Computer and Software Engineers graduating from college
- Active STEM program in Middle Georgia
- Advanced Battle Management System (ABMS) coming to Robins Air Force Base

#### Identification of 'Islands of Excellence':

- Middle Georgia State University (MGA), Mercer University and Georgia Tech Research Institute (GTRI)
- Robins Air Force Base
- Companies which are already doing this work

## Identification of groups/organizations and lead team:

 Robins Airforce Base (RAFB), Mercer Engineering Research Center (MERC), Air Force Advance Technology and Training Center (ATTC), Middle Georgia State University (MGA), Mercer University and Georgia Tech Research Institute (GTRI)

### Outline of action plan over next 3 years:

- Assess technical capabilities needed and which are present
- Form coalition of local companies and stakeholders

- Virtual network for the 11-county region to do this work
- Central site/cluster of hub
- Private industries
- Investment stream
- Communication and PR Plan

#### 3.2 Research - Innovation - Commercialization

The Middle Georgia region has a significant concentration of physical, organizational and knowledge assets that are concentrated on research and innovation. The centers of innovation and idea generation include; Fire Starter Maker Lab, Spark Macon, The Office at New Town, GDEcD – Center of Innovation for Aerospace, Mercer University Innovation Center, The 567, Air Force Advanced Technology & Training Center, Air Force Lifecycle Management Center, Mercer Engineering Research Center (MERC), University of Dayton Research Institute (UDRI), Georgia Tech Research Institute (GTRI), University of Georgia Small Business Development Center (SBDC), Advanced Technology Development Center (ATDC), Technology Association of Georgia (TAG), Georgia Research Alliance (GRA), Small Business Innovation Research Program (SBIR), AFWERX funding agency for innovation on Robins Air Force Base, all regional post-secondary educational institutions, Mercer Law School, First Robotics and RESAs.

#### Definition

Strong regional innovation ecosystems foster a strong entrepreneurial culture and dynamic business environment. They provide long term resources that support the successful launch and scaling of innovation-based businesses, offering a suite of services for location specific enterprises. This attracts new opportunities and investment based upon the strength and energy of the ecosystem.

#### > Trends

- Mercer is positioning itself as a Medical Device Center of Excellence.
- In 2016, Mercer University was awarded 82 external research grants worth \$18.8M and total research expenditures of \$31.7M. The goal is \$60M in the next 10 years.
- ATTC is emerging with a specialty in corrosion testing and characterization, 3D printing and additive manufacturing.
- RAFB was awarded the location for the new Advanced Battle Management System, global airspace, intelligence, surveillance and reconnaissance information mission.
- Internationally recognized research on small ruminants

#### > Strengths and Opportunities

- Concentration the Middle Georgia region has a high concentration of research and innovation assets in a number of industries, healthcare, software, cyber security, small ruminants and local makers.
- University Research The regional high education institutions have an ongoing focus and strength in research. IN 201

### > Needs to Leverage the Asset Concentration

- Business capital, especially angel, venture and other alternative finance resources
- Stronger technology transfer and commercialization support resources and services
- Greater coordination and resource leveraging among innovation and entrepreneurship programs

#### 3.2.1 Summary from Asset Mapping Workshop

## Assessment of Middle Georgia strengths and determination of scale of opportunities:

- Colleges and Universities are a major driver in this area
- Fire Starter Maker Lab, Spark Macon, The Office at New Town, GDEcD Center of Innovation for Aerospace, Mercer University Innovation Center, The 567, Air Force Advanced Technology & Training Center, Air Force Lifecycle Management Center, Mercer Engineering Research Center (MERC), University of Dayton Research Institute (UDRI), Georgia Tech Research Institute (GTRI), University of Georgia Small Business Development Center (SBDC), Advanced Technology Development Center (ATDC), Technology Association of Georgia (TAG), Georgia Research Alliance (GRA), Small Business Innovation Research Program (SBIR), AFWERX funding agency for innovation on Robins Air Force Base, all regional post-secondary educational institutions, Mercer Law School, First Robotics and RESAs

#### Identification of 'Islands of Excellence':

- Healthcare and medical devices
- Aerospace, drones and defense applications
- Kaolin and mining companies

### Identification of groups/organizations and lead team:

- Mercer University Innovation Center as the lead organization
- Other groups Fire Starter Maker Lab, Spark Macon, The Office at New Town, GDEcD Center of Innovation for Aerospace, Mercer University Innovation Center, The 567, Air Force Advanced Technology & Training Center, Air Force Lifecycle Management Center, Mercer Engineering Research Center (MERC), University of Dayton Research Institute (UDRI), Georgia Tech Research Institute (GTRI), University of Georgia Small Business Development Center (SBDC), Advanced Technology Development Center (ATDC), Technology Association of Georgia (TAG), Georgia Research Alliance (GRA), Small Business Innovation Research Program (SBIR), AFWERX funding agency for innovation on Robins Air Force Base, all regional post-secondary educational institutions, Mercer Law School, First Robotics and RESAs

#### Outline of action plan over next 3 years:

- Build working group of key stakeholders, JD champions and identify resources
- Sponsor events and curriculum trades (i.e. Hackathon, Engineering Career Planning)
- Scholarship Opportunities to keep talent in the region
- Entrepreneurial Support
- Communication and Teaming

- Need addition access and sharing of resources. Lacking business capital and angel investors
- Need guidance on how to use and build on existing resources

#### 3.3 Water Resources and Distribution

Middle Georgia has a large water resource from rivers and aquifers, particularly in relation to other regions in the State of Georgia. The three-county area has over 70 million gallons of excess capacity, Macon Bibb alone has 60 million gallons per day. Macon's reservoir has a capacity of 7-8 billion gallons.

#### Definition

Water resource and supply is defined as access and distribution infrastructure available to support community and economic growth in agriculture, industrial, households, recreation and environmental activities.

#### > Trends

- Water use in North America is forecast to substantially increase in the next decade, especially in agriculture.
- Climate change and environmental priorities are limiting or constraining the availability of water in many regions of the US, especially the Southwest and Midwest.
- Rise in hydroponic greenhouse agriculture

### > Strengths and Opportunities

- Macon's municipal water was recognized as the "Best Water in the Country" in 2013.
- Middle Georgia has sole rights to the water supply, water security
- Source and distribution systems and infrastructure are in place, requiring limited new capital investment

## ➤ Needs to Leverage the Asset Concentration

 Additional research, investigation and characterization of the water quality and availability

## 3.3.1 Summary from Asset Mapping Workshop

## Assessment of Middle Georgia strengths and determination of scale of opportunities:

- Food processors in Middle Georgia are not capitalizing on water supply
- Green Ways (Macon, Baldwin)
- Create more green ways/trails for tourism

## Identification of 'Islands of Excellence':

- Macon Water Authority
- Milledgeville new water plant

## Identification of groups/organizations and lead team:

- Angie Gheesling
- Candice Scott

## Outline of action plan over next 3 years:

- Middle Georgia Water Authority
- Marketing education camp

### **Resources needed:**

- Funding
- Angie Gheesling's time
- Political support

## 3.4 Adaptive Manufacturing maintenance and sustainment

Manufacturing maintenance and sustainment is an emerging industrial capacity in Middle Georgia. This application is primarily focused on preventative maintenance in aerospace, industrial, advanced food processing, warehousing and distribution sectors. Adaptive manufacturing, 3D printing (additive manufacturing) capability, corrosion testing and reliability centered maintenance establish Middle Georgia as a center of excellence for adaptive manufacturing maintenance and sustainment.

#### Definition

Primary materials science the investigation, testing and characterization of materials over a lifespan and under challenging conditions. Corrosion is defined as the destructive and unintentional degradation of materials caused by the environment.

#### > Trends

- Lifespan analysis and improved performance of materials
- Increased demand and amount of operational equipment, especially in aerospace

## > Strengths and Opportunities

- ATTC is partnering with Mercer University and others in the region which is building expanded capacity and resources
- ATTC plans to enable the transfer of research and technology to companies and others "outside the fence"

### Needs to Leverage the Asset Concentration

- Improved facilitation and enabling technology transfer "over the fence" at RAFB
- An improved innovation and entrepreneurial ecosystem to capture and grow new businesses in Middle Georgia

#### 3.4.1 Summary from Asset Mapping Workshop

## Assessment of Middle Georgia strengths and determination of scale of opportunities:

- Educational institutions and training programs
- Maker spaces
- Location (climate and proximity to stakeholders)
- Robins Air Force Base infrastructure

#### Identification of 'Islands of Excellence':

- Intellectual capital
- Experience in disciplines
- Integrity and reliability of systems
- Human resources (eco system of sustaining)
- Educational institutions to support research

## Identification of groups/organizations and lead team:

- Mercer Engineering Research Center (MERC)
- Advanced Technology and Training Center (ATTC)
- Central Georgia Technical College (CGTC)
- Middle Georgia State University (MGSU)
- Georgia Tech Research Institute (GTRI)
- Advanced food processing
- Mining
- Warehouse and distribution
- Manufacturing firms
- Georgia Veterans Education Transition Resource (VECTR)

## Outline of action plan over next 3 years:

- Advanced Technology and Training Center (ATTC) roll out in October
- Internships with local educational entities
- VECTR expansion to include electrical/industrial component

- Different sources of funding
- Communication pipeline and focused marketing
- Collaborative groups and alliances
- Success spurs success

## 3.5 Intellectual Capital and Talent

The Middle Georgia region has a significant concentration of higher education institutions. Enrollment figures for 2017 are also included:

•	Mercer University	4,302
•	Middle Georgia University	7,341
•	Wesleyan College	700
•	Georgia College & State University	6,047
•	Georgia Military College	1,651
•	Central Georgia Technical College	11,932
•	Fort Valley State University	2,240

#### Definition

Higher Education institutions have a significant economic impact on regional economies. An April 2017 Board of Regents of the University System of Georgia report estimated that 2.2 local jobs were generated by every job in the institutions.

#### > Trends

- Higher education institutions are key economic drivers for regions outside of major metro areas.
- The success and performance of regional innovation ecosystems are dependent upon the strength and creativity of higher education institutions.
- Higher education institutions are facing declining enrollments in a highly competitive market to attract the best and brightest.
- Major questions are being asked in the market about the cost and value of high education degrees

#### > Strengths and Opportunities

- The Middle Georgia higher education system is very diverse in academic offerings and degree offerings.
- The regions higher education institutions are expanding and adding new academic offerings, nursing, engineering, bio medical, aerospace.
- Mercer University has 800 engineering students
- Anecdotal information states that graduates from Middle Georgia universities have a desire to start their career in the area.
- Higher education research and enrollment can generate significant economic value to a region. Research could achieve over \$100 million and student impact per year may range between \$45,000 to \$60,000 per year per student.

### ➤ Needs to Leverage the Asset Concentration

 Increased collaboration and strategic alignment between the regional higher education institutions. Improved technology transfer capacity from Universities to industries

#### 3.5.1 Summary from Asset Mapping Workshop

### Assessment of Middle Georgia strengths and determination of scale of opportunities:

- Volume of students
- Quality of life provided by Higher Education institutions
- Intellectual capital
- Program alignment without competing regarding industry needs
- Dual enrolment
- Higher education employment opportunities
- Need to build on innovation

#### Identification of 'Islands of Excellence':

- Higher education institutions' facilities
- Veterans Education Transition Resource (VETR)
- CGTC Aviation programs
- MGA School of Aviation

### Identification of groups/organizations and lead team:

- Create higher education group to include CGTC, private and public institutions.
- Define paths for students

## Outline of action plan over next 3 years:

- Create higher education group
- Define the purpose and mission of the group
- Share public and private resources

- Institutional 'buy in' and commitment
- Funding
- Leader who will drive the project?
- Archway (similar for education compared to community resources)

#### 3.6 Veteran Center of Excellence

The Middle Georgia has been recognized as a national leader in providing veteran services and training. The key organizations leading this asset are the VECTR Center and the Central Georgia Technical College. These organizations have been recognized nationally for their veteran programs and are being emulated by other states.

#### Definition

Veteran services include education and training, transition services, financial counseling and other programs that assist military personal as they move from enlisted service to the private sector.

#### > Trends

- The US is predicted to be in a constrained labor market for a number of years, workforce availability is a differentiator for regional economies.
- The Federal Government is facing on-going funding and performance challenges in respect to veteran affairs.
- Veterans are a pool of talented and trained workforce in a constrained national labor market.

## > Strengths and Opportunities

- The Middle Georgia region has a high concentration of military service personal and veteran service institutions and programs
- VECTR and CGTC have been recognized as national leaders in service of veterans,
  Military Friendly©, Best for Vets©, top colleges and university lists.
- Expand and promote the veteran service system to attract enrollment linked directly to workforce in Middle Georgia.
- VECTR center is a strong collaboration between the State of Georgia, CGTC, MGSU, RAFB and the City of Warner Robins

## Needs to Leverage the Asset Concentration

• Greater collaboration between the veteran programs and employment opportunities/needs in the private sector.

#### 3.6.1 Summary from Asset Mapping Workshop

## Assessment of Middle Georgia strengths and determination of scale of opportunities:

- Veterans Education Career
  Transition Resource Center (VECTR)
- Community and State support
- Numbers of veterans
- Technology

- Centrally located
- Education Sources
- Soft Skills
- Small Business Development
- One stop shop

## Identification of 'Islands of Excellence':

- Veterans Education Career
  Transition Resource Center (VECTR)
- Robins Air Force Base (RAFB)
- Veterans Medical Center (VAMC)
- Air National Guard (ANG)
- Air Force Reserve Command (AFRC) Headquarters

## Identification of groups/organizations and lead team:

- Veterans Education Career
  Transition Resource Center (VECTR)
- Robins Air Force Base (RAFB)
- Air Force Reserve Command (AFRC)
- Georgia Dept. of Veterans Service (GDVS)
- Veterans Affairs (VA)
- United Way
- Middle Georgia Consortium
- 116<sup>th</sup> Air Control Wing
- Veterans Medical Center (VAMC)

- Veterans Business Outreach Center
- Small Business Administration (SBA)
- Small Business Development Center (SBDC)
- Technical College System of Georgia (TCSG)
- Central Georgia Technical College (CGTC)
- Service Corps of Retired Executives (SCORE)
- Employers

#### Outline of action plan over next 3 years:

- New 10,000 sq./ft Industrial Training Facility
- Additional Veterans Service Organizations
- Corporate investments
- Contribute to colleges' enrolment and tax base.
- Directing GI Bill Funding to Georgia Colleges

- Funding
- Continued Federal and State support
- Marketing and state/nationwide exposure
- On site housing

## 3.7 Film and digital entertainment

The Middle Georgia region has a long and unique history in the field of arts and culture. Many famous musicians and artists have come from the region including Little Richard, Morgan Freeman, Otis Redding, Allman Brothers, Alice Walker, Joel Chandler Harris and Flannery O'Connor. In addition, the areas have numerous sites and buildings that are on the national historic register including Bibb County and Baldwin County.

#### Definition

Film production consists of a wide spectrum of assets and support services. These include the financial incentive structure, locations, production resources and professional support.

#### > Trends

- In 2016, Georgia overtook California as the top location for the production of feature films. This included 17 of the top 100 grossing films
- Metro Atlanta is being labeled as the Hollywood of the South
- The State of Georgia is dedicated to providing tax incentives for film production
- State of Georgia economic impact in 2017 was \$9.5B

## Strengths and Opportunities

- State of Georgia film production tax credits
- Build a relationship with the Atlanta film industry to introduce Middle Georgia as film location
- Tourism trends are seeing growth in visiting and participating in events and festivals linked to popular movies
- Film Academy
- SCAD

### Needs to Leverage the Asset Concentration

 Organization of regional economic and tourism organization to craft a plan and tactics to capture the Georgia film production industry.

### 3.7.1 Summary from Asset Mapping Workshop

## Assessment of Middle Georgia strengths and determination of scale of opportunities:

- Number of film companies in the State
- Good statewide environment
- Macon Film Commission
- Film ready liaisons in each community

## Identification of 'Islands of Excellence':

- Eagle Eye Production UAV filming
- Guardian Center availability of public safety sites for filming
- 4D rendering
- Agricenter in Perry
- Music/recording
- Geographic diversity as a sales pitch

#### Identification of groups/organizations and lead team:

- Macon Film Commission to lead throughout the region
- Convention and Visitor Bureaus/Chambers/ Local Economic Development Group (MGEA)
- Colleges and Universities (art and digital collaborative)
- Technology Association of Georgia (TAG)
- Private investors

### Outline of action plan over next 3 years:

- Broaden alliance and increase visibility through marketing
- Recruitment strategy: bring production capacity and leverage film liaisons in each community

- Film Academy in Middle Georgia
- Expand resources (digital media) to colleges. Also set design and construction (Construction Education Foundation of Georgia – CFGA)
- Infrastructure/private companies/production capacity
- Accommodations and equipment for film industry crews

#### 3.8 Healthcare and Research

The healthcare industry sector in the Middle Georgia region is primarily supplying patient services with limited manufacturing of equipment or supplies or external market services. The region has a strong collection of healthcare assets including the Navicent-Medical Center. Coliseum Medical Center and the School of Medicine at Mercer University. Also, many other higher education institutions offer nursing and medical provider training.

#### Definition

High performing healthcare systems supported by substantial workforce development resources can provide a difference in relation to relocation and a resident's quality of life decisions.

#### > Trends

- The healthcare sector continues to be the largest employer in the region with higher than regional average wages.
- Aging populations will be attracted to regions with high performing and healthcare service capacities.

### > Strengths and Opportunities

- Navicent Medical Center is a nationally ranked ACS verified Level I Trauma Center in Georgia, outside of Atlanta.
- Certified Breast Center of Excellence
- Mercer University pursuing healthcare related research outside of patient services

## > Needs to Leverage the Asset Concentration

- Strategic Diversification
  - Mercer University expansion of the Medical Device Center of Excellence
- Healthcare Human Capital
  - 300+ medical students at Mercer University
- Research
  - Focus on expansion of external research funding on healthcare related ventures
- Veterans
  - Leverage the VECTR center and high concentration of military and veteran services to grow veterans' healthcare – VA Hospital

### 3.8.1 Summary from Asset Mapping Workshop

## Assessment of Middle Georgia strengths and determination of scale of opportunities:

- Medical School (Mercer) and Nursing programs
- BioMed Undergraduate Program (Mercer)
- Excellent hospitals and doctors
- The need is great (i.e. geriatrics, 'memory care', etc.)

#### Identification of 'Islands of Excellence':

- 100 miles to the North: Ga Tech Cell Manufacturing
- Department of Biomedical Engineering jointly with Ga Tech
- 220,000sq foot Engineered Biosystems Building (chemical biology, cell therapies and systems biology)

## Identification of groups/organizations and lead team:

No workshop data recorded

#### Outline of action plan over next 3 years:

- · Reassess this as an opportunity area for Middle Georgia
- Treat Healthcare separately from Healthcare Research

### **Resources needed:**

No workshop data recorded

# 4.0 Future iQ Asset Mapping Highlights and Recommendations

The Asset Mapping sessions and the following recommendations were analyzed and developed based upon the primary objectives of the State of Georgia GUARD initiative in Middle Georgia. The objectives include:

- Build on existing defense industrial base
- Diversify the economy from dependence on DoD contracts
- Assess Middle Georgia strengths and determine opportunities
- Identify "Islands of Excellence".

The key finding from the asset mapping sessions is that the Middle Georgia region and economy is diverse with substantial competitive strengths and special characteristics that provide real opportunities for economic diversification. Furthermore, the competitive strengths in the region provide an opportunity to enhance a mutually beneficial relationship between RAFB and the regional economy. Enhancing a mutually beneficial relationship will reduce the areas exposure to future Federal Base Realignment and Closure (BRAC) decisions.

### 5.0 Recommendations and Priorities

## 5.1 Water supply and security

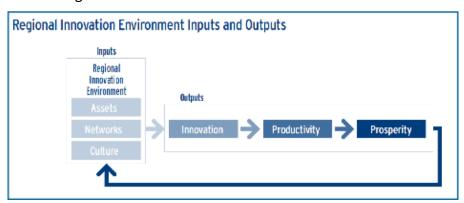
Water Supply and security is an asset that the region controls on their own and provides a distinctive and valuable community economic development asset.

## 5.2 Innovation Ecosystem

A high performing Innovation Ecosystem can be a primary economic driver by improving the innovation business climate. The region has most key assets in existence today: human knowledge, technical expertise, higher education research institutions, entrepreneurial support programs and services and a friendly business climate. Areas of improvement are in respect to networks, including access to alternative finance and building a culture and climate to support and celebrate risk taking.

Primary areas of innovation include:

- Adaptive maintenance and manufacturing
- Corrosion testing
- Medical devices
- Cyber security and software
- Logistics



## 5.3 Human Capital and Talent

Human capital and talent is the economic development advantage for the next generation. The Middle Georgia region with seven universities and colleges and 25,000 students have its future workforce and talent in the community. The higher education institutions should be recognized as an economic driver and asset for new economic diversification. Economic value can be realized through expanded research, increased enrollment and aligned academic. Programs should be created to match the regional economy.